

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Department of Justice,
Petitioner,
v.

EnvisionIT, LLC,
Patent Owner

Trial No.: IPR2017-00160

Patent 8,438,221

Filed: February 7, 2017

**PATENT OWNER'S PRELIMINARY RESPONSE TO PETITION FOR
INTER PARTES REVIEW OF U.S. PATENT NO. 8,438,221**

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LISTING OF EXHIBITS

Exhibit	Description
Ex. 2001	Complaint, Docket No. 1 in <i>CellCast Technologies, LLC, et al. v. United States</i> , C.A. No. 1:15-cv-1307-VJW (C.F.C.)
Ex. 2002	Motion to Notice Third Party filed by United States (with Exhibits), Docket No. 10 in <i>CellCast Technologies, LLC, et al. v. United States</i> , C.A. No. 1:15-cv-1307-VJW (C.F.C.)
Ex. 2003	Answer of International Business Machines Corp., Docket No. 21 in <i>CellCast Technologies, LLC, et al. v. United States</i> , C.A. No. 1:15-cv-1307-VJW (C.F.C.)
Ex. 2004	Joint Motion to Stay Proceedings filed by IBM (without Exhibits), Docket No. 39 in <i>CellCast Technologies, LLC, et al. v. United States</i> , C.A. No. 1:15-cv-1307-VJW (C.F.C.)
Ex. 2005	U.S. Provisional Patent Application No. 60/544,739
Ex. 2006	MICROSOFT COMPUTER DICTIONARY, 5 th Ed. (Microsoft 2002) - Definition of “broadcast”

LISTING OF CLAIMS

CLAIM 19:

19[pre]	A method of public service broadcast messaging to a broadcast target area, the method comprising:
19[a]	receiving over an input interface a broadcast request including a broadcast agent identification, a geographically defined broadcast target area, and a broadcast message from one of a plurality of coupled broadcast agent message origination systems;
19[b]	storing a geographically defined broadcast message jurisdiction for a broadcasting agent;
19[c]	verifying an authority of the broadcast agent identification including an authority of the originating broadcast agent to send the broadcast message to the broadcast target area by comparing the stored geographically defined broadcast message jurisdiction for the originating broadcast agent with the broadcast target area associated with the broadcast message in the broadcast request; and
19[d]	transmitting the broadcast message over an output interface to one or more coupled broadcast message networks providing broadcast message alerting service to at least a portion of the broadcast target area.

Pursuant to 37 C.F.R. § 42.107, Patent Owner EnvisionIT, LLC (“Patent Owner”) submits this Preliminary Response to the above-captioned Petition for *inter partes* review of U.S. Patent No. 8,438,221 (“Pet.” or “Petition,” Paper 1).

I. U.S. Patent No. 8,438,221

U.S. Patent No. 8,438,221 (“the ’221 Patent”) discloses a system and method of admission control for authorizing transmission of a broadcast message to a broadcast target area. Ex. 1001 at Abstract. Public service warning systems in existence at the time of the ’221 Patent application filing were “antiquated and provide[d] only limited access to the public who may be in need of knowing of potential emergencies or danger.” Ex. 1001 at 1:29–31. Those systems did not “provide for location-based notification or broadcasting messages.” Ex. 1001 at 1:31–33. Attempted solutions to those problems, which focused on the use of SMS technology, suffered from their own technical drawbacks, including delays in delivery, congestion of networks, and overloading of telecommunications infrastructure. Ex. 1001 at 1:36–67.

The ’221 Patent describes a method and system for broadcast messaging to a broadcast target area which overcomes the above-mentioned drawbacks. According to the ’221 Patent, “[l]ocation-based message broadcasting is transmitted from [a] predefined cell in a downlink only mode and therefore, unlike current SMS services, does not require functionality or network resources from the

mobile services provider or from any portion of the mobile service provider's mobility management resources.” Ex. 1001 at 5:50–55. This technique allows for “the simultaneous sending of public service messages to millions of subscribers with less impact on the supporting networks than a single SMS-message.” Ex. 1001 at 4:56–59. That characteristic and advantage of the ’221 patent’s invention is critical and is fundamentally different from systems that identify specific recipients for messages.

The location-based message broadcasting described in the ’221 Patent relies on the “broadcast target area” which is received as part of a broadcast message record. Ex. 1001 at Fig. 5 (element 502), 5:1–3, claim 19. This broadcast target area is utilized by the public service message location broadcasting system (PLBS) to provide “a message or alert to a single cell geographic location, a neighborhood, a city, or an entire nation with minimal impact to the hosting telecommunication networks.” Ex. 1001 at 6:23–27. The ’221 Patent further explains that “[u]nlike other emergency messaging services that require the recipient's identity, a predetermined fixed delivery location, and usually the payment of a service fee, the [PLBS] uses broadcast messaging technology to reach an unlimited number of people in real time, with no pre-event recipient action required.” Ex. 1001 at 6:17–22.

The '221 Patent also describes the verification of Broadcast Agents to transmit messages to a particular target area. Ex. 1001 at 4:37–40. “[T]he [PLBS] and methods described herein provide the functions and steps necessary to ensure that the Broadcast Agents are authorized to send the requested broadcast messages to the defined broadcast target area.” Ex. 1001 at 6:36–40. The PLBS “provides internal controls for insuring that the network and components are secure and that messages are authorized prior to transmittal” to the target area. Ex. 1001 at 6:39–44, claim 19. A geographically defined broadcast message jurisdiction is stored for a broadcast agent and is used to verify an authority of an originating broadcast agent to send a broadcast message to a broadcast target area. Ex. 1001 at claim 19.

After validation is complete, the broadcast message record is transmitted to an output interface for ultimate broadcast to at least a portion of the broadcast target area. Ex. 1001 at claim 19.

II. The Petition should be rejected for failure to name a Real Party in Interest (RPI).

Petitioner acknowledges that International Business Machines Corporation (IBM) has voluntarily joined in the co-pending Court of Federal Claims action pursuant to Court of Federal Claims Rule 14 but argues that IBM is not an RPI for the purpose of this Petition. Pet. at 1–4.

The determination of “whether a party who is not a named participant in a given proceeding nonetheless constitutes a ‘real party-in-interest’ or ‘privy’ to that

proceeding is a highly fact-dependent question.” *See* Office Patent Trial Practice Guide (“Trial Guide”), 77 Fed. Reg. 48,756, 48,759 (2012) (*citing Taylor v. Sturgell*, 553 U.S. 880, 893–895, 893 n.6 (2008)).

The factors for determining whether a non-party should be an RPI include: (i) the non-party's relationship with the Petitioner; (ii) the non-party's relationship to the petition itself, including the nature and/or degree of involvement in the filing; and (iii) whether the non-party exercised or could have exercised control over a party's participation in the proceeding. *See* Trial Guide, 77 Fed. Reg. at 48,760.

The facts in this case demonstrate that IBM is an RPI. In particular:

- The indemnification agreement between IBM and the Petitioner states that IBM could have exercised control over the Petitioner's participation in this proceeding.
- Petitioner admits that IBM collaborated with it in connection with the preparation of the Petition.
- IBM has an interest in the outcome of this proceeding, because of the relationship between IBM and Petitioner.

The authority cited by the Petitioner in arguing that IBM is not an RPI is not pertinent to the facts surrounding this Petition. Pet. at 1–4.

A. Background

On November 2, 2015, Patent Owner and exclusive licensee CellCast Technologies, LLC, filed a Complaint against the Petitioner in the United States Court of Federal Claims (the “Co-Pending Action”), alleging that Petitioner’s “Integrated Public Alert Warning System (‘IPAWS’)” infringes certain claims of the ’221 Patent (and other patents). Complaint, Ex. 2001.

In the Co-Pending Action, Petitioner filed an Unopposed Motion to Notice Third Party International Business Machines Corporation on March 4, 2016. Motion to Notice Third Party (“Motion”), Ex. 2002. In the Motion, Petitioner stated that “aspects of [IPAWS] were developed in work performed by IBM under a multi-part contracting vehicle” and that “upon information and belief, the Department of Homeland Security (DHS) awarded an umbrella contract referred to as the EAGLE contract for Information Technology Support Services.” Ex. 2002 at 2. This EAGLE contract was assigned EAGLE Contract No. HSHQDC-06-D-00019. *Id.* The Motion explained that EAGLE Contract No. HSHQDC-06-D-00019 “incorporated by reference, among others, Federal Acquisition Regulation (FAR) Clause 52.227-3 (APR 1984).” Ex. 2002 at 3. Clause 52.227-3 provides that a “Contractor shall indemnify the Government and its officers, agents, and employees against liability, including costs, for infringement of any United States patent...” *See* 48 C.F.R. § 52.227-3(a). Petitioner then concluded that “pursuant

to the patent indemnity clause in Contract No. HSHQDC-06-D-00019, IBM may have an interest in the subject matter of this suit within the meaning of [the Rules of the United States Court of Federal Claims] 14(b).” Ex. 2002 at 3.

After IBM was noticed, IBM then intervened in the Co-Pending Action, even though the only remedy in the Court of Federal Claims can be against the government (Petitioner) alone. *See* Answer of International Business Machines Corporation, Ex. 2003. IBM and Petitioner subsequently filed a Joint Motion to Stay Proceedings in light of the instant petition for *inter partes* review. *See* Motion to Stay Proceedings, Ex. 2004.

B. IBM could have exercised control over Petitioner’s participation in this proceeding.

Control by a party means “the availability of a significant degree of effective control in the prosecution or defense of the case.” *Gonzalez v. Banco Central Corp.*, 27 F.3d 751, 758 (1st Cir. 1994). A non-party is considered to have control when it has “the power – whether exercised or not – to call the shots.” *Id.* “The concept of control generally means that it should be enough that the nonparty has the actual measure of control **or opportunity to control** that might reasonably be expected between two formal co-parties.” Trial Guide, 77 Fed. Reg. at 48,760 (emphasis added).

The indemnification clause grants IBM at least the ability to exercise control over Petitioner’s participation in this *inter partes* review proceeding. Indeed,

Petitioner sought to delay the Co-Pending Action in order to provide IBM the opportunity to intervene in the case, which it did. The provision states, in part:

This indemnity shall not apply unless the Contractor shall have been informed as soon as practicable by the Government of the suit or action alleging such infringement and shall have been given such opportunity as is afforded by applicable laws, rules, or regulations to participate in its defense.

48 C.F.R. § 52.227-3(b).

Thus, the indemnification agreement between Petitioner and IBM provides an opportunity for IBM, as the Contractor, to participate in the defense of any patent infringement action. Petitioner filed this Petition for *inter partes* review as part of the defense strategy in the Co-Pending Action, and these proceedings are “afforded by applicable laws, rules or regulations.” As support, the Board need only understand that IBM and Petitioner jointly filed the Motion to Stay Proceedings in the Co-Pending Action in light of the instant petition for *inter partes* review. Ex. 2004. All of this indicates that, even if IBM did not directly participate in this proceeding, IBM **could** have exercised control over the Petitioner’s participation in this proceeding pursuant to the terms of the contract.

Petitioner cites to a number of previous PTAB decisions and argues that “the **mere existence** of an indemnification agreement does not establish that the indemnitor has the opportunity to control an *inter partes* review.” Pet. at 2

(emphasis added, internal citations omitted). While that may be true, none of the cases cited by the Petitioner address the situation in which the terms of the indemnification agreement allow a non-named party to exercise control over a petitioner in a proceeding. The relevant issue is not merely the **existence** of an indemnification agreement, but whether the **terms** of the indemnification agreement allow IBM to exercise control over the Petitioner's participation in this proceeding.

The PTAB addressed an indemnification agreement that allowed a non-party to exercise control over a Petitioner in *First Data Corp. v. Cardsoft (Assignment for the Benefit of Creditors), LLC*, Case IPR2014-00715, slip op. at 7–10 (PTAB October 17, 2014) (Paper 9). The agreement in that case provided that the indemnitor “shall have the right at its expense to employ counsel... to defend against Claims that [the indemnitor] is responsible for... and to compromise, settle and otherwise dispose of such claims.” *Id.* at 7. The indemnitor in *First Data* even attempted to disclaim its rights pursuant to the indemnification agreement before the petition for *inter partes* review. *Id.* at 9. The Board was not persuaded by this disclaimer and found that the indemnitor “controlled, and/or had the opportunity to control the filing of the Petition in material respects and [was] a real party-in-interest to [the] proceeding.” *Id.*

Just as in *First Data*, the indemnification agreement between IBM and the Petitioner grants IBM the opportunity to participate in the defense of any patent infringement suit resulting from their contract with Petitioner, and consequently, to control Petitioner's participation in this proceeding.

C. Petitioner admitted that IBM was involved.

The Trial Practice Guide explains that the non-party's relationship to the petition itself, "including the nature and/or degree of involvement in the filing" is a factor that should be considered when making a determination regarding RPI. *See* Trial Guide, 77 Fed. Reg. at 48,760. Here, Petitioner vaguely admitted that IBM had some involvement in the Petition:

Beyond an arm's length exchange of prior art, IBM and the government have not collaborated in any way on the preparation of this petition.

Pet. at 4. As Petitioner states, IBM participated in some way in the Petition.

In the related context of *inter partes* reexamination, the Board has previously stated that:

To be required to be named as a real party in interest, a party must **participate in some manner** in the request for reexamination.... Evidence that the activities were conducted **with an intent to file** an *inter partes* reexamination request is required....

In re Slominski, Inter Partes Reexamination No. 95/001,852, Dismissal of Reexam Petition Decision at 4 (January 23, 2013) (emphasis changed). Thus, the intent of

the non-named party is critical in determining whether the non-named party's activities necessitate its identification as an RPI. Here, the Petitioner did not state that IBM provided prior art to the Petitioner for use in the co-pending litigation as part of the litigation defense. To the contrary, Petitioner was clear that IBM provided prior art to Petitioner with intent to file a petition for *inter partes* review.

D. IBM has an interest in the outcome of this proceeding because of its relationship with Petitioner.

Another factor in whether a non-party should be named as an RPI is the non-party's relationship with the petitioner. Trial Guide, 77 Fed. Reg. at 48,760.

In this case, the record of the Co-Pending Action indicates that IBM had entered into a contract with Petitioner to develop aspects of the Integrated Public Alert Warning System, which is the subject of the infringement claim in the Co-Pending Action. Ex. 2002 at 2. Additionally, IBM may be responsible for damages arising out of infringement of the '221 Patent pursuant to the terms of the indemnification agreement. *Id.* IBM has also joined in the co-pending action voluntarily. Ex. 2003. Per the Petition, IBM also appears to have provided (alleged) prior art for use in the Petition. All of these factors support a finding that IBM is an RPI.

E. The Petition should be denied because IBM is an RPI.

Petitioner attempts to refute the combined evidence described above by arguing against each aspect in isolation. *E.g.*, Pet. at 2–3. However, the evidence

for IBM's status as an RPI does not involve **merely** the existence of an indemnification agreement, or **only** IBM's status as a codefendant. Whether an unnamed party is an RPI is based on the totality of the circumstances and not on isolated facts. *ZOLL Lifecor Corp. v. Philips Electronics North America Corp.*, Case IPR2013-00606, slip op. at 6 (PTAB March 20, 2014) (Paper 13). "The non-party's participation may be overt or covert, and the evidence may be direct or circumstantial...." *Id.* Here, the totality of the circumstances indicates that IBM is an RPI to this proceeding.

Because IBM is an unnamed RPI and 35 U.S.C. § 312(a) requires an IPR petition to name all real parties-in-interest, this Petition should be denied.

III. Claim Construction

Petitioner's proposed construction of "broadcast" is divorced from the context of the claims and the entirety of the contextual guidance of the '221 patent, is inaccurate, and vague.¹ Accordingly, Patent Owner urges the Board to reject Petitioner's proposed construction and to adopt Patent Owner's proposed construction below.

¹ Patent Owner submits preliminary constructions for the purpose of this Preliminary Response and reserves the right to modify its constructions should the Board institute review.

A. Legal Framework

The Patent Trial and Appeal Board (“PTAB” or “Board”) will interpret claims of an unexpired patent using the broadest reasonable construction in light of the specification of the patent. *See* 37 C.F.R. § 42.100(b); *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016); *In re Abbott Diabetes Care, Inc.*, 696 F.3d 1142, 1148 (Fed. Cir. 2012). Under the broadest reasonable construction standard, claims are to be given their broadest reasonable interpretation consistent with the specification, and the claim language should be read in light of the specification as it would be interpreted by a person having ordinary skill in the art. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). The broadest reasonable interpretation, however, does not allow constructions that ignore “the specification and teachings in the underlying patent” or that “interpret claims to embrace anything remotely related to the claimed invention.” *In re Suitco Surface, Inc.*, 603 F.3d 1255, 1259–60 (Fed. Cir. 2010).

The requirement that claims be interpreted in a way that is “consistent with the specification” is important because it prevents the construction from becoming unreasonably broad. *See, e.g., Suitco*, 603 F.3d at 1260 (construction must be “consistent with the specification...and that claim language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art.”) (quoting *In re Bond*, 910 F.2d 831, 833 (Fed. Cir. 1990)). “Even when guidance is

not provided in explicit definitional format, the specification may define claim terms by implication such that the meaning may be found in or ascertained by a reading of the patent documents.” *Abbott*, 696 F.3d at 1150 (internal quotations omitted).

Claim construction starts with the claims, *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (*en banc*), and remains centered on the words of the claims throughout. *Interactive Gift Express, Inc. v. CompuServe, Inc.*, 256 F.3d 1323, 1331 (Fed. Cir. 2001). Claim terms are not interpreted in a vacuum, devoid of the context of the claim as a whole, but that is what Petitioner proposes. *See Hockerson-Halberstadt, Inc. v. Converse Inc.*, 183 F.3d 1369, 1374 (Fed. Cir. 1999) (“proper claim construction...demands interpretation of the entire claim in context, not a single element in isolation”); *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1088 (Fed. Cir. 2003) (“While certain terms may be at the center of the claim construction debate, the context of the surrounding words of the claim also must be considered....”).

B. Petitioner Has Not Properly Construed “Broadcast.”

The term “broadcast” is used throughout the claims but most often as an adjective in the context of a “broadcast message.” “Broadcast message” is the key term for construction, although “broadcast” also could be construed, provided that it is construed properly and consistently with the claims and specification.

The proper construction of “broadcast message” in the context of this patent is: a message that is intended for transmission to all recipients in a target area and not to an identified recipient. To the extent the Board elects to construe “broadcast” instead, the proper construction of “broadcast” is: pertaining to transmission to all recipients in a target area and not to an identified recipient.²

In contrast, Petitioner erroneously proposes that “broadcast” be construed to mean “to transmit data for purposes of wide dissemination over a communications network including, but not limited to, cellular carriers, digital private radio systems, private radio systems, internet, wireline telecommunications, satellite, and CATV systems.” Pet. at 9. Petitioner’s proposed construction is erroneous for a number of reasons, discussed in detail below.

1. The claim language and the specification support Patent Owner’s proposed construction and refute Petitioner’s.

The plain language of the claims themselves—giving effect to all terms—provides that the broadcast message is associated with transmission to all available recipients in a target area as an element of a broadcast message record (or corresponding term), and not for “wide distribution,” which is not supported by the

² In addition to the intrinsic evidence cited below, Patent Owner’s constructions of “broadcast” and “broadcast message” are further supported by a computer dictionary definition of the term “broadcast,” which states “a broadcast message is one distributed to all stations.” Ex. 2006 at 3.

specification. To be clear, a broadcast transmission is a type of transmission, and not all transmissions are broadcast transmissions.

It is improper to ignore “the specification and teachings in the underlying patent.” *Suitco*, 603 F.3d at 1259–60. Here, the specification clearly establishes that not all messages are broadcast messages. Instead, the specification explains that a “broadcast message” has certain features that are not shared by other forms of transmission. First, a “broadcast message” is not a standard Short Message Service (SMS) message. The ’221 patent contains only disparaging remarks with respect to SMS messages. Ex 1001 at 1:39 – 3:27; *see In re Abbott Diabetes Care Inc.*, 696 F.3d 1142, 1149–50 (Fed. Cir. 2012) (broadest reasonable construction excluded prior art embodiments disparaged in specification). The ’221 patent also specifically distinguishes a broadcast message from an SMS message in at least three ways: (1) broadcast messages do not require the functionality or network resources that SMS messages require; (2) broadcast messages have less network impact than a single SMS message thereby avoiding network congestion; and (3) broadcast messages do not require the recipient’s identity, which is required for SMS messages. Ex. 1001 at 5:50-60, 6:17-22.

One of ordinary skill in the art in view of the specification would appreciate that a broadcast message is not directed to identified recipients, but, instead, is transmitted for distribution to all recipients in a target area – small or large. Any

construction of “broadcast” or “broadcast message” that does not consider these distinguishing features is not reasonable in view of the specification. *See Suitco*, 603 F.3d at 1259–60.

In support of its improper construction of “broadcast,” Petitioner relies only on portions of the specification that describe the operators to which a message can be transmitted and the physical components used to transmit the message. Pet. at 9. That entirely sidesteps the real issue of what makes a message a “broadcast message” or a transmission a “broadcast transmission” rather than a point-to-point message or transmission (such as SMS) or another type altogether. Additionally, Petitioner’s expert does not provide any rationale or supporting evidence as to why he agrees with the Petitioner’s proposed construction. Ex. 1011 at ¶ 78.

2. Petitioner’s proposed inclusion of examples is confusing and unnecessary.

Petitioner’s proposed construction includes alleged examples of networks over which broadcast allegedly could occur, but that only adds to the inaccuracy of Petitioner’s proposed definition. As an example, transmission via cellular carrier (one of the examples in Petitioner’s proposed definition) could be a broadcast transmission (e.g., via a broadcast channel), or it could be non-broadcast transmission (e.g., via SMS). Petitioner’s proposed inclusion of examples implies that all transmissions over the identified networks would be broadcast transmissions – which simply is not the case.

3. Petitioner's construction is indefinite and inaccurate

Petitioner's proposed construction is also problematic in that it calls for "wide dissemination." "Wide dissemination" is not a technical term and is mismatched with the technology disclosed in the patent. To the contrary, the claims consistently tie the dissemination of the broadcast message to a defined "broadcast target area," so Petitioner's proposed construction is not consistent with the plain language of the claims. *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996) (the claims themselves provide substantial guidance as to the meaning of particular claim terms). The claims contemplate transmission to all devices capable of receiving within a target broadcast area and not for "wide dissemination."

Indeed, the limits of "wide dissemination" are unclear, because there is no indication of what "wide" means in this context. "Wide" from a geographic standpoint? Wide with regard to the number of actual or intended recipients? If a target broadcast area were very large, it is not clear whether "wide dissemination" would reach the entire target broadcast area, a portion of it, or none. If a broadcast target area were very small, it is not clear whether "wide dissemination" would be necessary to accomplish what the claims and specification seek to accomplish. This aspect of Petitioner's proposed definition is unworkable and unnecessary.

Even if “wide dissemination” were intelligible (which Patent Owner does not concede) and meant something along the lines of dissemination to many recipients, the result would be a definition that would be overly broad in some ways and simply inaccurate in others. For example, a transmission to all available recipients in a small, low population target geographic may not constitute wide dissemination.

But, beyond that, “wide dissemination” is simply inaccurate. Even if “wide dissemination” means dissemination to many recipients, distribution to many recipients may not cover all or even a part of the claimed geographic broadcast target area.

IV. The Board should not institute on Grounds I through IV, because Petitioner has failed to establish that the two central references are prior art.

Because Petitioner must show a reasonable likelihood of success, it bears the burden of establishing that any reference on which it relies is prior art. *Servicenow, Inc., v. Hewlett-Packard Co.*, Case IPR2015-00716, slip op. at 8 (PTAB Aug. 26, 2015) (Paper 13). Here, Petitioner has failed to establish that either the Gundlegård thesis (Ex. 1013) or 3GPP Standard 4.2.0 (Ex. 1019) is authentic and was publically available before the priority date of the ’221 patent.

A. Petitioner bears the burden of showing that alleged prior art was authentic and publically accessible.

A document must have been “sufficiently accessible to the public interested in the art” to qualify as a printed publication. *In re Cronyn*, 890 F.2d 1158, 1160 (Fed. Cir. 1989). A document is publicly accessible if it “has been disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art, exercising reasonable diligence, can locate it and recognize and comprehend therefrom the essentials of the claimed invention without need of further research or experimentation.” *Cordis Corp. v. Boston Scientific Corp.*, 561 F.3d 1319, 1333 (Fed. Cir. 2009) (internal citation and quotation omitted).

B. Petitioner has not authenticated Gundlegård or established that it was publicly accessible in order to constitute prior art.

With respect to authenticity or public accessibility, the Petition only concludes, without support, that Gundlegård was published on May 8, 2003. Pet. at 8. The date printed on the document itself is insufficient to establish publication, because dates on the face of a document, such as copyright dates, are inadmissible hearsay. *See Servicenow*, IPR2015-00716, at 16 (date on the face of a reference is hearsay); *see also Standard Innovation Corp. v. Lelo, Inc.*, Case IPR2014-00148, slip op. at 12–13 (PTAB Apr. 23, 2015) (Paper 41).

The Petition is void of any discussion or explanation regarding the source of Gundlegård beyond a reference to Linköping University in Norrköping, Sweden. The Petition fails to provide any basis for the asserted publication date or to reference any testimonial evidence to authenticate the reference beyond the Petition's inclusion of the Nuss Declaration (Ex. 1021) in the List of Exhibits. The Petition cannot rely on testimony, such as the Nuss Declaration, that is neither presented nor referenced in the Petition.³ As a result, the Board should exclude Gundlegård and deny institution on Ground 1. *See Shenzhen Huiding Technology Co., Ltd. v. Synaptics Inc.*, Case IPR2015-01741, slip op. at 29–31 (PTAB Aug. 7, 2015) (Paper 8) (partially denying institution for improper use of incorporation by reference).

Even if the Board were to consider the contents of the Nuss Declaration, it is insufficient to establish that Gundlegård is authentic or was publically available. According to the Nuss Declaration, Gundlegård is a printout from the Linköping

³ Petitioner's reliance on the Nuss Declaration without an explanation of the relevance of the testimony provided therein violates 37 C.F.R. § 42.6(a)(3)'s prohibition against improper incorporation by reference. A petition must contain a "full statement of the reasons for the relief requested, including a detailed explanation of the significance of the evidence" 37 C.F.R. § 42.22(a)(2); *Cisco Systems, Inc. v. C-Cation Techs., LLC*, Case IPR2014-00454, slip op. at 10 (PTAB Aug. 29, 2014) (Paper 12).

University website. Ex. 1021 at ¶3. “[T]o authenticate printouts from a website, the party proffering the evidence must produce some statement or affidavit from someone with *knowledge of the website* . . . for example a web master or someone else with personal knowledge would be sufficient.” *EMC Corp. v. Personalweb Techs., LLC*, Case IPR2013-00084, slip op. at 45 (PTAB May 15, 2014) (Paper 64) (emphasis added). Here, the declarant, Amelia Nuss, does not claim to have any association with Linköping University and does not claim personal knowledge of the source or date of publication of the Gundlegård reference. *See* Ex. 1021. Instead, the Nuss Declaration provides inadmissible hearsay information from the Internet Archive. *Id.* at ¶5. To authenticate a document using the Internet Archive, a party must provide “a statement or affidavit from an Internet Archive representative *with personal knowledge of the contents of the Internet Archive website*.” *Specht v. Google Inc.*, 758 F.Supp.2d 570, 580 (N.D. Ill. 2010) (emphasis added); *see also Novak v. Tucows, Inc.*, No. 06-CV-1909 (JFB) (ARL), 2007 WL 922306 at *5 (E.D.N.Y. Mar. 26, 2007), *aff’d*, 330 F. App’x 204 (2d Cir. 2009). Thus, the Nuss Declaration is void of any proper evidence to authenticate Gundlegård.

Moreover, even if all the alleged facts in the Nuss Declaration were considered, Petitioner still has not met its burden, because, without more, merely asserting that a reference was available on a university website is not sufficient to

establish public accessibility. *Groupon, Inc. v. Blue Calypso, LLC*, Case CBM2013-00033, slip op at 28–29 (PTAB Dec. 17, 2014) (Paper 51). Petitioner does not offer any testimony from anyone associated with Linköping University that Gundlegård was indexed or otherwise made available to any member of the public prior to February 13, 2004, nor does Petitioner provide testimony from a member of the public who accessed Gundlegård prior to that date. In fact, Petitioner fails to address this issue at all.

Even setting aside the above-mentioned issues, Gundlegård still should not be eligible as a prior art printed publication as of Oct. 27, 2003. In particular, the Petitioner relies heavily on a web page which **is not the actual Gundlegård reference**, but which purportedly links to the Gundlegård reference. As shown below, the Petitioner has utilized this web page to misrepresent the date on which Gundlegård was allegedly archived (and, according to Petitioner, available to the public)

An annotated version of attachment 3 from Ex. 1021 is reproduced below:

INTERNET ARCHIVE
Wayback Machine

http://www.ep.liu.se/exjobb/itn/2003/its/013/ Go

10 captures
27 Oct 03 - 26 Sep 05

OCT 27 2003

Linköpings universitet - Student - Alumni - Näringsliv/samhälle - Internat - Sök

LiU - E-Press - Student Theses - ITN - 013

Articles and Monographs
Journals
Doctoral Theses
Licentiate Theses
Student Theses
Publish Student Theses
Search Student Theses
General Information
Info for Readers
Info for Authors
Copyright Info
About Us
Contact Us
University Library
Search a Publication
Search on www.ep.liu.se

Författare/Author
David Gundlegård

Titel/Title
Automotive Telematics Services based on Cell Broadcast

Seriebeteckning/Series number
LITH-ITN-KTS-EX--03/013--SE

Framläggningsdatum/Defence date
2003-05-08

Språk/Language
Engelska

Institution/Institute
Institutionen för Teknik och Naturvetenskap

Sammanfattning/Abstract
Cell Broadcast is a relatively old technique within the GSM-network which makes it possible to broadcast text messages to one or more cells in the network. As efforts in Sweden have been made to develop both traffic safety and information technology, the automotive telematics market is predicted to grow rapidly in the near future. The characteristics of Cell Broadcast make it especially suitable for automotive telematics services. The main purpose of this thesis is to investigate possible automotive telematics services based on Cell Broadcast and how these services can affect traffic safety.

The most important characteristics for Cell Broadcast in the automotive telematics market are close connection to the GSM/UMTS network, location-based information and information of push character. These characteristics allows the mobile operator to offer a number of automotive telematics services based on Cell Broadcast, some of them as service provider and some of them in joint ventures with car and mobile terminal manufacturers.

Nyckelord/Keywords
Automotive telematics, road telematics, in-vehicle telematics, traffic information, Cell Broadcast, GSM, UMTS, road informatics, traffic safety

Search Reset

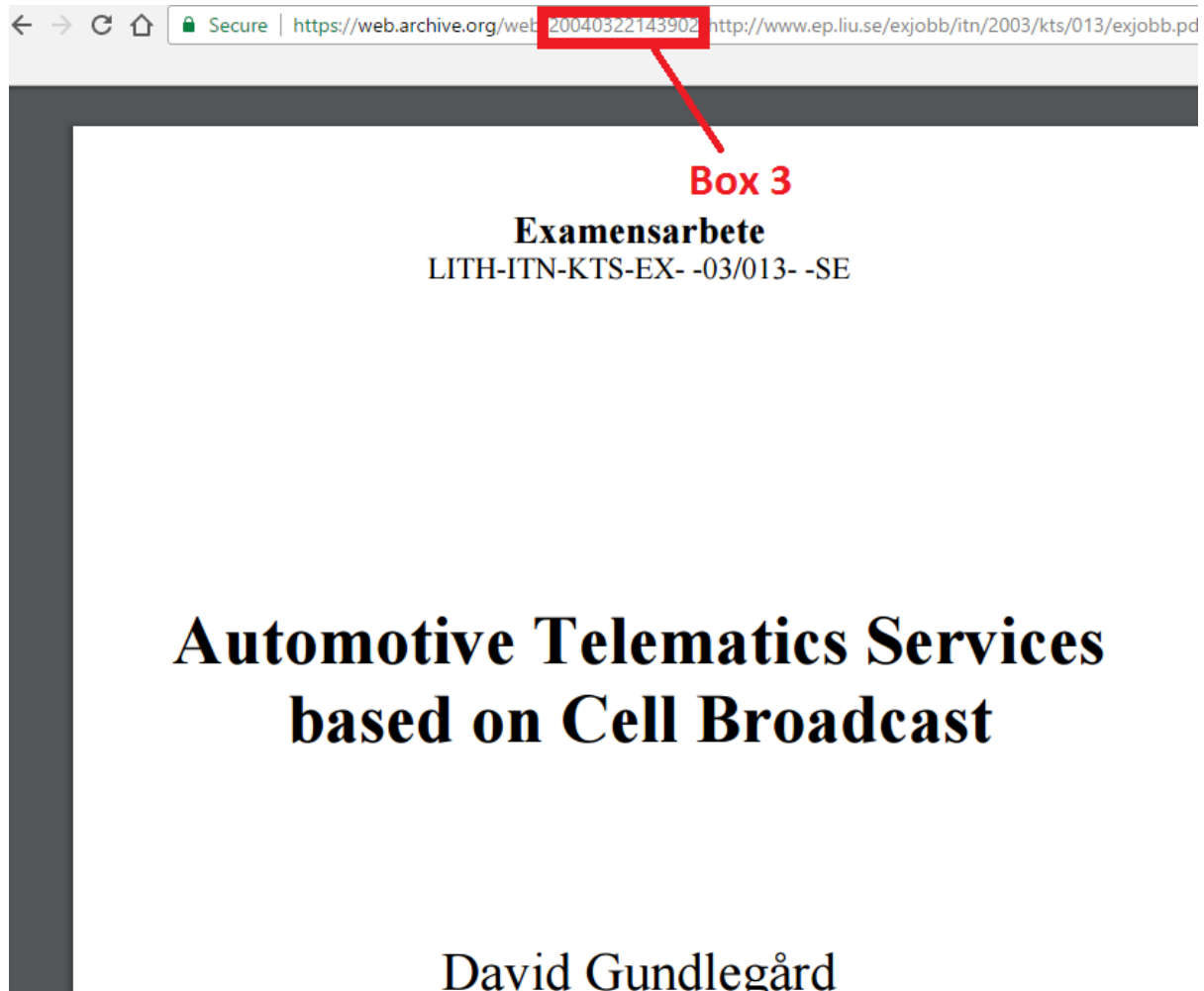
File Files
Thesis (pdf) Checksum

Box 1

Box 2

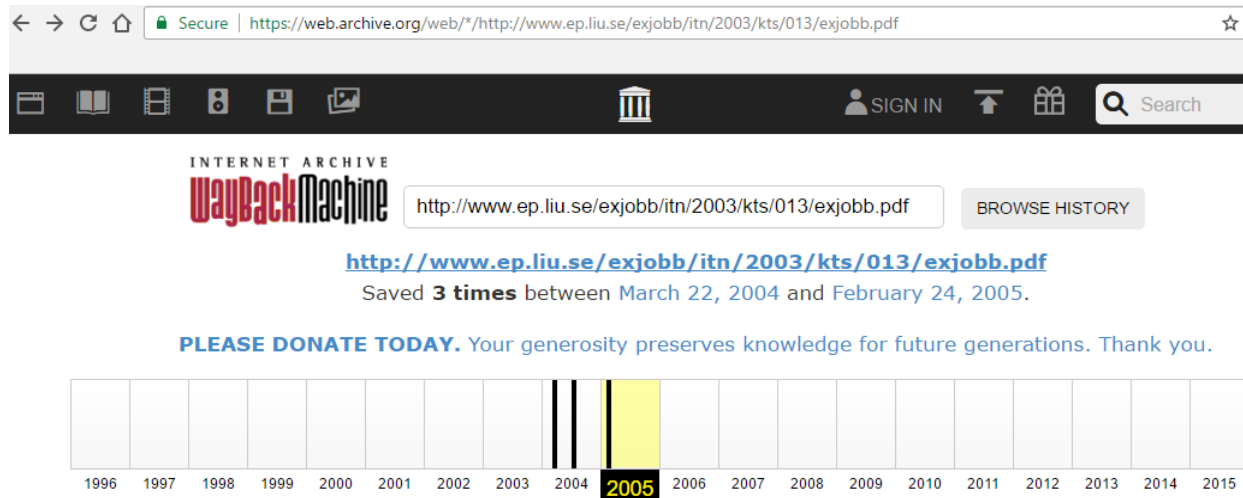
Ex. 1021 at 63.

In the declaration of Ex. 1021, Amanda Nuss implies that, since the above web page was allegedly archived on Oct. 27, 2003 (Box 1) and allegedly included a link to the Gundlegård thesis (Box 2), the Gundlegård thesis was publically available on Oct. 27, 2003. *See* Ex. 1021, p. 2. However, the link in Box 2 goes to a URL indicating an alleged capture date which is **after** October 27, 2003:



As shown in Box 3 above, the date associated with the actual Gundlegård document on the Internet Archive appears to be March 22, 2004 and not October 27, 2003. This is confirmed when the entire address of the actual Gundlegård document (<http://www.ep.liu.se/exjobb/itn/2003/kts/013/exjobb.pdf>) is entered into the Internet Archive:⁴

⁴https://web.archive.org/web/*/http://www.ep.liu.se/exjobb/itn/2003/kts/013/exjobb.pdf (accessed on 02-06-2017).



As shown above, the earliest date on the Internet Archive associated with the actual Gundlegård thesis document is March 22, 2004. Even if the Board were to set aside the lack of authentication, the lack of evidence of public accessibility, and the hearsay testimony proffered by Petitioner, the data available on the Internet Archive indicates that the earliest date associated with the Gundlegård thesis on the Internet Archive is March 22, 2004, which is after the priority date of February 13, 2004.

In summary, Gundlegård should be excluded because Petitioner failed to authenticate it and, separately, because Petitioner offered no evidence that Gundlegård was publicly accessible. Even if any of the Declaration evidence was properly before the board, the evidence attempting to show public accessibility would be inadmissible hearsay. Furthermore, even under the Petitioner's flawed reasoning, the earliest date associated with the Gundlegård thesis on the Internet

Archive is March 22, 2004, which is after the priority date of February 13, 2004. Accordingly, trial should not be instituted on Ground I or II, which rely on Gundlegård.

C. Petitioner has failed to authenticate 3GPP and to establish that it was publically accessible.

As an initial matter, Petitioner does not list 3GPP in its “Citation of Prior Art.” Pet. at 7. Moreover, Petitioner offers no direct evidence to authenticate the 3GPP Standard 4.2.0 reference (3GPP). The only information in the body of the Petition regarding the 3GPP reference is an unsupported assertion that the 3GPP standard was “in existence more than one-year before February 12, 2004.” Pet. at 14. Petitioner provides no information in their Petition regarding any alleged publication date of the 3GPP reference. Petitioner’s Declarant, Randall Snyder, declared that 3GPP was published on a standards organization website on January 11, 2002, based on an “upload date” on a web page (Figure 2).⁵ Ex. 1011 at ¶¶50, 85.⁶ Even if the board considers this evidence that is not cited in the Petition, it is

⁵ Mr. Snyder does not contend that this web page is a representation of the page as it existed on January 11, 2002, and considering a reference to dates in 2015, it is assumed to be a representation of the web page at the time the declaration was made.

⁶ The Petition does not include a citation to these paragraphs of the Snyder Declaration.

not sufficient to authenticate printouts from a website. *See EMC Corp.*, IPR2013-00084 at 45; *see also Standard Innovation*, IPR2014-00148 at 5. Mr. Snyder does not claim to be associated with the website⁷, nor does he claim to have accessed 3GPP from the website before the '221 patent's priority date. Furthermore, Mr. Snyder has provided testimony as to the date he believes the document was **uploaded**, and there is no evidence of record to establish that the alleged upload event on January 11, 2002 resulted in public accessibility of the document, let alone whether the document that was uploaded on this date is the same 3GPP document relied upon in the Petition. *See Servicenow*, IPR2015-00716 at 14 (public accessibility of webpage containing links to asserted references not sufficient to establish accessibility of the references themselves).

Second, even if Mr. Snyder's testimony were considered, it would be inadmissible hearsay. Specifically, Mr. Snyder offers a web page from the website (Figure 2) as evidence for the purpose of proving the truth of the matter asserted, namely that 3GPP was publically accessible on the website as of January 11, 2002. Thus, the contents of this web page are inadmissible hearsay. *See Novak*, 2007 WL 922306, at *5.

⁷ 3GPP Organizational Partners is indicated on the face of 3GPP as being the copyright owner. Ex. 1019 at 2.

Third, the dates on the face of 3GPP, including the copyright date, are inadmissible hearsay and therefore, cannot be used to prove the publication date of a reference. *See Ideavillage Products, Corp., v. Choon's Design, LLC*, Case IPR2015-01143, slip op. at 18 (PTAB Nov. 9, 2015) (Paper 6) (copyright date, even registration thereof, is insufficient to demonstrate accessibility)(citing *In re Lister*, 583 F.3d 1307, 1311 (Fed. Cir. 2009); *see also See Standard Innovation Corp. v. Lelo, Inc.*, Case IPR2014-00148, slip op. at 13–16 (PTAB Apr. 23, 2015) (Paper 41); *Servicenow*, IPR2015-00716 at 17.

Accordingly, trial should not be instituted on Grounds I through IV, which rely on 3GPP.

V. There is no reasonable likelihood that Petitioner will prevail on Ground I.

The Petition, which does not assert that any of the patent claims are anticipated by a single prior art reference, takes an incredible position – that the '221 patent claims, which are presumed valid, should be invalidated based upon the **combination of five references**, a number of which were already of record. Petitioner has failed to meet its statutory threshold, because it has failed to present a legal basis under which this Board could reach a conclusion that the claims are obvious, and Patent Owner urges the Board to see the Petition's position for what it is – egregious hindsight reconstruction.

To establish a reasonable likelihood of prevailing on obviousness grounds, all limitations of the challenged claims must be taught or suggested by the prior art. *Microsoft Corp. v. Proxyconn, Inc.*, Case No. IPR2012-00026, slip op. at 12 (PTAB Dec. 21, 2012) (Paper 17). As discussed above, Petitioner has not established that Gundlegård and 3GPP are prior art at all, but, even for established prior art, a Petition “must specify where each element of the claim is found in the prior art patents or printed publications relied upon.” 37 C.F.R. § 42.104(b)(4). The Petition, attempting to mix and match from numerous references, fails to do so for Ground I in several ways, as detailed below, and has not established that the combination of Gundlegård, 3GPP, Sandhu, Rieger, and Zimmers (the “cited references”) discloses, suggests, or teaches each and every limitation of claim 19.

Furthermore, Petitioner has not provided any rational underpinning for combining Gundlegård, Zimmers, and Rieger. *See In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (“[R]ejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be **some articulated reasoning with some rational underpinning** to support the legal conclusion of obviousness.”). *See also KSR International Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (quoting Federal Circuit statement with approval).

Accordingly, Petitioner has not demonstrated that the combination of the cited references discloses, suggests, or teaches each and every limitation of any claim.

A. The combination does not disclose, suggest, or teach the limitation of claim 19[c].⁸

Petitioner concedes that Gundlegård does not disclose this limitation and instead argues that Gundlegård teaches “the importance of a verification step by disclosing a network that handles ‘authentication’ and acknowledges that messages may be successful or unsuccessful.” Pet. at 25. The sections of Gundlegård cited by Petitioner explain that a BSC (Base Station Controller) can provide feedback to a Cell Broadcast Centre (CBC) regarding **successful or unsuccessful commands**. *See* Ex. 1013 at 9, ¶ 2. Gundlegård does not disclose or suggest any verification of **authority**, let alone “verifying ...an authority of the originating broadcast agent to send the broadcast message to the broadcast target area.” *See* Ex. 1013 at 9, ¶ 2.

Petitioner next argues that the “3GPP Standard also discloses the importance of a verification step by disclosing a standard that requires message validation.” Pet. at 25. Petitioner has again misconstrued the relevant disclosure. The relevant section of 3GPP merely explains that a BSC or Radio Network Controller (RNC)

⁸ For convenience, Patent Owner has adopted the claim element numbering scheme used in the Petition, and reproduced in the Listing of Claims.

can provide an error statement when it is unable to understand information in a received instruction, such as a cell identity. Ex. 1019 at §9.3.16. The process described in 3GPP of outputting an error message when a cell identity is not recognized is not equivalent to “verifying ... an authority of the originating broadcast agent to send the broadcast message to the broadcast target area.” Verifying an authority of the originating broadcast agent requires a determination of whether the **originating broadcast agent** is **authorized** to send a message to the broadcast target area, whereas looking up a cell identity involves comparing a cell identifier with a list of known identifiers and/or checking the syntax of the cell identifier.

Petitioner then incorrectly argues that this limitation is met by the disclosure in Rieger of user-specific authorized posting regions. Pet. at 26. Rieger describes a system in which users can create messages called “postings” and publish them to a categorical database of postings. Ex. 1017 at ¶¶ 8, 77. Rieger further explains that each posting has an associated “broadcast descriptor” which identifies the posting’s geographical target region and that each user has an “antenna descriptor” which identifies a geographical region for which a user would like to receive messages. Ex. 1017 at ¶¶ 79, 84. When a user’s “antenna descriptor” matches the “broadcast descriptor” of a particular posting, then the content of that posting is delivered to the user. Ex. 1017 at ¶¶ 84–85.

Despite nominally using the term “broadcast indicators,” Rieger does not involve broadcast messages. As explained earlier, the proper construction of a broadcast message is “a message that is intended for transmission to all recipients **in a target area** and not to an **identified recipient**.” See Section III.B, *supra*. Rieger describes a system in which an attribute associated with a posting (the broadcast descriptor) is compared to an attribute of a user (the antenna descriptor). Ex. 1017 at ¶¶ 84–85. If there is a match, then the posting is sent to the **identified user**. Paragraph 9] of Rieger explains the matching process used to forward postings to users:

The communications server 111 is further comprised of an intersection engine 133. Intersection engine 133 is a pattern-matching engine that constantly runs as a background process. This engine is capable of finding intersections between broadcast descriptors and antenna descriptors, system-wide. Upon finding an intersection for the first time, the engine adds the posting to the notification list of the relevant user account, noting which of the user's antenna descriptors “received” the posting.

Ex. 1017 at ¶ 91. As shown above, Rieger uses the intersection of “broadcast descriptors” and “antenna descriptors” to **identify the relevant users** and then forwards the message to those users. A broadcast message, by contrast, is not sent to an identified recipient but rather to **all recipients in a target area**. Additionally, unlike users receiving a broadcast message, the users in Rieger are

not required to be in a target area in order to receive a particular message. *See* Ex. 1017 at ¶ 84 (“In addition to the antenna descriptor for the base location, each user account would be capable of maintaining a list of additional antenna descriptors, permitting the user to intercept postings relevant to multiple locations of interest”). Therefore, the “postings” in Rieger are not “broadcast messages,” as recited in claim 19.

Even if the Board were to consider the “postings” in Rieger to be broadcast messages, the section of Rieger identified by Petitioner does not disclose or suggest the recited limitation. The relevant portion of Rieger explains that administrators can “restrict the nature of postings created by any particular user by defining geographic regions into which the user is either authorized or unauthorized to post.” Ex. 1017 at ¶ 81. In other words, Rieger discloses an authorization check **prior** to the **creation** of a posting. Claim 19, by contrast, recites authorization verification of a broadcast message **originator** of a broadcast message **that has already been received**. Ex. 1001 at claim 19 (“comparing the stored geographically defined broadcast message jurisdiction for the originating broadcast agent with the broadcast target area associated with the broadcast message in the broadcast request”). Rieger does not disclose or suggest any authorization verification of a **message originator** of a message that is received.

To the contrary, Rieger makes clear that when a user is unauthorized to post in a particular region, **no message is originated.**

Petitioner subsequently argues that Zimmers discloses “verifying a broadcast message request as a function of the authority of the originating broadcast agent to send the broadcast message to the broadcast target based on **certain parameters** in the broadcast message request.” Pet. at 26-27 (emphasis added).

Even if Petitioner’s assertion were true, it is beside the point. Petitioner has not made any argument that Zimmers discloses or suggests “verifying... an authority of the originating broadcast agent... **by comparing the stored geographically defined broadcast message jurisdiction for the originating broadcast agent with the broadcast target area associated with the broadcast message,**” as claim 19[c] requires. Zimmers does not disclose or suggest any authorization verification that depends upon a geographically defined message jurisdiction for an originating broadcast agent.

Additionally, Petitioner’s characterization of Zimmers is incorrect. Zimmers discloses authorization of a user *before generation or transmission* of any message, so that an unauthorized user would not even be able to generate or transmit a message. Ex. 1018, claim 144 and Fig. 4D. Zimmers discloses that if a user is not authorized to send a particular type of notification, no message is generated or transmitted. Ex. 1018, Fig. 4D (steps 496 and 504). When a user is authorized, the

message is subsequently generated and transmitted and no additional verification is performed. Ex. 1018, Fig. 4D (steps 496, 498, 500, and 502). There is no verification of an authority of “the originating broadcast agent” of a message in Zimmers, since message origination in Zimmers occurs **after** authorization of a user is determined. Therefore, at the time of authorization, a user of Zimmers could not be considered an “originating broadcast agent” of a received message, since no message has even been generated, let alone received.

Petitioner further argues that “Sandhu discloses that a basic principle of any access control system is that stored information for an originating user is compared with information associated with the user’s request.” Pet. at 27. Once again, even if Petitioner’s assertion were true, it still would be insufficient to demonstrate that Sandhu discloses or suggests the recited limitation. Petitioner has not proffered any evidence that Sandhu discloses or suggests “verifying... an authority of the originating broadcast agent to send the broadcast message to the broadcast target area by comparing the stored geographically defined broadcast message jurisdiction for the originating broadcast agent with the broadcast target area associated with the broadcast message in the broadcast request.”

Additionally, Petitioner’s argument mischaracterizes Sandhu’s disclosure. Sandhu generally discloses an access control scheme in which an authorization of a user is checked before it can access a particular object, such as a bank account. Ex.

1020 at 42, 44. A user in Sandhu is not in any sense an “originating user,” because it has not attempted to originate a message at the time the system checks to determine whether it has access rights. This check for access rights generally is a fundamentally different scheme from one in which a user’s authorization is evaluated for a particular message request for a particular target broadcast area.

B. Petitioner has not provided any rational underpinning for combining Gundlegård, Zimmers, and Rieger.

Rejections based on obviousness must be based upon some “rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F.3d at 988.

Petitioner concedes that “Gundlegård does not expressly disclose a [sic] storing a geographic jurisdiction for a broadcasting agent” and Gundlegård does not “expressly disclose a verification that specifically restricts the geographic scope of a broadcast message based on the sender’s authority.” Pet. at 31 (emphasis removed).

Petitioner then identifies several alleged rationales for combining Rieger’s feature of defining geographic regions into which the user is either authorized or unauthorized to post with the system of Gundlegård. In particular, Petitioner first argues that such a combination would (1) increase safety and reduce false alarms by limiting broadcast to areas which are affected by a particular emergency and (2)

reduce costs by limiting the broadcast area to a predetermined region. Pet. at 31-32.

Both of these rationales pertain only to the benefits of limiting broadcast to a target area, a feature that Petitioner argues is already disclosed in Gundlegård. Pet. at 31 (“Gundlegård clearly discloses an application whereby messages are delivered to a target area”). Thus, the only benefits that Petitioner identifies as arising from the combination of Gundlegård with Rieger, would, according to Petitioner, already exist in Gundlegård alone. Petitioner, therefore, has failed to articulate a legitimate rationale underpinning for combining the systems of Gundlegård and Rieger. *See Square, Inc. v. Cooper*, Case IPR2014-00158, slip op. at 30 (PTAB May 15, 2014) (Paper 10) (finding obviousness rationale unpersuasive when the alleged benefit of a combination already existed independent of the combination).

Petitioner then argues that Zimmers discloses “two (2) stages of security in an emergency message transmission system: namely, (1) user authentication and (2) user privileges” and that “Gundlegård discloses the capability to enable charging for different users of a cell broadcast messaging system.” Pet. at 32. According to Petitioner, this provides additional motivation to combine because “a user who is granted privileges to broadcast a particular message type can only be

charged for sending that message type if the system knows who that user is.” Pet. at 32 (citing Ex. 1011, at ¶ 107).

The two stages of security in Zimmers pertain to a user who wishes to transmit messages and not to the target of those messages. Ex. 1018, Fig. 4D. By contrast, the “charging system” described by Gundlegård refers to a user who wishes to receive messages. Ex. 1013 at 36. Therefore, Zimmers is directed to security aimed at message senders, while the charging system of Gundlegård is directed to techniques for charging message subscribers. Incorporating the two stages of security of Zimmers into Gundlegård would not aid in identification of a subscriber to be charged, because the two stages of security of Zimmers do not pertain to message subscribers.

Petitioner then concludes that “a POSITA would be motivated to combine the geographic restriction disclosed in Rieger (Ex. 1017) with the system of Gundlegård to restrict emergency messages to their proper target as taught by Zimmers.” Pet. at 32-33.

Petitioner points to a teaching in Zimmers of restricting “emergency messages to their proper target.” *Id.* According to Petitioner, this teaching provides motivation to combine the geographic restriction feature of Rieger with the system of Gundlegård. *Id.* The relevant portion of Zimmers explains that one problem with weather broadcasts is “that weather broadcasts must cover a

relatively large area” and therefore result in the transmission of the broadcasts to users within the area that may not be affected by a particular weather event. Ex. 1018 at 2:49-54. However, the “geographic restriction” feature of Rieger does not in any way address this problem. To the contrary, the “geographic restriction” disclosed in Rieger merely imposes an access restriction on which users can create postings associated with specific geographic areas. Ex. 1017 at [0079], [0081]. The “geographic restriction” of Rieger does not solve the problem of users within a geographic area receiving messages which may not be pertinent to them because of the size of the geographic area. One of ordinary skill in the art would not look to combine the “geographic restriction” of Rieger with the system of Gundlegård based on the teachings of Zimmers, because Rieger does not address the problem which Zimmers identifies.

VI. There is no reasonable likelihood that Petitioner will prevail on Ground III.

Petitioner again has failed to meet its statutory threshold, because it has failed to present a legal basis under which the Board could reach a conclusion that the claims are obvious. As explained above, Petitioner has not established that 3GPP qualifies as prior art. *See* Section IV.C, *supra*. In addition, Petitioner’s combination of **five** distinct references to find the elements of the claim is rooted in hindsight, and should be rejected. *See Grain Processing Corp. v. American-Maize Prods. Co.*, 840 F.2d 902, 907 (Fed. Cir. 1988) (“Care must be taken to avoid

hindsight reconstruction by using the patent in suit as a guide through the maze of prior art references, combining the right references in the right way so as to achieve the result of the claims in suit.”).

A. The Petition fails to provide a basis for the specific combination of five references.

Petitioner presents a number of different rationales for pairwise combination of Mani with each of 3GPP, Sandhu, and “Rieger in view of Zimmers,” respectively, Pet. at 42–44, but none set forth a “rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F.3d at 988. As a preliminary matter, the Petition is entirely devoid of a discussion explaining why, other than hindsight, a person of skill in the art would have been motivated to combine **five** identified references. The Petition’s only discussion of motivation to combine is to combine Mani with each individual reference. Even to the extent that these pairwise combinations make sense (and they do not, as discussed below), the use of five references without a clear explanation of **why** a person of skill in the art would have combined all five is a clear example of the hindsight view that is specifically forbidden in an obviousness analysis. *See Cheese Sys. Inc. v. Tetra Pak Cheese and Powder Sys., Inc.*, 725 F.3d 1341, 1352 (Fed. Cir. 2013) (“Obviousness cannot be based on the hindsight combination of components selectively culled from the prior art to fit the parameters of the patented invention.”) (internal quotation marks omitted).

In addition, the specific pairwise combinations advocated by Petitioner – Mani with individual second references – fail for two additional reasons. First, the system disclosed by Mani would only exacerbate the problem with prior art systems discussed in the background of the invention section of the ’221 patent – that overhead for a per-recipient message system is unfeasible for large-scale alerting. Second, the combination of Mani and 3GPP would remove from Mani the very per-recipient customization it is designed to provide.

B. Mani cannot render the ’221 patent claims obvious because Mani presents exactly the problem that the ’221 patent solves – in prior art systems, overhead scales with the number of recipients of an alert.

Mani discloses a system and method “for effectuating a **subscriber-selectable** notification scheme with respect to an incoming emergency message **directed to a subscriber.**” Ex. 1014 at Abstract, ¶9 (emphasis added). Mani discloses delivery of emergency notices differently based on individual recipient preferences:

The call treatment application’s service logic is operable to **query the subscriber profile database** based on the parametric information in the incoming emergency message (step 806). Responsive at least in part to the **results obtained from the database query**, a determination is made thereafter with respect to a particular emergency alert scheme to be provided (step 808).

Id. at ¶ 54 (emphasis added); *see also id.* Fig. 8 (steps 806 and 808).

This type of per-recipient overhead is specifically the problem with prior art emergency notification systems that the '221 patent was designed to solve. *See* Ex. 1001 at 5:56–60 (“A public service message location broadcasting system provides for the simultaneous sending of public services to millions of subscribers with less impact on the supporting networks than a single SMS-message.”). The '221 patent provides nearly three columns of additional discussion of the problems with utilizing per-subscriber database queries in a mass-alerting system. Ex. 1001 at 1:36 – 3:64. Although the database query disclosed by Mani is not identical to the HLR and VLR queries rejected by this disclosure, Figure 7 of Mani shows an exemplary database record 700 that would need to be queried and acted upon for each targeted individual recipient of Mani’s emergency message. Ex. 1014 at Fig. 7, ¶ 50. Thus, for the reasons discussed in the '221 patent, the system of Mani could not be effectively scaled to provide broadcast messaging to all subscribers in a target area. The system in the '221 patent avoids the drawbacks of systems like Mani, because it operates in a fundamentally different way – it operates without knowledge of specific recipients and it not burdened by the number of message recipients, because of the controlled broadcast nature of the patented system.

C. Mani cannot be combined with 3GPP, because cell broadcast is incompatible with the per-recipient customization of Mani

A person of skill in the art would not have been motivated to combine the teachings of Mani and 3GPP because the system of Mani is designed for

customization of alert message reception on a subscriber level, while the Cell Broadcast standard of 3GPP would not allow any such customization.

Petitioner's suggestion that Mani should be combined with the 3GPP standard that defines Cell Broadcast simply because both relate to cellular networks and emergency alerts is the type of hindsight reconstruction that the law of obviousness forbids. *See, e.g., In re Gorman*, 933 F.2d 982, 987 (Fed. Cir. 1991). 3GPP provides for the transmission of true broadcast messages – “unacknowledged” messages that are “broadcast to all receivers within a particular region.” Ex. 1019 at 7. Because these messages do not have specific recipients, combining Mani with the 3GPP Cell Broadcast standard would remove from Mani the very per-recipient customization that it was expressly designed to provide. Thus, the only argument for this combination is impermissible hindsight. *Cheese Sys. Inc.*, 725 F.3d 1341 at 1352.

VII. Conclusion

Because Petitioner has failed to identify all Real Parties in Interest, the Petition should be denied on that basis. Even if the individual grounds are considered, Petitioner has failed to establish a reasonable likelihood that it will prevail as to claim 19 on any ground, and Patent Owner respectfully requests the Board deny institution as to all grounds of the Petition.

Dated: February 7, 2017

Respectfully Submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing PATENT OWNER'S PRELIMINARY RESPONSE TO PETITION FOR INTER PARTES REVIEW OF U.S. PATENT NO. 8,438,221, together with Exhibits 2001 through 2006, was served on February 7, 2017 on all counsel of record for Petitioner by electronic mail, and also on lead counsel only (by agreement of the Parties) by UPS overnight delivery (a method at least as fast and reliable as Priority Mail Express) as listed below:

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CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.26(a)(2)(ii), this Patent Owner's Preliminary Response is typeset in Times New Roman proportional font, with normal spacing.

Pursuant to 37 C.F.R. § 42.24(d), I hereby certify that this Patent Owner's Preliminary Response contains no more than 14,000 words, excluding those portions exempted by § 42.24(a). Microsoft Word 2010 provides the following for the non-excluded portions of the document:

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