

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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DEPARTMENT OF JUSTICE,  
Petitioner,

v.

ENVISIONIT, LLC,  
Patent Owner.

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Case IPR2017-00180  
Patent 9,136,954 B2

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Before BRYAN F. MOORE, LYNNE E. PETTIGREW, and  
DAVID C. MCKONE, *Administrative Patent Judges*.

MCKONE, *Administrative Patent Judge*.

DECISION  
Denying Institution of *Inter Partes* Review  
*37 C.F.R. § 42.108*

## I. INTRODUCTION

### A. Background

The Department of Justice (“Petitioner”) filed a Petition (Paper 1, “Pet.”) to institute an *inter partes* review of claims 1, 2, 4, 17, and 23 of U.S. Patent No. 9,136,954 B2 (Ex. 1001, “the ’954 patent”). EnvisionIT, LLC (“Patent Owner”) filed a Preliminary Response (Paper 7, “Prelim. Resp.”). Upon consideration of the Petition and Preliminary Response, we conclude, under 35 U.S.C. § 314(a), that Petitioner has not established a reasonable likelihood that it would prevail with respect to any of the challenged claims. Accordingly, we decline to institute an *inter partes* review of claims 1, 2, 4, 17, and 23 of the ’954 patent.

### B. Related Matter

The parties indicate that the ’954 patent has been asserted in *CellCast Technologies, LLC v. United States*, Case No. 1:15-cv-01307 (Fed. Cl.) (“*CellCast* Litigation”). Pet. 3; Paper 4, 2.

### C. Evidence Relied Upon

Petitioner relies on the following prior art:

David Gundlegård, Automotive Telematics Services based on Cell Broadcast (May 8, 2003) (Master’s Thesis, Linköping University, Norrköping, Swed.) (Ex. 1013, “Gundlegård”);

U.S. Publication No. US 2002/0184346 A1, published Dec. 5, 2002 (Ex. 1014, “Mani”);

U.S. Publication No. US 2002/0103892 A1, published Aug. 1, 2002 (Ex. 1017, “Rieger”);

U.S. Patent No. 6,816,878 B1, issued Nov. 9, 2004, filed Feb. 11, 2000 (Ex. 1018, “Zimmers”);

3rd Generation Partnership Project (“3GPP”), *Technical Specification Group Terminals; Technical realization of Cell Broadcast Service (CBS) (Release 4)*, 3GPP TS 23.041 V4.2.0 (Dec. 2001) (Ex. 1019, “3GPP Standard”); and

Ravi S. Sandhu & Pierangela Samarati, *Access Control: Principles and Practice*, VOL. 32 NO. 9 IEEE COMMUNICATIONS MAGAZINE 40–48 (Sept. 1994) (Ex. 1020, “Sandhu”).

Petitioner also relies on the Declaration of Randall A. Snyder (Ex. 1011, “Snyder Decl.”).

#### *D. The Asserted Grounds*

Petitioner asserts the following grounds of unpatentability (Pet. 6–7):

| Reference(s)                                           | Basis    | Claims Challenged   |
|--------------------------------------------------------|----------|---------------------|
| Gundlegård, 3GPP Standard, Sandhu, Rieger, and Zimmers | § 103(a) | 1, 2, 4, 17, and 23 |
| Mani, 3GPP Standard, Sandhu, Rieger, and Zimmers       | § 103(a) | 1, 2, 4, 17, and 23 |

#### *E. The ’954 Patent*

The ’954 patent describes “[a] message broadcast system collecting broadcast messages from a plurality of broadcast message originators and providing a broadcast message to a plurality of broadcast message transmission systems for broadcasting to a plurality of user devices located within a geographically defined broadcast target area.” Ex. 1001, Abstract. Figure 1, reproduced below, illustrates an example:

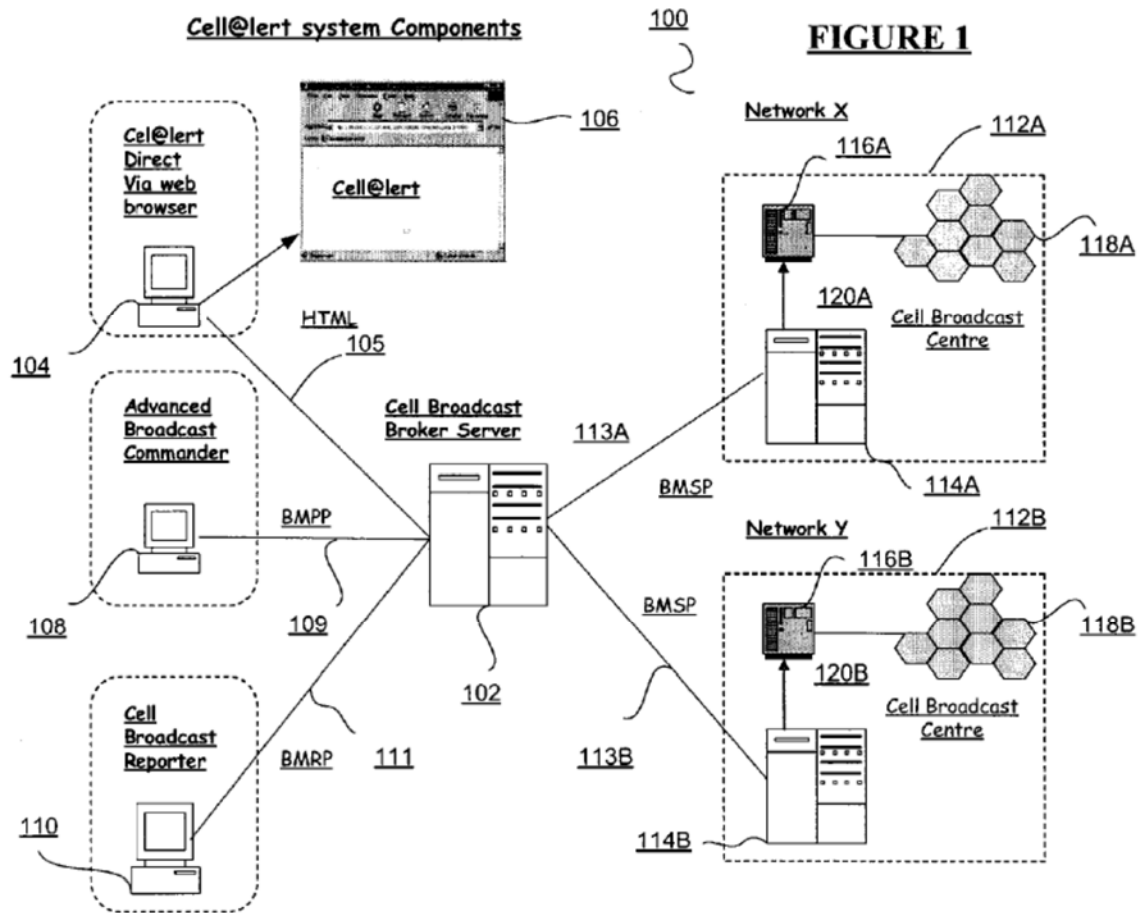


Figure 1 is a block diagram of a public service message location broadcast system. *Id.* at 4:48–50.

The location broadcast system (e.g., cell broadcast broker 102) receives broadcast message requests from different broadcast agent message origination systems (e.g., 104). *Id.* at Abstract. Each broadcast request includes a broadcast agent identification, a geographical broadcast target area, and a broadcast message. *Id.* The location broadcast system verifies the broadcast request based on the broadcast agent identification and determines the authority of the broadcast agent to send the broadcast message to the broadcast target area. *Id.* The location broadcast system identifies a broadcast message transmission system (e.g., cell broadcast

centres 112A, 112B) serving at least a portion of the broadcast target area, and transmits the broadcast message and the broadcast target area to the identified broadcast transmission system. *Id.*

Claim 1, reproduced below, is illustrative of the invention:

1. A message broadcast system for collecting broadcast messages from a plurality of broadcast message originators and providing a broadcast message to one or more of a plurality of broadcast message transmission systems for broadcasting to a plurality of user devices located within a geographically defined broadcast target area, the system comprising:

- a broadcast message management system communicatively coupled for receiving broadcast message requests from a plurality of coupled broadcast agent message origination systems, the broadcast message management system storing a broadcast message jurisdiction authority for each broadcast agent of each coupled broadcast agent message origination system, each broadcast message request being from a different originating broadcast agent associated with one of the coupled broadcast agent message origination systems, each broadcast message request including a broadcast agent identification uniquely identifying the broadcast agent originating the broadcast message request, the geographically defined broadcast target area, and a broadcast message, for each received broadcast message request of the broadcast message management system, verifying the broadcast message request to provide a verified broadcast message, the verifying being a function of the broadcast agent identification of the broadcast message request, and an authority of the originating broadcast agent to send the broadcast message of the broadcast message request to the broadcast target area of the broadcast message request, the

verifying ensuring the stored broadcast message jurisdiction of the originating broadcast agent includes the broadcast target area of each broadcast message request,

for each verified broadcast message request, the broadcast message management system further determining two or more of the broadcast message transmission systems serving at least a portion of the broadcast target area for the broadcast message request, and transmitting the broadcast message and the broadcast target area of the verified broadcast message request to the determined two or more broadcast message transmission systems.

## II. ANALYSIS

### A. *Real Party in Interest*

According to Patent Owner, its exclusive licensee, CellCast Technologies, LLC, sued Petitioner for infringement of the '954 patent in the United States Court of Federal Claims based, in part, on development work performed by International Business Machines Corporation ("IBM"). Prelim. Resp. 5. According to a Motion to Notice Third Party filed by Petitioner in the *CellCast* Litigation (Ex. 2002, 3), the contract between Petitioner and IBM regarding the development work included Federal Acquisition Regulation (FAR) Clause 52.227-3, reproduced below:

#### *Patent Indemnity*

(a) The Contractor shall indemnify the Government and its officers, agents, and employees against liability, including costs, for infringement of any United States patent (except a patent issued upon an application that is now or may hereafter be withheld from issue pursuant to a Secrecy Order under 35 U.S.C. 181) arising out of the manufacture or delivery of supplies, the performance of services, or the construction, alteration,

modification, or repair of real property (hereinafter referred to as *construction work*) under this contract, or out of the use or disposal by or for the account of the Government of such supplies or construction work.

(b) 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 (Apr. 1984). Pursuant to that clause, Petitioner noticed IBM of the *CellCast* Litigation. Ex. 2002. After being noticed, IBM intervened in the *CellCast* Litigation. Pet. 1; Prelim. Resp. 6; Ex. 2003.

A petition for *inter partes* review may be considered only if, among other requirements, “the petition identifies all real parties in interest.” 35 U.S.C. § 312(a)(2). According to the Trial Practice Guide, “[w]hether 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.” 77 Fed. Reg. 48,756, 48,759 (Aug. 14, 2012). The Trial Practice Guide provides guidance regarding the factors we consider in determining whether a party is a real party in interest. For example, “[a] common consideration is whether the non-party exercised or could have exercised control over a party’s participation in a proceeding.” 77 Fed. Reg. 48,756, 48,759 (Aug. 14, 2012). Other considerations may include whether the non-party is funding or directing the proceeding. *Id.* at 48,760.

Patent Owner argues that IBM is a real party in interest in this proceeding by virtue of the indemnity clause reproduced above. Prelim. Resp. 7–9. Anticipating this argument, Petitioner points out that previous

panels of the Board have ruled that the mere existence of an indemnification agreement does not establish that an indemnitor is a real party in interest. Pet. 2 (citing, *inter alia*, *Mercedes-Benz USA, LLC v. Proximity Monitoring Innovations LLC*, Case No. IPR2015-00397, slip. op. at 9 (PTAB July 17, 2015) (Paper 18)). Likewise, as Petitioner notes (Pet. 2), a non-party is not necessarily a real party in interest by virtue of its status as a co-defendant or co-member of a joint defense group with a petitioner. See Trial Practice Guide, 77 Fed. Reg. at 48,760. Petitioner then represents the following:

IBM has not collaborated with Petitioner in the preparation of the  
Petition;

IBM has not funded or paid the filing fees for the Petition; and  
Petitioner did not share a draft of the Petition with IBM.

Pet. 3. Patent Owner does not offer evidence contradicting these representations.

According to Patent Owner, however, “[t]he 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.” Prelim. Resp. 8. Patent Owner argues that because the indemnity clause in this case gives IBM an opportunity to participate in the defense of any suit or action alleging patent infringement, IBM *could* have exercised control over Petitioner’s participation in this proceeding, even if it did not actually do so. *Id.* at 7–8.

We are not persuaded by Patent Owner. We generally accept a petitioner’s identification of real parties in interest at the time of filing the petition. Petitioner represents that IBM has not funded, directed, or otherwise controlled the preparation of the Petition in this proceeding.

Pet. 3. Patent Owner introduces no evidence that reasonably brings into question Petitioner's identification of real parties in interest. Moreover, Patent Owner has not shown persuasively that the indemnification clause at issue, which gives IBM an "opportunity as is afforded by applicable laws, rules, or regulations to participate in its defense," gives IBM an opportunity to direct or control this proceeding.<sup>1</sup>

On this record, we are not persuaded that IBM is a real party in interest.

*B. Prior Art Status of Gundlegård and 3GPP Standard*

Patent Owner contends that Petitioner has failed to establish that either Gundlegård or 3GPP Standard was publicly available before the priority date of the '954 patent and, thus, Petitioner has not established that either is prior art to the '954 patent. Prelim. Resp. 19.

According to the Federal Circuit, "[b]ecause there are many ways in which a reference may be disseminated to the interested public, 'public accessibility' has been called the touchstone in determining whether a

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<sup>1</sup> This Decision is not at odds with the decision 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 No. 9), to which Patent Owner cites in the Preliminary Response, at 8–9. In *First Data*, the panel considered not only an indemnification agreement that expressly stated that the indemnitor "shall have the right at its expense to employ counsel . . . to defend against Claims that VeriFone is responsible for . . . and to compromise, settle and otherwise dispose of such Claims," but also considered additional evidence of control, such as communications from the indemnitor to the petitioner in that proceeding, and the indemnitor paying all costs of the petition. IPR2014-00715, slip op. at 7–8.

reference constitutes a ‘printed publication’” under Section 102. *Kyocera Wireless Corp. v. Int’l Trade Comm’n*, 545 F.3d 1340, 1350 (Fed. Cir. 2008) (quoting *In re Hall*, 781 F.2d 897, 898–99 (Fed. Cir. 1986)). A reference is publicly accessible “upon a satisfactory showing that such document 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.” *SRI Int’l, Inc. v. Internet Sec. Sys., Inc.*, 511 F.3d 1186, 1194 (Fed. Cir. 2008). We assess public accessibility on a case-by-case basis. See *Kyocera*, 545 F.3d at 1350.

In instances of references stored in libraries, for example, “competent evidence of the general library practice may be relied upon to establish an approximate time when a thesis became accessible.” *In re Hall*, 781 F.2d at 899. “In these cases, we generally inquire whether the reference was sufficiently indexed or cataloged.” *Blue Calypso, LLC v. Groupon, Inc.*, 815 F.3d 1331, 1348 (Fed. Cir. 2016); accord *Voter Verified, Inc. v. Premier Election Solutions, Inc.*, 698 F.3d 1374, 1380 (Fed. Cir. 2012) (“[I]ndexing is a relevant factor in determining accessibility of potential prior art, particularly library-based references.”). In *Hall*, the Federal Circuit found sufficient “a declaration from the university librarian which detailed the library’s procedures for receiving, cataloging, and shelving of theses and attested to the relevant dates that Bayer’s thesis was processed.” 781 F.2d at 899. In contrast, in *SRI International*, in the context of a motion for summary judgment, a document on an FTP server was not shown to have been sufficiently publicly available, in part, because “the FTP server did not contain an index or catalogue or other tools for customary and meaningful research.” 511 F.3d at 1196. In another example, theses deposited at a

library “were not accessible to the public because they had not been either cataloged or indexed in a meaningful way.” *In re Cronyn*, 890 F.2d 1158, 1161 (Fed. Cir. 1989). In *Cronyn*, the theses were cataloged in alphabetical order, by title, and “the student’s name, which, of course, bears no relationship to the subject of the student’s thesis.” *Id.*

*1. Petitioner has not shown that Gundlegård was publicly accessible*

Gundlegård states on its face that it is a master’s thesis kept at Linköping University in Norrköping, Sweden, and is alleged to have been made available over the Internet. Thus, to determine a date on which Gundlegård was publicly accessible, we look to evidence of the library’s cataloging and indexing practices and any search capability of the library’s website. *See Blue Calypso*, 815 F.3d at 1348; *Voter Verified*, 698 F.3d at 1380; *SRI*, 511 F.3d at 1196.

The Petition does not provide a detailed statement of Petitioner’s arguments as to the public accessibility of Gundlegård. Rather, Petitioner simply states “[a]s documented by the declaration of Amelia Nuss (Ex. 1021), the thesis was published at least as early as October 27, 2003.” Pet. 14. The detailed basis for Petitioner’s contention is stated in the Nuss Declaration. Patent Owner argues that this constitutes an improper incorporation by reference of arguments from the Nuss Declaration into the Petition, in violation of 37 C.F.R. § 42.6(a)(3). Prelim. Resp. 20–21 n.4. We share Patent Owner’s concern. Nevertheless, we agree with Patent Owner that the Nuss Declaration, even if considered, does not support a finding that Gundlegård was publicly available.

According to her Declaration, Ms. Nuss is a law librarian at the Justice Management Division of the Department of Justice, rather than a staff member of the Linköping University library at which Gundlegård is located. Ex. 1021 ¶¶ 1–2. Ms. Nuss testifies that she “was provided with a copy of” Gundlegård and was “asked to determine the earliest date that the thesis was recorded and made available and accessible to researchers.”

*Id.* ¶ 3.

Ms. Nuss identifies a URL link in Gundlegård (Ex. 1013, 3), testifies that she followed that link and that Attachment 2 to her Declaration reflects the web page that resulted. *Id.* ¶¶ 3–4. Attachment 2 purports to be a search screen from Linköping University listing bibliographic details regarding Gundlegård. As Ms. Nuss notes, it includes at the bottom the text

**“Available from: 2003-10-02 Created: 2003-10-02.”** Attachment 2 also includes, at the top right, a link to “fulltext.” According to Ms. Nuss, clicking on that link results in downloading Gundlegård. Ex. 1021 ¶ 4.

Ms. Nuss also includes, as Attachment 3 to her Declaration, a screenshot of Attachment 2 purportedly archived by the Wayback Machine on October 27, 2003. Ex. 1021 ¶ 5. According to Ms. Nuss, this “reflects that a copy of this thesis was publically available on the internet at least as early as October 27, 2003.” *Id.* As Patent Owner points out (Prelim. Resp. 23), following the “fulltext” link in the archived version (Attachment 3) downloads a version of Gundlegård archived at later date, March 22, 2004.

Patent Owner contends that Ms. Nuss’s testimony is insufficient because she lacks personal knowledge of the source or date of publication of

Gundlegård.<sup>2</sup> Prelim. Resp. 21. Patent Owner further argues that Petitioner does not offer any evidence that Gundlegård was indexed or otherwise made available to a member of the public prior to February 13, 2004.<sup>3</sup> *Id.* at 22. We agree with Patent Owner. Ms. Nuss does not claim to have personal knowledge of the general library practices of Linköping University library prior to the critical date of the '954 patent. Nor does Ms. Nuss claim to have personal knowledge of the search capabilities of its website in that time period. For example, Ms. Nuss does not testify as to the procedures, if any, the university used to index or catalogue theses in 2003, or the manner, if at all, in which they were indexed or cataloged (e.g., by author, title, subject, etc.).

Petitioner does not introduce any other evidence of the indexing and cataloging policies of Linköping University library or the search capabilities of its website. Petitioner also does not introduce any evidence that Gundlegård was actually disseminated to any interested skilled artisans. Thus, the evidence in the Petition is insufficient to show that Gundlegård was publicly available as of the earliest priority date of the '954 patent (or,

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<sup>2</sup> Patent Owner raises various objections to the evidence in Ms. Nuss's Declaration, including authenticity and hearsay objections. Prelim. Resp. 20–24. It is not necessary to rule on these objections for purposes of this Decision, as Ms. Nuss's evidence, if credited, is insufficient to show that Gundlegård was publicly accessible.

<sup>3</sup> Patent Owner appears to contend that the critical date for the '954 patent is November 23, 2005. Prelim. Resp. 22. This appears to be a typographical error. Patent Owner later contends that the earliest priority date is February 13, 2004. *Id.* at 24. The precise critical date does not matter, here, as Petitioner does not show public accessibility of Gundlegård as of any date.

for that matter, prior to the actual filing date of May 6, 2013). Petitioner, therefore, has not established that Gundlegård is prior art to the '954 patent.

## *2. Prior Art Status of 3GPP Standard*

Patent Owner contends that Petitioner has not established that 3GPP Standard is prior art. Prelim. Resp. 24–27. Because we decide on other grounds that Petitioner has not shown a reasonable likelihood that it would prevail with respect to claims 1, 2, 4, 17, and 23, we do not reach Patent Owner's arguments as to the prior art status of 3GPP Standard.

### *C. Claim Construction*

We interpret claims of an unexpired patent using the broadest reasonable construction in light of the specification of the patent in which they appear. *See* 37 C.F.R. § 42.100(b); *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144–45 (2016). In applying a broadest reasonable construction, claim terms generally are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *See In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007).

Although the parties propose competing constructions of “broadcast” (Pet. 7–8; Prelim. Resp. 14–18), we need not construe this or any other term for the purposes of this Decision to resolve the parties' dispute. *See Vivid Technologies, Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (“[O]nly those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy.”).

*D. Asserted Grounds of Unpatentability*

A claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the claimed subject matter and the prior art are “such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” We resolve the question of obviousness on the basis of underlying factual determinations, including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) objective evidence of nonobviousness, i.e., secondary considerations.<sup>4</sup> *See Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

*1. Level of Skill in the Art*

Petitioner, relying on Mr. Snyder’s testimony, contends that a person of ordinary skill in the art would have had a bachelor’s degree in computer science, engineering, physics, mathematics, or other technical field, along with three to five years of practical cellular network and protocol design and software development experience. Pet. 7 (citing Ex. 1011 ¶ 28). Patent Owner does not propose a level of skill or contest Petitioner’s statement. Petitioner’s proposal is consistent with the level of ordinary skill reflected by the prior art of record. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001); *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995);

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<sup>4</sup> The record does not include allegations or evidence of objective indicia of nonobviousness.

*In re Oelrich*, 579 F.2d 86, 91 (CCPA 1978). For purposes of this Decision, we adopt Petitioner's statement of the level of skill in the art.

*2. Alleged Obviousness over Gundlegård, 3GPP Standard, Sandhu, Rieger, and Zimmers*

For the reasons given above, the evidence in the Petition is not sufficient to show public availability of Gundlegård; thus, Petitioner has not shown that Gundlegård is prior art to the '954 patent. Accordingly, Petitioner has not established a reasonable likelihood that it would prevail with respect to claims 1, 2, 4, 17, and 23 as obvious over Gundlegård, 3GPP Standard, Sandhu, Rieger, and Zimmers.

*3. Alleged Obviousness over Mani, 3GPP Standard, Sandhu, Rieger, and Zimmers*

*a. Overview of Mani*

Mani is directed to an emergency message notification system for use in a multimedia-capable network. Ex. 1014, Abstract. Figure 5, reproduced below, illustrates an example:

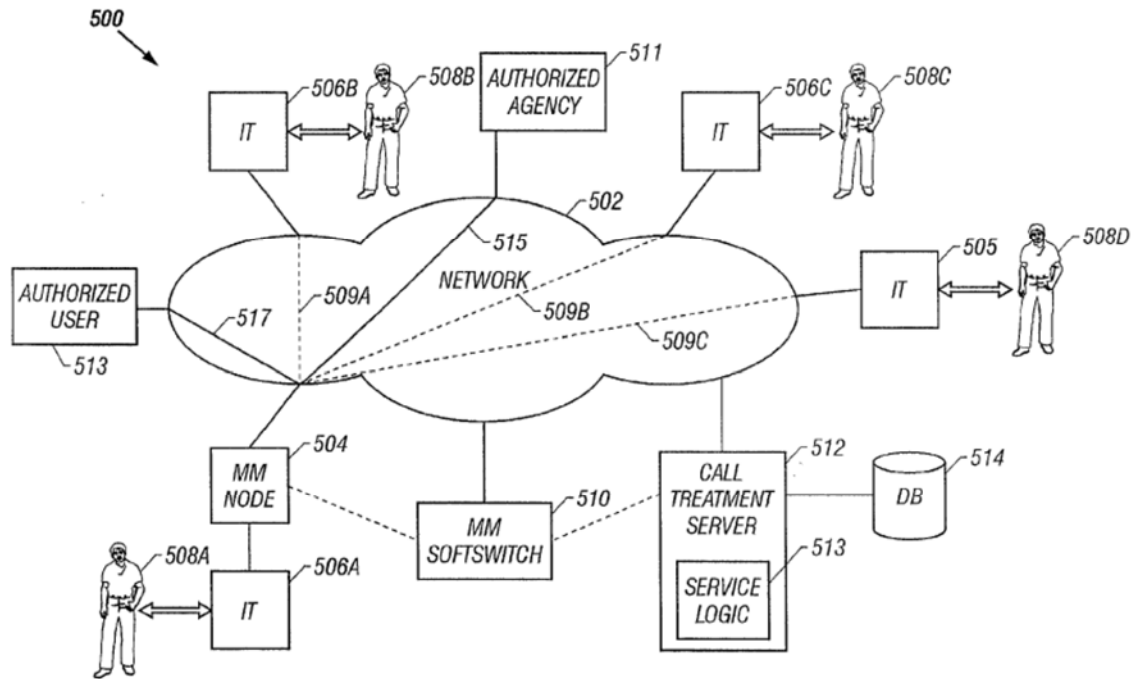


FIG. 5

Figure 5 is a block diagram of a service network that employs a multimedia-based emergency notification system. *Id.* ¶ 17.

Multimedia node 504, coupled to network 502, serves subscriber 508A (operating multimedia IT device 506A) for originating and terminating calls. Other call parties operating IT devices (e.g., call party 508B with IT device 506B and call party 508C with IT device 506C) are similarly coupled to network 502. *Id.* ¶ 39. Softswitch 510 is disposed in network 502 and coupled to call treatment server 512, which, in turn, is coupled to database environment 514. *Id.* ¶¶ 40–41. Database environment 514 stores various emergency notification alert modes, options, restrictions, and policies. *Id.* ¶ 41.

Authorized agency 511 is coupled to network 502. *Id.* ¶ 43. Authorized agency 511 could be a governmental agency, and may generate

emergency messages, such as for inclement weather and police action. *Id.*

According to Mani,

the emergency messages generated by the agency 511 may also include information regarding the characteristics of the various emergency situations, e.g., type, degree and severity of an emergency, target area to which the message is to be disseminated, indication as to whether recipients of a message are to respond in a particular manner, originating area of the emergency message, override capabilities (wherein a delivery restriction option selected by a subscriber in the target area is superseded by the emergency message to effect delivery), et cetera.

*Id.*

Path 515 illustrates disseminating an emergency message generated by authorized agency 511 with respect to particular subscriber 508A.

*Id.* ¶ 45. Mani states that “the emergency message paths may be established between an authorized entity and the intended recipient without disrupting an ongoing call connection involving the recipient, e.g., call connection 509A, 509B or 509C.” *Id.*

#### *b. Overview of 3GPP Standard*

3GPP Standard is a technical specification, promulgated by 3GPP, that, “[f]or UMTS . . . defines the interface requirements for the Cell Broadcast Center – UMTS Radio Network System (RNS) interface and the radio interface requirements for UMTS Radio Acces[s] Networks to support CBS [Cell Broadcast short message service].” Ex. 1019, p. 6 § 1.

Petitioner relies, in particular, on 3GPP Standard’s specification of message-identifier parameters of CBS messages (Ex. 1019 § 9.3) and the format of CBS messages (*id.* § 9.4). Pet. 55–56. Specifically, a CBS

message includes a “Message Identifier” parameter. Ex. 1019, p. 27

§ 9.4.1.2. The Message Identifier parameter “identifies the source and type of the CBS message. For example, ‘Automotive Association’ (= source), ‘Traffic Reports’ (= type) could correspond to one value.” Ex. 1019, p. 29

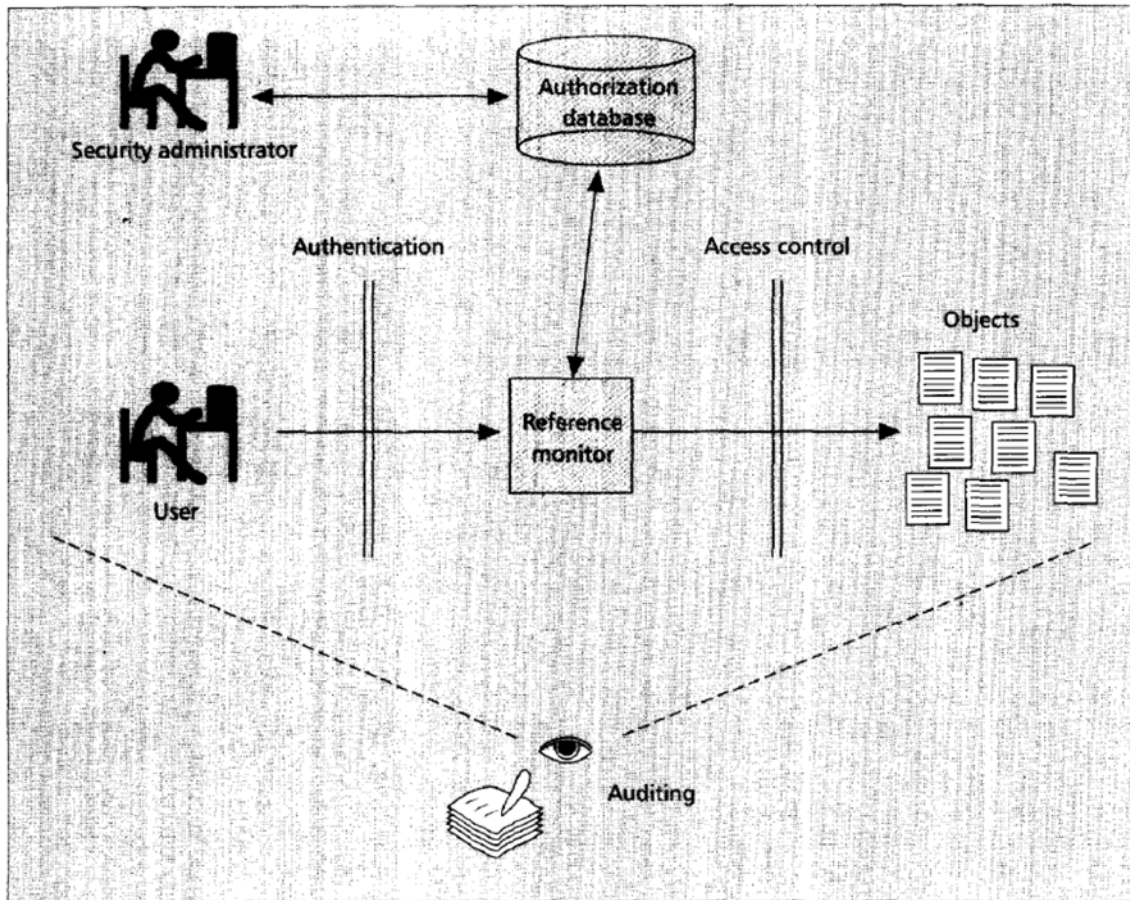
§ 9.4.1.2.2. A CBS message also includes a “Serial Number” parameter that includes “a 2-bit Geographical Scope (GS) indicator.” *Id.*, p. 27 §§ 9.4.1.2,

9.4.1.2.1. A CBS message further includes a “Cell-List” parameter that “identifies a sequence of one or more cells to which the primitives apply.”

*Id.* at 21 § 9.3.5.

*c. Overview of Sandhu*

Sandhu is a technical magazine article that “explains access control and its relationship to other security services such as authentication, auditing, and administration.” Ex. 1020, 40 col. 1. Figure 1, appearing on page 41 of Sandhu, is reproduced below:



■ Figure 1. Access control and other security services.

Figure 1 is a block diagram showing the relationship between access control and other security services in a computer system. *Id.* at 40 col. 1.

According to Sandhu, access control “is enforced by a reference monitor which mediates every attempted access by a user (or program executing on behalf of that user) to objects in the system” and “consults an authorization database in order to determine if the user attempting to do an operation is actually authorized to perform that operation.” *Id.*

Sandhu also describes an “access matrix” that defines the relationship between subjects (e.g., users or programs acting on behalf of users) and objects. *Id.* at 41 col. 2. According to Sandhu, “[s]ubjects initiate actions or operations on objects. These actions are permitted or denied in accord with

the authorizations established in the system. Authorization is expressed in terms of access rights or access modes.” *Id.* at 41 col. 2–42 col. 1.

*d. Overview of Rieger*

Rieger describes a communications system for posting arbitrary information to a geographic region. Ex. 1017, Abstract. Figure 1, reproduced below, illustrates an example:

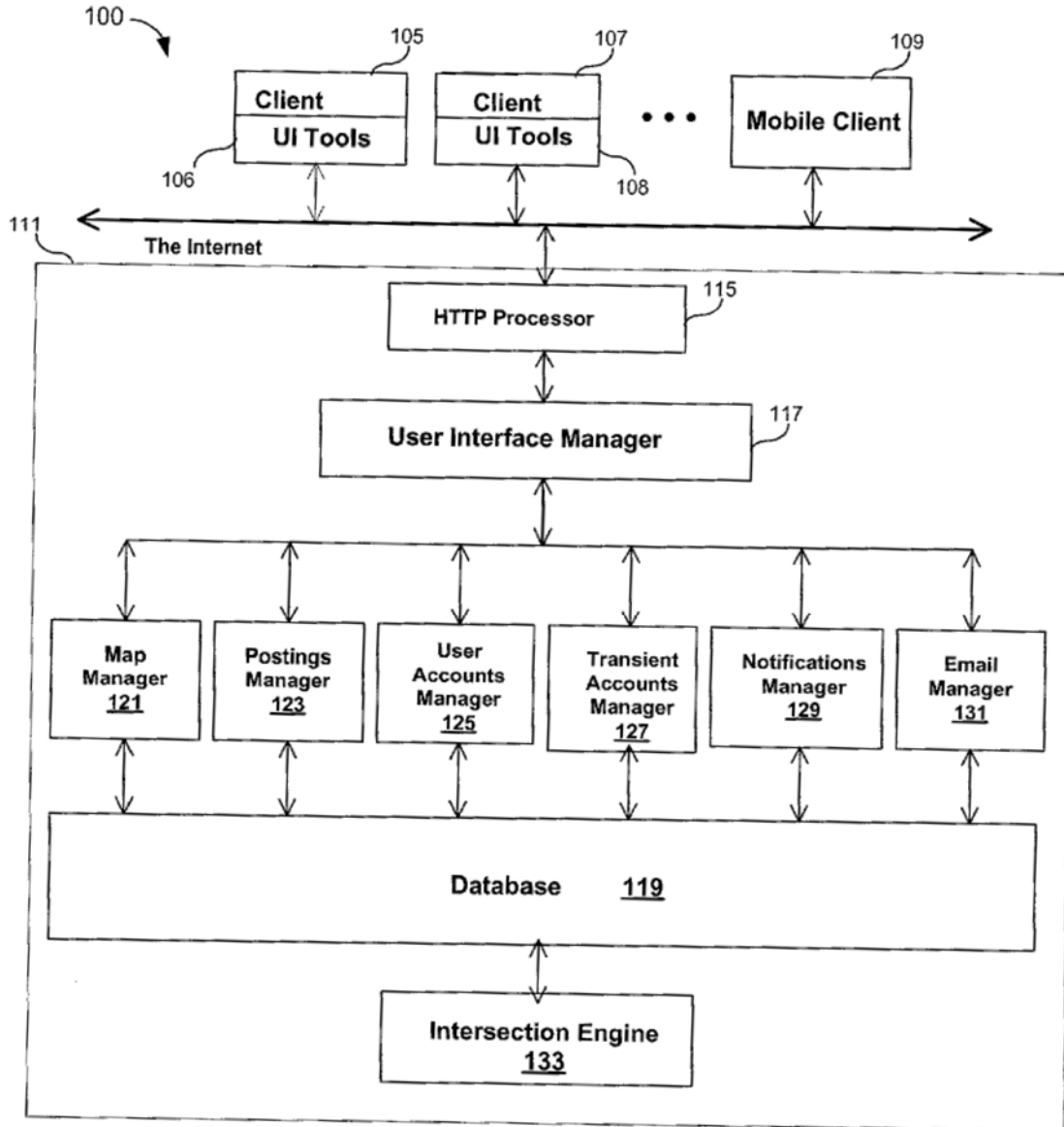


**FIG. 1**

Figure 1 is a block diagram of communications system 100. *Id.* ¶ 22. Communications server 111 communicates with mobile clients 109 and stationary clients 105, 107 over a network (e.g., the Internet). *Id.* ¶ 70. Communications server 111 is organized among a series of geographical maps that cover an intended service area, e.g., a county, metropolitan area,

state, or country. *Id.* ¶ 71. User interface 117 allows a user to interact, using map manager 121, with the maps. *Id.* ¶ 73.

Postings manager 123 stores and retrieves information about postings on demand from user interface 117. *Id.* ¶ 76. Each posting includes an identification tag that describes, inter alia, who posted it, and an information component (i.e., the content of the posting). *Id.* ¶¶ 77–78. Each posting also includes a broadcast descriptor that identifies the posting’s geographic target region(s). *Id.* ¶ 79. According to Rieger:

Administrators of the communications system 100 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. Authorized regions can be assigned optional passwords and posting category restrictions that further narrow the user’s posting privileges in those regions. These controls would, for example, permit system administrators to grant specific privileges to a regional authority to create postings of particular categories, e.g., Governmental/Traffic, Governmental/Weather, to particular regions, while excluding all other users from posting those categories to the regions.

*Id.* ¶ 81.

*e. Overview of Zimmers*

Zimmers describes a system for providing alert notifications to a plurality of related geographic regions. Ex. 1018, Abstract. “Alerts may be initiated by authorized personnel via telephone or Internet interaction with the system, or may be generated automatically from data feeds such as the EMWIN system of the National Weather Service. Alerts may be delivered via telephone, pager (voice or text), e-mail, Internet, or other media.” *Id.* Authorized personnel can include civil defense authorities, school

administrators, and managerial employees of business or community organizations. *Id.* at 11:13–18.

Zimmers identifies a problem with prior art solutions in that alerts sent to a large coverage area might be irrelevant for a large percentage of the recipients. *Id.* at 2:41–59. According to Zimmers, in the example of the National Weather Service (“NWS”), “[t]his results in the situation not unlike the fable of the Boy Who Cried Wolf, in which citizens decide that the warnings are not normally relevant, and either ignore them or turn their NWS receiver off.” *Id.* at 2:59–62.

*f. Alleged Obviousness of Claims 1, 2, 4, 17, and 23*

Petitioner does not include in the Petition a meaningful textual explanation of how Mani corresponds to aspects of claim 1. Rather, Petitioner primarily includes quotations from Mani and the other cited references in claim chart form. We detail our understanding of Petitioner’s mapping below.

For example, claim 1 recites a “broadcast message management system communicatively coupled for receiving broadcast message requests from a plurality of coupled broadcast agent message origination systems” and “each broadcast message request being from a different originating broadcast agent associated with one of the coupled broadcast agent message origination systems.” Petitioner appears to identify Mani’s subscriber 508A and IT device 506A, subscriber 508D and IT device 505, and authorized agency 511 as “a plurality of coupled broadcast agent message origination systems.” Pet. 52–54 (including instances of Mani’s Figure 5 annotated with red boxes around these entities). Petitioner also appears to identify

emergency messages received from authorized agency 511 as “broadcast message requests,” as recited in claim 1. *Id.* at 52 (citing Ex. 1014 ¶ 54).

Petitioner argues that Mani describes that notifications can be distributed across multiple networks, including IP networks, the Public Switched Telephone Network (“PSTN”), and the Public Land Mobile Network (“PLMN”). Pet. 57–58. Thus, Petitioner argues, Mani teaches “for each verified broadcast message request, the broadcast message management system further determining two or more of the broadcast message transmission systems serving at least a portion of the broadcast target area for the broadcast message request,” as recited in claim 1. *Id.* As to “transmitting the broadcast message and the broadcast target area of the verified broadcast message request to the determined two or more broadcast message transmission systems,” as recited in claim 1, Petitioner cites to Figure 10 of Mani, in particular boxes 1004 (“broadcasting the message over a particular area served by the service network”) and 1006 (“delivering the public emergency message to the served subscribers in accordance with each subscriber’s notification options”). *Id.* at 59.

Petitioner concedes that Mani does not teach “each broadcast message request including a broadcast agent identification uniquely identifying the broadcast agent originating the broadcast message request, the geographically defined broadcast target area, and a broadcast message,” as recited in claim 1. Pet. 54. Nevertheless, Petitioner argues, a skilled artisan would have found these teachings in 3GPP Standard’s description of Message Identifier (“broadcast agent identification”) and Cell-List (“geographically defined broadcast target area”) parameters of CBS messages. *Id.* at 54–55. Relying on Mr. Snyder’s testimony, Petitioner

contends that, because Mani’s system can use the Public Land Mobile Network (“PLMN”), a skilled artisan would have known to use the Cell Broadcast feature of 3GPP Standard. *Id.* at 65–66 (citing Ex. 1011 ¶¶ 106–08).

Petitioner further concedes that Mani does not teach the following limitations of claim 1:

the broadcast message management system storing a broadcast message jurisdiction authority for each broadcast agent of each coupled broadcast agent message origination system;  
and

for each received broadcast message request of the broadcast message management system, verifying the broadcast message request to provide a verified broadcast message, the verifying being a function of the broadcast agent identification of the broadcast message request, and an authority of the originating broadcast agent to send the broadcast message of the broadcast message request to the broadcast target area of the broadcast message request, the verifying ensuring the stored broadcast message jurisdiction of the originating broadcast agent includes the broadcast target area of each broadcast message request  
Pet. 54–56; *see also id.* at 66 (“Mani does not expressly disclose how to implement user roles to manage and maintain the different disclosed *privilege and authorization levels* in implementing its system.”), 68 (“Mani does not expressly disclose [] storing a *geographic jurisdiction* for a broadcasting agent. Nor does Mani expressly disclose a verification that specifically restricts the geographic scope of a broadcast message based on the sender’s authority.”).

Nevertheless, Petitioner contends that Rieger teaches these aspects and that Zimmers describes a reason to combine the teachings of Mani and Rieger. *Id.* Specifically, Petitioner argues “Rieger expressly discloses a

message transmission system that ‘teaches restricting message distribution based on two criteria: (1) the message category and (2) the applicable geographic region.’” *Id.* at 69 (quoting Ex. 1011 ¶118). As to Zimmers, Petitioner argues that it “provides an example of how limiting the geographical scope of weather alerts can reduce the ‘cry wolf’ syndrome resulting from overbroad emergency broadcasts.” *Id.* at 68. Petitioner applies the teachings of Rieger “based on the safety focused motivation in Zimmers” and additional “commercial reasons” attested to by Mr. Snyder. *Id.* at 69. Petitioner also cites Sandhu for “background description of basic authorization and auditing concepts well known in the art.” *Id.* at 56. Petitioner argues that it would have been predictable to use such concepts with Mani’s system. *Id.* at 67.

Patent Owner responds that Petitioner has provided insufficient explanation for its contentions as to certain limitations of claim 1. For example, as to “each broadcast message request being from a different originating broadcast agent associated with one of the coupled broadcast agent message origination systems,” as recited in claim 1, Patent Owner argues that Petitioner’s reproduction of Mani’s Figure 5, annotated with boxes around authorized agency 511; subscriber 508A and IT device 506A; and subscriber 508D and IT device 505, fails to satisfy 37 C.F.R.

§§ 42.22(a)(2) (petition must include “[a] full statement of the reasons for the relief requested, including a detailed explanation of the significance of the evidence including material facts, and the governing law, rules, and precedent”) and 42.104(b)(4) (“The petition must specify where each element of the claim is found in the prior art patents or printed publications relied upon.”). Prelim. Resp. 49.

We agree with Patent Owner. Claim 1 requires a plurality of “different originating broadcast agent[s]” such that each broadcast message request is from a different originating broadcast agent. By annotating Figure 5 of Mani (Pet. 54) to identify (1) authorized agency 511, (2) subscriber 508A paired with IT device 506A, and (3) subscriber 508D paired with IT device 505, we presume that Petitioner identifies these three entities or pairs as three “different originating broadcast agents,” each of which originates broadcast message requests. As explained above, Petitioner also includes this annotation of Figure 5 as support for its contention that Mani teaches “a broadcast message management system communicatively coupled for receiving broadcast message requests from a plurality of coupled broadcast agent message origination systems.” Pet. 53.

Petitioner does not explain persuasively how each of the identified originating broadcast agents originates broadcast message requests or how broadcast message requests are received from each of these alleged agents. As explained above, Petitioner identifies the emergency message of paragraph 54 of Mani as corresponding to a broadcast message request. Pet. 52. The description in paragraph 54 is sent by “an authorized entity” in the context of the “service network arrangement 500 depicted in FIG. 5.” Ex. 1014 ¶ 54. Mani describes emergency messages generated by authorized agency 511 of Figure 5. *Id.* ¶ 43 (“Continuing to refer to FIG. 5, an authorized agency (e.g., a governmental entity) 511 is operably coupled to network 502 for generating appropriate emergency messages as may be warranted in different situations such as public safety, inclement weather, police action, and the like.”).

Petitioner does not cite to any disclosure in Mani suggesting that subscriber 508A, IT device 506A, subscriber 508D, or IT device 505 generates emergency messages. We note that Mani also describes authorized user 513 generating an emergency message, but such a message is generated “towards a recipient, e.g., IT 506A,” *id.* ¶ 44, which does not appear to be a broadcast message request. In any case, Petitioner does not cite to authorized user 513 as an originating broadcast agent. Petitioner also cites to paragraph 59 of Mani, which explains that “the emergency message may be transmitted in broadcast mode to the target serving area (step 1004 [of Figure 10]).” Pet. 52. To the extent that Petitioner contends that such emergency messages correspond to “broadcast message requests,” as recited in claim 1, these emergency messages are generated by an entity, such as authorized agency 511, not by individuals, such as subscriber 508A, IT device 506A, subscriber 508D, or IT device 505. Ex. 1014 ¶ 58.

On this record, Petitioner does not show persuasively how Mani teaches “a plurality of coupled broadcast agent message origination systems” such that “each broadcast message [is] from a different originating broadcast agent associated with one of the coupled broadcast agent message origination systems,” as recited in claim 1. For example, Petitioner does not contend that Mani teaches a plurality of authorized agents 511. Nor does Petitioner persuasively show that any of subscriber 508A, IT device 506A, subscriber 508D, or IT device 505 sends a broadcast message request, or that it would have been obvious to have them send such a request. Petitioner does not cite to 3GPP Standard, Sandhu, Rieger, or Zimmers for these aspects of claim 1. Accordingly, Petitioner has not established a reasonable

likelihood that claim 1 would have been obvious over Mani, 3GPP Standard, Sandhu, Rieger, and Zimmers.

Claim 17 is a method claim, but otherwise similar to claim 1. In particular, claim 17 recites, inter alia, a “method of collecting broadcast messages from *a plurality of broadcast message originators*” and “receiving over an input interface a plurality of broadcast message requests . . . from one of *a plurality of coupled broadcast agent message origination systems*.” Petitioner cites a subset of the disclosure of Mani cited for similar limitations of claim 1. Pet. 60–61 (citing Ex. 1014 ¶¶ 39, 54, 59, 60). In particular, Petitioner appears to identify “a plurality of subscribers, e.g., subscriber 508A operating a multimedia IT device 506A for originating and/or terminating calls” as the plurality of coupled broadcast agent message systems. *Id.* at 60 (quoting Ex. 1014 ¶ 39). Contrary to its allegations as to claim 1, Petitioner does not appear to identify Mani’s authorized agency 511 as corresponding to a broadcast agent message origination system. *Id.* Nevertheless, Petitioner appears to contend that the emergency messages generated by authorized agency 511 correspond to “broadcast message[s]” and “broadcast message requests,” as recited in claim 17. *Id.* (citing Ex. 1014 ¶¶ 54, 59, 60).

Petitioner also cites to 3GPP Standard (Pet. 60–61) for the limitation of claim 17 that includes these aspects, but, based on Petitioner’s application of 3GPP Standard to claim 1 (*Id.* at 54–55), we presume it is cited for a teaching of “each broadcast message request including a broadcast agent identification uniquely identifying the broadcast agent originating the broadcast message request, a geographically defined broadcast target area, and a broadcast message,” as also recited in the same limitation of claim 17.

The remainder of Petitioner's allegations as to claim 17 are similar to those for claim 1. *Id.* at 61–65. Petitioner's allegations regarding combining the references treat claims 1 and 17 together. *Id.* at 65–69.

Patent Owner responds that Petitioner's claim chart for this aspect of claim 17 “contains only general citations to Mani and 3GPP, without sufficient explanation to understand which portions are being used or combined to meet each portion of the limitation” and that “the Petition does not provide any disclosure or explanation that discloses a ‘plurality of coupled broadcast agent message origination systems.’” Prelim. Resp. 50–51.

We agree with Patent Owner. Petitioner does not appear to contend that Mani's authorized agent 511 is a “broadcast message originator” or “broadcast agent message origination system” or that Mani teaches a plurality of authorized agents 511. Likewise, as with claim 1, Petitioner does not persuasively show that either of subscriber 508A or IT device 506A sends a broadcast message request. Petitioner does not cite to 3GPP Standard, Sandhu, Rieger, or Zimmers for these aspects of claim 17. Accordingly, Petitioner has not established a reasonable likelihood that claim 17 would have been obvious over Mani, 3GPP Standard, Sandhu, Rieger, and Zimmers.

Claims 2 and 4 depend from claim 1. Claim 23 depends from claim 17. We have analyzed Petitioner's evidence and argument as to these dependent claims (Pet. 70–72) and find that they do not remedy the above-noted deficiencies as to claims 1 and 17. Thus, Petitioner has not established a reasonable likelihood that it would prevail with respect to claims 2, 4, and 23 as obvious over Mani, 3GPP Standard, Sandhu, Rieger, and Zimmers.

### III. CONCLUSION

Petitioner has not established a reasonable likelihood that claims 1, 2, 4, 17, and 23 are unpatentable.

### IV. ORDER

For the reasons given, it is:

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review is not instituted for claims 1, 2, 4, 17, and 23 of U.S. Patent No. 9,136,954 B2.

IPR2017-00180  
Patent 9,136,954 B2

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