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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte NTP, Inc.
Patent Owner and Appellant

Appeal 2008-004602 Reexamination Control 90/006,493, 90/006,680 and 90/007,735 Patent No. 5,819,172¹ Technology Center 3900

ENTERED: November 10, 2009

Before JAMES T. MOORE, Vice Chief Administrative Patent Judge, JAMESON LEE and SALLY C. MEDLEY, Administrative Patent Judges.

Per Curiam

DECISION ON APPEAL

NTP, Inc. (NTP), the assignee of Patent 5,819,172 under reexamination, appeals under 35 U.S.C. §§ 134(b) and 306 from a final rejection of claims 1-223 and 295-317. We have jurisdiction under 35 U.S.C. §§ 6(b) and 134(b).

We affirm.

STATEMENT OF THE CASE

The involved Patent 5,819,172 ("NTP '172 patent") was the subject of three ex parte reexamination proceedings 90/006,493, 90/006,680, and

Based on Application 08/844,957, filed on April 23, 1997.

90/007,735 which were merged by order dated March 1, 2006. Final rejection by the Examiner was entered on August 22, 2006. The NTP '172 patent issued on October 6, 1998, with claims 1-223. Claims 224-317 were added during reexamination, and claims 224-294 have been cancelled.

Together with other NTP patents, the NTP '172 patent was the subject of a patent infringement suit filed by NTP against Research In Motion, Ltd. (RIM) in the U.S. District Court for the Eastern District of Virginia. The district court entered judgment in favor of NTP. *NTP*, *Inc. v. Research in Motion, Ltd.*, No. 3:01CV767 (E.D. Va Aug. 5, 2003). RIM appealed that judgment to the Court of Appeals for the Federal Circuit, who affirmed-in-part, reversed-in-part, and vacated-in-part. *NTP*, *Inc. v. Research in Motion, Ltd.*, 418 F.3d 1282 (Fed. Cir. 2005).

The Federal Circuit described the inventors' innovation as follows, referring to the specification of NTP's Patent 5,436,960, which according to the Court has the same written description as the NTP '172 patent, *NTP*, *Inc. v. Research in Motion, Ltd.*, 418 F.3d at 1289:

In simplified terms, the Campana invention operates in the following manner: A message originating in an electronic mail system may be transmitted not only by wireline but also via RF [radio frequency], in which case it is received by the user and stored in his or her mobile RF receiver. The user can view the message on the RF receiver and, at some later point, connect the RF receiver to a fixed destination processor, *i.e.*, his or her personal desktop computer, and transfer the stored message. *Id.* at col. 18, ll. 39-66. Intermediate transmission to the RF receiver is advantageous because it "eliminat[es] the requirement that the destination processor [be] turned on and carried with the user" to receive messages. *Id.* at col. 18, ll. 44-46. Instead, a user can access his or her email stored on the RF receiver and "review . . . its content without interaction with the

destination processor," *id.* at col. 18, l. 67 -- col. 19, l. 1, while reserving the ability to transfer the stored messages automatically to the destination processor, *id.* at col. 19, ll. 1-2.

None of NTP's claims on appeal, however, requires the RF receiver to include a memory or display or to be operative on its own to receive and display electronic mail in the absence of an attached personal computer. An RF receiver which is not detachable from a personal computer and which cannot operate to receive messages unless it is attached to a personal computer that is turned on is within the scope of these claims.

Claims 1-223 and 295-317, in various combinations, were finally rejected over more than twenty separate grounds of rejection. The prior art references relied on by the Examiner are as follows:²

- 1. Telenor '89 -- Stig Kaspersen et al., Norwegian Telecommunication Administration, Mobile Data Network Description (1989) (Volumes 1-4, 6-8 (there is no Volume 5)).
- 2. Perkins -- U.S. Patent 5,159,592, issued October 27, 1992, based on application filed October 29, 1990.
- 3. Garbee -- Bdale Garbee, *The KA9Q Internet Software Package* (1989).
- 4. Riddle -- U.S. Patent 5,166,931, issued November 24, 1992, based on application filed September 4, 1990.
- 5. Hortensius -- U.S. Patent 5,917,629, issued June 29, 1999, based on application filed October 29, 1990.

3

² The Examiner also relied on the inventors' own admitted prior art.

- 6. Verjinski -- Verjinski, Richard D., "PHASE, A Portable Host Access System Environment," 3 IEEE Military Communications Conference 1989, 0806-0809 (1989).
- 7. DeVaney -- U.S. Patent 4,698,839, issued October 6, 1987, based on application filed June 3, 1986.

Claims 295-317 were finally rejected under 35 U.S.C. § 112, first paragraph, as without written description in the specification.

Claims 295-317 were finally rejected under 35 U.S.C. § 112, first paragraph, as lacking an enabling disclosure.

Claims 295-317 were rejected under 35 U.S.C. § 305 as violating the prohibition against enlargement of the scope of a patent claim in a reexamination proceeding.

Claims 1, 38, 74, 88, 99, and 126 were rejected under the judicially created doctrine of obviousness-type double patenting over "at least claim 1" of each of Patent Nos. 5,436,960; 5,438,611; 5,479,472; 5,631,946; 6,067,451; and 6,317,592. The rejection, however, was later withdrawn. (Answer 198:12-24.)

DISCUSSION

The discussion below is organized into Sections A-J.

Section A discusses claim interpretation.

Section B discusses rejections based in whole or in part on Telenor '89.

Section C discusses rejections based in whole or in part on Perkins.

Section D discusses rejections based in whole or in part on Verjinski.

Section E discusses secondary considerations and evidence of nonobviousness.

Section F addresses NTP's argument that the copy of Telenor '89 relied on by the Examiner contains content which have been altered and manipulated and thus is not authentic, and also NTP's argument that Telenor '89 is not a printed publication.

Section G addresses NTP's efforts to antedate Perkins and Hortensius as prior art.

Section H addresses the rejection of claims 295-317 under 35 U.S.C.

§ 112, first paragraph, for lack of written description in the specification.

Section I addresses the rejection of claims 295-317 under 35 U.S.C.

§ 112, first paragraph, for lack of enabling disclosure.

Section J discusses the rejection of claims 295-317 under 35 U.S.C. § 305.

A. Claim Interpretation

NTP argues that we must adopt the claim interpretation applied by the U.S. District Court for the Eastern District of Virginia in the infringement litigation between NTP and RIM involving the NTP '172 patent, which have been either affirmed or not reached by the Federal Circuit. According to NTP, the final court interpretation of the meaning of claim terms in its infringement litigation applies in this merged reexamination proceeding. The argument is without merit. The claim interpretation affirmed by the Federal Circuit in NTP's patent infringement suit does not control in the proceeding before us and neither does the claim interpretation applied by the

Eastern District of Virginia in that litigation but not reached by the Federal Circuit. We construe NTP's claim terms according to the rules of claim interpretation applicable to reexamination proceedings before the USPTO.

NTP maintains (Brief 23-33) that the examiner erred in construing the claims on appeal. The examiner interpreted the claims by applying the rule generally applicable in reexamination proceedings, *i.e.*, claim terms are given their broadest reasonable construction consistent with the specification. The reexamination claim construction rule for *unexpired* patents was first announced in *In re Yamamoto*, 740 F.2d 1569, 1571 (Fed. Cir. 1984) (during reexamination, claims of unexpired patents given broadest reasonable construction consistent with specification).

The USPTO and the Federal Circuit have consistently followed the rule since *Yamamoto*. *See*, *e.g.*, (1) *In re Etter*, 756 F.2d 852, 856-58 (Fed. Cir. 1985) (*en banc*) ((a) presumption of validity does not apply in reexamination; (b) claims of unexpired patent in reexamination given broadest reasonable construction; (c) reexamination is an ex parte proceeding); (2) *In re Hiniker Co.*, 150 F.3d 1362, 1368 (Fed. Cir. 1998) (claims in a reexamination proceeding are to be given their broadest reasonable interpretation); (3) *In re American Academy of Science Tech Center*, 367 F.3d 1359, 1363 (Fed. Cir. 2004) (claims are given broadest reasonable construction in reexamination); (4) *In re ICON Health and Fitness, Inc.*, 496 F.3d 1374, 1379 (Fed. Cir. 2007) (during reexamination, PTO gives claims broadest reasonable interpretation; as patent owner has an opportunity to amend the patent claims); and (5) *In re Translogic Technology, Inc.*, 504 F.3d 1249, 1256 (Fed. Cir. 2007) (during

reexamination, claims are given their broadest reasonable interpretation consistent with the specification). *Cf. Ex parte Papst-Motoren*, 1 USPQ2d 1655 (Bd. App. & Int. 1986)(reexamination claim construction applied where the patent undergoing reexamination has expired.).

According to NTP, the *Yamamoto* reexamination claim construction practice should *not* apply in this case. NTP tells the Board that limitations in the claims on appeal, or at least some of the limitation in the claims on appeal, were construed in the patent infringement civil action between NTP and RIM in *NTP*, *Inc. v. Research in Motion*, *Ltd.*, Civil Action 3:01CV767 (E.D. Va. Aug. 5, 2003). Further according to NTP, it is estopped from seeking a claim construction broader than that made by the Eastern District of Virginia ("E.D. Va."). Stated in other terms, NTP says it "is foreclosed from asserting [a broader claim construction] in the future." (Brief 24:13 to 25:1).

Essentially NTP maintains that since the E.D. Va. and the Federal Circuit on appeal have construed the claims, it is as if the construction fixed by the court had been incorporated into the specification. (Brief 25). NTP therefore reasons that the rule of *In re American Academy* has no application in this case, because in *American Academy* there had not been a prior district court interpretation of the claims.

In our view, NTP misapprehends the differences between (1) how claims are construed in litigation and (2) the underlying purpose of reexamination. The differences have been articulated by the Federal Circuit in *In re Swanson*, 540 F.3d 1368, 1377-78 (Fed. Cir. 2008) ((1) USPTO examination procedures have different standards, parties, purposes, and

outcomes compared to civil litigation; (2) USPTO standard for rejecting is "preponderance of the evidence" which is substantially lower than in a civil case where standard is clear and convincing; and (3) claim construction in USPTO differs from the claim construction in civil litigation.).

NTP asserts that the claim construction of the E.D. Va. is binding on the USPTO in these reexaminations. We reject NTP's assertion. In support of its assertion, NTP cites a non-precedential Federal Circuit opinion in Marlow Industries, Inc. v. Igloo Products Corp., 65 Fed. Appx. 313, 318 (Fed. Cir. 2003) ("[i]n addition, the district court's two previous orders construing the '193 patent and concluding that picnic boxes that only cooled did not infringe the patent were binding on the examiner under the doctrine of issue preclusion."). (Brief 26). Apart from the fact that Marlow is nonprecedential, the Government was not a party in *Marlow* and therefore cannot be bound by statements in *Marlow* which may or may not be *dicta*. NTP's preclusion issue is foreclosed by *In re Trans Texas Holdings Corp.*, 498 F.3d 1290, 1297 (Fed. Cir. 2007) (claim construction of patent undergoing reexamination by district court in action not involving the PTO is not binding on the PTO—there is no collateral estoppel). As the Federal Circuit succinctly put it: "This argument simply makes no sense." 498 F.3d at 1297. See also Standard Havens Products, Inc. v. Gencor Industries, Inc., 953 F.2d 1360, 1366 n.2 (Fed. Cir. 1991).

There are additional policy reasons for adhering to the *Yamamoto* rule in these appeals.

First, at least one of the ex parte reexamination proceedings before us was requested by a third-party. The third-party cannot participate in an ex

parte reexamination proceeding. In making the request, the third-party had an expectation (provided the USPTO found a substantial new question of patentability) that the USPTO would apply the "rules" to the reexamination. Had the third-party understood that the USPTO would change those "rules" in the middle of the ex parte reexamination proceeding, the third-party may not have filed the reexamination request in the first place. Third-parties and the public have an expectation that the USPTO will adhere to the "rules" and "practices" in performing its congressionally assigned duties. NTP's proposed claim construction would undermine public confidence in the exparte reexamination process.

Second, there is no meaningful adverse consequence in amending the claims in these appeals. If, as NTP asserts, the claims on appeal are to be construed in accordance with the interpretation of the E.D. Va., then what is the harm in amending the claims to conform to that interpretation.

Assuming NTP is correct that it is precluded from arguing an interpretation broader than the interpretation of the E.D. Va., why should other potential defendants have to re-litigate claim interpretation (as they have a right to do) and why should another district court (or even the same district court) have to spend resources re-considering claim interpretation. In an ideal world, claims should say precisely what they mean and need for interpretation (both in the USPTO and the courts) should be minimized. Under the circumstances presented to us, NTP could have avoided the entire claim construction issue in the first place if it simply had amended the claims to explicitly incorporate therein the claim interpretation of the E.D. Va. Had NTP done so, the *explicit* definition of the invention defined by the claims

on appeal would be exactly the same as the *implicit* definition assigned to the claims by the E.D. Va. The place to take care of any possible ambiguity in a claim is during proceedings in the USPTO—in this case during reexamination. *Cf. In re Zletz*, 893 F.2d 319, 322 (Fed. Cir. 1989) (an essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous; only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process).

We have not overlooked the fact that NTP is of the opinion that the claim interpretation of the E.D. Va. is the broadest reasonable interpretation. NTP reasons, therefore, that there was no need to amend claims during the reexamination proceedings before the USPTO. In taking the approach it did, NTP made a litigation choice to run a risk that the USPTO would not interpret claim language broader than the E.D. Va. To the extent that the USPTO interprets claim language broader than the E.D. Va., NTP now lives with its litigation choice.

Even if the invention disclosed in an applicant's written description is outstanding in its field, it is still the case that "the name of the game is the claim." *In re Hiniker*, 150 F.3d at 1369 (citing Giles Sutherland Rich, *Extent of Protection and Interpretation of Claims -- American Perspectives*, 21 Int'l Rev. Indus. Prop. & Copyright L. 497, 499 (1990)). It is the claims on which we focus, not the disclosed embodiments and examples, in determining whether the claimed invention is novel and patentably distinct from the prior art.

In reexamination proceedings such as these, as it is in all patent examinations before the U.S. Patent and Trademark Office, claim terms are

read and interpreted according to their broadest reasonable construction consistent with the specification. *E.g.*, *In re American Academy*, 367 F.3d at 1363; *In re Yamamoto*, 740 F.2d at 1571.

At the very least, the rule of broadest reasonable interpretation precludes importation into the claims of an "extraneous limitation" from the specification. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). A limitation is extraneous if there is no need for its inclusion in the claim for the claim to have a reasonable meaning. *See, id.*; *E.I. du Pont de Nemours* & *Co. v. Phillips Petroleum Co.*, 849 F.2d 1430, 1433 (Fed. Cir. 1988). As the Court of Appeals for the Federal Circuit has clearly stated in *In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004):

[T]his court counsels the PTO to avoid the temptation to limit broad claim terms solely on the basis of specification passages. *In re Zletz*, 893 F.2d 319, 321 (Fed. Cir. 1989). Absent claim language carrying a narrow meaning, the PTO should only limit the claim based on the specification or prosecution history when those sources expressly disclaim the broader definition. *See, e.g., Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906-09 (Fed Cir. 2004)(explaining requirement for an express disclaimer in either the specification or prosecution history).

Although claims are interpreted in light of the specification, "particular embodiments and examples appearing in the specification will not generally be read into the claims." *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988)("A reading of the specification provides no evidence to indicate that these limitations must be imported into the claims to give meaning to disputed terms."). Where the specification sets forth no definite requirement of a specific limitation for a claim term, that limitation should not be read from the specification into the

claims. *Specialty Composites v. Cabot Corp.*, 845 F.2d 981, 987 (Fed. Cir. 1988). In *Lemelson v. United States*, 752 F.2d 1538, 1552 (Fed. Cir. 1985), the Court of Appeals for the Federal Circuit stated:

In *Fromson v. Advance Offset Plate, Inc.*, this court cautioned against limiting the claimed invention to preferred embodiments or specific examples in the specification. 720 F.2d at 1568, 219 USPQ at 1139 (citing *Smith v. Snow*, 294 U.S. 1, 11, 55 S.Ct. 279, 283, 79 L.Ed. 721 (1935)). Even if the specification only discloses apparatus directed to executing automatic prepositioning of the workpiece or the measurement device or both, this does not dictate reading such a limitation into the prepositioning step of the claim.

Thus, even if the specification discloses only one embodiment or implementation for a claim element, it is not reason enough to read all the requirements of that embodiment or implementation into the claims. As the Supreme Court stated in *McCarty v. Lehigh Valley R. Co.*, 160 U.S. 110, 116 (1895):

[I]f we once begin to include elements not mentioned in the claim in order to limit such claim . . . , we should never know where to stop.

We are cognizant that a patent applicant through the specification can be its own lexicographer in redefining the meaning of a known term in the art to something else. But the special definition must be set out in the specification, *In re Paulsen*, 30 F.3d at 1480; *Intellicall, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384, 1388 (Fed. Cir. 1992). Also, the defining must be done with "reasonable clarity, deliberateness, and precision." *In re Paulsen*, 30 F.3d at 1480. Thus, unless the specification is clear in setting forth a limiting definition or disclaiming a broader coverage

for a claim term, examples and preferred embodiments disclosed in the specification are regarded as just that, *i.e.*, examples and preferred embodiments, and not as restrictive limitations.

Based on the description in the specification of the NTP '172 patent, the inventors do not purport to be their own lexicographer in setting forth a new and more restrictive definition for any word or term already known in the art. When asked by the panel about this issue during oral hearing, NTP's counsel failed to identify any special or restrictive definition which has been set forth in the specification for any claim term. Pertinent portions of the exchange between the panel and counsel are reproduced below (Hearing Transcript 34:15 to 37:6):

JUDGE LEE: Along that line, has any one of your inventors acted as his own lexicographer and coined a term with a special definition that's not otherwise known to people in the art in any one of your eight patents?

MR. BUROKER: Well, I believe that that's what the district court found in a number of instances.

The term "gateway switch" can mean a lot of things in different contexts but in the context of this particular patent, it means the definition we have given, which is that it is one of the processors in an electronic — a processor in an electronic mail system which connects other processors in that system, et cetera.

But that's an example of a situation which we think they weren't using the term generically, they were using it specifically to talk about --

JUDGE LEE: Well, it doesn't depend on any district court. It is did your inventors try to coin the new term and define it in your spec.

You know, there are case law that says inventors can come up with their own terms whenever they like as long as they put their own definition in the spec. I'm just trying to find out do we have that situation here.

MR. BUROKER: Well, I think "gateway switch" is one of those situations in which that's what they tried to do. Does it say gateway switch means X and give a definition? They didn't go that far but we believe that that's what the meaning of that term is in the particular specification in the way in which it is used in the claims.

JUDGE LEE: So I'm not sure how to take that. It should be an easy yes or no. Yes, our inventors coined a new term with a new definition or, no, they used terms that were known in the art. Is that too unreasonable to ask for a yes or no answer?

MR. BUROKER: Well, in the context of this invention, gateway switch couldn't have been known in the art. That's the point. The gateway switch is acting in a new capacity. There were -- there were gateway switches because that term is in the background section but here the gateway switch is described as having additional functionality. So I guess it is a yes and a no. That's the hard --

JUDGE LEE: Well, that's my problem, too. Since -- but according to case law, in order to be your own lexicographer, you have to clearly define the meaning of the term and I don't find that in your spec.

MR. BUROKER: For any of the terms?

JUDGE LEE: The definition. Yes.

MR. BUROKER: Well, I disagree with that. For most of the terms, there's clear understanding given. Electronic mail system is one. There is an explanation of what an electronic mail system is. There is a description of what --

JUDGE LEE: Let's take gateway switch, for instance. I mean, of course, anyone reading it could speculate the inventors probably meant this but I think the kind of clarity the federal circuit has required for coining your own term is a lot more specific than that.

MR. BUROKER: Well, I read the case law, I guess, a little differently. Certainly, if they had gone to the extent of saying gateway switch -- the definition of gateway switch is X, that would mean they are being their own lexicographer.

There are other circumstances in which the court finds the same thing based upon the circumstances of the disclosure and this is one of them, we believe, that, you know, there is a specific definition for what a gateway switch is. It is a -- it is a switch in a gateway -- in an electric mail system in this particular patent.

JUDGE LEE: Because I can easily say, well, that's just an example the inventors offer for a gateway switch and not say that, you know, whatever examples you gave, that had to be it, that had to be the definition, so where do we draw the line?

When we see something offered as an implementation of gateway switch, how do we know -- well, is that just an example or is that what the inventors are saying that's the definition for my gateway switch and, it can't be anything else than that?

MR. BUROKER: Well, in a re-examination, my understanding is you are supposed to come up with the broadest reasonable interpretation in view of the specification.

I believe in almost every instance and I believe every instance where it is used, it is described in the same way as having mailboxes that operate to store e-mail for the various users that are subscribers and that it then routes them onto other gateway switches or to other networks.

That's the definition that's been given by the district court and that we are adopting in this particular case. (Emphasis added.)

Using the claim term "gateway switch" as an example, NTP's counsel, Mr. Buroker, acknowledged that the inventors did not go so far as to set forth any "definition" in the specification. Despite having an opportunity to do so, Mr. Buroker did not identify any definition which has been set forth in the specification for any claim term. Yet, it is argued that there are definitions which make the inventors their own lexicographer. Counsel was referring to the definitions NTP now seeks to have adopted in this case, rather than any which are identified or provided in the specification. The position adopted by NTP abuses the principle of one's being his or her own lexicographer. As is already discussed above, the inventors' special definitions must be set out in the specification. A litigation position taken or otherwise agreed to after issuance of the involved patent does not an inventor's own lexicographer make.

As quoted above, NTP's counsel explained during oral hearing that NTP has described in its specification a gateway switch that is said to have additional functionalities than known types of gateway switches. That,

however, does not cause prior art types of gateway switches to cease to be gateway switches. If NTP wanted the term "gateway switch" to cover only the specific gateway switch implementation, the one with additional functionalities as is described in the specification, NTP was free to make a clear and deliberate limiting definition in the specification. It did not do so.

Similarly, although NTP's specification describes electronic mail messages containing only formatted text and having four parts: (a) destination address, (b) indication of sender, (c) a subject field, and (d) inputted message text, that does not cause preexisting electronic mail messages containing only images and graphics and no text to cease to be electronic mail messages. Nor does it cause electronic mail messages which do not disclose sender information or which do not include a subject field to not be electronic mail messages.

NTP would like to have us treat mere description in the specification, without any kind of express disclaimer of broader coverage, as limiting restrictions for what is claimed. For reasons discussed above, NTP's position is without merit, certainly where the principle of broadest reasonable interpretation is applied for construing claims. Note also that the patent statute provides one instance in which a claim element can rightfully be limited to what is disclosed in the specification and equivalents thereof, without need to recite the disclosed elements in the claim. See the sixth paragraph of 35 U.S.C. § 112:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure,

material, or acts described in the specification and equivalents thereof.

However, none of NTP's claim elements at issue is expressed as a means or step plus function element and NTP makes no such argument in its brief.

During oral hearing, NTP's counsel made the assertion that for each claim term in dispute, the corresponding disclosure in the specification should be treated as a limiting definition for the term rather than an example (Hearing Transcript 52:26 to 53:9):

JUDGE LEE: Well, sometimes you say example and sometimes you try to take it back, so is it -- is it only an example or is it a limiting definition for an e-mail?

MR. BUROKER: In this particular case, it is a limiting definition for an e-mail.

JUDGE LEE: And you would say that for every other term that's in dispute here, that in every instance what you disclose in the spec is a limiting definition for the term that appears in the claim and not an example of what falls within the claim?

MR. BUROKER: I would have to look because there is about 30 some terms but I believe that's the case.

The assertion is remarkable because as is already explained above, (1) counsel could point to no limiting definition in the specification for any claim term, (2) NTP did not use means or step plus function language sanctioned by the sixth paragraph of 35 U.S.C. § 112, for limiting a claim element to what is disclosed in the specification and equivalents thereof, and (3) during reexamination, the broadest reasonable interpretation rule applies. NTP's argument is rejected. We will regard embodiments disclosed in the

specification as preferred embodiments and examples, and not as restrictive limitations for what is claimed.

For instance:

- 1. The claim term "RF receiver" does not require a device which can be carried by a person outside a home or office. The term simply carries no such mobile or portable limitation. Any receiver that receives radio frequency signal, whether or not it is small enough to be carried by a person, meets the claim term.
- 2. The claim terms "RF information transmission system" and "RF system" do not require more than one radio frequency transmitter and do not require any minimum geographic coverage area. The terms simply carry no such number and size requirement. Any system that transmits information by radio frequency signals meets the claim term.
- 3. The claim term "electronic mail system" does not require a plurality of processors each running electronic mail programming. A processor placing an electronic mail message on a transmission mechanism capable of delivering the message to the intended recipient constitutes an electronic mail system, one that sends electronic mail. A processor capable of receiving from a transmission mechanism an electronic mail message intended for it constitutes an electronic mail system, one that receives electronic mail. A transmission mechanism capable of routing an electronic mail message toward the intended recipient constitutes an electronic mail system, one that transmits or routes electronic mail. Any multiple or combination of the above also constitutes an electronic mail system. The

term is broad and reads on any aspect of the processing or handling of electronic mail.

Our interpretation is not inconsistent or incompatible with any example illustrated in NTP's specification. That NTP's specification describes an electronic mail system which composes, sends, routes, and receives electronic mail transmitted between originating and destination processors does not mean that a system which performs just one of those functions concerning email would not be an electronic mail system. Any system which performs an important function with regard to electronic mail is reasonably deemed an electronic mail system. For example, that constituent processors in an electronic mail system typically both send and receive electronic mail does not mean each processor in an electronic mail system necessarily must both send and receive electronic mail.

4. The claim term "interface" does not require a processor that transmits electronic mail messages to a wireless system for delivery to a mobile processor which can be carried by a person outside of a home or office and which executes electronic mail programming to function as a destination and/or source of electronic mail. An interface, when broadly construed within reason, is a structural connection or device between two or more systems, devices, or component parts through which information may pass from one side to the other. That broad interpretation is not inconsistent or incompatible with any example illustrated in NTP's specification. There simply is no requirement on what must be in the system on one side of the interface and what must be in the system on the other side of the interface.

- 5. The claim term "electronic mail message" does not have to be a formatted text message having all of the following four parts:
 - (a) a destination address identifying the persons, places, or objects to which the message is directed;
 - (b) an indication of the sender;
 - (c) a subject field; and
 - (d) the inputted message text.

Item (a) is the only necessary element of the four for constituting an electronic mail message. An electronic mail system could be one which does not transmit sender information or add sender information to the electronic mail message, in which case the electronic mail message would not include an indication of the sender. An electronic mail system could be one which does not support a subject field in the electronic mail message, in which case the electronic mail message would not include a subject field. An electronic mail message could be blank and have no informational content other than envelope type information and any attached file, in which case the electronic mail message would not include inputted text. We see no reason why one with ordinary skill in the art would regard as absolutely necessary that an electronic mail message must reveal the sender, include message text, and have a subject field. Those components are useful if included in an electronic mail message but are not necessary.

Note that in the specification of NTP's '172 patent (Spec. 2:63 - 3:15), the four above-identified items are described only as "several common items" that must be entered to send an electronic mail message. The

"common" description implies only a general observation and does not express a necessary condition for composing and sending a message. That usually all four items must be present does not set forth a requirement that all four items must be present in all circumstances at all times.

- 6. The claim term "gateway switch" does not require a processor in an electronic mail system which connects processors in that system and which has additional functions for supporting other aspects of an electronic mail system such as receiving, storing, routing and/or forwarding electronic mail messages. An interface which provides controlled entry of information into a separate system, device, or another component reasonably constitutes a gateway switch. That interpretation is not inconsistent or incompatible with any example illustrated in NTP's specification. There simply is no requirement on what must be on one side of the gateway switch, what must be on the other side of the gateway switch, and what specifically must pass through the gateway switch. It is also not necessary that a gateway switch must run certain electronic mail programming for creating an electronic mail message of the specific type preferred by NTP.
- 7. An originating processor need not be either a part of or outside of an electronic mail system or able to process electronic mail programming, beyond simply having the capability to send out electronic mail. The processor from which an electronic mail message first originates to travel on a transmission route to the intended recipient is the originating processor whether or not it is within the electronic mail system or able to process electronic mail programming. Adding limitations regarding the processing of electronic mail programming and relationship to an electronic mail

system is not necessary to make sense of the term "originating processor." A processor is an originating processor with regard to an electronic mail message if and when it sends the message on a transmission route toward a recipient.

A "destination processor" need not be a part of an electronic 8. mail system or able to process electronic mail programming beyond simply having the capability to receive electronic mail. It does not have to be identified by an address which initiates transmission of information from the originating processor. It does not have to be a desktop or notebook computer. Adding limitations regarding the processing of electronic mail programming and relationship to an electronic mail system is simply not necessary to make sense of the term "destination processor." A destination processor is a processor at a location in the route of transmission of an electronic mail message where reception of the message constitutes completion of transmission and where the intended recipient can view the message at that location, whether or not the processor is within an electronic mail system or able to process electronic mail programming. At that location, the transmitted message is made available at the destination processor for viewing by the intended recipient without need of further transmission. A processor located at an intermediate location where physical access by the intended recipient is not available is not a destination processor. This interpretation is based on the plain meaning of the word "destination" and is fully consistent with how the term "destination processor" is used in NTP's specification.

The only processors referred to as a "destination processor" in the specification of NTP's '172 patent as filed are end node processors A-N and end node portable personal computers illustrated in Figures 1 and 8. Gateway switches and interface switches, which are intermediate nodes in the electronic mail transmission process are not ever referred to as destination processors. Furthermore, the terms "gateway switch" and "interface switch" are used, throughout the specification of NTP's '172 patent as filed, in the same sentence in which the term "destination processor" appears and is used to identify an end node processor A-N or an end node portable personal computer. For example, the specification states in column 24, lines 61-67:

The information is transmitted from the receiving interface switch 304 to the RF information transmission network with an address of the destination processor, such as a name of a user of the destination processor A-N, to receive the information which has been added by either the originating processor A-N, a gateway switch 14 or the receiving interface switch 304.

The term "destination processor" is used in the specification of NTP's '172 patent as filed to describe that particular end node device to which the intended user recipient of electronic mail has immediate and direct physical access when accessing and viewing electronic mail. For instance, the specification of the '172 patent states in column 3, lines 28-46:

Upon arrival of the information at the destination processor's gateway switch with mailboxes 14, one of two events take place. The information is typically stored in the destination processor's electronic mailbox [located at a gateway switch at some other location] for later retrieval by the destination processor. This typically happens as a result of the fact that a person is not located at the destination processor at

the time of delivery of the message to the gateway switch with mailboxes 14 or the destination processor is not turned on and connected to the public switch telephone network 12... In the situation where the destination processor is within a company or organization, the information may be delivered to the host computer. The destination processor's host computer stores the information until the destination processor calls the host computer to retrieve the information.

The specification further states that the destination processors may be transported during operation by a user. ('172 patent 19:44-45). The physical link between the destination processor and the intended user recipient of electronic mail is unmistakably required in the context of the specification of NTP's '172 patent as filed.

Any attempt to read the claim term "destination processor" onto intermediate nodes such as the gateway switch 14 and interface switch 304 derives no support from NTP's specification as filed and is unreasonable.

We have not overlooked the declaration testimony of Dr. V. Thomas Rhyne relied upon in NTP's appeal brief in support of NTP's position on claim interpretation, i.e., Supplemental Declaration of Dr. V. Thomas Rhyne under 37 C.F.R. § 1.132 (A12) ("Rhyne Supplemental Declaration") and Exhibit A attached thereto ("Rhyne Claim Constr. Dec."). We decline, as did the Examiner, to credit Dr. Rhyne's testimony as it does not address our concerns as discussed above. Dr. Rhyne has taken a misplaced approach to claim interpretation by regarding what is described in the specification as restrictive claim limitations, without identification of any clearly limiting definition or disclaimer of broader coverage. Dr. Rhyne has read each disputed claim term onto the disclosure, *i.e.*, identified what NTP has

disclosed in the patent specification which satisfies or meets the claim term. But that is no basis to limit what is claimed to what is specifically disclosed.

B. Rejections based on Telenor '89

NTP asserts that the copy of Telenor '89 relied on by the Examiner contains content which has been altered and manipulated and therefore the copy not authentic and cannot be relied on to support any rejection based on Telenor '89. In Section F of this opinion we address the argument and evidence on that issue. We conclude that the Examiner properly relied on the copy of Telenor '89 contained in the record.

NTP also asserts that Telenor '89 does not qualify as a printed publication under 35 U.S.C. § 102(b) because one with ordinary skill in the art would not have located the document despite an exercise of reasonable diligence. In Section F of this opinion we also address the arguments and evidence on that issue and reject NTP's argument. We conclude that Telenor '89 is a printed publication under 35 U.S.C. § 102(b).

1.

The anticipation rejection based on Telenor '89

The Examiner finally rejected claims 1-13, 23-50, 60-92, 94-114, 117-142, 146, 151-163, 188, 189, 192-194, 199-202, 207-213, 218-223, and 295-317 under 35 U.S.C. § 102(b) as anticipated by Telenor '89.

The rejection of claims 1-13, 23-50, 60-92, 94-114, 117-142, 146, 151-163, 188, 189, 192-194, 199-202, 207-212, 219, 220, and 295-317 under 35 U.S.C. § 102(b) as anticipated by Telenor '89 is *reversed*.

The rejection of claims 213, 218, and 221-223 under 35 U.S.C. § 102(b) as anticipated by Telenor '89 is *affirmed*.

Issue

Has NTP shown that the Examiner incorrectly determined that claims 1-13, 23-50, 60-92, 94-114, 117-142, 146, 151-163, 188, 189, 192-194, 199-202, 207-213, 218-223, and 295-317 are anticipated by Telenor '89? Findings of Fact

Of all NTP claims rejected as anticipated by Telenor '89, the independent claims are claims 1, 38, 74, 88, 99, 126, 160, 162, 188, 194, 202, and 213. For this anticipation rejection, claim 1 is representative for all rejected claims except claims 213 and 218-223. Claim 1 reads as follows:

1. A system for transmitting an inputted message, contained in an electronic mail message originating from one of a plurality of originating processors contained in at least one electronic mail system, to at least one RF receiver with at least the inputted message being transmitted by an RF information transmission system to the at least one RF receiver comprising:

at least one interface, one of the at least one interface connecting the at least one electronic mail system containing the plurality of originating processors to the RF information transmission system; and wherein

the electronic mail message originating from the one of the plurality of originating processors includes an address of the one interface and is transmitted from the one of the plurality of originating processors to the one interface which processes the electronic mail message with the one of the at least one electronic mail system responding to the address of the one interface to direct the electronic mail message from the one of the plurality of originating processors to the one interface;

the RF information transmission system transmits at least the inputted message from the one interface through the RF

information transmission system to the at least one RF receiver after information is inputted to the system; and

the one interface comprises a processor, a bus coupled to the processor and to a plurality of ports, at least one of the plurality of ports being coupled through a modem to the RF information transmission system and at least another of the plurality of ports being coupled through a modem to the at least one electronic mail system.

Telenor '89 discloses a system called Mobile Data Network (MDN) which transfers messages between fixed terminals and mobile stations on a store-and-forward basis. (Telenor '89, Vol. 1, Preface).

Telenor '89 discloses that the MDN may also be connected to a separate Message Handling System (MHS). (Telenor '89, Vol. 1, Preface). Telenor '89 also discloses that a "MIWU" (MHS InterWorking Unit) is responsible "for the interwork between MDN and a public MHS service" and that "communication between an MDN subscriber and a MHS user may be routed over any of the existing MIWUs." (Telenor '89, Vol. 1, p. 6, Il. 1-4).

In the MDN architecture, the terminals are up to 100,000 mobile stations (MS) and up to 5,000 fixed terminals (FT), and the network nodes are: 1 Operation and Management Center (OMC), up to 50 Mobile Data Exchanges (MDX), up to 500 Network Adapters (NA) each of which controls up to 50 Base Stations (BS), and up to 20 MHS Interworking Units (MIWU). (Telenor '89, Vol. 1, p. 2).

Figure 2 of Volume 1 of Telenor '89 is reproduced below, which presents in a simple illustration which part of the MDN is the fixed wirelined portion and which part of the MDN is a radio network:

The terms of the different parts of the public part of the MDN is shown in Figure 2.

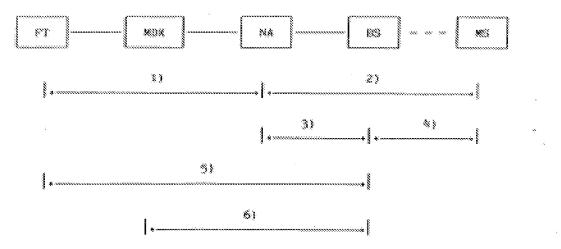


Figure 2 Terms and definitions concerning the different parts of the public part of the MDN:

- 1): Data network part of the MON
- 2): Radio network of the MDN
- 3): Fixed part of the radio network
- 4): Nadio part of the radio network
- 5): Fixed part of the NOW
- 6): NTA operated part of the MDN
- 1). 5) and 5) also include the links MEX-MEX and MEX-WIW!.

As is shown above, the wireless portion is that segment from a base station BS to a mobile station MS, based on radio transmission. The radio network has a wired portion extending from a network adaptor NA to a base station BS. Telenor '89 also describes that the radio network of the MDN is assumed to be a cellular system. (Telenor '89, Vol. 1, Preface).

In the MDN architecture, each MDX and network adapter NA is connected to every other MDX and NA in the system. (Telenor '89, Vol. 1, p. 7, ll. 1-5). Figure 5 of Volume 1 of Telenor '89 illustrates that structure and is reproduced below:

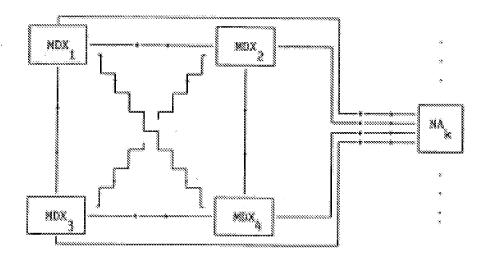


Figure 5. An MOW of 4 MOXs will be interconnected in a mesh network. Each MA will be connected to every MOX.

Each Network Adaptor NA is in turn connected by wire to up to 50 location areas (LCA) each of which may comprise up to 20 base stations (BS) which transmit messages to mobile stations by radio communication. (Telenor '89, Vol. 1, p. 4, ll. 1-4). Figure 3 of Volume 1 of Telenor '89 illustrates that arrangement and is reproduced below:

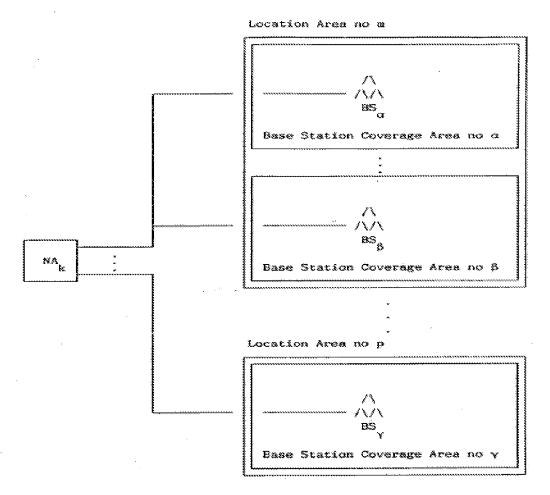


Figure 3. The structure of the fixed part of the radio network within the MDN.

Within the MDN architecture, each MIWU which connects the MDN to an external message handling system MHS is connected to every MDX, as is illustrated in Figure 6 of Volume 1 of Telenor '89, which is reproduced below:

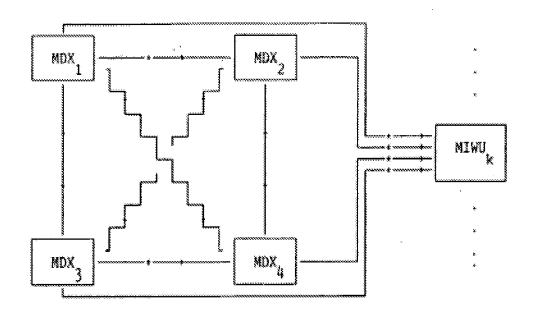


Figure 6. Each MIWU will be connected to every MDX of the network.

In the MDN, every user or terminal belongs to one and only one licensee and every licensee, including every subscriber of that license, is related to one and only one MDX, referred to as the Home-MDX (hMDX) of the licensee. (Telenor '89, Vol. 1, p. 8, ll. 12-23). Each fixed terminal FT is directly connected to only one MDX. (Telenor '89, Vol. 1, p. 8, l. 4).

In the MDN, an MDX is responsible for message switching in the sense of switching a message to the correct FTs, NAs, other MDXs, or MIWUs (Telenor '89, Vol. 1, p. 5, ll. 9-10), and a network adaptor NA is responsible for message switching in the sense of switching messages from a mobile station MS to the correct MDX, and from an MDX to the correct mobile station MS. (Telenor '89, Vol. 1, p. 5, ll. 17-24).

The message routing possibilities within the MDN is summarized by the following statement in Telenor '89, Vol. 1, p. 9, ll. 6-14:

- The only possible connections within the MDN will be the following:

Any FT (-) Home-MDX of that FT
Any MDX (-) Any MDX
Any MDX (-) Any MIWU
Any MDX (-) Any MA
Any NA (-) Any MS
OMC (-) Any MIWU, MDX or NA

These connections are said to be the possible <u>communication links</u> of the MDN.

Each message transmitted in the MDN is divided into several fields, and Telenor '89 particularly describes the message fields in its Volume 3. (Telenor '89, Vol. 1, p. 17, ll. 12-15).

Telenor '89 uses the term Protocol Data Unit (PDU) to refer to the information being transferred between entities implementing a transfer protocol. (Telenor '89, Vol. 3, p. 2, ll. 2-3).

Telenor '89 describes that all PDUs, at all layers, contain a header portion and in most cases also a content portion. (Telenor '89, Vol. 3, p. 14, ll. 8-9). Figure 5 of Volume 3 of Telenor '89 illustrates the general layout of a PDU:

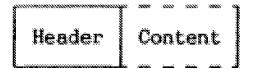


Figure 5 Overall layout of a PDU.

Telenor '89 describes that the header portion of a PDU is separated into three parts, a PDU type identifier, a Mandatory Header, and an Optional

Header. (Telenor '89, Vol. 3, p. 14, ll. 14-24). Figure 6 of Volume 3 of Telenor '89 illustrates that structure, and is reproduced below:

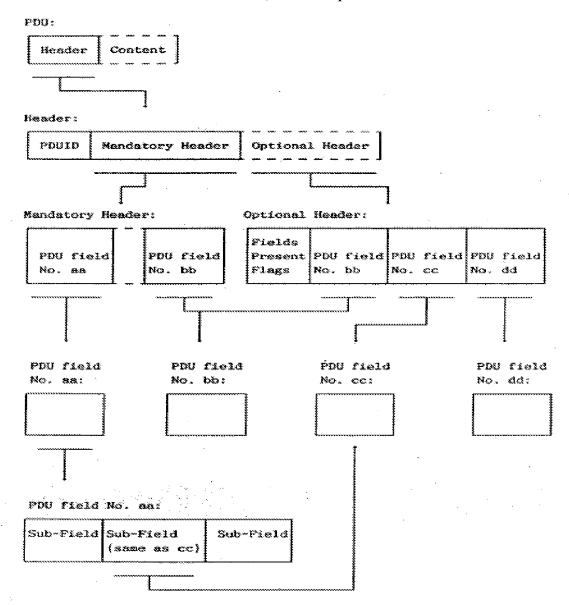


Figure 6 An example describing the building blocks of a PDU.

In order not to make the figure too complicated, no replicated PDU fields are shown.

Telenor '89 discloses that the PDU from an MDX to a FT has a content portion and has a mandatory header including a Unique Message

Identifier, the Originator Address, and the Recipient Address. (Telenor '89, Vol. 3, p. 30, ll. 6-19).

Telenor '89 discloses that the PDU from a FT to an MDX has a content portion, has a mandatory header including a Unique Message identifier and the Originator Address, and an optional header which includes the Recipient Address. (Telenor '89, Vol. 3, p. 31, ll. 1-21).

Telenor '89 discloses that the PDU from an MDX to a NA has a content portion and a mandatory header including a Unique Message Identifier, the Originator Address, and the Recipient Terminal's Address. (Telenor '89, Vol. 3, p. 32, Il. 1-32).

Telenor '89 discloses that the PDU from a NA to an MDX has a content portion, a mandatory header including a Unique Message identifier and Originator's Terminal Address, and an optional header including the Recipient Address. (Telenor '89, Vol. 3, p. 33, ll. 1-30).

Telenor '89 discloses that the PDU between MDXs and between an MDX and a MIWU has a content portion, a mandatory header including a Unique Message Identifier and the Originator Address, and an optional header including the Recipient Address. (Telenor '89, Vol. 3, p. 37, ll. 1-26).

Messages originating from an MHS and passed through to the MDN through a MIWU contain an envelope portion and a content portion. (Telenor '89, Vol. 8, p. 6, sec. 2.4.). The envelope information are data such as originator, recipient, content type, content length, and message identifier. (Telenor '89, Vol. 8, pp. 33-37, sec. 7.2).

Principles of Law

Anticipation under 35 U.S.C. § 102 requires that each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999).

Analysis

a. Electronic Mail Message

For all rejected claims, NTP argues that the messages transmitted in the MDN of Telenor '89, whether they are originated within the MDN or admitted into the MDN through a MIWU from an external message handling system MHS, are not electronic mail messages as is required by NTP's claims. NTP's position is that an electronic mail message, in the context of NTP's specification, must include four parts: (1) a destination address identifying the person, place, or object to which the message is directed, (2) an indication of the sender, (3) a subject field, and (4) the inputted message text.

In construing "electronic mail message" as a claim term, we have determined that it is not limited to the particular type and format of an electronic mail message as that used in NTP's disclosed embodiment. An electronic message that includes only the recipient's address still qualifies as electronic mail. The information contained in the headers of the messages from within the MDN, and the envelope information contained in the messages from a message handling system MHS communicating with the MDN through a MIWU, qualify the messages communicated within the MDN and between an MHS and an MDN as electronic mail messages.

In any event, at least some messages handled by the MDN, when considered as including both the mandatory and optional header, contain all four parts of what NTP asserts must be included in an electronic mail message. For instance, the PDU from a FT to an MDX has (1) a content portion, (2) a mandatory header including a Unique Message identifier and (3) the Originator Address, and (4) an optional header which includes the Recipient Address. (Telenor '89, Vol. 3, p. 31, ll. 1-21). It is not necessary that every message transmitted through the system contains all of the allegedly required fields for an electronic mail message. A single one would suffice.

NTP argues that Telenor '89 does not explain how an MDN user actually generates a message as input into the Telenor '89 system but only describes possible protocols for data that may be transmitted. (Brief 56:17-21). The argument is misplaced. The protocol requirements provide specific information on what the transmitted messages must or may include, because the protocols are rules governing the transmission of messages. NTP's argument unreasonably insists on not only that there be substantive teachings in the prior art which satisfy a claim limitation but that the teachings are expressed in a particular manner that NTP would prefer. It is simply not necessary that Telenor '89 specifically describe what application program is running on a fixed terminal or mobile station in the MDN and exactly what it prompts a user to input into the system. Moreover, NTP itself acknowledges that information about the sender may be automatically added by the terminal and need not be actually inputted by the user. (Brief 56:13-14). It is enough that an MDX is associated with a plurality of fixed

terminals which can generate and send an electronic mail message to each other.

NTP argues that Telenor '89 teaches away from providing a message that has all four elements of NTP's disclosed electronic mail messages because it states "that only data input by the user may be transmitted over the network due to bandwidth issues." (Brief 57:10-12). But NTP's argument does not indicate where in Telenor '89 the alleged statement exists. Paragraph 26 of the Supplemental Declaration of Dr. V. Thomas Rhyne, a citation closest to NTP's argument, likewise does not indicate where in Telenor '89 the alleged statement exists. We cannot verify or consider the meaning and significance of the alleged statement without first locating it in Telenor '89. NTP's argument fails on that basis alone. We decline to search the seven volumes of Telenor '89 to see if NTP's assertion can be verified. It is NTP's responsibility to point out where the alleged statement appears in the record to support its argument. Board Rule 41.37(c)(1)(vii) requires citation to the parts of the record relied on. See also Halliburton Energy Services, Inc. v. M-I LLC, 514 F.3d 1244, 1250 n.2 (Fed. Cir. 2008) (judges are not like pigs, hunting for truffles buried in briefs quoting United States v. Dunkel, 927 F.2d 955, 956 (7th Cir. 1991)) and DeSilva v. DiLeonardi, 181 F.3d 865, 867 (7th Cir 1999) (a brief must make all arguments accessible to the judges, rather than ask them to play archaeologist with the record). In any event, the alleged statement does not preclude a transmitted message from having any number, or all four parts, of what NTP asserts must be contained in an electronic mail message. They simply would all have to be entered by the user. We have identified where

Telenor '89 describes the contents of its PDUs in the MDN. Some PDUs include all components NTP asserts must be present in an electronic mail message.

b. Electronic Mail System/Interface/ RF Information Transmission System

All of the claims rejected as anticipated by Telenor '89 require an interface which connects an electronic mail system to an RF information transmission system or an RF system. In that context, the electronic mail system should not include the RF information transmission system or RF system, because the interface recitation implies two separate elements. It is illogical and not meaningful to refer to an interface connecting one system to another if the former includes the latter or vice versa.

NTP argues that each MDX is not an electronic mail system. (Brief 56:5-6; 57:20-21). The argument is misplaced because the Examiner identified the MDN as an electronic mail system and also the MHS as an electronic mail system (Answer 9:25), not the MDX. That part of the MDN represented by the network of MDXs, including each MDX's assigned fixed terminal, is an electronic mail system because the messages transferred from one terminal to another in the MDN are electronic mail messages. The MHS is also an electronic mail system because the messages transferred within the MHS and from the MHS to the MDN are electronic mail messages.

The part of the MDN extending from the Network Adaptors to the Base Stations to the Mobile Stations constitutes a RF information transmission system or RF system. (See Answer 10:9-11). For a message sent from a fixed terminal in the MDN to a mobile station, the home MDX

of the recipient mobile station constitutes the interface between the electronic mail system and the RF information transmission system. (See Answer 10:6-11). For a message sent from a MHS to a mobile station, the home MDX of the mobile station serves as the interface between the electronic mail system and the RF information transmission system. (See Answer 10:6-11).

NTP cannot reasonably assert, and has not asserted, that the home MDX of a recipient mobile station MS is not an interface connecting the network of MDXs with their assigned fixed terminals to an RF information transmission system. NTP cannot reasonably assert, and has not asserted, that the home MDX of a recipient mobile station MS is not an interface connecting a MHS to an RF information transmission system as represented by the network adaptors, base stations, and mobile stations.

c. Message including an address of the interface

All of the claims rejected as anticipated by Telenor '89, except claims 213, 218, and 221-223, require that the electronic mail message originating from a processor includes an address of the "interface." NTP argues that that feature is not disclosed by Telenor '89. The argument has merit except for claims 213, 218, and 221-223 which merely require inclusion of "the address of the destination to which the electronic mail messages are delivered by the electronic mail system." The recitation broadly reads on the address of the final destination beyond the interface. The phrase "delivered by the electronic mail system" is not so restrictive as to require direct transmission from the electronic mail system to the final destination without any forwarding component. The delivery can be made by reliance on and

use of one or more forwarding system components outside of the electronic mail system, such as but not limited to the radio network of Telenor '89.

(1)

From the perspective in which the MHS is an electronic mail system and the user agent UA in the MHS is the originating processor of the message, the Examiner states (Answer 130:3-7):

Regarding Appellant's fourth argument, Telenor teaches that the MHS UA transmits originated information in connection with an address of the MDX, contrary to Appellant's argument. For example, email originated at a MHS UA is addressed to a MDN recipient (as discussed above), however the MDN recipient address in "Party-Network Messaging" is also an MDX (interface) (vol. 1, p. 21, sec. 3.6).

The Examiner does not identify where in Telenor '89 "Party-Network Messaging" is described or what "Party-Network Messaging" represents. The Examiner's position seems to be that in party-network messaging mode, the recipient address for an email originated from the MHS and intended for a recipient in the MDN can be the address of the interface MDX. As best we can tell, it seems to be assumed by the Examiner that "party-network messaging" mode is substantially the same as or at least not much different from the ordinary mode in which an email message is sent from a user agent UA terminal in the MHS to a mobile station MS in the MDN. It is apparently further assumed by the Examiner that whatever "party-network messaging" represents, it preserves the requirement of these claims that a message transmitted from an originating processor in an electronic mail system to the interface is provided by the interface to an RF information transmission system.

The assumptions are not supported by a persuasive explanation and would appear to be inconsistent with Figure 9 of Volume 1 of Telenor '89, as reproduced below:

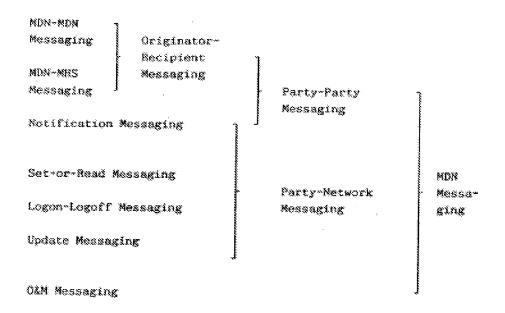


Figure 9. Hierarchy of terms of the possible types of messaging within the MDN.

As shown above, party-network messaging is quite different from party-party messaging. It appears that in party-network messaging, either the originator or recipient is the network. There are four types of party-network messaging: Notification Messaging, Set-or-Read Messaging, Logon-Logoff Messaging, and Update Messaging. The text in Telenor '89, Volume 1, pages 14-15, which describe each of these types of party-network messaging is reproduced below:

<u>Notification Messaging</u> denotes the messaging arising from the notification requests of originator-recipient messaging. Notification Messaging comprises MT-Reports generated by the network or UM-Messages generated by the recipients.

Set-or-Read Messaging denotes the messaging arising from the need of an MDN subscriber to either

- 1) retrieve current values of some specified parameter(s)
- 2) change current values of some specified parameter(s).

Included in the term Set-or-Read Messaging are the MT-Set-or-Read message being transferred on the link originator -> hMDX and the MT-Set-or-Read-Result being transferred on the link hMDX -> originator (see also [2]).

Logon-Logoff Messaging. A subscriber has to go through a logon procedure before being able to communicate within the MDN. Likewise, a communicating party may finish the communication session by logging off. Included in the term Logon-Logoff Messaging are the messages MT-Logon and MT-Logoff being transferred on the link originator -> hMDX and the message MT-logon-Result being transferred on the link hMDX -> originator (see also [2]).

<u>Update messaging</u>. A MS rosming between different location areas will automatically submit a particular message to inform the hMDX that the location is changed. This message is called RT-Here-I-am when transferred MS -> NA, and NX-Here-I-am when transferred NA -> MS (see also [2]).

Based on the foregoing, in party-network messaging mode, there is no indicated reason for an MDX as the intended recipient of a message to send the message further to an RF information transmission system. Examiner has provided no persuasive basis to assume that in party-network messaging mode, a message sent to an MDX as the intended recipient of the message forwards or provides it to an RF information transmission system.

Accordingly, the Examiner's reliance on the party-network messaging mode

in which the address of a MDX would be provided as the intended recipient address is believed to be unsupported by substantial evidence. In that scenario, with respect to the message transmitted, the MDX is no longer the

interface between the electronic mail system and the RF information transmission system.

A proper anticipation rejection based on Telenor '89 requires the Examiner to locate all the features of NTP's claimed invention in the same embodiment disclosed in Telenor '89. Generally, it is not sufficient to find separate features of the claimed invention in different embodiments in the reference.

(2)

From the perspective in which all MDXs and their fixed terminals are collectively regarded as an electronic mail system and a fixed terminal FT is regarded as the originating processor, the Examiner indicates (Answer 10:22-29) that the message originated by the FT includes the address of the interface which is the home MDX of the recipient mobile station. In support of that position, the Examiner cites to Volume 1, page 36 of Telenor '89, and notes that the recipient field of email originating from a FT includes the address of the MDX, expressed as "MXA." (Answer 10:22-29).

According to the Examiner, a message from a FT to a MS includes the address of the interface which is the home MDX of the recipient MS, because the communication link entries for "MXA" (address of a MDX) indicates so in a table on page 36 of Volume 1 of Telenor '89. We have reviewed those table entries and find that the Examiner appears to have read more information into the table than what is actually shown. In that connection, the table for the MDX address "MXA" on page 36 of Volume 1 of Telenor '89 is reproduced below:

Appeal No. 2008-004602 Reexamination Control 90/006,493, 90/006,680, 90/007,735 Patent No. 5,819,172

Address	Communication link		Originator OR	field(s) ORM	Recipient OR	field(s) ORN
type						
MXA:	£-1, -	> MDX	No	No	Yes	Yes
	FT <	- MDX	Yes	Yes	No	No
	MDX -	> MDX	Yes	Yes	No	Yes
	MDX -	UWIM <	Yes	Yes	No	No
	MDX <	- KIWU	No	No	No	Yes
	MDX -	> NA	Yes	Yes	No	No
	MDX <	- NA	No	Мо	Yes	Yes
	NA -) MS	Yes	No	No	No
	NA <	- 185	No	No .	Yes	No

For reading the table properly, we reproduce the following sentence on page 33, lines 21-22, of Volume 1 of Telenor '89, which states:

The following tables show on which links the different address types may occur.

The table, as explained by the above-quoted text, is not intended to indicate a continuous path for any particular message from one communication link to the next. The table simply shows on which communication links a MDX address may appear. The column labeled "Communication link" includes all communication links in the MDN. Note also that the interface as determined by the Examiner is not just any MDX but the home MDX of the recipient mobile station MS. (Answer 10:6-10).

There is inadequate basis to string together from the table a complete path for a particular message from a fixed terminal FT to a mobile station MS, and then assume that the address of the home MDX of the recipient MS appears on the first communication link FT \rightarrow MDX or any other communication link, or is carried from one link to the next. Those

assumptions are speculative. From the table one can tell that a MDX address may exist on a link but it is speculative to identify any MDX address as that of the home MDX of a recipient mobile station MS. Also, to the extent that a MDX address appears in what is referred to as a "Recipient field" in the table, it can indicate that the MDX, not a mobile station MS, is the intended recipient of the message, for example in party-network messaging explained on pages 14-15 of Volume 1 of Telenor '89. The Examiner has not articulated a sufficient basis to assume that where a MDX address appears on a communication link, the message being transmitted must be for a mobile station as the intended party recipient and that the MDX address must be that of the home MDX of the mobile station.

In summary, the record does not adequately support the assumptions made by the Examiner.

(3)

From the perspective in which a mobile station MS is an originating processor, the Examiner indicates (Answer 10:22-28) that the message originated by the MS includes the address of the interface which is the home MDX of the MS. In support of that position, the Examiner cites to Volume 1, page 36 of Telenor '89, and notes that the recipient field of email originating from a MS includes the address of the MDX, expressed as "MXA." (Answer 10:22-28). The positions of the Examiner are misdirected, because in the scenario depicted the home MDX of the MS as originating processor does not satisfy the claim requirement of an interface between an electronic mail system including the originating processor (MS)

and the RF information transmission system (NA and BS) are on the same side of the MDX and do not require the MDX for connection with each other. Also, no MS can be connected to its home MDX without first passing through an NA and associated BS. The MDX is not an interface between (1) an electronic mail system containing the originating processor and (2) the RF information transmission system or RF system (NA and BS).

Furthermore, according to the Examiner, a message from a MS to a MDX includes the address of the interface which is the home MDX of the MS, because the communication link entries for "MXA" (address of a MDX) indicates so in a table on page 36 of Volume 1 of Telenor '89. We have considered the significance of those table entries and find that the Examiner appears to have read more information into the table than what is actually shown. As is already discussed above, the table shows what address type may appear on a particular communication link but does not indicate the ultimate destination of a message appearing on the link or whether the same address is carried forward from one communication link to the next. For example, that a MDX address appears on a MS to NA link and on a NA to MDX link does not mean the message being transmitted from a MS will be provided back to the RF information transmission system (NA and BS) for sending to a MS. Also, that a MDX address may appear on a MS to NA link and on a NA to MDX link does not mean the same MDX address appears on both links or that a particular MDX address is carried forward from the former to the latter.

d. Broadcasting the inputted message and the identification of at least one RF receiver from a broadcast location in the RF system to the at least one RF receiver

Independent claim 213 recites that at least one broadcast location in the RF system broadcasts at least the inputted messages and an identification of at least one RF receiver to the at least one RF receiver. Claims 218-223 each depend directly or indirectly from claim 213 and thus include the same limitation.

A prior art reference must be enabling as to the claimed invention it anticipates. *In re Donohue*, 766 F.2d 531, 533 (Fed. Cir. 1985). It is not necessary, however, that an invention disclosed in a publication shall have actually been made to satisfy the enablement requirement. *Id.* NTP argues that Telenor '89 does not enable one with ordinary skill in the art to build a system which broadcasts an inputted message from a broadcast location to an RF receiver. NTP's reasoning (Brief 58:18 to 59:17) is reproduced below:

The Telenor documents, however, fail to describe how communication between a BS and the Radio Unit/RPC controller actually occur. Indeed, the Telenor documents indicate only that communications between the BS and the Radio Unit/RPC can occur using one of two protocols -- a "Radio Bearer Protocol" and a "Radio Transfer Protocol" on the Radio Bearer Layer and the Radio Transfer Layer, respectively. *See* Telenor at 3:4-6. Then, at 3:9-10 the documents explain the general goals of the Radio Bearer Layer including that it "shall provide the ability to transport one radiogram between MS and BS" and its goal is to relate to "addressing of sending/receiving MS and BS." *See* Telenor at 3:9. Volume 3 then states that the "the above functions is not described in detail in this specification [sic]." *Id*. The next page indicates that the Radio Transfer Layer functionality "will

depend on the functionality of the protocol chosen for RBL." *Id.* at 7:10. *See* Rhyne Supplemental Declaration, ¶ 30.

Clearly, at the time this document was written the Telenor authors had not resolved how to transfer radiograms between a base station (BS) and the mobile station (MSs). The required communication protocols had not been designed, for example, and hence were not included in these documents. This fact is further confirmed in Volume 7 where the authors stated that "[s]ince the objective of this study was to describe services, networking and the upper layer protocols for message based mobile communications, no specific radio protocol has been described." *See* Telenor at 7:1. *See* Rhyne Supplemental Declaration, ¶ 31.

Accordingly, the Telenor documents are insufficient to enable a person of ordinary skill in the art of the Campana patents to build a system for transmission of "originated information" (which is properly defined in the context of the '172 claims as "the message text of an electronic mail message") using an RF information network to an RF receiver, as specifically required by all of the claims of the '172 Patent. Thus, the Telenor documents fail to anticipate any of the claims of the '172 Patent for this additional reason. *See* Rhyne Supplemental Declaration, ¶ 32. [Emphasis in original.]

NTP's argument is misplaced, as it mistakenly assumes that every implementation detail must be specifically disclosed by a prior art reference.

The test for passing the enabling disclosure requirement under 35 U.S.C. '112, first paragraph, is whether one reasonably skilled in the art could make or use the claimed invention from the disclosed subject matter together with information in the art without undue experimentation. *United States v. Telectronics, Inc.*, 857 F.2d 778, 785 (Fed. Cir. 1988). A disclosure can be enabling even though some experimentation is necessary. *Hybritech*

Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1384 (Fed. Cir. 1986), cert. denied, 480 U.S. 947 (1987). The issue is whether the amount of required experimentation is undue. In re Vaeck, 947 F.2d 488, 495 (Fed. Cir. 1991); In re Angstadt, 537 F.2d 498, 504 (CCPA 1976). The factors suitable for consideration in making the enablement determination include (1) the quantity of experimentation necessary, (2) the amount of direction or guidance presented, (3) the presence or absence of working examples, (4) the nature of the invention, (5) the state of the prior art, (6) the relative skill of those in the art, (7) the predictability or unpredictability of the art, and (8) the breadth of the claims. See In re Wands, 858 F.2d 731, 737 (Fed. Cir. 1988).

Nothing in the above-quoted rationale of NTP is directed to whether the missing specifics could have been filled in or designed by one with ordinary skill in the art without undue experimentation. The question is not whether Telenor '89 discloses every implementation detail, but whether one with ordinary skill in the art, given the disclosure of Telenor '89, would have known enough to make and use the invention of the claims rejected as anticipated by Telenor '89 without undue experimentation. In that connection, NTP has not explained (1) what difficulties exist, (2) what kind of effort would have been required of one with ordinary skill in the art to come up with what Telenor '89 is said not to disclose, and (3) why that effort constitutes undue experimentation rather than routine experimentation.

For the foregoing reasons, we reject NTP's argument that Telenor '89 does not enable one with ordinary skill in the art to build a system which broadcasts an inputted message from a broadcast location to an RF receiver.

However, it is noted that claims 219 and 220 depend directly or indirectly from claim 214 and claim 214 in turn depends from claim 213. That chain of dependency means claims 219 and 220 include the limitation of claim 214. Claim 214, however, has not been rejected as anticipated by Telenor '89. Rather, it has been rejected by the Examiner as unpatentable over Telenor '89 and U.S. Patent 5,166,931 ("Riddle"). The Examiner has not explained how the limitation added by claim 214 with respect to claim 213 is met by Telenor '89 alone. Accordingly, the rejection of claims 219 and 220 as anticipated by Telenor '89 cannot be sustained.

Conclusion

NTP has shown that the Examiner incorrectly determined that Telenor '89 anticipates NTP's claims 1-13, 23-50, 60-92, 94-114, 117-142, 146, 151-163, 188, 189, 192-194, 199-202, 207-212, 219, 220, and 295-317.

NTP has not shown that the Examiner incorrectly determined that Telenor '89 anticipates NTP's claims 213, 218, and 221-223.

2.

The obviousness rejection based in part on Telenor '89

The Examiner finally rejected claims 14-22, 51-59, 93, 115, 116, 143145, 147-150, 164-187, 190, 191, 195-198, 203-206, and 214-217 under
35 U.S.C. § 103(a) as unpatentable over the combined teachings of Telenor
'89 and Riddle.

We reverse.

Claims 14-22 depend directly or indirectly from independent claim 1 which was rejected as anticipated by Telenor '89.

Claims 51-59 depend directly or indirectly from independent claim 38 which was rejected as anticipated by Telenor '89.

Claim 93 depend from independent claim 88 which was rejected as anticipated by Telenor '89.

Claims 115 and 116 depend directly or indirectly from independent claim 99 which was rejected as anticipated by Telenor '89.

Claims 143-145 and 147-150 depend directly or indirectly from independent claim 126 which was rejected as anticipated by Telenor '89.

Claims 190 and 191 depend directly or indirectly from independent claim 188 which was rejected as anticipated by Telenor '89.

Claims 195-198 depend directly or indirectly from independent claim 194 which was rejected as anticipated by Telenor '89.

Claims 203-206 depend directly or indirectly from independent claim 202 which was rejected as anticipated by Telenor '89.

We have reversed the anticipation rejection of independent claims 1, 38, 88, 99, 126, 188, 194, and 202 over Telenor '89. Telenor '89 has not been shown to disclose the claim feature requiring the electronic mail message from the originating processor to include an address of the interface. Riddle, as applied by the examiner in rejecting claims depending from independent claims 1, 38, 88, 99, 126, 188, 194, and 202, was relied on for meeting some other claim feature and does not make up for the deficiency of Telenor '89 with regard to including in the electronic mail message the address of the interface. Accordingly, the rejection of those dependent claims as unpatentable based on obviousness over the combined teachings of Telenor '89 and Riddle also must fail.

With regard to independent claims 164, 170, 176, and 182, each of them includes the limitation that the electronic mail message from the originating processor includes the address of the interface. The Examiner relied on Telenor '89, not Riddle, as disclosing that feature of the claimed invention. In the context of independent claims which have been rejected as anticipated by Telenor '89, we have already determined that NTP has shown that the Examiner incorrectly found that Telenor '89 discloses that the electronic mail message from an originating processor includes an address of the interface. Accordingly, the rejection of independent claims 164, 170, 176, 182, and claims which depend therefrom, *i.e.*, claims 165-169, 171-175, 177-181, and 183-187, as unpatentable over Telenor '89 and Riddle cannot be sustained.

With regard to claims 214-217, it is noted that claim 214 depends from claim 213 and we have affirmed the rejection of independent claim 213 as anticipated by Telenor '89. Each of claims 215-217 depend directly or indirectly from claim 214. Claim 214 adds a limitation to claim 213 and is reproduced below:

214. A method in accordance with claim 213 wherein:

the address of the interface is combined with the inputted messages at the processor in response [to] selection of an icon and the inputted messages being originated at the processor.

Riddle discloses a terminal 300-11 which displays an icon. (Riddle 4:4-21). When the icon is selected, the terminal initiates a process to send a message to a receiving device such as a printer. (Riddle 4:22-61; Figure 1).

Riddle also discloses an "AppleTalk" data network in which receiving devices can be other terminals. (Riddle 3:1-22; Figure 1).

The Examiner determined that it would have been obvious to one of ordinary skill in the art at the time the invention was made, to add the icon triggering feature of Riddle, which initiates a message transfer between an originating processor and a receiving device, to the communication network of Telenor '89 which also sends messages between an originating processor and a receiving device. (Answer 32:1-4). The Examiner also determined that selecting an icon to send a message would have been notoriously well known in a communication system that uses a graphical user interface such as that in Riddle. (Answer 32:10-12).

NTP argues (Brief 103:8-15) that the limitation added by claim 214 is about selecting an icon to trigger combining of the inputted message with the address of the interface and with an identification of the RF receiver, not to trigger the sending of the message as was discussed by the Examiner. NTP is only partially correct. Claim 214 is about selecting an icon to trigger combining of the inputted message with the address of the interface but it states nothing about further combining the inputted message with an identification of the RF receiver. Nonetheless, NTP's argument is sufficient to demonstrate that the Examiner's reasoning based on the teachings of Riddle is not directed to what is claimed in claim 214. The feature at issue is not, as the Examiner discussed, selecting a display icon to trigger the sending of information from an originating device to a receiving device. Rather, it is selecting a display icon to trigger combining of the inputted message with the address of the interface.

For the foregoing reasons, the rejection of claims 214-217 as unpatentable over Telenor '89 and Riddle cannot be sustained.

C. Rejections based in whole or in part on Perkins

NTP argues that Perkins and Hortensius have been antedated by its submissions filed under 37 C.F.R. § 1.131. In Section G of this opinion, we address and evaluate NTP's submissions made under 37 C.F.R. § 1.131. It suffices here to note only that NTP's showings under 37 C.F.R. § 1.131 fall short and are insufficient to remove Perkins and Hortensius as prior art.

1.

The anticipation rejection based on Perkins

The Examiner finally rejected claims 1-13, 23-50, 60-92, 94-98, 160-163, 188, 189, 192-194, 199-202, 207-213, 218-223, and 295-298 under 35 U.S.C. § 102(e) as anticipated by Perkins.

We affirm.

Issue

Has NTP shown error in the Examiner's rejection of claims 1-13, 23-50, 60-92, 94-98, 160-163, 188, 189, 192-194, 199-202, 207-213, 218-223, and 295-298 under 35 U.S.C. § 102(e) as anticipated by Perkins?

Findings of Fact

NTP's Claims

Of all NTP claims rejected as anticipated by Perkins, the independent claims are claims 1, 38, 74, 88, 160, 162, 188, 194, 202 and 213. For illustrative purposes only, claim 188 is reproduced below:

188. A method for transmitting and distributing inputted messages through a distributed system, comprising:

originating an electronic mail message from a processor in an electronic mail system while electronic mail message includes (a) an address of an interface which connects to an RF system to which the electronic mail message is delivered by the electronic mail system in response to the address in the electronic mail message, (b) an identification of at least one designated RF receiver in the RF system to receive the inputted message, and (c) the inputted message to be delivered to the at least one designated RF receiver;

receiving the originated electronic mail message at the interface which connects to the RF system;

adding information to the inputted message and the identification of the at least one designated RF receiver to facilitate transmission of the inputted message and the identification to the at least one designated RF receiver;

broadcasting the inputted message and the identification of the at least one designated RF receiver from at least one broadcast location to the at least one designated RF receiver; and

the at least one RF designated receiver receiving the broadcasted inputted message and the identification of the at least one designated RF receiver.

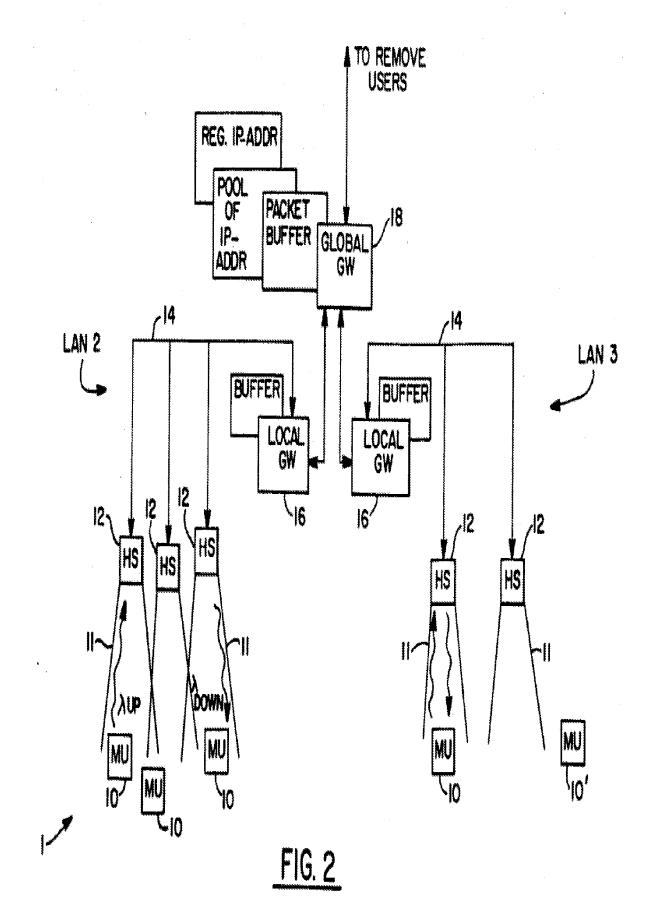
Perkins

The Perkins invention relates to an apparatus and method for managing bidirectional information transmission between a wired network and mobile communication units in wireless communication with the wired network. (Perkins 3:16-20). Perkins describes that an Internet Protocol (IP) was already known and established which supports the interconnection of communication Local Area Networks (LANs). (Perkins 1:24-26). The IP transmits blocks of data, called internet datagrams, from sources to destinations throughout the internet, and sources and destinations are hosts located on either the same subnetwork or connected LANs. (Perkins 1:48-52). Perkins also describes that a Transmission Control Protocol (TCP) was already known and established which supports connection-oriented, end-to-end reliable data transmission in packet-switched computer LANs and internetworks. (Perkins 1:34-37). As background, Perkins describes that network elements, such as hosts, front-ends, gateways, etc., within Department of Defense networks which are to be used for internetting must implement TCP/IP. (Perkins 1:38-45).

Perkins states that an object of its invention is a method and apparatus for coupling wireless migrating users to a network operating in accordance with the TCP/IP type-protocol. (Perkins 2:55-59).

Perkins discloses local area networks 2 and 3 each including a plurality of mobile communications units (MU) 10 in wireless communication with a plurality of header stations (HS) 12 which are bidirectionally coupled to a wired LAN 14. (Perkins 3:56-61). Each LAN 2 and 3 includes local gateway (GW) 16 for coupling the mobile units 10, via header stations 12 and wired LAN 14, to a global gateway 18 (Perkins 4:21-25). The global gateway 18 is coupled to remote users. (Perkins 3:26-28).

Figure 2 of Perkins is reproduced below:



For its preferred embodiment, Perkins discloses that header stations 12 conduct wireless communication with mobile units 10 by infrared radiation. (Perkins 3:63-65). Perkins also describes that for an alternative embodiment the header stations 12 may conduct wireless communication through a RF (radio frequency) medium. (Perkins 3:65-66). Perkins also describes that each header station has an associated communications coverage area, shown as cell 11 in Figure 2. (Perkins 3:66-68). Thus, the header stations 12 with or without the corresponding local gateways 16 constitute a RF System or a RF Information Transmission System, that provides wireless RF communication to and from mobile units 10. And because the mobile units 10 receive wireless RF (radio frequency) transmission from header stations 12, each mobile unit 10 constitutes a RF Receiver.

As each mobile unit 10 enters and leaves the area of LANs 2 and 3, it is allocated and deallocated respective pseudo-IP (Internet Protocol) addresses by the global gateway 18 which "owns" all of the pseudo-IP addresses. (Perkins 5:2-6). A mobile unit 10 maintains its assigned pseudo-IP address until it is turned off, or until the network session is actively terminated. Upon specific request by a particular mobile unit 10, a "permanent" association is made between the mobile unit and a pseudo-IP address. (Perkins 5:6-12).

Perkins discloses that all communication from a remote user to a mobile unit 10 employs the pseudo-IP address of the mobile unit 10. (Perkins 7:5-7). When a remote user initiates a conversation with a mobile unit 10 the remote user consults a network nameserver configured to send

requests for specified mobile unit 10 names to a specified mobile unit 10 global gateway 18. (Perkins 7:13-17). A request for a mobile unit 10 name fails unless there exists an association registered between the mobile unit 10 and a particular pseudo-IP address. (Perkins 7:17-20).

Perkins discloses that if a remote user obtains the pseudo-IP address of a registered mobile unit 10,³ the remote user is enabled to send messages, such as mail, to the mobile unit 10, even if the mobile unit 10 is inactive. (Perkins 7:37-40). In that context, the remote user is not sending paper mail with messages written in ink to mobile unit 10, but electronic mail. Consequently, the reference to a mail message refers to an electronic mail message. It is inherent that the electronic device the remote user employs to send the electronic mail message has sufficient processing power to send electronic mail messages according to the protocols described in Perkins. If not, Perkins could not reasonably state, with respect to its disclosed communication system and protocols, that the remote user is enabled to send messages such as mail.

Thus, the device used by the remote user is an originating processor in that the electronic mail message originates from that device, and the electronic mail message originates from that processor because the electronic mail message is composed by and initially sent from that processor. In that context, the message content of the remote user's electronic mail constitutes originated information. Moreover, because the originating processor enables and provides for the creation or putting

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³ Some mobile units 10 will have assigned pseudo-IP addresses. The condition "if a remote user obtains the pseudo-IP address of a registered mobile unit" serves to identify mobile units 10 to whom a remote user can send an electronic mail message.

together of an electronic mail message and sending the message for routing to an intended recipient, it constitutes an electronic mail system.

As is shown in Figure 2 of Perkins, global gateway 18 forms an interface between remote users and the mobile units 10 which are connected to the global gateway 18 through respective local gateways 16. The global gateway 18 is positioned between the remote users on one side and local gateways 16 and header stations 12 on the other. As is described in Perkins (Perkins 4:29-34):

The global gateway 18 is preferably a data processor having suitable network adaptors and an archival facility for storing packets addressed to particular ones of the mobile units 10 during a time when mobile units are not in contact with the wireless network.

Thus, global gateway 18 is an interface switch which receives the remoteuser originated electronic mail and which in turn connects to an RF System comprising header stations 12 and local gateways 16.

In another embodiment, Perkins discloses that if a remote user is executing software to enable special handling of pseudo-IP addresses, the remote user is enabled to deliver the mobile unit 10 packets directly to the mobile unit's local gateway 16, without requiring the intervention of the global gateway 18. (Perkins 8:14-18). In that case, the local gateway 16 constitutes an interface between the remote users on one side and header stations 12 and mobile units 10 on the other.

According to Perkins, an IP address consists of four bytes the first two bytes of which encode or identify the associated LAN. (Perkins 4:39-43). Thus, in a pseudo-network containing mobile units 10, the pseudo-IP

address of the mobile unit contains identification information, i.e., address, of the corresponding LAN with which the mobile unit is associated. Each LAN includes its own associated local gateway 16, which connects the LAN to global gateway 18 that further connects to remote users. In that context, the LAN identification code within the pseudo-IP address is also an address of the local gateway 16 for mobile unit 10. Thus, the pseudo-IP address of a mobile unit 10 not only identifies the RF Receiver that is mobile unit 10 but is also the address of the local gateway 16 which serves as an interface for transmission of electronic mail from a remote user to the mobile unit.

With regard to transmissions to mobile unit 10, in column 6, lines 28-35, Perkins states:

The local gateway 16 requests from the global gateway 18 all packets currently queued for the mobile unit 10 pseudo-IP address and delivers the packets over the downlink wireless channel. The global gateway 18 thereafter forwards to the local gateway 16 all future packets addressed to the pseudo-IP address associated, either temporarily or permanently, with the mobile unit 10.

The above-quoted text discloses that global gateway 18 ascertains from the electronic mail message which it receives from a remote user and intended for a mobile unit what is the pseudo-IP address to which the electronic mail message is addressed. On that basis, it is inherent that the pseudo-IP address of the mobile unit is included in the electronic mail message originating from the remote user and intended for that mobile unit. If not, the pseudo-IP address would not be ascertainable from the electronic mail message.

In the Examiner's Answer from page 36, line 21, through page 39, line 18, it is explained why Perkins implicitly discloses that the local

gateway 16 adds information to the electronic mail message from the remote user and received at the local gateway 16, for transmission to the mobile unit. NTP's reply does not address the substance of the Examiner's position and explanation. Accordingly, the finding of the Examiner is accepted.

Principles of Law

Anticipation under 35 U.S.C. § 102 requires that each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *In re Robertson*, 169 F.3d at 745; *Verdegaal Bros., Inc. v. Union Oil Co.*, 814 F.2d 628, 631 (Fed. Cir. 1987).

Whether a prior art reference constitutes non-analogous art is not pertinent in an anticipation rejection under 35 U.S.C. § 102 for lack of novelty. *In re Schreiber*, 128 F.3d 1473, 1478 (Fed. Cir. 1997). *See also State Contracting & Eng. Corp. v. Condotte America, Inc.*, 346 F.3d 1057, 1068 (Fed. Cir. 2003).

Analysis

NTP argues first that Perkins cannot be applied against NTP's claimed invention because Perkins belongs to that category of prior art which is non-analogous to NTP's claimed invention. The argument is rejected. For a rejection based on anticipation under 35 U.S.C. § 102, whether the applied prior art constitutes analogous or non-analogous art is not pertinent. *In re Schreiber*, 128 F.3d at 1478.

We focus on the disputed limitations which NTP contends are not found in Perkins.

NTP argues that Perkins does not disclose "originating an electronic mail message from a processor in an electronic mail system" (Brief

75). The argument is unpersuasive. As we have explained in the findings above, Perkins discloses that a remote user sends an electronic mail message through the disclosed communication system to a mobile unit 10. On that basis, it is inherent that the remote user makes use of a device with sufficient processing power to compose and send an electronic mail message. That device constitutes an originating processor, and the remote user's electronic mail message originates from that processor. The processor itself constitutes an electronic mail system because it enables the remote user to compose and send an electronic mail message.

While it is true that the composing and sending of electronic mail is premised on whether the remote user obtains the pseudo-IP address of a registered mobile unit 10, we have explained in our findings above that it is implicit in Perkins that some mobile units would be so registered. The premise merely limits the sending of electronic mail to those whose address is known. It is not a "may be" or imaginary electronic mail situation as NTP evidently asserts.

NTP argues that an electronic mail message must come from a processor that is a part of the electronic mailing system. (Brief 76). It is so in Perkins. While NTP's own disclosed electronic mail system may be complex, a processor which allows a user to compose and send electronic mail constitutes one type of electronic mail system -- it is a system for composing and sending electronic mail. We do not credit the testimony of Dr. V. Thomas Rhyne, NTP's technical witness, insofar as it relates to the issue of whether Perkins discloses an electronic mail system, because Mr. Rhyne's interpretation of "electronic mail system" is unduly narrow. For

instance, according to Dr. Rhyne, "one of skill in the art would not understand any of the components disclosed by Perkins to have any relationship or association with electronic mail systems." (Appendix A8,

¶ 30). Dr. Rhyne defines "electronic mail system" as follows:

Electronic mail systems involve email servers that run specialized email software and maintain an account for each subscriber or authorized user who can receive email on the server. Authorized users communicate with such an email server via simple text conversations from the user's processor, which also runs specialized email software.

That is not the broadest reasonable interpretation of "electronic mail system" as we have determined in Section A of this opinion. The broadest reasonable interpretation of electronic mail system reads on a device which enables the user to compose and send electronic mail. Viewed in that light, all of the disclosed components of Perkins are related to an electronic mail system, contrary to NTP's contention and the testimony of Dr. Rhyne. (Appendix A8, ¶¶ 30-31).

NTP argues that Perkins does not disclose an "electronic mail message" as that term is used in the involved NTP patent. (Brief 77) The argument is misplaced and not persuasive. In construing "electronic mail message" as a claim term, we have determined in Section A of this opinion that it is not limited to the particular type and format of an electronic mail message as that used in NTP's disclosed embodiment. Any type of message that would be recognized by one with ordinary skill in the art as an electronic mail message satisfies the claim term. Perkins discloses an electronic mail message because we have explained in the findings above that Perkins describes the putting together and sending of electronic mail

from a remote user to a mobile unit. Whatever message the electronic mail carries is an electronic mail message. We do not credit the testimony of Dr. Rhyne (Appendix A8, \P 14, \P 32, \P 39), because his interpretation of "electronic mail message" is unjustifiably narrow and reads extraneous features into the claims.

NTP argues that Perkins does not disclose an "RF system" and does not teach any feature or functionality comprising an "RF system." (Brief 77). The argument is unpersuasive. Perkins discloses an "RF system" because as we have explained in the findings above, Perkins discloses header stations 12 which make radio frequency transmissions of information received through local gateway 16 to mobile units 10 and receive radio frequency transmissions from mobile units 10. As we have already determined in Section A of this opinion on claim interpretation, it is not necessary that a RF system must have the same kind of geographic dispersion and substantial coverage as that provided by the types of RF systems specifically disclosed in the specification of NTP's involved patent.

According to NTP, the wireless communications system of Perkins is suitable, at best, only for an internal office environment where a mobile unit can be placed near the header station in a particular room. (Brief 78) Even assuming that that is true, the Perkins' system is nonetheless still an RF system. As we have explained in Section A of this opinion on claim interpretation, NTP's claims do not require any minimum range of radio frequency coverage or geographical dispersion. In that connection, we do not credit the testimony of Dr. Rhyne (Appendix A8, ¶¶ 35-36, 41), because

his reading of "RF system" is unjustifiably narrow and reads extraneous features into the claims.

NTP argues that Perkins does not disclose an "interface" that receives an electronic mail message and connects to an RF system. (Brief 79). The argument is not persuasive. As we have explained in the findings above, either the global gateway 18 or local gateway 16 in Perkins constitutes an interface which receives an electronic mail message on one side and connects to an RF system on the other. NTP is simply incorrect that the global gateway only connects remote users to LANs and that the local gateway 16 only connects mobile users to LANs. We do not credit the testimony of Dr. Rhyne in that regard (Appendix A8, ¶ 37-38) because it is based on the incorrect notion that Perkins discloses neither an "electronic mail message" nor an "RF system." We also do not credit the testimony of Dr. Rhyne (Appendix A8, \P 9, \P 38) because it is based on an excessively narrow interpretation of the claim term "interface" which reads into the claims extraneous features from the specification. As we have explained in Section A of this opinion on claim interpretation, the claim term "interface" does not require transmission of electronic mail messages to mobile processors "which can be carried by a person outside of a home or office."

NTP argues that Perkins does not disclose an electronic message that includes an address of an interface. (Brief 80-81). The argument is not persuasive. As we have explained in the findings above, Perkins does disclose the sending of an electronic mail message from a remote user, which includes the address of an interface. NTP's argument is based on the incorrect position that Perkins discloses neither an electronic mail message

nor an interface. In that regard, we do not credit the testimony of Dr. Rhyne (Appendix A8, ¶ 39-40) because it is based on an excessively narrow interpretation of the claim term "electronic mail message" and "interface" which reads into the claims extraneous features from the specification.

NTP argues that Perkins does not disclose transmission of an electronic mail message with the address of an RF receiver. (Brief 81-82). According to NTP, the pseudo-IP address of the mobile unit 10 cannot be the address of the RF receiver which is required to be in the electronic mail message, because it is not information originating from a processor in an electronic mail system. (Brief 81). The argument is misplaced.

NTP correctly points out that to obtain the pseudo-IP address of the mobile unit, the remote user must first consult with a network nameserver, and that it is only after the remote user obtains the pseudo-IP address of the mobile unit from the network nameserver that it can begin to direct data packets to the mobile unit. NTP incorrectly assumes, however, that all information contained in the electronic mail message must be generated within the processor sending the electronic mail message without inquiry to any other source. It is the "electronic mail message" as a whole which must originate from the remote user's processor, not every piece of information that is contained within the electronic mail message. The remote user may first obtain all information needed to compose an electronic mail message, from whatever source, and then compose the electronic mail message for sending as an electronic mail message. We note that the phrase "originating an electronic mail message from a processor in an electronic mail system" as is recited in claim 188 requires only that the "electronic mail message" be

initially sent from the processor and not that all information contained in the message be generated at the processor without inquiry to another device. In that regard, we do not credit the testimony of Dr. Rhyne (Appendix A8, ¶ 42) because it also mistakenly assumes that the claimed message cannot be composed based on information obtainable from another device.

NTP argues that Perkins (1) does not disclose adding information to the inputted message and the identification of the RF receiver to facilitate transmission of the inputted message and the identification to the RF receiver, and (2) does not disclose broadcasting the inputted message and the identification of the RF receiver to the RF receiver. (Brief 82:6-11). The argument is unpersuasive because it is premised on the incorrect position that Perkins does not disclose an RF receiver. We also do not credit the testimony of Dr. Rhyne (Appendix A8, ¶ 43) because it is similarly premised on the incorrect position that Perkins does not disclose an RF receiver.

NTP argues that Perkins does not disclose an electronic mail message that includes inputted message to be delivered to the RF system. (Brief 82:12-18). The argument is unpersuasive as it is based only on the incorrect position that Perkins does not disclose an "electronic mail message." In that regard, we also do not credit the testimony of Dr. Rhyne (Appendix A8, ¶ 44), because it is similarly premised on the incorrect position that Perkins does not disclose an electronic mail message.

On page 85 of its brief, NTP additionally argues that the pseudo-IP address of Perkins is used only to establish a connection to route data packets to the mobile unit and is not itself transmitted to or from an interface, relying on the testimony of Dr. Rhyne (Appendix A12, ¶ 14).

The argument is unpersuasive. In that regard, we note that the Examiner cited to Perkins (col. 6: 28-35), which states:

The local gateway 16 requests from the global gateway 18 all packets currently queued for the mobile unit 10 pseudo-IP address and delivers the packets over the downlink wireless channel. The global gateway 18 thereafter forwards to the local gateway 16 all future packets addressed to the pseudo-IP address associated, either temporarily or permanently, with the mobile unit 10.

As the Examiner correctly determined, the above-quoted text discloses that global gateway 18 ascertains from the electronic mail message which it receives from a remote user and intended for a mobile unit what is the pseudo-IP address to which the electronic mail message is addressed. On that basis, it is inherent that the pseudo-IP address of the mobile unit is included in the electronic mail message originating from the remote user and intended for that mobile unit. If not, the pseudo-IP address would not be ascertainable from the electronic mail message. It is because of the inclusion of this pseudo-IP address in the electronic mail message that a proper connection can be made to the mobile unit through the appropriate local gateway. We do not credit the testimony of Dr. Rhyne (Appendix A12, \P 13-14), because he does not explain how a proper connection can be established without inclusion of the pseudo-IP address in the electronic mail message or packets of the electronic mail message that would be received by global gateway 18 and forwarded to local gateway 16. Dr. Rhyne's testimony is conclusory in that regard and does not address the key portions of Perkins as cited by the Examiner.

With regard to independent claims other than claim 188, NTP's arguments rely on the same arguments it presented for independent claim 188. (Brief 82-84). No separate analysis was presented by NTP other than to list a series of corresponding claim limitations running more than two pages long. Per 37 C.F.R. § 41.37.(c)(1)(vii), a statement which merely points out what a claim recites will not be considered a separate argument for separate patentability of the claim. NTP has effectively grouped all the independent claims with claim 188 in the context of the anticipation rejection based on Perkins. We have discussed all the disputed limitations of independent claim 188. To the extent the same claim features are present in other independent claims, our analysis similarly applies to those claims.

With regard to dependent claims in the context of the anticipation rejection based on Perkins, NTP has not separately argued the merits of any dependent claim except claims 189, 193, 200, 201, 208, 211, 219, and 222, which have been collectively argued as a group. (Brief 85-86). NTP notes that each of claims 189, 193, 200, 201, 208, 211, 219 and 222 essentially requires that a header, added by the processor, is deleted from the electronic mail message prior to broadcasting of the inputted message and the identification of the receiver and that Perkins does not disclose the same. NTP argues that Perkins does not disclose the claim feature, citing the testimony of Dr. Rhyne (Appendix A28, ¶ 7). We have reviewed the cited paragraph of Dr. Rhyne's testimony and do not credit it with any substantial weight. It identifies and repeats the rationale and reasoning advanced by the Examiner, and then concludes as follows (Appendix A28, ¶ 7):

I respectfully disagree with these statements; Perkins does not teach or suggest any feature or functionality wherein the local

> gateway or any other element or component of Perkins removes or deletes from the electronic mail message any information that was added by the processor or otherwise.

The statement is conclusory and establishes only that Dr. Rhyne disagrees with the rationale and reasoning of the Examiner. It does not even attempt to explain why the Examiner's rationale and reasoning are wrong. We decline to credit the conclusory remarks of Dr. Rhyne over the specific rationale and reasoning set forth by the Examiner.

Conclusion

NTP has not shown error in the Examiner's rejection of claims 1-13, 23-50, 60-92, 94-98, 160-163, 188, 189, 192-194, 199-202, 207-213, 218-223, and 295-298 under 35 U.S.C. § 102(e) as anticipated by Perkins.

2.

The obviousness rejection of claims 99-114, 117-142, 146, and 151-159 under 35 U.S.C. § 103 over Perkins and Garbee

The Examiner finally rejected claims 99-114, 117-142, 146, and 151-159 under 35 U.S.C. § 103 as unpatentable over Perkins and Garbee.

We affirm.

Issue

Has NTP shown error in the Examiner's rejection of claims 99-114, 117-142, 146, and 151-159 under 35 U.S.C. § 103 as unpatentable over Perkins and Garbee?

Findings of Fact

On pages 4-5, Garbee identifies three "most important" and "traditional" TCP/IP services (1) File Transfer, (2) Remote Login, and (3) Computer Mail, and states: (Garbee 5:37-39):

These services should be present in any implementation of TCP/IP, except that micro-oriented implementations may not support computer mail. (Emphasis added).

The Examiner specifically cited to the bolded portion of the above-quoted text. (Answer 44:18-19).

And regarding file transfer, as cited by the Examiner (Answer 43:25 - 44:1), Garbee states (Garbee 4:39-50):

file transfer. The file transfer protocol (FTP) allows a user on any computer to get files from another computer, or to send files to another computer. Security is handled by requiring the user to specify a user name and password for the other computer. Provisions are made for handling file transfer between machines with different character set, end of line conventions, etc. This is not quite the same thing as more recent "network file system" or "netbios" protocols, which will be described below. Rather, FTP is a utility that you run anytime you want to access a file on another system. You use it to copy the file to your own system. You then work with the local copy. (See RFC 959 for specifications for FTP.)

Thus, Garbee teaches files as a separate source of information from computer mail, and describes both file transfer and computer mail as services that should be implemented on any system executing TCP/IP protocol.

The Examiner determined that the address or identification number of the destination must be used to initiate any FTP session and that the FTP

protocol uses standard TCP/IP. (Answer 44:8-10). NTP has not disputed these determinations. Therefore, the findings of the Examiner are accepted.

On page 16, Garbee describes that while computer mail is typically sent on one connection, the file transfer protocol FTP involves two connections. (Garbee 16:38-44). While the data for transfer makes use of one connection, commands about the transfer such as a status check or an abort make use of another. (Garbee 16:41-45). In that regard, Garbee states (Garbee 16:46-49): "However file transfers often take a long time. The designers of the file transfer protocol wanted to allow the user to continue issuing commands while the transfer is going on."

Based on the teachings of Garbee, the Examiner reasoned that one with ordinary skill in the art would have recognized files as a separate information source for transfer between computers in addition to computer mail. (Answer 44:11-13).

Principles of Law

References within the statutory terms of 35 U.S.C. § 102 qualify as prior art for an obviousness determination only when analogous to the claimed invention. *In re Bigio*, 381 F.3d at 1325. Two separate tests define the scope of analogous art: (1) whether the art is from the same field of endeavor as that of the inventor, and (2) whether the art is reasonably pertinent to the particular problem with which the inventor is involved. *Id.*, at 1325; *In re Deminski*, 796 F.2d 436, 442 (Fed. Cir. 1986).

Analysis

The claims rejected for obviousness over the combined teachings of Perkins and Garbee, as compared to the claims rejected over Perkins alone

for anticipation, require an additional feature generally represented by this recitation in claim 99:

at least one additional information source, each additional information source being coupled to at least one of the at least one interface and originating other information from outside any of the at least one electronic mail system for transmission to at least one RF receiver and information used by the RF information transmission system to identify the at least one RF receiver to receive the other information with the RF information transmission system providing transmission of the other information through the RF information transmission system to the identified at least one RF receiver receiving the other information.

In essence, the other information from a separate and additional source is sent or transferred to an RF receiver in the same manner as an electronic mail message and its contents are sent to an RF receiver as is recited in the claims rejected as anticipated by Perkins.

NTP argues that both Perkins and Garbee constitute inapplicable prior art because they are not within the same field of inventor as that of the inventor. Even assuming that that is true, NTP has not asserted that either reference is not reasonably pertinent to the particular problem with which the NTP inventors are involved. To qualify as analogous art whose teachings may be relied on in an obviousness rejection, a prior art reference does not have to be in the same field of endeavor as that of NTP's inventors. Rather, it can be analogous art on the basis that it is reasonably pertinent to the particular problem with which NTP's inventors are involved. *In re Bigio*, 381 F.3d at 1325; *In re Deminski*, 796 F.2d at 442. NTP has not established that either Perkins or Garbee constitutes non-analogous art.

NTP argues that the teachings of Perkins and Garbee are not properly combined. Specifically, NTP states (Brief 104:13-15):

Nothing suggests that use of Garbee would cure any of the deficiencies of Perkins. For example, Perkins does not have an interface coupled to a gateway switch and an RF transmission network. Adding Garbee would not cure that deficiency.

NTP further argues that Garbee does not disclose an interface or any type of information that is received by an interface and which is then transmitted through an RF transmission network. (Brief 104:16-18).

The arguments are misplaced. Perkins does not have the deficiencies identified by NTP. As has already been discussed in the context of the anticipation rejection based on Perkins, Perkins does disclose an interface coupled to a gateway switch and an RF transmission network. Also, Garbee was not relied on by the Examiner for the disclosure of an interface or information that is received by an interface. Garbee was relied on by the Examiner for its teaching that in addition to computer mail, files constitute a separate and additional source of information with respect to computer mail that should be shared or transferred between computers executing TCP/IP protocol. NTP evidently does not dispute those teachings of Garbee.

The reasoning of the Examiner is rational and well supported. Given the teachings of Garbee, one with ordinary skill in the art would consider files as a separate and additional source of information, relative to an electronic mail message, that should be transferred between processors implementing TCP/IP protocol. One with ordinary skill in the art would be led by Garbee to add sending of files to the communication system of

Perkins, and to use the communication system of Perkins to send files in the same way it is used to send and receive electronic mail.

We do not credit the testimony of Dr. V. Thomas Rhyne, NTP's technical witness, relied on by NTP in its argument against the rejection of claims 99-114, 117-142, 146, and 151-159. (Appendix A8 ¶¶ 68, 69, 79; A12 ¶ 61). Mr. Rhyne's interpretation of the claim term "interface" is unduly narrow and reads extraneous features into the claims. Mr. Rhyne also discusses alleged shortcomings of Garbee with regard to features which the Examiner did not rely on Garbee to teach in the context of the obviousness rejection based on Perkins and Garbee.

Conclusion

On balance, upon weighing all of the evidence together as a whole, including the evidence of nonobviousness which we discuss in another section of this opinion, we conclude that NTP has not shown error in the rejection of claims 99-114, 117-142, 146, and 151-159 under 35 U.S.C. § 103 as unpatentable over Perkins and Garbee.

3.

The obviousness rejection of claims 115, 116, 143-145 and 147-150 under 35 U.S.C. § 103 over Perkins, Garbee, and Riddle

The Examiner finally rejected claims 115, 116, 143-145 and 147-150 under 35 U.S.C. § 103 as unpatentable over Perkins, Garbee, and Riddle. We *affirm*.

Issue

Has NTP shown error in the Examiner's rejection of claims 115, 116, 143-145 and 147-150 under 35 U.S.C. § 103 as unpatentable over Perkins, Garbee, and Riddle?

Findings of Fact

For the rejection of claims 115, 116, 143-145, and 147-150 based on Perkins, Garbee, and Riddle, the Examiner regarded claim 115 as representative. (Answer 47:22-23). Claim 115 depends from independent claim 99 which has been rejected as unpatentable over Perkins and Garbee. With regard to claims 115, 116, 143-145, and 147-150, a common claim feature not disclosed by Perkins and Garbee is that of an icon displayed by an originating processor, the selection of which triggers sending of the electronic mail message. In that connection, the Examiner relied on Riddle. (Answer 48:10-15).

Riddle discloses a terminal 300-11 which displays an icon. (Riddle 4:4-21). When the icon is selected, the terminal initiates a process to send a message to a receiving device such as a printer. (Riddle 4:22-61; Figure 1). Riddle also discloses an "AppleTalk" data network in which receiving devices can be other terminals. (Riddle 3:1-22; Figure 1).

The Examiner determined that it would have been obvious to one of ordinary skill in the art at the time the invention was made, to add the icon triggering featuring of Riddle, which initiates a message transfer between an originating processor and a receiving device, to the communication network of Perkins which also sends messages between an originating processor and a receiving device. (Answer 48:16-27). The Examiner also determined that

selecting an icon to send a message would have been notoriously well known in a communication system that uses a graphical user interface such as that in Riddle. (Answer 48:25-27).

Analysis

Citing the testimony of Dr. Thomas V. Rhyne (Appendix A8, ¶ 70), NTP argues that claims 115-116, 143-145, and 147-150 are all dependent on claims 99 or 126 and thus are not unpatentable for the same reasons already set forth in connection with the rejection of claims 99 and 126 over Perkins and Garbee. (Brief 106:3-10). The argument is unpersuasive because NTP's arguments with regard to claims 99 and 126 are unpersuasive. NTP specifically argues that neither Garbee nor Riddle discloses an "interface" as claimed, citing the testimony of Dr. Rhyne (Appendix A8, ¶ 71). (Brief 106:11-14). However, Perkins does disclose an interface as is already discussed in the rejection of claims 99 and 126. Also, the Examiner did not rely on either Garbee or Riddle for satisfying the claimed interface.

Conclusion

On balance, upon weighing all of the evidence together as a whole, including the evidence of nonobviousness which we discuss in another section of this opinion, we conclude that NTP has not shown error in the rejection of claims 115, 116, 143-145, and 147-150 under 35 U.S.C. § 103 as unpatentable over Perkins, Garbee, and Riddle.

4.

The obviousness rejection of Claims 14-22, 51-59, 93, 164-187, 190, 191, 195-198, 203-206, and 214-217 under 35 U.S.C. § 103 over Perkins and Riddle

The Examiner finally rejected claims 14-22, 51-59, 93, 164-187, 190, 191, 195-198, 203-206, and 214-217 under 35 U.S.C. § 103 as unpatentable over Perkins and Riddle.

We affirm.

Issue

Has NTP shown error in the Examiner's rejection of claims 14-22, 51-59, 93, 164-187, 190, 191, 195-198, 203-206, and 214-217 under 35 U.S.C. § 103 as unpatentable over Perkins and Riddle?

Analysis

NTP argues that claims 14-22, 51-59, 93, 164-187, 190, 191, 195-198, 203-206, and 214-217 are patentable for the same reasons why claims 115, 116, 143-145, and 147-150 are patentable. (Brief 106:18-20). We have already discussed why NTP's arguments directed to claims 115, 116, 143-145, and 147-150 are unpersuasive. Accordingly, the argument directed to claims 14-22, 51-59, 93, 164-187, 190, 191, 195-198, 203-206, and 214-217 is rejected.

Conclusion

On balance, upon weighing all of the evidence together as a whole, including the evidence of nonobviousness which we discuss in another section of this opinion, we conclude that NTP has not shown error in the rejection of claims 14-22, 51-59, 93, 164-187, 190, 191, 195-198, 203-206, and 214-217 under 35 U.S.C. § 103 as unpatentable over Perkins and Riddle.

5.

The obviousness rejection of claims 299-317 under 35 U.S.C. § 103 over Perkins, Garbee, and Hortensius

The Examiner finally rejected claims 299-317 under 35 U.S.C. § 103 as unpatentable over Perkins, Garbee, and Hortensius.

We affirm.

Issue

Has NTP shown error in the Examiner's rejection of claims 299-317 under 35 U.S.C. § 103 as unpatentable over Perkins, Garbee, and Hortensius?

Analysis

NTP sets forth only two arguments with respect to the rejection of claims 299-317 over Perkins, Garbee, and Hortensius. First, according to NTP, neither Perkins nor Hortensius constitutes prior art to NTP. (Brief 64-65). That argument is addressed and rejected in Section G of this opinion. In addition, NTP argues that the proposed combination involving the teachings of Garbee is not proper for the same reasons as those set forth in connection with the rejection of claims 99-114, 117-142, 146, and 151-159. (Brief 106:23 to 107:1). We have already discussed why NTP's arguments directed to claims 99-114, 117-142, 146, and 151-159 with regard to the combined teachings of Perkins and Garbee are unpersuasive. Accordingly, both arguments directed to claims 299-317 are rejected.

Conclusion

On balance, upon weighing all of the evidence together as a whole, including the evidence of nonobviousness which we discuss in another section of this opinion, we conclude that NTP has not shown error in the rejection of claims 299-317 under 35 U.S.C. § 103 as unpatentable over Perkins, Garbee, and Hortensius.

D. Rejections based in whole or in part on Verjinski

1.

The anticipation rejection based on Verjinski

The Examiner finally rejected claims 1-4, 23, 26, 27, 30-41, 60, 63, 66-76, 83, 86-90, 94, 97 and 98 under 35 U.S.C. § 102(b) as anticipated by Verjinski. The pages of Verjinski are numbered from 0806 to 0809, with split columns on pages 0806 through 0808.

The rejection of claims 1-4, 23, 26, 27, 32-41, 60, 63, 68-76, 83, 86-88, 94, 97 and 98 as anticipated by Verjinski is *affirmed*.

The rejection of claims 30, 31, 66, 67, 75, 76, 89 and 90 as anticipated by Verjinski is *reversed*.

Issue

Has NTP shown error in the Examiner's rejection of claims 1-4, 23, 26, 27, 30-41, 60, 63, 66-76, 83, 86-90, 94, 97 and 98 under 35 U.S.C. § 102(b) as anticipated by Verjinski?

Findings of Fact

NTP's Claims

Of all NTP claims rejected as anticipated by Verjinski, the independent claims are claims 1, 38, 74, and 88. For these independent claims, the Examiner regards claim 1 as representative:

1. A system for transmitting an inputted message, contained in an electronic mail message originating from one of a plurality of originating processors contained in at least one electronic mail system, to at least one RF receiver with at least the inputted message being transmitted by an RF information transmission system to the at least one RF receiver comprising:

at least one interface, one of the at least one interface connecting the at least one electronic mail system containing the plurality of originating processors to the RF information transmission system; and wherein

the electronic mail message originating from the one of the plurality of originating processors includes an address of the one interface and is transmitted from the one of the plurality of originating processors to the one interface which processes the electronic mail message with the one of the at least one electronic mail system responding to the address of the one interface to direct the electronic mail message from the one of the plurality of originating processors to the one interface;

the RF information transmission system transmits at least the inputted message from the one interface through the RF information transmission system to the at least one RF receiver after information is inputted to the system; and

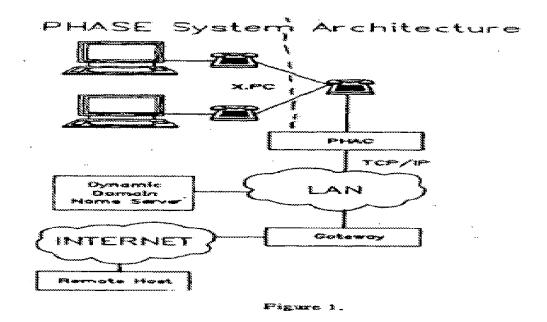
the one interface comprises a processor, a bus coupled to the processor and to a plurality of ports, at least one of the plurality of ports being coupled through a modem to the RF information transmission system and at least another of the

plurality of ports being coupled through a modem to the at least one electronic mail system.

Verjinski discloses a system called Portable Host Access System Environment (PHASE) which enables portable computers ("PCs") to change their point of connection to the Internet and continue to be accessible by a fully specified Internet domain-name. (Verjinski 0806:1:2-5). In the context of its disclosure, Verjinski also refers to portable PCs as "portable hosts." (Verjinski 0806:1:30-31).

In Verjinski's system, a portable PC user dials in by telephone into a Portable Host Access Component (PHAC) to gain access to the Internet, and the PHAC acts as an interface for connecting the portable PC to the Internet. (Verjinski 0806:1:33-36). When a portable PC is connected to the PHAC by telephone, the PHAC assigns a temporary IP address to the portable PC, and the portable PC then sends its name and IP address to a Dynamic Domain Name Server (DDNS). (Verjinski 0807:1:30-33, 0808:2:43-45). Verjinski describes that the telephone connection between the portable PC and the PHAC can be either through a conventional wired telephone system or through a cellular telephone. (Verjinski 0808:2:35-37 and 0809:2-4).

Verjinski describes that its PHASE architecture consists of three main components: the DDNS, the PHAC, and the portable hosts, i.e., the portable PCs. (Verjinski 0807:1:6-7). Figure 1 of Verjinski is reproduced below:



"The PHAC is connected to a Local Area Network (LAN) that supports TCP/IP protocols and is connected to the Internet through a gateway." (Verjinski 0807:1:9-11). Alternatively, the PHAC may be directly connected to an Internet Packet Switch Node. (Verjinski 0907:1:11-12). The PHAC serves as the access point for portable hosts, i.e., the portable PCs, to connect to the internet. (Verjinski 0807:1:8-9). The Examiner determined that Verjinski's disclosed system employs TCP/IP protocol. (Answer 158:5). That is not disputed by NTP.

The DDNS is a process that can be run on any Internet host, and the host which runs the DDNS does not have to reside on the same server as the PHAC. (Verjinski 0807:1:16-18). A remote host on the internet sends a query to the DDNS about a portable host, and the DDNS responds to the query by sending the current temporary IP address of the requested portable host back to the remote host making the query. (Verjinski 0807:1:21-25). The DDNS stores the domain name and current IP address of the portable

hosts, and each portable host may update its IP address in the DDNS data base within seconds of connecting to the network. (Verjinski 0807:2:23-26).

Although only one PHAC is shown in Figure 1 of Verjinski, it is understood that there are multiple PHACs to which a portable host may make a connection, depending on its current location. Verjinski explains that after disconnecting from one PHAC and then reconnecting to another PHAC, a portable host is assigned a new temporary IP address. (Verjinski 0808:2:30-33). Verjinski describes that PHASE enables portable hosts to attach to any PHAC connected to a subnet of the Internet and that having many PHACs dispersed in the field increases the availability of a connection in a local calling area. (Verjinski 0807:1:2-5).

Similarly, although only one remote host is illustrated in Figure 1, it is understood that there are a plurality of remote hosts on the internet which may desire sending a message to a portable host. Verjinski describes that as a result of its technology, internet hosts can initiate connections to portable hosts (Verjinski 0806 1:16-17), that the PHAC routes packets between remote hosts on the internet and portable hosts (Verjinski 0807:1:12-14), and that domain name queries for portable hosts come from remote hosts through the local gateway to the DDNS. (Verjinski 0807:1:21-23).

As an example only, Verjinski discusses the sending of electronic mail by a military commanding officer as a remote user on the internet to a field officer as a portable host. (Verjinski 0809:1-25). It is understood that there may be multiple such remote hosts wanting to send a message to the portable host. The first step in that scenario involves the field officer's using a cellular phone to call a PHAC. (Verjinski 0809:2-4). When

communication through the cellular phone is established, the PHAC sends the portable host a unique IP address and the portable host immediately updates the DDNS with the new IP address. (Verjinski 0809:4-7). The portable host then opens a passive connection on its SMTP port and waits, as it is ready to receive messages from remote hosts on the internet through the PHAC. (Verjinski 0809:7-9).

When the commanding officer decides to send an email message to the field officer, the commanding officer's computer sends a query to the DDNS for the current IP address of the field officer's portable PC and the DDNS returns the temporary IP address of the portable PC. (Verjinski 0809:9-12). Then the commanding officer's SMTP implementation connects to the portable host and communicates with the SMTP on the portable host for sending the email in a SMTP mail session. (Verjinski 0809:12-14). Once the SMTP mail session is complete, the field officer reads the email. (Verjinski 0809:14-16).

As described, the commanding officer's SMTP mail program implementation on a computer enables the composition and sending of an electronic mail message. It is an electronic mail system. Likewise, each remote host on the internet with its SMTP implementation constitutes an electronic mail system. Moreover, each remote host on the internet also constitutes an originating processor insofar as the sending of electronic mail to a portable host is concerned. Thus, Verjinski discloses a plurality of originating processors contained in at least one electronic mail system.

The cellular telephone system connecting the portable host and a PHAC constitutes an RF information transmission system and the cellular

telephone used by the field officer in the above-described example to connect a portable host to a PHAC constitutes an RF receiver. In that configuration, the PHAC constitutes an interface between the at least one electronic mail system and the RF information transmission system. The PHAC also includes a plurality of ports and modems for making the necessary connections to corresponding hosts (Verjinski 0807:1:35-37).

The Examiner determined that the processor and bus requirements of the interface element of claim 1 are inherent in Verjinski's PHAC. (Answer 56:22 through 57:3). The reasoning is that the PHAC has to possess enough processing power to execute the various functions it performs and a bus system is necessary to make the appropriate connections as determined by the processor. NTP disputes the finding only on the ground that according to NTP, Verjinski does not disclose an interface. (Brief 96:10-16).

Information from a remote host and destined for a portable host must be directed first to the PHAC to which the portable host is connected, and the PHAC processes that information and sends it onward to the portable host on an appropriate channel through the telephone network. (Verjinski Figs. 1-2; 0807:1:38-43). The Examiner determined that an address of the PHAC is inherently included in any email directed to a portable host currently served and maintained by the PHAC. (Answer 55:16-18). Because all email intended for a portable host must be directed to and transmitted through the PHAC to which the portable host is connected, the IP address of each portable host connecting to a PHAC constitutes an address of the PHAC. (Answer 157:15-18). The identity of the PHAC currently servicing the portable host is determinable from the IP address of

the portable host. Consequently, an electronic mail message containing the IP address of a portable host necessarily also includes an address of the connecting PHAC. NTP does not dispute that in Verjinski an electronic mail message to a portable host includes the IP address of the portable host. Principles of Law

Anticipation under 35 U.S.C. § 102 requires that each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *In re Robertson*, 169 F.3d at 745; *Verdegaal Bros., Inc. v. Union Oil Co.*, 814 F.2d at 631.

Analysis

We focus on the disputed limitations. First and foremost, NTP argues (Brief 87:11-16) that Verjinski nowhere talks about an address for any PHAC, much less including an address of the PHAC in an electronic mail message.

The key to the analysis lies in the "inherent" disclosure of Verjinsky, *i.e.*, disclosure that is necessarily there although not explicitly. It is true that Verjinski does not anywhere expressly describe or refer to an address of a PHAC or addressing the PHAC. But the IP address of a portable host also constitutes an address of the connecting PHAC as is already explained above in the findings. The IP address of each portable host connected to a PHAC uniquely identifies not only that particular portable host but also the one PHAC to which the portable host is connected. As is determined by the Examiner, the IP address of a portable host also serves as an address of the connecting PHAC. Verjinski inherently discloses that an electronic mail message to a portable host, which contains the IP address of the portable

host, includes "an address" of the connecting PHAC. NTP does not dispute that the electronic mail message includes the IP address of the portable host.

NTP has not specifically addressed the inherency rationale for regarding the IP address of a portable host as "an address" of the connecting PHAC as the Examiner has done. It is not clear what is NTP's response to regarding the IP address of the portable host as "an address" of the PHAC. Generally, however, NTP does assert that like a portable host a remote internet host has to first "dial in" to the PHAC using a telephone to initiate a session. (Brief 89:18-20; 92:9-11). The significance of the argument is not understood, as NTP does not point out what claim feature precludes a remote host's "initiating" a session by "dial in" to a PHAC, even assuming that that is true.

Treating NTP's argument in a light most favorable to NTP, we assume NTP really is asserting that electronic mail from the remote internet host to a portable host is sent from the remote internet host to the PHAC over a telephone line after the remote internet host makes a telephone "dial in" connection with the PHAC. In that scenario, because the email is transmitted over an already connected telephone line to the appropriate PHAC, "an address" of the PHAC need not be ascertainable from the IP address of the portable host contained in the email. Henceforth, in that circumstance the IP address of the portable host would not necessarily include "an address" of the PHAC. Before proceeding further, we note that NTP should have articulated all its arguments in a clear and precise manner and cannot count on the Board's conjuring up what NTP might have meant to say, just to make some sense of what NTP actually asserted.

The argument is rejected. As is illustrated in Figure 1 of Verjinski, which is again reproduced below, while the connection from portable hosts to the PHAC is through a telephone system, the connection between the PHAC and a remote host is through the internet, via a corresponding gateway and a local area network LAN, and an Ethernet port on the PHAC as shown in Verjinski's Figure 2, also reproduced below, affirms the internet connection from the remote host to the PHAC.

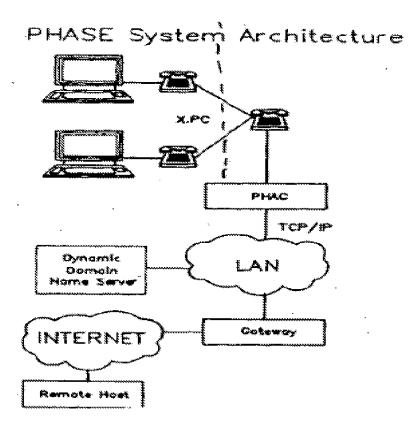
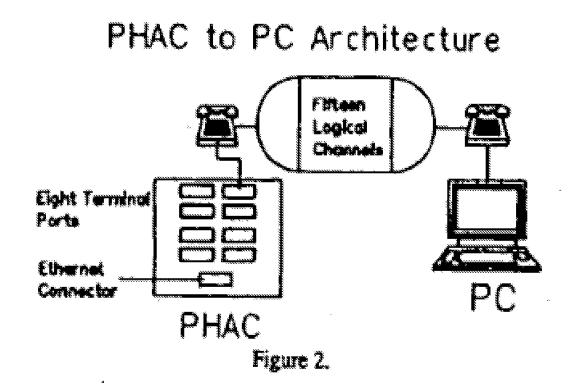


Figure 1.



NTP does not point to anything in Verjinski which describes the sending of an electronic mail message from a remote internet host to the PHAC as being conducted over a telephone connection between the remote internet host and the PHAC. NTP also does not point to anything in Verjinski which describes that a remote internet host would "dial in," using a telephone line, to the PHAC to "initiate" a session, whatever "initiate" is intended to mean. We have considered the supporting testimony of Dr. V. Thomas Rhyne, cited by NTP. In particular, Dr. Rhyne states (Appendix A12 ¶9):

9. In my opinion, and to the contrary, Verjinski does not teach or suggest any embodiment wherein an address of the PHAC is included in an electronic mail message. Rather, in all cases a sender must first dial-in to the PHAC in order to initiate a session.

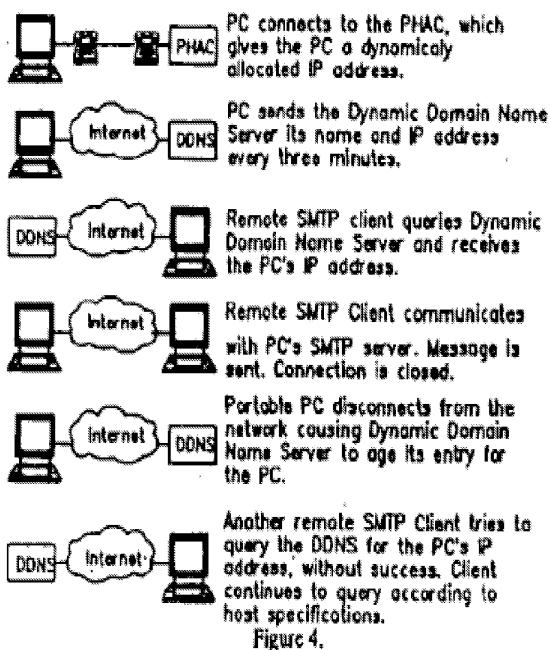
The testimony is conclusory and does not explain why the reasoning set forth by the Examiner for regarding the IP address of a portable host as "an address" of the connecting PHAC is wrong. The testimony also does not cite to any portion of Verjinski to support the conclusion that in all cases a sender of electronic mail, including a remote internet host, must first "dialin," presumably over a telephone, to the PHAC to "initiate" a session. The testimony further does not indicate that an electronic mail message from a remote internet host to a portable host is sent to the connecting PHAC over a telephone line rather than via the internet. We do not credit the testimony of Dr. Rhyne because it lacks adequate explanation and citation to the record.

Citing Section 6.0 of Verjinski and Verjinski's Figure 4, NTP further argues that (Brief 94:21 to 95:12) the remote host and the portable host must be simultaneously connected by telephone and that any electronic mail is "directly" transmitted between the remote host and the portable host. It is not clear what NTP means by "directly," but it appears NTP intends to say that electronic mail communication between the remote host and the portable host is conducted over a separate telephone connection between the remote host and the portable host, outside of the internet and any PHAC. The position is simply incorrect. The argument is rejected.

Figure 1 of Verjinski explicitly shows an internet connection between a remote host and a PHAC and a telephone connection between the PHAC and a portable host. Section 6.0 of Verjinski does not describe anything contrary to what is shown in Figure 1. Section 6.0 describes neither a telephone connection between a remote host and a PHAC nor a direct telephone connection between a remote host and a portable host. NTP refers

to Figure 4 contained in Section 6.0 Verjinski, which Figure generally illustrates a sample SMTP session:





The fourth item in Figure 4 illustrates the connection for communication between the remote host and the portable host, and the illustration depicts "Internet" as the connection, rather than a separate telephone line between the remote host and the portable host. Figure 4 provides only a general illustration and does not include many details which are not necessary for the purpose of Figure 4. For instance, items 2-5 of Figure 4 conveniently omit illustration of the PHAC and the cellular telephone system connecting a portable host to the internet, as is already shown in Figure 1. However, it cannot be reasonably disputed that Figure 4 does not support what NTP asserts, i.e., that the connection between the remote host and the portable host is a telephone line apart from the internet. The only element shown between a remote host and a portable host, in item 4, is labeled "Internet."

Verjinski also describes that if the portable host is not connected to the internet (such as through the cellular phone system and the PHAC as shown in Figure 1), then mail messages will be queued at the sending machine for future transmission. (Verjinski 0808:2:8-11). That description does not support NTP's view that messages between a remote host and a portable host are over a telephone connection apart from the internet.

NTP argues that because the Examiner's Final rejection made reference to several additional RFC documents (online publications from RFC Editor -- www.rfc-editor.org), the anticipation rejection over Verjinski is improper because not all of the teachings relied on by the Examiner come from Verjinski as a single prior art reference. (Brief 88:11-14). While acknowledging that in some instances an Examiner may properly cite to

additional documents to support an anticipation rejection, NTP asserts that the present circumstance is not one of them. (Brief 88:19 to 89:4).

The argument is dismissed. In its appeal brief, NTP does not cite to the locations in Examiner's Final rejection where a reference to or a discussion of RFC is made and does not reproduce the text by which the Examiner cited to and discussed RFC documents. It does not appear that NTP in its appeal brief even specifically identified which RFC documents are involved. RTP asserts that the way in which the Examiner discussed RFC is not one of the permitted uses of additional documents in an anticipation rejection (Brief 88:19 to 89:1), but makes no factual showing of just how the Examiner used RFC documents to support the anticipation rejection. NTP asserts that the Examiner used RFC documents to establish how Verjinski "could have" operated but does not support the assertion with a factual showing based on the Examiner's stated reasoning for the anticipation rejection. Thus, NTP's argument is made in a vacuum.

On page 88 of its brief, NTP surmises and asserts that the Examiner must have relied on the RFC documents because "it is recognized that Verjinski does not teach the addressing functions required by the claims." (Brief 88:18-19). But we have been directed to nothing in the record which reflects a finding or recognition by the Examiner that Verjinski does not disclose the addressing limitations required by the rejected claims. We note that the Examiner denies having referred to any RFC document in an impermissible way (Answer 158:7-9), and states that the RFC documents were not relied upon in the rejection but were cited only to provide more information which are not necessary for the rejection. (Id.)

NTP has the burden to show error in the rejection on appeal. We decline the invitation to search the extensive record to locate the allegedly inappropriate references to RFC documents. We also decline the invitation to ascertain in the first instance how the Examiner in fact used the RFC documents, how the reference to RFC documents actually fit into the reasoning underlying the rejection, if at all, and what teachings, if any, from RFC documents are actually required for the rejection based on Verjinski.

NTP argues that Verjinski does not disclose two different networks for transmission of information. The significance of the argument is not explained in the context of claim elements. We presume NTP is referring to the claim requirement that there be an electronic mail system and a separate RF information transmission system, which communicate through an interface. NTP asserts (Brief 90:3-5):

Both the processor that transmits a communication and the processor that receives the communication must dial in and remain connected to the same system, and all data / email is transmitted via the single network. *See* pages 0808-0809.

We have already rejected NTP's contention that the originating processor in Verjinski must "dial in" by phone to establish a connection. Also, the cellular phone network is a separate system from remote hosts sending information on the internet. Even though Verjinski's PHAC is an interface between the internet and the cellular phone system, the connection does not destroy the separate nature of the cellular phone system and the internet. NTP points out that in Verjinski's system, email messages from a remote internet host cannot be pushed to the PHAC when the intended portable host as recipient is not connected to the PHAC but must be queued at the sender

for future transmission. (Brief 90:6-12). That is true, but it does not undermine the nature of the cellular phone system as an information transmission system separate from the internet. NTP's argument is rejected. If NTP wanted the interface to have the ability to receive and hold electronic mail messages until the intended recipient is connected to the interface, NTP could have included such a limitation in the claims. That is not the case.

NTP argues that the internet cannot receive electronic mail from a remote host because a remote host is a part of the internet. (Brief 90:16 to 91:2). The significance of the argument is not clear. But in any event, the argument is misplaced. Even if the internet is construed as including the remote host sending the electronic mail, nothing precludes seeing the internet as receiving an electronic mail sent by one of its constituent hosts to be transmitted over the network as a whole. All hosts directly connected to the internet may technically be a part of the internet, but that does not mean (1) a connected host cannot be deemed to have sent a message through the internet, or (2) the internet cannot be deemed to have received an electronic mail from a constituent host. Note Figure 1 of Verjinski which illustrates a remote internet host in a separate box from that representing the internet. We do not credit the testimony of Dr. V. Thomas Rhyne (Appendix A12 ¶ 4), because he does not explain why it would be unreasonable to regard the internet as having received an electronic mail from a constituent host when that electronic mail leaves the constituent host and is directed over the internet toward the intended recipient.

NTP argues that the PHAC disclosed in Verjinski does not comprise an "interface" as that term is defined in the context of the claims because it

does not comprise a device or system which includes a processor and which transmits electronic mail messages to a wireless system for delivery to a mobile processor. (Brief 91:4-8). The argument is not persuasive. As we have explained in the findings above, the PHAC in Verjinski is an interface which receives electronic mail messages from the internet on one side and connects to a cellular telephone system on the other. NTP is simply incorrect that the PHAC does not transmit electronic mail messages to a wireless system for delivery to a mobile processor.

We do not credit the testimony of Dr. Rhyne to the effect that Verjinski does not disclose an "interface" (Appendix A12, ¶ 5), because it is based on an excessively narrow interpretation of the claim term "interface" which reads into the claims extraneous features from the specification. As we have explained, the claim term "interface" does not require transmission of electronic mail messages to mobile processors "which can be carried by a person outside of a home or office." Nor does it require a processor. If the inventors intended to claim a particular type or kind of interface with additional requirements, it was incumbent upon them to specifically include those requirements in the claims. In any event, NTP fails to explain why the remote host carried by the field officer in the military application embodiment of Verjinski is not a mobile processor that can be carried by a person outside of a home or office.

NTP argues that Verjinski does not disclose an "electronic mail message" as that term is used in the involved NTP patent. (Brief 91:9-18). The argument is misplaced and not persuasive. In construing "electronic mail message" as a claim term, we have determined that it is not limited to

the particular type and format of an electronic mail message as that used in NTP's disclosed embodiment. Any type of message that would be recognized by one with ordinary skill in the art as an electronic mail message satisfies the claim term. Verjinski discloses an electronic mail message because we have explained in the findings above that Verjinski describes the sending of electronic mail from a remote internet host to a portable host. Whatever message the electronic mail carries is an electronic mail message. We do not credit the testimony of Dr. Rhyne (Appendix A8, ¶ 14; A12 ¶ 6), because his interpretation of "electronic mail message" is unjustifiably narrow and reads extraneous features into the claims.

With regard to representative independent claim 1, NTP specifically argues that Verjinski does not disclose an interface which connects at least one electronic mail system containing the plurality of originating processors to the RF information transmission system. (Brief 93:11-15). The argument is unpersuasive. As we have discussed in the findings above, each remote internet host running an implementation of Simple Mail Transfer Protocol (SMTP) constitutes an electronic mail system and is itself an originating processor for sending electronic mail. Thus, Verjinski discloses a plurality of originating processors contained in "at least one electronic mail system," in this case as many electronic mail systems as there are originating processors. An electronic mail message is sent from an originating processor, i.e., the remote host such as that represented by the commanding officer, to the PHAC which further connects to the cellular telephone system which is an RF information transmission system. The PHAC is an interface connecting at least one electronic mail system to an RF information

transmission system, albeit the former is indirectly coupled to the PHAC through the internet, a gateway, and a LAN. See Verjinski's Figure 1.

We reject NTP's assertion (Brief 93:24-25) that a single computer running an electronic mail program such as SMTP is not an electronic mail system. An "electronic mail system," construed under the broadest reasonable interpretation rule applicable during patent reexamination, covers and reads on a single computer implementing an electronic mail program such as SMTP. We do not credit the testimony of Dr. V. Thomas Rhyne (Appendix A8, ¶ 19) because his interpretation of "electronic mail system" is unjustifiably narrow and reads extraneous features into the claims. He does not explain why none of the following is reasonably deemed an electronic mail system: (1) a system that composes and prepares electronic mail for routing; (2) a system which routes electronic mail by a predetermined protocol; and (3) a system that receives electronic mail and processes it for review and display.

NTP does not separately argue the merits of claims 2, 3, 23, 26, 32, and 36 from the merits of claim 1. (Brief 96:17-18).

With regard to claims 4, 33, and 34, NTP argues that the requirement of inputting into the system at one of the plurality of originating processors the address of the interface before inputting of the inputted message of the electronic mail is not met by the disclosure of Verjinski. (Brief 96:19 to 97:5). The argument is without merit.

We have already determined that the address of the PHAC as an interface is included in the IP address of the portable host. We have also determined that each remote host running an implementation of SMTP

constitutes an electronic mail system and is itself an originating processor for sending electronic mail. Verjinski discloses that when a remote host desires to send a message to a portable host, it queries the DDNS for the IP address of the portable host and the DDNS provides it to the remote host. (Verjinski 0807:1:20-25; 0808:2:46-48; 0809:9-12). Inputting of the address of the interface into the electronic mail system occurs the instant the remote host as the electronic mail system receives the queried IP address of the portable host back from the DDNS. And then the remote host sends a message. Thus, obtaining the address of the portable host, which includes the address of the PHAC interface, is the first event that occurs when a remote host desires to send an electronic mail message to a portable host.

With regard to claims 27, 35, and 37, NTP argues that Verjinski does not disclose inputting the address of the interface into the electronic mail system at the one of the plurality of originating processors, for the same reasons as presented with respect to claim 4. (Brief 97:6-10). The argument is rejected, based on the above discussion of claim 4.

With regard to independent claim 38, 74, and 88, NTP merely identifies several claim features which are also contained in independent claim 1, and asserts in a conclusory manner that those limitations are not disclosed by Verjinski. (Brief 98:7-23; 99:15 to 100:9; Brief 101:6-22). Giving NTP the benefit of doubt, we assume that NTP intended to assert the same arguments and reasoning it provided for those same limitations in the context of independent claim 1. In essence, NTP has not separately argued the merits of claims 38, 74, and 88 from the merits of independent claim 1.

Also, NTP has grouped dependent claims 83 and 87 with claim 74 and dependent claims 94 and 98 with claim 88. (Brief 100:10-11; 101:23 to 102:1).

Claim 30 depends from claim 1 and claim 66 depends from claim 38. Both claim 30 and claim 66 further require the feature: "a security check is performed on the electronic mail message to determine if the electronic mail message should be transmitted by the RF information transmission system." Claim 31 depends from claim 30 and claim 67 depends from claim 66. Thus, both claim 31 and claim 67 also include the above-quoted feature.

The Examiner explained that in any cellular telephone system it is inherent to check the identification of any active cellular telephone in the area before allowing the phone to be serviced by the cellular phone network. (Answer 59:22 to 60:2; 173:12-19). Because not servicing the phone means no electronic mail would be transmitted to the phone, the Examiner equates the security check on the phone to the claimed security check on the electronic mail message. The analysis is misplaced. The claim limitation calls for a security check specifically "on the electronic mail message," which is not met by checking the identification signal of a cellular phone, notwithstanding that not servicing the phone means no electronic mail would be sent or forwarded to the phone.

Without citing to anything in Verjinski, the Examiner further states (Answer 173:28-174:01):

In addition the DNS lookup process compares the identification of the RF receiver (email destination address) with permissible identifications (IP addresses in the DDNS database) to determine if the inputted information (email) should be

transmitted to an RF receiver (portable PC) served by a particular PHAC.

The Examiner's failure to cite to the record for such a key finding is detrimental to the position taken by the Examiner, as we do not find such a disclosure in Verjinski. Moreover, it is unclear how such a disclosure, even if true, equates to a "security check performed on the electronic mail message" as is required by claims 30 and 66. The position taken by the Examiner lacks support in the record as well as an adequate explanation.

The Examiner further states (Answer 60:6-7; 174:1-2) that in Verjinski the PHAC performs a password protected IP update query process on a DNS server, citing Section 4.0 of Verjinski. According to the Examiner, the PHAC performs a security check by password on the information received at an input, and if the check clears then that means the IP address update process is legitimate and the information contained in received emails should be outputted by the PHAC for transmission and broadcast by the RF system. (Answer 60:7-11; 174:2-6). The analysis is misplaced, because the IP address updating process does not take any information from any electronic mail message or act on any information taken from any electronic mail message. What the Examiner has referred to in Verjinski is only a security check by password on the portable host's request to update its own IP address stored in the DDNS. At the time the process is performed, no electronic mail message is involved in any way. Although the consequence of updating an IP address stored in the DDNS is that a future electronic mail can use the updated address to send a message to that address, that does not make the security check on the IP address

updating request by a portable host the same as a security check "performed on an electronic mail message" as claimed.

NTP does not separately argue the merits of claims 39, 40, 60, 63, 68, and 72 from the merits of claim 38. (Brief 99:1-2).

With regard to claims 41, 69-71, and 73, all of which depend directly or indirectly from independent claim 38, NTP argues that for the reasons it presented in connection with claim 27, Verjinski does not disclose that the address of the one interface is inputted at the one of the plurality of originating processors. (Brief 99:3-7). With regard to claim 86 which depends from claim 74, NTP argues the same. (Brief 101:1-5). With regard to claim 97 which depends from claim 88, NTP further argues the same. (Brief 102:13-17).

We have already discussed and rejected NTP's arguments with respect to the same limitation in claim 27.

NTP does not separately argue the merits of claims 83 and 97 from the merits of claim 74. (Brief 100:10-11).

Claim 75 depends from claim 74 and additionally recites: "a destination processor in one of the at least one electronic mail system is coupled to one of the at least one RF receiver and receives the inputted message." With respect to that claim limitation, the Examiner simply made reference (Answer 60:21) to his reasoning in support of the rejection of claim 2 which recites: "a processor is coupled to the one of the at least one RF receiver and receives the inputted message." The Examiner's reasoning with respect to claim 2 is this (Answer 57:7-9):

The PC client in Verjinski connects to cellular network and the PHAC thus requiring RF capable modem (RF receiver) as

> claimed, an email or other information message is transmitted to client destination processor via the RF receiver attached to the destination processor.

The explanation does not account for the requirement in claim 75 that the destination processor is in one of the at least one electronic mail system. That electronic mail system, according to base claim 74, is connected to the RF information transmission system through an interface. Verjinski's portable host, i.e., the above-referenced PC client, is not in an electronic mail system that is connected to the cellular telephone system through the PHAC as interface. Rather, it is connected to the PHAC by way of the cellular telephone system. The Examiner's conclusion is not supportable.

Claim 76 depends from claim 75. The Examiner's conclusion on claim 76 is equally not supportable for the same reasons.

Claim 89 depends from independent claim 88 and additionally recites: "one of the at least one RF receiver transmits the inputted message to one of a plurality of destination processors in the at least one electronic mail system." Claim 90 depends from claim 89 and includes the same feature. The Examiner's explanation for the rejection of claim 89 (Answer 60:15-20) fails to account for the requirement that the destination processor has to be within the electronic mail system that connects to the RF information transmission system through the interface. It is not evident how that claim feature is disclosed by Verjinski.

Conclusion

NTP has not shown error in the anticipation rejection of claims 1-4, 23, 26, 27, 32-41, 60, 63, 68-76, 83, 86-88, 94, 97, and 98 under 35 U.S.C. § 102 as anticipated by Verjinski.

NTP has shown error in the anticipation rejection of claims 30, 31, 66, 67, 75, 76, 89, and 90 under 35 U.S.C. § 102 as anticipated by Verjinski.

2.

The obviousness rejection of claims 5, 6, 9, 12, 13, 42, 43, 46, 49, 50, 79, 80, 83, 91, 92 and 160-163 under 35 U.S.C. § 103 over Verjinski and Admitted Prior Art

The Examiner finally rejected claims 5, 6, 9, 12, 13, 42, 43, 46, 49, 50, 79, 80, 83, 91, 92, and 160-163 under 35 U.S.C. § 103 as unpatentable over Verjinski and prior art allegedly admitted by NTP ("Admitted Prior Art").

We affirm.

Issue

Has NTP shown error in the Examiner's rejection of claims 5, 6, 9, 12, 13, 42, 43, 46, 49, 50, 79, 80, 83, 91, 92, and 160-163 under 35 U.S.C. § 103 as unpatentable over Verjinski and Admitted Prior Art?

Analysis

NTP argues that the alleged Admitted Prior Art does not include an "interface." NTP also argues that the alleged Admitted Prior Art does not disclose including in the electronic mail message an address of the interface. Thus, according to NTP, the alleged Admitted Prior Art does not cure the deficiencies of Verjinski with respect to both of those claim limitations.

NTP's arguments are misplaced. As we have already explained and determined, Verjinski discloses both of the claim features now referred to by NTP. With regard to those features, Verjinski has no deficiency.

NTP separately argues the merits of claim 13 which depends on claim 5. NTP states that with regard to claim 13 Verjinski does not disclose the

claim feature of inputting the address of the interface at one of the plurality of originating processors before inputting of the inputted message, based on reasons NTP presented in the context of the anticipation rejection of claim 4. (Brief 107:20 to 108:1). We have already discussed and rejected NTP's reasoning in the context of claim 4. Verjinski discloses the claim feature.

NTP separately argues the merits of claim 50 which depends on claim 42. NTP states that with regard to claim 50 Verjinski does not disclose the claim feature of inputting the address of the interface at one of the plurality of originating processors before inputting of the inputted message, based on reasons NTP presented in the context of the anticipation rejection of claim 27. (Brief 108:2-6). We have already rejected NTP's reasoning in the context of claim 27. Verjinski discloses the claim feature.

NTP does not separately argue the merits of claims 160 and 161 in the obviousness rejection from the merits of claim 1 in the anticipation rejection over Verjinski. According to NTP, the alleged Admitted Prior Art does not cure the deficiency of Verjinski with regard to the claim limitations of (1) connecting the at least one electronic mail system containing the plurality of originating processors to the RF information transmission system with one of at least one interface, and (2) the electronic mail message originating from the one of the plurality of originating processors includes an address of the one interface and is transmitted from the one of the plurality of originating processors to the one interface. We have already discussed those claim features in the context of the anticipation rejection of claim 1 over Verjinski. Verjinski discloses the claim features and has no deficiency in that regard.

NTP does not separately argue the merits of claims 162 and 163 in the obviousness rejection from the merits of claim 1 in the anticipation rejection over Verjinski. According to NTP, the alleged Admitted Prior Art does not cure the deficiency of Verjinski with regard to the claim limitations of (1) connecting the at least one electronic mail system containing the plurality of originating processors to the RF information transmission system with one of at least one interface, and (2) including in the electronic mail message originating from one of the plurality of originating processors an address of the interface and is transmitted from one of the plurality of originating processors to the interface. We have already discussed those same claim features in the context of the anticipation rejection of claim 1 over Verjinski. Verjinski does disclose the features and has no deficiency in that regard.

Conclusion

On balance, upon weighing all of the evidence together as a whole, including the evidence of nonobviousness which we discuss in another section of this opinion, we conclude that NTP has not shown error in the rejection of claims 5, 6, 9, 12, 13, 42, 43, 46, 49, 50, 79, 80, 83, 91, 92, and 160-163 under 35 U.S.C. § 103 as unpatentable over Verjinski and Admitted Prior Art.

3.

The obviousness rejection of claims 24, 25, 28, 29, 61, 62, 64, 65, 77, 78, 84, 85, 95, 96, 188, 189, 192-194, 199-202, 207-213, and 218-223 over Verjinski and DeVaney

The Examiner finally rejected claims 24, 25, 28, 29, 61, 62, 64, 65, 77, 78, 84, 85, 95, 96, 188, 189, 192-194, 199-202, 207-213, and 218-223 under 35 U.S.C. § 103 as unpatentable over Verjinski and DeVaney.

The rejection of claims 24, 25, 28, 29, 61, 62, 64, 65, 77, 78, 84, 85, 95, 96, 188, 189, 194, 201, 202, 211, 212, 213, 219, 220, 222, and 223 over Verjinski and DeVaney is *affirmed*.

The rejection of claims 192, 193, 199, 200, 207-210, 218 and 221 over Verjinski and DeVaney is *reversed*.

Issue

Has NTP shown error in the Examiner's rejection of claims 24, 25, 28, 29, 61, 62, 64, 65, 77, 78, 84, 85, 95, 96, 188, 189, 192-194, 199-202, 207-213, and 218-223 under 35 U.S.C. § 103 as unpatentable over Verjinski and DeVaney?

Analysis

Claims 24, 25, 28, 29, 61, 62, 64, 65, 77, 78, 84, 85, 95, and 96 depend from claim 1, claim 38, or claim 74. NTP does not separately argue the merits of claims 24, 25, 28, 29, 61, 62, 64, 65, 77, 78, 84, 85, 95, and 96 in the obviousness rejection from the merits of claims 1, 38, and 74 in the anticipation rejection over Verjinski. According to NTP, DeVaney does not cure the deficiency of Verjinski with regard to the claim limitations of (1) "an interface," and (2) the electronic mail message originating from one of the plurality of originating processors includes an address of the interface. We have already discussed those claim features in the anticipation rejection of claims 1, 38 and 74 over Verjinski. Verjinski discloses the claim features and has no deficiency in that regard.

With regard to independent claim 188, NTP identifies various features which are supposedly not disclosed by Verjinski. (Brief 110:1-17). All of the identified features have already been discussed in the context of the

anticipation rejection of claims 1, 38, and 74 over Verjinski, except the feature of including in the electronic mail message an identification of a designated RF receiver in the RF system to receive the inputted message. NTP has not disputed that Verjinski's electronic mail message includes the IP address of the portable host which is to receive the electronic mail message. That IP address of the portable host which is to receive the message constitutes an identification of the RF receiver used by the portable host. Claim 188 is not specific about the identification.

NTP argues that DeVaney does not cure the deficiency of Verjinski with regard to the various claim features it has identified. However, Verjinski has no such deficiency, as it discloses each identified limitation. We do not credit the testimony of Dr. V. Thomas Rhyne (Appendix A8, ¶ 23) because as we have already noted above Dr. Ryhne's opinion is based on an unduly narrow reading of the claims.

NTP does not separately argue the merits of claims 189 from the merits of claim 188.

NTP separately argues the merits of claim 192, which depends from claim 188 and further recites: "the identification of the at least one designated RF receiver is compared with permissible identification numbers in the RF system to determine if the inputted message and the identification of the at least one designated RF receiver should be transmitted by the RF system to the at least one designated RF receiver." For analysis of claim 192, the Examiner merely makes a reference to the discussion concerning claim 30. (Answer 64:15-16). In the context of claim 30, the Examiner discusses an identification of a RF receiver, such as the mobile identification

number of a cellular phone, and verification of the same as an inherent feature of a cellular telephone system. However, the Examiner does not explain how such an identification is included in the electronic mail message originated from a processor in the electronic mail system, and it is not apparent that that is the case. Claim 193 depends from claim 192.

With regard to independent claim 194, NTP identifies various features which are supposedly not disclosed by Verjinski. (Brief 111:6-22). All of the identified features have already been discussed in the context of the anticipation rejection of claims 1, 38, and 74 over Verjinski, except the feature of including in the electronic mail message an identification of a designated RF receiver in the RF system to receive the inputted message and the sending of that identification to the RF system. NTP has not disputed that Verjinski's electronic mail message includes the IP address of the portable host which is to receive the electronic mail message. That IP address of the portable host which is to receive the message constitutes an identification of the RF receiver used by the portable host. Claim 194 is not specific about particulars of the identification. Furthermore, in Verjinski, the PHAC as an interface forwards the electronic mail message to the cellular telephone system. Accordingly, the identification of the RF receiver is transmitted to an RF system, i.e., the cellular telephone system.

NTP argues that DeVaney does not cure the deficiency of Verjinski with regard to the various claim features it has identified. However, Verjinski has no such deficiency, as it discloses each identified limitation. We do not credit the testimony of Dr. V. Thomas Rhyne (Appendix A8,

¶ 23) because as we have already noted above Dr. Ryhne's opinion is based on an unduly narrow reading of the claims.

NTP does not separately argue the merits of claim 201 from the merits of claim 194.

NTP separately argues the merits of claim 199, which depends from claim 194 and further recites: "the identification of the at least one RF receiver is compared with permissible identification numbers in the RF information transmission system to determine if the inputted message and the identification of the at least one RF receiver should be transmitted by the RF information transmission system to the at least one RF receiver." For analysis of claim 199, the Examiner merely makes a reference to the discussion concerning claim 30. (Answer 64:15-16). In the context of claim 30, the Examiner discusses an identification of a RF receiver, such as the mobile identification number of a cellular phone, and verification of the same as an inherent feature of a cellular telephone system. However, the Examiner does not explain how such an identification is included in the electronic mail message originated from a processor in the electronic mail system, and it is not apparent that that is the case.

Claim 200 depends from claim 199. The Examiner's analysis of claim 200 is inadequate for the same reasons as those discussed with respect to claim 199.

With regard to independent claim 202, NTP identifies various features which are supposedly not disclosed by Verjinski. (Brief 112:15 to 113:6). All of the identified features have already been discussed in the context of the anticipation rejection of claims 1, 38, and 74 over Verjinski, except the

feature of including in the electronic mail message an identification of at least one RF receiver to receive the inputted message.

NTP has not disputed that Verjinski's electronic mail message includes the IP address of the portable host which is to receive the electronic mail message. That IP address of the portable host which is to receive the message constitutes an identification of the RF receiver used by the portable host. Claim 202 is not specific about particulars of the identification.

Claim 202 requires that the electronic mail message includes an address to which the message is delivered in response to that address and specifies that the interface is the address to which electronic mail message is delivered. We have already determined that in Verjinski electronic mail messages intended for a portable host are first delivered to the PHAC, and also explained why the IP address of the portable host, contained in the electronic mail message, constitutes an address of the PHAC.

NTP argues that DeVaney does not cure the deficiency of Verjinski with regard to the various claim features it has identified. However, Verjinski has no such deficiency, as it discloses each identified limitation. We do not credit the testimony of Dr. V. Thomas Rhyne (Appendix A8, ¶ 23) because as we have already noted above Dr. Ryhne's opinion is based on an unduly narrow reading of the claims.

NTP does not separately argue the merits of claims 211 and 212 from the merits of claim 202.

NTP separately argues the merits of claim 207, which depends from claim 202 and further recites: "the identification of the at least one RF receiver is compared with permissible identification numbers in the RF

system to determine if at least the inputted messages and the identification of the at least one RF receiver should be transmitted by the RF system to the at least one RF receiver." For analysis of claim 207, the Examiner merely makes a reference to the discussion concerning claim 30. (Answer 64:15-16). In the context of claim 30, the Examiner discusses an identification of a RF receiver, such as the mobile identification number of a cellular phone, and verification of the same as an inherent feature of a cellular telephone system. However, the Examiner does not explain how such an identification is included in the electronic mail message originated from a processor in the electronic mail system, and it is not apparent that that is the case.

Claims 208-210 each depend directly or indirectly from claim 207. The Examiner's analysis of claims 208-210 is inadequate for the same reasons as those discussed with respect to claim 207.

With regard to independent claim 213, NTP identifies various features which are supposedly not disclosed by Verjinski. (Brief 113:21 to 114:11). All of the identified features have already been discussed in the context of the anticipation rejection of claims 1, 38, and 74 over Verjinski, except the feature of including in the electronic mail message an identification of at least one RF receiver, and the feature of connecting a processor to the electronic mail system.

NTP has not disputed that Verjinski's electronic mail message includes the IP address of the portable host which is to receive the electronic mail message. That IP address of the portable host which is to receive the message constitutes an identification of the RF receiver used by the portable host. Claim 213 is not specific about particulars of the identification. In

Verjinski, the PHAC is an interface between the electronic mail system and the RF system, which first receives the electronic mail message, and the electronic mail message includes the address of the PHAC as is discussed in the context of claims 1, 38, and 74.

With regard to the feature of connecting a processor to the electronic mail system, we have already determined that Verjinski discloses multiple remote hosts connected to the internet each of which is capable of sending an electronic mail message. Each remote host has sufficient processing power to constitute a processor. Verjinski discloses an electronic mail system in the form of a remote host running an SMTP implementation on a processor. The requirement of connecting a processor to the electronic mail system is met because the electronic mail system is connected by internet to at least one other remote host. Alternatively, both the DDNS and the PHAC require enough processing power to constitute a processor and both of those components are connected to the electronic mail system.

NTP argues that DeVaney does not cure the deficiency of Verjinski with regard to the various claim features it has identified. However, Verjinski has no such deficiency, as it discloses each identified limitation. We do not credit the testimony of Dr. V. Thomas Rhyne (Appendix A8, ¶ 23) because as we have already noted above Dr. Ryhne's opinion is based on an unduly narrow reading of the claims.

NTP does not separately argue the merits of claims 222 and 223 from the merits of claim 213.

NTP separately argues the merits of claim 218, which depends from claim 213 and further recites: "the identification of the at least one RF

receiver is compared with permissible identification numbers in the RF system to determine if at least the inputted messages and the identification of the at least one RF receiver should be transmitted by the RF system to the at least one RF receiver." For analysis of claim 218, the Examiner merely makes a reference to the discussion concerning claim 30. (Answer 64:15-16). In the context of claim 30, the Examiner discusses an identification of a RF receiver, such as the mobile identification number of a cellular phone, and verification of the same as an inherent feature of a cellular telephone system. However, the Examiner does not explain how such an identification is included in the electronic mail message originated from a processor in the electronic mail system, and it is not apparent that that is the case.

Claim 221 depends from claim 218. The Examiner's analysis of claims 221 is inadequate for the same reasons as those discussed with respect to claim 218.

With regard to claim 219, NTP points out that claim 219 depends from claim 214 and argues that because claim 214 has not been rejected as unpatenatable over Verjinski and DeVaney, the rejection of claim 219 as unpatentable over Verjinski and DeVaney is erroneous. The argument is without merit. It may be the case that claim 214 should have been rejected as unpatentable over Verjinski and DeVaney. The lack of rejection of claim 214 does not demonstrate that there is error in the rejection of claim 219. NTP does not focus on the reasoning articulated by the Examiner in rejecting claim 219.

With regard to claim 219, NTP also argues that because claim 219 depends from claim 214 which depends from claim 213, claim 219 is

patentable over Verjinski and DeVaney for the same reasons as those it presented to rebut the rejection of claim 213. However, we have discussed and rejected NTP's arguments directed to claim 213. Accordingly, the reliance on solely the arguments in connection with claim 213 is inadequate.

NTP does not separately argue the merits of claim 220 from the merits of claim 219.

In its reply (Reply 49:6-12), NTP argues that the obviousness rejection is improper because "such a combination would change the principle of operation of Verjinski." The assertion is mere attorney argument and is not supported by the testimony of any technical witness. More importantly, even assuming that a principle of operation disclosed in Verjinski is modified, the argument is misplaced because there is no per se rule in patent law that a disclosed manner or principle of operation in a prior art reference must remain unchanged when the reference is considered in combination with other prior art references or from the perspective of one with ordinary skill in the art.

A prior art reference must be considered for everything it teaches by way of technology and is not limited to the particular invention it is describing and attempting to protect. *EWP Corp. v Reliance Universal Inc.*, 755 F.2d 898, 907 (Fed. Cir. 1985). The use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned, as they are a part of the literature and are relevant for all they contain. *In re Heck*, 669 F.2d 1331, 1333 (Fed. Cir. 1983), (citing *In re Lemelson*, 397 F.2d 1006, 1009 (CCPA 1968)). To vary from the precise teachings of a prior art reference, there need only be

reasoning with rational underpinnings to support a prima facie case of obviousness. *See In re Kahn*, 441 F.3d 977, 989 (Fed Cir. 2006).

Conclusion

NTP has shown error in the rejection of claims 192, 199, 200, 207-210, 218, and 221 under 35 U.S.C. § 103 as unpatentable over Verjinski and DeVaney.

On balance, upon weighing all of the evidence together as a whole, including the evidence of nonobviousness which we discuss in another section of this opinion, we conclude that NTP has not shown error in the rejection of claims 24, 25, 28, 29, 61, 62, 64, 65, 77, 78, 84, 85, 95, 96, 188, 189, 193, 194, 201, 202, 211, 212, 213, 219, 220, 222, and 223 under 35 U.S.C. § 103 as unpatentable over Verjinski and DeVaney.

4.

The obviousness rejection of claims 190, 191, 195-198, 203-206, and 214-217 under 35 U.S.C. § 103 over Verjinski, DeVaney, and Riddle

The Examiner finally rejected claims 190, 191, 195-198, 203-206, and 214-217 under 35 U.S.C. § 103 as unpatentable over Verjinski, DeVaney, and Riddle.

We affirm.

Issues

Has NTP shown error in the conclusion that one with ordinary skill would have recognized, in view of Riddle's disclosure, that combining of the inputted message and the address of the interface into a message can occur in response to user selection of an icon?

Has NTP shown error in the Examiner's rejection of claims 190, 191, 195-198, 203-206, and 214-217 under 35 U.S.C. § 103 as unpatentable over Verjinski, DeVaney, and Riddle?

Findings of Fact

Riddle discloses a terminal 300-11 including a display on which are shown names, symbols, or icons. (Riddle 4:6-12). A user desiring to send an internet message to a particular device uses a mouse cursor to select a name, symbol, or icon representing the device. (Riddle 3:48 through 4:21). In response to user selection of a displayed name, symbol, or icon identifying a device, terminal 300-11 starts the message transmission process by transmitting the message to its associated network bus 300-20. (Riddle 4:38-42). As an example, Riddle specifically discloses the selection of printers (Riddle 4:33-37), but recipient devices are not limited to printers because Riddle discloses that there are multiple device types for selection. (Riddle 4:10-12).

Analysis

With regard to this rejection, the issue centers about a claim limitation which requires that the address of the interface is combined with the inputted message in response to selection of an icon and the inputting of the inputted message at the processor transmitting the electronic mail message.

NTP first asserts by reference the same arguments it had presented in connection with the rejection of independent claims 188, 194, 202, and 213 with regard to the disclosure of Verjinski, and notes that all of claims 190, 191, 195-198, 203-206, and 214-217 depend directly or indirectly from one of claims 188, 194, 202, and 213. However, we have already rejected NTP's

arguments raised in the context of the rejection of claims 188, 194, 202, and 213, concerning the disclosure of Verjinski.

With regard to claims 190, 195, 203, and 214, NTP notes that they each require the address of the interface to be combined with the inputted message in response to the selection of an icon and inputting of the inputted message and argues that the Examiner failed to present adequate reasoning in support of the obviousness rejection in connection with that feature. (Brief 115:21 to 116:2). It is asserted that although the Examiner relies on Riddle to show that one with ordinary skill is familiar with the user selection of an icon, there is no teaching or suggestion in the prior art to combine the address of the interface with the inputted message in response to the selection of an icon. (Brief 115:23 to 116:2). NTP even asserts that there is no disclosure in Verjinski that the address of the interface is combined with the inputted message at the originating processor. (Brief 116:4-5).

The arguments are unpersuasive.

NTP does not dispute that the electronic mail message from the processor originating the electronic mail message in Verjinski includes the inputted message as well as the IP address of the portable host. We have already determined in our findings that the IP address of the portable host constitutes an address of the connecting interface PHAC. Thus, the inputted message and the address of the interface are combined at the originating processor to form the electronic mail message to be sent from the processor originating the message. The originating processor can send no message containing the inputted message and the address of the interface until the inputted message and the address of the interface are first combined to form

the message. What is not disclosed by Verjinski is that the combining of the inputted message and the address of the interface in forming the electronic mail message occurs in response to the selection of an icon.

One with ordinary skill in the art has ordinary creativity and is not an automaton. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007). The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. at 416. By definition, the hypothetical person is presumed to have some skills. *See, e.g., In re Sovish*, 769 F.2d 738, 743 (Fed. Cir. 1985). Because one with ordinary skill is familiar with using icon selection as a trigger to commence the sending of a message, one with ordinary skill in the art would have recognized that where a message has multiple parts and needs to be assembled before sending, icon selection can serve to trigger assembly of the message and subsequent sending when it has been assembled, rather than just sending of the message.

NTP does not separately argue the merits of claims 191, 196-198, 204-206, and 215-218 from the merits of claims 190, 195, 203, and 214.

For reasons discussed above in the context of the rejection based on Verjinski and DeVaney, NTP's argument in its reply brief that combining the teachings of Verjinski and DeVaney would change the operation of Verjinski, is misplaced and has no merit.

Conclusion

NTP has not shown error in the conclusion that one with ordinary skill would have recognized, in view of Riddle's disclosure, that combining of the

inputted message and the address of the interface into a message can occur in response to user selection of an icon.

On balance, upon weighing all of the evidence together as a whole, including the evidence of nonobviousness which we discuss in another section of this opinion, we conclude that NTP has not shown error in the rejection of claims 190, 191, 195-198, 203-206, and 214-217 under 35 U.S.C. § 103 as unpatentable over Verjinski, DeVaney, and Riddle.

5.

The obviousness rejection of claims 7, 8, 10, 11, 44, 45, 47, 48, 81, and 82 under 35 U.S.C. § 103 over Verjinski, Admitted Prior Art, and DeVaney

The Examiner finally rejected claims 7, 8, 10, 11, 44, 45, 47, 48, 81, and 82 under 35 U.S.C. § 103 as unpatentable over Verjinski, Admitted Prior Art and DeVaney.

We affirm.

Issue

Has NTP shown error in the Examiner's rejection of claims 7, 8, 10, 11, 44, 45, 47, 48, 81, and 82 under 35 U.S.C. § 103 as unpatentable over Verjinski, Admitted Prior art, and DeVaney?

Analysis

Claims 7, 8, 10, 11, 44, 45, 47, 48, 81, and 82 depend directly or indirectly from one of claims 1, 38, and 74, which have been finally rejected as anticipated by Verjinski. NTP does not separately argue the merits of claims 7, 8, 10, 11, 44, 45, 47, 48, 81, and 82 in the obviousness rejection from the merits of claims 1, 38, and 74 in the anticipation rejection over Verjinski. According to NTP, neither the Admitted Prior Art nor DeVaney

cures the deficiency of Verjinski with regard to the claim limitations of claims 1, 38, and 74. We have already addressed and rejected NTP's arguments in the context of claims 1, 38, and 74. Verjinski discloses all of the claim features of claims 1, 38, and 74, and has no deficiency in that regard.

For reasons discussed above in the context of the rejection based on Verjinski and DeVaney, NTP's argument in its reply brief that combining the teachings of Verjinski and DeVaney would change the operation of Verjinski is misplaced and has no merit.

Conclusion

On balance, upon weighing all of the evidence together as a whole, including the evidence of nonobviousness which we discuss in another section of this opinion, we conclude that NTP has not shown error in the rejection of claims 7, 8, 10, 11, 44, 45, 47, 48, 81, and 82 under 35 U.S.C. § 103 as unpatentable over Verjinski, Admitted Prior Art, and DeVaney.

6.

The obviousness rejection of claims 14, 15, 18, 20-22, 51, 52, 55, 58, 59, 93, 164, 167-170, 173-176, 182, and 185-187 under 35 U.S.C. § 103 over Verjinski and Riddle

The Examiner finally rejected claims 14, 15, 18, 20-22, 51, 52, 55, 58, 59, 93, 164, 167-170, 173-176, 182, and 185-187 under 35 U.S.C. § 103 over Verjinski and Riddle.

The rejection of claims 14, 15, 18, 20-22, 51, 52, 55, 58, 59, 93, 164, 167, 168, 170, 173, 174, 176, 182, 185, and 186 over Verjinski and Riddle is *affirmed*.

The rejection of claims 169, 175, and 187 over Verjinski and Riddle is *reversed*.

a. claims 14, 15, 18, 20-22, 51, 52, 55, 58, 59, and 93

Issue

Has NTP shown error in the rejection of claims 14, 15, 18, 20-22, 51, 52, 55, 58, 59, and 93 under 35 U.S.C. § 103 as unpatentable over Verjinski and Riddle?

Analysis

Claims 14, 15, 18, 20-22, 51, 52, 55, 58, 59 and 93 depend directly or indirectly from one of claims 1, 38, and 88, which have been finally rejected as anticipated by Verjinski. According to NTP, Riddle does not cure the deficiency of Verjinski with regard to the claim limitations of claims 1, 38, and 88. We have already addressed and rejected NTP's arguments in the context of the anticipation rejection of claims 1, 38, and 88 over Verjinski. Verjinski discloses all of the claim features of claims 1, 38, and 88, and has no deficiency in that regard.

NTP further argues that claims 14, 15, 18, 20-22, 51, 52, 55, 58, 59 and 93 all include the feature of icon selection on a display of the originating processor, which in combination with the inputting of the inputted message combines the inputted message with an address of the interface and an identification of the RF receiver to form the electronic mail message. It is asserted that although the Examiner relies on Riddle to show that one with ordinary skill is familiar with the user selection of an icon, there is no teaching or suggestion in the prior art to use icon selection in combination with inputting of a message to trigger the combination of the inputted

message with an address of the interface and an identification of the RF receiver to form an electronic mail message.

The arguments are unpersuasive.

NTP does not dispute that the electronic mail message from the processor originating the electronic mail message in Verjinski includes the inputted message as well as the IP address of the portable host. We have already determined in our findings that the IP address of the portable host constitutes an address of the connecting interface PHAC. The IP address of the portable host is also an identification of the RF receiver associated with the portable host. The rejected claims are not specific about the identification. Thus, the inputted message, the address of the interface, and the identification of the RF receiver are combined at the originating processor can send no message until the message has been formed. What is not disclosed by Verjinski is that the combining of the inputted message, the address of the interface, and the identification of the RF receiver in forming the electronic mail message occurs in response to the selection of an icon in combination with inputting of the message.

One with ordinary skill in the art has ordinary creativity and is not an automaton. *KSR Int'l Co.*, 550 U.S. at 421. The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results. *KSR Int'l Co.*, 550 U.S. at 416. By definition, the hypothetical person is presumed to have some skills. *See*, *e.g., In re Sovish*, 769 F.2d at 743. Because one with ordinary skill is familiar with using icon selection as a trigger to commence sending of a

message as is shown in Riddle and discussed in connection with the rejection of claims 190, 191, 195-198, 203-206, and 214-217 over Verjinski, DeVaney, and Riddle, one with ordinary skill would have recognized that where a message has multiple parts and needs to be assembled before sending, icon selection can serve to trigger assembly of the message and subsequent sending of the message. Also, because message assembly cannot occur until each message component is present and available, one with ordinary skill would also have recognized that the trigger for assembly of the message can be the combination of icon selection and inputting of the inputted message. The motivation to modify the prior art to produce the claimed invention need not be expressly stated in any one of the references used to show obviousness. *ACS Hospital Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 1577 (Fed. Cir. 1984). Inputting of the inputted message is a natural trigger for assembling the parts of the message.

b. <u>claim 22</u>

NTP further argues that for claim 22 Riddle does not make up for the deficiency of Verjinski with regard to the claim feature of: "the address of the one interface is inputted into the system at the one of the plurality of originating processors before inputting of the inputted message." We have already discussed that claim feature in the context of the anticipation rejection of claim 4 over Verjinski. Verjinski does disclose that feature and therefore has no deficiency in that regard.

c. <u>claim 59</u>

NTP further argues that for claim 59 Riddle does not make up for the deficiency of Verjinski with regard to the claim feature of: "the address of

the one interface is inputted at the one of the plurality of originating processors." We have already discussed that claim feature in the context of the anticipation rejection of claim 27 over Verjinski. Verjinski does disclose that feature and therefore has no deficiency in that regard.

Conclusion

On balance, upon weighing all of the evidence together as a whole, including the evidence of nonobviousness which we discuss in another section of this opinion, we conclude that NTP has not shown error in the rejection of claims 14, 15, 18, 20-22, 51, 52, 55, 58, 59 and 93 under 35 U.S.C. § 103 as unpatentable over Verjinski and Riddle.

d. claims 164, 167, 168

Issue

Has NTP shown error in the rejection of claims 164, 167, and 168 under 35 U.S.C. § 103 as unpatentable over Verjinski and Riddle?

Analysis

For claim 164, NTP asserts some of the same arguments it asserted in connection with the anticipation rejection of claim 1 over Verjinski. Specifically, NTP argues that Verjinski does not disclose (1) at least one interface connecting an electronic mail system containing the plurality of originating processors to the RF transmissions system, and (2) an electronic mail message from an originating processor, which includes an address of the interface and is transmitted from an originating processor to the interface. We have already rejected that argument when discussing the anticipation rejection of claim 1. According to NTP, Riddle does not make up for the deficiency of Verjinski with regard to the above-noted claim

features. However, Verjinski does disclose those features and has no deficiency in that regard.

NTP further asserts the same argument it asserted in connection with the rejection of claim 14 as unpatentable over Verjinski and Riddle, based on the claim feature of the selection of an icon in combination with inputting of the inputted message, the response to which is the combining of the inputted message with the address of the interface and an identification of at least one RF receiver to form the electronic mail message. For the same reasons we discussed in the context of claim 14, we reject the argument here as well.

NTP does not separately argue the merits of claims 167 and 168 from the merits of claim 164.

Conclusion

On balance, upon weighing all of the evidence together as a whole, including the evidence of nonobviousness which we discuss in another section of this opinion, we conclude that NTP has not shown error in the rejection of claims 164, 167, and 168 under 35 U.S.C. § 103 as unpatentable over Verjinski and Riddle.

e. claim 169

Issue

Has NTP shown error in the rejection of claim 169 under 35 U.S.C. § 103 as unpatentable over Verjinski and Riddle?

Analysis

Claim 169 depends from claim 168. NTP separately argues the merits of claim 169 from that of claim 168. NTP asserts that Verjinski does not disclose the following claim feature and Riddle does not make up for that

deficiency: "the identification of the at least one RF receiver is compared with permissible identification numbers in the RF transmission system to determine if the inputted message and the identification of the at least one RF receiver should be transmitted by the RF information transmission system to the at least one RF receiver."

For analysis of claim 169, the Examiner merely makes a reference to the discussion concerning claim 30. (Answer 67:4). In the context of claim 30, the Examiner discusses an identification of a RF receiver, such as the mobile identification number of a cellular phone, and verification of the same as an inherent feature of a cellular telephone system. However, the Examiner does not explain how such an identification is included in the electronic mail message originated from a processor in the electronic mail system, and it is not apparent that that is the case.

Conclusion

NTP has shown error in the rejection of claim 169 under 35 U.S.C. § 103 as unpatentable over Verjinski and Riddle.

f. claims 170, 173 and 174

Issue

Has NTP shown error in the rejection of claim 170 under 35 U.S.C. § 103 as unpatentable over Verjinski and Riddle?

Analysis

For claim 170, NTP asserts some of the same arguments it asserted in connection with the anticipation rejection of claim 1 over Verjinski.

Specifically, NTP argues that Verjinski does not disclose (1) connecting the at least one electronic mail system containing the plurality of originating

processors to the RF transmissions system with the at least one interface, and (2) an electronic mail message from an originating processor, which includes an address of the interface and is transmitted from an originating processor to the interface. We have already rejected that argument when discussing the anticipation rejection of claim 1. According to NTP, Riddle does not make up for the deficiency of Verjinski with regard to the above-noted claim features. However, Verjinski does disclose those features and has no deficiency in that regard.

NTP further asserts the same argument it asserted in connection with the rejection of claim 14 as unpatentable over Verjinski and Riddle, based on the claim feature of the selection of an icon in combination with inputting of the inputted message, the response to which is the combining of the inputted message with the address of the interface and an identification of at least one RF receiver to form the electronic mail message. For the same reasons we discussed in the context of claim 14, we reject the argument here as well.

NTP does not separately argue the merits of claims 173 and 174 from the merits of claim 170.

Conclusion

On balance, upon weighing all of the evidence together as a whole, including the evidence of nonobviousness which we discuss in another section of this opinion, we conclude that NTP has not shown error in the rejection of claims 170, 173, and 174 under 35 U.S.C. § 103 as unpatentable over Verjinski and Riddle.

g. claim 175

Issue

Has NTP shown error in the rejection of claim 175 under 35 U.S.C. § 103 as unpatentable over Verjinski and Riddle?

Analysis

Claim 175 depends from claim 174. NTP separately argues the merits of claim 175 from that of claim 174. NTP asserts that Verjinski does not disclose the following claim feature and Riddle does not make up for that deficiency: "the identification of the at least one RF receiver is compared with permissible identification numbers in the RF information transmission system to determine if at least the inputted message and the identification of the at least one RF receiver should be transmitted by the RF information transmission system to the at least one RF receiver."

For analysis of claim 175, the Examiner merely makes a reference to the discussion concerning claim 30. (Answer 67:4). In the context of claim 30, the Examiner discusses an identification of a RF receiver, such as the mobile identification number of a cellular phone, and verification of the same as an inherent feature of a cellular telephone system. However, the Examiner does not explain how such an identification is included in the electronic mail message originated from a processor in the electronic mail system, and it is not apparent that that is the case.

Conclusion

NTP has shown error in the rejection of claim 175 under 35 U.S.C. § 103 as unpatentable over Verjinski and Riddle.

h. claims 176, 182, 185, 186

Issue

Has NTP shown error in the rejection of claims 176, 182, 185 and 186 under 35 U.S.C. § 103 as unpatentable over Verjinski and Riddle?

Analysis

For claims 176, 182, 185 and 186, NTP asserts some of the same arguments it asserted in connection with the anticipation rejection of claim 1 over Verjinski. Specifically, NTP argues that Verjinski does not disclose (1) at least one interface connecting the at least one electronic mail system containing the plurality of originating processors to the RF transmissions system, and (2) an electronic mail message from an originating processor, which includes an address of the interface and is transmitted from an originating processor to the interface. We have already rejected that argument when discussing the anticipation rejection of claim 1. According to NTP, Riddle does not make up for the deficiency of Verjinski with regard to the above-noted claim features. However, Verjinski does disclose those features and has no deficiency in that regard.

NTP further asserts the same argument it asserted in connection with the rejection of claim 14 as unpatentable over Verjinski and Riddle, based on the claim feature of the selection of an icon in combination with inputting of the inputted message, the response to which is the combining of the inputted message with the address of the interface and an identification of at least one RF receiver to form the electronic mail message. For the same reasons we discussed in the context of claim 14, we reject the argument here as well.

Conclusion

On balance, upon weighing all of the evidence together as a whole, including the evidence of nonobviousness which we discuss in another section of this opinion, we conclude that NTP has not shown error in the rejection of claims 176, 182, 185 and 186 under 35 U.S.C. § 103 as unpatentable over Verjinski and Riddle.

i. <u>claim 187</u>

Issue

Has NTP shown error in the rejection of claim 187 under 35 U.S.C. § 103 as unpatentable over Verjinski and Riddle?

Analysis

Claim 187 depends from claim 186. NTP separately argues the merits of claim 187 from that of claim 186. NTP asserts that Verjinski does not disclose the following claim feature and Riddle does not make up for that deficiency: "the identification of the at least one RF receiver is compared with permissible identification numbers in the RF information transmission system to determine if the inputted message and the identification of the at least one RF receiver should be transmitted by the RF information transmission system to the at least one RF receiver."

For analysis of claim 187, the Examiner merely makes a reference to the discussion concerning claim 30. (Answer 67:4). In the context of claim 30, the Examiner discusses an identification of a RF receiver, such as the mobile identification number of a cellular phone, and verification of the same as an inherent feature of a cellular telephone system. However, the Examiner does not explain how such an identification is included in the

electronic mail message originated from a processor in the electronic mail system, and it is not apparent that that is the case.

Conclusion

NTP has shown error in the rejection of claim 187 under 35 U.S.C. § 103 as unpatentable over Verjinski and Riddle.

7.

The obviousness rejection of claims 16, 17, 19, 53, 54, 56, 57, 165, 166, 171, 172, 177-181, 183 and 184 under 35 U.S.C. § 103 over Verjinski, Riddle, and DeVaney

The Examiner finally rejected claims 16, 17, 19, 53, 54, 56, 57, 165, 166, 171, 172, 177-181, 183, and 184 under 35 U.S.C. § 103 over Verjinski, Riddle, and DeVaney.

We affirm in part.

The rejection of claims 16, 17, 19, 53, 54, 56, 57, 165, 171, 177, 179, 180, and 183 over Verjinski, Riddle, and DeVaney is *affirmed*.

The rejection of claims 166, 172, 178, 181, and 184 is *reversed*.

Issue

Has NTP shown error in the rejection of claims 16, 17, 19, 53, 54, 56, 57, 165, 166, 171, 172, 177-181, 183 and 184 as unpatentable over Verjinski, Riddle, and DeVaney?

Analysis

Claims 16, 17, 19, 53, 54, 56, 57, 165, 166, 171, 172, 177-181, 183 and 184 depend directly or indirectly from one of claims 14, 15, 51, 52, 164, 168, 170, and 176, which were finally rejected as unpatentable over Verjinski and Riddle. According to NTP, DeVaney does not cure the deficiency of Verjinski and Riddle with regard to the claim limitations of

claims 14, 15, 51, 52, 164, 168, 170, and 176. We have already addressed and rejected NTP's arguments in the context of the rejection of claims 14, 15, 51, 52, 164, 168, 170, and 176 over Verjinski and Riddle. The combination of Verjinski and Riddle discloses all of the claim features of claims 14, 15, 51, 52, 164, 168, 170, and 176, and has no deficiency in that regard.

NTP further separately argues the merits of claims 166, 172, 178, 181, and 184. NTP asserts that Verjinski does not disclose the following claim feature and neither Riddle nor DeVaney makes up for that deficiency (Brief 123:17-20): "the identification [of the at least one RF receiver] is compared with permissible identification numbers in the RF information transmission system to determine if at least the inputted message and the identification [of the at least one RF receiver] should be transmitted by the RF information transmission system to the at least one RF receiver."

For analysis of claims 166, 172, 178, 181, and 184, the Examiner merely makes a reference to the discussion concerning claim 30. (Answer 67:13-14). In the context of claim 30, the Examiner discusses an identification of a RF receiver, such as the mobile identification number of a cellular phone, and verification of the same as an inherent feature of a cellular telephone system. However, the Examiner does not explain how such an identification is included in the electronic mail message originated from a processor in the electronic mail system, and it is not apparent that that is the case.

For reasons discussed above in the context of the rejection based on Verjinski and DeVaney, NTP's argument in its reply brief that combining

the teachings of Verjinski and DeVaney would change the operation of Verjinski, is misplaced and has no merit.

Conclusion

On balance, upon weighing all of the evidence together as a whole, including the evidence of nonobviousness which we discuss in another section of this opinion, we conclude that NTP has not shown error in the rejection of claims 16, 17, 19, 53, 54, 56, 57, 165, 171, 177, 179, 180, and 183 under 35 U.S.C. § 103 as unpatentable over Verjinski, Riddle, and DeVaney. NTP has shown error in the rejection of claims 166, 172, 178, 181, and 184 under 35 U.S.C. § 103 as unpatentable over Verjinski, Riddle, and DeVaney.

8.

The obviousness rejection of claims 99-101, 104, 107, 117, 120, 123-128, 131, 134, 151, 154, and 157-159 under 35 U.S.C. § 103 over Verjinski and Garbee

The Examiner finally rejected claims 99-101, 104, 107, 117, 120, 123-128, 131, 134, 151, 154, and 157-159 under 35 U.S.C. § 103 as unpatentable over Verjinski and Garbee.

We affirm.

Issue

Has NTP shown error in the rejection of claims 99-101, 104, 107, 117, 120, 123-128, 131, 134, 151, 154, and 157-159 as unpatentable over Verjinski and Garbee?

Findings of Fact

We refer to our findings on what Garbee discloses, as presented in the discussion of the obviousness rejection of claims 99-114, 117-142, 146, and 151-159 over Perkins and Garbee. Furthermore, we reiterate certain findings below:

On pages 4-5, Garbee identifies three "most important" and "traditional" TCP/IP services (1) File Transfer, (2) Remote Login, and (3) Computer Mail, and states: (Garbee 5:37-39):

These services should be present in any implementation of TCP/IP, except that micro-oriented implementations may not support computer mail. (Emphasis added).

On page 16, Garbee describes that while computer mail is typically sent on one connection, the file transfer protocol FTP involves two connections. (Garbee 16:38-45). While the data for transfer makes use of one connection, commands about the transfer such as a status check or an abort make use of another. (Garbee 16:41-45). In that regard, Garbee states (Garbee 16:46-49): "However file transfers often take a long time. The designers of the file transfer protocol wanted to allow the user to continue issuing commands while the transfer is going on."

Based on the teachings of Garbee, the Examiner reasoned that with portable hosts running TCP/IP, one with ordinary skill in the art would have recognized FTP file transfer as a separate information source for transfer of information between computers outside of an email system. (Answer 69:1-6).

Analysis

Claim 99 is an independent claim. Claim 126 is also an independent claim. With regard to each of claim 99 and claim 126, NTP asserts some of the same arguments it asserted in the context of the rejection of claims 1, 38, and 74 as anticipated by Verjinski. Specifically, NTP argues that Verjinski does not disclose (1) at least one interface connecting the at least one electronic mail system containing the plurality of originating processors to the RF transmissions system, and (2) an electronic mail message from an originating processor, which includes an address of the interface and is transmitted from an originating processor to the interface. We have already rejected that argument when discussing the anticipation rejection of claim 1. According to NTP, Garbee does not make up for the deficiency of Verjinski with regard to the above-noted claim features. However, Verjinski does disclose those features and has no deficiency in that regard.

With regard to claims 99 and 126, NTP further argues that Verjinski does not disclose the following claim feature and a proper combination of Verjinski and Garbee does not make up for that deficiency: "at least one additional information source, each additional information source being coupled to at least one of the at least one interface and originating other information from outside any of the at least one electronic mail system for transmission to at least one RF receiver and information used by the RF information transmission system to identify the at least one RF receiver to receive the other information with the RF information transmission system providing transmission of the other information through the RF information

transmission system to the identified at least one RF receiver receiving the other information."

In essence, there has to be another source of information, separate from the electronic mail message and outside of the electronic mail system, which sends information to the interface for transmission to the RF receiver through the RF information transmission system. Relying on Garbee, the Examiner noted that in "a TCP/IP system such as Verjinski" (Answer 69:7-8), one with ordinary skill would have known to provide a file transfer protocol (FTP) that is separate from the electronic mail system. In that regard, note that Garbee identifies three most important and traditional TCP/IP services as (1) File Transfer, (2) Remote Login, and (3) Computer Mail. (Garbee 4:39-5:36). Garbee further states that these services should be present in any implementation of TCP/IP. (Garbee 5:37).

NTP is correct, however, in noting that the Examiner has no basis to conclude that the portable hosts in Verjinski implements TCP/IP protocol. The Examiner does not point to anything in Verjinski which indicates that any portable host implements TCP/IP. Furthermore, there is evidence indicating that the portable hosts of Verjinski do not implement a TCP/IP protocol. Verjinski describes the portable hosts as using an asynchronous protocol called X.PC and explains that the interface PHAC functions as a gateway to the internet by translating X.PC packets into TCP packets. (Verjinski 0808:1:32-36). It is further explained that the PHAC establishes and maintains session mappings between TCP packets and X.PC channels and handles the conversion of packet formats from one protocol to the other. (Verjinski 0807:1:28-30). When Verjinski refers to TCP/IP, it is made with

respect to the local area network LAN that is on the opposing side of the PHAC with respect to portable hosts all of which communicate by use of the asynchronous X.PC protocol. Note Verjinski's Figure 1, which is reproduced below:

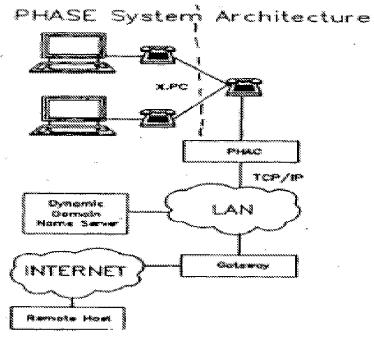


Figure 1.

Nevertheless, the Examiner's error is harmless. In analyzing obviousness, there does not have to be an express teaching, suggestion, or motivation in the applied prior art. *KSR Int'l Co.*, 550 U.S. at 418. There need only be an articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *In re Kahn*, 441 F.3d at 988. Aside from noting that Garbee states that both FTP file transfer protocol and computer mail should be made available on any system implementing TCP/IP, the Examiner explained the benefits of having FTP file transfer capabilities which are not provided by computer mail (Answer 69:12-15):

The use of FTP would have been a preferred method to share files because the user may continue issuing commands while the transfer is going on and so as to be able to abort the transfer or provide further inquiries, this is in lieu of email applications such as SMTP that do not allow a user to do such.

That analysis is supported by Garbee's disclosure in the last paragraph on page 16. (Garbee 16:38-47). The Examiner further reasoned that file transfer by FTP, in contrast to computer mail, would have allowed the user to share files efficiently by transferring information in the binary state rather than inefficiently by converting files to text as would be required by SMTP for email. (Answer 69:15-18).

All the benefits of using FTP for file transfer, in contrast to using computer mail to transfer information, as presented by the Examiner and supported by Garbee provide ample motivation for one with ordinary skill to add FTP file transfer services to any system already providing computer mail services whether or not it is already implementing TCP/IP. Note that NTP has not alleged that given Verjinski's disclosure on how to transmit electronic mail by wireless cellular telephone, one with ordinary skill would not have known how to transmit electronic files in a similar manner.

NTP does not separately argue the merits of claims 100, 101, 104, 107, 117, 120, and 123 from the merits of claim 99.

NTP does not separately argue the merits of claims 127, 128, 131, 134, 151, 154, and 157 from the merits of claim 126.

Claims 124 and 125 each depend from claim 99, and claims 158 and 159 each depend from claim 126. With regard to these four claims, NTP argues that for the reasons it presented in connection with claim 27,

Verjinski does not disclose that the address of the one interface is inputted at the one of the plurality of originating processors. (Brief 125:12-16; 126:17-21). We have already discussed and rejected NTP's arguments in our discussion of the rejection of claim 27 as anticipated by Verjinski.

Conclusion

On balance, upon weighing all of the evidence together as a whole, including the evidence of nonobviousness which we discuss in another section of this opinion, we conclude that NTP has not shown error in the rejection of claims 99-101, 104, 107, 117, 120, 123-128, 131, 134, 151, 154, and 157-159 under 35 U.S.C. § 103 as unpatentable over Verjinski and Garbee.

9.

The obviousness rejection of claims 102, 103, 105, 106, 118, 119, 121, 122, 124, 125, 129, 130, 132, 133, 152, 153, 155, and 156 over Verjinski, Garbee, and DeVaney

The Examiner finally rejected claims 102, 103, 105, 106, 118, 119, 121, 122, 124, 125, 129, 130, 132, 133, 152, 153, 155, and 156 under 35 U.S.C. § 103 as unpatentable over Verjinski, Garbee, and DeVaney.

We affirm.

Issue

Has NTP shown error in the rejection of claims 102, 103, 105, 106, 118, 119, 121, 122, 124, 125, 129, 130, 132, 133, 152, 153, 155, and 156 as unpatentable over Verjinski, Garbee, and DeVaney?

Analysis

Claims 102, 103, 105, 106, 118, 119, 121, 122, 124, 125, 129, 130, 132, 133, 152, 153, 155, and 156 depend from claims 99, 100, 101, 117,

126-128, and 151, which have been rejected as unpatentable over Verjinski and Garbee. According to NTP, DeVaney does not cure the deficiency of Verjinski and Garbee with regard to the claim limitations of claims 99, 100, 101, 117, 126-128, and 151. We have already addressed and rejected NTP's arguments in the context of the rejection of claims 99, 100, 101, 117, 126-128, and 151 over Verjinski and Garbee. The combination of Verjinski and Garbee discloses all of the claim features of claims 99, 100, 101, 117, 126-128, and 151 and has no deficiency in that regard.

NTP further separately argues the merits of claim 125 which depends from claim 99. NTP asserts that Verjinski does not disclose the following claim feature and DeVaney does not make up for that deficiency: "the address of the one interface is inputted into the system at the one of the plurality of originating processors." We have already rejected NTP's argument in the context of the rejection of claim 27 as anticipated by Verjinski. Verjinski discloses the feature and has no deficiency in that regard.

For reasons discussed above in the context of the rejection based on Verjinski and DeVaney, NTP's argument in its reply brief that combining the teachings of Verjinski and DeVaney would change the operation of Verjinski, is misplaced and has no merit.

Conclusion

On balance, upon weighing all of the evidence together as a whole, including the evidence of nonobviousness which we discuss in another section of this opinion, we conclude that NTP has not shown error in the rejection of claims 102, 103, 105, 106, 118, 119, 121, 122, 124, 125, 129,

130, 132, 133, 152, 153, 155, and 156 under 35 U.S.C. § 103 as unpatentable over Verjinski, Garbee, and DeVaney.

10.

The obviousness rejection of claims 108, 109, 114, 135, 136, 139, 142, and 146 over Verjinski, Garbee, and Admitted Prior Art

The Examiner finally rejected claims 108, 109, 114, 135, 136, 139, 142, and 146 under 35 U.S.C. § 103 as unpatentable over Verjinski, Garbee, and Admitted Prior Art.

We affirm.

Issue

Has NTP shown error in the rejection of claims 108, 109, 114, 135, 136, 139, 142, and 146 as unpatentable over Verjinski, Garbee, and Admitted Prior Art?

Analysis

Claims 108, 109, 114, 135, 136, 139, 142, and 146 depend directly or indirectly from one of claims 99 and claim 126, which have been rejected as unpatentable over Verjinski and Garbee. According to NTP, the Admitted Prior Art does not cure the deficiency of Verjinski and Garbee with regard to the claim limitations of claims 99 and 126. We have already addressed and rejected NTP's arguments in the context of the rejection of claims 99 and 126 over Verjinski and Garbee. The combination of Verjinski and Garbee discloses all of the claim features of claims 99 and 126 and has no deficiency in that regard.

Conclusion

On balance, upon weighing all of the evidence, including the evidence of nonobviousness which we discuss in another section of this opinion, we conclude that NTP has not shown error in the rejection of claims 108, 109, 114, 135, 136, 139, 142, and 146 under 35 U.S.C. § 103 as unpatentable over Verjinski, Garbee, and Admitted Prior Art.

11.

The obviousness rejection of claims 110-113, 137, 138, 140, and 141 over Verjinski, Garbee, Admitted Prior Art, and DeVaney

The Examiner finally rejected claims 110-113, 137, 138, 140, and 141 under 35 U.S.C. § 103 as unpatentable over Verjinski, Garbee, Admitted Prior Art, and DeVaney.

We affirm.

Issue

Has NTP shown error in the rejection of claims 110-113, 137, 138, 140, and 141 as unpatentable over Verjinski, Garbee, Admitted Prior Art, and DeVaney?

Analysis

Claims 110-113, 137, 138, 140, and 141 depend directly or indirectly from one of claims 108, 109, 135, and 136, which have been rejected as unpatentable over Verjinski, Garbee, and Admitted Prior Art. According to NTP, DeVaney does not cure the deficiency of Verjinski, Garbee, and Admitted Prior Art with regard to the claim limitations of claims 108, 109, 135, and 136. We have already addressed and rejected NTP's arguments in the context of the rejection of claims 108, 109, 135, and 136 over Verjinski,

Garbee, and Admitted Prior Art. The combination of Verjinski, Garbee, and Admitted Prior Art discloses all of the claim features of claims 108, 109, 135, and 136 and has no deficiency in that regard.

Conclusion

On balance, upon weighing all of the evidence, including the evidence of nonobviousness which we discuss in another section of this opinion, we conclude that NTP has not shown error in the rejection of claims 110-113, 137, 138, 140, and 141 under 35 U.S.C. § 103 as unpatentable over Verjinski, Garbee, Admitted Prior Art, and DeVaney.

12.

The obviousness rejection of claims 115, 116, 143, 144, 147 and 150 under 35 U.S.C. § 103 over Verjnski, Garbee, and Riddle

The Examiner finally rejected claims 115, 116, 143, 144, 147, and 150 under 35 U.S.C. § 103 as unpatentable over Verjinski, Garbee, and Riddle.

We affirm.

Issue

Has NTP shown error in the rejection of claims 115, 116, 143, 144, 147, and 150 as unpatentable over Verjinski, Garbee, and Riddle?

Analysis

Claims 115, 116, 143, 144, 147, and 150 depend directly or indirectly from one of independent claims 99 and 126, which have been rejected as unpatentable over Verjinski and Garbee. According to NTP, Riddle does not cure the deficiency of Verjinski and Garbee with regard to the claim limitations of claims 99 and 126. We have already addressed and rejected NTP's arguments in the context of the rejection of claims 99 and 126 over

Verjinski and Garbee. The combination of Verjinski and Garbee discloses all of the claim features of claims 99 and 126 and has no deficiency in that regard.

With regard to claims 115, 116, 143, 144, 147, and 150, NTP further asserts the same argument it asserted in connection with the rejection of claim 14 as unpatentable over Verjinski and Riddle, based on the claim feature of the selection of an icon in combination with inputting of the inputted message, the response to which is the combining of the inputted message with the address of the interface and an identification of at least one RF receiver to form the electronic mail message. For the same reasons we discussed above in the context of the rejection of claim 14 as unpatentable over Verjinski and Riddle, we reject the argument here as well.

Conclusion

On balance, upon weighing all of the evidence, including the evidence of obviousness and the evidence of nonobviousness which we discuss in another section of this opinion, we conclude that NTP has not shown error in the rejection of claims 115, 116, 143, 144, 147, and 150 under 35 U.S.C. § 103 as unpatentable over Verjinski, Garbee, and Riddle.

13.

The obviousness rejection of claims 145, 148, and 149 under 35 U.S.C. § 103 over Verjnski, Garbee, Riddle, and DeVaney

The Examiner finally rejected claims 145, 148, and 149 under 35 U.S.C. § 103 as unpatentable over Verjinski, Garbee, Riddle, and DeVaney.

We affirm.

Issue

Has NTP shown error in the rejection of claims 145, 148, and 149 as unpatentable over Verjinski, Garbee, and Riddle?

Analysis

Claims 145, 148, and 149 depend directly or indirectly from one of claims 143 and 144, which have been rejected as unpatentable over Verjinski, Garbee, and Riddle. According to NTP, DeVaney does not cure the deficiency of Verjinski, Garbee, and Riddle with regard to the claim limitations of claims 143 and 144. We have already addressed and rejected NTP's arguments in the context of the rejection of claims 143 and 144 over Verjinski, Garbee, and Riddle. The combination of Verjinski, Garbee, and Riddle discloses all of the claim features of claims 143 and 144 and has no deficiency in that regard.

Conclusion

On balance, upon weighing all of the evidence, including the evidence of nonobviousness which we discuss in another section of this opinion, we conclude that NTP has not shown error in the rejection of claims 145, 148, and 149 under 35 U.S.C. § 103 as unpatentable over Verjinski, Garbee, Riddle, and DeVaney.

14.

The obviousness rejection of claims 295-317 over Verjnski, DeVaney, and Garbee

The Examiner finally rejected claims 295-317 under 35 U.S.C. § 103 as unpatentable over Verjinski, DeVaney, and Garbee.

We reverse.

Issue

Has NTP shown error in the rejection of claims 295-317 as unpatentable over Verjinski, DeVaney, and Garbee?

Analysis

Each of claims 295-317 depend directly or indirectly from claim 199. Claim 199 has been rejected as unpatentable over Verjinski and DeVaney. NTP argues that Garbee fails to cure the deficiencies of Verjinski and DeVaney. The assertion has merit. As applied by the Examiner, Garbee indeed fails to cure the deficiencies of Verjinski and DeVaney as discussed above in the context of the rejection of claim 199 as unpatentable over Verjinski and DeVaney, concerning the claim feature of:

the identification of the at least one RF receiver is compared with permissible identification numbers in the RF information transmission system to determine if the inputted message and the identification of the at least one RF receiver should be transmitted by the RF information transmission system to the at least one designated RF receiver.

Based on the foregoing, the rejection of claims 295-317 cannot be sustained.

For completeness, we discuss NTP's separate argument concerning claims 295 and 296. NTP asserts arguments it presented in the context of the rejection of claim 99 as unpatentable over Verjinski and Garbee. Those arguments have been rejected in our discussion of the rejection of claim 99 over Verjinski and Garbee. Also, it appears that the Examiner did not clearly point out a "first processor" not forming a part of the electronic mail system which sends information other than an electronic mail message to the RF receiver using the RF system but not the electronic mail system, as is

required by claim 295. However, such a "first processor" is accounted for by a second remote host which runs a file transfer FTP program. Based on our discussion of Verjinski and Garbee in the context of the rejection of claim 99, one with ordinary skill in the art would have known to run a file transfer FTP program on each remote host supporting SMTP computer mail.

NTP further separately argues the merits of claim 299. We have read the Examiner's reasoning expressed on page 74 of the Examiner's Answer, which also makes reference to page 73 of the Examiner's Answer. The Examiner's discussion is vague and confusing. One part of the reasoning, however, is clear. The Examiner has determined that the "Gateway" in Verjinski's Figure 1 transmits other information by FTP file transfer, through a wired telephone system to another processor without using the cellular telephone system (Answer 74:6-11):

The gateway (second processor) relays received email (i.e., "causes" received email to be) to the interface (PHAC) and the RF system. Verjinski also teaches that the PHAC supports a conventional, wired telephone system (p. 808, section 6.0). Thus, "other information" (e.g., FTP file transfer) outside the SMTP email system is transmitted from the gateway (second processor) through a wireline without using the RF (cellular telephone) system, as discussed in the claim 295 rejection for additional details.

NTP correctly points out that Verjinski does not describe using both a wired telephone system and a cellular telephone system to connect the PHAC to portable hosts. The two systems are in lieu of each other. Verjinski indicates that it "currently" uses a conventional telephone system but in a "future" scenario a cellular telephone system would be used. (Verjinski 0808:2:34-37). The incorrect determination of the Examiner further

undermines the rejection of claims 299-309 and 317 which depend either directly or indirectly from claim 299. Claims 310-316 do not.

NTP further separately argues the merits of claim 303, which depends from claim 299 and adds the limitation of:

an address of a destination processor coupled to the RF receiver is added to the electronic mail message by the second processor, said address being an identification of the RF receiver which is to receive the electronic mail message.

With regard to claim 303, the Examiner simply states (Answer 75:9): "see the claim 3 rejection for additional details." Claim 3 has been rejected as anticipated by Verjinski and a discussion of claim 3 appears on pages 57-58 of the Examiner's Answer. Nothing in the discussion of claim 3 pertains to the above-quoted feature of claim 303. That is not surprising because claim 3 does not include the above-quoted feature of claim 303. The Examiner identifies "Gateway" as the "second processor," but points to no disclosure in Verjinski that the "Gateway" adds any address of a processor to the electronic mail message, much less an address that is an identification of the RF receiver which is to receive the electronic mail message. For these additional reasons, the rejection of claims 303-306 cannot be sustained. Claims 304-306 depend either directly or indirectly from claim 303.

Conclusion

NTP has shown error in the rejection of claims 295-317 under 35 U.S.C. § 103 as unpatentable over Verjinski, DeVaney, and Garbee.

E. Secondary Considerations / Objective Evidence of Nonobviousness

Introduction

Factual inquiries for an obviousness determination include secondary considerations based on evaluation and crediting of objective evidence of nonobviousness. Graham v. John Deere Co., 383 U.S. 1, 17 (1966). Notwithstanding what the teachings of the prior art would have suggested to one with ordinary skill in the art at the time of NTP's invention, the totality of the evidence submitted, including objective evidence of nonobviousness, may lead to a conclusion that the claimed invention would not have been obvious to one with ordinary skill in the art. In re Piasecki, 745 F.2d 1468, 1471-1472 (Fed. Cir. 1984). Secondary consideration factors include (1) unexpected results, (2) commercial success, (3) satisfaction of long-felt need, (4) failure of others, and (5) copying by others. E.g., Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 291 (Fed. Cir. 1985); Perkin-Elmer Corp. v. Computervision Corp., 732 F.2d 888, 894 (Fed. Cir. 1984). NTP has alleged (1) commercial success, (2) industry recognition, (3) satisfaction of long-felt but unresolved need, (4) failure of another to design around its invention, (5) licensing of the invention to others and (6) copying of its invention by another.

To be of relevance, evidence of nonobviousness must be commensurate in scope with the claimed invention. *In re Kulling*, 897 F.2d 1147, 1149 (Fed. Cir. 1990); *In re Grasselli*, 713 F.2d 731, 741 (Fed. Cir. 1983); *In re Tiffin*, 448 F.2d 791, 792 (CCPA 1971) (evidence of success for cups is not commensurate in scope with containers). During prosecution

before the USPTO, that a species or subgenus of a claimed invention might have been nonobvious does not equate to nonobviousness of a broader generically claimed invention. *In re Muchmore*, 433 F.2d 824, 826 (CCPA 1970).

In patent law, "the name of the game is the claim." *In re Hiniker*, 150 F.3d at 1369. The *Hiniker* court stated, *id*.:

Hiniker's proffered facts, including its evidence of secondary considerations of nonobviousness, are not commensurate with the claim scope and are therefore unpersuasive. The invention disclosed in Hiniker's written description may be outstanding in its field, but the name of the game is the claim. [Citation omitted.]

There must be a demonstrated "nexus" between the merits of the claimed invention and the evidence of secondary considerations before that evidence is accorded substantial weight in an obviousness determination.

Simmons Fastener Corp. v. Illinois Tool Works, Inc., 739 F.2d 1573, 1575 (Fed. Cir. 1984); Stratoflex, Inc. v. Aeroquip Corp., 713 F.2d 1530, 1539 (Fed. Cir. 1983); see also In re Huang, 100 F.3d 135, 140 (Fed. Cir. 1996); In re Fielder, 471 F.2d 640, 642 (CCPA 1973). "Nexus" is a legally and factually sufficient connection between the objective evidence and the claimed invention, such that the objective evidence should be considered in determining nonobviousness. Demaco Corp. v. F. Von Langsdorff Licensing Ltd., 851 F.2d 1387, 1392 (Fed. Cir. 1988). In the absence of an established nexus with the claimed invention, secondary consideration factors such as commercial success, satisfaction of a long-felt but unresolved need, licensing and copying by others are not entitled to much, if any, weight and

generally have no bearing on the legal issue of obviousness. *See In re Vamco Machine & Tool, Inc.*, 752 F.2d 1564, 1577 (Fed. Cir. 1985).

During prosecution before the USPTO, the applicant for patent bears the burden of demonstrating nexus between the objective evidence of nonobviousness and the claimed invention. *In re Paulsen*, 30 F.3d at 1482; *In re Huang*, 100 F.3d at 140.

NTP bears the burden of proof. At this point we wish to observe that the burden of proof on rebuttal evidence to commercial success and other socalled secondary considerations in an infringement context is different from that in an ex parte context. As *Demaco* reveals, the burden of proof on "nexus" in an infringement context is on the patentee. Demaco Corp., 851 F.2d at 1392. *Demaco* goes on to say that a prima facie case of nexus is generally made out when the patentee shows both that there is a commercial success and that the thing that is commercially successful is the invention disclosed and claimed in the patent. Id. The phrase "disclosed and claimed" can be read as meaning an embodiment "disclosed" in the specification and "covered" by the claim (i.e., within the scope of the claim) of the patent. When the patentee has presented a prima facie case of nexus, the burden of coming forward with evidence in rebuttal shifts to the challenger. Id. at 1393. The Federal Circuit's rebuttal holding makes sense in an infringement context due to the liberal discovery provisions available under the Federal Rules of Civil Procedure. In an ex parte context, however, a different practice is more appropriate. First, an examiner is not a party rather an examiner is a quasi-judicial official acting on the record presented by the applicant, or in this case, the reexamination patentee. As an objective

decision maker, an examiner has no axe to grind. An accused infringer has an axe to grind. *Second*, upon evaluation of any showing made, the USPTO points out short-comings in the evidence which the applicant or patent owner can then address. The discovery available under the Fed. R. Civ. P. is not a "tool" commonly used by examiners. Accordingly, the "rebuttal" practice of *Demaco* does not fit well into the patent application or patent reexamination process. The same is true in third-party reexaminations, because a third-party requester has only limited opportunity to submit evidence and cannot "go after" evidence using Fed. R. Civ. P. discovery techniques during proceedings in the USPTO. The USPTO can make observations on the evidence and it is up to the applicant or patentee, as the case may be, to provide evidence and answers to those observations.

In an attempt to satisfy its burden, NTP has submitted (1) a declaration of its President, William C. White, (2) a supplemental declaration of its President, William C. White, and (3) portions of the trial transcript, from the patent infringement suit filed by NTP against RIM, of the testimony of (a) NTP's witness Terry Lee Musika and (b) RIM's witness Murali Narayanan.

For reasons discussed below, NTP's evidence of nonobviousness factually is not commensurate in scope with the invention claimed by NTP. NTP also has failed to establish the required nexus between the claimed invention and the proffered evidence of nonobviousness. Contrary to NTP's contention, there is convincing affirmative evidence that features in addition to those required by NTP's claims lie at the foundation of the secondary consideration factors alleged by NTP.

Discussion

 Alleged Industry Recognition and Satisfaction of Long-Felt but Unresolved Need

According to the specification of the NTP '172 patent, what makes NTP's disclosed invention useful and advantageous over the prior art are the following characteristics of the RF receiver used by NTP in its invention to receive wireless email messages intended for a destination processor (NTP '172 patent 17:50-56; 19:56-61; 20:30-35; 22:32-43; 22:47-57):

- (1) the RF receiver is detachable from the destination processor and operates to wirelessly receive the email messages while it is detached from the destination processor;
- (2) the RF receiver includes its own memory to store the received email messages intended for the destination processor and does not require power from the destination processor to receive and store those messages; and
- (3) the RF receiver provides reception and review of email messages without need of the destination processor for which the email messages are intended.

In column 19, lines 56-58, the NTP '172 patent describes:

The RF receiver may be detached from the destination processor during reception of the information with a memory of the RF receiver storing the information. (Emphasis added.)

The NTP '172 patent further describes in column 22, lines 32-57 (emphasis added):

An important aspect of the present invention is that reception and review of electronic mail can be performed

> without connection of the RF receiver 119 to the destination processor A-N which permits the receiver to function as a mobile electronic mail receiver. As a result, the user may move from the site of the destination processor A-N either within an office or other location or during travel while receiving electronic mail which was not possible with the prior art. Furthermore, the connection of the RF receiver 119 to the destination processor automatically transfers the electronic mail stored within the memory of the RF receiver to the destination processor without manual keyboarding. . . . As a result, the deficiencies of the prior art in requiring substantial expense consequent from the making of telephone calls. substantial labor resultant from the lost time of persons making telephone calls and the inability to deliver electronic mail messages and the more difficult problem of delivering electronic mail messages to portable processors is overcome.

We have not been able to find a clear description in the specification of the NTP '172 patent of any embodiment that does not have a detachable RF receiver with its own memory to enable it to receive and store email messages in the absence of the destination processor for which the email messages are intended. Likewise, we have not been able to find any portion of the NTP '172 patent specification that clearly identifies an RF receiver that is (1) inseparable from the destination processor, (2) includes no memory unit, or (3) depends on an attached destination processor to receive and store email.

As is described in NTP's specification, the alleged advantage NTP's invention provides over the prior art requires an RF receiver which (1) is detachable from the destination processor to which email messages are intended, and (2) includes its own memory for storing email messages received by the RF receiver in the absence of the destination processor. The

stored messages are later transferred to the destination processor when the RF receiver is attached to the destination processor. Even without the destination processor connected thereto and turned on, the RF receiver can receive wirelessly transmitted email messages, and store them until the RF receiver is connected to a destination processor. No email message would be missed by the RF receiver even if the destination processor is turned off or not carried with the user.

Statements appearing in NTP's appeal brief indicate something similar. NTP's appeal brief on page 133, lines 17-20, states:

The transmission to the RF receiver was advantageous because it eliminated the requirement that a destination processor be [1] turned on and [2] carried with the user and [3] connected to a telephone jack in order for the user to receive email messages.

NTP's specification does not indicate, and NTP does not assert, that simply providing for receipt by an RF receiver of wirelessly transmitted email messages intended for a destination processor represents why its invention is advantageous with respect to the prior art. Rather, the focus is on a "detachable" RF receiver which (1) has its own "memory" and (2) receives email messages even in the absence of the destination processor.

Similarly, the declaration testimony of NTP's President William C. White under 37 C.F.R. § 1.132 demonstrates that the alleged industry recognition is directed to a system using a detachable RF receiver with its own memory, which receives email even when the destination processor is not turned on, not carried with the user, or not connected. In describing the

industry recognition for NTP's invention, William C. White states in paragraph 16 of his declaration dated June 17, 2005:

16. The inventions claimed in the NTP patents relate to the integration of electronic mail systems with RF wireless communications networks. *See*, *e.g.*, '611 Patent, Col. 18, 1. 32 to Col. 22, 1. 17. In simplified terms, a message originating in an electronic mail system may be transmitted not only by wireline but also via radio frequency (RF), in which case, it is received by and stored on a user's mobile RF receiver. The transmission to the RF receiver was advantageous because it eliminated the requirement that a destination processor be turned on and carried with the user and connected to a telephone jack in order for the user to receive email messages. *See*, *e.g.*, '611 Patent, Col. 18, Il. 40-47. Almost immediately, the industry recognized the significance of the inventions. (Emphasis added.)

The above-quoted testimony of NTP's President indicates that the purported industry recognition of NTP's invention comes from its ability to have wireless email received by an RF receiver which has its own memory to store the email and which receives email even when the destination processor is not turned on or is not carried with the user. The testimony is consistent with the advantages of the invention as stated in NTP's specification. The RF receiver receives and stores email without the destination processor.

However, none of NTP's claims on appeal requires an RF receiver which is "detachable" from the destination processor, which includes its own "memory," and which operates to receive and store email messages in the absence of the destination processor.

The testimony of William C. White continues in paragraphs 17 and 18 of the same declaration, which are reproduced below:

- 17. Indeed, when the inventors demonstrated the claimed inventions to AT&T in September 1990, AT&T requested that the technology be adapted for demonstration at the upcoming Comdex Show in November 1990. See Declaration of Thomas J. Campana, Jr. Pursuant to 37 C.F.R. § 1.131 at ¶s 24-31.
- 18. After witnessing the demonstration of the invention, AT & T also requested that the technology be implemented with its new Safari laptop computer. *Id*.

While the testimony refers to the claimed invention, no description is given as to the specific embodiment that is said to have been demonstrated to AT&T. NTP represents that the demonstration shown AT&T was a reduction to practice of the invention of the independent claims. Assuming NTP is correct, the fact remains that both an embodiment using a detachable RF receiver with its own memory and an embodiment using a non-detachable RF receiver without its own memory fall within the broad scope of NTP's claims.

Since it is possible that it could have been the disclosed embodiment using a detachable RF receiver having its own memory that was demonstrated, and that such an RF receiver is not required by the claims, NTP has not shown by a preponderance of the evidence the relevance of AT&T's supposed response as objective evidence of nonobviousness of the claimed invention.

Furthermore, we decline to credit the testimony in paragraphs 17 and 18 reproduced above for other independent reasons. NTP presented and

explained no testimony of any AT&T personnel who supposedly witnessed the demonstration. We therefore have no direct testimony which indicates any AT&T personnel impression of the demonstrated invention and the reasons for such impression. Requesting that the demonstration be repeated again at an upcoming computer industry trade show for computers and requesting that the invention be demonstrated with a different destination processor are less than direct indications of a positive recognition and even less indication of the extent of the recognition. It is only widespread recognition in the art that constitutes objective evidence of nonobviousness, not just positive recognition from a few. *See, e.g., Kloster Speedsteel AB v. Crucible Inc.*, 793 F.2d 1565, 1574 (Fed. Cir. 1986). Also, such a response does not indicate the existence of a "long-felt and unresolved" need in the industry for the demonstrated invention.

NTP's brief (Brief 134:17-21) refers to the trial testimony in the infringement litigation between NTP and RIM of inventor Thomas J. Campana, Jr. The trial testimony is said to support NTP's assertion of industry recognition and satisfaction of a long-felt but unresolved need. The cited testimony concerns a demonstration of the invention at a 1990 Comdex Trade Show for computers in conjunction with AT&T's Safari laptop computer, and appear on pages 149-152, and 177-180 of the trial transcript. We have reviewed the cited testimony of Thomas J. Campana, Jr. and do not credit it with any substantial weight.

Campana's testimony describes how AT&T's customers at the trade show reacted to a demonstration of NTP's invention implemented on an AT&T computer. Campana states that the reaction ranked from disbelief to

a request to hold the RF receiver in the customer's own hand and see if an email message sent anew would actually be received. (Trial Transcript 151; 178-180). Campana also states that the customers even suggested using the RF receiver with an office computer rather than just a portable laptop computer as was used at the trade show. (Trial Transcript 151). Campana states that at the trade show AT&T had shown the invention to several hundred customers including Sears, Xerox Corporation, and United Parcel Service. (Trial Transcript 178). We have not heard from Sears, Xerox or UPS. Campana cites to a letter or report that he is said to have written which is said to indicate that customer response to the NTP invention was "overwhelming." (Trial Transcript 178-179). It is uncertain whether a copy of that letter or report has been submitted by NTP. NTP did not inform us where a copy can be located in the record of this appeal or whether it even exists in the record of this appeal. Campana notes in particular that an Executive from Xerox Corporation is said to have been in disbelief about the invention and specifically asked to have the RF receiver detached from the computer so that he could see if the receiver would actually receive the wireless email and then transfer it to the computer when the RF receiver and the laptop computer are connected.

Campana's testimony is not corroborated by the testimony of any one of the hundreds of AT&T customers who are said to have been shown the invention at the trade show. Campana's testimony is not corroborated by the testimony of any AT&T personnel who are said to have conducted the demonstration at the trade show. Campana's testimony is not corroborated by any press or media report about the trade show. Campana's testimony is

not corroborated by the testimony of any person who might have been in attendance at the demonstration and witnessed the response of the AT&T customers.

It is also not entirely clear from the portions of the Trial Transcript cited by NTP that Campana himself was in attendance at the demonstration to witness any responses first hand. In any event, assuming that he was present, and that he witnessed the demonstration to the hundreds of people who are said to have visited AT&T's setup at the trade show at various different times, there is still essentially only the testimony of an inventor and his own report on how overwhelmingly positive the reaction supposedly was from people who were shown a demonstration of his invention.

Paragraph 19 of the declaration of NTP's President William C. White refers to the trial testimony of one witness identified as "RIM's own witness" as confirming the allegedly "overwhelmingly positive reaction by industry customers" at the 1990 Comdex Trade Show. We have read the cited pages of the trial transcript, *i.e.*, pages 1264-1265, and note that they do not indicate (1) the name or identity of the witness, (2) the employer of the witness, (3) the role of the witness at the 1990 Comdex Trade Show, or (4) the extent to which he or she actually witnessed a demonstration to hundreds of customers who are said to have visited AT&T's setup at the show at various times.

The cited testimony of "RIM's own witness" does not support NTP's assertion. Notably, the witness did not agree to characterize NTP's invention a "big breakthrough," and also declined to go along with the questioner's suggestion that Sears, United Parcel Service, and Xerox

Corporation were ecstatic about what they saw. Pertinent portions of the testimony are reproduced below (Exhibit 1036):

- Q And these customers, Sears, United Parcel Service, and Xerox were, to put it mildly, ecstatic about what they saw, weren't they?
- A They liked the capabilities of sending wireless messages to laptop computers.
- Q No doubt about it. This was a big breakthrough.
- A. I don't know whether I would call it a big breakthrough, but that's a capability that they liked. It was impressive when you see it for the first time that wireless messaging to your laptop computer was useful.

That one witness characterized a demonstration of NTP's invention at the 1990 Comdex Trade Show as something three customers out of hundreds who saw the demonstration "liked" does not establish widespread industry recognition and does not support NTP's assertion that there was a significant long-felt but unresolved need in the industry for NTP's invention or that there was an "overwhelming positive reaction by industry customers." Neither does the observation that the invention was useful.

On page 139 of NTP's brief, NTP identifies the witness referred to in William C. White's declaration as "RIM's own witness" as Murali Narayanan, but does not (1) state his employer, (2) explain his role at the 1990 Comdex Trade Show or (3) the extent to which he witnessed the demonstration to the hundreds of AT&T customers. On page 139 of NTP's appeal brief, NTP cites pages 1265-1266 of the trial transcript containing the trial testimony of Murali Narayanan as supporting the assertion that

"customers expressed disbelief that such a product could work." We find no such testimony in the cited portions of the trial transcript. Rather, we see that the witness rebuffed the questioner's suggestion that the customers were expressing incredible disbelief at what they were seeing. Pertinent portions of the testimony are reproduced below:

- Q And it is true, because you were there for at least part of that meeting, it is true that some of your customers were expressing incredible disbelief at what they were seeing.
- A They liked what they saw.
- Q No doubt about it.
- A No doubt.

Given the interest Campana had in his own invention, we decline to credit the evidence stemming solely from the co-inventor himself, particularly in the absence of corroborating evidence from (1) the customers who were shown the invention, (2) AT&T personnel who conducted the demonstration, and (3) press and media who might have reported on the 1990 Comdex Trade Show. Moreover, Campana had specific recollection only of the reaction from one customer out of hundreds, the one said to be representing Xerox Corporation. As to the rest, he has no specific recollection and the testimony is too vague and general to be of value. It is uncertain what portion of the hundreds shared a similar reaction and what portion did not.

It is significant that although hundreds of customers allegedly saw the demonstration at the 1990 Comdex Trade Show, NTP filed no testimony from a single customer about the customer's impression or evaluation of

NTP's invention. Furthermore, without direct testimony from customers, even assuming that the customers were impressed, we do not know the reasons why they were impressed and how impressed they were. Also, being impressed about an invention does not establish, as NTP suggests, that there was a long-felt but unresolved need solved by the invention.

The testimony of Murali Narayanan, who NTP simply calls RIM's witness in the infringement trial, does not help NTP. As is made evident through the testimony quoted above, Narayanan declined to go along with the questioner's suggestion (1) that NTP's invention as demonstrated at the 1990 Comdex Trade Show was a big breakthrough, (2) that Sears, United Parcel Service, and Xerox Corporation were ecstatic about what they saw, and (3) the customers at the trade show were expressing incredible disbelief at what they were seeing.

Based on inventor Campana's own description, the demonstration at the 1990 Comdex Trade Show involved a RF receiver that (1) was detachable from the AT&T Safari laptop computer and (2) included its own storage to hold the wirelessly received email message when it is not connected to the laptop computer. According to NTP's own specification, the detachable RF receiver with its own memory is what provides NTP's invention important advantages over prior art. As we have noted above, none of NTP's claims on appeal requires an RF receiver which (1) is detachable from the destination processor, (2) includes its own memory unit, and (3) operates to receive wireless email when the destination processor is not connected to the RF receiver and not turned on.

Accordingly, NTP's alleged industry recognition based on the demonstration at the 1990 Comdex Trade Show is not commensurate in scope with what NTP has claimed. Also, assuming that the advantages stated in NTP's specification are what made NTP's demonstration a success, NTP has not shown nexus between the full scope of the claimed invention and the evidence of nonobviousness.

NTP's alleged long-felt but unresolved need argument depends on use of a detachable RF receiver which includes its own memory and which operates to receive wireless email even when the destination processor is turned off and not connected. Because NTP's claims are broader and do not require such an RF receiver, NTP has not shown nexus between its solution and the claimed invention. We are unable to find that the evidence of nonobviousness is commensurate in scope with NTP's claimed invention.

Furthermore, satisfaction of a long-felt but unresolved need is not evidence of nonobviousness unless it is shown that widespread efforts of skilled workers having knowledge of the prior art had failed to find a solution to the problem. *In re Allen*, 324 F.2d 993, 997 (CCPA 1963). *See also Toledo Pressed Steel Co. v. Standard Parts, Inc.*, 307 U.S. 350, 356 (1939). NTP has not directed our attention to evidence that there was widespread attempt by skilled workers in the art for a long period of time to send an email message wirelessly to a destination processor, and that all such attempts failed to achieve successful transmission. NTP does not identify and explain what technical problem was solved by NTP's invention which had allegedly kept the entire field of skilled workers from successfully transmitting an email message wirelessly to a destination

processor despite repeated and serious attempts to do so over a long period of time. NTP has not established that wireless transmission of an email message had been a long-felt but unresolved need at the time of NTP's invention. Lastly, NTP has failed to establish that persons actually working in the field were aware of the teachings of the prior art cited by the Examiner. That wireless transmission of email is desirable does not mean widespread efforts were involved in implementing it and that all such efforts ended in failure for a long period of time until NTP attempted to do the same.

2. Alleged Commercial Success

According to NTP, there is "commercial success" because NTP successfully sued RIM for infringement of the NTP '172 patent by a certain BlackberryTM device of RIM. On page 135 of its appeal brief, NTP states:

In fact, Judge Spencer -- the presiding judge in the litigation between the Patent Owner and RIM -- commented on the compelling strength of Patent Owner's evidence of commercial success: "Furthermore, [Patent Owner] offered irrefutable evidence of nonobviousness in the form of tremendous commercial success of the infringing Blackberry products, which indicated the satisfaction of "long-felt" need. *See* White Dec. ¶ 5.

Also on page 135 of its Appeal Brief, NTP states: "Indeed, at trial, there was evidence that the \$ 405M of RIM's infringing sales were due to the inventions described in the NTP patents." (Emphasis added.) *See* White Dec. ¶ 21.

NTP does not describe for us the components or manner of operation of the infringing BlackberryTM devices. It appears to be NTP's legal position that it does not matter what components RIM's BlackBerryTM device has or how RIM's BlackBerryTM device operates as long as the device infringes and falls within the scope of an NTP claim. Note NTP's argument on page 139, line 10, of the appeal brief that "[t]hat the BlackBerryTM system meets the language of the claims is beyond dispute." NTP's position regarding the law is simply wrong, being inconsistent with binding precedent cited above and which governs prosecution before the USPTO.

As is discussed above, NTP's claims are so broad that they can be infringed by a system having either (1) an RF receiver which is detachable from the destination processor, which includes its own memory, and which receives email even when the destination processor is not turned on or is not connected, or (2) an RF receiver that does not share those attributes. In case of the latter, the alleged commercial success (1) does not have much to do with what NTP's own specification states are important advantages of the invention over the prior art, and (2) is not commensurate in scope with the claimed invention. Also in the case of the latter, NTP has not shown "nexus" between the alleged commercial success and the claimed invention.

NTP's not describing the components and operation of the infringing devices precludes us from ascertaining whether they embody a technical breakthrough beyond a detachable RF receiver with its own memory, which can account for the alleged commercial success. For instance, it cannot be ruled out that the devices sold do not use a detachable RF receiver with its

own memory but yet still permit user access of email messages whenever the user desires access without requiring the destination processor to be turned on and carried with the user all the time.

Citing a U.S. District Court decision which was affirmed by the Federal Circuit, Rite-Hite Corp. v. Kelley Co., 629 F.Supp. 1042, 1055-56, 231 U.S.P.Q. 161, 169 (E.D. Wis. 1986), aff'd, 819 F.2d 1120 (Fed. Cir. 1987), NTP argues in its appeal brief on page 142, lines 16-17, that even though RIM's BlackberryTM system includes unclaimed features such as its small size, that "should in no way obscure the fact that it was and still is an incredibly successful product that embodies the '172 Patent claims as affirmed by the CAFC." We have reviewed the Federal Circuit's decision on appeal from the Eastern District of Wisconsin. The issue of nexus with respect to secondary consideration factors is simply not discussed in the Federal Circuit opinion. The district court's opinion, which is not binding authority for the Board, does not support the notion that unclaimed but important features in a commercial product fail to undermine the patent owner's assertion of nexus between the alleged commercial success and the claimed invention. They do, under Federal Circuit precedent requiring a showing of nexus already discussed above. The U.S. District Court's decision in Rite-Hite Corp., supra, is not much different, because the court determined that specific patented features were a significant cause of the product's commercial success. Rite-Hite Corp., 629 F.Supp. at 1055. NTP has not shown that that is the case here. NTP simply has not shown that the merits of NTP's invention, in particular the advantages described in NTP's specification, constitute a significant cause of RIM's sales. NTP does not

even allege that RIM's BlackberryTM devices include a detachable RF receiver with its own memory, which provides the advantages of NTP's invention as stated in the specification.

Also, for example, NTP has not directed our attention to evidence that the difference in size between that of a laptop computer and a hand held cell phone is not a significant factor adding to the sales of RIM's Blackberry devices. All of NTP's disclosed embodiments are directed to laptop or notebook sized computers, not hand-held cellular telephones. NTP's specification touts as an advantage the ability for the user to simply carry the RF receiver rather than the laptop computer as we have discussed above. The size of the device does matter. We seriously doubt that if RIM's Blackberry devices were as big as a typical laptop or notebook computer, their sales and market share would be the same.

Note also that NTP refers to evidence presented at the infringement trial that RIM's infringing sales were due to the inventions "described" in the NTP patents. The focus is misplaced. NTP must establish a nexus between the evidence of nonobviousness and the "claimed" invention, not between the evidence of nonobviousness and the invention "disclosed" in its specification. *In re Tiffin, supra*; *In re Fielder, supra*. The disclosed invention requires as a key component an RF receiver which is detachable from the destination processor and which includes its own memory, so that the RF receiver can receive and store email even when the destination processor is not turned on or is not connected. That feature, however, is not required by any NTP claim.

In its appeal brief (Brief 139:3-7), NTP cites to the trial testimony of its own witness Terry Lee Musika (Trial Transcript 620):

the ability to access email in real time and return messages with RIM's Blackberry is a breakthrough. . . . And that really relates to both the commercial success, again, and the advantages over the old mode. (Emphasis added.)

Absent additional technological development, receiving email in real time would require the embodiment described in NTP's specification involving an RF receiver which is detachable from the destination processor, which has its own memory, and which receives email even when the destination processor is not turned on or connected to the RF receiver. Such an RF receiver ensures that emails are received when they are sent, even in the absence of the destination processor which is connected and turned on. But the claimed invention has no requirement for a detachable RF receiver including its own memory.

In any event, it is uncertain why \$ 405M of RIM's infringing sales constitutes commercial success. It is well established that absolute sale numbers without market share data does not establish commercial success. See, e.g., In re Huang, 100 F.3d at 140. NTP's appeal brief does not discuss and present market share information. While \$405M is a large sum, and may well represent commercial success of something, on the basis of its appeal brief NTP simply has not proven its case with respect to the claims on appeal. What about the extent of all non-infringing sales in the industry? We decline to determine that NTP has shown commercial success simply because a U.S. District Court has found on the record before it during the civil action between NTP and RIM that there was commercial success. Note

also that while 246 claims are on appeal in this proceeding, including fifteen independent claims, only one claim from the NTP '172 patent was found by the U.S. District Court to have been infringed by RIM. NTP has failed to demonstrate why, even assuming that there was commercial success with regard to the invention of one claim, *i.e.*, claim 199, that translates to commercial success of the claimed invention of all 246 claims before us.

For all of the foregoing reasons, NTP has failed to establish the necessary "nexus" between the evidence of alleged commercial success and the invention claimed. The evidence of commercial success is not commensurate in scope with NTP's claimed invention.

3. Alleged Inability to Design Around

On pages 137-138 of its appeal brief, NTP asserts that the inability of RIM to design around NTP's patent claim constitutes strong evidence of nonobviousness. Specifically, in a section titled "Inability to Design Around," NTP states (Brief 138):

Here, over three years after the trial in which RIM was found to willfully infringe six claims of the '172 Patent and with millions of dollars of damages at stake, RIM recently announced that RIM had developed a design around, yet remarkably indicated that it prefers not to implement it. *See* White Supp. Dec. at ¶¶ 5-6. With very significant money hanging in the balance, that RIM waited over three years to allegedly develop a design-around that it never implemented is strong evidence of nonobviousness.

NTP cites no authority which indicates that failure to design around a patented invention after the patent issues, when not coupled with failed attempts to design the claimed invention before the patentee's invention, constitutes objective evidence of nonobviousness. The case authority cited

by NTP, *Advanced Display Sys., Inc. v. Kent State Univ.*, 212 F.3d 1272, 1285 (Fed. Cir. 2000), clearly indicates that first and foremost it is the infringer's repeated failure to design the claimed invention which supports a conclusion of nonobviousness. An infringer's failure to design around the claimed invention after the patentee's patent issues can strengthen the indication of nonobviousness if the infringer had tried but failed to design the claimed invention prior to the patenting by the patentee. *Id.*

Here, as we have already discussed, NTP failed to direct our attention to evidence that skilled workers in the art, prior to NTP's invention, made repeated efforts to send a wireless email message to an RF receiver associated with a destination processor but were met with consistent failure. In the absence of previous failed attempts to design the claimed invention, subsequent inability to design around the claimed invention after the patent issues is not indicative of nonobviousness. It may just reflect the breadth of NTP's claims. In that connection, note that if any and all attempts to solve a problem lead to something within the scope of the claimed invention, that would indicate obviousness, not nonobviousness of the claimed invention.

In any event, NTP's argument that RIM failed to design around NTP's claimed invention is not supported by the evidence cited by NTP. The supplemental declaration of William White, cited by NTP, states in paragraph 5 that RIM recently informed investors that it has been working on a design around option but that it does not want to implement such an option. The testimony is hearsay. While perhaps "admissible" in the context of this ex parte case, we nevertheless decline to credit it. It merely reflects what William White says about what RIM had told RIM's investors.

Even if we were to credit it, it does not support what NTP asserts, because simply choosing not to implement a design around is not the same as having tried but failed to design around NTP's claimed invention. The decision not to implement a design around may be due to a myriad of reasons. There is no basis to equate that decision to an inability to design around the claimed invention.

Paragraph 6 of the supplemental declaration of William White is reproduced below:

Further, on January 17, 2006, RIM informed the United States District Court for the Eastern District of Virginia [sic] that RIM's "workaround" would be difficult and complicated. *See* Defendant Research in Motion, LTD.'s Non-Confidential Consolidated Memorandum on Remand Issues, January 17, 2006, attached hereto as Exhibit A, pages 27 and 46-48.

We have read the cited portions of RIM's memorandum to the Eastern District of Virginia and find that the "difficulty" referred to in connection with a "workaround" does not have to do with technical issues on developing something that does not infringe, but has to do with the logistics and inconvenience with regard to carrying out a software upgrade for existing customers. The cited portions of the memorandum do not indicate that RIM failed to develop a technical "workaround" but only that for various business reasons implementing the "workaround" would not be desirable.

We also do not credit the following statement in paragraph 5 of the declaration of William White:

[I]n response to a motion for injunctive relief, RIM's CEO, Mike Lazaridis, filed a declaration stating that RIM had been

unable to design around the Campana patents. *See* Appendix B, Declaration of Mike Lazaridis (Redacted), ¶ 7.

The cited portion of the declaration of Mike Lazaridis is reproduced below and clearly does not reflect a statement that RIM had attempted to design around the patents and failed:

RIM continues the process of attempting to design around the NTP patents. There is no guarantee that RIM's engineers will find a design-around solution, and whether or not successful, the efforts will take substantial resources, time and money. Even if a design around solution is found, there would be an inevitable interruption in service to implement such a solution, causing RIM to lose a significant portion of the Company's competitive advantage, customers, revenues and gross profit.

Finally, it is noted that NTP's own argument indicates that RIM had developed a design around NTP's claimed invention but simply chose not to implement the alternative design. The wording used by NTP in its brief to characterize the alleged circumstance is that "RIM had developed a design around, yet remarkably indicated that it prefers not to implement it." (Brief 138:5-6). It suffices here to note only that choosing not to implement a design which had been developed is not the same as having failed to develop the design. NTP's argument is misplaced.

4. Alleged Copying

Citing paragraph 22 of the White declaration, NTP argues in its appeal brief that "AT&T provided the [NTP] patented technology to its strategically important customer Skytel, thus allowing Skytel to copy the technology developed by the '172 Patents' Inventors." (Brief 137:5-7). Paragraph 22 of the White declaration is reproduced below:

22. With regard to copying, NTP presented unchallenged evidence during its trial against RIM that AT&T provided the patented technology to its strategically important customer Skytel, thus allowing Skytel to copy the technology developed by the Campana patent inventors.

The above-quoted testimony does not cite to any underlying evidence which we can review. It represents a bare statement of William C. White, the President of NTP, whose testimony we do not give much weight given his mischaracterization of the declaration of Mike Lazaridis discussed above and his manifest interest in the involved patent. William C. White also does not specifically discuss the evidence. Even assuming that pertinent evidence was presented in the infringement trial, NTP could have presented, but elected not to present, the evidence to the Examiner for consideration and discuss how the evidence supports its assertion of copying by others. NTP has not shown what product was produced by Skytel and to what extent it duplicated NTP's demonstrated device. Copying by Skytel, as alleged by NTP, has not been established.

Copying is also one of those secondary consideration factors which can cut both ways. In *Cable Electric Products, Inc. v. Genmark, Inc.*, 770

F.2d 1015, 1028 (Fed. Cir. 1985), the Court of Appeals for the Federal Circuit stated:

Even widespread copying could weigh toward opposite conclusions, depending on the attitudes existing toward patent property and the accepted practices in the industry in question. It is simplistic to assert that copying per se should bolster the validity of a patent.

Even if Skytel "copied" NTP's demonstrated system, NTP has not shown that Skytel generally respected NTP's patent rights or that Skytel has taken a license of NTP's '172 patent.

Infringement by RIM also does not establish copying by RIM. As is stated by the Court of Appeals for the Federal Circuit in *Iron Grip Barbell Co., Inc. v. USA Sports, Inc.*, 392 F.3d 1317, 1325 (Fed. Cir. 2004):

Not every competing product that arguably falls [sic] within the scope of a patent is evidence of copying. Otherwise every infringement suit would automatically confirm the nonobviousness of the patent. Rather, copying requires the replication of a specific product.

Moreover, if the alleged copier duplicated NTP's disclosed embodiment using a detachable RF receiver having its own memory to obtain the advantages described in NTP's specification over prior art, then the evidence of copying is not commensurate in scope with NTP's claims. As is already discussed above, none of NTP's claims on appeal requires an RF receiver that is detachable from the destination processor and that includes its own memory for storing the received email messages.

5. Licensing Activity

NTP asserts that it has licensed the '172 patent to Nokia Inc., a major manufacturer of mobile telephones and related hardware and software products, Good Technology Inc., and Visto Corporation. However, the mere existence of several licensees, without more specific information about the circumstances surrounding the licensing, is not a good indicator of nonobviousness. In *EWP Corp. v. Reliance Universal Inc.*, 755 F.2d at 907-908, the Court of Appeals for the Federal Circuit stated:

Such [licensing] programs are not infallible guides to patentability. They sometimes succeed because they are mutually beneficial to the licensed group or because of business judgments that it is cheaper to take licenses than to defend infringement suits, or for other reasons unrelated to the unobviousness of the licensed subject matter.

The record contains no testimony from any licensee with regard to why the licensee took a license from NTP. It is unknown how much of the decision to take a license stems from a business cost-benefit analysis with regard to defending an infringement suit or from another business reason, rather than from acknowledged merits of NTP's invention. NTP also does not disclose how many entities refused to take a license or why some entities, if any, refused to take a license. Three licensees may not represent a very successful licensing program if the field of potential application of NTP's technology includes a large number of potential licensees. It is also uncertain whether the terms of the alleged licenses are made unusually favorable to the licensee just so that NTP could claim it had licensed its invention to some.

To the extent that NTP asserts commercial success based on the existence of the licenses, it has not established the market picture insofar as how much of the commercial market are represented by products which are sold under the licenses and how much are not. The mere number of licensees does not establish substantial commercial success.

Furthermore, NTP has not described the specific structure and operation of the devices made or marketed by its licensees such that we can evaluate whether and to what extent the devices embody what NTP describes as the reason why its invention is advantageous over the prior art, *i.e.*, use of a detachable RF receiver which has its own memory. We also cannot assume that the licensees took the licenses for reasons substantively related to each and every one of NTP's hundreds of claims. In our view, it is significant that NTP filed no declaration from a representative of any one of the three licensees attesting to and praising the merits of NTP's invention or which discusses the circumstances surrounding the taking of a license from NTP.

Because it is NTP's burden to establish nexus between the evidence of nonobviousness and the merits of its claimed invention, the murky picture of the commercial business environment as noted above leads us to conclude that NTP has failed to credibly establish the necessary nexus between the licensing activity and the merits of its claimed invention.

Note also that none of NTP's claims on appeal requires an RF receiver which is detachable from the destination processor, which includes its own memory to store email messages, and which can operate to receive email in the absence of the destination processor. Given that those are the features

NTP's specification describes as providing important advantages over the prior art, the licensing activity, to the extent that they allow the licensees to make and use NTP's disclosed invention, is not commensurate in scope with what is claimed.

NTP has informed the Board that RIM, who was found to have infringed the NTP '172 patent and who was unsuccessful in asserting invalidity of any claim of the NTP '172 patent in civil litigation, has taken a license under the NTP '172 patent. That fact is not of substantial help to NTP, as the litigation and charge of invalidity reflects RIM's firm position that certain claims of the patent are invalid. Licensing activity after a successful defense against an assertion of invalidity does not have the same character as licenses arranged without a challenge of validity. Moreover, RIM may have agreed to take a license during a phase of the civil action involving a question of whether an injunction should be issued by the Eastern District of Virginia. In other words, the taking of any license may not have been an issue when obviousness was considered. Rather, agreeing to take a license would be one factor a court could consider particularly if the patentee itself is not commercially marketing an infringing device.

Also, NTP has not described the structure and operation of RIM devices which have been sold under the license. If they implement NTP's disclosed embodiment to achieve the disclosed advantages, then the licensing activity is not necessarily commensurate in scope with what is claimed as we have already discussed above in connection with RIM's product which was found to have infringed the NTP '172 patent. The lack of information also precludes us from meaningfully evaluating whether other

advances in the art are primarily responsible for the sales and for RIM's interest in selling a device within the scope of NTP's claims.

Conclusion

For reasons discussed above, the evidence of nonobviousness is not commensurate in scope with what NTP has claimed, and NTP has failed to establish the necessary nexus between the evidence of nonobviousness and the claimed invention. The evidence of nonobviousness as discussed above is very weak, if it is even relevant. While we have discussed each NTP argument individually, we also find and hold that the arguments collectively and evidence, as a whole, do not establish credible evidence of nonobviousness. In making our decision on the obviousness of NTP's claims over prior art, the entirety of the evidence submitted, including the evidence based on the applied prior art and the evidence of nonobviousness based on secondary consideration factors, has been considered as a whole.

F. Telenor '89 as an Authentic Document and a Printed Publication

1. Introduction

Included as part of the prior art relied upon by the Examiner, are eight documents which form part of a library collection at the University Library of the Norwegian University of Science and Technology (Library). The documents are Reference C1 through Reference C8:

Reference C1—TeleNor '86: Terje Henriksen et al.,
 Mobile Data Network System Description, Norwegian
 Telecommunications Administration Research Department Report
 No. 30/86, April 1986, Kjeller, Norway, Deposited at the Norges

Teknisknaturvitenskapelige Universitet (hereinafter NTNU—The Technical University Library of Norway) Library in Trondheim, Norway, May 23, 1986.

Received in the Library: 22 May 1986.

Catalogued: 24 June 1986.

2. Reference C2—TeleNor '89, Vol. 1: Stig Kaspersen et al., Mobile Data Network Description, Volume 1: Network Architecture, Addressing and Routing, Teledirektoratets forskningsavdeling, TF-Report 3/89, 6 February 1989.

Received in the Library: 23 February 1989

Catalogued: 12 October 1989

ISBN: 82-423-003-8

3. Reference C3—TeleNor '89, Vol. 2: Stig Kaspersen et al., Mobile Data Network Description, Volume 2: Services and Service Elements, Teledirektoratets forskningsavdeling, TF-Report 4/89, 6 February 1989.

Received in the Library: 22 February 1989

Catalogued: 12 October 1989

ISBN: 82-423-0004-6

4. Reference C4—TeleNor '89, Vol. 3: Geir Ivar Thorud et al., Mobile Data Network Description, Volume 3: Protocols and Protocol Hierarchy within the MDN, Teledirektoratets forskningsavdeling, TF-Report 5/89, 6 February 1989.

Received in the Library: 24 April 1989

Catalogued: 12 October 1989

ISBN: 82-423-0005-4

5. Reference C5—TeleNor '89, Vol. 4: Geir Ivar Thorud et al., Mobile Data Network Description, Volume 4: Specification of DTL and DTP within the MDN, Teledirektoratets forskningsavdeling, TF-Report 6/89, 6 February 1989.

Received in the Library: 22 February 1989

Catalogued: 12 October 1989

ISBN: 82-423-0006-2

6. Reference C6—TeleNor '89, Vol. 6:⁴ Stig Kaspersen et al., Mobile Data Network Description, Volume 6: Requirements to the Base Stations, Teledirektoratets forskningsavdeling, , TF-Report 7/89, 6 February 1989.

Received in the Library: 22 February 1989

Catalogued: 12 October 1989

ISBN: 82-423-0007-0

7. Reference C7—TeleNor '89, Vol. 7: Stig Kaspersen et al., Mobile Data Network Description, Volume 7: Requirements to the Mobile Stations, Teledirektoratets forskningsavdeling, TF-Report 9/89, ⁵ 6 February 1989.

Received in the Library: 24 April 1989

⁴ There is no Volume 5.

In order to avoid possible confusion, we advise the reader to be aware that Reference C7 relates to FT-Report 9/89 Volume 7 and Reference C8 relates to FT-Report 8/89 Volume 8. While the Volume numbers are in order, the FT-Report numbers 9/89 and 8/89 are out of order. On the merits of the issues before us, we attribute no significance to the order in which documents are numbered.

Catalogued: 12 October 1989

ISBN: 82-423-0009-7

8. Reference C8—TeleNor '89, Vol. 8: Geir Ivar Thorud et al., Mobile Data Network Description, Volume 8: Specification of the MDN—MHS Interworking, Teledirektoratets forskningsavdeling, TF-Report 8/89, 6 February 1989.

Received in the Library: 24 April 1989

Catalogued: 12 October 1989

ISBN: 82-423-0008-9

Copies of the eight documents were provided to the USPTO as part of a third-party request for ex parte reexamination.

The receipt dates, catalogue dates and ISBN data were obtained from a Torbjorn Digernes letter to Kevin Anderson, dated 16 January 2006, page 3 of 5 (hereinafter "Digernes letter"). *See also* Exhibit C of the third-party ex parte reexamination request in Reexamination Control 90/007735.

NTP maintains that the eight documents are not prior art. *First*, according to NTP, the authenticity of the documents—as of a date one year prior to NTP's filing date—is questionable. *Second*, further according to NTP, the documents were not catalogued by and in the University Library of the Norwegian University of Science and Technology in such manner as to be reasonably accessible to the public in connection with NTP's field of invention.

2. Photos

We have taken photographs of portions of the eight documents which are said to have been examined by NTP witness David Richard Browne.

The photos were taken on 30 and 31 October 2008. A listing of the photographs appears as Appendix 1 to this opinion. The photographs are found on a CD which accompanies this Memorandum Opinion and are in JPEG format. Reference to a photograph is by the last 3 numbers, *e.g.*, (004) means photograph:

2008-4602.30October2008.004.jpg

listed in Appendix 1 as 004.

Appendix 1 lists the photos (1) in photograph number order and (2) by Reference C number.

3. Findings of Fact

The Library

The Norwegian University of Science and Technology (the Library) is a state-owned university and a public body. (Digernes letter, page 1 of 5).

The Library is located at Trondheim, Norway—which is about 375 kilometers almost directly north of Oslo.

The Library has no interest in any patent dispute involving NTP and RIM. *Id*.

According to the Library, both NTP (appellant) and RIM (third-party reexamination requester) sought the assistance of the Library in seeking certain information. *Id*.

As would be expected of a public library, it is the Library policy to provide equal treatment to any interested party seeking information from the Library. *Id*.

The Library has provided the following information (Digernes letter, pages 3-4 of 5) [matter in brackets added]:

As our routine was for receiving reports at the time [1986 and 1989], the reports were stamped and inserted on our cardex (the date was written down on a cardex card for when we received each report in the series) right after they were received in the library or some days after, dependent of the backlog, but not more than 2 weeks after, according to our Serials Department.

After cardex the reports were indexed and classified. For classification of our technical literature we use the UDC system.

At the time we received these reports [1986 and 1989], the name of the Main Library for Technology under [the] NTNU Library were [sic—was the] Technical University Library of Norway, and belonged to Norges tekniske høgskole (NTH). It merged with several others to form the NTNU Library from 1990. UDC was used at the whole Technical University Library of Norway.

The signature of the whole series is "621.39(06) tq R18" and that is where all the reports in the series are placed on the shelf. 621.39 is "telecommunications" and a rather general number, because it is used for the whole series. In addition to that each report was classified and indexed with more special numbers and subject headings, like f.eks. Mobile Data network description vol. 8, that has UDC 681.324 and 621.391:006 and the subject headings "Datamaskinnett" (computer networks)

and "kommunikasjonsprotokoller" (communication protocols). That means the reports could be found by searching on these UDC numbers and subject headings in BIBSYS, or looked up on these numbers and words in our microfiche edition of BIBSYS. "Anal" after the signature, means that each number in the series was "analyzed" i.e. each report is classified and indexed and is catalogued in the database with author, title etc. That is done to make each report in the series easier to find in the catalogue, because it then can be searched in many several ways: On all the authors (when there are not more than 3), title, classification numbers, subject headings, ISBN, title of the report etc. (To see all the search elements in the record, search "BIBSYS websearach"

http://wgate.bibsys.no/search/gen?lang=E, then click "Export using format MARC").

After indexing the reports were sent to cataloguing. We catalogue all our literature in our online catalogue in BIBSYS. The BIBSYS catalogue is the common database for the Norwegian university libraries and colleges and other research libraries in Norway, about 100 all together. For the cataloguing we use the "Anglo American Cataloguing Rules" (AACR2) in Norwegian translation by I. C. Spangen, which also were the rules used back in 1986. The machine readable format we use for cataloguing is MARC (BIBSYSMARC). BIBSYSMARC is

built on the Norwegian NORMARC and Library of Congress' LCMARC.

After cataloguing, the catalogue records were proofread by another person at the Catalogue Department, before the reports were sent down and placed on the shelf in the periodicals collection.

From the moment the reports were catalogued in BIBSYS, they were searchable and public[ly] available. They could be borrowed by anybody who came to the library and at that time we had inter-library loan connections with all parts of the world. Our catalogue could be searched online by the public all since we started to catalogue in BIBSYS in 1980. And a microfiche copy of the catalogue, both alphabetical and systematical, came usually every 3 months. By the way no microfiche edition was produced between May 1989 and June 1990, because the BIBSYS system came in a new version (BIBSYS II) at that time. The microfiche were distributed to several libraries, and the search elements in the microfiche were the same as by searching online. The Technical University Library of Norway also delivered their catalogue records to "Norsk samkatalog"—the Norwegian Union Catalogue, which also at that time came in a microfiche edition that was distributed to a lot of libraries. (NUC for monographs: http://www.nb.no/baser/sambok/english.html) NUC also exists for periodicals etc.). The reports can therefore also be searched

in NUC. It is not checked [sic—We did not check to see] if the reports could be searched in any other reference databases.

How BIBSYS was searched outside Norway before the World Wide Web is hard for us to say anything about.

Based on the Digernes letter, we find that the following steps generally take place in the receipt through shelving of a document:

- 1. Receipt;
- 2. Date stamp receipt;
- 3. Add document information to cardex;
- 4. Index and classify;
- 5. Catalogue (search can be conducted at this point);
- 6. Proofread:
- 7. Shelve.

Shelving in this case occurred "prior to the relevant priority date of the . . . patents" involved in these reexamination proceedings.

(Supplemental Declaration of V. David Rhyne, ¶ 48, Assumption c; Brief 50). The shelving date is not an issue on appeal.

As noted earlier, the Library states that it has a policy of helping all who seek its assistance.

Representatives of RIM [identified as "Mr. Sylthe" (believed to be Olav Sylthe) and "Mr. Novak" (believed to be Gregory V. Novak)] are said to have visited the Library. Two weeks later, Keith Anderson visited the Library seeking what would appear to be similar information as the RIM representatives. It may be that Anderson did not tell the Library that he represented NTP. That detail was nevertheless independently discovered by

the Library through articles in the American press. (Digernes letter, page 1 (2d and 3d full ¶) of 5).

Pasquine Declaration

The third-party reexamination requester submitted a Declaration of Mark Vincent Pasquine.

The declaration is said to have been executed at Bergen, Norway on 3 January 2006.

On 17 June 2005, Pasquine was told by the Library that the eight documents relied upon by the Examiner were available for loan (*i.e.*, could be borrowed from the Library). (Pasquine Declaration, \P 2).

Pasquine does not say what prompted him to ask the Library if the documents "were available for loan."

The eight documents were checked out of the Library on 17 June 2005. (Pasquine Declaration, ¶ 2).

The eight documents were "shipped" to the United States on 17 June 2005 and according to Federal Express records were delivered on 23 June 2006. (Pasquine Declaration, ¶ 4).

According to a document which is said to be a Federal Express record, the delivery occurred on 23 June 2005 at 10:22 a.m. and delivery was signed for by an individual identified by Federal Express as being L. Johnson. (*See* Exhibit A to the Pasquine Declaration).

The position occupied by L. Johnson is not stated in the Pasquine Declaration.

A third-party reexamination request in Reexamination Control 90/007,735 was filed on 28 September 2005.

A copy of Reference C7—TeleNor '89, Vol. 6 submitted on 28 September 2005 with the third-party request for reexamination bears a stamp as follows

RECEIVED

JUNE 23, 2005

NOVAK DRUCE—DC

Novak Druce Deluca & Quigg, a law firm located in the District of Columbia, represents the third-party requester.

A possible inference is that Pasquine obtained the eight documents and sent them via Federal Express to Novak Druce for its use in preparing a third-party reexamination request.

Pasquine says that he was able to confirm that the eight documents were received back at the Library no later than 12 August 2005. (Pasquine Declaration, \P 5).

A Federal Express tracking document is consistent with Pasquine's statement. (*See* Exhibit B of the Pasquine Declaration). Exhibit B facially reveals that a package was shipped from Washington, D.C., on 9 August 2005 and arrived via (1) Indianapolis, Indiana, (2) Paris, France and (3) Gardermoen, Norway ultimately arriving in Trondheim, Norway on 12 August 2005 at 10:46 a.m. Exhibit B facially shows that a J. Lundquist "signed" for delivery of the Federal Express package.

According to Pasquine, he talked with a representative of NTNU on 16 August 2005. Further according to Pasquine, the representative was able to confirm that the documents were back at the Library. (Pasquine Declaration, ¶6).

On 3 January 2006, Pasquine spoke with Birgit Storleer at the Library and "she [is said to have] confirmed" that the eight documents were "currently available in the NTNU [L]ibrary." (Pasquine Declaration, ¶8).

Sorsdahl Declaration

The third-party reexamination requester submitted a Declaration of Petter Sorsdahl.

The declaration is said to have been executed at Gothenberg, Sweden on 5 January 2006.

Sorsdahl has been a Swedish patent attorney since 1999. (Sorsdahl Declaration, \P 2).

From 1984 through 1995, Sorsdahl was a patent examiner in the Swedish Patent Office. (Sorsdahl Declaration, ¶ 3).

During his tenure as a patent examiner, Sorsdahl performed "hundreds" of patent searches. (Sorsdahl Declaration, ¶ 4).

Although he does not say why, there came a time when Sorsdahl reviewed the specification, including claims, of NTP U.S. Patent 5,436,960 and NTP U.S. Patent 6,317,592. (Sorsdahl Declaration, \P 6).

Sorsdahl regards the general subject matter of the two patents in the technical field of mobile data communications and electronic telecommunications and messaging, including "mobile data networks" and "mobile telephony." (Sorsdahl Declaration, ¶ 7).

Sorsdahl is of the opinion that it would be an exercise of reasonable diligence to search various Nordie-European and Scandinavian universities and libraries for printed publications relating to the involved technical field. (Sorsdahl Declaration, ¶ 7).

A search of the various card catalogs and indexes of the Norwegian University of Science and Technology (NTNU) would have been appropriate. Also appropriate would have been a search in a multiple catalogue search facility at the University of Karlsrube in Germany. (Sorsdahl Declaration, ¶ 8).

Based on his experience, Sorsdahl believes that a search in 1989 at NTNU would have located the eight documents upon which the Examiner relies. (Sorsdahl Declaration, ¶ 9).

Sorsdahl's opinion is based on a search he conduced of NTNU library records both through the BIBSYS system and through an interview of library staff at NTNU. The search and interview were conducted on 26 October 2005. (Sorsdahl Declaration, ¶ 10).

Based on his discussion with NTNU staff, Sorsdahl was able to confirm that the eight documents (1) were still in the Library's catalogue and index collections and (2) could be checked out of the Library at that time. (Sorsdahl Declaration, \P 11).

Declaration of Kevin P. Anderson

We now shift from third-party requester activities to those of the patent owner.

Anderson is an attorney representing NTP. (Anderson Declaration, \P 2).

Although he does not say why, there came a time when Anderson was "apprised" of what he refers to as "alleged documents" "supposedly" located in the NTNU Library. (Anderson Declaration, $\P 2$).

On or about 1 July 2005, Anderson initiated an investigation into the documents. (Anderson Declaration, \P 2).

He made an inquiry (possibly by phone—Anderson does not say how the inquiry was made) about the "authenticity of these alleged documents." (Anderson Declaration, \P 3).

Whatever the nature of the Anderson inquiry, he says he found out that the documents were checked out. (Anderson Declaration, \P 3).

The documents, of course, are the eight documents upon which the Examiner relies.

Apparently, Anderson attempted to determine who had checked the documents out of the Library. But, to his disappointment, he promptly learned that in Norway one cannot obtain information on who checks books out of a library. (Anderson Declaration, \P 3). We take official notice of the fact that the same policy exists in many libraries in the United States.

On 18 August 2005, Anderson traveled to Trondheim, Norway, to visit the NTNU Library.

Anderson was again advised that the documents were "checked out."

Anderson was told that a typical check out time is three months. The good news was that he could put his name on a waiting list. The bad news was that the Library had no means to force someone to return checked out material. (Anderson Declaration, ¶ 4).

Anderson states (Anderson Declaration, $\P 5$):

During my visit to the NTNU [L]ibrary, I was also advised that the [L]ibrary has no mechanism for verifying that a document, such as the alleged Telnor documents [i.e., the eight

documents relied upon by the Examiner], was returned to the library with [sic—in] the same condition and [with the same] contents as existed for the document when it was checked out. I was also advised that the [L]ibrary cannot verify whether the documents [which have been checked out and returned] have the same content as when originally deposited.

We decline to give any weight to the "testimony" in ¶ 5 of the Anderson declaration. Unlike much of the other hearsay "testimony" before us, there is no documentary corroboration of the hearsay in ¶ 5 of the Anderson declaration. It is testimony of a witness with an interest—the witness represents the interests of NTP. Moreover, we do not find the testimony credible. In our view, at best it represents Anderson's twist on a conversation he said he had with an individual employed by the Library.

<u>Declaration of David L. Gunn</u>

David L. Gunn is the Head Librarian at Hunton & Williams LLP, a law firm representing NTP. (Gunn Declaration, \P 1).

On 3 February 2006, Gunn called Birgit Storleer at NTNU to see if he (the firm) could borrow the eight documents. Presumably, Storleer is the same individual mentioned in the Pasquine declaration. Storleer is said to have "readily assented" to Gunn's request. (Gunn Declaration, ¶ 2).

Gunn received the documents "in good order" via DHL on 7 February 2006. (Gunn Declaration, ¶ 3).

On 7 February 2006, Gunn gave the documents to Tom Kaufman and, as of 24 April 2006, has not again seen the documents. (Gunn Declaration, \P 4).

Gunn tells us that while the documents were in his possession, he did not "alter" or "manipulate" the documents. (Gunn Declaration, \P 5).

The term "manipulate" is susceptible to different meanings. A first meaning would include turning pages—a permissible manipulation. A second meaning would include changing the contents of the pages in some fashion—an impermissible manipulation. We believe Gunn (as well as other NTP witnesses) in using the term "manipulate" refers to the second meaning.

Declaration of Thomas F. Kaufman

Thomas F. Kaufman is an attorney in the law firm of Hunton & Williams LLP. (Kaufman Declaration, ¶ 1).

On 7 February 2006, Kaufman received the eight documents from Gunn. (Kaufman Declaration, ¶ 2).

Kaufman examined the documents "to get a sense of what they contained," but he "did not alter or manipulate the . . . documents while they were in [his] possession." (Kaufman Declaration, \P 3).

On 22 February 2006, Kaufman caused the documents to be shipped via DHL to James Brown, "a solicitor in our London office." (Kaufman Declaration, ¶ 4).

Declaration of James Brown

To alert the reader, we note that NTP relies on both (1) a Brown Declaration and (2) a Browne Declaration.

James Brown is an English "solicitor" in the London Office of Hunton & Williams LLP. (Brown Declaration, ¶ 1).

Brown received the documents from Kaufman on 27 February 2006. (Brown Declaration, ¶ 2). What Brown means is that he received via DHL the eight documents which Kaufman says he sent to London via DHL.

On 2 March 2006, Brown instructed paralegal Peter Sadler to handdeliver the documents to David Richard Browne. (Brown Declaration, ¶ 3).

Brown did not alter the documents while they were in his possession. (Brown Declaration, \P 4).

Declaration of Peter Sadler

Peter Sadler is a paralegal in the London Office of Hunton & Williams LLP. (Sadler Declaration, ¶ 1).

On 2 March 2006, he received the eight documents from James Brown. (Sadler Declaration, ¶ 2).

Sadler then hand delivered the eight documents to David Richard Browne. (Sadler Declaration, \P 3).

Sadler did not alter or manipulate the documents while they were in his possession. (Sadler Declaration, $\P 4$).

Declaration of David Richard Browne

Browne is a citizen of the United Kingdom working in London. (Browne Declaration, \P 1).

Browne is a forensic document investigator. Browne Declaration, ¶¶ 3-6 and Exhibit 1 attached to the declaration.

Browne has performed forensic investigation in both criminal and civil matters. (Browne Declaration, Exhibit 1, page 1, ¶ 4).

Browne "took possession" of the eight documents on 2 March 2006. (Browne Declaration, \P 8).

He had been asked by David Geneson of Hunton & Williams LLP to "examine" the documents. (Browne Declaration, \P 7).

What did Browne learn from his examination?

- 1. Reference C1 is said to have been fastened with staples. Browne Declaration, ¶ 14. According to Browne, staple holes in the document were "commensurate [sic—consistent] with three staples having been present and [at one point thereafter] having been removed." *Id.* Further examination has lead Browne to conclude that it is "possible" that Reference C1 was taken apart and then put back together, but Browne states [one might say "speculates"] that the papers may have been put back together in an order differing from the original order. (*See*, *e.g.*, Browne Declaration, ¶ 22). Browne says that it is not possible to state when the documents were dismantled (unstapled) and reassembled. (Browne Declaration, ¶ 24).
- 2. Using UV light analysis, Browne concludes that a number of pages within each document, which he calls "books," "were [made on photocopiers] from different batches of paper." (Browne Declaration, ¶ 27).
- 3. Finding what Browne calls a disparity between some "headers" and the rest of the text on the page of Reference C2, Browne indicates "that the

The Examiner calls into question the relevance of the Browne examination and whether it should be considered at all. (Answer 109 n.29). We note that the Examiner sometimes refers to Browne as "Brown." We have not found in NTP's Reply Brief any response to the Examiner's point. The Browne examination is questionable for the reasons given by the Examiner. However, assuming arguendo the Examiner is not correct, we proceed with fact-finding and analysis assuming the examination occurred with a proper set of documents.

original text on the page has been replaced in each case." (Browne Declaration, ¶ 32).

- 4. Browne says that the header line of Reference C3 was produced at a different time than the material on the rest of the page. He also notes a shift in how pages are numbered. After page 107, the page numbers move from the outside of each page to the inside. (Browne Declaration, \P 33). More on the page number "shift" appears later in this opinion.
- 5. According to Browne, References C3, C4 and C5 were all produced by a photocopier on the same day. The three references do not have the "same trash mark." (Browne Declaration, ¶ 35). Browne cannot explain why the three documents, all made via a photocopier, have different trash marks. (Browne Declaration, ¶ 36).
- 6. Reference C5 has pages which appear to have been made on different paper. (Browne Declaration, ¶ 37).
- 7. Reference C6 has pages which are reproduced on different paper. (Browne Declaration, ¶ 38).
- 8. The same is said to be true for Reference C8. Not only does Browne conclude that it was made on different paper, but "probably at different times." (Browne Declaration, ¶ 39).
- 9. Browne finds it difficult to explain why the first half of Reference C8 is on paper that is the same as used for the next book (Reference C7) while the second half of Reference C8 uses the same paper as five other books. (Browne Declaration, ¶ 41).
- 10. Browne next addresses date stamps on the front page of each document. Since pages can be removed and replaced, Browne reasons that

one cannot "guarantee" the accuracy of the dates stamped on the front pages. (Browne Declaration, \P 44).

- 11. Browne states that "[i]t is clear that much of the text has been added to existing pages." (Browne Declaration, ¶ 45). Browne does not identify to our satisfaction specifically what "text" is said to have been added. The apparent basis for the statement is that the "re-use of existing headers to introduce the current text." Id.
- 12. "Although many of the books purport to have been produced at the same time, there is [says Browne] considerable evidence that this is not the case." (Browne Declaration, ¶ 47). Presumably the basis for this statement is the result of the overall findings of the examination, all as discussed above.
- 13. Browne concludes his declaration as follows (Browne Declaration, ¶¶ 49-50):
 - 49. Without knowledge of other documents in the University [L]ibrary and or the Telecommunications Research Institute and the control procedure in use, or the copiers in use, it is not possible to give a definite opinion as to the dates of any alterations.
 - 50. However, my findings are significant and do cast doubt as to when these documents were created, when changes were made and what text was actually on the pages when they were first filed [in the Library].

Supplemental Declaration of V. Thomas Rhyne

NTP takes the position that one skilled in the art could not have found the eight documents because they are said to have been improperly indexed, *i.e.*, the "right" technical terms do not appear on the catalogue index. In support of its position, NTP relies on the declaration testimony of V. Thomas Rhyne. The relevant testimony appears in ¶¶ 47-52 on pages 15-17 of the Supplemental Declaration of V. Thomas Rhyne.

According to Rhyne, one skilled in the art would not have located the eight documents through a reasonable search. (Rhyne Supplemental Declaration, \P 47).

When asked by NTP to give his opinion, Rhyne was told to base his opinion on nine (9) assumptions which Rhyne identifies in subparagraphs a. through i. of ¶ 48 of the Supplemental Declaration. We paraphrase the assumptions as follows—using words in place of those used by Rhyne for which there is an antecedent in this opinion.

Assumption a: That the eight documents consist of a first document dated April 1986 ("the 1986 Document [Reference C1]) and a second group of documents dated in 1989 (the "1989 Documents" [References C2 through C8]) (collectively "the Norwegian Documents).

Assumption b: That the documents were deposited at the Norwegian University of Science and Technology ("NTNU") in Trondheim, Norway as RIM has alleged.

<u>Assumption c</u>: That the documents were entered into the BIBSYS system, a computer system used by NTNU and other

Norwegian libraries prior to the relevant priority date of the Campana patents involved in these reexamination proceedings.

Assumption d: That Reference C1 is entitled "Mobile Data Network System Description," Norwegian Telecommunications Administration Research Department, Report No. 30/86, and that the cover page, indicates a date of April 1986 and lists the following authors: Terje Henriksen, Stig Kaspersen, Geir Thorud and Finn Trosby.

Assumption e: That currently, i.e., 25 January 2006, the date on which Rhyne appears to have signed the Supplemental Declaration, the BIBSYS entry for Reference C1 lists only the first author, the title, and the following subject matter in Norwegian: datamaskinnett, dataoverforing, and mobiltelefon where these Norwegian terms are translated, respectively, as: computer network, data transmission, and mobile telephone.

Assumption f: That the BIBSYS system currently allows a user to enter keywords to electronically search the BIBSYS records, including the use of author, title, and subject matter categories.

Assumption g: That References C2 through C8 consist of an eight-volume set [with Volume 5 appearing to be unavailable], each volume entitled "TF Teledirektoratets forskningsavdeling, Mobile Data Network Description," and that the cover page of each volume is date stamped either February 22, 1989 or April 24, 1989.

Assumption h: That the BIBSYS entry for each of References C2 through C8 currently lists the first author, the title and volume

title, and one or both of the following subject matter categories in Norwegian: datamaskinnett and kommunikasjonsprotokoller where these Norwegian terms are translated, respectively, as: computer network and communications protocol.

Assumption i: That in 1989-91, the BIBSYS system was available for use only at one of four universities in Norway and was not connected to any outside networks for use from anywhere else.

According to Rhyne, the "field of the invention of the Campana patents is [limited to] electronic mail communication systems." (Rhyne Supplemental Declaration, ¶ 49).

Rhyne goes on to testify that "one of ordinary skill in the art would be a person *focused* on the technology of electronic mail communications systems." *Id.* (emphasis added).

In his opinion, one of ordinary skill in the art in researching the field "would have searched for relevant materials using terms *such as* 'electronic mail,' 'email,' electronic message," and *similar terms*." (Rhyne Supplemental Declaration, ¶ 50; emphasis added).

Assuming, says Rhyne, that a person would have been motivated to fly to Norway to use the BIBSYS computer system at one of the four Norwegian libraries, the person would have used those search strategies [i.e., using the terms set out in ¶ 50], but would not have located any of the eight documents. Id.

Based on his underlying assumptions and opinions, Rhyne concludes that one skilled in the art would not have located the eight documents "exercising reasonable diligence." (Rhyne Supplemental Declaration, ¶ 52).

The problem facing the NTP inventors

Rhyne's focus on the "field of the invention" is too narrow.

The field of the invention is broader than Rhyne would have us believe. For example, with reference to Campana U.S. Patent 6,317,592, the following becomes manifest (col. 3:41 to col. 4:29) (emphasis added):

As personal computers are used more frequently by business travellers, the problem of electronic mail delivery becomes considerably more difficult. A business traveller carrying a portable PC has great difficulty in finding a telephone jack to connect the PC to fetch electronic mail from either a host computer or a gateway switch. Connections for a PC's modem are difficult to find in airports and with the advent of digital PABX's in businesses the telephone connectors are incompatible with a PC's analog modem. Hotels and motels oftentimes have internal PABX's that prevent calls from automatically being placed by the user's PC to electronic mail gateway switches to retrieve information. Most portable PC modems will only operate correctly when connected to a true outside telephone line that has telephone battery voltages and dial tone available to permit the number to be dialed direct. The inability to find an appropriate connection to connect the PC modem when travelling has contributed to the degradation of electronic mail reception when the recipient is travelling. When travelling internationally, this problem is further compounded by the fact that most electronic mail gateway

mailboxes require a 1-800 toll free number to be dialed in order to connect the mailbox. Almost all 1-800 telephone numbers are available for continental use only and cannot be accessed from a foreign country.

Industry trends make it increasingly difficult to receive electronic mail. When PC's were exclusively considered an office or desktop machine, it was less difficult to deliver electronic mail. Advances in the state of the art in microelectronics have permitted PC's to be downsized to very lightweight portable (notebook), and notebook size computers. These portable units have the computing and storage power of the former desktop units and have lent themselves to the trend that they now become very portable in their utilization. They are small enough that they can easily fit into an attache case and/or a suit pocket. The net result is that the portable unit no longer resides in the office or the desktop. The portable unit now may be taken home at night, as well as on travel with the user, such as for business travel. Increased portability of PC's further aggravates the problem of automatic electronic mail delivery as a consequence of portability eliminating the wired communication paths which have been typically used in state of the art electronic mail systems. The electronic mail industry is currently experiencing a rapid growth rate.

Numerous communication companies are offering forms of electronic mail services. However, a problem arises that

users of one electronic mail system currently cannot send electronic mail to a subscriber of another electronic mail system (e.g., AT&T E-mail to Sprint Mail, etc.). Numerous attempts are currently underway in the industry to solve this problem. Current attempts are the utilization of common protocols between electronic mail systems (e.g. X.400). However, the proposed system does not resolve the problems resultant from portability and travelling situations described above.

NTP's description of the background of the invention as set out above reveals that the subject matter to be researched or investigated is not limited to email. While it is true that email systems are relevant, no less relevant is wireless communication—or, to use the words of Sorsdahl: "mobile data networks" and "mobile telephony." (Sorsdahl Declaration, ¶ 7).

Because the problem as described by NTP is the elimination of wired communication paths previously relied on for sending email to people with a portable device, wireless communication of data is a technical field just as important, if not more, than email systems and messages, in the context of NTP's invention.

Rhyne does not explain precisely what he means by "focused" (does it mean solely focused or just principally focused?) and "similar terms" (such as?). (Rhyne Supplemental Declaration, \P 49, line 5 and \P 50, line 53).

To the extent there is a conflict in the testimony of Rhyne on the one hand and Sorsdahl on the other hand as to the field of the invention, we credit the testimony of Sorsdahl over that of Rhyne. The Sorsdahl

testimony is more consistent with the problem of sending and receiving email by wireless communication.

Review of "original" documents

The Board has reviewed two sets of what we will refer to as "original documents."

1. First set of "original" documents

The first set of documents consists of (1) seven of the eight documents filed by the third-party requester [References C2 through C7] and (2) the Browne declaration as filed by NTP.

The "official record" of the reexamination proceedings before us is contained in what the USPTO calls its IFW (image file wrapper). *See* Notification of United States Patent and Trademark Office Patent Application Records being Stored and Processed in Electronic Form, 1271 Off. Gaz. Pat. & Tm Office 100 (June 17, 2003).

We elected to retrieve from USPTO archives the paper form of the seven documents and the Browne declaration as filed in the USPTO and have inspected the documents.

2. Observations on first set of "original" documents

a. Browne declaration

We find nothing we need to discuss with respect to the "original" Browne declaration filed by the requester with the USPTO.

Instead, we refer the reader to our discussion of the copy of the Browne declaration filed by NTP in response to our request for production of documents.

b. Seven of the eight "original" documents as filed by the requester

References C2 through C8 have been reviewed.

As filed by the third-party requester, each document was bound on the left side with plastic binder probably using a Velo® binder machine. The plastic Velo® binder has been removed, probably so that the USPTO could scan the documents into the Image File Wrapper (IFW) system. We do not know what happened to the plastic binder. Each of the documents has 11 small holes approximately ½ inch in diameter along the left side of each page.

Unlike the original Library documents examined by Browne, each of the third-party filed copies of References C2 through C7 contain on the upper-right hand corner of the cover page the following "stamp" (matter in italics is hand-written):

True Copy Certified
Royal Norwegian Embassy
Washington, D.C., 07 22 2005
B Ve Magnusson
Brita Ve Magnusson

Vice Counsul

Further observations concerning References C1 through C8 appear below in connection with our discussion of the "original" eight documents.

3. The second set of "original" documents

In order to better evaluate the Browne declaration, the Board determined that it wanted to review the "original" eight documents which were examined by Browne.

Accordingly, the Board ordered NTP to produce the "original" documents which were examined by Browne. *See* Order—37 C.F.R. § 41.50(d) (Request for production of original documents, entered 22 October 2008).

The Board also asked for a clear copy of the Browne declaration since portions of some Exhibits in the USPTO copy of the declaration in IFW are not clear.

A clear copy of the Browne declaration and the "original" eight documents were produced and filed with the Board on 23 October 2008.

We were told at oral hearing that, despite inquiries from the Library asking that the documents be returned, the eight documents have been in the possession of counsel for NTP between (1) the time of Browne's examination and (2) their being filed with the Board. Hearing Transcript 29:27-30:9. NTP asks that the documents be returned "so that we may return them to the [L]ibrary in Norway from which they were obtained." (Letter dated 23 October 2008 from Brian M. Buroker, Esq., to Supervisory Trial Clerk Maria Vignone, page 2).

We will assume that the documents produced by NTP on 23 October 2008 are in essentially the same condition as they were when examined by Browne.

4. Observations on the documents produced by NTP

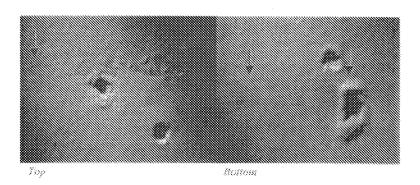
a. The Browne declaration

(1)

In \P 10 on page 3 of a report (Exhibit 2) accompanying the Browne declaration, Browne states:

I noted there were slight abrasions on the paper within the pair of old staple holes at the top of page 7-1 [of Reference C1]. Similar scratches can be seen within the pair of old staples holes at the bottom (See pictures below). These marks are clear signs that an implement was used to remove staples from the page/s.

There follows a "picture". In the IFW record, the "picture" is not clear. However, Exhibit 3 attached to the "original" Browne report is clear. It shows holes and marks on the top and bottom of page 7-1. A copy of what appears in Exhibit 3 is set out below (*see also* (069)):



Sexatch marks in paper near staples on page 7-1 of NTA report 30/86

(2)

Browne observed a difference between the "header" on pages of Reference C2 (Report 3/89) and the remaining text on those pages. (See

Exhibit 2, ¶ 24 on page 4 of the Browne report accompanying the Browne Declaration).

A copy of part of page 1 of Reference C2 (TF-Report 3/89) is reproduced below:

Volume 1: Network Architecture, Addressing and Routing

<u>l Introduction</u>

This volume deals with the network architecture, addressing and routing within the MDN.

2 Network Architecture

2.1 Terms and definitions concerning the network architecture

The MDN architecture is shown in Pigure 1.

The difference between the header "Volume 1: Network Architecture, Addressing and Routing" and the remaining text on page 1 "1. Introduction ... Figure 1." is apparent.

(3)

The pages of Reference C4 (TF-Report 5/89) have what is known as a "trash mark" on each page. Trash marks can appear on documents reproduced on a photocopier. The trash mark on Reference C4 is approximately 4-5/8 inches from the top of each page and approximately 7/8 inches from the right side of the page (070-071). A similar trash mark appears on all the pages of Reference C4. Browne explains the trash marks at ¶ 26 on page 5 of his report.

In \P ¶ 27-28, Browne then states:

- 27. According to the TF front sheet [*i.e.*, the third page] it [*i.e.*, Reference C4,] was produced on the same date—6/2/89 [*i.e.*, "Dato" 800206]—as the other two documents [*i.e.*, References C2 (TF-Report 3/89) and C3 (FT-Report 4/89)]. They [*i.e.*, References C2 and C3] do not have the same trash mark.
- 28. I cannot explain how three documents, allegedly produced on the same date, using the same paper and all by photocopier, do not produce the same trash marks.

(4)

In ¶¶ 31-33 of his report, Browne has the following to say about References C8 (TF-Report 8/89) and C9 (TF-Report 9/89).

31. Document 8/89, Volume 8, was also produced on 6/2/89. It does not have the trash marks seen in 5/89, Volume 3 [Reference C4]. It does have the same problems with the header throughout, in that the contents of each page were copied onto a page already bearing the header. Pages up to page 14 are loose, having become detached from the binding strip. I note that the pages from page 83 to the end are produced on similar paper [that] was used for the bulk of the previous books—3/89, Volume 1 to 7/89, Volume 6 [References C2 through C7]. However, the first pages, i.e., up to page 82 are significantly lighter under UV (see picture above—comparing pages 82 with 83. The difference between the papers can also be seen in normal lighting. This book [i.e.,

Reference C9] has clearly been produced on two separate papers and probably at different times.

[A clear copy of the "picture above" mentioned in ¶ 31 is a rectangle divided in half. See Exhibit 6 attached to the Browne report. The left half is a UV of page 82 and the right half is a UV of page 83. The left half is a lighter blue than the right half and there is a visible contrast between the two blues. Part of the right half appears to be almost purple (072).]

32. Document 9/89, Volume 7 [Reference C8], has the same header problems mentioned above. The whole document has been produced on the lighter paper used for the first half of 8/89, Volume 8 [Reference C9]. This document [Reference C8] was produced on 15/2/89 [see the third page—"Dato" 890215]. "15/2/89" means 15 February 1989. The picture shows the comparison of pages 14 of 9/89, Volume 7 with 3/89, Volume 1.

[A clear copy of the "picture" mentioned in ¶ 32 is a rectangle divided in half. See Exhibit 7 attached to the Browne report. The left half is a UV of a page from 3/89 (073) and the right half is a UV of a page from 9/89 (073). The caption below the picture is "UV reaction of the paper in 3/89 compared with that in 9/89." The left half is dark, almost black in color. The right half is dark

blue at the top and dark purple at the bottom. There is a visible contrast between the left and right sides.]

33. What is difficult to explain is why the first half of book 8/89 [Reference C9], Volume 8, is on paper that is the same as that used for the next book in the series (produced some days later) while the second half uses the same paper as the previous 5 books. It should be borne in mind that the TF sheet [*i.e.*, the third page in each book including the cover page,] giving the date of production is produced on paper that was used on 15/2/89—even though the date shown is 6/2/89, the same as the previous dates.

b. The original Library material—the eight documents

(1) Reference C1

Reference C1 contains paper pages which were at one time bound with (1) a plastic front cover and (2) a light blue back paper (004 and 005) which extends around to the front covering about 1 inch of the left front cover. There is some damage to the upper portion of the spine (052). The light blue paper is the kind one often sees in legal documents, like wills. The document appears to have been held together with three staples. The staples in Reference C1 as received by Browne were removed by Browne and have been preserved (007). (Browne Declaration, Exhibit 2, page 2, ¶ 7). The document is about $\frac{3}{8}$ inches thick.

The authors are identified as:

Terge Henriksen Stig Kaspersen

Geir Thorud

Finn Trosby

At the top left corner of the first paper page, the following handwritten notation appears: 621.39(06)tqR18 (066).

A date stamp (made with an ink date stamp) appears half way down the page on the right side (067):

Norges tekniske

23 MAI 1986

universitetsbibliotek

Browne testified that he could not vouch for the authenticity of the date stamp of Reference C1 or of References C2 through C8. (Browne Declaration, ¶¶ 42-43). We have no basis to question the authenticity of the dates stamped on References C1 through C8.

In the lower right hand corner of the first paper page, perforated holes which spell out (011):

N.T.H.

Bibliotek

On the back side of the first paper page there is a bar code with the number 86a008658 (068).

(2) Reference C2

Reference C2 (TF-Report 3/89—Volume 1) (008) contains paper pages bound with a dark blue cloth binder (009). Browne refers to the bound pages being "'Perfect' bound" and he describes certain advantages of a Perfect binding system. (Browne Declaration, ¶¶ 25-26). The document is about ½ inches thick.

The authors are identified as:

Stig Kaspersen

John Reidar Rørnes

Geir Ivar Thorud

Finn Trosby

At the top left corner of the cover page, the following handwritten notation appears: 621.39(06)tqR18 (010).

A date stamp (made with an ink date stamp) appears half way down the page on the left side (009):

Norges tekniske

22 FEB. 1989

universitetsbibliotek

In the lower right hand corner of the first paper page, perforated holes—similar to those on Reference C1—spell out (013):

N.T.H.

Bibliotek

On the back side of the first paper page there is a bar code with the number 89a012956 (012).

(3) Reference C3

Reference C3 (TF-Report 4/89—Volume 2) (050) contains paper pages bound with a dark blue cloth binder (050). The document is about 5/16 inches thick.

The authors are identified as:

Stig Kaspersen

Geir Ivar Thorud

Finn Trosby

At the top left corner of the cover page, the following handwritten notation appears: 621.39(06)tqR18 (050, upper left-hand corner).

A date stamp (made with an ink date stamp) appears half way down the page on the left side (050):

Norges tekniske

22 FEB. 1989

universitetsbibliotek

In the lower right hand corner of the first paper page, perforated holes—similar to those on Reference C1—spell out (015):

N.T.H.

Bibliotek

On the back side of the first paper page there is a bar code with the number 89a012955 (016).

Browne observed the following (Browne Declaration, ¶ 33):

I note that the page numbering [of Reference C3] changed for the annex, *i.e.* after page 107. The numbers move from the outside of the page to the inside [see (074 and 075)].

Review of the original document confirms Browne's observations. However, there is more to the story.

Reference C3 consists of (1) a cover (050), (2) four pages of introductory material, *e.g.*, table of contents, (3) pages 1 through 107 of descriptive text (with page numbers on the *outside* of each page (074)), (4) Annex 1 [Data Tables with MDX] with pages 1-2 numbered on the *inside* of the page (075), (5) Annex 2 [Description of procedures in MDX]

and MS] with pages 1-17 numbered on the *inside*, and (6) a back cover. An Annex in the context of the document is what normally we would call appendix—such as Appendix 1 to this opinion listing photographs. Nothing about the page numbering strikes us as being unusual.

(4) Reference C4

Reference C4 (TF-Report 5/89—Volume 3) (018) contains paper pages bound with a dark blue cloth binder (017). The document is about 5/16 inches thick.

The authors are identified as:

Geir Ivar Thorud

Finn Trosby

At the top left corner of the cover page, the following handwritten notation appears: 621.39(06)tqR18 (021).

A date stamp (made with an ink date stamp) appears half way down the page on the left side (022):

Norges tekniske

24 APR. 1989

universitetsbibliotek

In the lower right hand corner of the first paper page, perforated holes—similar to those on Reference C1—spell out (019):

N.T.H.

Bibliotek

On the back side of the first paper page there is a bar code with the number 89a012954 (020).

As earlier mentioned in this opinion, Browne discussed a "trash" mark on the pages of Reference C4. (Browne Declaration, Exhibit 2, page 5, ¶ 26). We have been able to confirm that the "trash" mark is present on the pages of the document (070 and 071—note black dot where pencil points).

(5) Reference C5

Reference C5 (TF-Report 6/89—Volume 4) (023) contains paper pages bound with a dark blue cloth binder (024). The document is about ½ inches thick.

The authors are identified as:

Geir Ivar Thorud

Finn Trosby

Trond Harald Wettre

At the top left corner of the cover page, the following handwritten notation appears on a piece of cloth attached to the cover: 621.39(06)tqR18 (024).⁷

A date stamp (made with an ink date stamp) appears half way down the page on the left side (076):

Norges tekniske

22 FEB. 1989

universitetsbibliotek

In the lower right hand corner of the first paper page, perforated holes—similar to those on Reference C1—spell out (025):

N.T.H.

On the cover, a handwritten "Anal" appears on cloth attached to the cover. While in our possession, the cloth with "Anal" came loose. We have reattached the cloth using Scotch TM tape.

Bibliotek

On the back side of the first paper page there is a bar code with the number 89a012953 (026).

(6) Reference C6

Reference C6 (TF-Report 7/89—Volume 6) (028) contains paper pages bound with a dark blue cloth binder (030). The document is about ½ inches thick.

The authors are identified as:

Stig Kaspersen

Geir Ivar Thorud

Finn Trosby

At the top left corner of the cover page, the following handwritten notation appears on a piece of cloth attached to the cover: 621.39(06)tqR18 (030).

A date stamp (made with an ink date stamp) appears half way down the page on the left side (029):

Norges tekniske

22 FEB. 1989

universitetsbibliotek

Unlike any of the other documents, a second date stamp appears half way down the page on the right side (029):

RECEIVED

JUN 23, 2005

NOVAK DRUCE--DC

In the lower right hand corner of the first paper page, perforated holes—similar to those on Reference C1—spell out (032):

N.T.H.

Bibliotek

On the back side of the first paper page there is a bar code with the number 89a012951 (031).

(7) Reference C7

Reference C7 (TF-Report 9/89—Volume 7) (033) contains paper pages bound with a dark blue cloth binder (035). The document is a little less than ½ inches thick.

The authors are identified as:

Stig Kaspersen

Geir Ivar Thorud

Finn Trosby

At the top left corner of the cover page, the following handwritten notation appears on a piece of cloth attached to the cover: 621.39(06)tqR18 (035).

A date stamp (made with an ink date stamp) appears half way down the page on the left side (034):

Norges tekniske

24 APR.1989

universitetsbibliotek

In the lower right hand corner of the first paper page, perforated holes—similar to those on Reference C1—spell out (036):

N.T.H.

Bibliotek

On the back side of the first paper page there is a bar code with the number 89a012947 (037).

(8) Reference C8

Reference C8 (TF-Report 8/89—Volume 8) (040) contains paper pages bound with a cloth binder (041). The document is about 5/16 inches thick.

The authors are identified as:

Geir Ivar Thorud

Finn Trosby

Trond Harald Wettre

At the top left corner of the cover page, the following handwritten notation appears: 621.39(06)tqR18 (041; 049).

A date stamp (made with an ink date stamp) appears half way down the page on the left side (039):

Norges tekniske

24 APR.1989

universitetsbibliotek

Over the stamped date, written in blue ball-point pen, appears (039)

24 April 89

In the lower right hand corner of the first paper page, perforated holes—similar to those on Reference C1—spell out (042):

N.T.H.

Bibliotek

On the back side of the first paper page there is a bar code with the number 89a012949 (059).

The first fourteen (14) pages of the document have come loose from the binder (043, 044). Browne also found that the first fourteen (14) pages had come loose. (Browne Declaration, ¶ 39, lines 3-4).

(9) Other observations

Facially, all eight documents appear to be "normal." To our untrained eye, the documents do not appear to have been altered or manipulated (in an inappropriate manner).

When all documents are placed side by side, a photo from the spine reveals some red ink marks (052). We do not know the significance of those red ink marks.

Miscellaneous findings

Browne states that he did not go to the Library in connection with his examination of the eight documents. Browne, therefore, cannot state whether similar documents in the Library collection have similar characteristics.

NTP and those associated with NTP (*e.g.*, counsel, Browne) made no attempt to locate or contact the authors of the eight documents. (Hearing Transcript 24:24-25:8). Likewise, there is no indication on the record that the third-party requester contacted the authors. These authors would be expected to have no interest in patent issues between NTP and RIM. Further, these authors might have been able to shed some light on the differences, if any, between the documents they prepared in 1986 and 1989

and the documents examined by Browne. NTP and RIM made a "litigation" decision not to find the authors; both now live with that "litigation" decision.

In its Reply Brief, page 15, NTP states that the documents "were obtained by the third party requester, RIM, and therefore [are] of dubious authenticity or reliability." There is no basis to assume that the documents are "dubious" because they were presented by RIM. An inference that a third-party was "up to no good" in presenting a document has no place in a reexamination proceeding unless the patent owner has proof that something inappropriate occurred.

4. Discussion

(1) Authenticity

(a)

A prior art document relied upon to (1) defeat a patent applicant during examination under 35 U.S.C. § 132, (2) defeat a patent owner during reexamination and (3) have a court declare a patent invalid in a civil action for patent infringement should be "authentic." Before the USPTO, the proponent of a prior art document must initially establish the prima facie authenticity of the document. The standard of proof is preponderance of the evidence—meaning the document is more likely authentic than not. *Concrete Pipe & Prod. of Cal., Inc. v. Constr. Laborers Pension Trust for S. Cal.*, 508 U.S. 602, 622 (1993).

Once a prima facie case of authenticity is established by a preponderance of the evidence, the patent owner in a reexamination may come forward with evidence to establish a lack of authenticity.

We then evaluate all the evidence and determine whether the examiner erred in finding the documents to be authentic.

Unlike a civil action in district court or an interference before this Board, the Federal Rules of Evidence do not control the admissibility of evidence. Hearsay evidence is "admissible" and may be considered. In re Epstein, 32 F.3d 1559, 1565 (Fed. Cir. 1994). Likewise, third-party statements, such as statements in the Pasquine and Sorsdahl declarations and the Digernes letter, may be "admissible." *In re Reuter*, 670 F.2d 1015, 1020-21 (CCPA 1981). However, mere uncorroborated hearsay or rumor is not sufficient to establish a fact. Consol. Edison Co. of N.Y. v. NLRB, 305 U.S. 197, 229-30 (1938). The weight to be accorded any evidence, including hearsay evidence, presented in an ex parte reexamination proceeding is a matter we determine through the exercise of sound discretion. In re American Academy of Science Tech Center, 367 F.3d at 1368 (Board has broad discretion to determine weight to be given evidence, including declaration evidence); J.C. Equipment Corp. v. England, 360 F.3d 1311, 1315 (Fed. Cir. 2004) (the trier of fact's responsibility is to determine the weight (if any) to be given all the evidence, whatever its character).

(b)

The third-party requester filed copies of References C1 through C8 as part of an ex parte request for reexamination. The documents appear regular on their face. The Digernes letter outlines the procedure for receiving, cataloguing and shelving documents. The Digernes letter is countersigned by Ingar Lomheim, the Library Director. As we noted earlier, the Library does not have a dog in the fight between NTP and RIM—in fact we view the

Library as a neutral observer doing its best to communicate to NTP and RIM (and ultimately us) how the Library functions. The procedure set out in the Digernes letters is consistent with a review of the "original" documents.

For example, the Digernes letter says one step in the receipt to shelving process is to date stamp receipt of the document. We find a date stamp on References C1 to C8. We have absolutely no reason to question the accuracy of those date stamps. Just as employees of the Government of the United States government are presumed to have done their job correctly, on the record before us, we see no reason to apply a different standard to employees of the Government of Norway.

Another example is the presence of the "621.39(06)tqR18" and "Anal" hand-written notes on the cover of each document. The Library Director tells us the Library makes the hand-written notations before shelving and we have absolutely every reason to believe the handwritten notes were placed on the documents exactly as the Library Director says they were.

The procedure followed in this case, *i.e.*, obtaining a letter from the Library, is consistent with the procedure followed by the USPTO in other cases when receipt, cataloguing and shelving issues arise in connection with a reference, *e.g.*, a thesis in a university library. We do not take live testimony in an ex parte reexamination. Accordingly, neither the third-party requester nor the patent owner could "call" the Library Director. The Digernes letter is the best the third-part requester, the patent owner and the USPTO could expect. While "hearsay" in the strictest sense, it is consistent with the physical evidence and we accord the letter considerable weight.

That being the case, we have no basis for holding that the Examiner erred in finding, prima facie, that the eight documents are authentic.

In its Reply Brief, NTP argues that more weight should be given to the "sworn" testimony of its witnesses vis-à-vis the unsworn testimony of officials of the Library. We disagree. While the NTP witnesses and the third-party requester's witnesses may be characterized as interest witness, the officials of the Library have no interest in the matter before us. There is no reason to doubt their "unsworn" testimony given how consistent it is with the physical evidence.

NTP also makes much of the fact that a Library official was not willing to give a "sworn" statement when asked by RIM. (Reply Brief 15). NTP has not told us whether it asked for the same "sworn" statement. In any event, the complications of litigation in the United States are well-known and we would go as far as to sympathize with an employee of a Norwegian library not wanting to provide an American lawyer with a "sworn" statement prior to consultation with legal counsel for the Library.

(c)

NTP hired Browne—a forensic document examiner—to look into the documents. Browne found various characteristics of the documents which seem to give him pause. We do not share Browne's concerns. While we need not address all of Browne's concerns, we will discuss a few. In discussing the concerns, we keep in mind that we are not dealing with a criminal law standard of proof (beyond a reasonable doubt). Instead we are dealing with a "civil" matter where the standard of proof is preponderance of the evidence.

To establish a fact by a preponderance of the evidence it must be shown that the fact is more likely true than not. A fact cannot be established by a preponderance based on "possibilities." Rather, it must be established based on "probabilities." The difference is significant. Rapoport v. Dement, 254 F.3d 1053, 1063 (Fed. Cir. 2001) (inherency, a question of fact, cannot be established by a preponderance of the evidence based on evidence that a certain thing may result from a given set of circumstances); In re Robertson, 169 F.3d at 745 (inherency cannot be established by the mere fact that a certain thing may result from a given set of circumstances); *Hansgirg v*. Kemmer, 102 F.2d 212, 214 (CCPA 1939) (inherency may not be established by probabilities or possibilities; the mere fact that a certain thing may result from a given set of circumstances is not sufficient); Central State Hospital v. Wiggers, 335 S.E.2d 257, 258 (Va 1985) (possibilities, conjecture and speculation are not sufficient to establish something by a preponderance of the evidence); Scripps Research Institute v. Nemerson, 72 USPQ2d 1122, 1125 (BPAI 2004) (possibilities do not amount to a preponderance of the evidence).

Browne with commendable candor concedes, as he must, that there is significant "factual" information he does not know. (Browne Declaration, ¶ 49—knowledge of other documents in the Library).

Throughout his testimony, Browne seems to assume that one Reference document was "photocopied" at the same time another Reference document was "photocopied." The assumption seems to be based on the date stamp placed on the document by the Library or the date the Library

says it received the document. However, there is no credible evidence which establishes that a photocopy date was or is a function of a receipt date.

Browne also has pause about certain References because they are printed on different paper, i.e., they were "photocopied" on different paper. From this fact, Browne and NTP invite us to find that there was some inappropriate alteration of the documents at some unknown time. We decline the invitation. First, a plausible possibility (not a probability) is that after photocopying the authors or their "secretaries" were not satisfied with the "results" of certain pages and therefore they "re-photocopied" those pages so that a "good looking" document would be filed with the Library. Second, pages may have been substituted during the proofreading step between receipt and shelving at the Library. *Third*, Browne concedes that if there was an alteration, he does not know when it occurred. NTP essentially wants us to figure out that there was an inappropriate alteration by "someone," yet NTP fails to identify any "someone" who would have had a motive to engage in inappropriate alterations. NTP, without any real basis, wants us to believe someone did something they were not supposed to do. On the record before us, it appears all involved did what they were supposed to do and did it in an honest manner.

Browne has a concern with the header on pages of some documents vis-à-vis the text on the same page. Browne reasons that "photocopies" may have been made using paper which already had the header. Browne does not testify whether copying of documents on paper with a header was unusual at the time the documents were prepared. Rather, Browne "speculates" in this case that "something may not be right."

The patent owner made no attempt to locate the authors. (Hearing Transcript 24:24-25:8). Much of the speculation and possibilities might have been clarified had one or more of the authors been contacted. As noted earlier, a litigation decision not to contact the authors is something NTP has to live with.

With respect to Reference C1, one reason staples *might* have been removed by the Library was to replace a torn page. Also removal of staples would make copying the document easier. After copying, the staples would be "replaced" with new staples. Removal of the staples does not give us pause even if it gives Browne pause.

We have considered all of the Browne testimony, but we decline to credit that testimony to the extent it attempts to persuade us that any of References C1 through C8 were altered in some inappropriate way after they were received, catalogued and shelved by the Library.

In assessing the weight to be given the Browne testimony, we in no way suggest that he is not telling us the truth about his examination or his findings. What we cannot accept are findings which are based on possibilities and speculation. Even if Browne's possibilities and speculation could be argued to be a "reasonable doubt" in a criminal case, they do not overcome the credible account provided to the USPTO through the Digernes letter countersigned by the Library Director.

(d)

We hold that NTP has failed to show that the Examiner erred in finding that the copies of References C1 through C8 filed by the third-party requester are authentic.

(2) Accessibility

NTP maintains that the third-party requester provided copies of References C1 through C8, which the third-party requester obtained from the Library in 2005. A reference with a 2005 prior art date, of course, is not prior art to NTP.

NTP's "beef" with the eight documents seems to be whether the documents reasonably could be accessed at the Library by a person of ordinary skill in the art. NTP says "no" and the third-party requester says "yes." The Examiner agreed with the third-party requester. The issue becomes whether NTP has shown that the Examiner erred.

Because NTP tells us that no one in the Library would "agree to provide an affidavit or declaration attesting to any facts," NTP has made several assumptions (Brief 50). Those assumptions are the same as those made by Rhyne.

The existence of a single printed document, sufficiently catalogued and available at a public library, generally is a printed publication within the meaning of 35 U.S.C. § 102. For example, a single printed thesis properly catalogued and shelved in the library of Freiburg University in Germany was held to be a printed publication. *In re Hall*, 781 F.2d 897, 899-900 (Fed. Cir. 1986). Hall demonstrates that Rhyne's concern whether anyone would have "been motivated to fly to Norway" is irrelevant. (Rhyne Supplemental Declaration, ¶ 50, line 4). On the other hand, a single "thesis" received by the library of the University of Toledo in Ohio, but in no way catalogued or shelved, was held not to be a printed publication. *In re Bayer*, 568 F.2d 1357, 1362 (CCPA 1978). A thesis "partially" catalogued, such as a thesis

at Reed College in Portland Oregon, via author index cards stored in a shoe-like box, was held not to be a printed publication. *In re Cronyn*, 890 F.2d 1158, 1161 (Fed. Cir. 1989). The 2-1 vote in *Cronyn* shows that the issue can be fairly debatable.

The case before us is much closer to *Hall* than it is to either *Bayer* or *Cronyn*. Nevertheless, each case is considered on its own facts. *In re Klopfenstein*, 380 F.3d 1345, 1350 (Fed. Cir. 2004). One fact of interest is a comparison of the letters to the USPTO from Freiburg University in *Hall* (found to be sufficient) and the Digernes letter before us (which contains considerably more detail than the letter to the USPTO in *Hall*). The case before us is not an index card collection in a shoe box. The case before us is not an uncatalogued and unshelved thesis. Rather, the eight documents were received, catalogued and shelved in the Library before the NTP inventors entered the field.

While Rhyne says a person skilled in the art would not have been able to locate the eight documents in the BIBSYS system in place in the Library, Sorsdahl has a different view. As noted earlier, we have credited the Sorsdahl view over that of Rhyne. We find, therefore, that the eight documents were accessible and that a reasonable search of the Library would have uncovered the documents.

In making our findings and reaching our decision, we note that someone found the eight documents. We are not sure by what process, or how the eight documents were found. According to NTP, "[t]he only evidence . . . is a Wall Street Journal article indicating that RIM became aware of the documents as a result of a 'tip' from an industry insider."

(Reply Brief 23). Even if RIM was "tipped" off to the documents, we have resolved the accessibility issue on the basis of the evidence before us without according the Wall Street Journal article much, if any, weight. On evidence before us, we are satisfied that the documents (1) were timely received, cataloged and shelved in the Library, (2) were accessible and (3) that one skilled in the art reasonably could have found the eight documents using the tools available in the Library. Nothing more is needed.

NTP has failed to establish that the Examiner erred in holding the eight documents to be printed publications within the meaning of 35 U.S.C. § 102.

G. NTP's submissions under 37 CFR § 1.131

1. Procedural History

An examiner rejected the appealed claims under 35 U.S.C. § 103 as unpatentable over a number of references. Those references included the Perkins and Hortensius patents. Each of the patents has an effective date of October 29, 1990. NTP's earliest application for which it claims benefit was filed later on May 20, 1991, giving NTP a possible constructive reduction to practice no earlier than that date.

During prosecution NTP offered a showing under 37 C.F.R. § 1.131 attempting to antedate the patents. The examiner was unconvinced by the showing, maintained the rejections and NTP appealed.

After an oral argument, we ordered additional briefing on the issue of antedation. Order mailed November 6, 2008. The order found:

that the Appeal Brief and Reply Brief (the latter basically restating what is found in the former) do not permit us to understand in any cogent way the issues raised by NTP.

Accordingly, we invite NTP to file a supplemental brief in response to this order. Our expectation is that a supplemental brief will permit us to address the Rule 131 showing issue in a meaningful way.

Order mailed November 6, 2008, p. 4. The order noted that NTP had not provided guidance explaining how the evidence relied upon established facts sufficient to support a holding of invention prior to the effective filing dates of the Perkins and Hortensius patents. Order mailed November 6, 2008, p. 5.

NTP filed its first supplemental brief on § 1.131 matters and the accompanying exhibits. (NTP 1st Supplemental Brief received December 15, 2008). We reviewed the paper and exhibits and held that NTP failed to establish a date of invention prior to the effective filing date of the Perkins and Hortensius patents. Memorandum Opinion and Order mailed, February 18, 2009, p. 33. However, our opinion noted that we used a different rationale for holding NTP's § 1.131 effort insufficient. We allowed NTP to file an additional brief and additional evidence on its antedating effort. Memorandum Opinion and Order mailed, February 18, 2009, p. 33. NTP filed a second supplemental brief and additional evidence. 2nd Supplemental Brief filed April 22, 2009.

2. Principles of Law – Antedation under 37 C.F.R. § 1.131

The purpose of filing a 1.131 declaration is to demonstrate that the applicant invented the subject matter of the rejected claims prior to the effective date of a reference. 37 C.F.R. 1.131(a); *In re Asahi/America Inc.*, 68 F.3d 442, 445 (Fed. Cir. 1995). Section 1.131(a) (2003) provides in relevant part:

(a) When any claim of . . . a patent under reexamination is rejected, the inventor of the subject matter of the rejected claim, the owner of the patent under reexamination, . . . may submit an appropriate oath or declaration to establish invention of the subject matter of the rejected claim prior to the effective date of the reference or activity on which the rejection is based. The effective date of a U.S. patent, . . . is the . . . date that it is effective as a reference under 35 U.S.C. 102(e). . . .

The rule specifically requires the presentation of evidence proving facts establishing either (1) prior conception of the invention and diligence from before the effective date of the reference to a subsequent actual or constructive reduction to practice or (2) an actual reduction to practice of the invention prior to the effective date of the reference. 37 C.F.R. § 1.131(b); *In re Costello*, 717 F.2d 1346, 1349 (Fed. Cir. 1983). Section 1.131(b) specifies the quality of proofs that are necessary:

(b) The showing of facts shall be such, in character and weight, as to establish reduction to practice prior to the effective date of the reference, or conception of the invention prior to the effective date of the reference coupled with due diligence from prior to said date to a subsequent reduction to practice or to the filing of the application.

The rule also requires more than just the oath or declaration of the inventors generally averring that they conceived or reduced to practice the subject matter of the claims before the date of the reference. It requires objective evidence supporting the inventor's testimony:

Original exhibits of drawings or records, or photocopies thereof, must accompany and form part of the affidavit or declaration or their absence must be satisfactorily explained.

37 C.F.R. § 1.131(b).

The one asserting a prior date of invention bears the burden of establishing facts necessary to prove earlier conception or an earlier actual reduction to practice. 37 C.F.R. § 1.131(b); *In re Facius*, 408 F.2d 1396, 1404 (CCPA 1969). Thus, NTP bears the burden of proving prior conception or actual reduction to practice of the rejected subject matter.

Conception and reduction to practice are well defined in patent law. "Conception is the formation 'in the mind of the inventor of a definite and permanent idea of the complete and operative invention, as it is therefore to be applied in practice." *Singh v. Brake*, 317 F.3d 1334, 1340 (Fed. Cir. 2003) *quoting Kridl v. McCormick*, 105 F.3d 1446, 1449 (Fed. Cir. 1997) (citations omitted). An idea is definite and permanent when the inventor has a specific, settled idea, a particular solution to the problem at hand, not just a general goal or research plan he hopes to pursue. *See Fiers v. Revel*, 984 F.2d 1164, 1169 (Fed.Cir. 1993); *Amgen, Inc. v. Chugai Pharmaceutical Co.*, 927 F.2d 1200, 1206 (Fed.Cir. 1989). Conception "is complete only when the idea is so clearly defined in the inventor's mind that only ordinary skill would be necessary to reduce the invention to practice, without extensive research or experimentation," *Burroughs Wellcome Co. v. Barr Laboratories Inc.*, 40 F.3d 1223, 1228 (Fed. Cir. 1994).

Proof of conception requires objective evidence of the inventor's subjective beliefs. *Invitrogen Corp. v. Clontech Laboratories Inc.*, 429 F.3d 1052, 1064 (Fed. Cir. 2005). Those proofs must address all limitations of the claimed invention. *Burroughs Wellcome*, 40 F.3d at 1228, *citing Coleman v. Dines*, 754 F.2d 353, 359 (Fed.Cir. 1985) (conception must

include every feature of claimed invention). There must be evidence establishing what was in the inventor's mind prior to the critical date by objective evidence of what the inventor has disclosed to others, and what that disclosure would fairly suggest to one of ordinary skill in the art. *In re Jolley*, 308 F.3d 1317, 1323 (Fed. Cir. 2002).

Actual reduction to practice occurs when a physical embodiment of the claimed subject matter has been made or, in the case of a process, the process has actually been performed.

Actual reduction to practice requires proof of an actual physical embodiment or performance of a process that includes all limitations of the claims. *In re Garner*, 508 F.3d 1376, 1380(Fed. Cir. 2007); *UMC Electronics Co. v. U.S.*, 816 F.2d 647, 652 (Fed.Cir. 1987), *cert. denied*, 484 U.S. 1025 (1988) ("[U]nder our precedent there cannot be a reduction to practice of the invention here without a physical embodiment which included all limitations of the claims."); *Hummer v. Administrator of National Aeronautics & Space Administration*, 500 F.2d 1383, 1387 (CCPA 1974).

While logically conception of an invention should precede reduction to practice. This is not always the case. Depending on the particular facts, conception and reduction to practice may occur simultaneously. *Burroughs Wellcome*, 40 F.3d at 1228; *Amgen, Inc. v. Chugai Pharmaceutical Co.*, 927 F.2d 1200, 1206 (Fed.Cir. 1989); *Alpert v. Slatin*, 305 F.2d 891, 894, (CCPA 1962).

While the definitions of conception and actual reduction to practice are the same for both Rule 131 practice and interference, the proofs

sufficient to show prior conception or actual reduction to practice can be different. In an interference proof of conception and reduction to practice must demonstrate conception or reduction to practice of all the limitations of the count. With respect to § 1.131, the focus is on the subject matter of the rejected claims. 37 C.F.R. § 1.131(a). While the language of that rule expressly requires proof demonstrating prior invention "of the subject matter of the rejected claims", the jurisprudence interpreting § 1.131 holds that proof of conception or actual reduction to practice of subject matter that would render the subject matter of the rejected claims obvious to a person skilled in the art may be sufficient. E.g., In re Stryker, 435 F.2d 1340, 1341 (CCPA 1971). However, all limitations of the rejected claims must be accounted for whether the proofs show each limitation of the rejected subject matter or render the limitation obvious. See, In re Spiller, 500 F.2d 1170 (CCPA 1974) (CCPA evaluated that each of the claim limitations that were not included in the actual reduction to practice shown in the § 1.131 affidavit and held each would have been obvious to one having ordinary skill in the art).8

As the burden of establishing facts showing an earlier date of invention rests with the one asserting an earlier date (37 C.F.R. § 1.131(b); *Facius*, 408 F.2d at 1404), the burden of establish that any differences between the conception or actual reduction to practice and the rejected

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Under the jurisprudence relating to § 1.131, conception and actual reduction to practice may also be proved by facts demonstrating the prior invention of an embodiment that meets the claim limitations and also includes as much of the invention as taught in the references. In re Tanczyn,, 347 F.2d 830, 832 (CCPA 1965).

subject matter would be obvious also rests with the one asserting an earlier date of invention.

NTP argues that the correct legal standard for conception requires only evidence of an idea. (2nd Supplemental Brief 7-9). NTP's argument is correct but incomplete. The idea must be of a "complete and operative invention, as it is therefore to be applied in practice." *Singh*, 317 F.3d at 1340 To prove conception, the evidence must also establish the idea included all the limitations of the rejected claims. *Burroughs*, 40 F.3d at 1228. Thus, assuming that the NTP inventors had the broad general idea of and were working on wireless e-mail prior to the effective date of the references, possession of that idea would not establish prior invention of the "subject matter of the rejected claims" as required by § 1.131.

3. Summary of Decision on Antedation

We have considered NTP's 1st and 2nd Supplemental briefs and reviewed the evidence relied upon. NTP failed to meet its burden of showing facts establishing either prior conception or prior actual reduction to practice of the subject matter of the rejected claims. NTP's proofs do not establish that they had a complete conception or actual reduction to practice of the claimed wireless e-mail system and process including all of the limitations of the rejected claims prior to the effective date of the Perkins and Hortensius patents. Specifically, NTP has not demonstrated, by a preponderance of the evidence, a prior conception or actual reduction to practice of a system or process (1) for wirelessly transmitting an e-mail message and (2) that that e-mail is sent to the e-mail/RF interface in

response to either the address of the interface included in the e-mail as it leaves the originating processor or in response to the destination address.

To the extent NTP asserts that any differences between what is shown in its proofs and the rejected subject matter would have been obvious, NTP has not identified those differences nor explained why the differences would have been obvious.

Since prior conception has not been proved, it is unnecessary for us to consider NTP's case on diligence.

4. Analysis

A. NTP's Antedation case

The effective date of the Perkins and Hortensius patents is October 29, 1990. NTP alleges a conception in July of 1990 or no later than October 26, 1990. (1st Supplemental Brief 5). NTP also alleges an actual reduction to practice "no later than October 26, 1990. (1st Supplemental Brief 13). NTP argues that the subject matter of each of its 246 claims was "conceived and either actually reduced to practice or constructively reduced to practice with diligence before the effective date of the Perkins and Hortensius references" (1st Supplemental Brief 23:9-13).

To prove conception and actual reduction to practice, NTP relies on what it calls an element-by-element analysis of the claims of its patent. (1st Supplemental Brief 23-49). NTP's approach essentially reproduces each independent claim and following selected portions adds a parenthetical said to identify "the element or other support for conception and/or actual reduction to practice, followed by a slash ("/"), followed by the element or other support for constructive reduction to practice" in the specification of

Patent 5,436,960. (1st Supplemental Brief 24, n.2). For example, with respect to the Claim 1 limitation requiring sending e-mail wirelessly, NTP submits the following:

at least the inputted message being transmitted by an RF information transmission system (*e.g.*, Network, DF's 1-18, 35, 90/RF information transmission network 302)

(1st Supplemental Brief 24:9-11). NTP tells us that "everything to the right of the '/' describes constructive reduction to practice as demonstrated in the specification of the 960 Patent." (1st Supplemental Brief 24, n.2).

We do not find NTP's approach helpful in explaining how the submitted evidence meets its burden of proving prior invention.

First, the pertinence of the portions of the 960 specification said to show a constructive reduction to practice is not apparent to us. There is no issue that has been raised in this appeal which implicates the constructive reduction to practice date of NTP's rejected claims. It is unnecessary, therefore, for us to decide whether or not the rejected subject matter was constructively reduced to practice on May 20, 1991.

With respect to the portions of the parenthetical to the left of the "/", said to show "the element or other support for conception and/or actual reduction to practice," NTP sends us on a "scavenger hunt." NTP does not directly identify and explain the evidence which would show the conception and/or reduction to practice of the particular claim element. Indeed, NTP does not even separately address conception and actual reduction to practice. Rather it directs us to its proposed findings of fact, designated by "DF," which in turn directs us to its exhibits and/or other proposed facts. The exhibits often direct us to still other exhibits.

For example, in the discussion of Claim 1 and the limitation requiring that an inputted message be transmitted by an RF information transmission system, NTP directs us to "e.g., Network, DFs 1-18, 35 and 90." Those proposed facts direct us to look at numerous portions of Ex. 1001, portions of NTP's Patent 5,436,960 and 9 additional patents and 9 additional applications said to be incorporated by reference into the 960 patent, portions of NTP's Patent 5,045,850 patent, NTP's Patent 4,870,410, and selected portions of Ex. 1002. DF 35 additionally directs us to DF 61 which again directs us to portions of Ex. 1001 and which in turn references the "Campana patents" and the Telefind E-mail Integration document (Ex. 1002). The referenced portions of Ex. 1001 direct us to portions of the "Campana Patents," the "Telefind Patents" and other exhibits. How the referenced document support to proposed finding of fact or the referenced claim limitation is not explained. Indeed, much of the material cited by NTP to support conception or actual reduction to practice with respect to particular claim limitations appears to us to have no relationship to prior invention of that limitation. For example, for the limitation in Claim 1 relating to an inputted e-mail message being transmitted by an RF information transmission system, NTP directs us to, inter alia, DF 2. (1st Supplemental Brief 24:9-11). DF 2 refers to 9 patents and 9 applications said to provide details on a network with wireless capability (1st Supplemental Brief 2:13-17), but, our review indicates, they have no relationship to sending e-mail. Instead, they appear to relate to sending pager messages. The significance of those patents to proving the date of

prior invention of a system or process for wirelessly transmitting e-mail is not explained.

Notwithstanding the lack of guidance from NTP, we have attempted to follow NTP's clues. We have reviewed the information said to show conception or actual reduction to practice of each limitation of each independent claim. Our review shows a failure to prove either prior conception or prior actual reduction to practice of systems or processes having all the claim limitations. In presenting its antedation case NTP has not separately argued conception and actual reduction to practice. Our analysis treats them together also.

We will focus our discussion on two limitations of the rejected subject matter: (1) the requirement that an e-mail be sent wirelessly and (2) the requirement that the e-mail message be sent to the e-mail/RF interface in response to either (a) the address of the interface included in the e-mail as it leaves the originating processor (in most claims) or (b) the destination address (in the remaining claims). We will refer to that interface as the e-mail/RF interface. Element (1) and one alternative of element (2) are required by each rejected claim.

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⁹ See e.g., Claim 1 ("the RF information transmission system transmits at least the inputted message . . . through the RF information transmission system to the at least one RF receiver"; "the electronic mail message originating from the one of the plurality of originating processors includes an address of the one interface . . ."; Claim 194 ("broadcasting the inputted message and the identification of the at least one RF receiver with the RF system"; "electronic mail message includes (a) an address in the electronic mail system of an interface to which the electronic mail message is delivered by the electronic mail system in response to the address in the electronic mail message, . . . receiving the transmitted electronic mail message at the interface and transmitting at least the inputted message . . . to the RF system"); Claim 202 ("broadcasting the inputted messages and the identification of the at least one RF receiver from the at least one broadcast location to the at least one RF receiver."; "electronic mail messages include (a)

B. Conception and Actual Reduction to Practice of Wirelessly Sending e-mail

NTP's claims include the limitation requiring sending an inputted message included in an e-mail message wirelessly. For example Claim 1 requires that "the RF information transmission system transmits at least the inputted message from the one interface through the RF information transmission system to the at least one RF receiver after information is inputted to the system." *See e.g.*, Claim 1, Appeal Brief filed December 21, 2008 at 170. NTP argues that conception and actual reduction of this limitation is supported by "Interface switch on the 3B2-Hub switch [which] sends processed email to Network and transmitter in Network broadcasts to Wireless Email Receiver — Pager" To support its position, NTP refers us to proposed facts DF 6, 8, 9, 17, 21, 27, 35, 44, 45, 47, 52, 59, and 99-100. (*See e.g.*, 1st Supplemental Brief 25:10-13) (relating to Claim 1).

The above-listed proposed facts refer us to specific portions of the following documents and testimony: (1) The Telefind E-Mail Intergration Document (Ex. 1002) at 1, ¶¶ 5 and 6, at 2, ¶¶ 1, 2 and 5, p. 3, ¶ 3, and at 4, ¶ 3; (2) Campana's Declaration (Ex. 1001), ¶¶ 5, 6, 8-10, 12-13, 15 and Row 3 of the Chart on p. 19; (3) Campana's trial testimony at 145:18 - 146:7; (4) Patent

an address in the electronic mail system to which the electronic mail messages are

delivered . . . providing an interface connecting the electronic mail system to the RF system which is the address in the electronic mail system to which electronic mail messages are delivered by the electronic mail system"); Claim 213 ("[e-mail] are transmitted by the RF system to at least one broadcast location in the RF system and are broadcasted from the at least one broadcast location to the at least one RF receiver"; "electronic mail messages originating from an electronic mail system and transmitted through an interface to an RF system . . . with the interface being a destination in the electronic mail system to which electronic mail messages are delivered by the electronic mail system in response to an address of the destination in the electronic mail messages"). Appeal Brief filed December 21, 2008 at 170, 227, 229 and 232.

5,436,960, Figs. 2, 10 and 11 and the discussion at 24:14-28 (5) the abstract of Patent 5,045,850 and (6) Patent 4,870,410, Fig. 2.

1. The Telefind Integration Document - Exhibit 1002

NTP's Exhibit 1002 is critical to its case for antedation. 2nd

Supplemental Brief, p. 12, ll. 1-6. Exhibit 1002 has been referred to in these proceedings as TEI or TEID, acronyms for Telefind E-mail Integration and Telefind E-mail Integration Document, respectively. The former is the title appearing on the first page of Ex. 1002.

Exhibit 1002, however, is not relevant to establish that the inventors conceived or actually reduced to practice sending e-mail message wirelessly prior to the October 29, 1990, effective date of the references.

First we note the date of the exhibit. The first page of the exhibit lists three revisions, and a date corresponding to each. The revisions are designated 0, 1 and 2. Ex. 1002 is Revision 2 and is dated April 9, 1991. Ex. 1002 includes four sections each beginning with its own title page. The sections are titled: (1) "C' Version Driver Routine for Pager to Computer RS-232 Serial Interface" (2) "Better Basic' Driver Routine for Pager to Computer RS-232 Serial Interface" (3) "Pager to Computer Serial RS-232 Interface" and (4) "AT&T E-Mail Entry Screen, Entry Methods, and Supportive Help Commands." Each section title page includes a list of revision dates. The final revision date on each section title page except the last is April 9, 1991. The final revision date on the title page of the last section, "(4)," is March 1, 1991. To the extent Ex. 1002 is evidence of what was in the mind of the inventors, it can establish a date of conception no earlier than March 1, 1991, for the fourth section and no earlier than April 9,

1991, for the remainder of the document. Both dates are subsequent to the October 29, 1990, effective filing date of the Perkins and Hortensius references.

Revision 0 of Exhibit 1002

Recognizing that Ex. 1002 did not antedate the references, NTP attempts to rely on the Revision 0 date of October 6, 1990. The first page of Ex. 1002 and each of the section title pages list a "Revision 0" date of October 6, 1990. That date is earlier than the effective date of the references. NTP, however, has not provided a copy of Revision 0. Instead, NTP relies on inventor testimony and documents as evidence establishing the content of unproduced Revision 0. We have reviewed NTP's arguments and evidence. We hold that NTP has failed to prove the content Revision 0.

We will assume, for the purpose of this opinion, that there was a Revision 0 in existence on October 6, 1990. However, Ex. 1002 itself establishes that the content of the document was amended after that date. Exhibit 1002 does not identify what was removed or added during the revision process. Thus, Ex. 1002 does not provide objective evidence of the content of Revision 0 on October 6, 1990.

NTP argues that the schematic circuit drawing of the RS-232 Port appearing at Page 16 of Ex. 1002 confirms the content for Revision 0. NTP argues that the drawing "shows a creation date of October 23, 1990" showing that the inventors had earlier conceived the invention. (2nd Supplemental Brief 13).

It is not apparent to us how a document dated October 23 establishes the content of another document on October 6.

In any event, the schematic as it may have appeared in Revision 0 is not part of the record. Indeed, the schematic in Ex. 1002 raises more questions then it answers as to the content of Revision 0. The circuit drawing is part of the section of Ex. 1002 having the title "Pager to Computer Serial RS-232 Interface." The section has but two pages, the title page (page 16) and the circuit drawing (page 17). NTP says the drawing was created on October 23, 1990. (2nd Supplemental Brief 13:11-12). Consistent with that argument, the drawing includes the notation "10/23/90" in the lower right hand corner. However, the section title page lists a Revision 0 date of October 6, 1990. If the circuit drawing was created on October 23, 1990, as NTP says, what was the content of the Revision 0 version of the "RS-232 Interface" section on October 6, 1990? Additionally, directly adjacent to "10/23/90" is a notation apparently indicating that the drawing was revised on March 29, 1991 ("REV #/ Date 01 3/29/91"). Thus, the October 23, 1990, version of the schematic is also not of record. Additionally the title page of the RS-232 section apparently indicates yet another revision on April 9, 1991. The schematic diagram section of Ex. 1002 simply provides no basis for establishing the content of Revision 0 on October 6, 1990 or any date earlier than the April 9, 1991, revision date.

NTP argues that the Revision 0 document represented a complete wireless e-mail integration system. (2nd Supplemental Brief 14). NTP says that the purpose of Revision 0 was to provide initial commercial

documentation of wireless e-mail integration and that Revision 0 always represented functional, tested software ready for commercial availability.

We do not see how NTP characterization of what Revision 0 was intended to be establishes what was or was not disclosed in Revision 0 on October 6, 1990.

NTP directs us to a long list of exhibits said to establish the content of Revision 0 including the declaration of and trial testimony of one of the inventors Thomas Campana. We reject the Examiner's position (Answer 142:11-16) that Mr. Campana's declaration can only be considered without the declaration of all other co-inventors if there has been a showing that Mr. Campana alone invented the subject matter of the claims at issue.

(1) Campana's Declaration - Exhibit 1001

Campana's declaration addresses the content of Revision 0. For the reasons detailed below, we do not credit his declaration. His declaration on the content of Revision 0 is inconsistent with essentially contemporaneous memos written by him. Additionally, Campana's recollections as to the content of Revision 0 are not credible in light of his strong interest in the outcome of this reexamination and the fact that his declaration was made over twelve years after the date of Revision 0.

(a) Contemporary Documents

Campana testified that "from a complete review of documents" he concluded that he was the author of the Revision 0 document: "[T]he description of the system in [Ex. 1002] which was revision 0 was written by me." Ex. 1001, 13-14, ¶ 32. In his declaration (Ex. 1001) Campana's testifies that Ex. 1002 included the "primary substance" of Revision 0. Ex.

1001, 14, ¶ 35. He further testified that the document was only substantially changed in two respects. Ex. 1001, ¶ 32. The first change was said to be in response to a February 11, 1991, fax from AT&T relating to a commercial embodiment. Ex. 1001, 14, ¶ 33. According to Campana, this change resulted in the March 1, 1991, Revision 1. Ex. 1001, 14, ¶ 33. The second was the revision to the circuit diagram on March 29, 1991. Ex. 1001, 14, ¶ 34. This change was said to be the basis of the April 9, 1991, revision. Ex. 1001, 14, ¶ 34.

Revision 0 is dated October 6, 1990. From before that date and continuing for a substantial period after, Campana and Telefind were attempting to establish business relationships with AT&T and other companies involving wireless communications. Campana and other employees were involved in a number of meetings with these potential partners. A number of memos were written summarizing the meetings. Exhibits 1003, 1004, 1005, and 1009 are copies of memos written by Campana between August 16, and October 9, 1990. Exhibit 1007 is a memo written by A. Andros dated November 1, 1990. Each of these memos discusses meetings with AT&T. The detail of what transpired during the meetings indicates that developing a business relationship with AT&T was important. *See, e.g.*, Ex. 1007, 3, titled "The Developing Telefind/AT&T Strategic Alliance."

What we find particularly noteworthy is that none mention e-mail, the central focus of Ex. 1002. Rather, they discuss messaging.

As we understand it, "messaging" is not the same as e-mail and NTP seems to distinguish the two. All of NTP's claims specifically require

sending messages by e-mail to a destination processor. Thus, wirelessly sending non-email messages to a destination processor is not part of the rejected subject matter. NTP notes that wirelessly sending non-email messages, such as stock quote information, to a pager or "paging receiver" is part of the prior art with respect to the claimed subject matter. For example, NTP says that "U.S. Patent No. 5,045,850 . . . reduced to practice before . . . the Campana Patents - describes non-email information being transmitted from a 'page source' . . . ' through the Network to a 'paging receiver." (NTP 1st Supplemental Brief 3:7-10). A paging receiver is a type of destination processor. 10 Thus, messages and e-mail are distinct as far as the rejected subject matter is concerned.

As we noted above, the memos contemporaneous with the October 6, 1990 date of Revision 0 -- those written between August 16 and November 1, 1990, do not mention e-mail. E-mail is not mentioned in any NTP document until a memo dated November 21, 1990, from Campana to Jack Richards. Ex. 1006. After that date, discussion of wireless e-mail is significant in virtually all of NTP's documentary exhibits. See, Exs. 1002, 1008, 1011 – 1018, 1026, and 1030. Those exhibits cover the period November 21, 1990 to March 1, 1991.

In his declaration Campana says that he was the author of Revision 0 and that only two significant changes were made in preparing Revision 2 (Ex. 1002). Neither was identified as adding a reference to e-mail. Thus,

The destination of the message is the paging receiver. Patent 5,045,850, e.g., col. 4, 11. 40-44. Patent 5,045,850 says that the preferred paging receivers are described in a number of patents incorporated by reference including 4,857,915. Patent 5,045,850 col. 11, Il. 25-27. Figure 3 and corresponding text of the 915 patent at col. 14:28-32, show that the paging receiver is a processor.

Campana implicitly says that Revision 0, like Ex. 1002, was directed to e-mail integration into the Telefind wireless paging system.

Exhibit 1002, as well as the other documents referenced above, show the importance of creating a business relation ship with AT&T and the significance of wireless e-mail in creating that relationship. The reference to the AT&T e-mail entry screen and help commands in Ex. 1002 at 17-19 reflects this importance. In light of the importance of the development of a relationship with AT&T, the failure of the memos written about the time Campana says he wrote Revision 0 (Exs. 1003-1005, 1007 and 1009) is inconsistent with his testimony on the content of Revision 0. Had Revision 0 included the reference to wireless e-mail as implied by Campana's testimony, we think that wireless e-mail would have been a significant part of the discussions with AT&T and reflected in the memos authored about the same time, as it was in subsequent memos.

(b) Campana's Interest and the time of his declaration
Campana's declaration on the content of Revision 0 is problematic for
two additional reasons: (1) Campana's strong interest in the outcome of this
reexamination and (2) the long period of time between the events to which
he testifies and the date of his declaration and testimony.

Campana is an inventor. As a general proposition an inventor's testimony about the facts of conception and actual reduction to practice of their invention must be supported by more than the inventor's bare testimony. This is reflected in the requirement of § 1.131(b) that the inventor's declaration must include "[o]riginal exhibits of drawings or records, or photocopies thereof, must accompany and form part of the

affidavit or declaration or their absence must be satisfactorily explained." It is also reflected in the requirement that proof of conception requires objective evidence of what the inventor has disclosed to others. *Jolley*, 308 F.3d at 1323.

Additionally, at the time of his declaration Campana was also the Vice President and one of two board members of NTP. NTP is a patent holding company whose principal assets include the patents involved in these reexaminations. The result of these proceeding may be cancellation of NTP's patent claims and loss of its assets. Thus, Campana had a significant interest in the outcome of the reexamination.

A witness' interest is important in determining the weight to be given declaration evidence submitted during ex parte patent examination. *Accord, Pargon Podiatry Lab., Inc. v. KLM Lab., Inc.*, 984 F.2d 1182, 1191 (Fed. Cir. 1993) (Holding inequitable conduct resulted from the failure to disclose to the examiner that the declarants who testified supporting patentability had a significant financial stake in the assignee of the invention.); *Refac Int'l, Ltd. v. Lotus Development Corp.*, 81 F.3d 1576, 1582 (Fed. Cir. 1996) (holding that applicant committed inequitable conduct in withholding information on the inventor's significant prior connections with the affiants - the prior connection was considered material in deciding the weight to be given affidavits supporting the patentability of the claims).

Campana's interest in the outcome of the reexamination is particularly important given the length of time that has passed between the events and the testimony on those events. Campana's declaration (Ex. 1001) and trial testimony (Ex. 1043) were given over twelve years after the alleged dates of

conception and actual reduction to practice. Because of the long period time, we think his recollections on what was done on specific dates and the content of Revision 0 are unreliable and of little probative value. The passage of a long period of time between the event and the testimony on the event may adversely effect the weight of the testimony. The Barbed Wire Patent, 143 U.S. 275, 289 (1892) (After a lapse of twenty-five years it is highly improbable that any witness who saw the barbed wire for a single day would be able to describe it accurately); Morgan v. Daniels, 153 U.S. 120, 127-129 (1894) (testimony on the existence of drawings showing conception of the invention more than eight years after the alleged creation of the drawings "is not of a character to carry great weight."); Woodland Trust v. Flowertree Nursery Inc., 148 F.3d 1368, 1369 (Fed. Cir. 1998) (The relationship of the witnesses and the fact that the events to which they testified occurred over twenty years ago were insufficient to prove prior use of the invention); In re Lippold, 150 F.2d 714, 717 (CCPA 1945) (Affirming the decision of the Office declining to credit affidavit testimony submitted under Rule 75 (a predecessor to § 1.131) that many years before the witnesses observed a machine operated in a way and that was said to be constructed in accordance with the specifications of a certain application or patent.)

NTP argues that under the correct legal standard, the Board is required to accept Campana's sworn testimony. In other words, according to NTP, the board may not weigh the strength of the evidence presented but rather must simply accept all of its sworn testimony. (2nd Supplemental Brief 3-5).

In making this argument NTP misconstrues the functions of this board in reviewing adverse decisions of examiners on patentability. In evaluating examiners' decisions, this Board not only acts to review the correctness of the examiner's legal conclusions, but acts as trier of fact. As a trier of fact, the Board has broad discretion as to the weight to give to declarations offered in the course of prosecution. In re American Academy of Science Tech Center, 367 F.3d 1359, 1369 (Fed. Cir. 2004); see also Velander v. Garner, 348 F.3d 1359, 1371 (Fed. Cir. 2003) ("[A]ccord[ing] little weight to broad conclusory statements [in expert testimony before the Board] that it determined were unsupported by corroborating references [was] within the discretion of the trier of fact to give each item of evidence such weight as it feels appropriate."); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 294 (Fed. Cir. 1985) ("Opinion testimony rendered by experts must be given consideration, and while not controlling, generally is entitled to some weight. Lack of factual support for expert opinion going to factual determinations, however, may render the testimony of little probative value in a validity determination." (citations omitted)). Contrary to NTP assertions, the board is entitled to weigh the evidentiary value of the declarations, not merely accept, without question, the averments therein made.

Because of the inconsistencies between documents contemporaneous with Revision 0 and the content of Ex. 1002, Campana's interest in the outcome of the proceeding and the twelve years between events and his testimony, we do not credit Campana's testimony as to the content of Revision 0.

(2) Other evidence on the content of Revision 0

NTP directs us to other correspondence said to "corroborate the Revision 0 of the TEI Document." (2nd Supplemental Brief 15-17):

NTP relies on various Campana correspondences between August 1990 and March 1991 (NTP Ex. 1001, 1002, 1004, 1005, 1009, 1012, 1022, 1015, 1016, 1017, 1018) all of which support conception of July 1990, and no later than October 6, 1990.

(2nd Supplemental Brief 15:20 to 16:20). For the most part NTP has not provided an explanation of how each of these references establish the content of Revision 0.

We have reviewed the documents.

Exhibit 1001 is Campana's declaration which we do not credit. Ex. 1002 is Revision 2 of the TEID.

All of the remaining documents except Ex, 1022 relate to efforts to establish a business relationship with AT&T. We have discussed a number of them above. Exhibit 1022 is apparently the results of a patentability search.

Exhibits 1012, 1015-1018 and 1022 are dated between December 5, 1990, and March 13, 1991. We fail to see how they can establish the content of Revision 0 on October 6, 1990. As we noted above, Exs. 1003 – 1005, 1007 and 1009, those closest in time to the Revision 0 date, do not mention sending e-mail. Rather they relate to messaging. Email became the focus of the later documents. In any event, they do not support NTP's argument that Revision 0 and Ex. 1002 were substantially the same.

NTP also specifically directs us to the portion of Campana's declaration (Ex. 1001, ¶ 35) stating that he used Revision 0 to draft a letter dated November 21, 1990. (2nd Supplemental Brief 16:3-5). That letter is of record as Ex. 1006. NTP's only proffered explanation of how the letter supports the content is that Revision 0 "was the only version of the TEI Document available in October-November 1990."

To the extent NTP is attempting to show that Ex. 1006 and the other documents demonstrate that there was a Revision 0, on October 6, 1990, we again note that we have presumed that there was a Revision 0 on October 6, 1990. It is the content of the document on that date, not its existence, that is in question.

We noted Ex. 1006 above and specifically addressed it in our previous decision. (Memorandum Opinion and Order, 22:3-16). We noted that NTP did not provide an explanation of what was in common between the letter and Ex. 1002. We also noted the existence of certain common words and phrases but that the text was not the same. In its 2nd Supplemental Brief, NTP asserts that the letter supports the contents of Revision 0. Yet, our review of the content of Exs. 1002 and 1006 shows they are substantially different. NTP again provides no explanation of how the contents of the letter establishes the content of Revision 0.

We have again reviewed the letter without guidance from NTP and remain of the view that the content of the Revision 0 document can not be gleaned from the letter. The letter appears to be a summary report of meetings with various divisions of AT&T and the efforts to develop a business relationship with them. The letter also appears to relate to a

wireless modem that could be attached to a laptop computer. The letter discloses little technical content relating to the rejected subject matter and actually appears to include substantially less technical content than Ex. 1002. To the extent that NTP urges that the content of Revision 0 is revealed in the November 21, 1990, letter (Ex. 1006), the lack of technical content seems to suggest that substantial information was added by the revisions after the completion of the letter. Ex. 1006 provides little that is useful in establishing the content of Revision 0.

NTP also relies on the patent application preparation process said to have begun in November 1990 along with the declaration Donald Stout to establish the content of Revision 0. (2nd Supplemental Brief 17-18 and 25). Specifically, NTP argues that Campana contacted his patent attorney Donald Stout in November 1990, described embodiments of the invention to Stout, that Stout initiated a patentability search based on the November 1990 disclosures and prepared a patentability report dated December 4, 1990. NTP then argues that Revision 0 was the only version in existence at the time that the application process began and must have been the one used by Stout. (2nd Supplemental Brief 17-18).

NTP has not explained how any of the documents and testimony related to the preparation of Application 07/702,319 establish what was or was not described in Revision 0. Stout testifies that he believes Ex. 1002¹¹ was used as the disclosure document to prepare the applications. Ex. 1025,

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Stout's testimony refers to an "Exhibit 2". Stout's Exhibit 2 is a copy of the Telefind Email Integration Document. It was resubmitted as Exs. 1002 and 1027. (Memorandum Opinion and Order, 11). The order for rebriefing on antedation required that the exhibits be sequentially renumbered. Order – Request for Further Briefing, mailed November 6, 2008, p. 7.

¶ 4. However, Ex. 1002 bears a "Revision 1" date of March 1, 1991 and a "Revision 2" date of April 9, 1991. Exhibit 1002 is Revision 2. Thus, Exhibit 1002 did not exist in November, 1990, when Stout began the application process. Assuming that Stout's testimony was that he believed he used Revision 0 as the disclosure document, he does not testify on the content of Revision 0.

The search results (Ex. 1022) referred to in Stout's testimony shed little light on the content of Revision 0. To the extent the search results might reflect what Stout was searching, that search was apparently not based solely on Revision 0. It was apparently also based upon the additional embodiments described to Stout by Campana. (2nd Supplemental Brief 17:17-18). Thus, the search results are of little value as indicating the content of Revision 0. In any event, how the search results might inform the content of revision 0 is not explained.

Lastly, with respect to the preparation of Application 07/702,319, we note that the disclosure of Application 07/702,319, filed on May 20, 1991, is very detailed in technical content –content apparently necessary to reduce the claimed subject matter practice without undue experimentation. The level of technical detail in the application, contrasts with the substantially less technical detail in Ex. 1002 as of April 9, 1991. The level of technical detail in the application compared with that in Ex. 1002 at least suggests that development of the subject matter had been ongoing and was in a state of flux up to the time that Application 07/702,319 was filed on May 20, 1991.

The documents and testimony on the preparation of the 07/702,319, application provides little insight as to the content of Revision 0.

NTP argues that certain demonstrations and alleged actual reductions to practice between August and November 1990 confirm the content of Revision 0. (2nd Supplemental Brief 18:15 to 23:14). Specifically, NTP argues that the August and September 1990 demonstrations to AT&T, the October 26, 1990, Safari laptop demonstration and the November 1990 Comdex demonstration, support the content of Revision 0. (2nd Supplemental Brief 20:9-12; 22:5-9; 23:7-12). NTP directs us to a long list of Exhibits and argues that the content of the exhibits demonstrates what was detailed in Revision 0. (2nd Supplemental Brief 19:7 to 20:6). NTP's only explanation of how these purported demonstrations show the content of Revision 0 is that the demonstration of a working wireless e-mail system proves that the system must have been conceived prior to the date of the demonstrations and therefore confirms the content of Revision 0. (2nd Supplemental Brief 20:7-12). The exhibits are said to address implementations of technology embodied in Revision 0. (2nd Supplemental Brief 19:7-16).

NTP has not explained how the exhibits demonstrate what technology was actually described in Revision 0. We have reviewed the referenced exhibits and fail to see how they establish the content of Revision 0. For the most part, the exhibits relate to development of a business relationship with AT&T and provide little detail on exactly what was demonstrated.

NTP specifically argues that the Safari laptop computer demonstration on October 26, 1990, and the Comdex show demonstrations on the Week of November 10, 1990, confirms the substance of Revision 0. (2nd Supplemental Brief 20-22). However, whatever the system was that was

demonstrated on October 26 and the week of November 10, 1990, it is not relevant to proving the content included in Revision 0 earlier on October 6, 1990. As we noted above, the development of NTP's electronic messaging system appeared to be an ongoing process right up to the time the grandparent application, was filed on May 20, 1991. In addition, the documents to which we have been directed fail to describe the details of the system that was actually demonstrated.

NTP also relies on the trial testimony of Murali Narayanan. (2nd Supplemental Brief. 23-24). NTP says that Narayanan's trial testimony. corroborates Campana's testimony regarding the AT&T and Comdex demonstrations. (2nd Supplemental Brief 23:17 to 24:2). NTP also directs us to a memo said to be authored by Narayanan dated November 29, 1990. (2nd Supplemental Brief 23:17 to 24:2). The memo is said to confirm the existence of an operational prototype. Based upon the trial testimony and the memo, NTP argues that to demonstrate the system and its functionality must have been conceived prior to the time of the demonstrations. Therefore, according to NTP, the testimony and memo confirm the existence and substance of Revision 0 on October 6, 1990. (2nd Supplemental Brief 24:15-17).

As we noted above, we have assumed for the purpose of this opinion that a Revision 0 existed as of October 6, 1990. The testimony as to subsequent events and the later memo can not prove the content of Revision 0 as of October 6, 1990. Nonetheless, we have reviewed Narayanan's testimony (Ex. 1044) and the Memo (Ex. 1011). We fail to see how either the testimony or the memo inform the content of Revision 0 as of

its issue date of October 6, 1990, and NTP has not explained how those exhibits prove that content. Narayanan's testimony, at best, establishes that wireless messages, as opposed to e-mail, were received by a laptop during the week of November 10, 1990. Ex. 1044, 1265:12-14, 1266:8-9. This is after the October 6, 1990 date of Revision 0. Additionally, Narayanan's testimony provides no details as to the system and process demonstrated.

Narayanan's memo also fails to provide any insight into the content of Revision 0. Indeed, it indicates that things were in a state of flux. He says that, Telefind "is building a gateway," that Narayanan will be providing the details for the gateway to Telefind and that he had "heard that an initial prototype is now operational." Ex. 1011, 1, ¶ 1. The date of the memo is November 29, 1990 long after the Revision 0 date of October 6, 1990. The memo simply provides no details from which the content of Revision 0 on October 6, 1990, can be determined.

NTP argues that the declaration of William White, supports NTP's position on the substance of Revision 0. (2nd Supplemental Brief 26:11-17). We have reviewed Mr. White's declaration (Ex. 1031). We do not see where Mr. White testifies on the content of Revision 0, or indeed on any version of the Telefind Email Integration Document (Ex. 1002). Again we fail to see how this testimony sheds any light on the content of Revision 0.

NTP relies on the testimony of Michael Ponschke, another of the inventor's, as corroborating "the email integration system description as it would have been available in Revision 0 of the TEI Document" (2nd Supplemental Brief 28:2-4). Part of his testimony is of record as Ex. 1040. We carefully reviewed the referenced portions and do not see any testimony

on Revision 0 or the TEI Document. Nor do we see how his testimony provides any information on the content of Revision 0.

Thelen, another inventor testified about Revision 0. NTP relies on his trial testimony (Ex. 1039) as establishing the content of Revision 0. (2nd Supplemental Brief 27:8-13). We have reviewed Ex. 1039 and can not locate, and have not been told, where he testifies on the content of Revision 0. He does testify on the meaning of the phrase "Revision 0," speculating that it "[p]robably [was] the first working version" and that he did not recall drafting anything else. Ex. 1039, 84:13 – 84:18. Thelen is listed as the author of the "Better Basic' Driver" section of Ex. 1002. Ex. 1002, p. 11. That section lists a Revision 0 date of October 6, 1990, and a Revision 1 date of April 9, 1991. Thelen does not explain what was added or deleted by the revision on April 9, 1991.

NTP also relies on Thelen's declaration (Ex. 1047) submitted in response to our earlier opinion. (2nd Supplemental Brief 31:20 to 32:5). Thelen testifies that he read Campana's reconstruction of the contents of Revision 0. He goes on to state his belief that the reconstruction was an accurate description of what they were working on in October 1990 and that by October 6, 1990, they had conceived the system described in pages 1-4 of Ex. 1002 with two exceptions. Ex. 1047, 4, ¶ 15.

Thelen's declaration is not enlightening on the content of Revision 0. Revision 0 is not part of the record on appeal. The only "TEI Document" of record is not Revision 0. It is Ex. 1002 which is the later Revision 2. Thelen does not say that he had any recollection of the content of Revision 0. And while he says Ex. 1002 describes what they were "working on" by

October 1990, his general recollections of what they were "working on" some eighteen years later, do not reliably establish what was actually described in Revision 0. Thelen's referenced testimony does not credibly establish the content of Revision 0 on October 6, 1990.

NTP, in a number of places in the 2nd Supplemental Brief mischaracterizes our position on the evidence relating to the date attributable to Ex. 1002. NTP asserts that we found that there was "no evidence to attribute the earlier October 6, 1990, date to the description of the email integration system of the TEI Document." (2nd Supplemental Brief 32:9-12). NTP also says that our decision was "based on a premise that NTP has no physical evidence that is dated prior to October 29, 1990, that corroborates the content of the TEI document..." (2nd Supplemental Brief 40: 1-3).

We did not hold that there was "no evidence" or no "physical evidence." We evaluated and weighed the evidence presented relating to the content of Revision 0 and found that evidence insufficient to establish its content. See Mem. Op. and Order, p. 19, l. 18 - p. 23, l. 13. We said:

[T]he precise content of Revision 0 is critical for establishing conception. We will decline in view of the facts of these cases to credit 12-year old testimony about the content of a document which is over 12 years old.

In declining to credit the Campana testimony we have not overlooked the Campana testimony that the "substance of the [Revision. 0] document is confirmed by several different and independent indicia."

Mem. Op. and Order, p. 20, l. 27 – p. 21, l. 6. We then discussed those other indicia including documents dated between July and October 6, 1990. Mem. Op. and Order, p. 21, l. 7 – p. 22, l. 16 and p. 23, l. 11-13. Thus, we neither held that there was "no evidence" nor based the decision on upon a premise

that NTP presented no physical evidence dated prior to October 29, 1990. And NTP has not identified where in the record we did so. Our decision on the date attributable to Ex. 1002 is not the result of NTP providing no evidence. Rather, NTP's submitted evidence is insufficient to credibly prove the content of Revision 0 as of October 6, 1990.

NTP has failed to prove the content of Revision 0 as of October 6, 1990. Ex. 1002, which is dated April 9, 1991, can not establish conception or actual reduction to practice prior to that date.

2. Campana's Declaration and Trial Testimony – Exhibits 1001 and 1043

We have also reviewed the referenced portions of Campana's declaration and trial testimony. *E.g.*, 1st Supplemental Brief, p. 25, ll. 10-13 (relating to Claim 1) referring to DF's 6, 8, 9, 17, 21, 27, 35, 44, 45, 47, 52, 59, and 99-100. We do not credit his testimony as to the dates because of his interest in the outcome of the reexamination and the length of time between the events and his declaration and testimony on those events. We detailed our explanation on his interest and the amount of time above in discussing Revision 0.

3. Patent 5,436,960

NTP also relies on certain portions of U.S. Patent 5,436,960, including Figures 2, 10 and 11 thereof, to prove conception or actual reduction to practice.

The '960 patent issued from Application 07/702,939, filed May 21, 1990. That application is the first in a chain of applications filed by NTP or its predecessors relating to RF transmission of e-mail. The '960 patent is the

grandparent of Patent 5,819,172, involved in this reexamination. The written description and drawings of both patents are the said to be the same. NTP specifically relies on the text appearing at 24:14-28 and Figure 11 of the '960 patent. (1st Supplemental Brief 10, DF 41).

The effective date of the '960 patent is May 20, 1991. Its disclosure is evidence of conception and constructive reduction to practice of what is disclosed therein no earlier than that date. Thus, the patent is simply not relevant to proving what was in the inventors mind or what was actually reduced to practice prior to October 29, 1990, effective date of the references.

4. Patents 5,045,850 and 4,870,410

NTP also relies on Patents 5,045,850 and 4,870,410. The disclosures of these patents are said to be incorporated by reference in the disclosures of the Campana patents and are apparently prior art as to the claimed subject matter. (1st Supplemental Brief 3, \P 6 and \P 10; 11, \P 44). Both appear to be to describe wirelessly sending non-email messages where the destination processor is a pager device rather than a computer. (1st Supplemental Brief 3, \P 6).

Since neither relates to sending e-mail, we fail to see how they demonstrate conception or actual reduction to practice of wirelessly sending e-mail prior to October 29, 1990. In any event, to the extent the patents have relevance with respect to the rejected subject matter, i.e., wireless e-mail, they only provide evidence of conception and constructive reduction to practice as of the effective filing date of the application into which they were incorporated, May 20, 1990.

5. The August, September and October 1990 demonstrations

In addition to the facts and evidence related to wirelessly transmitting e-mail that NTP referred us to in its element-by-element analysis, we have also considered the evidence related to the alleged demonstrations in August – October, 1990. (2nd Supplemental Brief 18-22). The evidence to which we were directed does not establish that e-mail was wirelessly sent on those dates.

NTP directs us to the following exhibits: specific portions of Campana's declaration (Ex. 1001); Ex. 1003 at 1-2; Ex. 1004 at 2; Ex. 1005 at 2; Ex. 1006 at 1; Ex. 1007 at 1-2; Ex. 1009; Ex. 1034 at 176:l0-177:23, 210:25-211:7; Ex. 1040 at 97:19-98:19, 99:7-102:9, 103:5-104:7; specific portions of Campana's Trial Testimony (Ex. 1043); and Ex. 1045 at 1403:12-1405:14.

Exhibits 1001 and 1043 are Campana's declaration and Trial testimony which we do not credit.

Exhibits 1003-1005, 1007 and 1009 are memos dated between August 16, 1990 and November 1, 1990. We discussed these above with respect to the content of Revision 0. As we there noted, they do not refer to sending email, rather they relate to wireless paging. For example, Ex. 1007, a memo describing a meeting with the AT&T Portable Computer Group on October 26, says:

The purpose of the meeting (at their request) was to demonstrate the Telefind Messager (pager) for use as a wireless modern to download data and messages into the AT&T portable computer. The interface was developed by ESA-Chicago using the Telefind technology at the

request of Mr. Murali Narayanan of Bell Labs.

Ex. 1007, p. 1.

Exs. 1003-1005, 1007 and 1009 are essentially contemporaneous with the demonstrations said to have occurred in August to October, 1990. Yet wirelessly sending e-mail is simply not mentioned. These memos do not establish that e-mail messages were sent during the demonstrations.

Exhibits 1034 is a portion of Campana's deposition testimony from the *NTP v. RIM* litigation. Exhibits 1040 and 1045 are portions of the deposition and trial testimony, respectively, of Michael Ponschke, another of the inventors, also from that litigation.

We do not credit Campana's testimony for the reasons we have stated above. However, it is noteworthy that in testifying about the October 26, 1990, demonstration, Campana was not asked about sending e-mail. He was asked about pager messages:

Do you recall a meeting in New Jersey on October 26th, 1990 of which the Telefind pager was used to download messages into an AT&T portable computer?

Ex. 1034, 176:10-13. He answered:

I believe that was the date that it was demonstrated to AT&T in New Jersey.

Ex. 1034, 176:15-16. Thus, this portion of his deposition does not support NTP's position that wireless e-mail was demonstrated on that date. The other referenced portion of his deposition was directed to the interface between the AT&T mail system and the Telefind system. While he said he believed the interface was working in early October (of 1990), he did not say it was actually used to send e-mail, rather than non-email pager messages.

At best, Campana's deposition testimony, to the extent it can be credited, is ambiguous about sending wireless e-mail at the October 26, 1990 demonstration.

At his deposition, Michael Ponschke testified about attending the meeting in New Jersey on October 26, 1990. He testified that Telefind's "paging device" was demonstrated and that e-mail messages were sent through the devices and displayed on a laptop computer. Ex. 1040, 98:2-16, 101:11-22. However, later, at trial, he clarified that he misspoke about sending e-mail. What was demonstrated was messaging, not e-mail:

Let me clarify or explain that, what I said on that tape, I apparently misspoke, that we did not demonstrate e-mail. We demonstrated messaging. Like I said, everything was happening so fast that at one time we did have e-mail, but after reviewing documents and dates and memos that I wrote myself, that we could not have demonstrated e-mail.

Ex. 1045, 1404:20 to 1405:1. His testimony is consistent with Campana's memos and other documentary evidence dated between August 16 and November 19, 1990, all of which discuss messaging, not e-mail.

We have also reviewed Thelen's declaration (Ex. 1047) submitted in response to our earlier opinion. Thelen is a named inventor. At the time of his declaration he was a paid consultant "regarding any legal matters which NTP may be involved." Ex. 1047, ¶¶ 4-5. He says that between 1990 and 1991 he was working on wirelessly transmitting e-mail originated from a processor having an e-mail application to a destination computer. Ex. 1047, ¶ 9. He was responsible for developing software to interface Telefind's paging device with a computer. Ex. 1047, ¶ 11. He testifies that he,

Campana and Ponschke conceived of a system for transmitting e-mail over a wireless network to a pager and extracting the e-mail from the pager to a computer. Ex. 1047, ¶ 34. He says that no later than October 6, 1990, they

had an operational extraction program which was executed on a destination processor as identified in Fig. 10 of our Patents for extracting the email from memory of the Telefind Messager pager. The email was sent from an originating processor in an email system, such as shown in Fig. 8 of the Patents through an interface switch 204 to the Telefind Network and then to the Telefind Messager from which pager an email was extracted into the destination processor such as the AT&T Safari prototype laptop.

Ex. 1047, 10 ¶ 35. To support his declaration, he relies on data from diskettes said to be backups of software related to the development of the BetterBASIC driver for the pager to computer interface. Ex. 1047, ¶¶ 16-33. The diskettes include files said to be dated October 5, 8, and 12, 1990, and November 14, 1990. Ex. 1047, 9 ¶ 33. He goes on to testify that the work he did during that time period was for a Telefind Messager pager operating in the Telefind network and connected to a laptop computer. Ex. 1047, ¶ 40. He further testifies that, without specifying a date, that an e-mail was originated by a computer in the AT&T mail system, sent through an interface switch into Telefind's wireless network, delivered to a Telefind pager and the software extracted the e-mail into the laptop. He says that the

pager received email that originated at the AT&T email system by someone at ESA using a modem to call the AT&T brand 3B2 computer which was located at Telefind's Coral Gables Florida headquarters to originate an email, as illustrated in Fig. 8 of the Patents. The email was then transmitted through an interface switch 302 also

located at Coral Gables to a switch of the Telefind Network and ultimately delivered by the Telefind Network to the Telefind Messager, at which point both my or Michael Ponschke's software (running on the prototype Safari laptop computer) would extract email from the Messager through the Messager serial port (such as on page 15 of the Telefind E-Mail Integration) and into the prototype AT&T Safari laptop that AT&T had provided to ESA. The email application software resident on the AT&T prototype Safari laptop computer displayed the email message on the screen as part of an AT&T email format.

Ex. 1047, ¶ 41.

Thelen also testifies about another program file on the diskettes said to be dated October 23, 1990, apparently in preparation for the October 26, demonstration to AT&T in New Jersey. The program is said to display when messages were received by the pager attached to a laptop computer. Ex. 1047, 17 ¶ 59. According to Thelen, this program showed that the integration of the AT&T e-mail system with the Telefind wireless network had been completed. Ex. 1047, ¶ 60. Thelen concludes his testimony stating that prior to October 23, 1990, he had witnessed the successful operation of the invention to deliver wireless e-mail which originated in the AT&T e-mail system. Ex. 1047, ¶ 61.

We do not credit Thelen's testimony relating to the specific dates in which the events are said to have occurred. Thelen is an inventor and a paid consultant for NTP. His declaration is dated April, 2009, more than eighteen years after the events on which he testifies.

Additionally, Thelen's testimony on sending email appears to be contradicted by Panschke who testified that they demonstrated messaging

rather than e-mail in October, 1990. To the extent Thelen's testimony and Panschke's are inconsistent, we credit Panschke's because it is consistent with the memos written between August 16 and November 1, 1990, which discuss messaging rather than e-mail. *See* Exs. 1003-1005, 1007 and 1009.

NTP's § 1.131 submissions fail to establish that the inventors conceived or actually reduced to practice the claims a system or process, including wirelessly sending e-mail prior to the effective date the references.

C. Conception and actual reduction to practice of sending E-mail messages to the e-mail/RF interface

In addition to transmitting e-mail wirelessly, all of NTP's claims require that the e-mail message be delivered to the e-mail/RF interface either (1) in response to the address of the e-mail/RF interface included in the e-mail as it leaves the originating processor or (2) in response to the destination address. For example, Claim 1 requires that

the electronic mail message originating from the one of the plurality of originating processors includes an address of the one interface . . . with the one of the at least one electronic mail system responding to the address of the one interface to direct the electronic mail message from the one of the plurality of originating processors to the one interface . . . "

(Brief 170). Claim 213 requires that

the [e-mail/RF] interface being a destination in the electronic mail system to which electronic mail messages are delivered by the electronic mail system in response to an address of the destination in the electronic mail messages

NTP relies on "e.g., Email sent from AT&T Processor in AT&T Email System to Interface switch on the 3B2-Hub switch; various methods

for addressing emails" and "e.g., various methods of addressing emails" (1st Supplemental Brief 25:5-7 and 44:20-21). We are directed to proposed facts DFs 28, 38-41, 58-63 and 99-100 as support. (1st Supplemental Brief 25:5-8 and 44:18-21). Virtually identical references are made with respect to each of the independent claims.

DFs 28, 38-41, 58-63 and 99-100 refer us to specific portions of the following documents and testimony: (1) Campana Declaration (Ex. 1001), ¶¶ 13, 15, 16 and 31; (2) Campana's trial testimony (Ex. 1043) at 148:22-149:17; 152:6-156:8, 159:15-161:12; and 167:12-25; (3) The Telefind Integration Document (Ex. 1002) p. 2, ¶ 5; p. 3, ¶ 1-3, p. 4, and p. 18-19; (4) the "Campana Patents" specifically Patent 5,436,960 at 24:41-47 and Figure 11; (5) pages 2-3 of a letter dated August 31, 1990 from Campana to Jack Richards (Ex. 1004).

Exs. 1001 and 1043 are Campana's declaration and trial testimony. We do not credit his declaration and trial testimony, for the reasons we have detailed above.

As we also explained above, the Telefind Email Integration document (Ex. 1002) is dated after the effective date of the references. It is not evidence of what was conceived or reduced to practice prior to the date of the references.

The effective date of Patent 5,436,960 patent is May 20, 1991. Its disclosure is evidence of conception and constructive reduction to practice of what is disclosed therein no earlier than that date. Thus, the patent is simply not relevant to proving what was in the inventors mind or what was actually reduced to practice prior to October 29, 1990, effective date of the

references. Thus, the patent is simply not relevant to proving what was in the inventors mind or what was actually reduced to practice prior to October 29, 1990, effective date of the references.

Ex. 1004 is a memo from Campana to Jack Richards dated August 31, 1990. It is dated prior to the effective date of the references.

We have reviewed the memo with respect to showing the subject matter of the rejected claims, particularly relating to the claim requirements that the e-mail message be sent to the e-mail/RF interface in response to either the interface address included in the e-mail as it leaves the processor or in response to the destination address. However, there is nothing we can find in the document which is directed to the details of the e-mail or even any detail relating to the system or process for sending e-mail. The letter is titled "AT&T Status update." Ex. 1004, p. 1. It appears to be a summary of the activities of various business divisions of AT&T relating to possible joint ventures or an acquisition of Telefind by one of the groups. It provides little information relating to the details of what was conceived or actually reduced to practice. It provides no information relating to how the e/mail is sent to the e-mail/RF interface.

We have also reviewed Thelen's declaration (Ex. 1047) for the light it might shed on the inclusion in the e-mail of the address of the e-mail/RF interface. We do not credit his testimony for the reasons we stated above.

In any event, for the most part, Thelen testifies about the software used by the recipient computer to download messages from the RF receiver attached to the destination laptop. Thelen's declaration provides little insight on how the e-mail was sent to the interface. The portions of the TEI

document he references do not mention including the interface address as part of the e-mail or that the e-mail is sent to the interface in response to the destination address. Relying on the patent disclosure, he says the e-mail was transmitted "through an interface switch 302 [sic, 304]." He does not, however, testify that that e-mail included the address of the e-mail/RF interface when it left the originating processor or that the e-mail was sent in response to the address of the destination processor. To the extent he is relying on the additional disclosure in the Campana patents to show conception or actual reduction to practice of a system or process including these elements, the patents can only corroborate conception and reduction to practice no earlier than May 20, 1991.

NTP has failed to establish conception and actual reduction to practice of a system or a process wherein the e-mail is sent to the e-mail/RF interface in response to either the address of the interface included in the e-mail as it leaves the originating processor or in response to the destination address.

- D. Additional Points Raised by NTP
- 1. Stout Declaration Ex. 1064

As part of its submissions in response to our decision entered February 18, 2009, NTP submitted Ex. 1064 a document titled "Declaration of Donald Stout as President of Patent Owner under 37 C.F.R. § 1.131 Regarding Further Conception and Reduction To Practice Evidence"

We decline to consider the substance of this document. A review of the document shows that, for the most part, it is a duplication of NTP's 1st Supplemental Brief updated to refer to the 2nd Thelen declaration (Ex. 1047). It repeats, essentially verbatim, the proposed fact findings found at

pp. 2-23 and the "claim mappings" found at pp. 24-49 of the 1st Supplemental Brief. Thus, Ex. 1064 is actually an unauthorized additional brief.

The purpose of a § 1.131 declaration is to present a "showing of facts . . . to establish reduction to practice . . . or conception of the invention prior to the effective date of the reference" 37 C.F.R. § 1.131(b). Stouts affirmation that statements made of his own knowledge are true, and all statements made on information and belief are believed to be true on the final page of Ex. 1064 does not convert the suggested fact findings, fact interpretations and the arguments in the 1st Supplemental Brief into factual testimony. His "testimony" is predominately surmise, conjecture, inference and opinion. While arguably appropriate as part of a brief explaining how a collection of asserted facts supports granting the requested relief from the tribunal, it is inappropriate as a "showing of facts. . . to establish reduction to practice . . . or conception of the invention prior to the effective date of the reference . . . " as required by § 1.131. We decline to consider it.

Even if we considered the declaration, it would be entitled to little, if any weight. It appears that Stout has no personal knowledge of facts related to alleged conception and actual reduction to practice prior to the October 29, 1990, date of the references. Stout's 1st declaration (Ex. 1025) does not describe any events that occurred prior to October 29, 1990. He also does not attest to involvement in preparing the applications that became the patents undergoing reexamination prior to November 1990 (Ex. 1025, p. 2, ¶ 4). Thus Stout does not appear to be in a position

to provide factual testimony relating to conception and actual reduction to practice prior to October 29, 1990.

Additionally, to the extent that Stout, as a patent attorney (Ex. 1025, 2 ¶ 3), is attempting to give opinion testimony as a patent law expert on the legal conclusions of conception and actual reduction to practice, we are not required to give any weight to his opinions on legal issues. *Cable Electric Products, Inc. v. Genmark, Inc.*, 770 F.2d 1015, 1025. (Fed. Cir. 1985). Stout's legal opinions fall far short of providing a "showing of facts" sufficient to prove conception or actual reduction to practice of the "of the subject matter of the rejected claim[s]."

Further, Stout is hardly a disinterested witness. His declaration (Ex. 1064) notes at the time the declaration was submitted he was the president of NTP. Ex. 1065, p. 2, ll. 2-4. He and his immediate family, collectively, are apparently NTP's largest stockholders. Ex. 1025, 1 ¶ 1. We understand that NTP is a patent holding company and that the patents undergoing reexamination are substantial assets of that company. Because Stout has a very strong interest in the outcome of these reexamination proceedings, we also do not give much credit to his testimony.

2. NTP's Terminology Mappings

As it did in its 1st Supplemental Brief, NTP refers to what it calls the "Terminology Mappings" found in Campana's declaration. (2nd Supplemental Reply Brief 29-31). NTP says this table was an attempt to correlate "terminology used in the patent claims with terminology used in the TEI document" (2nd Supplemental Brief 29-30).

NTP's "correlation" is simply not relevant or helpful. NTP's burden in making out its § 1.131 case is "to establish invention of the <u>subject matter of the rejected claim</u> prior to the effective date of the reference"

37 C.F.R. § 1.131 (emphasis added). The table correlating language of its disclosure with certain selected language from Ex. 1002 does not establish that the subject matter of the rejected claims is present in Ex. 1002. The rejected claims are directed to systems and processes having specific components and steps that must be interconnected or interrelated in the manner required by the claims. As we noted in our earlier opinion:

[i]t is . . . not helpful that the Telefind Integration Document may use some of the same terms as those used in NTP's patent disclosure. It is the functions performed by each and the interactions and co-operations between components that are important, not just whether some of the same terms are used in both documents.

(Mem. Op. 24:25 to 25:2).

The claims require functions and interactions not identified in the table. Thus, for example, Claim 1 requires that the e-mail message generated by an originating processor include the address of the e-mail/RF interface. The table does not mention this interface address. Rather the table refers generically to "Addressing of Email." Ex. 1001, p. 18. The table specifically identifies p. 3, \P 1-3, and pp. 18-19 as the relevant portions of Ex. 1002.

We have reviewed those portions and fail to see where Ex. 1002 discloses the limitation that the e-mail coming from the originating processor includes the address of the interface between the e-mail system

and the RF system. Paragraph 1 on page 3 of Ex. 1002, bears the title "All Entry E-Mail Network Configuration." It describes purported benefits and capabilities of a wireless e-mail system but does not mention the interface address. Paragraph 2 says that the method of entry into existing e-mail services will be emulated and provides an example where the user enters the recipients name and composes the message. The E-mail software derives the recipient's destination address from the name. Only the final recipient's address is mentioned, not the address of the interface. Paragraph 3 on page 3, concerns convenience to the e-mail user. It notes that e-mail will be received in the format in which they were originally composed format and that no new e-mail software will be necessary. Translation into the Telefind format will be done by the recipient's network switch. Again no mention is made of including the interface address in the originating e-mail. Pages 18 and 19 appear to relate to the AT&T e-mail system entry screen and methods of entering e-mail into that system. Page 18 includes the instruction "Enter 8 digit Telefind ID code and message " To the extent the Telefind ID code represents an address rather than, for example, an authorization code (see 1st Supplemental Brief, p. 4, Proposed Fact 11), that code apparently is the address of the Messager radio receiver that is to be attached to the computer by means of the RS-232 serial interface. It is not the address of the interface between the e-mail system and radio transmission system.

5. Conclusion

We have reviewed NTP's arguments and its voluminous evidence. The evidence does not establish, by a preponderance of the evidence, that the inventors conceived or actually reduced to practice a system (1)

wirelessly sending e-mail, as opposed to messages, to a destination processor and (2) sending e-mail to the e-mail/RF interface in response to either (a) the address of that interface included in the e-mail as it left the originating processor or (b) the destination address. Element (1) and one alternative of element (2) are required by each rejected claim. Nor has NTP established that the evidence of conception and reduction to practice was sufficient to have rendered the claimed invention obvious over that evidence. NTP has failed to meet its burden of proving prior invention of the subject matter of the rejected claims.

Note further that NTP's antedating efforts are directed only to the independent claims. Even assuming that the prior art sought to be antedated have been antedated with respect to the subject matter of the independent claims, it does not automatically follow that the same is true with regard to the subject matter of the dependent claims.

H. Rejection of claims 295-317 under35 U.S.C. § 112, first paragraph, as lacking written description in the specification

The Examiner finally rejected claims 295-317 under 35 U.S.C. § 112, first paragraph, as lacking written description support in the specification.

The rejection of claims 297-317 under 35 U.S.C. § 112, first paragraph, for lack of written description in the specification is *affirmed*.

The rejection of claims 295 and 296 under 35 U.S.C. § 112, first paragraph, as lacking written description in the specification is *reversed*.

1. <u>Claims 297, 298, 310-316</u>

Claims 298 and 310-316 each depend directly or indirectly from claim 297.

Issue

Has NTP shown that the Examiner incorrectly determined that the specification of the NTP '172 patent does not reasonably convey that the inventors had possession at the time the patent was filed of the generic claim feature that includes deleting the inputted message text and subject description prior to transmitting the electronic mail by an RF system?

Findings of Fact

Claim 297 depends from independent claim 199 and recites as follows:

A method in accordance with claim 199, wherein:

after reception of said electronic mail including said information from an electronic mail system by said processor, information is deleted from the electronic mail prior to transmission by the RF system. (Emphasis added.)

The specification of the NTP '172 patent describes the integration of an electronic mail system with an RF (radio frequency) information transmission network for transmitting electronic mail from an originating processor by RF communication to a destination processor. (NTP '172 patent 17:35-41). As disclosed, electronic mail from an originating processor is transmitted to an interface switch which connects to the RF data transmission network that transmits information to an RF receiver that is connectable to the destination processor. (NTP '172 patent 18:23-30).

The electronic mail system includes a gateway switch which stores information received from an originating processor prior to transmission to the destination processor. (NTP '172 patent 19:20-26). The electronic mail system also includes the interface switch which connects the gateway switch

to the RF information transmission network. (NTP '172 patent 19:30-34).

The specification of the '172 patent describes that certain items are required by electronic mail systems in order to send an electronic message and the common items are (1) identification of the recipient, (2) identification of the sender, (3) a short reference to the subject of the message, and (4) the actual message that is inputted by the sender at the originating processor. (NTP '172 patent 2:63 to 3:15).

The specification of the '172 patent describes several additions to the information originated by the originating processor for sending to the destination processor. First, there is an identification number of the RF receiver. The electronic mail system or the interface switch appends the identification number of the RF receiver to the information that is to be broadcast by radio frequency to the destination processor. (NTP '172 patent 18:50-67). Secondly, there is the address of the interface switch. Either the originating processor or the gateway switch in the electronic mail system adds the address of the interface switch to the initial information originated at the originating processor. (NTP '172 patent 19:36-39; 20:40-42; 20:50-51).

The specification of the NTP '172 patent describes removing the information added by the electronic mail system to the information initially originated by the originating processor. Specifically, the specification states (NTP '172 patent 23:60-64):

The interface switch 304 also removes information added by the electronic mail system 1-N to the information originated by the originating processor A-N from the stored information retrieved from one of the gateway switches 14... (Emphasis added).

Nowhere does the specification describe that any part of the inputted text of the electronic mail message originated at the originating processor or the short reference to the subject of the message would be removed prior to transmission of the message by radio frequency to the RF receiver connecting to a destination processor. In that regard, the Examiner determined that the deleting of information in the electronic mail as is recited in claim 297, including the subject field and any inputted message text, is without written description in the specification of the NTP '172 patent. (Answer 77:20-23).

Principles of Law

To satisfy the written description requirement under 35 U.S.C. § 112, first paragraph, the specification must convey with reasonable clarity to those skilled in the art that as of the filing date of the application the inventor was in possession of the claimed invention. *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64, (Fed.Cir. 1991); *Ralston Purina Co. v. Far-Mar-Co.*, 772 F.2d 1570, 1575, (Fed. Cir. 1985); *see also Pandrol USA, LP v. Airboss Ry. Products, Inc.*, 424 F.3d 1161, 1165 (Fed. Cir. 2005). A disclosure that merely renders the later-claimed invention obvious is not sufficient. *Tronzo v. Biomet, Inc.*, 156 F.3d 1154, 1158 (Fed. Cir. 1998).

Disclosure of a species does not always provide sufficient written description for a broader claim. *In re Curtis*, 354 F.3d 1347, 1356-1357 (Fed. Cir. 2004)("we have never held that in all such cases [disclosure of a species] . . . the claim to a genus is adequately described under § 112, ¶ 1."); *Bilstad v. Wakalopulos*, 386 F.3d 1116, 1124 (Fed. Cir. 2004)("Thus, this court has continued to apply the rule that disclosure of a species may be

sufficient written description support for a later claimed genus including that species."); see also University of California v. Eli Lilly & Co., 119 F.3d 1559, 1568 (Fed. Cir. 1997).

The key to resolving the issue lies in what does the disclosed species tell one with ordinary skill in the art about possession by the inventor of the entire genus. Predictability among species is a factor to be considered. *Bilstad*, 386 F.3d at 1125; *In re Curtis*, 354 F.3d at 1352-53. And so is the question whether the differences between species even matter. *Bilstad*, 386 F.3d at 1124.

Analysis

As described in the specification of the NTP '172 patent, either the originating processor or the gateway switch in the electronic mail system adds the address of the interface switch to the initial information originated at the originating processor. (NTP '172 patent 19:36-39; 20:40-42; 20:50-51). The specification of the NTP '172 patent also describes removing the information added by the electronic mail system to the information initially originated by the originating processor. (NTP '172 patent 23:60-64). As described, the information in the initial message originated at the originating processor is not subject to this removal but only the information subsequently added by the electronic mail system to the original information of the computer mail.

Claim 297, however, requires: "after reception of said electronic mail including said information from an electronic mail system by said processor, information is deleted from the electronic mail prior to transmission by the RF system." With regard to removing information, claim 297 is broader

than the disclosure. The claim encompasses, includes, and covers removing the original information from the electronic mail, which original information was initially entered at the originating processor, such as the inputted text of the message and the short reference to the subject of the inputted text.

Nowhere does the specification of the NTP '172 patent describe that any part of the inputted text of the electronic mail message originated at the originating processor or the short reference to the subject of the message would be removed prior to transmission of the message by radio frequency to the RF receiver connecting to a destination processor. NTP has not shown error in the Examiner's determination that the deleting of information in the electronic mail as is recited in claim 297, including the subject field and any inputted message text, is without written description in the specification.

NTP has not identified any portion of the specification which indicates that any portion of the originally inputted text or the short reference to the subject matter of the message text is removed prior to transmission of the electronic mail by the RF system. In Appendix B attached to NTP's response to Office Action, filed on February 28, 2006, NTP did not cite to any disclosure in the specification which indicates removing original message text from the computer mail that was initially entered at the originating processor. Instead, Appendix B cited to text in the specification including that located in column 23, lines 60-63, which refers to removing information "added" by the electronic mail system to the original information. Contrary to NTP's assertion, its Appendix B does not point out support for the generic feature including removal or deletion of

original message text. The Examiner articulated ample basis to question the sufficiency of the written description with regard to the generic feature.

NTP relies on the principle that sometimes disclosure of a species within a broader genus may be sufficient description to satisfy the written description requirement of 35 U.S.C. § 112, first paragraph, with respect to the broader genus and thus support a claim directed to the genus. But the key is "sometimes." Disclosure of a species does not always provide sufficient written description for a broader claim. *In re Curtis*, 354 F.3d at 1356-1357 ("we have never held that in all such cases [disclosure of a species] . . . the claim to a genus is adequately described under § 112, \P 1."); *Bilstad*, 386 F.3d at 1124 ("Thus, this court has continued to apply the rule that disclosure of a species may be sufficient written description support for a later claimed genus including that species.").

The key lies in what does the disclosed species tell one with ordinary skill in the art about possession by the inventor of the entire genus. Predictability among species is a factor to be considered. *Bilstad*, 386 F.3d at 1125; *In re Curtis*, 354 F.3d at 1352-53. And so is the question whether the differences between species even matters. *Bilstad*, 386 F.3d at 1124. Here, the difference in outcome is stark and the contrast is sharp between the disclosed and the undisclosed species. The information added by the electronic mail system to the originally inputted text and subject matter description of the text help to navigate the electronic mail to the appropriate interface and appropriate recipient and is not the substantive information the sender composed for reading by the recipient. Removing the added information inserted for routing purposes does not shed any light into the

operation of removing the initial message text or the subject field description of the message text or why that is even desirable. Also, it simply cannot be said that whether the initial message text or subject description is deleted does not matter or is inconsequential.

Consideration of both the predictability factor and the consequential significance of the undisclosed species lead to the conclusion that the inventors did not, at the time of filing of the involved patent, have possession of the concept of removing the initial message text or subject matter description of the initially originated electronic mail prior to transmission of the electronic mail by the RF transmission system.

Comparing the removal of initial message text and subject description to removal of subsequently added navigation and routing information yields a very significant conceptual difference and operational distinction.

Predictability between the disclosed and undisclosed species is entirely lacking. NTP also offers nothing persuasive to support the notion that if one with ordinary skill knew to remove the added information inserted for routing purposes then he or she also possessed the idea of removing the original message text of the electronic mail. The unsupported suggestion is suspect and illogical.

With regard to claim 313, NTP further argues (Brief 147:5-10) that the Examiner already admitted that there is sufficient written description in the specification, citing and quoting this statement of the Examiner (Office Action dated August 22, 2006, page 8):

While header addition, deletion, and encoding may be adequately described, the varying of the content includes more

than mere addition, deletion and encoding [of a header]. (Emphasis added.)

The argument is misplaced because it equates header information to substantive message text. The Examiner did not equate header information to substantive inputted message text. No reasonable reading of the above-quoted statement can result in an understanding that the Examiner regarded header information the same as substantive message text. It actually indicates the opposite, that they are not the same.

Claims 313 and 314 include the feature of varying the content of the electronic mail message, which encompasses the original inputted text of the message and subject description of the text. Claim 314 depends from claim 313 and requires "deleting of information from the electronic mail including the originated information." For reasons discussed above, the Examiner's finding of lack of written description is reasonable and supported by the record and NTP has not shown error in that determination.

Conclusion

NTP has failed to show that the Examiner incorrectly determined that the specification of the NTP '172 patent does not reasonably convey that the inventors had possession at the time the patent was filed of the generic claim feature that includes deleting the initially inputted message text and subject description prior to transmitting the electronic mail by an RF system.

2. Claims 299-309 and 317

Claim 299 depends indirectly from independent claim 194. Claims 300-309 and 317 each depend directly or indirectly from claim 299.

Issue

Has NTP shown that the Examiner incorrectly determined that the specification of the NTP '172 patent does not reasonably convey to one with ordinary skill in the art that at the time of filing of the patent the inventors possessed the subject matter of claims 299-309 and 317?

Analysis

Claim 299 further recites a second processor which receives the electronic mail message from the processor transmitting the original electronic mail message. The second processor causes the received message to be transmitted to the RF receiver through the interface and the RF system. Also, the second processor transmits "other information," which other information is from the processor which sent the electronic mail message, to another processor without using the RF system. The dispute centers about the limitation regarding the second processor's sending of "other information" from the processor originating the electronic mail message to still another processor through a wireline and without using the RF system.

The Examiner determined that the source of "other information" as described in NTP's specification is an "additional processor 312, which is connected directly to the interface switch" (Answer 77:28-78:1). According to claim 299, however, the "other information" transmitted by the second processor is from "said processor" which refers back to that processor first set forth in claim 194 which originated the electronic mail message. Thus, the closest description as identified by the Examiner does not support the recited claim feature. Where is written description in the specification for a second processor which transmits "other information"

from the processor which originated the electronic mail? NTP has no response. Note that Appendix B attached to NTP's response to Office Action, filed on February 28, 2006, does not even include an entry for the claim limitation at issue from claim 299, to show where corresponding description exists in NTP's specification. Claims 300-309 and 317 each depend directly or indirectly from claim 299.

Claim 301 further specifies that the second processor is a gateway switch. Claim 317 depends from claim 301. NTP does not point out where corresponding description exists for that further limitation. Note also that there is no entry in Appendix B attached to NTP's response to Office Action, filed on February 28, 2006, for the limitation at issue in claim 301.

Conclusion

NTP has not shown that the Examiner incorrectly determined that the specification of the NTP '172 patent does not reasonably convey to one with ordinary skill in the art that at the time of filing of the patent the inventors possessed the subject matter of claims 299-309 and 317.

3. Claim 309

NTP separately argues the merits of claim 309. We address the separate argument even though NTP has already failed to show that the Examiner incorrectly determined that the specification of the NTP '172 patent does not provide written description for claims 299-309 and 317.

Issue

Has NTP shown that the Examiner incorrectly determined that the specification of the NTP '172 patent does not reasonably convey to one with

ordinary skill in the art that at the time of filing of the patent the inventors possessed the following feature of claim 309 regarding the gateway switch?

initiates transmission of the electronic mail message to a destination processor through the wireline without using the RF system based on at least one of an address of the electronic mail message and the information pre-stored in the memory of the gateway switch.

Has NTP shown that the Examiner incorrectly determined that the specification of the NTP '172 patent does not reasonably convey to one with ordinary skill in the art that at the time of filing of the patent the inventors possessed the claim feature of the gateway switch initiating transmission of an electronic mail message?

Analysis

Claim 309 indirectly depends from independent claim 194, and adds the limitation that the gateway switch optionally (1) initiates transmission of the electronic mail message to the RF receiver through the interface and the RF system based on at least one of an address of the RF receiver or information pre-stored in the memory of the gateway switch, or (2) initiates transmission of the electronic mail message to a destination processor through the wireline without using the RF system based on at least one of an address of the electronic mail message and the information pre-stored in the memory of the gateway switch. The Examiner indicates that the specification of the NTP '172 patent describes the former but not the latter.

It appears that the Examiner has overlooked a pertinent part of the disclosure of the NTP '172 patent. With regard to Figures 1-7, the specification first describes the preexisting prior art in a portion of the

specification labeled as "BACKGROUND ART." (NTP '172 patent 1:48 to 17:34). Then, the specification states (NTP '172 patent 22:6-14):

The integrated system 100 [the invention] differs from the prior art of FIGS. 1-7 in that the originating processor, which may be any of the processors within computing systems #1-#N is provided the option of transmitting electronic mail (information) to at least one destination processor which may be any processor A-N within the processing systems #1-#N by means of an RF information transmission network 302 as described below. (Emphasis added.)

What is described in the specification subsequent to the above-quoted text is an addition to the preexisting system, and provides an option for sending the electronic mail message to an RF information transmission system. The preexisting system, as described in the specification, directs the electronic mail message from the originating processor to the destination processor through a public switch telephone network 12 which uses wired lines. (NTP '172 patent 2:53-62).

The Examiner states that none of the descriptions NTP provided in support of claim 309 refers to determining whether an address is associated with a wireless or wireline device. (Answer 192:18-21). The statement lacks a reasoned analysis of the pertinent portion of the specification quoted above which refers to adding an option relative to the preexisting wirelined system. It may be that the description of providing an option reasonably conveys to one with ordinary skill in the art that the same underlying information is evaluated or used to make the choice on whether to send the electronic mail message via wireline or to an RF transmission system. The Examiner's not accounting for seemingly relevant disclosure undermines the

determination that claim 309 is without adequate written description in the specification. The Examiner has not made out a prima facie case that the claim feature at issue is not described in the specification.

Also, according to the Examiner, the gateway switch described in NTP's specification does not "initiate" transmission of any electronic mail message because all electronic mail messages are really initiated in an originating processor. The Examiner's reading of the claim term "initiate" is unreasonably narrow. Because the gateway switch sends, redirects, or forwards electronic mail messages it has received from an originating processor, it does initiate transmission of an electronic mail message, i.e., when it forwards or redirects the received message. The gateway switch determines when it forwards the electronic mail message. When the message is forwarded, the gateway switch has initiated transmission of the message. In claim 309, the term "initiates" is used with respect to an electronic mail message that is forwarded or redirected by the gateway switch and which is initiated when it leaves the gateway switch, not to a message that is initiated when it is sent from an originating processor at another location. The Examiner's position is unreasonable.

Conclusion

NTP has shown that the Examiner incorrectly determined that the specification of the NTP '172 patent does not reasonably convey to one with ordinary skill in the art that at the time of filing of the patent the inventors possessed the claim feature of claim 309 regarding the gateway switch:

initiates transmission of the electronic mail message to a destination processor through the wireline without using the RF system based on at least one of an address of the electronic mail

message and the information pre-stored in the memory of the gateway switch.

NTP has shown that the Examiner incorrectly determined that the specification of the NTP '172 patent does not reasonably convey to one with ordinary skill in the art that at the time of filing of the patent the inventors possessed the claim feature of the gateway switch initiating transmission of an electronic mail message.

4. Claims 295, 296

Claim 295 depends from independent claim 199. Claim 296 depends from claim 295.

Issue

Has NTP shown that the Examiner incorrectly determined that the specification of the NTP '172 patent does not reasonably convey to one with ordinary skill in the art that at the time of filing of the patent the inventors possessed the subject matter of claims 295 and 296?

Analysis

Claim 295 specifies that other than the processor which sent the electronic mail message, there is a first processor which is not a part of the electronic mail system and which provides a source of "other information" which is not an electronic mail message and that the first processor sends the other information to the RF receiver using the RF system but not using the electronic mail system.

NTP in the Appendix attached to its response to Office Action, filed on February 28, 2006, cited to parts of the specification of NTP's Patent

5,479,472 (NTP '472 patent), ¹² allegedly providing written description support for the claim feature specified in claim 295. The description includes: "The at least one additional processor 312 originates information from outside of any electronic mail system" (NTP '472 patent 23:48-49), and "[t]he hub switch 116 receives the packet from the receiving interface switch 304 and disassembles the packet into information from . . . , or from outside of any electronic mail system from at least one additional processor 312 which is connected directly to interface switch 304" (NTP '472 patent 22:33-40). Thus, additional processor 312 is connected directly to the interface switch 304 and originates information from outside of any electronic mail system.

The Examiner noted (Answer 77:4-5) that in column 23, lines 50-55, the specification of the NTP '472 patent, it is stated that the processor 312 provides:

an address of at least one destination processor in an electronic mail system, such as the name of the user, to receive information transmitted by the RF information transmission system 302 or an identification number of the RF receiver 119 receiving information and transferring the information to the destination processor.

According to the Examiner, if the additional processor provides the address of the destination processor in an email system then the additional processor must be sending information through that electronic mail system, contrary to what is specified in claim 295. The position is speculative and not well

'472 patent. (Answer 77:4-5). Accordingly, we assume that the disclosures are the same.

NTP asserts that the disclosure of the NTP '472 patent is the same as the disclosure of the NTP '172 patent (Response to Office Action, filed February 28, 2006, 158:9-13). The Examiner has not contended otherwise and has cited to the disclosure of the NTP

grounded. The address of the destination processor in an electronic mail system, such as the name of the user at the destination processor, could be needed by the RF information transmission system for RF transmission and reception. Furthermore, the above-quoted text indicates that processor 312 need not provide an address of the destination processor in an email system. Rather, it can provide an identification number of the RF receiver 119. Also, NTP has identified written description which clearly states that additional processor 312 originates information from outside of any electronic mail system. There is no inconsistency between the destination processor's being in an electronic mail system and another processor's sending information to it using an RF information transmission system and not the electronic mail system. The Examiner's position is unpersuasive.

Conclusion

NTP has shown that the Examiner incorrectly determined that the specification of the NTP '172 patent does not reasonably convey to one with ordinary skill in the art that at the time of filing of the patent the inventors possessed the subject matter of claims 295 and 296.

I. Rejection of claims 295-317 under35 U.S.C. § 112, first paragraph, as lacking enabling disclosure in the specification

The rejection of claims 295-317 under 35 U.S.C. § 112, first paragraph, as lacking an enabling disclosure in the specification is *reversed*.

Issue

Has NTP shown that the Examiner erred in concluding that claims 295-317 are unpatentable under 35 U.S.C. § 112, first paragraph, as lacking an enabling disclosure in the specification?

Principles of Law

The written description requirement and the enabling disclosure requirement under 35 U.S.C. § 112, first paragraph, are separate and distinct requirements. In *Vas-Cath Inc. v. Mahurkar*, 935 F.2d at 1563-1564, the Court of Appeals for the Federal Circuit stated:

This court in *Wilder* (and the CCPA before it) clearly recognized, and we hereby reaffirm, that 35 U.S.C. § 112, first paragraph, requires a "written description of the invention" which is separate and distinct from the enablement requirement. The purpose of the "written description" requirement is broader than to merely explain how to "make and use"; the applicant must also convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession *of the invention*. (Emphasis in original).

The test for passing the enabling disclosure requirement under 35 U.S.C. '112, first paragraph, is whether one reasonably skilled in the art could make or use the claimed invention from the disclosed subject matter together with information in the art without undue experimentation. *United States v. Telectronics, Inc.*, 857 F.2d 778, 785 (Fed. Cir. 1988). A disclosure can be enabling even though some experimentation is necessary. *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1384 (Fed. Cir. 1986). The issue is whether the amount of required experimentation is undue. *In re Vaeck*, 947 F.2d 488, 495 (Fed. Cir. 1991); *In re Angstadt*, 537 F.2d 498, 504 (CCPA 1976). The factors suitable for consideration in making the enablement determination include (1) the quantity of experimentation necessary, (2) the amount of direction or guidance presented, (3) the presence or absence of working examples, (4) the nature of the invention, (5)

the state of the prior art, (6) the relative skill of those in the art, (7) the predictability or unpredictability of the art, and (8) the breadth of the claims. *See In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988).

The examiner has the initial burden to establish a reasonable basis to question the enablement provided for the claimed invention. *In re Wright*, 999 F.2d 1557, 1561-1562 (Fed. Cir. 1993).

Analysis

The Examiner explained the basis of the rejection only by specifically discussing claims 295 and 309. (Answer 80:5 to 81:5). We note that no claim depends from claim 309 and only claim 296 depends from claim 295. The limitations of claims 297-308 and 310-317 were not discussed and the Examiner has made no showing as to why claims 297-308 and 310-317 are without an enabling disclosure in the specification.

Even for claims 295, 296, and 309, the Examiner has not demonstrated a prima facie case of lack of enabling disclosure in the specification for the claimed invention. The reasoning provided in support of the rejection reflects a misunderstanding of the enabling disclosure requirement under 35 U.S.C. § 112, first paragraph.

The Examiner's reasoning in support of the assertion of lack of enabling disclosure is essentially based on the rejection of the same claims for lack of written description in the specification. The rationale is essentially that what is claimed is not what is described and in order to modify the disclosed system to provide for what is claimed, one would have to make changes that would break down the system as described and render it inoperative as disclosed.

But the written description requirement and the enabling disclosure requirement under 35 U.S.C. § 112, first paragraph, are separate from each other. A specification may be lacking in written description for the claimed subject matter while providing an enabling disclosure for the same, and vice versa. Regardless of whether the specification has written description for the claimed invention, it does not lack enabling disclosure if one with ordinary skill in the art could think and figure out how to make and use the claimed invention without undue experimentation. Even assuming that what is described is not consistent with what is claimed, the person of ordinary skill in the art is not prohibited from making whatever changes that are necessary to be made on the system that is described.

For claim 295, the Examiner recognized that as claimed the "first processor" is not a part of the electronic mail system which includes the processor which originates an electronic mail message, and must send "other information" which is not an electronic mail message to the RF receiver using the RF system but not using the electronic mail system. The problem, as viewed by the Examiner, is that the specification describes that the first processor sends the "other information" to the RF receiver by using the electronic mail system. Thus, the Examiner's position is that if one would change the system so that it works like NTP has claimed, that would break down the system as disclosed. In that regard, the Examiner stated (Answer 80:9-11):

Thus, undue experimentation would have been required to remove a critical component such as email system as disclosed without immediately breaking the network.

Nothing in the enabling disclosure requirement of 35 U.S.C. § 112, first paragraph prohibits one with ordinary skill in the art from modifying the disclosed system in order to make and use the claimed invention, even to the extent of creating a system that does not operate like the one disclosed. The proper focus is on making and using the invention that is claimed and not on preserving all aspects of what is described. The Examiner incorrectly focused on preserving what is described and erroneously turned a written description problem into an alleged lack of enabling disclosure problem. The proper view is that if one with ordinary skill in the art would recognize the changes that need to be made from the disclosed system in order to make and use the claimed invention without undue experimentation, then it is of no moment that the modified system no longer operates like what is described. Indeed, by definition, if changes are needed then one should not expect the modified system to work the same way as the described system.

The Examiner has failed to present a rational basis to support the assertion that it would require undue experimentation for one with ordinary skill in the art to send "other information" (information that is not an electronic mail message) from a processor which is outside of an electronic mail system to an RF receiver by using an RF information transmission system and not an electronic mail system. For example, the various enablement factors identified in *In re Wands*, 858 F.2d at 737 have not been meaningfully addressed.

In any event, in our earlier discussion we have determined that the Examiner failed to establish that NTP's specification lacks written description for the subject matter of claim 295. The Examiner mistakenly

read the specification as requiring the use of an electronic mail system to transmit "other information" from the "first processor" to the RF receiver. Not using an electronic mail system to transmit "other information" to the RF receiver would not, as alleged by the Examiner, break down the disclosed system.

For claim 309, again the Examiner's explanation is based on the position that the specification does not describe what is claimed and modifying it to make and use the claimed invention would "break" the disclosed system which seemingly provides only wireless routing from the gateway. On page 80 of the Answer, in lines 18-25, it is stated:

However, as explained in the claim 309 written description analysis above, the '172 patent describes a gateway that stores and forwards email. Thus, undue experimentation would have been required to design a "gateway" capable of both matching the email address to both a wireless and wireline network and initiating the transmission of email. Indeed, adding significant new functions, such as a dual wireline-wireless network routing to the existing '172 gateway switch would have immediately broken the disclosed network, which fail to support dual wireline-wireless network routing.

The Examiner's concern is that modifying the disclosed system to provide for both wireline and wireless transmission and routing would break the disclosed system which evidently provides only for wireless routing from the gateway switch. As is already explained above with regard to the enabling disclosure requirement of 35 U.S.C. § 112, first paragraph, it is not necessary for one with ordinary skill in the art, when coming up with a way to make and use the claimed invention, to preserve all parts of the disclosed system, especially if any part thereof is not consistent with the claimed

invention. It has not been adequately explained why one with ordinary skill, when instructed to have the gateway switch determine whether to forward an electronic mail message onto a wireline or alternatively onto a wireless system depending on either an address of the RF receiver or information prestored in the gateway switch, would require undue experimentation to implement the decision making and subsequent forwarding by initiating transmission of the electronic mail message onto the corresponding route. It would appear that such skills are basic to one with ordinary skill in the art. Furthermore, the Examiner already determined in the context of the written description analysis of claim 309 that the specification appears to describe address matching to determine whether to forward the received message onto a wireless transmission system. Given that, it has not been explained why one with ordinary skill would require undue experimentation to perform a similar operation to determine whether to route a message onto a wireline.

In any event, in the context of the rejection of claim 309 as lacking a written description in the specification, we have determined that the Examiner failed to establish that NTP's specification does not contain a written description for a gateway switch which acts in accordance with the recitation of claim 309, i.e., routing electronic mail message to either a wireless system or a wireline depending on at least an address of the RF receiver and information pre-stored in the gateway switch. Thus, modifying the disclosed system to implement dual or alternative routing to a wireless system and a wireline has not been shown as contrary to NTP's disclosure.

Conclusion

NTP has shown that the Examiner erred in concluding that claims 295-317 are unpatentable under 35 U.S.C. § 112, first paragraph, as lacking an enabling disclosure in the specification.

J. Rejection of claims 295-317 under
 35 U.S.C. § 305 for enlarging the scope of
 the claimed invention of a patent under reexamination

The rejection of claims 295-308 and 310-317 under 35 U.S.C. § 305 for enlarging the scope of an original patent claim during reexamination is *reversed*.

The rejection of claim 309 under 35 U.S.C. § 305 for enlarging the scope of an original patent claim during reexamination is *affirmed*.

Issue

Has NTP shown that the Examiner erred in determining that claims 295-317 enlarge the scope of an original issued claim of the NTP '172 patent under reexamination?

Principles of Law

"No proposed amended or new claim enlarging the scope of a claim of the patent will be permitted in a reexamination proceeding under this chapter." 35 U.S.C. § 305.

A claim that is broader in any respect is broader even though it may be narrower in other respects. *In re Bennett*, 766 F.2d 524, 525-526 (Fed. Cir. 1985); *Ball Corp. v. United States*, 729 F.2d 1429, 1438 (Fed. Cir. 1984).

Analysis

For this rejection, the Examiner specifically discussed only five claims, i.e., claim 295, claim 309, and the three claims 297, 313 and 314 as a group.

Claim 295, which depends directly from original patent claim 199 which depends from original independent patent claim 194, adds to the limitations of claims 194 and 199 by specifying further limitations regarding the sending of "other information" which is not an electronic mail message by a "first processor" which is not a part of the electronic mail system. It is also recited that the other information is sent by the first processor to the RF receiver by using the RF system but not the electronic mail system.

The Examiner reasoned that claim 295 is now broader than the original patent claims because claim 295 encompasses systems that "do not" transmit email. (Answer 81:19-24).

Claim 295 encompasses systems that do not use an electronic mail system. That is a broadening of original patent claims only if the original patent claims required the use of an electronic mail system for sending the same information. Here, the limitation at issue in claim 295 about using or not using the electronic mail system concerns the sending of "other information" which is not an electronic mail message. Neither original patent claim 199 nor original patent claim 194 has any limitation specifying how "other information" is sent. "Other information" is not an element of either claim 199 or claim 194. Consequently, claim 295 makes "other information" an additional claim element and limits how it is transmitted. As such, it is not a broadening of the original patent claims.

Claim 309, which depends indirectly on original patent claim 199 which depends from original independent patent claim 194, specifies an "optional" limitation. In particular, a gateway switch which previously had to cause transmission of a received message to the RF receiver through the interface and the RF system now has two options -- either (1) it sends the electronic mail message to the RF receiver through the interface and the RF system as is previously required, or (2) it sends the electronic mail message to a destination processor through a wireline without using the RF system. Original claims 199 and 194 provide for no such option for the sending of an electronic mail message. According to original patent claims 194 and 199, the electronic mail message from a processor in the electronic mail system has to be received at the interface and at least the inputted message thereof must be transmitted to the RF system and broadcasted to the RF receiver.

The Examiner correctly determined that claim 309 broadens the original patent claims by now encompassing systems that do not use an RF system for transmitting the electronic mail message. Not using the RF system is now an option provided by claim 309, whereas original claims 194 and 199 do not include the additional option. The "option" has broadened the claimed invention.

NTP argues (Brief 161:15-20):

Claims 295-317 as originally presented and as now amended do not enlarge the scope of the patented claims because claims 295-317 as originally presented and now amended simply recite features already recited in the patented claims. Further, claims 295-317 are dependent claims and as such it is impossible for these claims to enlarge the scope of the claims. Since claims 295-317 depend from the patented claims,

they are in effect narrower in scope relative to the patented claims.

The argument is not meaningful. NTP does not point to any original patent claim which already recites the option feature now presented in new claim 309. Also, designating a new claim as dependent on an original patent claim does not preclude a patentee in a reexamination proceeding from affirmatively removing one of the requirements of an original patent claim from the newly presented claim, as is the case here and as explained above. NTP erroneously presumes that no applicant or patentee ever submits an improper dependent claim which does not include all of the features of a claim on which it depends. While 35 U.S.C. § 112, fourth paragraph, might have provided a basis to reject claim 309 as an improper dependent claim which does not include all of the limitations of a claim on which it depends, the rejection made by the examiner is one for improper broadening under 35 U.S.C. § 305. The lack of a rejection under 35 U.S.C. § 112, fourth paragraph, does not mean lack of merit of a rejection under 35 U.S.C. § 305.

Claim 297 depends on original patent claim 199 which depends from original independent patent claim 194. Claim 297 recites that information is deleted from the electronic mail prior to transmission by the RF system. Claim 313 indirectly depends from claim 297 and further specifies "varying" the content of the electronic mail message by the interface. Claim 314 depends from claim 313 and further specifies deleting information from the electronic mail including the originated information.

The Examiner points to original claim 215 as simply calling for deleting an email header and reasons that claims 297, 313, and 314 are all

broader by reciting generically the deletion of any information from the original email, which information for deletion may be the inputted text message or the short reference to the subject of the message. The Examiner also points to claims 313 and 314 which generically recite varying the content of the original electronic mail message, which can be met by something other than deletion of the header. On the surface, it would appear that deleting any information from the email message is a broader limitation than specifically deleting the email header and that varying the electronic mail is also broader than deleting the header. However, the Examiner's rationale is misplaced and does not withstand closer scrutiny.

While it is true that a proposed amended or new reexamination claim is broader than an original patent claim if it is broader in any respect, notwithstanding that it may be narrower in other ways, the premise for that principle is that the comparison must be made with the closest original patent claim, not just any original patent claim. If the comparison can be made with any original patent claim, then a proper proposed amended or new reexamination claim must include every single feature of every single original patent claim. That is because if not every feature of every original patent claim is included, then there is always an original patent claim which includes a feature that is absent in the proposed amended or new claim. We do not interpret 35 U.S.C. § 305 as requiring each proposed amended or new reexamination claim to include every feature of every original patent claim.

Here, all of claims 297, 313, and 314 depend indirectly from original patent claim 199. By definition, they include each and every feature of original patent claim 199, unless there is some recitation in claim 297, 313,

or 314 which removes the feature. No such removal is apparent from these claims and the Examiner has not pointed to any such broadening. Thus, each of claims 297, 313, and 314 is narrower than original patent claim 199 which has no requirement for removing anything from the electronic mail.

Conclusion

NTP has shown that the Examiner erred in determining that claims 295-308 and 310-317 enlarge the scope of an original issued claim of the NTP '172 patent under reexamination.

NTP has not shown that the Examiner erred in determining that claim 309 enlarges the scope of an original issued claim of the NTP '172 patent under reexamination.

ORDER AND SUMMARY OF DECISION

It is ORDERED that:

- 1. The rejection of claims 1-13, 23-50, 60-92, 94-114, 117-142, 146, 151-163, 188, 189, 192-194, 199-202, 207-212, 219, 220, and 295-317 under 35 U.S.C. § 102(b) as anticipated by Telenor '89 is *reversed*.
- 2. The rejection of claims 213, 218, and 221-223 under 35 U.S.C. § 102(b) as anticipated by Telenor '89 is *affirmed*.
- 3. The rejection of claims 14-22, 51-59, 93, 115, 116, 143-145, 147-150, 164-187, 190, 191, 195-198, 203-206, and 214-217 under 35 U.S.C. § 103 as unpatentable over Telenor '89 and Riddle is *reversed*.

- 4. The rejection of claims 1-13, 23-50, 60-92, 94-98, 160-163, 188, 189, 192-194, 199-202, 207-213, 218-223, and 295-298 under 35 U.S.C. § 102(e) as anticipated by Perkins is *affirmed*.
- 5. The rejection of claims 99-114, 117-142, 146, and 151-159 under 35 U.S.C. § 103 as unpatentable over Perkins and Garbee is *affirmed*.
- 6. The rejection of claims 115, 116, 143-145, and 147-150 under 35 U.S.C. § 103 as unpatentable over Perkins, Garbee, and Riddle is *affirmed*.
- 7. The rejection of claims 14-22, 51-59, 93, 164-187, 190, 191, 195-198, 203-206, and 214-217 under 35 U.S.C. § 103 over Perkins and Riddle is *affirmed*.
- 8. The rejection of claims 299-317 under 35 U.S.C. § 103 as unpatentable over Perkins, Garbee, and Hortensius is *affirmed*.
- 9. The rejection of claims 1-4, 23, 26, 27, 32-41, 60, 63, 68-76, 83, 86-88, 94, 97 and 98 under 35 U.S.C. § 102(b) as anticipated by Verjinski is *affirmed*.
- 10. The rejection of claims 30, 31, 66, 67, 75, 76, 89, and 90 under 35 U.S.C. § 102(b) as anticipated by Verjinski is *reversed*.
- 11. The rejection of claims 5, 6, 9, 12, 13, 42, 43, 46, 49, 50, 79, 80, 83, 91, 92, and 160-163 under 35 U.S.C. § 103 as unpatentable over Verjinski and the inventors' own admitted prior art is *affirmed*.
- 12. The rejection of claims 24, 25, 28, 29, 61, 62, 64, 65, 77, 78, 84, 85, 95, 96, 188, 189, 193, 194, 201, 202, 211, 212, 213, 219, 220, 222, and 223 under 35 U.S.C. § 103 as unpatentable over Verjinski and DeVaney is *affirmed*.

- 13. The rejection of claims 192, 199, 200, 207-210, 218, and 221 under 35 U.S.C. § 103 as unpatenatble over Verjinski and DeVaney is *reversed*.
- 14. The rejection of claims 16, 17, 19, 53, 54, 56, 57, 165, 171, 177, 179, 180, 183, 190, 191, 195-198, 203-206, and 214-217 under 35 U.S.C. § 103 as unpatentable over Verjinski, Riddle, and DeVaney is *affirmed*.
- 15. The rejection of claims 166, 172, 178, 181, and 184 under 35 U.S.C. § 103 as unpatentable over Verjinski, Riddle, and DeVaney is *reversed*.
- 16. The rejection of claims 7, 8, 10, 11, 44, 45, 47, 48, 81, and 82 under 35 U.S.C. § 103 as unpatentable over Verjinski, DeVaney, and the inventors' own admitted prior art is *affirmed*.
- 17. The rejection of claims 14, 15, 18, 20-22, 51, 52, 55, 58, 59, 93, 164, 167, 168, 170, 173, 174, 176, 182, 185, and 186 under 35 U.S.C. § 103 as unpatentable over Verjinski and Riddle is *affirmed*.
- 18. The rejection of claims 169, 175, and 187 under 35 U.S.C. § 103 as unpatentable over Verjinski and Riddle is *reversed*.
- 19. The rejection of claims 99-101, 104, 107, 117, 120, 123-128, 131, 134, 151, 154, and 157-159 under 35 U.S.C. § 103 as unpatentable over Verjinski and Garbee is *affirmed*.
- 20. The rejection of claims 102, 103, 105, 106, 118, 119, 121, 122, 124, 125, 129, 130, 132, 133, 152, 153, 155, and 156 under 35 U.S.C. § 103 as unpatentable over Verjinski, Garbee, and DeVaney is *affirmed*.

- 21. The rejection of claims 295-317 under 35 U.S.C. § 103 as unpatentable over Verjinski, Garbee, and DeVaney is *reversed*.
- 22. The rejection of claims 108, 109, 114, 135, 136, 139, 142, and 146 under 35 U.S.C. § 103 as unpatentable over Verjinski, Garbee, and the inventors' own admitted prior art is *affirmed*.
- 23. The rejection of claims 110-113, 137, 138, 140, and 141 under 35 U.S.C. § 103 as unpatentable over Verjinski, Garbee, the inventors' own admitted prior art, and DeVaney is *affirmed*.
- 24. The rejection of claims 115, 116, 143, 144, 147, and 150 under 35 U.S.C. § 103 as unpatentable over Verjinski, Garbee, and Riddle is *affirmed*.
- 25. The rejection of claims 145, 148, and 149 under 35 U.S.C. § 103 as unpatentable over Verjinski, Garbee, Riddle, and DeVaney is *affirmed*.
- 26. The rejection of claims 297-317 under 35 U.S.C. § 112, first paragraph, as without written description in the specification is *affirmed*.
- 27. The rejection of claims 295 and 296 under 35 U.S.C. § 112, first paragraph, as without written description in the specification is *reversed*.
- 28. The rejection of claims 295-317 under 35 U.S.C. § 112, first paragraph, as without an enabling disclosure in the specification is *reversed*.
- 29. The rejection of claims 295-308, and 310-317 under 35 U.S.C. § 305 as violating the prohibition against enlargement of the scope of a patent claim under reexamination is *reversed*.

30. The rejection of claim 309 under 35 U.S.C. § 305 as violating the prohibition against enlargement of the scope of a patent claim under reexamination is *affirmed*.

AFFIRMED

Appendix 1

Index of CD disk pictures

Listed in order by picture number

004	Reference C1—front cover blue cover wrapped around
005	Reference C1—front cover blue cover peeled back
007	Reference C1—staples which have been removed
800	Reference C2—front cover
009	Reference C2—binder
010	Reference C2—handwritten notation
011	Reference C1—N.T.H. perforation
012	Reference C2—bar code inside front cover
013	Reference C2—N.T.H. perforation from inside front cover
015	Reference C3—N.T.H. perforation from inside front cover
016	Reference C3—bar code inside front cover
017	Reference C4—binder
018	Reference C4—front cover
019	Reference C4—perforation from inside front cover
020	Reference C4—bar code
021	Reference C4—handwritten notation
022	Reference C4—date stamp
023	Reference C5—front cover
024	Reference C5—binder and handwritten notation on cloth
025	Reference C5—perforation from inside front cover
026	Reference C5—bar code
027	Reference C5—showing binding coming apart
028	Reference C6—front cover
029	Reference C6—date stamps
030	Reference C6—binder and handwritten material

031 Reference C6—bar code 032 Reference C6—perforation from inside front cover 033 Reference C7—cover Reference C7—date stamp 034 Reference C7—binder and handwritten material 035 036 Reference C7—perforation from inside front cover 037 Reference C7—bar code 038 Reference C7—showing binder coming apart at top of document 039 Reference C8—handwritten date on top of stamped date 040 Reference C8—cover Reference C8—binder and handwritten material 041 042 Reference C8—perforations from inside front cover Reference C8—showing lose pages 043 Reference C8—showing lose pages 044 Reference C8—handwritten material and date stamp 049 050 Reference C3—cover 052 Reference C1—damage and red marks on spines of documents 059 Reference C8—bar code 066 Reference C1—handwritten material 067 Reference C1—date stamp 068 Reference C1—bar code 069 Reference C1—Browne report, Exhibit 1—staple holes 070 Reference C4—trash mark Reference C4—trash mark (pencil pointing to trash mark) 071 Reference C8—pages 82 and 83 UV comparisons 072 Reference C4—UV comparison Reference C4 and Reference C7 073 074 Reference C3—page 107 Reference C3—Annex 1 pages 1 and 2 075 Reference C5—date stamp 076

Listed in order by Reference C number

004	Reference C1—front cover blue cover wrapped around
005	Reference C1—front cover blue cover peeled back
007	Reference C1—staples which have been removed
011	Reference C1—N.T.H. perforation
052	Reference C1—damage and red marks on spines of documents
066	Reference C1—handwritten material
067	Reference C1—date stamp
068	Reference C1—bar code
069	Reference C1—Browne report, Exhibit 1—staple holes
00)	Reference of Browne report, Exmort 1 stuple notes
800	Reference C2—front cover
009	Reference C2—binder
010	Reference C2—handwritten notation
012	Reference C2—bar code inside front cover
013	Reference C2—N.T.H. perforation from inside front cover
015	Reference C3—N.T.H. perforation from inside front cover
016	Reference C3—bar code inside front cover
050	Reference C3—cover
074	Reference C3—page 107
075	Reference C3—Annex 1 pages 1 and 2
017	Reference C4—binder
018	Reference C4—front cover
019	Reference C4—perforation from inside front cover
020	Reference C4—bar code
021	Reference C4—handwritten notation
022	Reference C4—date stamp
070	Reference C4—trash mark
071	Reference C4—trash mark (pencil pointing to trash mark)
073	Reference C4—UV comparison Reference C4 and Reference C7
023	Reference C5—front cover
024	Reference C5—binder and handwritten notation on cloth
025	Reference C5—perforation from inside front cover
026	Reference C5—bar code

027 Reference C5—showing binding coming apart 076 Reference C5—date stamp 028 Reference C6—front cover Reference C6—date stamps 029 030 Reference C6—binder and handwritten material Reference C6—bar code 031 032 Reference C6—perforation from inside front cover 033 Reference C7—cover 034 Reference C7—date stamp Reference C7—binder and handwritten material 035 Reference C7—perforation from inside front cover 036 037 Reference C7—bar code Reference C7—showing binder coming apart at top of document 038 039 Reference C8—handwritten date on top of stamped date 040 Reference C8—cover 041 Reference C8—binder and handwritten material 042 Reference C8—perforations from inside front cover Reference C8—showing lose pages 043 044 Reference C8—showing lose pages 049 Reference C8—handwritten material and date stamp 059 Reference C8—bar code 072 Reference C8—pages 82 and 83 UV comparisons

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