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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte NTP, Inc.

Appeal 2008-001116
Reexamination Control 90/006,494, 90/006,681 and 90/007,726
Patent No. 6,067,451[1]
Technology Center 3900

ENTERED: December 3, 2009

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

Per Curiam

DECISION ON APPEAL

NTP, Inc. ("NTP"), the assignee of Patent 6,067,451 under reexamination, appeals under 35 U.S.C. §§ 134(b) and 306 from a final rejection of claims 1-341 and 393-437. We have jurisdiction under 35 U.S.C. § 6(b) and 35 U.S.C. § 134(b). We *affirm*.

STATEMENT OF THE CASE

The involved Patent 6,067,451 ("NTP '451 patent") was the subject of three ex parte reexamination proceedings 90/006,494, 90/006,681 and

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[1] Based on Application 09/161,462, filed on September 28, 1998.

90/007,726, merged by order dated March 1, 2006. Final rejection by the Examiner was entered on February 22, 2006. The NTP '451 patent issued on May 23, 2000, with claims 1-341. Claims 342-437 were added during reexamination and claims 342-392 have been cancelled.

Together with other NTP patents, the NTP '451 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, 2003 WL 23100881 (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 patent, which according to the Court has the same written description as the NTP '451 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 on 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.

Although claims 246, 311, 319, 326, 332 include the requirement that the RF receiver is coupled to a memory or that information received by the RF receiver is stored, none of NTP's claims on appeal requires a display in the RF receiver or a memory within the RF receiver. None of the claims require that electronic mail is received by the RF receiver when it is not attached to a processor.

Therefore, the claims on appeal read on implementations which do not provide the advantage and breakthrough discussed in the Court's opinion.

Claims 1-341 and 393-437, in various combinations, were finally rejected over many separate grounds of rejection. The prior art references relied on by the Examiner are as follows:

> 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. Hortensius -- U.S. Patent 5,917,629, issued June 29, 1999, based on application filed October 29, 1990.
>
> 5. Verjinski -- Verjinski, Richard D., "PHASE, A Portable Host Access System Environment," 3 IEEE Military Communications Conference 1989, 0806-0809 (October 18, 1989).

Claims 1-341 and 393-437 were finally rejected under 35 U.S.C. § 102(b) as anticipated by Telenor '89.

Claims 1-341 and 395-399 were finally rejected under 35 U.S.C. § 102(e) as unpatentable over Perkins.

Claims 400-437 were finally rejected under 35 U.S.C. § 103(a) as unpatentable over Perkins and Hortensius.

Claims 1-341 and 395-437 were finally rejected under 35 U.S.C. § 102(b) as anticipated by Verjinski.

Claims 393 and 394 were finally rejected under 35 U.S.C. § 103(a) as unpatentable over Verjinski and Garbee.

Claims 393-437 were finally rejected under 35 U.S.C. § 112, first paragraph, as without written description in the specification.

Claims 393-437 were finally rejected under 35 U.S.C. § 112, first paragraph, as lacking an enabling disclosure.

Claims 393-399, 414-417 and 434-437 were finally rejected under 35 U.S.C. § 305 as violating the prohibition against enlargement of the scope of a patent claim in a reexamination proceeding.

Claim 1 was finally rejected under the judicially created doctrine of obviousness-type double patenting over "at least claim 1" of each of Patent No. 6,317,592. The rejection, however, was later withdrawn. (Answer 192).

DISCUSSION

The discussion below is organized into Sections A-K.

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 393-437 under 35 U.S.C. § 112, first paragraph, as without written description in the specification.

Section I addresses the rejection of claims 393-437 under 35 U.S.C. § 112, first paragraph, for lack of enabling disclosure.

Section J discusses the rejection of claims 393-399, 414-417 and 434-437 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 '451 patent, which has 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 12-16) 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, 856-59 (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 Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1364 (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 Tech., 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 (BPAI 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 limitations 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, 2003 WL 23100881 (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 13).

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 13). 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 Indus., Inc. v. Igloo Prods. 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 14). Apart from the fact that *Marlow* is non-precedential, 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 Prods., Inc. v. Gencor Indus., Inc.*, 953 F.2d 1360, 1366 n.2 (Fed. Cir. 1991).

There are additional policy reasons for adhering to the *Yamamoto* rule in this appeal.

First, at least one of the reexamination proceedings before us was requested by a third-party. The third-party cannot participate in an ex parte reexamination proceeding. However, 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 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 the 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 1362, 1369 (Fed. Cir. 1998) (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 Am. Acad. Of Sci. Tech Ctr.*,

367 F.3d 1359, 1364 (Fed. Cir. 2004); *In re Yamamoto*, 740 F.2d 1569, 1571 (Fed. Cir. 1984).

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 1475, 1480 (Fed. Cir. 1994); *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 '451 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* 35 U.S.C. § 112, sixth paragraph:

> 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 term "RF system" does not require more than one radio frequency transmitter and does not require any minimum geographic coverage area. The term simply carries 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. The 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 some 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 originated information in an electronic mail system. An electronic mail system could be one which does not transmit sender information or add sender information to the originated information, in which case the information would not include an indication of the sender. An electronic mail system could be one which does not support a subject field in the message, in which case the information would not include a subject field. Originated information 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 originated information must reveal the sender, include message text, and have a subject field. Those components are useful if included in originated information but are not necessary.

Note that in the specification of NTP's '451 patent (Spec. 2:64 - 3:16), 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 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.

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. 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 simply 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.

8. A "destination processor" need not be a part of an electronic mail system or able to process electronic mail programming. 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 '451 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 '451 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 26, lines 21-28:

> 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 '451 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 '451 patent states in column 3, lines 30-49:

> 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. ('451 patent 20:54-56). 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 '451 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.

9. The claim term "application program" does not have to be capable of performing substantial useful functions for a user such as electronic mail programming, word processing, spreadsheets, personal calendar programs, and games. It can be directed to any one or more of those functions, or even the routing of information in its path of transmission.

10. The claim term "communication system" does not require a group of devices that work together for transmitting and/or receiving information. A single processor capable of sending and receiving information constitutes a communication system.

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 (Brief Evidence Appendix A13) ("Rhyne Supplemental Declaration") and Exhibit A attached thereto ("Rhyne Claim Construction Declaration"). 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 contents which have been altered and manipulated and therefore the copy is 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 argument 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 1-341 and 393-437 under 35 U.S.C. § 102(b) as anticipated by Telenor '89.

The rejection of claims 1-341 and 393-437 under 35 U.S.C. § 102(b) as anticipated by Telenor '89 is *reversed.*

Issue

Has NTP shown that the Examiner incorrectly determined that claims 1-341 and 393-437 are anticipated by Telenor '89?

Findings of Fact

Telenor '89 describes a system, a mobile data network (MDN), which transfers messages between fixed terminals (FT) and mobile stations (MS) on a store-and-forward basis. (Telenor '89, Vol. 1, Preface).

The MDN may also be connected to a Message Handling System (MHS), where users of the MHS transfer (or receive) messages to (or from) an MS or FT that is part of the MDN. (Telenor '89, Vol. 1, Preface). Telenor '89 describes a user of the MHS as "either a person or a computer program, and is referred to as an originator when sending a message, and a recipient when receiving one." (Telenor '89, Vol. 8, p. 3).

The MDN and MHS are connected through a message handling system (MHS) interworking unit "MIWU". Telenor '89 also discloses that a MIWU 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, ll. 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.

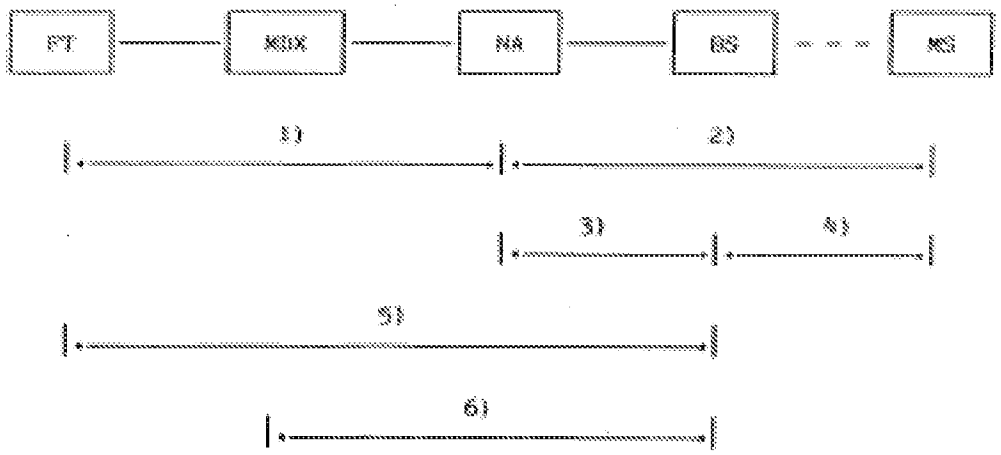

Figure 2 Terms and definitions concerning the different parts of the public part of the MDN:

1): Data network part of the MDN
2): Radio network of the MDN
3): Fixed part of the radio network
4): Radio part of the radio network
5): Fixed part of the MDN
6): MTA operated part of the MDN

1), 5) and 6) also include the links MDX-MDX and MDX-MIWU.

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:

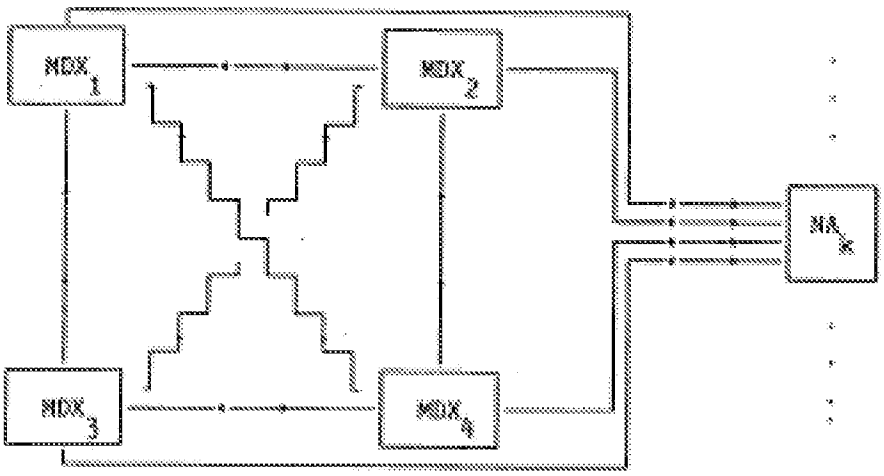

Figure 5. An MSN of 4 MSXs will be interconnected in a mesh network. Each NA will be connected to every MSX.

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:

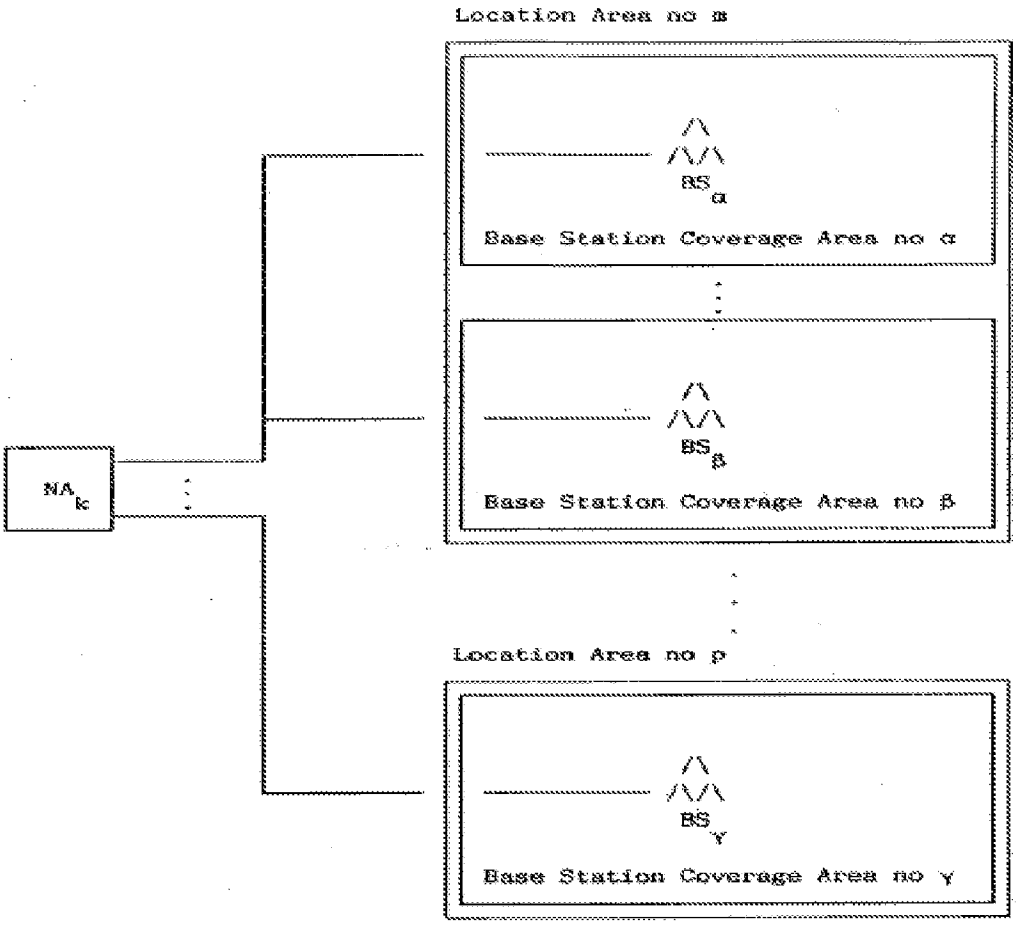

Figure 3. The structure of the fixed part of the radio network within the MDN.

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:

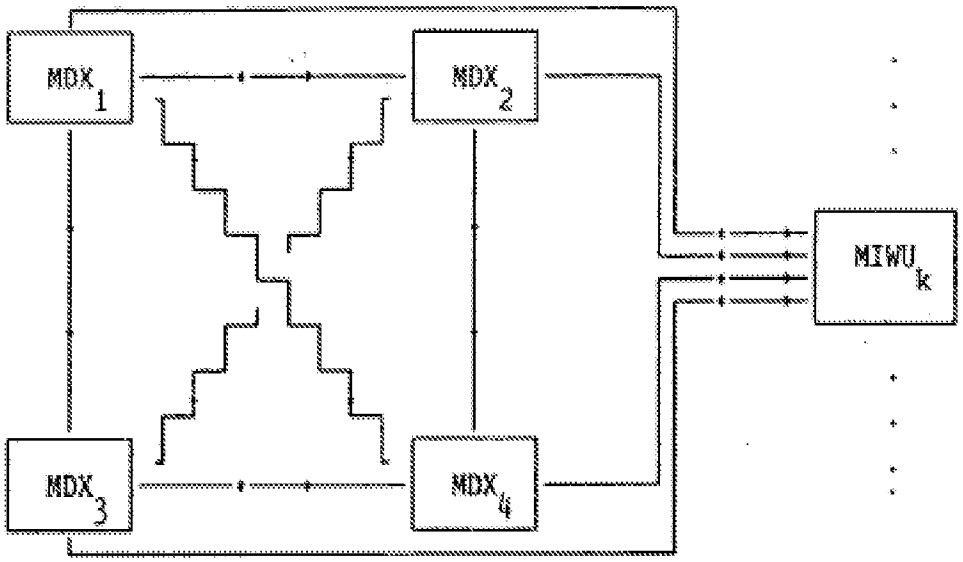

Figure 6. Each MIWU will be connected to every MDX of the network.

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, a 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 a MDX to the correct mobile station MS. (Telenor '89, Vol. 1, p. 5, ll. 17-24).

The message routing possibilities within the MDN are 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 PT <-> Home-MDX of that PT
Any MDX <-> Any MDX
Any MDX <-> Any MIWU
Any MDX <-> Any NA
Any NA <-> Any MS
OMC <-> Any MIWU, MDX or NA

These connections are said to be the possible communication links 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:

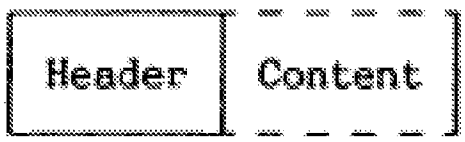

Figure 5 Overall layout of a PDU.

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:

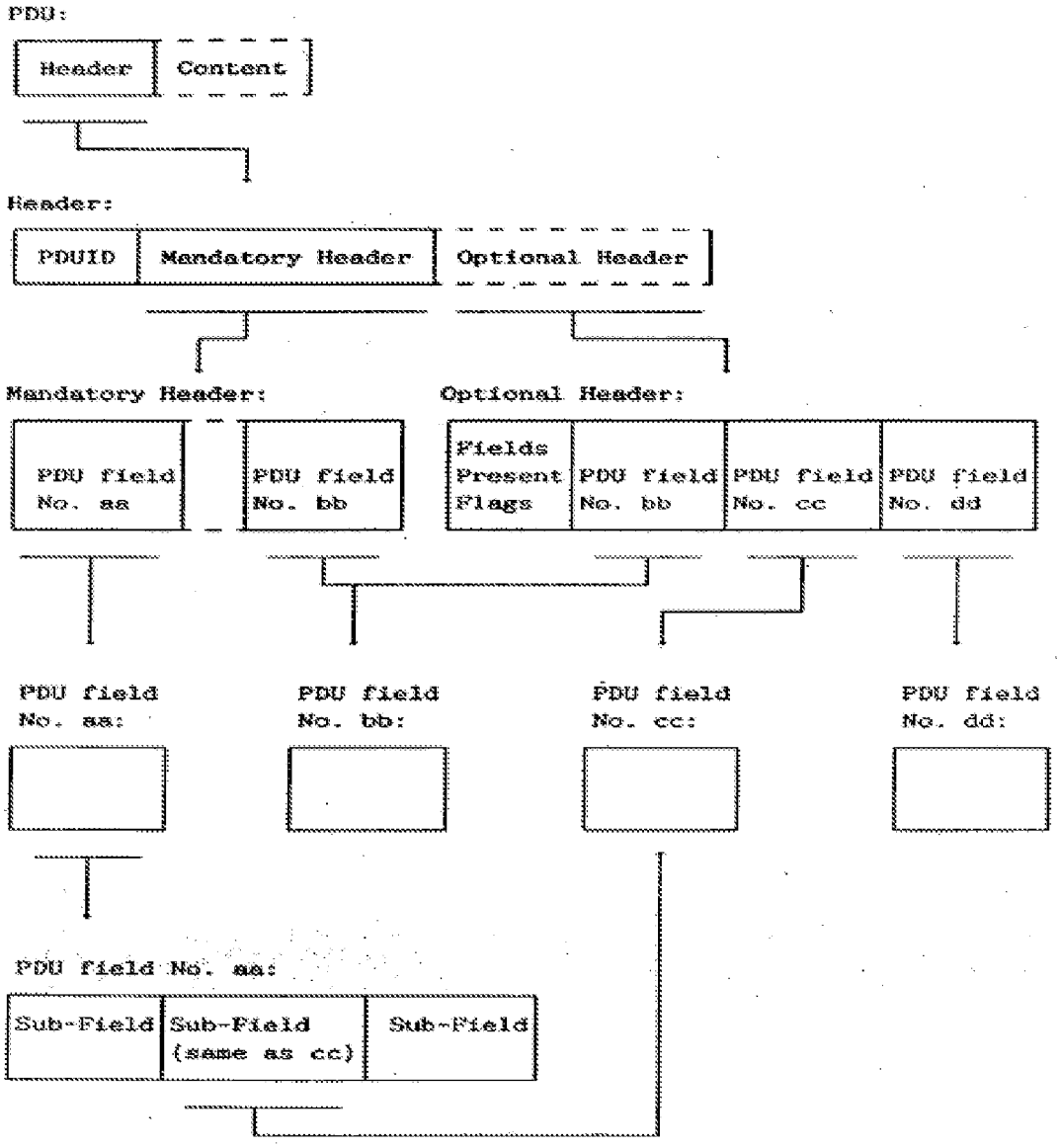

Figure 6 An example describing the building blocks of a PDU. In order not to make the figure too complicated, no replicated PDU fields are shown.

Telenor '89 discloses that the PDU from a 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 a MDX has a content portion, 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 a 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, ll. 1-32).

Telenor '89 discloses that the PDU from a NA to a 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 a 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 MDX contain an envelope portion and a content portion. (Telenor '89, Vol. 8, p. 6, ll. 15-16). The envelope information is data such as originator, recipient, content type, content length, and message identifier. (Telenor '89, Vol. 8, pp. 33-37).

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

Of the NTP claims rejected as anticipated by Telenor '89, the independent claims are 1, 81, 246, 250, 311, 319, 326 and 332.

For all of those claims, NTP argues that the claims require an identification of an RF receiver to be transmitted and that the Examiner has erred in determining that Telenor describes transmitting an identification of an RF receiver as claimed. The argument is applicable to independent claims 1, 81, 250, 311, 319, 326, and 332 as all of the claims require that the identification of the RF receiver be either transmitted to or from the interface. The argument has merit.

Claims 81, 311, 319, 326 and 332 require that the identification of the RF receiver be transmitted to, or received by, the interface. For example, claim 81 recites "transmitting at least the combined identification of each RF receiver to receive a broadcast of the information and the information to the one interface." Claims 311, 319, 326, and 332 each require originating or transmitting electronic mail from a processor with that electronic mail including an identification of a RF receiver. The processor is part of a communication system that transits the electronic mail to an interface.

For independent claims 81, 311, 319, 32 and 332 the Examiner found that the MDX is an interface and that the Radio Protocol Controller (RPC) and the "radio unit" form the RF receiver (Answer 9-10). The Examiner

further found that the MDX transmits a message to a distribution list of recipient addresses that includes the identification of the RF receiver, directing attention to volume 1, pages 27-29 of Telenor. (Answer 13). Independent claim 81, and independent claims 311, 319, 326 and 332 that are similar, require that the identification of the RF receiver(s) be transmitted to, or received by, the interface. The Examiner's stated rationale (Answer 13:10-20) does not account for the sending of an identification of a RF receiver to the interface. Rather, the rationale accounts for what occurs at the MDX. That the MDX adds the identification of recipient addresses is of no moment. The Examiner has not accounted for the transmission of an identification of the RF receiver(s) *to* the MDX. Moreover, the Examiner's equating the address of the mobile station MS or "recipient address" in Telenor '89 with an identification of an RF receiver or RF device in connection with all of the independent claims is incorrect as discussed in connection with claims 1, 246 and 250.

Claims 1, 246, 250 are different and require that the identification of the RF receiver or RF device be transmitted from the interface to the RF system. The Examiner equates the address of the mobile station MS or "recipient address" in Telenor '89 with an identification of a RF receiver or RF device. (Answer 11:1-13 and 13:23-25). That is incorrect.

We have reviewed all material referenced by the Examiner and find that the Examiner has not demonstrated that the "recipient address" referred to in Telenor '89 in connection with a mobile station is necessarily the same as identification of the RF receiver. As is indicated by the Examiner, the "Recipient Address" for a mobile station provides for identification of the addressable user or the terminal and the terminal can be a mobile station

MS. (Answer 11:8-10). In the context of NTP's '451 patent, however, the RF receiver, has its own identity apart from the processor to which it is connected and also from the user for whom the transmission is intended. ('451 patent 18:40-60). While the identification of an associated RF receiver may be looked up in a table or directory, based on identification of the mobile station terminal, the mobile station address cannot reasonably be regarded as identification of the RF receiver or an RF device.

The Examiner notes (Answer 11:n.5; and 115-116) that according to the specification of the NTP '451 patent the address of the destination processor receiving the transmitted electronic mail is "preferably" the identification number of the RF receiver. That disclosure, however, only further supports the position that the recipient address identifying the mobile station which is to receive the electronic mail need not be identification of the RF receiver. It is true that the identification of the RF receiver must be broadcasted by the RF system for the RF receiver to recognize a wireless transmission to it. But that does not mean the identification of the RF receiver must be transmitted to the RF system of Telenor '89 which includes the Network Adaptors NA and Base Stations BS. The Examiner has not accounted for the possibility that a processor within the RF system, either at a NA or a BS, or even at an interface portion of the RF system, may perform the necessary lookup to determine the identification of the associated RF receiver for a mobile station as the intended recipient.

Conclusion

NTP has shown that the Examiner incorrectly determined that Telenor '89 anticipates NTP's claims 1-341 and 393-437.

C. Rejections based 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 1-341 and 395-399 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 1-341 and 395-399 under 35 U.S.C. § 102(e) as anticipated by Perkins?

Findings of Fact

NTP's claims

Of all NTP claims rejected as unpatentable over Perkins in view of Hortensius, the independent claims are claims 1, 81, 246, 250, 311, 319, 326, and 332. For illustrative purposes only, independent claims 1 and 311 are reproduced below:

> 1. In a system comprising a communication system which transmits electronic mail, inputted to the communication system from a plurality of processors, and a RF system having a plurality of RF receivers which receive broadcasts from at least one broadcast location, the broadcast including information contained within the electronic mail and an identification of each RF receiver to receive the broadcast, an interface comprising:

at least one input receives at least the information contained within the electronic mail;

at least one output which outputs a processed output, the processed output including the information contained within the electronic mail and an identification of each RF receiver which is to receive the broadcast of the information; and

a processor, coupled to the at least one input and to the at least one output, which processes at least the information contained within the electronic mail to produce the processed output outputted by the at least one output.

311. A method of transmitting and distributing inputted information through a distributed system, comprising:

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

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

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

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

> receiving the broadcasted inputted information and the identification of the RF receiver with the RF receiver; and
>
> storing the received inputted broadcast information in a memory and processing the information stored in the memory with an application program executed by another processor coupled to the memory.

Perkins

Perkins describes a system for coupling wireless migrating users to a network operating in accordance with TCP/IP type protocol. (Perkins 2:56-59).

As seen in Fig. 2 reproduced below, a communications network 1 includes one or more LANs 2 and 3.

Each LAN includes a wireless network comprised of a plurality of mobile communication units (MU) 10 in wireless communication with a plurality of header stations (HS) 12. Each HS 12 is bi-directionally coupled to a wired LAN 14. The HS 12 communicates with the MU 10 preferably through infrared (IR) radiation wireless, although radio frequency (RF) wireless may be employed. Each HS 12 has associated with it a communications area or cell 11. (Perkins 3:56-68).

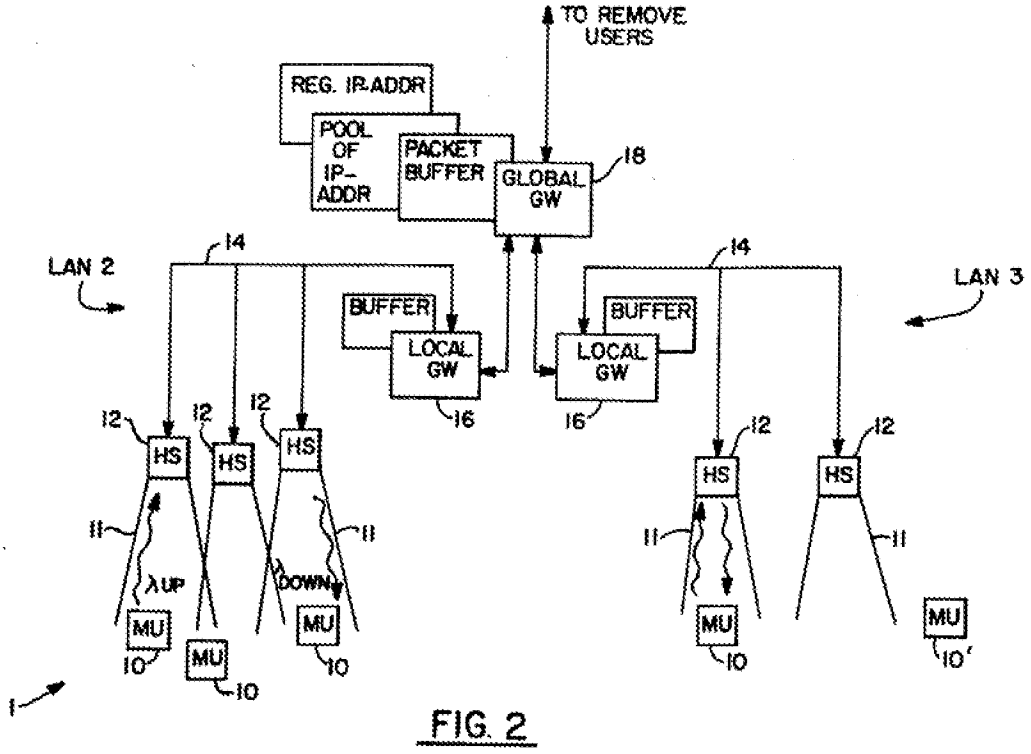

FIG. 2

Perkins figure 2 showing a communication network 1

The LANs 2 and 3 include at least one local gateway (GW) 16 for coupling the MU 10, via HS 12 and the LAN 14 to a global gateway 18. The global gateway 18 is coupled to remote network users (not "remove users" as seen in the figure).

The Perkins network conforms to the TCP/IP type protocol, an addressing scheme used for end-to-end data transmission in a network.

Transmission Control Protocol (TCP) is a transport protocol providing connection-oriented, end-to-end reliable data transmission in packet-switched computer local area networks (LANS) and internetworks. (Perkins 1:34-37).

The Internet Protocol (IP) supports the interconnection of communication LANs (Perkins 1:24-26). The IP transmits blocks of data, called internet datagrams, from sources to destinations throughout the internet. (Perkins 1:46-50).

The two protocols, TCP and IP (TCP/IP), are mandatory for use in all DoD packet switching networks utilizing connectivity across network or sub-network boundaries. As such, network elements, such as hosts, front-ends, gateways, etc. within such networks must implement TCP/IP. (Perkins 1:38-45).

Perkins describes global gateway 18 as a processor having suitable network adapters and archival facility for storing packets addressed to particular ones of the mobile units 10 during a time when the mobile units are not in contact with the wireless network. The global gateway 18 assigns, maintains, and associates "pseudo-IP" addresses with particular ones of the mobile units. (Perkins 4:29-38).

The global gateway "owns" all of the associated pseudo-IP addresses and allocates and deallocates the pseudo-IP addresses as the mobile units (MU) 10 enter and leave the LANs 2 and 3. (Perkins 5:3-6).

Perkins further describes that when a remote user initiates a conversation with a mobile unit (MU) 10 the remote user typically consults a nameserver configured to send requests for specified MU 10 names to a specified MU 10 global gateway 18. A request for a MU 10 name fails unless there exits an association registered between the MU 10 name and a pseudo-IP address. An address (or special IP address) is returned by the nameserver (to the remote user) if the requested name is associated to a

permanently assigned address, a temporary pseudo-IP address, or a previously known pseudo-IP address. (Perkins 7:22-36).

In operation, and with respect to the elements of claim 1, if the remote user obtains the pseudo-IP address of a registered MU 10, [2] the remote user is enabled to send messages, such as mail, to the MU 10 even if the MU 10 is inactive. (Perkins 7:37-40). The remote user has associated with it a remote computer (*e.g.*, processor). (Perkins 8:33-39). 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. This understanding is supported by Perkins 8:33-39, which refers to a "remote computer." 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.

The mail would be sent from the remote computer, to the global gateway 18 (*e.g.*, interface), to the local gateway 16 (*e.g.*, interface), to the HS 12 (RF system), and finally received by the MU 10 (*e.g.*, RF receiver and destination processor).

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

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[2] 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.

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 which receives the remote-user 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. 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.

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).

Analysis

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

For all of the independent claims, NTP argues that Perkins fails to describe a "RF receiver" since the mobile units are not described as being capable of receiving RF signals outside a home or office, directing attention to Dr. Rhyne's declaration. (Brief 61, 64, 67, 70, 73, 76, 79, 82). The argument is not persuasive. We do not credit the testimony of Dr. Rhyne (Brief Evidence Appendix A8, ¶ 37) because it is based on an excessively narrow interpretation of the claim term "RF receiver" which reads into the claims extraneous features from the specification. As explained in section A above, an 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. Perkins describes mobile communication units (MU) 10 in wireless communication with a plurality of header stations (HS) 12 and that RF wireless medium may be employed. (Perkins 3:56-66). Thus, the Examiner did not err in finding that mobile unit 10 is an RF receiver.

NTP argues, with respect to all of the independent claims, that Perkins does not disclose transmission of electronic mail from the interface to the RF system with an identification of the RF receiver. (Brief 62, 65, 68, 70, 73, 77, 79, 82). According to NTP, the pseudo-IP address of the mobile unit 10 cannot comprise the address of the RF receiver because that address is not

known before transmission by the remote user to the network. (Brief 62). 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 must be generated within the processor sending the electronic mail message without inquiry to any other source. The remote user may first obtain all information needed to compose electronic mail, from whatever source, and then compose the electronic mail for sending as an electronic mail message. We note that the phrase "the processed output including the information contained within the electronic mail and an identification of each RF receiver which is to receive the broadcast of the information" as is recited in claim 1 and claims with similar limitation requires only that the electronic mail and the identification of each RF receiver to receive the information be sent from the interface and not that all information be generated without inquiry to another device. In that regard, we do not credit the testimony of Dr. Rhyne (Appendix A8, ¶ 38) because it also mistakenly assumes that the claimed information cannot be generated based on information obtainable from another device.

On page 110 of its brief, NTP additionally argues that Perkins does not disclose any information to or from the interface that includes information contained in the electronic mail that identifies an RF receiver. We have explained in our findings why the pseudo-IP address does identify the RF receiver and therefore do not find NTP's argument persuasive.

Moreover, we decline to credit the conclusory remarks of Dr. Rhyne (Appendix A13, ¶ 21) over the specific rationale and reasoning set forth by the Examiner. On page 37, lines 17-21 of the Reply Brief, NTP argues that it:

> is not asserting that a pseudo-IP address cannot be the claimed limitation of "identification or .... RF receiver," "identification of ... RF device" or the above-described variations thereof. Rather, Patent Owner is simply asserting that Perkins does not teach or disclose that a pseudo-IP address is used as an "identification of ... RF receiver" or "identification of ... RF device" in Perkins.

The argument is conclusory. In connection with the argument made in its reply brief, NTP does not explain why, in the case of Perkins, the pseudo-IP address is not used as an identification of an RF receiver and the argument is therefore not persuasive.

NTP argues with respect to independent claim 246 that Perkins' mobile units do not detect the Pseudo-IP address. (Brief 112). NTP argues that since Perkins describes using a non-IP protocol between the local gateway and the mobile unit, then the mobile units cannot be viewed as "detecting" the pseudo-IP address. The argument is not persuasive. What about the other passages in Perkins relied upon by the Examiner that describes other embodiments? NTP does not explain why other passages do not support the Examiner's findings.

For example, Perkins describes that all communication from a remote user to a mobile unit employs the pseudo-IP address of the mobile unit 10. (Perkins 7:5-7). Moreover, immediately below the paragraph that NTP directs attention to in support of its argument, Perkins describes the situation

where a remote user is executing software to enable special handling of pseudo-IP address. (Perkins 8:14-24). That embodiment is in contrast to the embodiment that describes an operation that uses "non-IP protocol" between the local gateway and the mobile unit.

NTP's focus on just one isolated described embodiment in Perkins is too narrow and NTP does not address other descriptions that describe communication between the remote user and the mobile unit employing the pseudo-IP address of the mobile unit 10. We do not credit the testimony of Dr. Rhyne (Appendix A13, ¶¶ 27-30), because he also narrowly focuses on one described embodiment in Perkins and does not address other descriptions in Perkins which describe that all communication from a remote user to a mobile unit employs the pseudo-IP address of the mobile unit 10.

Next, with respect to all of the independent claims, NTP argues that Perkins does not describe an "RF system." (Brief 62, 65, 68, 71, 73, 77, 80, 82). 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 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 63). 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, ¶¶ 46-49), because his reading of "RF system" is unjustifiably narrow and reads extraneous features into the claims.

In connection with independent claims 81, 246, 250, 311 and 326, NTP argues that Perkins does not disclose an interface that connects a communication system to an RF system. (Brief 66, 70, 72, 75, 81, 111). 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 electronic mail from a communication system 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, ¶¶ 50-51) 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 ¶ 51; A13 ¶22, ¶24) 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."

In connection with independent claims 311, 319, 326 and 332, NTP argues that "electronic mail" has the same meaning as "electronic mail message" and that Perkins does not disclose "electronic mail" (Brief 75, 78, 81, 84, and 111). Even assuming that "electronic mail" has the same meaning as "electronic mail message," 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 electronic mail or 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, ¶ 6, ¶ 56; A13, ¶¶ 23-24), because his interpretation of "electronic mail message" is unjustifiably narrow and reads extraneous features into the claims.

In connection with independent claims 311, 319, 326 and 332, NTP argues that Perkins does not disclose transmission of electronic mail with an address of an interface. (Brief 75, 78, 81, 84). 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, ¶¶ 56-57) 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.

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 28, 116, 248, 309, 313 and 317. (Brief 85-87; 111-114). NTP "notes" that with respect to claims 28, 248, 309, 313, and 317 those claims were "litigated in NTP v. RIM and held to be valid and infringed," citing Rhyne Declaration, ¶ 62. (Brief 85-87). In section A of this decision, we address and reject NTP's argument that the USPTO is bound by the decision of the E.D. Va. It suffices to say here that we are not bound by the decision of the E.D. Va.

Claim 28 indirectly depends from claim 1 and recites "the at least one input receives electronic mail addressed to the interface including the identification of each RF receiver and the information to be broadcast to each RF receiver." NTP argues that because of the recited at least one input "receives electronic mail addressed to the interface," claim 28 is valid over Perkins for at least similar reasons as discussed above with respect to Claim 311. A discussed above, in connection with claim 311, we do not find NTP's argument persuasive. 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, ¶¶ 56-57) 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.

Claim 116 depends from claim 115, which depends from independent claim 81. NTP argues that the Examiner failed to address the additional limitation recited in claim 116 and that Perkins does not disclose that the combining of the "pseudo-IP address" with the information to be broadcast is done in an electronic mail system. (Brief 111).

Claim 116 recites that the combining recited in claim 115 "occurs in an electronic mail system." The Examiner found that Perkins describes that the email sending devices (plurality of processors) send email where the email includes the combined address and content. (Final Rejection 51; Answer 62). We understand, with respect to other claims rejected based on Perkins, that the Examiner found that the "email sending devices" are part of an electronic mail system. See, *e.g.*, Final Rejection 54. We do not credit the testimony of Dr. Rhyne (Appendix A13, ¶¶ 25-26) because it is based on an excessively narrow interpretation of the claim term "electronic mail system" which reads into the claims extraneous features from the specification. As stated above in connection with our claim interpretation section, "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.

Claim 248 indirectly depends from claim 246 and recites "at least one application program, executed by the processor, which processes the information." Claim 309 recites "processing information stored in the

memory with an application program executed by a processor coupled to the RF memory." With respect to those claims, NTP argues that Perkins does not disclose an "application program." (Brief 85-86; 113). The argument is not persuasive. In construing "application program" as a claim term, we have determined in Section A of this opinion that it is not limited to being capable of performing substantial useful functions for a user such as electronic mail programming, word processing, spreadsheets, personal calendar programs, and games. It can be directed to any one or more of those functions, or even the routing of information in its path of transmission. We do not credit the testimony of Dr. Rhyne (Appendix A8 ¶¶ 10, 64-65; A13 ¶ 31), because his interpretation of "application program" is unjustifiably narrow and reads extraneous features into the claims. The Examiner found that the mobile units 10 are computer based devices and comprise a processor that fetches instructions (i.e., an application program) from memory in order to receive and process email. (Final Rejection 52; Answer 64). The findings and rationale are reasonable and NTP has not demonstrated error with the Examiner's finding in that regard.

NTP' s argues on page 113 of its brief that claims 393 and 394 are patentable for the same reasons with respect to claim 248. (Brief 113). Claims 393 and 394 were not finally rejected on the basis of Perkins and therefore we need not address NTP's arguments as to those two claims. (*See, e.g.*, Final Rejection 44; Final Rejection 54; Answer 53; Answer 65).

NTP argues that Perkins does not disclose an "electronic mail system" as claimed in claim 395. (Brief 113). The argument is not persuasive. We do not credit the testimony of Dr. Rhyne (Appendix A13, ¶ ¶ 32-33) because it is based on an excessively narrow interpretation of the claim term

"electronic mail system." As explained in section A above, an electronic mail system does not 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.

Claim 313 depends indirectly from claim 250 and recites "the identification of the RF receiver is compared with permissible identification numbers in the RF system to determine if the inputted information and the identification of the RF receiver should be transmitted by the RF system to the RC receiver." For that claim and claims with similar recitation, the Examiner found that:

> the DNS lookup processor compares the identification of the RF receiver (email destination address) with permissible identifications (pseudo-IP addresses in the DNS database) to determine if the inputted information (email) should be transmitted to an RF receiver (portable PC) served by a particular gateway. (Final Rejection 53; Answer 65).

NTP's sole argument is that Perkins does not disclose the feature recited in claim 313. (Brief 86). The argument and Dr. Rhyne's testimony

with respect to this claim are conclusory and do not 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.

Claim 317 depends indirectly from claim 311 and recites "the inputted information and the identification of the RF receiver are transmitted by the RF system and broadcast to RF receiver at a location in the RF system which is determined by the RF system processing information stored in the RF system." The Examiner found that the "RF system is a cellular network (col. 3, ll. 65-67) and thus determines the location (e.g., cell) where the information (including the TCP/IP packet data) is transmitted." (Final Rejection 53; Answer 64). NTP's sole argument is that Perkins does not disclose the feature recited in claim 317. (Brief 87). That argument and Dr. Rhyne's testimony with respect to claim 317 are conclusory and do not 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 1-341 and 395-399 under 35 U.S.C. § 102(e) as anticipated by Perkins.

2.

The obviousness rejection of claims 400-437 over Perkins and Hortensius under 35 U.S.C. § 103

The Examiner finally rejected claims 400-437 under 35 U.S.C. § 103(a) as unpatentable over Perkins in view of Hortensius.

We *affirm.*

Issue

Has NTP shown error in the Examiner's rejection of claims 400-437 under 35 U.S.C. § 103(a) as unpatentable over Perkins in view of Hortensius?

Findings of Fact

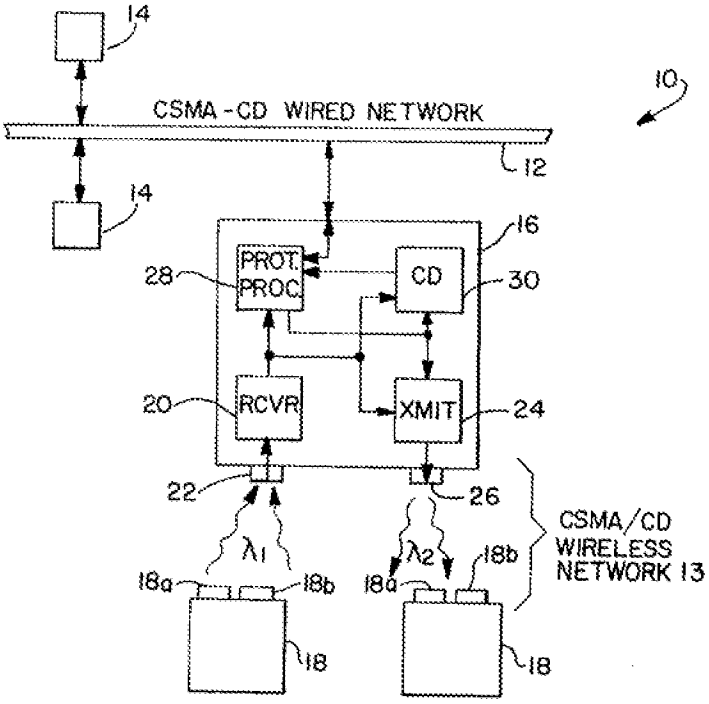
Hortensius

Hortensius describes a system for interfacing a wired communications network to a wireless communication network.

Fig. 1 reproduced below shows a wired network 12 connected to a wireless network 13 through a transceiver 16 which functions as an interface between the wired network 12 and the wireless network 13. Coupled to the wired network 12 are one or more nodes 14. Nodes 14 may include data processors, network servers and/or any of a number of conventional devices. (Hortensius 3:4-11).

Hortensius describes sending data from a wired node 14 to another wired node 14 or via the protocol processor 28 and transmitter 24, to one of the wireless nodes 18. Likewise, data (packet 40) may be directed from one of the wireless nodes 18, via the receiver 20 and transmitter 24, to another wireless node 18 or via the receiver and protocol processor 28 to one of the wired nodes 14. (Hortensius 4:13-20).

Thus, Hortensius describes transmitting data from an originating processor (at node 14) to a destination processor (node 14) through the wired network 12 (wireline) without transmission using the RF transmission network 13.



Hortensius describes that the advantages of a wired and wireless network in combination provides for a low complexity and low cost transceiver for transparently coupling nodes of a wireless network to a local area wired network. (Hortensius 2:12-16).

Principles of law

In *KSR*, the Supreme Court rejected the rigid application of the "teaching suggestion or motivation" (TSM) test, instead favoring the "expansive and flexible approach" used by the Court. *KSR Int'l Co. v. Teleflex Inc.,* 550 U.S. 398, 415 (2007). Based on its precedent, the Court reaffirmed the principle that "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *Id.* at 416.

Analysis

For this group of claims, the Examiner determined that claim 400 is representative. Claim 400 depends from dependent claim 248, which indirectly depends from independent claim 246. Claim 400 is reproduced below (Brief Claims Appendix):

> 400. The RF device in accordance with claim 248, wherein said communication system comprises:
>
> an electronic mail system to which the electronic mail including said information is inputted, where:
>
> said electronic mail system includes a second processor which receives said information from an originating processor, and causes said information to be transmitted to the RF device via the interface and the RF system and

The Examiner found that Perkins describes all features with the exception of transmitting using a wireline without using the RF system. (Answer 67). The Examiner further found that Perkins recognizes Hortensius as a suitable embodiment for the header stations 12 and the mobile units 10 (Perkins 4:5-10) and that utilizing wired and wireless terminals together in one system as taught by Hortensius would have led to a low complexity and cost transceiver for coupling nodes of a wireless network to a local wired network. (Answer 67).

NTP argues that Hortensius does not teach or suggest an "interface," "RF receiver," "RF system," "an identification of a RF device in the RF system being transmitted form the interface to the RF system," "originated information," or "originating processors." (Brief 109-110). NTP's arguments are misplaced. The Examiner did not rely on Hortensius to teach

an "interface," "RF receiver," "RF system," "an identification of a RF device in the RF system being transmitted form the interface to the RF system," "originated information," or "originating processors." Rather the Examiner relied on Hortensius for the teaching of transmitting data from one processor to another over wirelines without using the optional wireless data path. The Examiner further found that Perkins recognizes Hortensius as a suitable embodiment for the header stations 12 and the mobile units 10 (Perkins 4:5-10) and that utilizing wired and wireless terminals together in one system as taught by Hortensius would have led to a low complexity and cost transceiver for coupling nodes of a wireless network to a local wired network. (Answer 67). NTP has not shown error in the Examiner's findings or rationale.

NTP argues that Perkins does not disclose an "electronic mail system" as recited in claim 400. (Brief 113-114). The argument is not persuasive. We do not credit the testimony of Dr. Rhyne (Appendix A13, ¶¶ 32-33) because it is based on an excessively narrow interpretation of the claim term "electronic mail system." As explained in section A above, an electronic mail system does not 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.

NTP argues that claims 400-418 are patentable for the reasons provided for claim 248. (Brief 113). That argument is not considered an argument for separate patentability of the claims. In any event, we have considered the arguments made in connection with claim 248 as discussed above and found those arguments not to be persuasive.

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 400-437 under 35 U.S.C. § 103 as unpatentable over Perkins and Hortensius.

D. Rejections based in whole or in part on Verjinski

1.

The anticipation rejection based on Verjinski

The Examiner finally rejected claims 1-341 and 395-437 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 1-11, 14-23, 26-35, 38-45, 48-55, 58-60, 65-68, 81-92, 115-126, 151-160, 183-193, 218-227, 246-260, 271-279, 288-296, 305, 306, 310-312, 315, 316, 319, 320, 323, 325, 326, 328, 330-332, 335-337, 340, 341, 395, 396, 400-419, 426-437 as anticipated by Verjinski is *affirmed*.

The rejection of claims 12, 13, 24, 25, 36, 37, 46, 47, 56, 57, 61-64, 69-80, 93-114, 127-150, 161-182, 194-217, 228-245, 261-270, 280-287, 297-304, 307-309, 313, 314, 317, 318, 321, 322, 324, 327, 329, 333, 334, 338, 339, 397-399, 420-425 as anticipated by Verjinski is *reversed.*

Issue

Has NTP shown error in the Examiner's rejection of claims 1-341 and 395-437 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, 81, 246, 250, 311, 319, 326 and 332. For illustrative purposes only, claims 1 and 311 are reproduced below:

> 1. In a system comprising a communication system which transmits electronic mail, inputted to the communication system from a plurality of processors, and a RF system having a plurality of RF receivers which receive broadcasts from at least one broadcast location, the broadcast including information contained within the electronic mail and an identification of each RF receiver to receive the broadcast, an interface comprising:
>
> at least one input receives at least the information contained within the electronic mail;
>
> at least one output which outputs a processed output, the processed output including the information contained within the electronic mail and an identification of each RF receiver which is to receive the broadcast of the information; and
>
> a processor, coupled to the at least one input and to the at least one output, which processes at least the information contained within

the electronic mail to produce the processed output outputted by the at least one output.

311. A method of transmitting and distributing inputted information through a distributed system, comprising:

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

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

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

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

receiving the broadcasted inputted information and the identification of the RF receiver with the RF receiver; and

storing the received inputted broadcast information in a memory and processing the information stored in the memory with an application program executed by another processor coupled to the memory.

Verjinski

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:

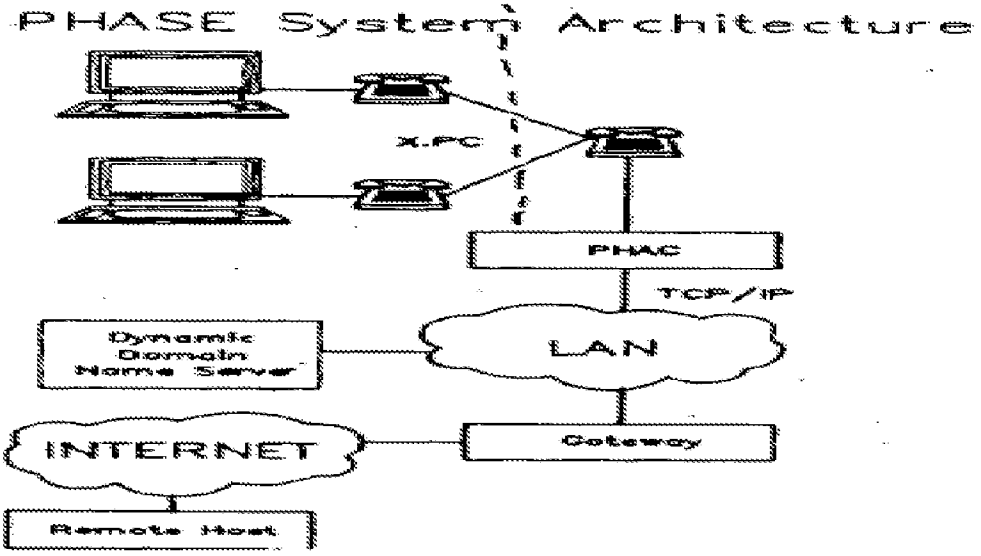


Figure 1.

"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 34). That finding 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. Each remote host connects to the Internet (communication system) and constitutes a processor insofar as the sending of electronic mail to a portable host is concerned. Thus, Verjinski discloses a plurality of processors.

The cellular telephone system connecting the portable host and a PHAC constitutes an RF 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 communication system and the RF 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 requirements of the interface element are inherent in Verjinski's PHAC. (Answer 35). The reasoning is that the PHAC has to possess enough processing power to execute the various gateway functions it performs.

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 37). 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 37). 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.

Verjinski describes that in one embodiment, the connection between the portable PC and the PHAC can be through a conventional wired telephone system and in another embodiment the connection can be through

a cellular telephone system. (Verjinski 808-09, 6.0 Example of a Military Application of the PHASE, ¶¶ 2-3).

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).

"[R]ejections under 35 U.S.C. § 102 are proper only when the claimed subject matter *is* identically disclosed or described in 'the prior art.'" *In re Arkley*, 455 F.2d 586, 587 (CCPA 1972) (emphasis in original). For a proper 35 U.S.C. § 102 rejection, the prior art "reference must clearly and unequivocally disclose the claimed [invention] or direct those skilled in the art to the [invention] without *any* need for picking, choosing, and combining various disclosures not directly related to each other by the teachings of the cited reference." *Id.* (emphasis in original).

"In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic *necessarily* flows from the teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (BPAI 1990) (emphasis in original). Inherency may not be established by probabilities or possibilities, and the mere fact that a certain result "may" follow from a given set of circumstances is not sufficient. *MEHL/Biophile Int'l Corp. v. Milgraum*, 192 F.3d 1362, 1365 (Fed. Cir. 1999); *In re Oelrich*, 666 F.2d 578, 581 (CCPA 1981).

Analysis

We focus on the disputed limitations. NTP asserts that the portable host and remote host have to first "dial in" to the PHAC using a telephone to initiate a session. (Brief 89). 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 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 host makes a telephone "dial in" connection with the PHAC. 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.

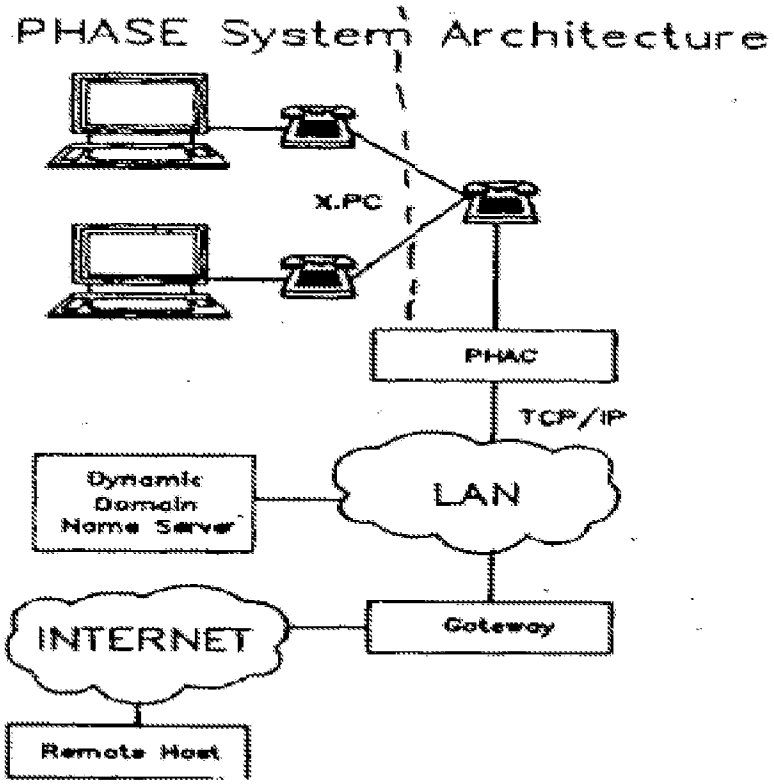

PHASE System Architecture
X.PC
PHAC
TCP/IP
Dynamic Domain Name Server
LAN
INTERNET
Gateway
Remote Host

Figure 1.

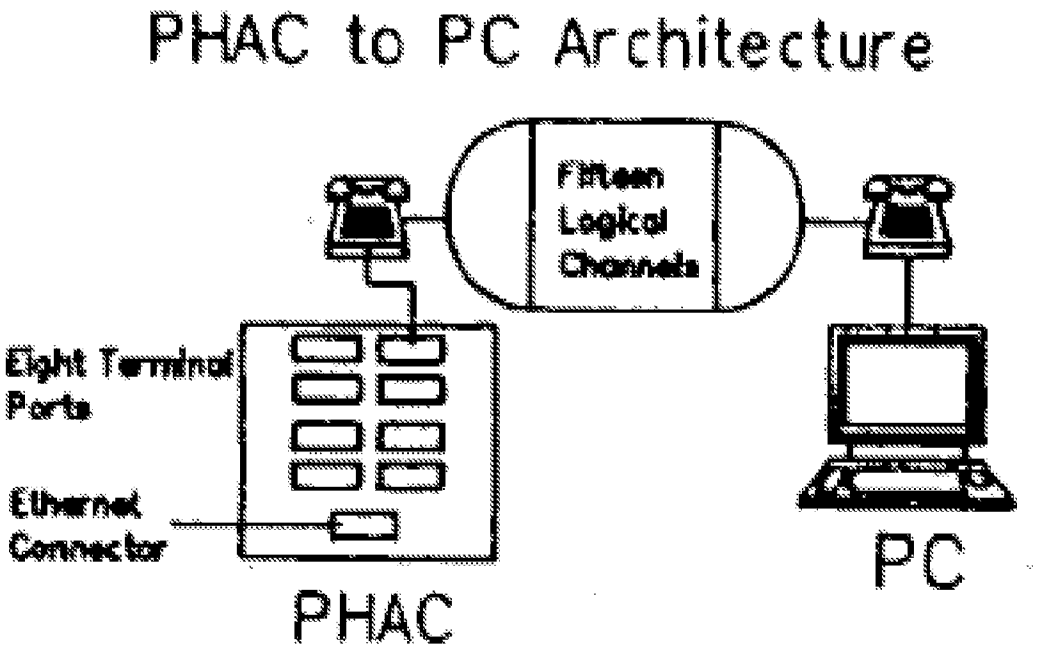


Figure 2.

NTP does not point to anything in Verjinski which describes the sending of an electronic mail message from a remote host to the PHAC as being conducted over a telephone connection between the remote host and the PHAC. NTP also does not point to anything in Verjinski which describes that a remote 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. However, the testimony does not cite to any portion of Verjinski to support the conclusion that in all cases a sender of electronic mail, including a remote host, must first "dial-in," 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 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.

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 a communication system and a separate RF system, which communicate through an interface. NTP asserts (Brief 88:13-16):

> 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 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 88:18 to 89:1). That is true, but it does not undermine the nature of the cellular phone system as an RF 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. NTP did not do so.

With respect to claim 1, NTP argues that Verjinski does not disclose that the PHAC receives electronic mail inputted from a plurality of processors. NTP argues that the PHAC only receives electronic mail from one computer. (Brief 89). The argument is not persuasive. As explained in our findings, although only one remote host is illustrated in Figure 1 of Verjinski, 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). We have considered the supporting testimony of Dr. V. Thomas Rhyne, cited by NTP. However, the testimony does not cite to any portion of Verjinski to support the conclusion that in all cases only a single remote host computer is connected to the PHAC. We do not credit the testimony of Dr. Rhyne because it lacks adequate explanation and citation to the record.

NTP argues that the Internet cannot receive electronic mail from remote hosts because the identified remote hosts are a part of the Internet. (Brief 90:1-3). 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 hosts sending the electronic mail, nothing precludes seeing the portion of the Internet that directs and sends an email as a

communication system within the overall system that includes the remote hosts. That part of the Internet that sends and receives an electronic mail sent by one of its constituent hosts to be transmitted over the network is a communication system. All hosts directly connected to the Internet may technically be a part of the same system that includes 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 host in a separate box from that representing the Internet, indicating that they are separate entities. We do not credit the testimony of Dr. V. Thomas Rhyne (Appendix A13, ¶ 4), because he does not explain why it would be unreasonable to regard the Internet as the communication system of a larger system, which receives an electronic mail from constituent hosts when electronic mail leaves the constituent hosts and is directed over the Internet toward the intended recipient.

NTP argues that Verjinski does not disclose an interface between a communications system and an RF system. (Brief 90). The argument is not persuasive. As we have explained in the findings above, the PHAC constitutes an interface which receives electronic mail from a communication system on one side and connects to an RF system on the other. We do not credit the testimony of Dr. Rhyne (Appendix A13, ¶ 5, ¶ 7) 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 a wireless system for delivery to a mobile processor.

NTP argues that Verjinski does not disclose transmission of "electronic mail messages." (Brief 90). Claim 1 recites "electronic mail" and not "electronic mail messages." Thus, the argument is not commensurate in scope with the claim 1 limitation. Giving NTP the benefit of the doubt that what they meant to say was that "electronic mail" means the same as "electronic mail message" and that Verjinski does not disclose "electronic mail messages," the argument is not persuasive. In construing "electronic mail message," 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. Verjinski discloses electronic mail or an electronic mail message because we have explained in the findings above that Verjinski describes the sending of electronic mail from a remote 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 A13, ¶¶ 6-7), because his interpretation of "electronic mail message" is unjustifiably narrow and reads extraneous features into the claims.

NTP argues that Verjinski does not disclose a processed output including information within electronic mail and an identification of each RF receiver which is to receive the broadcast of information. (Brief 91). The argument is not persuasive. 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 1 and independent claims with similar limitation are 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.

Claims 3, 15, 27 and 38 depend indirectly on claim 1. NTP argues that those claims require that the processing adds the identification of each RF receiver which is to receive the broadcasts. (Brief 91). The Examiner found that Verjinski discloses this feature since the PHAC converts an incoming email packet into a packet suitable for transmission over the cellular network and therefore the PHAC adds information including the identification of the RF receivers when it converts the email. (Final Rejection 32; Answer 152). Without explaining why, NTP argues that the PHAC does not add the identification of the RF receiver to the broadcasts. (Brief 92). The argument is conclusory and based on attorney beliefs. NTP does not direct us to testimony of a technical witness to support the assertions it makes. Therefore, NTP has not shown error in the Examiner's findings and rationale.

Claims 4, 16, 28 and 48 depend indirectly on claim 1. NTP argues that those claims require that the at least one input receives electronic mail addressed to the interface including the identification of each RF receiver and the information to be broadcast to each receiver. NTP argues that Verjinski does not disclose addressing electronic mail to the interface, the

PHAC. The argument is not persuasive. The key to the analysis lies in the "inherent" disclosure of Verjinski, *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. (Final Rejection 31; Answer 152-153). 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 NTP's response is regarding the IP address of the portable host as "an address" of the PHAC. We have reviewed the cited paragraph of Dr. Rhyne's testimony and do not credit it with any substantial weight. It merely repeats the rationale and reasoning advanced by the Examiner then concludes as follows (Appendix A21, ¶ 4):

> I respectfully disagree with these statements; Verjinski does not teach or suggest *any* feature or functionality that addresses electronic mail *to the interface*. In fact, the only addressing that takes place in Verjinski is related to the addressing of the portable hosts, not to the PHAC.

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 rational 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.

Claims 6, 7, 18, 19, 30, 31, 40, 41, 50, 51, 59 and 60 depend indirectly on claim 1. NTP argues that those claims require that the processing deletes information from the electronic mail with the processed output not containing the deleted information. (Brief 93:8-10). The Examiner found that the protocol conversion performed by the PHAC deletes protocol data specific to the email's originating TCP/IP protocol, such as leading header requiring IP datagram characteristics, in order to encapsulate the SMTP email into a packet, which requires its own packet header information. (Final Rejection 33; Answer 154-155). The PHAC establishes and maintains, for example, 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). We understand the Examiner to find that it is inherent in that description that the protocol conversion necessarily requires deleting protocol data specific to the email's originating TCP/IP protocol, such as leading header requiring IP datagram characteristics, in order to encapsulate the SMTP email into a packet.

NTP argues that Verjinski does not disclose that the PHAC removes or deletes any information from electronic mail, directing attention to paragraph 5 of the Second Supplemental Rhyne Declaration. (Brief 93). The argument is conclusory and fails to demonstrate error with the Examiner's findings and rationale. We have reviewed the cited paragraph of

Dr. Rhyne's testimony and do not credit it with any substantial weight. It merely repeats the rationale and reasoning advanced by the Examiner then concludes as follows (Appendix A21, ¶ 5):

> I respectfully disagree with that statement; Verjinski does not teach or suggest *any* feature or functionality wherein the PHAC removes or deletes any information from electronic mail. Accordingly, the Verjinski reference fails to anticipate these dependent claims for this additional reason.

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 rational 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.

Claims 11, 23, 35, 45, 55 and 68 depend indirectly on claim 1. NTP characterizes those claims as requiring that the processing adds a packet containing the destination of a switch in the RF system to which at least part of the packet is transmitted by the RF system. (Brief 93:20-22). The Examiner found that Verjinski teaches that the PHAC converts data into a packet-based protocol before transmitting the packet to the RF system and that the packet includes the destination of a switch (cellular telephone). (Final Rejection 34; Answer 155). NTP argues that there is no disclosure in Verjinski that the packet contains the destination of a switch in the cellular network. The argument is conclusory and based on attorney beliefs. NTP does not direct us to testimony of a technical witness to support the assertions it makes. Therefore, NTP has not shown error in the Examiner's findings and rationale.

Claims 12, 24, 36, 46, 56, 61, 63, 69, 71, 73, 75, 77 and 79 depend indirectly on claim 1. Claims 24, 36, 46, 56, 61, 63, 69, 71, 73, 75, 77 and 79 are similar in scope to claim 12. Claim 12 is representative and requires the feature: "the processor controls performing of a security check on at least the information which is received by the at least one input to determine if at least the information contained in the electronic mail should be outputted by the at least one output for transmission and broadcast by the RF system." Claims 13, 25, 37, 47, 57, 62, 64, 70, 72, 74, 76, 78 and 80 depend from claims 12, 24, 36, 46, 56, 61, 63, 69, 71, 73, 75, 77 and 79 respectively and also include the above-quoted feature. The "at least the information" recited in the above-quoted feature refers back to the claim 1 "at least the information contained within the electronic mail."

The Examiner determined that the PHAC uses information to perform a password protected IP update query process on a DNS server. NTP argues that the claim requires performing a security check on the "at least the information" that is contained in the electronic mail which is different from some other "information." The argument has merit.

The Examiner has not sufficiently explained how performing a security check on information equates with performing a security check on the "at least the information" that is contained within the electronic mail. 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. (Final Rejection 35:7-13; Answer 41:17-23; 156:21-27). 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 at least the information" contained in the electronic mail, 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.

The Examiner further states (Final Rejection 35:1-2; Answer 41:10-12; 156:15-16) 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. (Final Rejection 35:3-6; Answer 41:11-15; 156:17-21). The analysis is misplaced, because the IP address updating process does not take any information contained in an electronic mail message or act on any information contained in an 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 future information contained in an 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 the information contained in the electronic mail as claimed.

With respect to independent claim 81, NTP argues that Verjinski does not disclose an interface connecting a communication system to an RF system. (Brief 94). The argument is not persuasive. As we have explained in the findings above, and also with respect to claim 1, the PHAC constitutes an interface which receives electronic mail from the Internet (a communication system) on one side and connects to a cellular telephone system (RF system) on the other side. We do not credit the testimony of Dr. Rhyne (Appendix A8, ¶ 18) because it is based on an excessively narrow interpretation of the claim terms which reads into the claims extraneous features from the specification.

NTP argues that Verjinski does not disclose combining the identification of each RF receiver to receive a broadcast of the information and the information to be broadcast to each identified RF receiver. The argument is not persuasive. As we explained above in connection with claim 1, 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 81 and independent claims with similar limitation are 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.

Claims 83, 84, 86, 117, 118, 151, 152, 184, 185, 218 and 219 depend indirectly on claim 81. NTP argues that those claims require that the processing deletes information from the electronic mail with the processed

output not containing the deleted information. (Brief 95). The Examiner found that the protocol conversion performed by the PHAC deletes protocol data specific to the email's originating TCP/IP protocol, in order to encapsulate the SMTP email into a packet for further transmission. (Final Rejection 33; Answer 154-155). The PHAC establishes and maintains, for example, 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). We understand the Examiner to find that it is inherent in that description that the protocol conversion necessarily requires deleting protocol data specific to the email's originating TCP/IP protocol, such as leading header requiring IP datagram characteristics, in order to encapsulate the SMTP email into a different protocol, such as X.PC.

NTP argues that Verjinski does not disclose that the PHAC removes or deletes any information from electronic mail, directing attention to paragraph 5 of the Second Supplemental Rhyne Declaration. (Brief 96). The argument is conclusory and fails to demonstrate error with the Examiner's findings and rationale. It is not clear what NTP's response is that the conversion performed by the PHAC necessarily includes deleting information from the email. We have reviewed the cited paragraph of Dr. Rhyne's testimony and do not credit it with any substantial weight. It merely repeats the rationale and reasoning advanced by the Examiner then concludes as follows (Appendix A21, ¶ 5):

> I respectfully disagree with that statement; Verjinski does not teach or suggest *any* feature or functionality wherein the PHAC removes or deletes any information from electronic mail. Accordingly, the Verjinski reference fails to anticipate these dependent claims for this additional reason.

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 rational 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.

Claims 91, 125, 159, 192 and 226 depend indirectly on claim 81. NTP characterizes those claims as requiring that the processing adds a packet containing the destination of a switch in the RF system to which at least part of the packet is transmitted by the RF system. (Brief 96). The Examiner found that Verjinski teaches that the PHAC converts data into an acceptable protocol before transmitting the packet to the RF system and that the packet includes the destination of a switch (cellular telephone). (Final Rejection 34; Answer 155). NTP argues that there is no disclosure in Verjinski that the packet contains the destination of a switch in the cellular network. The argument is conclusory and based on attorney beliefs. NTP does not direct us to testimony of a technical witness to support the assertions it makes. Therefore, NTP has not shown error in the Examiner's findings and rationale.

Claims 93, 95, 97, 99, 101, 103, 105, 107, 109, 111, 113, 127, 129, 131, 133, 135, 137, 139, 141, 143, 145, 147, 149, 161, 163, 165, 167, 169, 171, 173, 175, 177, 179, 181, 194, 196, 198, 200, 202, 204, 206, 208, 210, 212, 214, 216, 228, 230, 232, 234, 236, 238, 240, 242 and 244 depend indirectly on claim 81. The claims are similar in scope. Claim 93 is representative of the group and recites "the one interface contains a processor; and the processor performs a security check to determine if the

combined identification of each RF receiver to receive the broadcast of the information and the information should be outputted from the one interface to the RF system."

For analysis of claim 93, and claims similar to that one, the Examiner merely makes a reference to the discussion concerning claim 12. (Answer 40; 160). But the claims are different and it is not apparent how the Examiner's findings with respect to claim 12 relate to the limitations of claim 93 for example.

In the context of claim 12, the Examiner discusses an identification of an 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. (Answer 156:21-27). Even if true, the Examiner's position is not easily understood with respect to the claimed features of claim 93 and claims that are of similar scope. In such a scenario, what is the processor that performs the security check? In other instances, the Examiner has taken the position that the PHAC is the claimed interface and that the PHAC contains the processor. However, it seems to be the position of the Examiner that some other processor in the cellular telephone system downstream of the PHAC performs security checks on mobile identification numbers. The Examiner has not even identified what does the verification in such a cellular telephone system.

The Examiner appears to take the alternative position that the PHAC performs a security check on information at the PHAC input. (Answer 156). Again this discussion is with respect to claim 12, which is not the same as claim 93. The Examiner further states (Answer 41:10-16; 156:14-20) 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 into account 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 that 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 to determine if electronic mail should be outputted from the interface. No such determination is made. Therefore we reverse.

With regard to independent claim 246, NTP argues that for the reasons it presented in connection with claim 81, Verjinski does not disclose an interface connecting the at least one communication system to the RF system. (Brief 97). We have already discussed and rejected NTP's arguments with respect to the limitation in claim 81. Verjinski discloses the claim feature.

Further with respect to independent claim 246, NTP argues that Verjinski does not disclose information contained in the electronic mail and

an identification of a RF device in the RF system being transmitted from the interface to the RF system. (Brief 97-98). NTP argues that Verjinski does not disclose that the PHAC transmits a message that includes an identification of a RF device. The argument is not persuasive for the reasons provided above, in connection with independent claims 1 and 81. With respect to claim 246, NTP further argues that the cellular telephone of Verjinski does not disclose an RF receiver that detects the destination IP address. (Brief 98:11-12). The argument is not persuasive. NTP's assertions are conclusory and do not demonstrate error with the Examiner's reasoning and rationale.

Claim 248 depends indirectly from claim 246 and recites "at least one application program, executed by the processor, which processes information." For this claim, NTP "notes" that claim 248 was litigated in NTP v. RIM and held to be valid. (Brief 98). To the extent that NTP asserts that we are bound by the decision of the E.D. Va., we have addressed in section A of this decision why we are not.

NTP argues that Verjinski does not disclose the "application program." (Brief 98-99). The argument is rejected. In construing "application program" as a claim term, we have determined in Section A of this opinion that it is not limited to being capable of performing substantial useful functions for a user such as electronic mail programming, word processing, spreadsheets, personal calendar programs, and games. It can be directed to any one or more of those functions, or even the routing of information in its path of transmission. We do not credit the testimony of Dr. Rhyne (Appendix A8 ¶ 29; A13 ¶ 15), because his interpretation of "application program" is unjustifiably narrow and reads extraneous features

into the claims. The Examiner found that the portable PC host (RF receiving device) is a PC and thus comprises a processor that fetches instructions (i.e., an application program) from memory in order to receive and process email. (Final Rejection 37; Answer 44). NTP has not demonstrated error with the Examiner's finding in that regard.

NTP argues that claims 393 and 394 are not anticipated by Verjinski for at least the reason that those claims depend from claim 248. (Brief 98-99). The argument is misplaced as claims 393 and 394 were not finally rejected as being anticipated by Verjinski. (Final Rejection 27). We nonetheless address the argument in the context of the obviousness rejection in that section below.

NTP argues that Verjinski does not disclose an "electronic mail system" as claimed in claims 395 and 400. (Brief 99). The argument is not persuasive. We do not credit the testimony of Dr. Rhyne (Appendix A13, ¶ ¶ 16-18) because it is based on an excessively narrow interpretation of the claim term "electronic mail system." As explained in section A above, an electronic mail system does not 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.

NTP argues that claims 395, 396, 417 and 435 require that information is deleted from the electronic mail prior to transmission and that Verjinski does not disclose this feature. (Brief 100:3-4; 7-9). The Examiner found that the protocol conversion performed by the PHAC deletes protocol data specific to the email's originating TCP/IP protocol, such as leading header requiring IP datagram characteristics, in order to encapsulate the SMTP email into a packet, which requires its own packet header information. (Final Rejection 33, 38, 41, 42; Answer 154-155, 164). The PHAC establishes and maintains session mappings, for example, 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). We understand the Examiner to find that it is inherent that the protocol conversion necessarily requires deleting protocol data specific to the email's originating TCP/IP protocol, such as leading header requiring IP datagram characteristics, in order to encapsulate the SMTP email into a packet.

NTP's argument that Verjinski does not disclose that the PHAC removes or deletes any information from electronic mail is conclusory and fails to demonstrate error with the Examiner's findings and rationale. It is not clear what is NTP's response to the conversion performed by the PHAC necessarily includes deleting information from the email.

NTP argues that claims 397 and 420 require that the processor perform a security check. NTP argues that Verjinski discloses that the portable host updates its IP address in the DDNS data base and not in the interface (the PHAC). (Brief 100:13-17). The claims are similar in scope to

claim 93 discussed above. The rationale provided by the Examiner is similar with respect to claim 93 and 12. For similar reasons already provided, the Examiner erred in determining that Verjinski anticipates claims 397 and 420. Claims which depend on claims 397 and 420 also include the feature and therefore the rejection of those claims also cannot be sustained.

NTP characterizes claims 400 and 404 as requiring that an address of said processor coupled to said memory is added to the information by the second processor. NTP argues that Verjinski does not teach or suggest adding new information by a second processor. (Brief 101:7-8). The argument is misplaced with respect to claim 400. That claim does not recite adding new information by a second processor or that an address of said processor coupled to said memory is added to the information by the second processor. Claim 404 does recite "an address of said processor coupled to said memory is added to the information by the second processor… ." NTP merely argues that the Examiner "makes the unreasonable assertion that stripping an address from a header and replacing the same address constitutes an address." (Brief 101:6-7). The argument is conclusory and is confusing. The Examiner specifically addressed claim 404 in the final rejection. The Examiner found that the "second processor" could be the gateway, shown for example in Figure 1 of Verjinski, or any of a plurality of PC hosts (Final Rejection 38-39), either of which function to add the address of the portable PC. NTP's argument does not even attempt to explain why the Examiner's rationale and reasoning are wrong.

With regard to independent claim 250, NTP argues that for the reasons it presented in connection with claim 81, Verjinski does not disclose "the RF system being connected to the communication system by at least

one interface." (Brief 101). We have already discussed and rejected NTP's arguments with respect to the limitation in claim 81. Verjinski discloses the claim feature. NTP argues that for the reasons it presented in connection with claim 1, Verjinski does not disclose "transmitting a processed output including at least the information and an identification of the RF receiver to receive the information." (Brief 101). We have already discussed and rejected NTP's arguments with respect to the limitation in claim 1. Verjinski discloses the claim feature.

NTP characterizes claims 252, 253, 273, 274, 289 and 290 as requiring that the processor deletes received information. The Examiner found that the protocol conversion performed by the PHAC deletes protocol data specific to the email's originating TCP/IP protocol, such as leading header requiring IP datagram characteristics, in order to encapsulate the SMTP email into a packet, which requires its own packet header information. (Final Rejection 33; Answer 154-155). The PHAC establishes and maintains session mappings, for example, 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).

NTP's argument is similar to the argument already addressed in connection with claims that require deleting received information. Again, in similar fashion, NTP's argument (*e.g.*, Brief 102) is conclusory and fails to demonstrate error with the Examiner's findings and rationale. We have reviewed the cited paragraph of Dr. Rhyne's testimony and do not credit it with any substantial weight. The testimony (Appendix A21, ¶ 5) 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 rational 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.

Claims 261-270, 280-287, 297-304 are similar in scope and require that the processor perform a security check on information received by the one interface. The claims are similar in scope to claims 12 and 93 discussed above. The rationale provided by the Examiner is similar with respect to claim 93 and 12. (Answer 42). For similar reasons already provided, the Examiner erred in determining that Verjinski anticipates claims 261-270, 280-287 and 297-304. NTP erroneously argues that claim 288 claims a similar feature, but it does not and therefore NTP's argument with respect to that claim is without merit. Claim 307 depends from claim 297 and also includes the limitation. Claim 308 is also similar in scope to claim 261 and 309 depends from claim 308. The rejection of these claims also cannot be sustained.

With regard to independent claim 311, NTP argues that for the reasons it presented in connection with claim 81, Verjinski does not disclose "an interface which connects the communication system to a RF system." (Brief 103). We have already discussed and rejected NTP's arguments with respect to the limitation in claim 81. Verjinski discloses the claim feature. NTP argues that Verjinski fails to disclose that an "electronic mail" may be transmitted with an address of the PHAC. (Brief 103:10-11). The argument is not persuasive.

As already explained, the key to the analysis lies in the "inherent" disclosure of Verjinski, *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. (Final Rejection 31; Answer 152-153). 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 NTP's response is 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 104:6-7). 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.

We assume NTP is asserting that electronic mail from the remote host to a portable host is sent from the remote host to the PHAC over a telephone line after the remote 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.

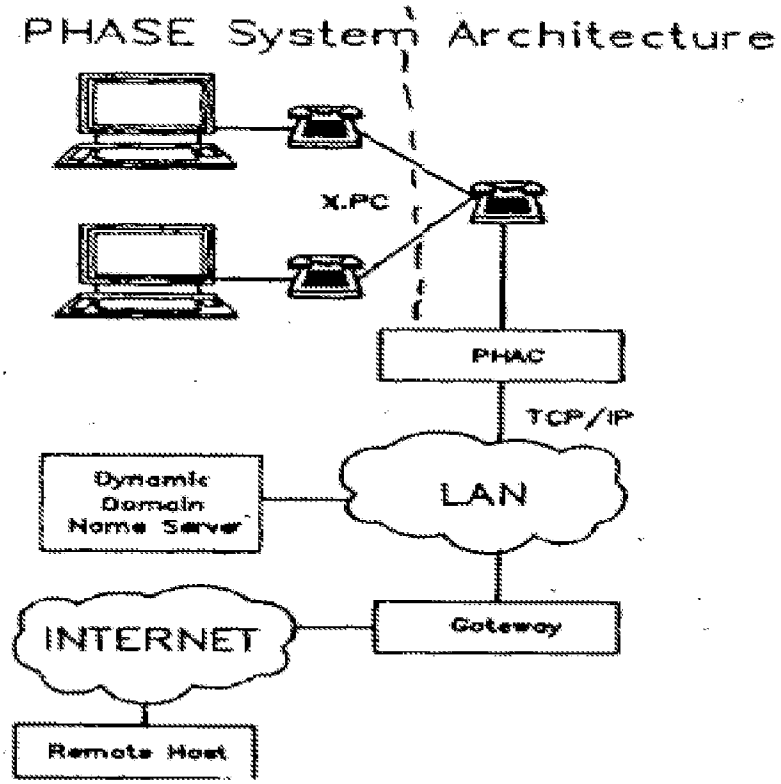

PHASE System Architecture
X.PC
PHAC
TCP/IP
Dynamic Domain Name Server
LAN
INTERNET
Gateway
Remote Host

Figure 1.

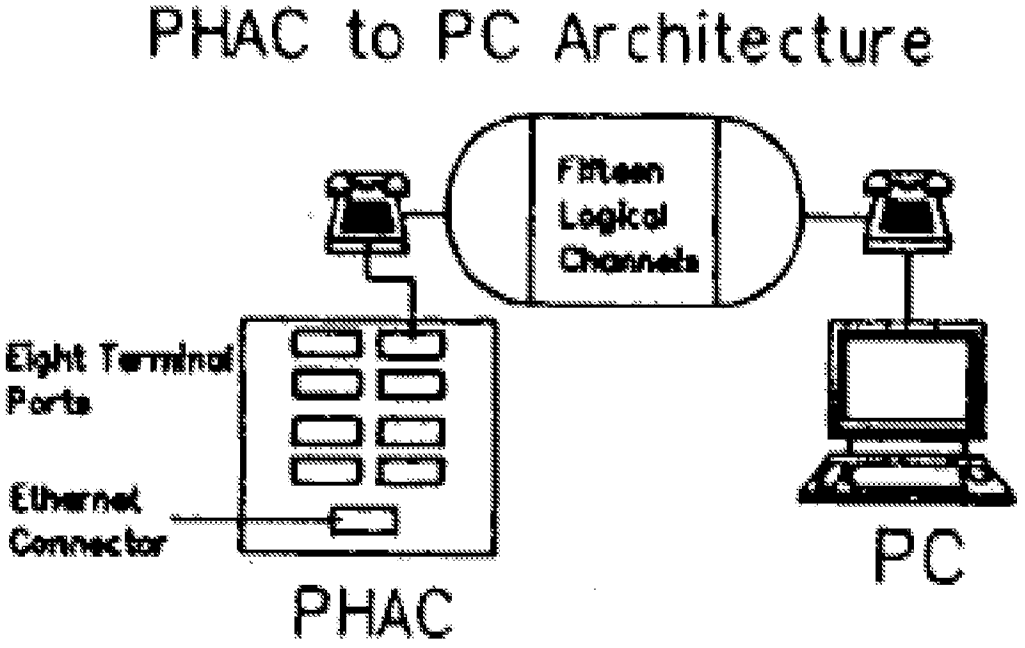


Figure 2.

NTP does not point to anything in Verjinski which describes the sending of an electronic mail message from a remote host to the PHAC as being conducted over a telephone connection between the remote host and the PHAC. NTP also does not point to anything in Verjinski which describes that a remote 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 A13, ¶ 9):

> 9. In my opinion, however, 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 host, must first "dial-in," 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 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 104:14-17) the remote host and the portable host must be connected by telephone and that any electronic mail is "directly" transmitted between the remote host and the portable host in a process that does not make the PHAC an email destination. 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:

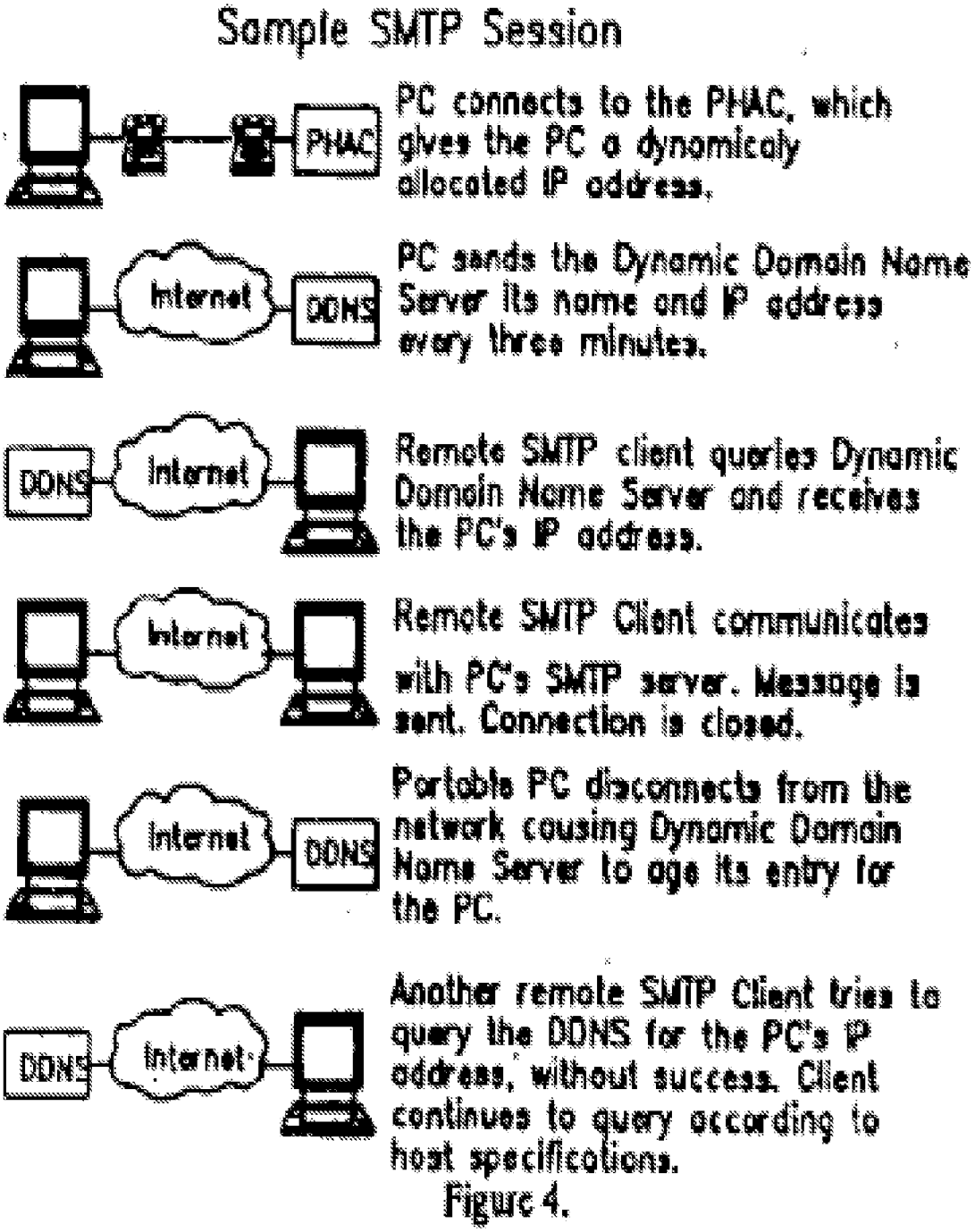


Figure 4.

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.

With respect to claim 311, NTP argues that for the reasons it presented in connection with claim 1, Verjinski does not disclose identification of an RF receiver as claimed. (Brief 104). We have already discussed and rejected NTP's arguments with respect to the limitation in claim 1. Verjinski discloses the claim feature.

NTP characterizes claims 312, 314, 320 and 322 as requiring that a header is deleted from the electronic mail prior to broadcasting. The Examiner found that the protocol conversion performed by the PHAC

deletes protocol data specific to the email's originating TCP/IP protocol, such as leading header requiring IP datagram characteristics, in order to encapsulate the SMTP email into a packet, which requires its own packet header information. (Final Rejection 33; Answer 154-155). The PHAC establishes and maintains session mappings, for example, 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).

NTP's argument is similar to the argument already addressed in connection with claims that require deleting received information. Again, in similar fashion, NTP's argument (*e.g.*, Brief 105) is conclusory and fails to demonstrate error with the Examiner's findings and rationale. We have reviewed the cited paragraph of Dr. Rhyne's testimony and do not credit it with any substantial weight. The testimony (Appendix A21, ¶ 5) is conclusory and establishes only that Dr. Rhyne disagrees with the rationale and reasoning of the Examiner. We decline to credit the conclusory remarks of Dr. Rhyne over the specific rationale and reasoning set forth by the Examiner.

NTP argues that Verjinski fails to disclose that an identification of a RF receiver is compared with permissible identification numbers in an RF system to determine if the information and the identification of the RF receiver should be transmitted by the RF system to the RF receiver as recited in claims 313 and 321. (Brief 105). The claims are similar in scope to claims 12 and 93 discussed above. The rationale provided by the Examiner is similar with respect to claim 93 and 12. (Answer 42). For similar reasons already provided, the Examiner erred in determining that Verjinski anticipates claims 313 and 321. Claims 314, 317 and 318 depend either

directly or indirectly from claim 313 and therefore include the limitations of claim 313. Claims 322 and 324 depend either directly or indirectly from claim 321 and also include the limitation. Claims 327, 329 and 333, which depend from independent claim 326 are similar in scope to claims 313 and 321. Claims 334, 338, and 339 depend either directly or indirectly from claim 333 and therefore include the limitations of claim 333. For similar reasons, the Examiner erred in determining that Verjinski anticipates claims 327, 329, 333, 334, 338 and 339.

NTP quotes the limitation of claim 317 and concludes that since Verjinski does not disclose or suggest the feature, the claim is valid over Verjinski. (Brief 106). The argument is conclusory and is not sufficient argument for the separate patentability of the claim. Moreover, we do not credit the testimony of Dr. Rhyne because it is also conclusory. (Appendix A8, ¶ 34).

With respect to independent claims 319 and 326 NTP argues that for similar reasons it presented in connection with claim 81 and claim 311, Verjinski does not disclose certain claim features. (Brief 106-107). We have considered the arguments, but have rejected them as discussed above.

Independent claim 332 recites an interface "with the interface being a destination in the communication system to which electronic mail is delivered by the communication system" where the electronic mail includes "the address of the destination to which the electronic mail is delivered by the communication system." NTP argues that claim 332 is patentable for similar reasons presented with respect to claim 311. The arguments presented with respect to claim 311 are rejected as discussed above. NTP additionally argues that the PHAC is not a destination in a communication

system. NTP argues that because the remote host and portable PC are simultaneously connected at the time of transmission, the portable PC is always the destination in Verjinski, citing paragraph 27 of the Rhyne Declaration. (Brief 108). The argument is not persuasive. NTP's assertions are based on the mistaken assumption that the PHAC is not an interface in between the remote host and the portable PC. However, we have already addressed and rejected that argument. Moreover, NTP's argument that the PHAC is not a "destination" in the communication system is conclusory.

The claim term destination in the context of claim 332 is in relation to the communication system. The interface is the destination in the communication system. The communication system is further connected to an RF system. Thus, in the context of the claim, the interface is the last hop or destination in the communication system. It is the last node in the communication system, which is connected to the RF system. Thus, an interface in the context of the claim can be located between two systems, but also be a destination in the first system that connects to the second system. We do not credit the testimony of Dr. Rhyne because he does not attempt to explain why the final node in one system, here the interface in the communication system, cannot be a destination of that system.

Claims 328 depends on independent claim 326. Claim 335 depends on independent claim 326. Claim 328 and 335 require that a header is deleted from the electronic mail prior to broadcasting. NTP argues that the feature is not disclosed in Verjinski. NTP's argument is similar to the arguments already addressed in connection with claims that require deleting received (header) information. Again, in similar fashion, NTP's arguments (*e.g.*, Brief 107 and 108) are conclusory and fail to demonstrate error with

the Examiner's findings and rationale. We have reviewed the cited paragraph of Dr. Rhyne's testimony and do not credit it with any substantial weight. The testimony (Appendix A21, ¶ 5) is conclusory and establishes only that Dr. Rhyne disagrees with the rationale and reasoning of the Examiner. 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 anticipation rejection of claims 1-11, 14-23, 26-35, 38-45, 48-55, 58-60, 65-68, 81-92, 115-126, 151-160, 183-193, 218-227, 246-260, 271-279, 288-296, 305, 306, 310-312, 315, 316, 319, 320, 323, 325, 326, 328, 330-332, 335-337, 340, 341, 395, 396, 400-419, 426-437 under 35 U.S.C. § 102 as anticipated by Verjinski.

NTP has shown error in the anticipation rejection of claims 12, 13, 24, 25, 36, 37, 46, 47, 56, 57, 61-64, 69-80, 93-114, 127-150, 161-182, 194-217, 228-245, 261-270, 280-287, 297-304, 307-309, 313, 314, 317, 318, 321, 322, 324, 327, 329, 333, 334, 338, 339, 397-399, 420-425 under 35 U.S.C. § 102 as anticipated by Verjinski.

2.

The obviousness rejection of claims 393 and 394 over Verjinski and Garbee under 35 U.S.C. § 103

The Examiner finally rejected claims 393 and 394 under 35 U.S.C. § 103(a) as unpatentable over Verjinski and Garbee.

We *affirm*.

Issue

Has NTP shown error in the Examiner's rejection of claims 393 and 394 under 35 U.S.C. § 103(a) as unpatentable over Verjinski and Garbee?

Findings of Fact

Claim 393 depends from claim dependent claim 248, which indirectly depends on independent claim 246. Claim 394 depends on claim 393. Claims 393 and 394 are reproduced below (Brief Claims Appendix):

> 393. The RF device in accordance with claim 248, wherein said communication system comprises:
> an electronic mail system, which transmits said electronic mail including said information inputted to said electronic mail system, and other information to a destination processor using wireline without using the RF system;
> said communication system further comprises a first processor which transmits to the RF device further other information which is information other than electronic mail, wherein:
> said first processor included in said communication system sends said further other information to the RF device using the RF system.
>
> 394. The RF device in accordance with claim 393, wherein said further other information is transmitted to the RF device via the interface.

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. (Final Rejection 43:37-38).

And regarding file transfer, as cited by the Examiner (Final Rejection 43), 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.

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. (Final Rejection 43).

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

NTP argues that Garbee constitutes inapplicable prior art because it is not within the same field of endeavor as that of the inventor. Even assuming that that is true, NTP has not asserted that Garbee 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 Garbee constitutes non-analogous art.

NTP argues that the teachings of Verjinski and Garbee are not properly combined. Specifically, NTP states (Brief 115:9-13):

> Nothing suggests that use of Garbee would cure any of the deficiencies of Verjinski. For example, Verjinski does not have an interface connecting a communication system to an RF transmission network. Adding Garbee would not cure that deficiency.

NTP further argues that Garbee does not disclose an interface or any device or system which includes a processor that transmits electronic mail messages to a wireless system for delivery to a mobile processor. (Brief 104:14-16).

The arguments are misplaced. Verjinski does not have the deficiencies identified by NTP. As has already been discussed in the context of the anticipation rejection based on Verjinski, Verjinski does disclose an interface coupled to a RF system. Also, Garbee was not relied on by the Examiner for the disclosure of an interface or an RF system. 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 argues that Verjinski does not describe a communication system as claimed in claim 393 and 394. (Brief 98-99). The argument is not persuasive because it is conclusory and is based on the narrow interpretation of communication system. We do not credit the testimony of Dr. Rhyne (Appendix A13, ¶ 16) because Dr. Rhyne's interpretation of "communication system" is unduly narrow and read extraneous features into the claims.

NTP further argues that Garbee does not teach or suggest "further other originating information" being sent to the "RF device using the RF

system." (Brief 116). The argument is conclusory and does not explain in any meaningful way error with the Examiner's reasoning and rationale. 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 Verjinski, and to use the communication system of Verjinski to send files in the same way it is used to send and receive electronic mail.

We do not credit the testimony of Dr. Rhyne. (Appendix A21, ¶¶ 8-12). Dr. Rhyne's interpretation of the claim term "interface" is unduly narrow and reads extraneous features into the claims. Dr. 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 Verjinski 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 393 and 394 under 35 U.S.C. § 103 as unpatentable over Perkins and Garbee.

E. Secondary Considerations / Objective Evidence of Nonobviousness

Introduction

Obviousness factual inquiries 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, 743 (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. *See 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 1362, 1369 (Fed. Cir. 1998). 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, 646 (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 Mach. & 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 1475, 1482 (Fed. Cir. 1994); *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 so-called 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 Federal Rules of Civil Procedure 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 Federal Rules of Civil Procedure 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

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

According to the specification of the NTP '451 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 '451 patent 17:55-59; 19:64-67; 20:37-41; 22:38-50; 22:49-64):

(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 62-64, the NTP '451 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 '451 patent further describes in column 22, lines 38 to 64 (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 '451 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 '451 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 117, lines 7-10, 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.*, '960 Patent, Col. 18, l. 32 to Col. 25, l. 10. 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.*, '960 Patent, Col. 17, ll. 41-46. 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 receives email while it is detached from the destination processor, which includes its own "memory," and which operates to receive 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 118) 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 123 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 123 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) receives email while the receiver is detached 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 '451 patent by a certain Blackberry™ device of RIM. On page 119 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 119 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 Declaration ¶ 21.

NTP does not describe for us the components or manner of operation of the infringing Blackberry™ devices. It appears to be NTP's legal position that it does not matter what components RIM's BlackBerry™ device has or how RIM's BlackBerry™ device operates as long as the device infringes and falls within the scope of an NTP claim. Note NTP's argument on page 122, line 20, of the appeal brief that "[t]hat the BlackBerry™ 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 (E.D. Wis. 1986), *aff'd*, 819 F.2d 1120 (Fed. Cir. 1987), NTP argues in its appeal brief on page 126, line 3, that even though RIM's Blackberry™ 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 '960 [sic] 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.* 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 Blackberry™ 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 Fielder*, 471 F.2d 640, 646 (CCPA 1973); *In re Tiffin*, 448 F.2d 791, 792 (CCPA 1971). 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 122, ll. 14-17), NTP cites to the trial testimony of its own witness Terry Lee Musika (Trial Tr. 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 135, 140 (Fed. Cir. 1996). 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 386 claims are on appeal in this proceeding, including 8 independent claims, only five claims from the NTP '451 patent were 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 five claims, that translates to commercial success of the claimed invention of all 386 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 page 121 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 121):

> Here, over three years after the trial in which RIM was found to willfully infringe six claims of the '451 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* Supplemental White Declaration 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 9 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 Columbia [sic—Virginia] 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 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 121, ll. 15-16). 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 '960 [sic] Patents' inventors." (Brief 120, ll. 15-17). 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 Elec. Prods., 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 '451 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 '451 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 898, 907-08 (Fed. Cir. 1985), 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 a 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 '451 patent and who was unsuccessful in asserting invalidity of any claim of the NTP '451 patent in civil litigation, has taken a license under the NTP '451 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 '451 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 non-obviousness. 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:

1. 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:[3] 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,[4] 6 February 1989.

Received in the Library: 24 April 1989
Catalogued: 12 October 1989

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[3] There is no Volume 5.

[4] 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 the documents are numbered.

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 90/007,735.

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:

2008-1116.30October2008.004.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 websearch" 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 ¶ 45, Assumption c; Brief 36). 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, ¶ 3).

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, ¶ 3).

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 (involved in Appeal 2008-004602) 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, ¶ 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, ¶ 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, ¶ 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, ¶ 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, ¶ 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, ¶ 2).

On or about 1 July 2005, Anderson initiated an investigation into the documents. (Anderson Declaration, ¶ 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, ¶ 3).

Whatever the nature of the Anderson inquiry, he says he found out that the documents were checked out. (Anderson Declaration, ¶ 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, ¶ 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, ¶ 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.

Declaration of David L. Gunn

David L. Gunn is the Head Librarian at Hunton & Williams LLP, a law firm representing NTP. (Gunn Declaration, ¶ 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, ¶ 4).

Gunn tells us that while the documents were in his possession, he did not "alter" or "manipulate" the documents. (Gunn Declaration, ¶ 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, ¶ 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 hand-deliver the documents to David Richard Browne. (Brown Declaration, ¶ 3).

Brown did not alter the documents while they were in his possession. (Brown Declaration, ¶ 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, ¶ 3).

Sadler did not alter or manipulate the documents while they were in his possession. (Sadler Declaration, ¶ 4).

Declaration of David Richard Browne

Browne is a citizen of the United Kingdom working in London. (Browne Declaration, ¶ 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, ¶ 8).[5]

He had been asked by David Geneson of Hunton & Williams LLP to "examine" the documents. (Browne Declaration, ¶ 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

[5] The Examiner calls into question the relevance of the Browne examination and whether it should be considered at all. (Answer 100 n.22). 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. (Reply Brief 9-25). 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.

"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 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, ¶ 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, ¶ 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, ¶ 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.

Assumption c: 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, ¶ 46).

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, ¶ 47; 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 ¶ 47], but would not have located any of the eight documents. (Rhyne Supplemental Declaration ¶ 47).

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, ¶ 49).

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 6,067,451, the following becomes manifest (col. 3:57 through col. 4:45) (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, ¶¶ 64-65).

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 ⅛ 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 30:21-31:7). 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

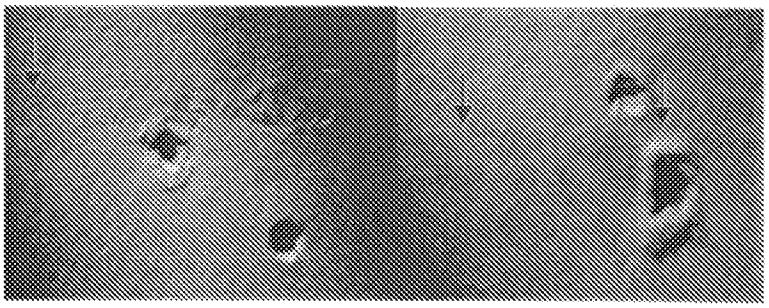
a. The Browne declaration

(1)

In ¶ 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)):



Scratch 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

1 Introduction

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 Figure 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 4-⅝ inches from the top of each page and approximately ⅞ 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 ¶¶ 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 ⅜ 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 ⅛ 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 ¼ 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).[6]

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.

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 ⅛ inches thick.

The authors are identified as:

Stig Kaspersen

Geir Ivar Thorud

Finn Trosby

[6] 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 ™ tape.

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 ⅛ 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; 039).

A date stamp (made with an ink date stamp) appears half way down the page on the left side (049):

Norges tekniske

24 APR.1989

universitetsbibliotek

Over the stamped date, written in blue ball-point pen, appears (049)

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).

(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 24:21-25:26). 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 12, NTP states that the documents "were obtained by the third party requester, RIM, and are therefore 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 & Prods. 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 Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1368 (Fed. Cir. 2004) (Board has broad discretion to determine weight to be given evidence, including declaration evidence); *J.C. Equip. 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 13). 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 743, 745 (Fed. Cir. 1999) (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); *Cent. State Hosp. 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 Inst. 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 24:21-25:26). 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 36-37). 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, ¶ 65). 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 21). 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 efforts to antedate Perkins and Hortensius as prior art

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, 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, 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, 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, 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. denie*d, 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, 1176-77 (CCPA 1974) (CCPA evaluated 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).[7]

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 establishing that any differences

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[7] 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).

between the conception or actual reduction to practice and the rejected 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 proved by a preponderance of the evidence a prior conception or actual reduction to practice of a system or process for wirelessly transmitting an e-mail message.

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, Hortensius and Harrison patents is October 29, 1990. NTP alleges a conception in July of 1990 or no later than October 6, 1990. (1st Supplemental Brief 5). NTP also alleges an actual reduction to practice "no later than October 26, 1990." (1st Supplemental Brief 14). NTP argues that the subject matter of each of the 386 claims was "conceived and either actually reduced to practice or constructively reduced to practice with diligence beginning before the effective date of the Perkins, Hortensius and Harrison 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 25-43). 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 6,067,451. (1st Supplemental Brief 26, n.2). For example, with respect to the Claim 1 limitation requiring sending e-mail wirelessly, NTP submits the following:

> a RF 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 26, 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. We are left to sort through NTP's submissions to figure out the relevance of the documents and testimony.

For example, in the discussion of Claim 1 and the limitation requiring broadcasting e-mail message information to an RF receiver, NTP directs us to "*e.g.*, broadcasts to Wireless Email Receiver - Pager include Email and address of Wireless Email Receiver - Pager; various methods for addressing

emails as described in DFs 6, 8, 9, 17, 21, 27, 28, 35, 44, 45, 47, 52, 38-41, 58-63 and 99-101." 1st Supplemental Brief, 26:13 to 27:3. The listed proposed facts direct us to look at numerous portions of Exhibit 1001, portions of NTP's Patent 5,436,960 and additional patents 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 Exhibit 1002, Exhibit 1004, and portions of Exhibit 1043. DF 35 additionally directs us to DF 1 which again directs us to portions of Exhibit 1001 and which in turn references the "Campana patents" and the Telefind E-mail Integration document (Exhibit 1002). The referenced portions of Exhibit 1001 direct us to portions of the "Campana Patents," the "Telefind Patents" and other exhibits. How the referenced document supports the 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 transmitting e-mail message information by an RF system, NTP directs us to, *inter alia*, DF 44. (1st Supplemental Brief 27:1-2). DF 44 refers to prior art patent 4,870,410 which provides details on a network with wireless capability and is said to show sending e-mail to multiple service code destinations. (1st Supplemental Brief 11:17-19). Our review of the patent does not reveal how it relates to sending e-mail. Instead, it appears to relate to sending pager messages. The significance of the patent 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 also treats them together.

We will focus our discussion on the requirement that an e-mail be sent wirelessly. Each of the independent claims, and by incorporation by reference, each of the dependent claims require this element.[8]

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[8] *See e.g.*, Claim 1 ("a system comprising a communication system which transmits electronic mail . . . .")"; Claim 81 ("a system comprising at least one communication system which transmits electronic mail . . . "); Claim 246 ("a system comprising a communication system which transmits electronic mail containing information, with the electronic mail being inputted to the communication system from a plurality of processors"); Claim 250 ("inputting electronic mail from a processor to the communication system"); Claim 311 ("originating electronic mail from a processor in a communication system which electronic mail includes . . ."); Claim 319 ("A method of transmitting and distributing inputted information through a communication system and an RF system, comprising: transmitting electronic mail from a processor in the communication system . . ."); Claim 326 ("a system for transmitting and distributing inputted information, contained in electronic mail originating at a processor in a communication system, through a RF system . . ."); and Claim 332 ("a system for transmitting and distributing inputted information contained in electronic mail originating from a communication system and transmitted through an interface to a RF system . . ."). (Brief 162, 177, 208, 209, 222, 225, 226 and 228).

B. Conception and Actual Reduction to Practice of Wirelessly sending e-mail

NTP's claims require a system or process sending an e-mail message wirelessly. For example Claim 1 is directed to

> a system comprising a communication system which transmits electronic mail, inputted to the communication system from a plurality of processors, and a RF system having a plurality of RF receivers which receive broadcasts from at least one broadcast location, the broadcast including information contained within the electronic mail . . . ."

(*See e.g.*, Claim 1, Appeal Brief filed June 26, 2006 at 162).

NTP directs us to the following proposed facts as support for conception and actual reduction to practice of wireless e-mail: DFs 1-21, 27, 28, 35, 38-41, 44, 45, 47, 52, 58-63, 89, 90, 95 and 99-101.[9] The above-

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[9] NTP argues with respect to Claim 1:

> The inventors conceived and actually or constructively reduced to practice in a system comprising a communication system (e.g., DFs 19, 20, AT&T Email System/electronic mail system 10) which transmits electronic mail (e.g., E-Mail, DFs 20 and 89/a type of originated information), inputted to the communication system from a plurality of processors (e.g., AT&T Processor, DFs 20, 33, 95/originating processor #1-#3 and A-N), and a RF system (e.g.,Network, DFs 1- 18, 35, 90/RF information transmission network 302) having a plurality of RF receivers (e.g.,Wireless Email Receiver - Pager, DFs 8, 35, 100/RF receiver 119) which receive broadcasts from at least one broadcast location (e.g.., transmitter in Network broadcasts to Wireless Email Receiver - Pager; various methods for addressing emails as described in DFs 6, 8, 9, 17, 21, 27, 28, 35, 44, 45, 47,

listed proposed facts refer us to specific portions of the following documents and testimony: (1) The Telefind E-Mail Intergration Document (Exhibit 1002) at p. 1, ¶¶ 5 and 6, p. 2, ¶¶ 1, 2 and 5, p. 3, ¶¶ 1-3, p. 4, ¶ 3, and pp. 18- 19; (2) Campana's Declaration (Exhibit 1001), ¶¶ 4-6, 8-13, 15-16, 29, 31 and 37 and Row 3 of the Chart on page 19; (3) Campana's trial testimony (Exhibit 1043) at 145:18 – 146:7, 148:22 -149:17, 165:7-166:1, 167:12-25 and 175:21-25; (4) Campana's deposition testimony (Exhibit 1034) at 176:10-177:23 and 210:25-211:7; (5) Patent 5,436,960, Figs. 2, 10 and 11 and the discussion at 24:14-28; (6) Patent 5,045,850, Fig. 7 and text at 13:32-40; (7) Patent 4,870,410, Fig. 2; (8) Exhibit 1004 at 2-3; (9) Exhibit 1007 at 1-2; and (10) Michael Ponschke's deposition testimony (Exhibit 1040) at 97:19 to 98:19, 99:7 to 102:9 and 103:4 to 104:7 and Ponschke's trial testimony (Exhibit 1045) at 1403:12 to 1405:14.

We discuss each of these documents below.

1. The Telefind Integration Document - Exhibit 1002

NTP's Exhibit 1002 is critical to its case for antedation. (2nd Supplemental Brief 12:1-6). 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 Exhibit 1002.

> 52, 38-41, 58-63 and 99-10l/transmitter 115 and 4:52-5:33 and Fig. 11 and 28:10-62 and 25:36-53 and 26:8-28) the broadcast including information contained within the electronic mail . . . .

(1st Supplemental Brief 26:2-14 (footnote omitted)). NTP's position is essentially the same for the other independent claims.

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. Exhibit 1002 is Revision 2 and is dated April 9, 1991. Exhibit 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 Exhibit 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 Exhibit 1002 did not antedate the references, NTP attempts to rely on the Revision 0 date of October 6, 1990. The first page of Exhibit 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 of Revision 0.

We will assume, for the purpose of this opinion, that there was a Revision 0 in existence on October 6, 1990. However, Exhibit 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, Exhibit 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 Exhibit 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 Exhibit 1002 raises more questions then it answers as to the content of Revision 0. The circuit drawing is part of the section of Exhibit 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 Exhibit 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's 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 196) 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 [Exhibit 1002] which was revision 0 was written by me." (Exhibit 1001, 13-14 ¶ 32). In his declaration (Exhibit 1001) Campana testifies that Exhibit 1002 included the "primary substance" of Revision 0. (Exhibit 1001, 14 ¶ 35). He further testified that the document was only substantially changed in two respects. (Exhibit 1001, 13-14 ¶ 32). The first change was said to be in response to a February 11, 1991, fax from AT&T relating to a commercial embodiment. (Exhibit 1001, 14 ¶ 33). According to Campana, this change resulted in the March 1, 1991, Revision 1. *Id.* The second was the revision to the circuit diagram on March 29, 1991. (Exhibit 1001, 14 ¶ 34). This change was said to be the basis of the April 9, 1991, revision. *Id.*

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 in describing what transpired during the meetings indicates that developing a business relationship with AT&T was important. See especially Exhibit 1007 at 3 ("The Developing Telefind/AT&T Strategic Alliance").

What we find particularly noteworthy is that none mentions e-mail, the central focus of Exhibit 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 an RF receiver. Thus, wirelessly sending non-email messages to an RF receiver 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.'" (1st Supplemental Brief 3:10-13). A paging receiver is a type of destination processor.[10] Thus,

[10] The destination of the message is the paging receiver. Patent 5,045,850, e.g., col. 4:40-44. 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. 11:25-27. Figure 3 and corresponding text

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. (Exhibit 1006). After that date, discussion of wireless e-mail is significant in virtually all of NTP's documentary exhibits. (*See*, Exhibits 1002, 1008, 1011–1018, 1026, and 1030). Those exhibits cover the period November 21, 1990 to April 9, 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 (Exhibit 1002). Neither was identified as adding a reference to e-mail. Thus, Campana implicitly says that Revision 0, like Exhibit 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 relationship 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 Exhibit 1002, 17-19, and ostensibly in Revision 0, 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 (Exhibits 1003-1005, 1007 and 1009) is inconsistent with his testimony on the content of Revision 0. Had Revision 0 included the reference to wireless

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of the 915 patent at col. 14:28-32, show that the paging receiver is a processor.

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 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. (Exhibit 1001, ¶ 1). NTP is a patent holding company whose principal assets include the patents involved in these reexaminations. The result of these proceedings 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 relevant in determining the weight to be given declaration evidence submitted during ex parte patent examination. *Paragon 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 (Exhibit 1001) and trial testimony (Exhibit 1043) were given over twelve years after the alleged dates of conception and actual reduction to practice. Because of the long period of 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).

Because of his interest and the period of time between the Revision 0 date and the date of the declaration, we do not credit Campana's testimony.

NTP argues that under the correct legal standard, the Board is required to accept Campana's sworn testimony. (2nd Supplemental Brief 3-5). 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.

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 F3d 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 Exhibit 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 Exhibits 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 16:3). 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. Exhibit 1002 is Revision 2 of the TEID.

All of the remaining documents except Exhibit 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, Exhibits 1003–1005, 1007 and 1009, those closes in time to the Revision 0 date, do not mention sending e-mail. Rather they relate to messaging. E-mail became the focus in later documents. In any event, they do not support NTP's argument that Revision 0 and Exhibit 1002 were substantially the same.

NTP also specifically directs us to the portion of Campana's declaration (Exhibit 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 Exhibit 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 Exhibit 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 Exhibit 1006 above and specifically addressed it in our previous decision. (Memorandum Opinion and Order 22:3-16). We there noted that NTP did not provide an explanation of what was in common between the letter and Exhibit 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 Exhibits 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 Exhibit 1002. To the extent that NTP urges that the content of Revision 0 is revealed in the November 21, 1990, letter (Exhibit 1006), the lack of technical content seems to suggest that substantial information was added by the revisions after the completion of the letter. Exhibit 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 of 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. *Id.*

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 Exhibit 1002[11] was used as the disclosure document to prepare the applications. (Exhibit 1025, ¶ 4). However, Exhibit 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 (Exhibit 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. (2 nd Supplemental Brief

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[11] 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 Exhibits 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).

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 Exhibit 1002 as of April 9, 1991. The level of technical detail in the application compared with that in Exhibit 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 24, 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 Revison 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 (Exhibit 1044) and the Memo (Exhibit 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. (Exhibit 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." (Exhibit 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 (Exhibit 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 (Exhibit 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 inventors, 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 Exhibit 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 (Exhibit 1039) as establishing the content of Revison 0. (2nd Supplemental Brief 27:8-13). We have reviewed Exhibit 1039 and can not locate, and we 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. Exhibit 1039, 84:13 – 84:18. Thelen is listed as the author of the "Better Basic' Driver" section of Exhibit 1002. (Exhibit 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 (Exhibit 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 Exhibit 1002 with two exceptions. (Exhibit 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 Exhibit 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 Exhibit 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 Exhibit 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." (*E.g.*, 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 19:18 to 23:13). 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 20:27 to 21:6). We then discussed those other indicia including documents dated between July and October 6, 1990. (Mem. Op. and Order 21:7 to 22:16 and 23:11-13). Thus, we neither held that there was "no evidence" nor based the decision 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 Exhibit 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. Exhibit 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 and Deposition Testimony – Exhibits 1001, 1034 and 1043

We have also reviewed the referenced portions of Campana's declaration and trial testimony relating to conception and actual reduction to practice of wireless e-mail. (*E.g.,* 1st Supplemental Brief 26:2-14 (relating to Claim 1) referring to DF's 1-21, 27, 28, 35, 38-41, 47, 52, 58-63, 89, 90, 95, and 99-101). We do not credit his testimony as to the dates when various events occurred 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 20, 1991. 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 great grandparent of Patent 6,067,451, involved in these reexaminations. The written description and drawings of both patents are said to be the same. NTP specifically relies on the text appearing at 24:14-28 and Figures 2, 1011 of '960. (1st Supplemental Brief, p. 11, 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 ¶ 6; 4 ¶ 10; 11 ¶ 44). Both appear to describe wirelessly sending non-email messages where the destination processor is a pager device rather than a computer. (1st Supplemental Brief 3 ¶ 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 21, 1990.

5. Andy Andros Memo dated November 1, 1990 – Exhibit 1007

Exhibit 1007 is a memo describing a meeting with the AT&T Portable Computer Group on October 26, 1990. It is dated November 1st 1990. We discussed the memo above. The focus of the meeting was apparently to demonstrate the use of Telefind's Messager paging device as a wireless modem. Exhibit 1007, 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.

Exhibit 1007, 1. The memo does not mention that downloading e-mail to the AT& T computer was demonstrated.

6. Michael Ponschke's deposition and trial testimony - Exhibits 1040 and 1045

Exhibits 1040 and 1045 are the deposition and trial testimony of one of the inventors, Michael Ponschke. At his deposition, Ponschke testified about attending the meeting in New Jersey on October 26, 1990, apparently discussed in the Andros memo, Exhibit 1007. He testified that Telefind's "paging device" was demonstrated and that e-mail messages were sent through the devices displayed on a laptop computer. (Exhibit 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.

(Exhibit 1045, 1404:20 – 1405:1). His testimony is consistent with Campana's memos and other documents dated between August 16 and November 19, 1990, all of which discuss messaging, not e-mail.

7. 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 demonstration 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 (Exhibit 1001); Exhibit 1003 at 1-2; Exhibit 1004 at 2; Exhibit 1005 at 2; Exhibit 1006 at 1; Exhibit 1007 at 1-2; Exhibit 1009; Exhibit 1034 at 176:l0-177:23, 210:25-211:7; Exhibit 1040 at 97:19-98:19, 99:7-102:9, 103:5-104:7; and specific portions of Campana's Trial Testimony (Exhibit 1043); and Exhibit 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 e-mail, rather they relate to sending paging messages to a wireless modem.

Exhibits 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.

Exhibit 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 of inventor Ponschke 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?

(Exhibit 1034, 176:10-13). He answered:

> I believe that was the date that it was demonstrated to AT&T in New Jersey.

(Exhibit 1034, 176:15-16). Thus, this portion of his deposition does not support NTP's position that wireless e-mail, rather than messaging, 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.

We discussed Ponschke's testimony, Exhibits 1040 and 1045, above. It relates to the October 26, 1990, demonstration. He testified that wireless transmission of messages rather than e-mail was demonstrated. (Exhibit 1045, 1404:20 – 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 (Exhibit 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." (Exhibit 1047, 1 ¶¶ 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. (Exhibit 1047, 2 ¶ 9). He was responsible for developing software to interface Telefind's paging device with a computer. (Exhibit 1047, 2 ¶ 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. (Exhibit 1047, 9 ¶ 34). He says that no later than October 6, 1990, they:

> had an operational email 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.

(Exhibit 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. (Exhibit 1047, 4-9 ¶¶ 16-33). Some of the files on the diskettes are said to be dated before the date of the references on October 5, 8, and 12, 1990. Another is dated

November 14, 1990. (Exhibit 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. (Exhibit 1047, 12 ¶ 40). He further testifies that, without specifying a date, 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.

(Exhibit 1047, 12-13 ¶ 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 that a message has been received by the pager attached to a laptop computer.

(Exhibit 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. (Exhibit 1047, 18 ¶ 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. (Exhibit 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, at the time of his declaration, was a paid consultant for NTP "regarding any legal matters which NTP may be involved." He thus has a significant interest in the outcome of this interference. Additionally, his declaration is dated April, 2009, more than eighteen years after the events on which he testifies. We do not consider his recollections reliable.

Additionally, Thelen's testimony on sending e-mail appears to be contradicted by Ponschke who testified that they demonstrated messaging rather than e-mail in October, 1990. To the extent Thelen's testimony and Ponschke's testimony are inconsistent, we credit Ponschke's testimony because it is consistent with the memos written between August 16 and November 1, 1990, which discuss messaging rather than e-mail. (*See* Exhibits 1003-1005, 1007 and 1009).

NTP's § 1.131 submissions fail to establish that the inventors conceived or actually reduced to practice a system or process, including wirelessly sending e-mail prior to the effective date the references.

5. Additional Points Raised by NTP

A. Stout Declaration – Exhibit 1064

As part of its submissions in response to our decision entered February 18, 2009, NTP submitted Exhibit 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 (Exhibit 1047). It repeats, essentially verbatim, the proposed fact findings found at pages 2-25 and the "claim mappings" found at pages 25-48 of the 1st Supplemental Brief. Thus, Exhibit 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). Stout's 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 Exhibit 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 by 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 (Exhibit 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 (Exhibit 1025, 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 (Exhibit 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 subject matter of the rejected claim[s]."

Further, Stout is hardly a disinterested witness. His declaration (Exhibit 1064) notes that at the time the declaration was submitted he was the president of NTP. (Exhibit 1065, p. 2:2-4). He and his immediate family, collectively, are apparently NTP's largest stockholders. (Exhibit 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.

B. 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 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 subject matter of the rejected claim 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 Exhibit 1002 does not establish that the subject matter of the rejected claims is present in Exhibit 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. and Order 24:25 to 25:2).

The claims require functions and interactions not identified in the table. Thus, for example, Claim 1 requires that the interface send a

processed output including the identification of the RF receiver. We do not see where the table addresses this limitation and NTP has not provided an explanation of how it does so. It is NTP's responsibility to present evidence establishing prior invention of all the claim limitations.

6. 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, the claimed system and process including sending e-mail wirelessly as required by all of the rejected claims. Nor has NTP established that their evidence of conception and reduction to practice was sufficient to have rendered the claimed invention obvious over that evidence. NTP has failed to demonstrate prior invention of the subject matter of the rejected claims.

H. Rejections of claims 393-437 under 35 U.S.C. § 112, first paragraph, as lacking written description in the specification

The Examiner finally rejected claims 393-437 under 35 U.S.C. § 112, first paragraph as lacking written description support in the specification.

The rejection of claims 393-437 is *affirmed-in-part.*

1. Claims 395-399, 411, 412, 414, and 434

Claims 396-399, 411, and 412 each depend directly or indirectly from claim 395. Claims 414 and 434 each depend indirectly from claim 400. Claims 395, 414 and 434 are similar in scope.

Issue

Has NTP shown that the Examiner incorrectly determined that the specification of the NTP '451 patent does not reasonably convey that the inventors had possession at the time the patent was filed of deleting inputted

message text and subject description prior to transmitting the electronic mail by an RF system?

Findings of Fact

Claim 395 depends from dependent claim 248 and recites (Brief Claims Appendix):

395. The RF device in accordance with claim 248, wherein:

after reception of electronic mail including said information from an electronic mail system, information is deleted from the electronic mail prior to transmission by the RF system.

NTP's '451 Specification

NTP's specification describes the integration of an electronic mail system with an RF information transmission network for transmitting electronic mail from at least one originating processor to at least one destination processor. (NTP '451 patent 17:42-49).

The electronic mail system includes an interface switch and a gateway switch. The interface switch connects the gateway switch to the RF information transmission network. (NTP '451 patent 19:26-40).

NTP's specification describes that certain items are required by electronic mail systems in order to send an electronic message and the common items are: (1) the identification of the receiver; (2) the identification of the sender; (3) a short reference to the subject matter of the text or message that follows; and (4) the text of the message. (NTP '451 patent 2:64 to col. 3:16).

The NTP '451 specification describes the addition of information to the information originated by the originating processor. The electronic mail system or the interface switch adds the identification number of the RF receiver to the information originated by the originating processor. (NTP '451 patent 18:55-60). Either the originating processor or the gateway switch in the electronic mail system adds the address of the interface switch to the originated information. (NTP '451 patent 19:40-45; 20:46-48; 20:56-57).

NTP's specification describes removing information added by the electronic mail system to the information initially originated by the originating processor as follows (NTP '451 patent 23:67 to 24:4):

> The interface switch 304 also removes information added by the electronic mail system 1-N to the information from the originating processor A-N from the stored information received from one of the gateway switches 14 . . . . (Emphasis added).

NTP's specification does not describe removing either of the text of the electronic mail message or the short reference to the subject of the message prior to transmission of the message to the RF receiver and the destination processor.

The Examiner found that claim 395, and claims similar in scope, covers removing the subject field and message text. The Examiner further found that the specification does not provide adequate written description for removing or deleting the subject field of the message or the text of the message. (Final Rejection 6; Answer 71-72).

Principles of Law

The test for determining compliance with the written description requirement is whether the disclosure of the application as originally filed reasonably conveys to the artisan that the inventor had possession at that time of filing of the claimed subject matter, rather than the presence or absence of literal support in the specification for the claim language. *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563 (Fed. Cir. 1991); *In re Kaslow*, 707 F.2d 1366, 1375 (Fed. Cir. 1983). One shows that one is "in possession" of the invention by describing the invention, with all its claimed limitations, not that which makes it obvious. *Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997); *In re Wertheim*, 541 F.2d 257, 262 (CCPA 1976).

Disclosure of a species does not always provide sufficient written description for a broader claim. *In re Curtis*, 354 F.3d 1347, 1356 (Fed. Cir. 2004)("we have never held that in all such cases [where there is disclosure of a species that] . . . 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 Univ. of Cal. 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 v. Wakalopulos*, 386 F.3d at 1125; *In re Curtis*, 354 F.3d at 1352-53.

Another factor to consider is whether the differences between species even matter. *Bilstad v. Wakalopulos*, 386 F.3d at 1124.

Analysis

Claim 395 is representative and recites that "after reception of said electronic mail including said information from an electronic mail system, information is deleted from the electronic mail prior to transmission by the RF system." Claim 395 includes deleting any of the information from the electronic mail prior to transmission by the RF system. That would include any added information or any original information. However, the specification of the '451 patent does not provide written description support for deleting information that originated from an originating processor, such as the text of the mail message from the electronic mail. Rather, the specification of the '451 patent only describes deleting information that is added by the electronic mail system, *e.g.*, information added to the originated information. Thus, claim 395 is broader than that which is described in the '451 patent specification.

In response to the rejection, NTP argues that the Examiner's rejection is not supported by an evidentiary showing of why a person of skill in the art would not be convinced that the inventor possessed the invention as claimed. (Brief 132). As stated above, the Examiner found that the claim 395 is broader in scope than that which is described in the '451 specification. We disagree, that in this case, anything more was required by the Examiner. *See Hyatt v. Dudas*, 492 F.3d 1365, 1370 (Fed. Cir. 2007) ("In the context of the written description requirement, an adequate prima facie case must therefore sufficiently explain to the applicant what, in the examiner's view, is missing from the written description. . . . When no such description can be found in

the specification, the only thing the PTO can reasonably be expected to do is point out its nonexistence.").

NTP asserts that it did point out examples to the Examiner where the limitations of claim 395 are supported, and as such, maintaining the rejection was improper. Presumably, NTP is referring to the Appendix B attached to its response mailed 30 January 2006 to which the Examiner refers at page 71 of the Answer. The Appendix B does not cite to a description in the '451 patent specification which indicates removing, for example, the original message text from the electronic mail that was initially entered at the originating processor. Rather, Appendix B cited to text in the specification of the related '472 patent, including that located in column 21:53 to column 22:6 (the same disclosed at column 23:56 to 24:9 of the '451 patent) which refers to deleting information that was added to the originated information by the electronic mail system. NTP did not direct attention to a portion in the '451 patent specification for the more generic feature of removing or deleting information such as the original message text. For these reasons, the Examiner provided ample basis by pointing out the insufficiency of the written description with regard to the broad claim limitation.

NTP argues that if some embodiments fall within the scope of a claim at issue, then the written description requirement is met. It is not a bright line rule, however. As explained in *Bilstad* (386 F.3d at 1124), disclosure of a species *may be* sufficient written description support for a later claimed genus including that species. That determination is case by case specific where consideration of the unpredictability of the art and a determination of whether the inventor had possession of what is claimed must be considered.

Here, we find that NTP did not have possession of the broader genus claims that encompass the deletion or removal of message text or subject text. NTP did not contemplate removing or deleting the message text from the originated information. That would make no sense in light of the entirety of NTP's disclosure. That is, based on the record before us, there is no reason why one of ordinary skill in the art would conclude from reading the NTP disclosure that NTP even desired to remove the text of the mail message prior to sending the message to the destination, much less possessed such a species within its invention. The specification is all about sending mail messages from an originator (sender) to a destination (receiver). Removing the text of the message before its arrival to the destination would be illogical.

We have considered the predictability factor and have determined that the specification as filed by NTP does not reasonably convey that the inventors, at the time of filing of NTP's '451 patent, had possession of the general feature of deleting information contained in the electronic mail being transmitted. NTP does not direct us to evidence that would support a theory that removal of addressing information would lead one of ordinary skill in the art to also know how or want to remove the original message text of the electronic mail.

NTP argues that the Examiner acknowledged that the specification does provide written description support for the broad claim through his remarks made with respect to other claims. NTP's argument is misplaced. The Examiner acknowledged that varying characteristics of header, for example, may be adequately described, the varying of the content includes more than mere addition, deletion and encoding. (Repeated in Answer 71).

Thus, the Examiner explained that varying, or deleting of the mail message (content) is not contemplated. Claim 414 includes "wherein said processes performed by the interface includes varying content of the electronic mail including said information." Claim 434 includes "wherein said processes performed by the interface includes varying content of the electronic mail." Claim 414 and 434 include the claim limitation, similar to the one in claim 395 that includes the feature of varying the content of the electronic mail message, which includes the original inputted text of the message and subject description of the text. 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.

Claims 396-399, 411 and 412 depend either directly or indirectly from claim 395 and therefore 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. Claims 415-417 depend on claim 414, and 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. Claims 435 and 436 depend on claim 434, and 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. NTP does not argue for the separate patentability of claim 396-399, 411, 412, 415-417, 435, and 436. (Brief 138-140; 143-145; and 151). Therefore, with respect to these claims which depend from either 395, 414, or 434, and for the same 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 NTP '451 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 the RF information transmission network.

2. Claims 393 and 394

Claim 393 indirectly depends from independent claim 246. Claim 394 depends from claim 393.

Issue

Has NTP shown that the Examiner incorrectly determined that the specification of the NTP '451 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 393 and 394?

Findings of Fact

Claim 393 is representative and is reproduced below (Brief Claims Appendix):

> 393. The RF device in accordance with claim 248, wherein said communication system comprises:
>
> an electronic mail system, which transmits said electronic mail including said information inputted to said electronic mail system, and other information to a destination processor using wireline without using the RF system;
>
> said communication system further comprises a first processor which transmits to the RF device further other

> information which is information other than electronic mail, wherein:
>
> said first processor included in said communication system sends said further other information to the RF device using the RF system.

The Examiner found that claim 393 with the "first processor" is broad enough to include sending information to the RF device via the RF system without using an interface. The Examiner further found that the NTP specification describes that the processor uses the interface and therefore there is insufficient written description support for the processor to communicate with the RF device without using the interface as claimed. (Final Rejection 6).

NTP's arguments are largely a repeat of those with respect to the claim 395 discussion above. NTP argues that the Examiner's rejection is not supported by an evidentiary showing of why a person of skill in the art would not be convinced that the inventor possessed the invention as claimed. (Brief 127-129). The Examiner found that the claim 393 is broader in scope than that which is described in the '451 specification. We disagree, that in this case, anything more was required by the Examiner. *See Hyatt v. Dudas*, 492 F.3d 1365, 1370 (Fed. Cir. 2007) ("In the context of the written description requirement, an adequate prima facie case must therefore sufficiently explain to the applicant what, in the examiner's view, is missing from the written description. . . . When no such description can be found in the specification, the only thing the PTO can reasonably be expected to do is point out its nonexistence.")

NTP asserts that it did point out examples to the Examiner where the limitations of claim 393 are supported, and as such, maintaining the rejection was improper. Presumably, NTP is referring to the Appendix B attached to its response mailed 30 January 2006 to which the Examiner refers at page 71 of the Answer. The Appendix B does not cite to a description in the '451 patent specification which indicates that the inventors had possession of transmitting other information from the other or "first processor" to the RF device using the RF information transmission network. As pointed out by the Examiner, the portions of the specification to which NTP directs attention to describe that the "other processor" transmits the other information through the interface switch prior to the information going to the RF information transmission network. NTP did not direct attention to a portion in the '451 (or '472 patent) patent specification for the more generic feature of transmitting other information from the "other processor" to the at least one destination processor using the RF information transmission network. For these reasons, the Examiner provided ample basis by pointing out the insufficiency of the written description with regard to the broad claim limitation.

NTP argues that if some embodiments fall within the scope of a claim at issue, then the written description requirement is met. It is not a bright line rule, however. As explained in *Bilstad* (386 F.3d at 1124), disclosure of a species *may be* sufficient written description support for a later claimed genus including that species. That determination is case by case specific where consideration of the unpredictability of the art and a determination of whether the inventor had possession of what is claimed must be considered.

Here, we find that NTP did not have possession of the broader genus claims that encompass the transmitting the other information by the other processor without using the interface. NTP did not contemplate bypassing or not using the interface switch. Based on the record before us, there is no reason why one of ordinary skill in the art would conclude from reading the NTP disclosure that NTP had possession of the other processor sending other information to at least one destination processor without transmitting such data through the interface switch. Therefore, 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.

Claim 394 depends from claim 393. According to NTP, the Examiner's reasoning for rejecting claim 393 was based on claim differentiation which apparently does not apply to claim 394. (Brief 130). Although claim 394, as presently written, depends from claim 394 and is therefore dependent on a rejected claim, the rejection of claim 394 is reversed.

Conclusion

NTP has not shown that the Examiner incorrectly determined that the specification of the NTP '451 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 the generic claim feature that includes the other processor sending other information to an RF device without transmitting such data through the interface switch.

3. Claims 400-410, 413, 418-433 and 437

Claim 400 indirectly depends from independent claim 246. Claims 401-410, 413, 418-433 and 437 depend either directly or indirectly from claim 400.

Issue

Has NTP shown that the Examiner incorrectly determined that the specification of the NTP '451 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 400-410, 413, 418-433 and 437?

Findings of Fact

Claim 400 is representative and is reproduced below (Brief Claims Appendix):

> 400. The RF device in accordance with claim 248, wherein said communication system comprises:
> an electronic mail system to which electronic mail including said information is inputted, wherein:
> said electronic mail system includes a second processor which receives said information from an originating processor, and causes said information to be transmitted to the RF device via the interface and the RF system, and
> said second processor transmits other information to a destination processor using wireline without using the RF system.

Claim 400 further recites a second processor which receives information from an originating processor. The second processor causes the received information to be transmitted to the RF device through the interface and the RF system. Also, the second processor transmits "other information," to a destination processor without using the RF system. The

dispute centers about the limitation regarding the second processor's sending of "other information" to 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 304 . . . ." (Answer 72:9-10). According to claim 400, however, the "second processor" also receives information from an originating processor and transmits the information to the interface. The Examiner reasoned that since claim 403, which depends from claim 400, recites that the "second processor" is a gateway switch, then claim 400 also includes, for example, a gateway switch as the claimed second processor. The Examiner determined that there is no description that the described gateway switch is capable of transmitting "other information." Specifically, the Examiner found that the only described source of "other information" bypasses any gateway switches and that the gateway switch is not described as the source of other information. (Answer 72:9-12).

NTP's arguments are largely a repeat of those with respect to the claim 395 and claim 393 discussions above. NTP argues that the Examiner's rejection is not supported by an evidentiary showing of why a person of skill in the art would not be convinced that the inventor possessed the invention as claimed. (Brief 134-135). The Examiner found that the claim 400 encompasses a gateway switch that transmits other information and that the '451 specification does not describe the same. We disagree, that in this case, anything more was required by the Examiner than the explanation provided. *See Hyatt v. Dudas*, 492 F.3d 1365, 1370 (Fed. Cir. 2007) ("In the context of the written description requirement, an adequate

prima facie case must therefore sufficiently explain to the applicant what, in the examiner's view, is missing from the written description. . . . When no such description can be found in the specification, the only thing the PTO can reasonably be expected to do is point out its nonexistence.")

NTP asserts that it did point out examples to the Examiner where the limitations of claim 400 are supported, and as such, maintaining the rejection was improper. Presumably, NTP is referring to the Appendix B attached to its response mailed 30 January 2006 to which the Examiner refers at page 72 of the Answer. The Appendix B does not cite to a description in the '451 patent specification which indicates that the inventors had possession of a processor that receives information from an originating processor and transmits that information to an interface, and that also transmits other information to a destination processor. As pointed out by the Examiner, the portions of the specification to which NTP directs attention to describe that the "other processor" that transmits other information is not described as also acting as a gateway switch. For these reasons, the Examiner provided ample basis by pointing out the insufficiency of the written description with regard to the claim limitation.

NTP argues that if some embodiments fall within the scope of a claim at issue, then the written description requirement is met. The argument is misplaced. The lacking support is not a scope of claim problem. Rather, the basis for the rejection is that there is not description of a processor that receives information from an originating processor and transmits that information to an interface, *and* that also transmits other information to a destination processor. Here, based on the record before us, we find that NTP did not have possession of that feature. Therefore, 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.

Claims 401-410, 413, 418-433 and 437 depend from claim 400 and therefore include the feature of the second processor functioning as claimed. Therefore, with respect to claims 401-410, 413, 418-433 and 437 and for the same 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 not shown that the Examiner incorrectly determined that the specification of the NTP '451 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 400-410, 413, 418-433 and 437.

4. Claim 432

NTP separately argues the merits of claim 432. We address the separate argument even though NTP has already failed to show that the Examiner incorrectly determined that the specification of the NTP '451 patent does not provide written description for claims 400-410, 413, 418-433 and 437.

Issue

Has NTP shown that the Examiner incorrectly determined that the specification of the NTP '451 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 432 regarding the gateway switch?

> initiates transmission of at least a portion of the electronic mail including the information to the RF device via the RF system based on at least one of an address included in the electronic mail and information pre-stored in a memory of the gateway switch.

Has NTP shown that the Examiner incorrectly determined that the specification of the NTP '451 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 432 indirectly depends from independent claim 246, and adds the limitation that the gateway switch optionally (1) initiates transmission of at least a portion of the electronic mail including the information to the RF device via the interface and the RF system based on at least one of an address included in the electronic mail and information pre-stored in a memory of the gateway switch, or (2) initiates transmission of the electronic mail including the information to a destination processor through the wireline without using the RF system based on at least one of the address included in the electronic mail and the information pre-stored in the memory of the gateway switch. The Examiner indicates that the specification of the NTP '451 patent describes the former but not the latter.

It appears that the Examiner has overlooked a pertinent part of the disclosure of the NTP '451 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 '451 patent 1:50 to 17:39). Then, the specification states (NTP '451 patent 22:13-21):

> 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 '451 patent 2:54-63).

The Examiner states that none of the descriptions NTP provided in support of claim 432 refers to determining whether an address is associated with a wireless or wireline device. (Answer 73). 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 432 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 432, the term "initiates" is used with respect to electronic mail 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 '432 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 432.

I. Rejection of claims 393-437 under 35 U.S.C. § 112, first paragraph, as lacking an enabling disclosure in the specification

The Examiner finally rejected claims 393-437 under 35 U.S.C. § 112, first paragraph, as lacking an enabling disclosure in the specification.

The rejection of claims 393-437 is *reversed.*

Issue

Has NTP shown that the Examiner erred in concluding that claims 393-437 are unpatentable under 35 U.S.C. § 112, first paragraph, as lacking an enabling disclosure in the specification?

Principles of Law

To satisfy the enablement requirement, a patent application must adequately disclose the claimed invention so as to enable a person skilled in the art to practice the invention at the time the application was filed without undue experimentation. *Enzo Biochem, Inc. v. Calgene, Inc.,* 188 F.3d 1362, 1371-72 (Fed. Cir. 1999). The issue is not whether any experimentation is necessary, but whether the amount of required experimentation is undue. *In re Vaeck*, 947 F.2d 488, 495 (Fed. Cir. 1991). The test for enablement is whether the amount of required experimentation is undue, not substantial. A technique that is routinely difficult (*e.g.* substantial) does not mean that the experimentation required is undue. *Johns Hopkins Univ. v. CellPro, Inc.*, 152 F.3d 1342, 1360 (Fed. Cir. 1998). The test is not merely quantitative, since a considerable amount of experimentation is permissible, if it is merely routine.

Factors that should be considered in determining enablement 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 written description requirement of 35 U.S.C. § 112 is separate and distinct from the enablement requirement. *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563 (Fed. Cir. 1991).

Analysis

In the Answer, the Examiner reasoned that:

> At least the claim limitations noted above are considered to be inaccurate of the described invention and require undue experimentation by one of ordinary skill in the art to make and use the invention as claimed using the written description which is required to support such claim limitations. (Answer 73).

The Examiner apparently combines the written description requirement with the enablement requirement. But they are two separate requirements. A claim may lack written description support, but one of ordinary skill may be able to make and use that which is claimed. Conversely, a claim may be adequately described in the specification, but one of ordinary skill may not know how to make or use the claimed invention. For these reasons, the Examiner's reasoning is misplaced.

Moreover, the Examiner fails to make any meaningful analysis of all of the claims it rejects under the enablement requirement. The Examiner specifically discusses only two claims; claims 393 and 400. Claims 395-399, 411 and 412 do not depend from either claim 393 or claim 400. The limitations of those claims the Examiner rejected were not discussed and the Examiner made no showing as to why those claims are without enabling disclosure in the specification.

Even for claim 393 and claim 400, which were specifically identified, the Examiner has not made a prima facie case for lack of enabling disclosure for the claimed invention. Specifically, with respect to claim 393 the

Examiner reasoned that "undue experimentation would have been required to design a 'first processor' capable of transmitting to the RF device while dispensing with the interface switch that is tightly integrated into the Campana network . . . Indeed, removing a critical component such as an interface switch from the Campana network would have immediately broken the network." (Answer 73). With respect to claim 400, the Examiner reasoned that "adding the ability to processor [sic] information other than email to a gateway switch without breaking the current network configuration would have been a significant endeavor." (Answer 73).

The Examiner's rationale as we understand it is misplaced. The Examiner's starting point begins by viewing that which is described in the NTP specification and not that which is claimed. By doing so, the Examiner focuses on changes made to the *system described in the specification* and how such changes would render *the described system inoperable*. The focus should be on the claim language, and whether, given the claim language, one of ordinary skill in the art would require undue experimentation to make that which is claimed. The Examiner' focus on the destruction of the completed described system is misplaced. Rather, the Examiner should have addressed why one of ordinary skill in the art would not have been able to make the claimed invention. Moreover, it is not apparent that the Examiner took into account any of the *Wands* factors listed above. For example, what was known in the prior art regarding the disputed limitation? How much time would be required to make the claimed invention? We do not know. The Examiner has apparently made no such analysis.

Conclusion

NPT has shown that the Examiner erred in concluding that claims 393-437 are unpatentable under 35 U.S.C. § 112, first paragraph, as lacking an enabling disclosure of the specification.

J. Rejection of claims 393-399, 414-417 and 434-437 under 35 U.S.C. § 305 for enlarging the scope of the claimed invention of a patent under reexamination

The Examiner finally rejected claims 393-399, 414-417 and 434-437 under 35 U.S.C. § 305 for enlarging the scope of the claimed invention of the patent under reexamination.

The rejection of claims is *reversed.*

Issue

Has NTP shown the Examiner erred in determining that claims 393-399, 414-417 and 434-437 enlarge the scope of an original issued claim of the '451 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.

Analysis

The Examiner's reasoning for the enlargement rejection is similar to the reasoning provided with respect to the written description rejection. For claim 393 and claims that either depend on claim 393, or are similar in scope to claim 393, the Examiner's Answer (Answer 74) provides that:

> The presentation of the new limitation directed toward communicating with an RF receiver without using an interface

> (as discussed in the claim 393, written description rejection above) . . . .

The Examiner provides no reasoned analysis for rejecting claim 393, other than rejecting that claim, and those claims that depend on claim 393, for the same reasons provided with respect to the written description rejection. Here, the Examiner reasons that because a claim is broader than what is described in the specification, then the claim must also enlarge the scope of an original claim of the patent. The reasoning is misplaced. The Examiner has apparently made no attempt to compare any of NTP's original claims with claim 393 and explain how claim 393 broadens any original claim. Therefore the rejection of claims 393 and 394 is without merit. In similar fashion, the Examiner provides no reasoned analysis for rejecting claim 400 other than rejecting that claim, and those claims that depend on claim 400 for the same reasons provided with respect to the written description rejection. Again, the Examiner has apparently made no attempt to compare any of NTP's original claims with claim 400 and explain how claim 400 broadens any original claim.

For claim 395 and claims that either depend on claim 395, or are similar in scope to claim 395, the Examiner's Answer (Answer 74) provides that:

> 'deleting' or varying' of the information of the electronic mail (as discussed in the claims 395, 414, and 434, written description rejections above) … . is considered to improperly broaden the claims.
>
> Consider for example the issue of varying the content of email. Information in the electronic mail was previously claimed as being added and deleted from the email header, but due to the

> claim amendment information is now being claimed as added and deleted from the body of the email (i.e., all characteristics of the electronic mail message). Furthermore, the term "varying" by plain meaning is broader than the terms "adding" and "deleting."

The Examiner finds claim 395, and claims with similar limitation, enlarged, since other original claims only recite adding to or deleting information from the email header, but do not recite deleting any information from the original email, such as the inputted text message or short reference to the subject of the message. We do not know to which original claim the Examiner refers. As stated above, it is not enough to say that a claim is broader than what is described and for that reason it violates the statutory provisions of 35 U.S.C. § 305. Rather, a comparison must be made between an original claim that is closest to the non original claim with an explanation for why the non original claim is broader than the original claim. The Examiner has failed to make the comparison. Moreover, even assuming that there is a claim that does recite adding or deleting an email header, that alone does not tell us much. The Examiner seems to suggest that the comparison can be made with respect to any original claim and the non original claim. 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.

Claim 395 depends from claim 248, which depends from claim 247, which depends from independent claim 246. By definition, claim 395 includes each and every feature of original claims 246-248, unless there is some recitation in claim 395 which removes the feature. No such removal is apparent from claim 395 and the Examiner has not pointed to any such broadening. Thus, claim 395 is narrower than original patent claims 246, 247 and 248, which have no requirements for removing anything from the electronic mail.

Conclusion

NTP has shown that the Examiner erred in determining that claims 393-399, 414-417 and 434-437 enlarge the scope of an original issued claim of the '451 patent under reexamination.

ORDER AND SUMMARY OF DECISION

It is ORDERED that:

1. The rejection of claims 1-341 and 393-437 under 35 U.S.C. § 102(b) as anticipated by Telenor '89 is *reversed*.

2. The rejection of claims 1-341 and 395-399 under 35 U.S.C. § 103(e) as anticipated by Perkins is *affirmed*.

3. The rejection of claims 400-437 under 35 U.S.C. § 103(a) as unpatentable over Perkins and Hortensius is *affirmed.*

4. The rejection of claims 1-11, 14-23, 26-35, 38-45, 48-55, 58-60, 65-68, 81-92, 115-126, 151-160, 183-193, 218-227, 246-260, 271-279, 288-296, 305, 306, 310-312, 315, 316, 319, 320, 323, 325, 326, 328, 330-332, 335-337, 340, 341, 395, 396, 400-419, 426-437 under 35 U.S.C. § 102(b) as anticipated by Verjinski is *affirmed.*

5. The rejection of claims 12, 13, 24, 25, 36, 37, 46, 47, 56, 57, 61-64, 69-80, 93-114, 127-150, 161-182, 194-217, 228-245, 261-270, 280-287, 297-304, 307-309, 313, 314, 317, 318, 321, 322, 324, 327, 329, 333, 334, 338, 339, 397-399, 420-425 as anticipated by Verjinski is *reversed.*

6. The rejection of claims 393 and 394 under 35 U.S.C. § 103(a) as unpatentable over Verjinski and Garbee is *affirmed.*

7. The rejection of claims 393 and 395-437 under 35 U.S.C. § 112, first paragraph, as without written description in the specification is *affirmed.*

8. The rejection of claim 394 under 35 U.S.C. § 112, first paragraph, as without written description in the specification is *reversed.*

9. The rejection of claims 393-437 under 35 U.S.C. § 112, first paragraph, as without an enabling disclosure in the specification is *reversed.*

10. The rejection of claims 393-399, 414-417 and 434-437 under 35 U.S.C. § 305 as violating the prohibition against enlargement of the scope of a patent claim under reexamination is *reversed.*

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
008 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
034 Reference C7—date stamp
035 Reference C7—binder and handwritten material

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

041 Reference C8—binder and handwritten material
042 Reference C8—perforations from inside front cover
043 Reference C8—showing lose pages
044 Reference C8—showing lose pages
049 Reference C8—handwritten material and date stamp

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
071 Reference C4—trash mark (pencil pointing to trash mark)
072 Reference C8—pages 82 and 83 UV comparisons

073 Reference C4—UV comparison Reference C4 and Reference C7
074 Reference C3—page 107
075 Reference C3—Annex 1 pages 1 and 2
076 Reference C5—date stamp

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

008 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
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
034 Reference C7—date stamp
035 Reference C7—binder and handwritten material
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
041 Reference C8—binder and handwritten material
042 Reference C8—perforations from inside front cover
043 Reference C8—showing lose pages
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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