

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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SAMSUNG ELECTRONICS AMERICA, INC.,  
Petitioner,

v.

UNILOC 2017 LLC,  
Patent Owner.

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Case IPR2017-01801  
Patent 8,995,433 B2

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Before JENNIFER S. BISK, MIRIAM L. QUINN, and  
CHARLES J. BOUDREAU, *Administrative Patent Judges*.

QUINN, *Administrative Patent Judge*.

FINAL WRITTEN DECISION  
*35 U.S.C. § 318(a)*

## I. INTRODUCTION

We instituted this proceeding for *inter partes* review of claims 1–5, 7–12, 14–17, 25, and 26 of U.S. Patent No. 8,995,433 B2 (Ex. 1001, “the ’433 patent”), owned by Uniloc 2017 LLC (“Patent Owner”), as requested by Samsung Electronics America, Inc. (“Petitioner”). We have jurisdiction under 35 U.S.C. § 6(c). This Final Written Decision is entered pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons discussed below, and in view of the full record, Petitioner has shown by a preponderance of the evidence that claims 1–5, 7–12, 14–17, 25, and 26 of the ’433 patent are unpatentable.

## II. BACKGROUND

### A. Procedural History

Petitioner filed its Petition for *inter partes* review on July 20, 2017. Paper 1 (“Pet.”). Upon consideration of the Petition and Patent Owner’s Preliminary Response (Paper 6), we issued, on February 6, 2018, a Decision on Institution. Paper 8 (“Dec. on Inst.”). We determined that Petitioner had demonstrated a reasonable likelihood of prevailing in its challenge of all claims and all grounds. *Id.* at 26–27. Patent Owner filed a Patent Owner Response. Paper 12 (“PO Resp.”). Petitioner filed a Reply. Paper 16 (“Reply”). Patent Owner further filed a Motion to Exclude deposition testimony objected to as being outside the scope of permissible deposition topics. Paper 20 (“Motion”). Petitioner opposes the Motion. Paper 23 (“Opp’n”).

Before the scheduled hearing in this proceeding, we issued an Order giving the parties notice of claim construction positions of the term “instant

voice message,” which is a term recited in all claims of the ’433 patent. Paper 26. In that Order, we notified the parties that the panel expected to hear the parties’ positions concerning the alternative constructions under consideration in IPR2017-01427, IPR2017-01428, IPR2017-01667, and IPR2017-01668 (proceedings involving the ’433 patent and related patents also reciting the term “instant voice message”). *Id.* We heard oral argument on October 30, 2018, the transcript of which is entered in the record. Paper 30 (“Tr.”).

### *B. Related Matters*

The parties indicate that the ’433 patent is involved in multiple district court cases, including *Uniloc USA, Inc. v. Samsung Electronics America, Inc.*, Case No. 2-16-cv-00641-JRG (E.D. Tex.). Pet. 1–5, Paper 4, 2. The ’433 patent also has been the subject of multiple *inter partes* review petitions, and was the subject of Case IPR2017-00225 (where Apple Inc., Facebook, Inc., Snap Inc., and WhatsApp, Inc. constitute the Petitioner), in which we issued a Final Written Decision concluding that claims 1–6 and 8 of the ’433 patent were not shown to be unpatentable. *Final Written Decision*, Case IPR2017-00225, Paper 29, 47 (May 23, 2018 PTAB). We have also issued Final Written Decisions concerning the ’433 patent in IPR2017-01427 and IPR2017-01428, concluding that claims 1–12, 14–17, 25, and 26 are unpatentable. *Final Written Decision*, Case IPR2017–01427, Paper 46 (Nov. 30, 2018 PTAB) (consolidated with IPR2017-01428).<sup>1</sup>

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<sup>1</sup> At the time of issuing this Final Written Decision, the appeal filed concerning the Final Written Decisions in IPR2017-00225, is unresolved. Furthermore, at the time of issuing this Decision, it is unclear whether the

### III. THE '433 PATENT AND PRESENTED CHALLENGES

#### *C. The '433 Patent*

The '433 patent relates to Internet telephony, and more particularly, to instant voice over IP (“VoIP”) messaging over an IP network, such as the Internet. Ex. 1001, 1:19–23. The '433 patent acknowledges that “instant text messaging is [] known” in the VoIP and public switched telephone network (“PSTN”) environments, with its server presenting the user a “list of persons who are currently ‘online’ and ready to receive text messages on their own client terminals.” *Id.* at 2:35–42. In one embodiment, such as depicted in Figure 2 (reproduced below), the system of the '433 patent involves an instant voice message (“IVM”) server and IVM clients. *Id.* at 7:21–22.

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Final Written Decisions in IPR2017-01427 and IPR2017-01428, also addressing the '433 patent, will be appealed. Therefore, we do not apply collateral estoppel to the challenged claims of the '433 patent. *Cf. MaxLinear Inc. v. CF Crespe LLC*, 880 F.3d 1373, 1376 (Fed. Cir. 2018) (“It is undisputed that as a result of collateral estoppel, a judgment of invalidity in one patent action renders the patent invalid in any later actions based on the same patent.”) (citing *Mycogen Plant Sci., Inc. v. Monsanto Co.*, 252 F.3d 1306, 1310 (Fed. Cir. 2001)).

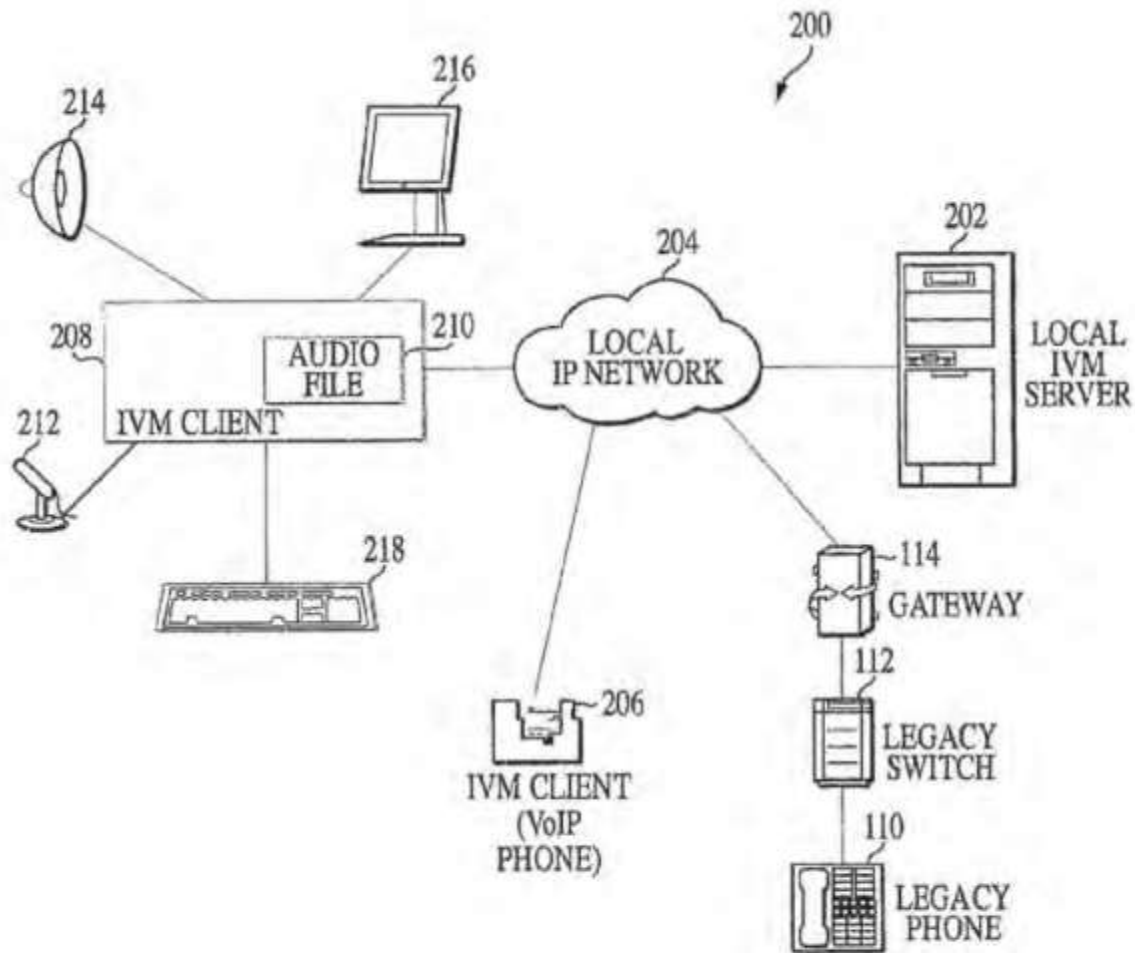


FIG. 2

Figure 2 illustrates IVM client 206 interconnected via network 204 to local IVM server 202, where IVM client 206 is a VoIP telephone, and where legacy telephone 110 is connected to legacy switch 112 and further to media gateway 114. *Id.* at 7:27–49. The media gateway converts the PSTN audio signal to packets for transmission over a packet-switched IP network, such as local network 204. *Id.* at 7:49–53. In one embodiment, when in “record mode,” the user of an IVM client selects one or more IVM recipients from a list. *Id.* at 8:2–5. The IVM client listens to the input audio device and records the user’s speech into a digitized audio file at the IVM client. *Id.* at

8:12–15. “Once the recording of the user’s speech is finalized, IVM client 208 generates a send signal indicating that the digitized audio file 210 (instant voice message) is ready to be sent to the selected recipients.” *Id.* at 8:19–22. The IVM client transmits the digitized audio file to the local IVM server, which, thereafter, delivers that transmitted instant voice message to the selected recipients via the local IP network. *Id.* at 8:25–26. Only the available IVM recipients, currently connected to the IVM server, will receive the instant voice message. *Id.* at 8:36–38. If a recipient “is not currently connected to the local IVM server 202,” the IVM server temporarily saves the instant voice message and delivers it to the IVM client when the IVM client connects to the local IVM server (i.e., is available). *Id.* at 8:38–43.

The ’433 patent also describes an “intercom mode” of voice messaging. *Id.* at 11:34–37. The specification states that “[t]he ‘intercom mode’ represents real-time instant voice messaging.” *Id.* at 11:37–38. In this mode, “instead of creating an audio file, one or more buffers of a predetermined size are generated in the IVM client[s] [] or local IVM servers.” *Id.* at 11:38–41. Successive portions of the instant voice message are written to the one or more buffers, which as they fill, automatically transmit their content to the IVM server for transmission to the one or more IVM recipients. *Id.* at 11:41–46. Buffering is repeated until the entire instant voice message has been transmitted to the IVM server. *Id.* at 11:46–59.

*D. Independent Claims*

Of the challenged claims, claims 1 and 9 are independent and are reproduced below. Each of claims 2–5, 7, 8, 10–12, 14–17, 25, and 26 depends directly or indirectly from claims 1 or 9.

1. A system comprising:

an instant voice messaging application including a client platform system for generating an instant voice message and a messaging system for transmitting the instant voice message over a packet-switched network via a network interface;

wherein the instant voice messaging application displays a list of one or more potential recipients for the instant voice message;

wherein the instant voice messaging application includes a message database storing the instant voice message, wherein the instant voice message is represented by a database record including a unique identifier; and

wherein the instant voice messaging application includes a file manager system performing at least one of storing, deleting and retrieving the instant voice messages from the message database in response to a user request.

9. A system comprising:

an instant voice messaging application comprising:

a client platform system for generating an instant voice message;

a messaging system for transmitting the instant voice message over a packet-switched network; and

wherein the instant voice messaging application attaches one or more files to the instant voice message.

Ex. 1001, 23:65–24:15, 24:60–67.

*E. Asserted Prior Art and Grounds of Unpatentability*

This proceeding relies on the following prior art references:

- a) *Griffin*: U.S. Patent No. 8,150,922 B2, issued April 3, 2012, filed in the record as Exhibit 1005;
- b) *Zydney*: PCT App. Pub. No. WO 01/11824 A2, published Feb. 15, 2001, filed in the record as Exhibit 1006;
- c) *Clark*: U.S. Patent No. US 6,725,228 B1, issued April 20, 2004, filed in the record as Exhibit 1007;
- d) *Väänänen*: PCT App. Pub. No. WO 02/17650 A1, published February, 28, 2002, filed in the record as Exhibit 1008;
- e) *Lee*: U.S. Patent Application Pub. No. US 2002/0101848 A1, published on August, 1, 2002, filed in the record as Exhibit 1014; and
- a) *Vuori*: U.S. Patent Application Pub. No. US 2002/0146097 A1, published on October 10, 2002, filed in the record as Exhibit 1015.

This trial involves seven grounds of unpatentability based on 35 U.S.C. § 103(a) over Griffin and the other asserted prior art as follows. Pet. 6–7.

<b>Challenged Claim(s)</b>	<b>Basis</b>	<b>References</b>
1–3, 8	§ 103(a)	Griffin and Clark
4 and 7	§ 103(a)	Griffin, Clark, and Zydney
5	§ 103(a)	Griffin, Clark, and Väänänen



Challenged Claim(s)	Basis	References
9, 11, 14–17, 25, and 26	§ 103(a)	Griffin and Zydney
12	§ 103(a)	Griffin, Zydney, and Väänänen
10	§ 103(a)	Griffin, Zydney, and Lee
26	§ 103(a)	Griffin, Zydney and Vuori

Petitioner supports its challenge of unpatentability with a Declaration of Zygmunt J. Haas, Ph.D., filed as Exhibit 1002 (“Haas Decl.”). Patent Owner relies on a Declaration of William C. Easttom II (Exhibit 2001, “Easttom Decl.”). A transcript of the deposition of Mr. Easttom specifically addressing the ’433 patent is filed in the record as Exhibit 1041.

#### IV. ANALYSIS

##### A. Claim Construction

In an *inter partes* review, claim terms in an unexpired patent are given their broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b) (2017); *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016) (upholding the use of the broadest reasonable interpretation standard as the claim interpretation standard to be applied in an *inter partes* review proceeding).<sup>2</sup> Under the

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<sup>2</sup> A recent amendment to this rule does not apply here because the Petition was filed before November 13, 2018. *See* Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board, 83 Fed. Reg. 51,340 (Oct. 11, 2018) (to

broadest reasonable interpretation standard, 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). We note that only those claim terms that are in controversy need to be construed, and only to the extent necessary to resolve the controversy. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017); *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999).

In our Decision on Institution we did not construe any terms. Dec. on Inst. 7. During trial, Patent Owner attempted to distinguish the prior art based on the scope of “instant” voice message. PO Resp. 9–12. According to Patent Owner, Petitioner applied the term “instant voice message” as requiring a transmission in real time, but not receiving the message in “real time” also. *Id.* at 9. To resolve this dispute, we construe the term “instant” of “instant voice message.” We also analyze the scope of another claim term that is in dispute: claim 9’s “attaches one or more files to the instant voice message.” *See* PO Resp. 24–31 (PO arguing that none of the asserted prior art teaches attaching a file to an audio file or the data message itself).

#### 1. Instant Voice Message

Patent Owner argues that the prior art does not disclose an “instant voice message” because real-time communication requires the capability of receiving in real time. PO Resp. 9. Patent Owner challenges Petitioner’s assertion that a voice message is “instant” because it is a voice message

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be codified at 37 C.F.R. pt. 42).

*transmitted* in real time to an available recipient. *Id.* Petitioner argues that the Specification does not support Patent Owner’s contention because of an embodiment in which the instant voice message is stored at the central server for delivery when the recipient becomes available. Reply 6.

We agree with Patent Owner that merely transmitting the “instant voice message” in real time is insufficient to define the “instant” feature of an “instant voice message.” The Background of the Invention purposely distinguishes a voice mail message from an “instant” text message. Ex. 1001, 2:23–47. In the voice mail message example, the Specification describes the drawbacks of dialing a telephone number, and after a few more steps, finally “recording the message for *later pickup* by the recipient.” *Id.* at 2:27–33 (emphasis added). In contrast, for an “instant” text message, a server presents the user with “a list of persons who are currently ‘online’ and *ready to receive* text messages on their own client terminals.” *Id.* at 2:39–42 (emphasis added). “The text message [will be] sent immediately via the text messaging server to the selected one or more persons and is displayed on their respective client terminals.” *Id.* at 2:45–47. That is, with a voice mail message, a person on the receiving end, who admittedly was not *ready* to engage in a direct voice conversation, must take an active step to retrieve the recorded message, regardless of when the message was recorded. In contrast, the “instant” text message is immediately transmitted *to the recipient*, which is *ready* to receive it, thus, ensuring a speedy arrival. Thus, the Specification distinguishes a voice mail message from the “instant” text message in that, although both messages are recorded and transmitted, only the “instant” text message, as the word “instant” implies, confers immediacy

to its receipt by a ready recipient. The “instant” in the “instant voice message” imparts the same speedy receipt.

Our conclusion that an “instant” voice message must involve this immediate transmission and, likewise, speedy reception of the message is not diminished by embodiments that store the message at the server for later delivery. *See id.* at 8:39–43 (“[I]f a recipient IVM client is not currently connected to the local IVM server 202 (i.e., is unavailable), the IVM server temporarily saves the instant voice message and delivers it to the IVM client when the IVM client connects to the local IVM server 202 (i.e., is available).”). Neither the sender nor the recipients can have any expectation with regard to the timing of the message’s receipt when the recipients are *not online*, and thus, *not available* to receive the message. Indeed, this same embodiment carries out the “instant” capability by delivering the message stored at the server to the client, when the client connects to the server, thus, becoming available to receive it. Consequently, we determine that an “instant voice message” is one that is transmitted in real time and received accordingly, *when the recipient is available*.

## 2. Attaches One or More Files to the Instant Voice Message

The parties also dispute what it means to *attach* a file to the instant voice message. PO Resp. 24–31. In our Decision on Institution, we noted that Patent Owner’s arguments raised an issue of claim construction that needed further development. Dec. on Inst. 21–22. During trial, Patent Owner argued the distinction between the data content and a container including the data content (PO Resp. 27), and proposed as support that the claimed “instant voice message,” in “all the challenged claims is recorded in the audio file and is not an encapsulating transport package” (PO Resp. 30).

Patent Owner implies that claim 9’s recitation of “instant voice message” has an ordinary meaning, as those words would be normally used in the field of the invention at the time of the invention. *Id.* at 31 (citing *Alloc, Inc. v. U.S. Int’l Trade Comm’n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003)).

Since our Decision on Institution, we have had occasion to revisit the claim language regarding the “attaching” issue. In a set of related *inter partes* reviews, we expressly construed the terms “instant voice message” and “attaching” to resolve the dispute of whether attaching one or more files to an instant voice message was different from attaching one or more files to an audio file. *See Facebook, Inc. v. Uniloc 2017 LLC*, Case IPR2017-01428, slip op. at 12–21 (PTAB November 30, 2018) (Paper 40). Part of that analysis is relevant here also, and where appropriate is included below.<sup>3</sup>

Claim 9 recites “wherein the instant voice message application attaches one or more files to the instant voice message.” Ex. 1001, 24:66–67. Also relevant to our analysis is the language of claim 14 of the ’433 patent, which depends from claim 9 and recites “wherein the instant voice messaging application invokes a document handler to create a link between the instant voice message and the one or more files.” *Id.* at 25:14–17. Although these claims of the ’433 patent require attaching one or more files to the “instant voice message,” we note that related patents recite

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<sup>3</sup> We previously construed “instant voice message” as data content including a representation of an audio message. *Facebook, Inc. v. Uniloc 2017 LLC*, Case IPR2017-01428, slip op. at 12–18 (PTAB November 30, 2018) (Paper 40). The actual dispute in this proceeding, however, concerns the scope of “attaching” one or more files to an instant voice message. Accordingly, we need not incorporate here our previous construction of “instant voice message” as “data content.”

attaching one or more files to an “audio file” instead. For instance, claim 2 of U.S. Patent No. 8,243,723, which shares the same disclosure with the ’433 patent, recites that “the instant voice message includes one or more files attached to an audio file.” Similarly, in claim 1 of related U.S. Patent No. 8,199,747, generating an “instant voice message” includes “attaching one or more files to the audio file.” We include the above claim language in our discussion to highlight the challenge of achieving consistency in construing “attaching” or “attached” to *both* an “instant voice message” and an “audio file,” notwithstanding the difference in claim terms.

As noted above, the claims of the ’433 patent require attachment of one or more files *to the instant voice message*. From claim 14, we understand that the “attachment” may be performed by creating a link between the instant voice message and the one or more files. The Specification also describes “attachment” by linking:

The attachment of one or more files is enabled conventionally via a methodology such as “drag-and-drop” and the like, which invokes the document handler 306 to make the appropriate linkages to the one or more files and flags the messaging system 320 that the instant voice message also has the attached one or more files.

Ex. 1001, 13:35–40. This passage also describes that, in addition to making linkages, flags alert the messaging system in the client device that the instant voice message has an attachment. Thus, “attaching” creates *an association* between the one or more files and the instant voice message so that the system, once alerted, may transmit the instant voice message with the associated one or more files. This passage describes the attachment of files to an instant voice message in the “record mode,” i.e., when the “instant

voice message” is recorded in an audio file. *Id.* at 13–35 (describing how the audio file is recorded and processed before transmission, including giving the user options to attach documents). The Specification provides no other detailed description of how to attach a file to an “instant voice message” in either the “record mode” or “intercom mode.” It seems reasonable, therefore, that, in reciting attachment to an “instant voice message,” when dealing with the audio file form of the message, the Specification supports that attachment to an “audio file” is synonymous with attachment to an “instant voice message,” because those claims would be referring to the “record mode.”

The discussion above brings us to the issue Patent Owner raises of whether attachment must be to the data message itself. PO Resp. 26 (arguing that Zydney does not attach one or more files to the data message itself). Patent Owner seeks to construe the “attachment to” phrase (and its variants) very narrowly, as in the sense of a physical appendage or the joining together of items. For instance, Patent Owner argues that attaching to the message data is different than attaching to a structure that is used to transport the message, i.e. voice container. *Id.* (arguing that Zydney, instead, attaches files to only the encapsulating package). Because the Specification describes “attaching” broadly, however, as making linkages and flagging, we are not persuaded that the “attachment” language recited in certain claims of the ’433 patent is confined to attachment *to the message data (or audio file) itself* as Patent Owner argues. *See id.* (arguing that Griffin does not disclose attaching a file to an audio file, and neither does Zydney).

Rather, the Specification discloses “attachment” to an instant voice message broadly, irrespective of the structure or content of that instant voice message. The Specification’s linkage and flagging cause the system to handle the one or more files *as attachments* of the “instant voice message.” The tangible difference between an “instant voice message” with an attachment and one without seems to be in whether the document handler has sufficiently linked the attachment and whether the flags inform the client system to associate the attachment for effective transmission to the server. Thus, as long as the client has sufficient information that the “instant voice message” has an attachment, the recited “attachment” is performed. The particular manner of associating the one or more files with the instant voice message is irrelevant, such as whether links, flags, or other like information is used, as such details are not recited expressly in the independent claim.

Based on our review of the claim language, the Specification, and the parties’ arguments on claim construction, we determine that Patent Owner has not shown that the Specification supports its narrow position that the recited attachment to an “instant voice message” involves a direct attachment to only the content. Giving the term its plain and ordinary meaning in the context of the Specification, as explained above, we construe “attaches . . . to the instant voice message” (and its variants in related patents) to mean indicating that another file (or files) is associated with the “instant voice message.”

### *B. Legal Principles*

A claim is unpatentable for obviousness 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.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved 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) when in evidence, objective indicia of non-obviousness (i.e., secondary considerations).<sup>4</sup> *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). Additionally, the obviousness inquiry typically requires an analysis of “whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *KSR*, 550 U.S. at 418 (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2016) (requiring “articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”)).

To prevail on its challenges, Petitioner must demonstrate by a preponderance of the evidence that the claims are unpatentable. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d). “In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.* 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)). This burden never shifts to Patent Owner. *See Dynamic Drinkware, LLC v. Nat’l Graphics*,

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<sup>4</sup> The parties do not address secondary considerations, which therefore do not constitute part of our analysis.

*Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (citing *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1326–27 (Fed. Cir. 2008)) (discussing the burden of proof in *inter partes* review). Furthermore, Petitioner does not satisfy its burden of proving obviousness by employing “mere conclusory statements,” but “must instead articulate specific reasoning, based on evidence of record, to support the legal conclusion of obviousness.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016).

### *C. Level of Ordinary Skill in the Art*

Citing Dr. Haas’s testimony, Petitioner proposes a level of ordinary skill in the art as follows: bachelor’s degree in computer science, computer engineering, electrical engineering, or the equivalent and at least two years of experience in the relevant field, e.g., network communication systems. Pet. 9 (citing Haas Decl. ¶¶ 15–16). Petitioner further states that more education can substitute for practical experience and vice versa. *Id.* Patent Owner’s declarant, Mr. Easttom, similarly testifies that a person of ordinary skill in the art is someone with a baccalaureate degree related to computer technology and 2 years of experience with network communication technology, or 4 years of experience without a baccalaureate degree. PO Resp. 6–7 (citing Easttom Decl. ¶ 16).

The principal difference between the parties’ proposed qualifications is that, as an alternative to an undergraduate degree and two years of relevant work experience, Patent Owner’s proposal allows for a specific number of years of experience as a substitute for an undergraduate degree, while Petitioner’s proposal is vague in this regard. Based on our review of the ’433 patent and the prior art of record, we find that Patent Owner’s

proposal is more precise as it takes into account a level of experience of four years with network communication technology without the undergraduate degree. We, therefore, adopt Patent Owner's expression of the level of skill in the art, which encompasses both alternative sets of qualifications.

#### *D. Overview of Asserted Prior Art*

We discuss more fully certain disclosures in the asserted references in our analysis below. A discussion of those references follows.

##### 1. Griffin

Griffin, titled "Voice and Text Group Chat Display Management Techniques for Wireless Mobile Terminals," relates to a technique of managing the display of "real-time speech and text conversations (e.g., chat threads) on limited display areas." Ex. 1005, [54], 1:9–11. Griffin discloses a wireless mobile terminal as shown in Figure 1, reproduced below.

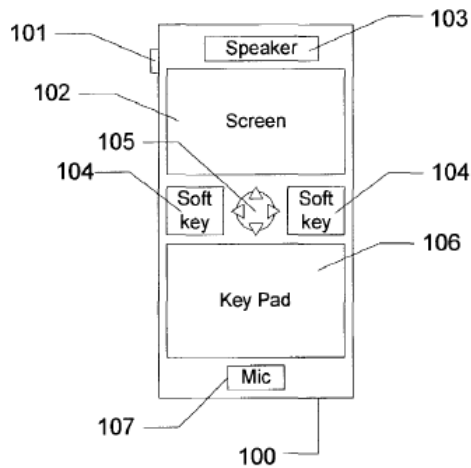
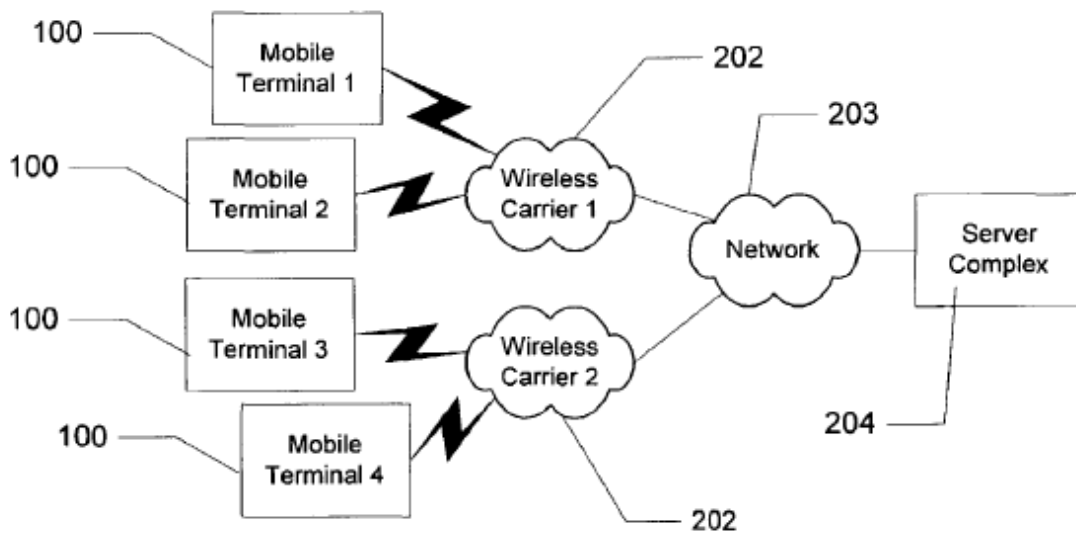


FIG. 1

Figure 1, above, depicts mobile terminal 100 comprising speaker 103 (which renders signals, such as received speech, audible), display 102 (for rendering text and graphical elements visible), navigation rocker 105 (which

allows a user to navigate a list or menu displayed on the screen), microphone 107 (for capturing the user's speech), and push-to-talk button 101 (which allows the user to initiate recording and transmission of audio). *Id.* at 3:14–30. Griffin also describes, in connection with Figure 2, reproduced below, the overall system architecture of a wireless communication system where the mobile terminals communicate with a chat server complex. *Id.* at 3:49–51.



**FIG. 2**

Figure 2, above, illustrates wireless carrier infrastructures 202, which support wireless communications with mobile terminals 100, such that the mobile terminals wirelessly transmit data to a corresponding infrastructure 202 for sending the data packets to communication network 203, which forwards the packets to chat server complex 204. *Id.* at 3:49–61.

Communication network 203 is described as a “packet-based network, [which] may comprise a public network such as the Internet or World Wide

Web, a private network such as a corporate intranet, or some combination of public and private network elements.” *Id.* at 3:61–65.

Griffin’s chat server complex 204 receives encoded data comprising text, speech, and/or graphical messages (or some combination thereof), when a plurality of users chat together (i.e., send chat messages from one terminal 100 to another). *Id.* at 4:11–15, 4:62–65. An outbound chat message, for example, is decomposed to locate the list of recipients, and the recipient’s current status is determined. *Id.* at 5:9–15. Griffin describes presence status 702 as “an indicator of whether the recipient is ready to receive the particular type of message, speech and/or text messages only, etc.).” *Id.* “When presence status 702 changes, the presence manager 302 [of server complex 204] sends a buddy list update message 600 to all the subscribers listed in the subscriber identifier field 706 of the corresponding presence record 700.” *Id.* at 5:27–30.

Griffin provides a buddy list display illustrated in Figure 9, reproduced below. *Id.* at 8:15–16.

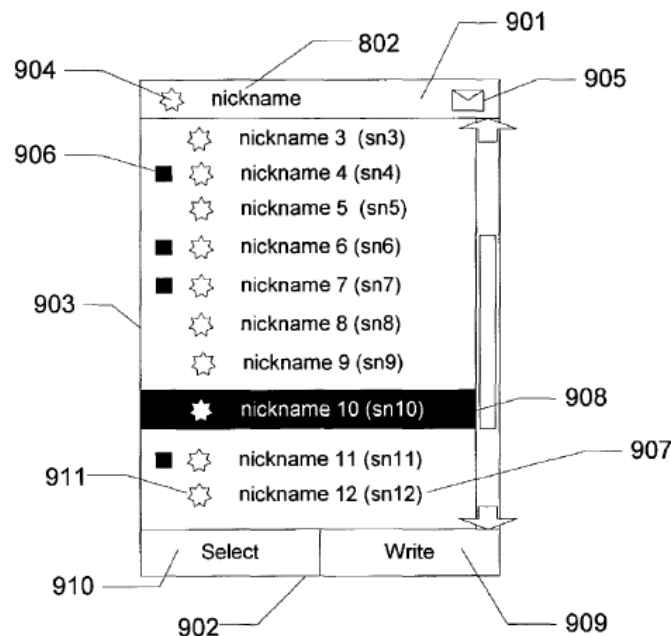


FIG. 9

Figure 9, above, depicts title bar 901, where inbound chat message indicator 905 is an icon accompanied by an audible sound when the icon is first displayed, indicating to the user that there is at least one unheard or unread inbound chat message that has arrived at terminal 100. *Id.* at 8:17–18, 8:28–32. Left softkey 910, labeled “Select,” permits selection of a particular buddy for chatting, which selection is indicated with selection indicator 906. *Id.* at 8:45–52, 8:60–67, 9:1–5. “If the user pushes-to-talk, the display switches to the chat history, and the user is able to record and transmit a speech message and consequently start a new thread with the selected buddies.” *Id.* at 9:27–31.

## 2. Zydney

Zydney, titled “Method and System for Voice Exchange and Voice Distribution,” relates to packet communication systems that provide for voice exchange and voice distribution between users of computer networks.

Ex. 1006, [54], [57], 1:4–5. While acknowledging that e-mail and instant messaging systems were well-known text-based communication systems utilized by users of on-line services and that it was possible to attach files for the transfer of non-text formats via those systems, Zydney states that the latter technique “lack[ed] a method for convenient recording, storing, exchanging, responding and listening to voices between one or more parties, independent of whether or not they are logged in to their network.” *Id.* at 1:7–17. Zydney, thus, describes a method in which “voice containers”—i.e., “container object[s] that . . . contain[] voice data or voice data and voice data properties”—can be “stored, transcoded and routed to the appropriate recipients instantaneously or stored for later delivery.” *Id.* at 1:19–22, 12:6–8. Figure 1 of Zydney is reproduced below.

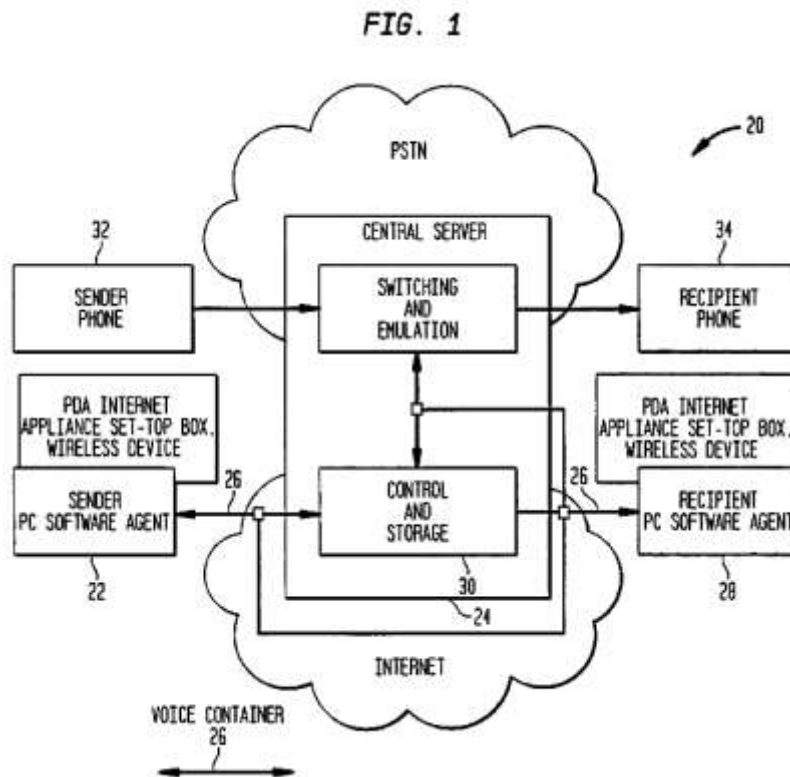


Figure 1, above, illustrates a high level functional block diagram of Zydney's system for voice exchange and voice distribution. *Id.* at 10:19–20. Referring to Figure 1, system 20 allows software agent 22, with a user interface, in conjunction with central server 24 to send messages using voice containers illustrated by transmission line 26 to another software agent 28, as well as to receive and store such messages, in a “pack and send” mode of operation. *Id.* at 10:20–11:1. Zydney explains that a pack and send mode of operation “is one in which the message is first acquired, compressed and then stored in a voice container 26 which is then sent to its destination(s).” *Id.* at 11:1–3. The system has the ability to store messages both locally and centrally at server 24 whenever the recipient is not available for a prescribed period of time. *Id.* at 11:3–6.

Zydney discloses that the voice container also has the ability to have other data types attached to it. *Id.* at 19:6–7. Formatting the container using Multipurpose Internet Mail Extension (“MIME”) format, for example, “allows non-textual messages and multipart message bodies attachments [sic] to be specified in the message headers.” *Id.* at 19:7–10.

Figure 3 of Zydney is reproduced below.



**FIG. 3**

302	ORIGINATOR'S CODE
304	ONE OR MORE RECIPIENT'S CODE
306	ORIGINATING TIME
308	DELIVERY TIME(S)
310	NUMBER OF "PLAYS"
312	VOICE CONTAINER SOURCE
	PC
	TELEPHONE AGENT
	NON-PC BASED APPLIANCE
314	VOICE CONTAINER REUSE RESTRICTIONS
316	ONE TIME AND DESTROY
318	NO FORWARD
320	PASSWORD RETRIEVAL
322	DELIVERY PRIORITY
324	SESSION VALUES
326	SESSION NUMBER
328	SEQUENCE NUMBER FOR PARTITIONED SEQUENCES
330	REPEATING INFORMATION
332	NO AUTOMATIC REPEAT
334	REPEAT TIMES
336	REPEAT SCHEDULE

Figure 3, above, illustrates an exemplary embodiment of Zydney's voice container structure having voice data and voice data properties components. *Id.* at 2:19, 23:1–2. Referring to Figure 3, voice container components include:

[O]riginator's code 302 (which is a unique identifier), one or more recipient's code 304, originating time 306, delivery time(s) 308, number of "plays" 310, voice container source 312 which may be a PC, telephone agent, non-PC based appliance, or other, voice container reuse restrictions 314 which may include one time and destroy 316, no forward 318, password retrieval 320, delivery priority 322, session values 324, session number 326, sequence number for partitioned sequences[] 328, repeating information 330, no automatic repeat 332, repeat times 334, and a repeat schedule 336.

*Id.* at 23:2–10.

3. Clark

Clark, titled “System for Managing and Organizing Stored Electronic Messages,” is directed to systems for managing and organizing electronic messages. Ex. 1007, [54], 1:8–9. According to Clark,

A computer-based system catalogs and retrieves electronic messages saved in a message store. The system automatically organizes each saved message into multiple folders based on the contents and attributes of the message, and implements improved methods for manually organizing messages.

*Id.* at [57]. A particularly relevant embodiment in Clark is shown in Figure 4A, reproduced below.

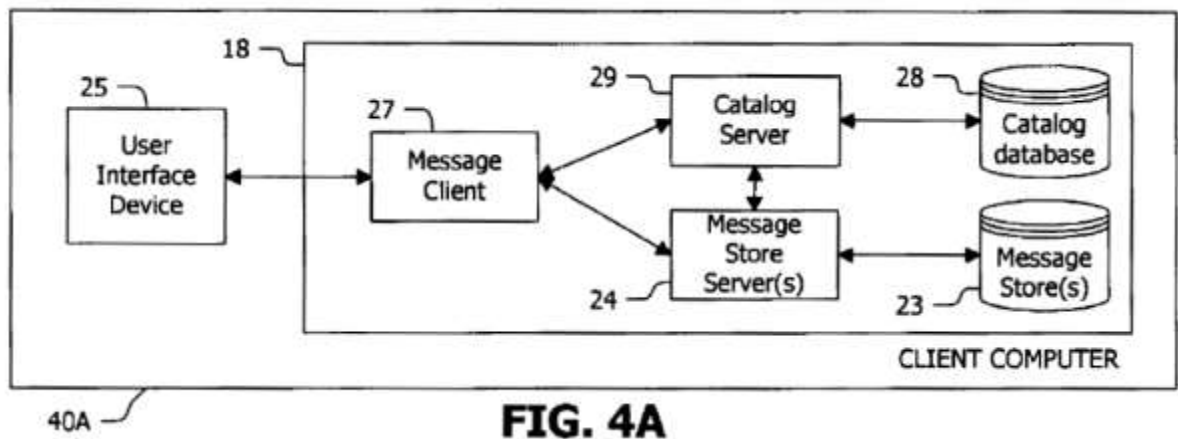
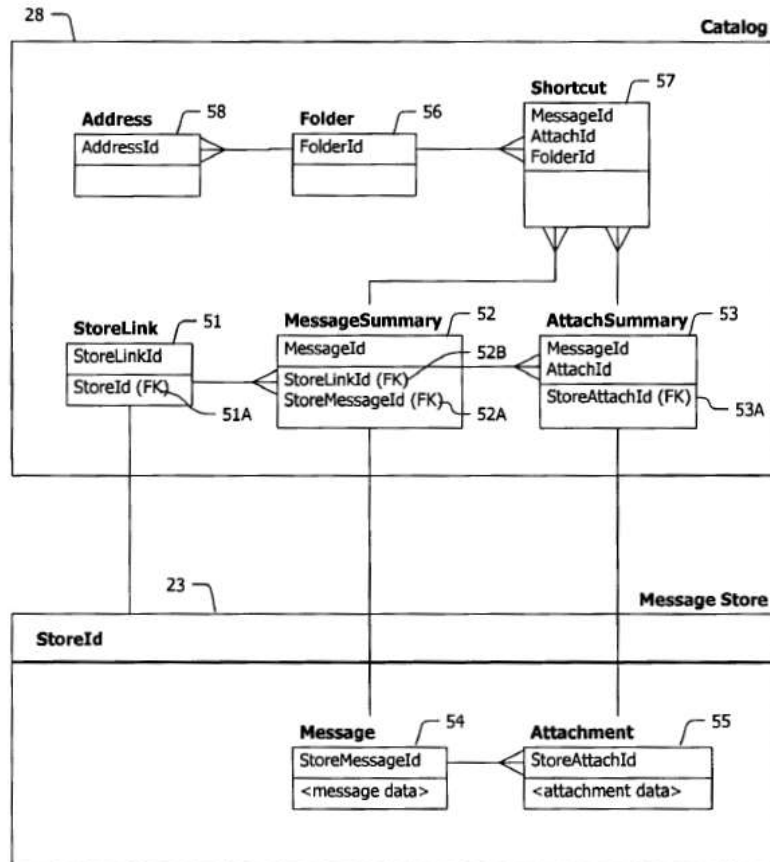


Figure 4A illustrates system 40A with client computer 18 implementing catalog server 29 and catalog database 28, and also including message client 27, message store 23, and message store server 24. *Id.* at 10:29–33. Each message store 23 comprises a memory, file, or database structure that provides temporary or permanent storage for the contained messages. *Id.* at 9:13–16. Clark describes providing catalog database 28 (and preferably catalog server 29) to organize the contents of one or more message stores 23. *Id.* at 9:54–57. Catalog database 28 and message store 23 may be separate from one another or may be integrated in a single

message store. *Id.* at 11:1–3. In the embodiment where they are separate from each other, illustrated in Figure 5A (reproduced below), catalog database 28 may be linked to a separate external message store 23. *Id.* at 11:3–7.



**FIG. 5A**

Figure 5A depicts the linking between catalog database 28 and external message store 23, where StoreLink table 51 contains rows, each with a StoreId pointing to a linked message store 23, and catalog database 28 includes MessageSummary table 52, which contains StoreMessageId 52A of messages in message store 23. *Id.* at 11:25–33. The Figure 5A embodiment also shows that messages 22 are stored in Message table 54 in message store

23 and that attachments are stored in Attachment table 55 in message store 23. *Id.* at 35–37.

4. Väänänen

Väänänen, titled “Voicemail Short Message Service Method and Means and a Subscriber Terminal,” concerns instantaneous voice mail between Internet compatible computers, personal digital assistants, telephones, and mobile stations. Ex. 1008, [54], 1:4–6. Väänänen notes that prior art subscriber terminals did not allow the use of audio features with the Internet connection and that for prior art voicemail systems a specific voicemail central server was an essential requirement that introduced unnecessary network hardware. *Id.* at 1:26–2:2. The method of Väänänen, in one embodiment, is “arranged with a mobile station” (*id.* at 8:30), for example, a computer program within a SIM card in the mobile station (*id.* at 8:30–32, 16:9–12). A message recipient (or several recipients or group) may be chosen from the memory of the SIM card or the memory of the mobile station or is inputted into the mobile station. *Id.* at 9:1–4, 16:12–15. When a user presses a button on the mobile station, a data file is recorded, using a media player/recorded, from the dictation, voice, or video. *Id.* at 16:15–18. Figure 6, reproduced below, illustrates a user interface 600 of a subscriber terminal, such as a mobile station. *Id.* at 15:16–18.

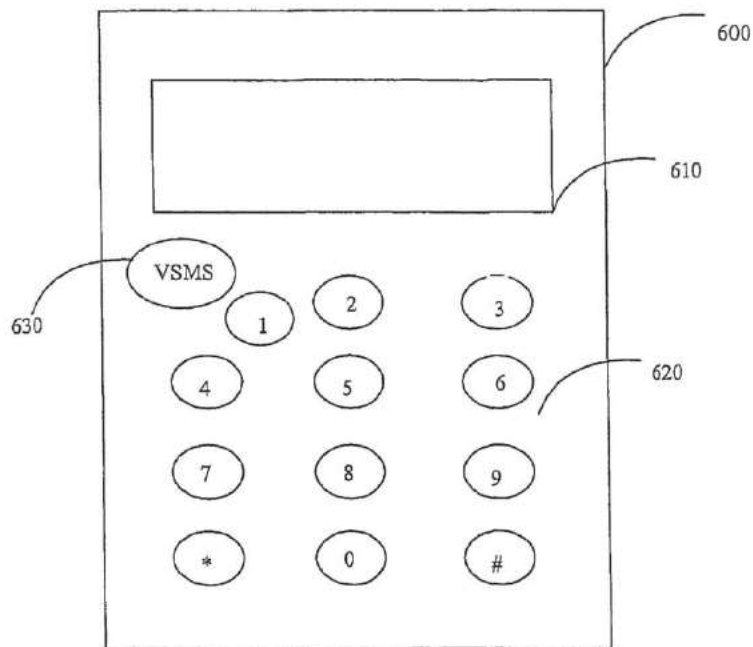


Figure 6 depicts user interface 600 including a voicemail short message service (VSMS) button 630 and a screen 610. *Id.* at 15:18–21, 16:2–4. The release of the VSMS button finishes the recording and sends the file with the message to the recipient or dials the telephone number of the recipient in order to playback the message to the recipient or to leave a voicemail with the message. *Id.* at 16:16–23. The recipient plays the packet stream in real time or reassembles the data file. *Id.* at 11:9–10.

##### 5. Lee

Lee, titled “Systems and Methods for On-Location, Wireless Access of Web Content,” describes providing local wireless service area for wireless clients to access web content from the Internet. Ex. 1014, [54], [57]. Lee discloses connecting to the Internet via a conventional cellular phone telecommunication network and discloses that the local wireless network

may also comprise IEEE 802.11 (Wireless LAN) technology. *Id.* ¶¶ 8, 15, 54.

6. Vuori

Vuori, titled “Short Voice Message (SVM) Service Method, Apparatus and System,” discloses a method for sending voice-type short messages using an SVM service. Ex. 1015, [54], [57], ¶ 31. Vuori teaches that SVMs are “recorded in the sending terminal and sent to a[n] SVM service center (SVMSC),” and a “second terminal may then commence a bidirectional communication so that an instant voice message session can be established.” *Id.* at [57].

In one embodiment, a user initiates a short voice message by pressing a menu key on a user equipment, which prepares to receive the message and may emit a sound to alert the user to commence speaking. *Id.* ¶ 32, Figs. 1–2. The user equipment then receives and stores the short voice message. *Id.* Next, the user “select[s] one or more intended recipients” and initiates the transfer. *Id.* ¶ 33. The short voice message is then sent to the SVMSC, which “check[s]” and “determines the availability of the one or more intended recipients.” *Id.* ¶¶ 34, 50; *see id.* ¶ 37. The SVMSC sends the short voice message “immediately to the intended recipients who are available.” *Id.* ¶ 34; *see id.* ¶ 50. For recipients who are not available, however, the SVMSC “temporarily stor[es]” the message and “continue[s] attempting to send [the message] . . . until the[ recipients] become available or until a time out occurs.” *Id.* ¶¶ 34, 51. Upon delivery of the short voice message, the recipient may play back the message. *Id.* ¶ 35, Figs. 1–2.

*E. Obviousness Determination*

Consistent with the *Graham* factors, we first discuss the differences between the independent limitations and the asserted prior art. Claims 1 and 9 are independent claims, and Petitioner asserts slightly different grounds for the two claims. Petitioner challenges claim 1 as obvious over Griffin and Clark, and claim 9 as obvious over Griffin alone or in combination with Zydney. In both of these grounds, however, Petitioner relies on Griffin as disclosing all the independent claim limitations, except that it relies on the following aspects of Clark and Zydney:

- a) Clark's disclosure of a client including a message store, where a message record is identified by a "StoreMessageId" or "MessageId;"
- b) Clark's disclosure of a user interface that "permits a user to select a folder and to view and manipulate messages;" and
- c) Zydney's disclosure of attachments to the voice container, including MIME standard attachment.

Pet. 22–23, 28, 49.

For certain dependent claims, Petitioner relies on other disclosures of Zydney and Clark, or other asserted references. For example, for claim 4, which depends from claim 1, Petitioner relies on Zydney's disclosure of an MP3 format. *Id.* at 35 (citing Ex. 1006, 39:16, 21:15–18). For claims 7, 25, and 26, which depend from claim 1, Petitioner points to Zydney's disclosure of the central server tracking and maintaining the status of all software agents, where the status indicates "whether the recipient is online or offline," or whether the recipient does not want to be disturbed. *Id.* at 41, 58–59. Zydney is further relied on for the disclosure of storing messages both

locally and centrally at the server when the recipient is not available. *Id.* at 64–66.

Väänänen is relied upon for its disclosure of encryption prior to sending a file to the recipient and decrypting the file prior to opening the message, in connection with dependent claims 5 and 12. *Id.* at 45, 68. And finally, Lee is relied upon for its disclosure of connecting wirelessly to the Internet via a conventional cellular phone telecommunication network and a Wi-Fi network. *Id.* at 71–72.

Petitioner proffers a second ground of unpatentability with respect to claim 26. Pet. 76–78. This ground is based on Vuori’s disclosure of a short voice messaging service center (“SVMSC”) that sends short voice messages immediately to the available intended recipients and that “continue[s] attempting to send to those not then available until they become available or until a time out occurs.” *Id.* (citing Ex. 1015 ¶ 34).

We now analyze these contentions, for each claim, in light of Patent Owner’s argument and evidence.

1. Independent Claim 1

-a-

Claim 1 recites “an instant voice messaging application including a client platform system for generating an instant voice message and a messaging system for transmitting the instant voice message over a packet-switched network via a network interface.” For the recited “instant voice messaging application,” Petitioner identifies Griffin’s mobile terminal as including software that performs the messaging functions disclosed in Griffin. Pet. 11–12 (citing Ex. 1005, 3:43–48, 4:29–61, 12:61–63; and Haas



Decl. ¶¶ 92–94). We agree that Griffin teaches software performing the messaging functionalities in the mobile terminal.

For the recited “client platform system,” Petitioner identifies Griffin’s mobile terminal as including chat software that, when a user activates the “push-to-talk” button, controls the recording and transmission of a speech message. *Id.* at 13–14 (citing Ex. 1005, 9:20–31, 11:42–47, 12:1–3).

Petitioner also points out that the speech chat message that Griffin generates is a “voice message.” *Id.* (citing Ex. 1005, 1:7–11, 3:20–22, 3:28–30, 4:11–18, 4:62–65, 5:9–15, 6:38–44, 8:47–52, 9:27–31, 10:36–43; and Haas Decl. ¶¶ 97–98). We agree with Petitioner that Griffin teaches a “client platform system for generating an instant voice message” as it describes that the mobile terminal’s push-to-talk button, through the chat software, causes the terminal to record the speech and generate a speech chat message. In particular, Petitioner has shown, and we agree, that in order to generate the speech chat message, Griffin’s mobile terminal includes microphone 107, which the software controls to capture the speech, and voice codec 307, which encodes that speech. *Id.* at 15 (citing Ex. 1005, 3:43–48, 4:40–48, 4:52–54, 9:20–31, 12:61–63; and Haas Decl. ¶¶ 101–102).

*i. Griffin’s “instant voice message”*

Petitioner relies on Griffin’s disclosure that the speech chat messages are transmitted in real time as supporting the contention that Griffin’s speech chat messages are “instant” voice messages. *Id.* at 14 (citing Ex. 1005, 1:6–11, 4:11–18, 4:40–56, 4:62–65, 5:2–15, 6:38–44, 6:56–71, 7:8–17, 8:8–14, 8:47–52, 9:27–31, 10:36–52, 11:42–47, 12:1–17; and Haas Decl. ¶ 99). For instance, Petitioner argues that, just as described in the

'433 patent specification, Griffin's terminals 100 present information regarding the availability of other terminals 100 for messaging and facilitate the immediate transmission of speech messages between available terminals 100 via server 204. *Id.* (citing Ex. 1001, 2:35–47, 8:5–43, 11:35–63).

Patent Owner challenges Petitioner's assertion that Griffin's real-time transmission teaches "real time communication." PO Resp. 9. Patent Owner acknowledges that Griffin mentions real-time speech and text conversations in the Technical Field description, but nevertheless argues that Griffin does not disclose any detail of how or why any such conversations might be communicated in real-time. *Id.* at 10. In particular, Patent Owner points out that Griffin describes receiving a speech message at the mobile terminal "at some point in the future" because, even if a terminal is "Available," if an inbound chat message arrives while the chat history display is not visible to the user, the received speech is queued up. *Id.* at 10–11 (citing Ex. 1005, 11:48–50). Mr. Easttom opines that Griffin "has no knowledge of, or interest in, and no way to know whether a recipient is positioned to hear a message." Easttom Decl. ¶ 35. According to Mr. Easttom, Griffin's message "is only delivered if the user has the 'chat history display' visible on the user interface." *Id.* ¶ 40. Thus, Patent Owner argues, any receipt of a speech chat message is not in real time, and therefore, none of those messages are the recited "instant voice message." PO Resp. at 11–12. We do not agree with Patent Owner's characterization of Griffin and we do not credit Mr. Easttom's testimony in this regard.

We determined that the proper scope of an "instant" voice message is the speedy, or real-time, receipt of that message, if the recipient is available. *See* Section IV.A.1. Griffin explains the disclosed system as providing a

“novel technique of managing the display of a plurality of *real-time* speech and text conversations (e.g., chat threads) on limited display areas.”

Ex. 1005, 1:7–10 (emphasis added). Griffin, thus, conveys that the speech chat messages are expected to be transmitted and received in real time. The issue is that Griffin is concerned with the limited display area of a mobile terminal, and with providing the speech exchange in a meaningful manner to the user. *Id.* at 1:20–30; 2:35–41. Because of this, Griffin explains that the chat history display provides all the necessary information about the exchanged chat messages. *Id.* at 10:20–25. It describes, for instance, that inbound chat messages are *automatically* added to the bottom of the chat history display. *Id.* at 11:14–16. It also describes that, by selecting the received chat message, a user can select an action to reply and compose a message or start a speech chat message by pushing the “push-to-talk” button. *Id.* at 11: 29–47. This chat history display is where the push-to-talk feature allows the user to record and transmit a speech message and start a new thread with selected buddies. *Id.* at 9:27–31. Griffin explains that the push-to-talk button, when pressed, changes the display to the chat history and the user begins talking with the other recipients. *Id.* at 12:44–47; 12:67–13:2. This explanation informs us that the “push-to-talk” communication is a real-time speech communication with the selected recipients. When the push-to-talk button is pressed, the sender speaks and the voice is recorded, transmitted, and delivered to the recipients in real-time.

Griffin also provides a way for the received speech message to be queued. Patent Owner focuses on this feature to argue that the receipt of the speech chat message is not “instant.” But we do not see the queuing of the message as contradicting the real-time receipt of the speech chat message.

As stated above, Griffin explains that messages are automatically added to the chat history display. It is only when the mobile terminal is not in the chat history display that the speech chat message is “queued for playback.”

In this regard, Griffin states:

It should be noted, that if an inbound speech message arrives while the chat history display is not visible to the user, the received speech is queued up. In a current implementation, the most recently received speech message (or at least that portion that will fit in available memory) are queued at the receiving terminal.

Ex. 1005, 11:48–53. That is, Griffin unequivocally states that the speech message *arrives*. The mobile terminal, thus, receives the speech chat message in real time. It is only the playback that is queued up, and only in situations when the chat history display is not visible to the user. This is an exception to the normal operation of Griffin, which is that the mobile terminal will begin playing the received speech chat message as soon as it is received in the chat history display. Furthermore, Griffin confirms that as soon as mobile terminal returns to the chat history display “if the speech entry is visible on the screen, it is automatically *played back*.” *Id.* at 11:62–64 (emphasis added). Again, the recitation of “play[ing] back” implies that the mobile terminal received the speech chat message—only the audio has been queued to automatically play back. Because we find that Griffin teaches that the speech chat message is received in real time, we do not credit Mr. Easttom’s testimony that Griffin has no interest in knowing when a user is positioned to hear a speech message and that messages are not “delivered” unless the device is on chat history display. Griffin’s mobile terminal undeniably receives the speech chat message, and specifically provides for automatic playback. We find Griffin to reasonably convey that

if a recipient is “available,” the sender has an expectation that its speech chat message will be transmitted in real time and received accordingly. This expectation, we find, is not belied by the additional feature of queuing audio playback when out of the chat history display, because the speech chat message is nevertheless delivered to the mobile terminal and automatically played back as soon as the recipient is poised to hear it. Consequently, we do not agree with Patent Owner’s arguments that the speech chat message of Griffin is not an “instant” voice message, as we have construed the term.

Patent Owner next argues that Petitioner has relied on Griffin’s text messaging features, which are not “instant voice messages.” PO Resp. 12–13. This argument is unpersuasive as it does not respond to Petitioner’s actual contentions. We understand the Petition to equate Griffin’s speech chat message with the recited “instant voice message.” *See* Pet. 13–14 (“Each generated speech chat message is a ‘voice message,’ as claimed;” and “Additionally, each speech message is an ‘instant’ voice message, as claimed, because it is transmitted in ‘real-time’.”); Reply 8 (confirming Petitioner’s position that speech chat messages are instant voice messages).

Consequently, we determine that Petitioner has shown by a preponderance of the evidence that Griffin’s speech chat message teaches the recited “instant voice message.”

*ii. “over a packet-switched network”*

To show “messaging system for transmitting the instant voice message over a packet-switched network via a network interface,” Petitioner relies on Griffin’s mobile terminal 100, including software that transmits the speech chat message over packet-based network 203 via network interface 306 to server complex 204. Pet. 15–16 (citing Ex. 1005, 3:51–61, 4:44–54,

4:62–65, 9:20–21, 12:61–63; and Haas Decl. ¶ 104). We agree with Petitioner that Griffin discloses this limitation. Griffin teaches that each mobile terminal includes network interface 306 for communicating with the server complex, and more specifically to transmit outbound chat messages to router 301. Ex. 1005, Fig. 3, 3:61–63, 4:44–51, 4:63–66, 5:8–10 (explaining that “outbound” refers to messages sent by mobile terminals). This transmission of data between mobile terminals 100 and server complex 204 occurs over two networks, i.e., wireless carrier infrastructure 202 and communication network 203, which is a packet-switched network, such as the Internet. Ex. 1005, 3:49–65; *see also* Pet. 17 (showing that, according to the ’433 patent, it was known in the art that the Internet is a packet-switched network (citing Ex. 1001, 1:38–40)). Notwithstanding the presence of wireless carrier infrastructure 202, Griffin describes that the data packets transmitted by the mobile terminal are transmitted via communication network 203 to server complex 204. *Id.* Accordingly, even though there is an intervening wireless carrier infrastructure, Griffin teaches that the speech chat messages are transmitted over communication network 203 (“packet-switched network”) via network interface 306 (“network interface”).

Patent Owner challenges Petitioner’s showing by arguing that all of Griffin’s communications using the “push-to-talk” mode are not instant voice messages that take place “over a packet-switched network,” as claimed. PO Resp. 13–14. In particular, Patent Owner argues that “push-to-talk” technology implies a two-way radio communication, like that of a walkie-talkie. *Id.* at 13 (citing Easttom Decl. ¶ 38). According to Mr. Easttom, this technology is for citizens band radio communications, and that no person of ordinary skill in the art would equate such a communication

with an “instant voice message” as claimed. Easttom Decl. ¶ 38.

Furthermore, Patent Owner argues that “push-to-talk over cellular” was not formalized until 2006. PO Resp. 13 (citing <https://tools.ietf.org/html/rfc4354>).

Petitioner responds that the term “push-to-talk” is specifically used in Griffin to describe that the user activates the feature of recording and transmitting a speech message, not for a “walkie-talkie” communication. Reply 9. Petitioner also argues, and we agree, that Griffin specifically teaches that the speech chat messages are delivered through the packet-based communication network 203, which belies Patent Owner’s assertions that a “push-to-talk” communication would not take place over a “packet-switched network.” *Id.* (citing Ex. 1005, 3:49–65). Although we agree that the words “push-to-talk” evoke the sense of a walkie-talkie communication, we find that Griffin is not directed to such a technology. Indeed, Griffin explains that the “push-to-talk” button may be omitted altogether and replaced with automatic voice recognition. Ex. 1005, 3:35–37. Furthermore, Griffin, as Petitioner points out, expressly discloses that “mobile terminals 100 communicate with at least one chat server complex 204 by wirelessly *transmitting data* to a corresponding wireless carrier’s infrastructure 202.” Ex. 1005, 3:51–54. These are undeniably data transmissions over cellular, as Griffin discloses that wireless carriers such as Verizon and Sprint in the U.S. built and maintained that infrastructure. *Id.* at 3:54–59. Finally, Patent Owner’s argument that such “push-to-talk” over cellular technology was not formalized until 2006 is unpersuasive, as it does not nullify Griffin’s express teachings of the “push-to-talk” feature resulting in data transmissions over a cellular network.

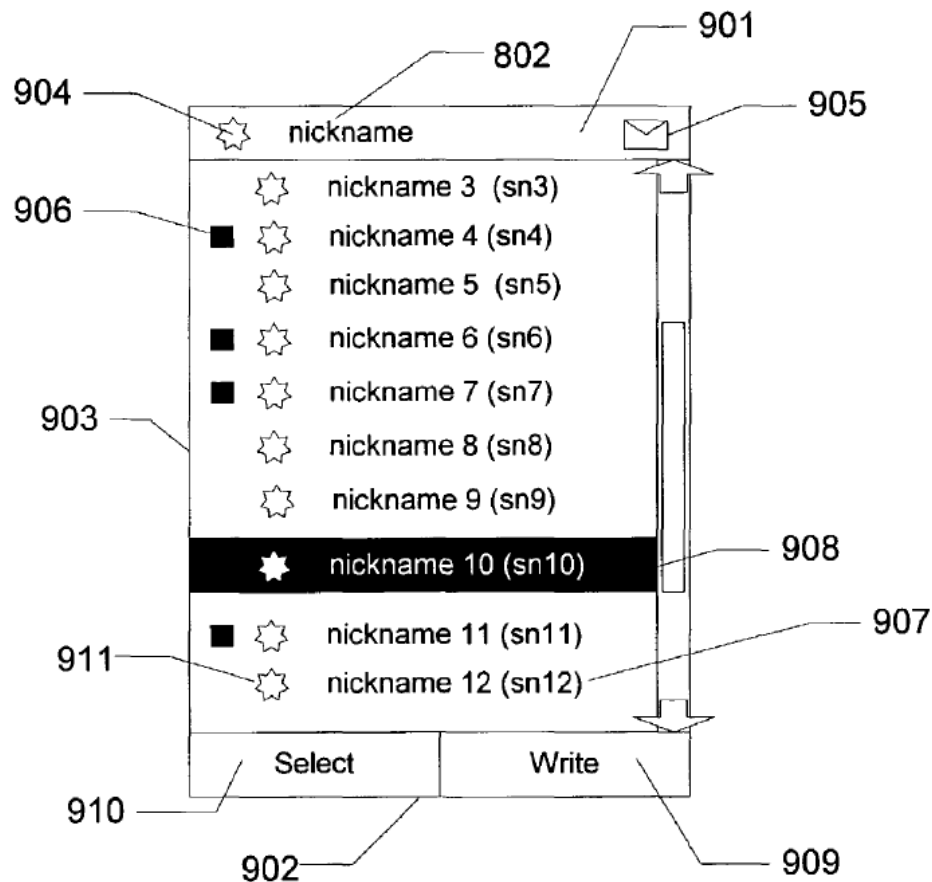
Griffin, furthermore, states that the “data packets are sent to the communication network 203 that forwards them onto the server complex 204.” *Id.* at 3:59–61. Again, these are *data transmissions* over a packet-switched network. There is nothing in Griffin indicating that the technology involved is two-way radio or citizens band radio transmissions over a circuit-switched network, as Mr. Easttom opines (Easttom Decl. ¶ 39). Thus, we do not credit Mr. Easttom’s testimony in this regard.

Consequently, we conclude that Petitioner has shown by a preponderance of the evidence that Griffin teaches “messaging system for transmitting the instant voice message over a packet-switched network via a network interface.”

-b-

Claim 1 recites “wherein the instant voice messaging application displays a list of one or more potential recipients for the instant voice message.” Petitioner relies on Figure 9 of Griffin reproduced below.





**FIG. 9**

Figure 9 depicts a buddy list display. Ex. 1001, 2:61–62. According to Petitioner, the software of the mobile terminal displays a “buddy list,” such as the one depicted in Figure 9, and each buddy is a potential recipient that the user can select for sending a speech chat message. Pet. 18 (citing Ex. 1005, 8:39–52). A user selects any number of buddies, activates the “push-to-talk” button, and thereby records and transmits to the selected buddies a speech chat message. *Id.* at 19–20 (citing Ex. 1005, 9:23–31). We agree with Petitioner that Griffin, in disclosing a buddy list display as explained above, teaches that the “instant voice messaging application displays a list of one or more potential recipients for the instant voice message.”

-c-

Claim 1 recites “wherein the instant voice messaging application includes a message database storing the instant voice message, wherein the instant voice message is represented by a database record including a unique identifier.” Petitioner asserts that Griffin’s software (which Petitioner maps to the recited “instant voice messaging application”) includes a “message database,” as recited in claim 1. Pet. 19. We do not agree with Petitioner that Griffin teaches a “message database.” At best, Griffin teaches that mobile terminal 100 includes temporary storage and permanent storage, for storing received and sent chat messages. Ex. 1005, Fig. 3, 12:41–42. Griffin does not disclose, however, storing the messages in a “message database” at the terminal. And we are not persuaded by Petitioner’s footnoted and conclusory argument that under the plain meaning of the words “message database,” by merely disclosing storage of the messages, Griffin discloses a “message database” under the broadest reasonable interpretation. *See* Pet. 20 n.10.

In the alternative, Petitioner argues that it would have been obvious to modify Griffin in view of Clark so that the software of mobile terminal 100 stores each speech message in an integrated message database (as taught by Clark), with each message represented by a database record including a unique identifier. Pet. 23. Such a modification would be motivated by a desire to improve the storage, retrieval, and management of messages. Haas Decl. ¶¶ 118–23. Additionally, Clark itself teaches a reason for implementing the disclosed database techniques, such as, for example, Clark’s disclosure of automatically managing the stored messages as a fast

and quick solution for users to locate messages or groups of messages. Pet. 24 (citing Ex. 1007, 1:20–4:8, 4:9–22; Haas Decl. ¶ 124).

We agree with Petitioner that Clark’s database allows for easy cataloging, retrieving, and manipulating messages (Ex. 1007, 4:25–48), benefits that a person of ordinary skill in the art would have appreciated and would have found useful to improve Griffin’s storage of messages (*see* Haas Decl. ¶ 123). Clark, for example, describes an embodiment in Figure 4A, reproduced below, in which the user’s computer contains the message client and the message store. *Id.*; Ex. 1007, Fig. 4A.

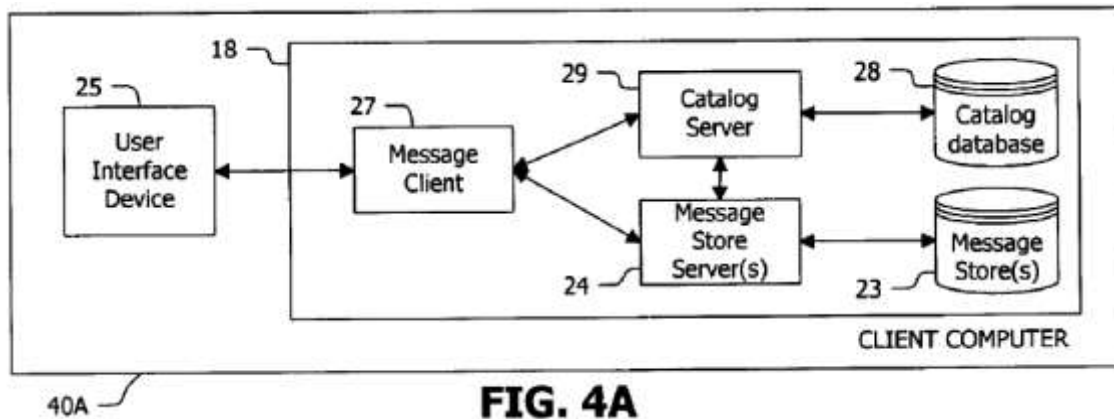


Figure 4A depicts an embodiment of a physical configuration of the client computer 18 on which electronic messages are received and stored. Ex. 1007, 5:1–3, 4:25–27. Clark describes that it is known for electronic messages to include instant messaging and that the electronic message may have attachments. *Id.* at 1:37–39, 8:36–44. Clark organizes the stored electronic messages in the database of message store 23 using a catalog database 28, which organizes the messages into different folders. *Id.* at 9:54–60; *see also id.* at 10:11–19 (describing the various elements of an electronic message shown in Figure 3 and that the elements can be the basis for associating the message with one or more folders). Notwithstanding

Clark's use of the catalog database for further organizing the messages into folders, Clark describes a message store 23, at the client, as a database for storing the messages, which teaches the required "message database." *See, e.g., id.*, Fig 4A (depicting message store 23 at the client), 9:13–16 (describing message store 23 as "a memory, file or database structure that provides temporary or permanent storage for the contained messages 22").

We are also persuaded that it would have been obvious to modify Griffin's mobile terminal storage to include such a message store.

Pet. 23–24. We agree that a person of ordinary skill in the art would have been motivated to combine the teachings of Griffin and Clark, as the benefits of message organization, touted by Clark, would improve Griffin's storage of messages. *Id.* at 24–26. Clark recognizes a need for systems and methods of automatically organizing stored electronic messages, including instant messages. Ex. 1007, 4:9–12. And Clark's invention provides not only the message store or database, but also the cataloging of messages that accomplishes the desired organization. *Id.* at 4:25–32. Particularly relevant to our analysis is Clark's description of its invention as "advantageously [] integrated with messaging client software . . . to facilitate the organization of electronic messages." *Id.* at 4:36–39. Thus, Clark informs us that it would have been advantageous to include a message database in messaging client software to organize further electronic messages, including instant messages. As further support for our conclusion, we credit Dr. Haas's testimony that Clark addresses the need for automatically managing stored messages, such that users quickly locate a message or group of messages. Haas Decl. ¶ 124. We find that given Clark's teachings, a person of ordinary skill in the art, looking to improve Griffin's mobile terminal's storing of messages, would

have looked to Clark's method and system for organizing electronic messages using a message store. *See KSR*, 550 U.S. at 417 (“[I]f a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.”); Haas Decl. ¶ 123.

With regard to the specific teachings of a database record and the unique identifier, Petitioner has identified Clark's message store 23 and catalog 28 as integrated databases, where each message 22 is represented by a “Message” record in message store 23 (“message database”) and is uniquely identified by a “StoreMessageId” (in the embodiment shown in Figure 5A) or “Message Id” (in the embodiment shown in Figure 5B). Pet. 22 (citing Ex. 1007, 11:14–17, 11:35–37, 11:50–54, 11:66–12:1, Figs. 5A, 5B). Petitioner also points out that Clark describes the “MessageSummary” record as holding information about the underlying message. *Id.* (citing Ex. 1007, 11:31–33, 11:66–12:1).

We agree with Petitioner that Clark teaches that the “instant voice message is represented by a database record including a unique identifier.” Clark assigns a StoreMessageId to the message when the message is added to the message store. Ex. 1007, 11:50–54. This StoreMessageId is a unique identifier that is stored in MessageSummary table 54, but more importantly, Petitioner points out that Clark *also* stores the StoreMessageId, as depicted in Figure 5A, in Message table 54 of message store 23. *See* Pet. 22–23; Ex. 1007, 11:31–32; 11:38–40, 16:50–63, Fig. 5A. According to the embodiment shown in Figure 5B of Clark, the catalog database and message store are preferably a single database comprising related tables. Ex. 1007,

11:1–5, 11:55–65, Fig. 5B. In the Figure 5B embodiment, the unique identifier is the MessageId, which is stored in Message table 54' and in the MessageSummary table 52'. Thus, Clark teaches various embodiments of a message record, in the form of Message table 54 (Figure 5A) and Message table 54' (Figure 5B), each storing a message and the unique identifier (either StoreMessageId or MessageId) for that message. *Id.* at 11:35–40. The stored message is retrieved using the unique identifier that not only identifies the stored message uniquely, but also uniquely addresses the message record. *See id.* at 11:14–24. Because each message record uniquely pertains to the stored message, the store message “is represented” by the message record.

Patent Owner raises several arguments in an attempt to show that Clark does not teach the “database record” limitation. First, Patent Owner argues that the claim requires the “database record” to be a record of the “message database.” PO Resp. 34. Second, stating that the claim language is unambiguous, Patent Owner asserts that claim 1 requires storing the instant voice message *and* the unique identifier in the *same* database record. *Id.* Patent Owner points out that the Specification describes the *database record* as comprising *both* a message identifier and the instant voice message. *Id.* (citing Ex. 1001, 12:34–40). Patent Owner highlights the Specification’s statement that the instant voice messages are “represented” as database records, such that the Specification implies a meaning of “represented” to refer to the content of the database record. *Id.* In sum, Patent Owner contends that the claims require a *single* database record, in a *single* message database, where the record includes both the instant voice message and the unique identifier. Because the arguments from Patent

Owner attempt to distinguish Clark based on the single-database-record argument, our analysis below focuses on that issue.

Based on the single-database-record characterization, Patent Owner argues that Clark's message is stored in Message table 54 and the StoreMessageId is stored elsewhere, in MessageSummary table 52. *Id.* at 35–36 (citing Ex. 1007, Fig. 5A, 16:64–17:23). Specifically, Patent Owner highlights that the unique identifier is stored in MessageSummary table 52 (in the catalog database), purposely separate from message store 23, which stores the message. *Id.*

We begin by ascertaining whether Patent Owner's characterization of the claim scope as requiring a single database record is proper. Claim 1 recites “the instant voice message is represented by a database record including a unique identifier.” Two things are evident from this plain language: (1) the instant voice message is *represented* by a database record; and (2) the same database record includes a unique identifier. Neither of these two features requires *storing* the instant voice message in the same database record that includes the unique identifier. Instead, by using the word “represented,” the claim language seems to reject a requirement of *storing* the instant voice message in a database record. We conclude that this is the correct claim scope because, among other things, the claim uses the word *storing* elsewhere to expressly require *storing the instant voice message in the message database*. If it were a requirement to store the instant voice message in the database record of the message database, the applicant could have specifically claimed *storing* rather than requiring a “representative” relationship between the instant voice message and the database record. In a way, Patent Owner asks us to read the claim as if it

stated “a message database storing the instant voice message in a database record including a unique identifier.” *But see K-2 Corp. v. Salomon S.A.*, 191 F.3d 1356, 1364 (Fed. Cir. 1999) (“Courts do not rewrite claims; instead, we give effect to the terms chosen by the patentee.”); *Tex. Instruments, Inc. v. U.S. Int’l Trade Comm’n*, 988 F.2d 1165, 1171 (Fed. Cir. 1993) (“[C]ourts can neither broaden nor narrow claims to give the patentee something different than what he has set forth.”) (internal quotes omitted). We also view Patent Owner’s request as urging that we read limitations into the claim from an embodiment of a database record comprising the instant voice message, which would be improper. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1369 (Fed. Cir. 2004) (“We have cautioned against reading limitations into a claim from the preferred embodiment described in the specification, even if it is the only embodiment described, absent clear disclaimer in the specification.”).

Finally, on the issue of claim scope, we note that the Specification uses the word “represented” in connection with another embodiment of a database record that does not support Patent Owner’s argument. That embodiment states that “[t]he users are *represented in the database as records*, each record comprising a user name, a password, and a contact list . . . and other data relating to the user.” Ex. 1001, 13:65–14:1 (emphasis added). This embodiment also describes a *representative* relationship that does not require storing the “users” in the database record—such a requirement would be nonsensical. Only information pertaining to the user is stored in the record. The same *representative* relationship is encompassed by the claim language at issue. We are, therefore, not persuaded that the



claims are as narrow as Patent Owner argues, and we disagree that Clark's "separate-table" disclosure is fatal to Petitioner's position.

Nevertheless, here, Petitioner has identified StoreMessageId and the MessageId as unique identifiers, each stored in a MessageSummary table of the catalog database, and each having the required representative relationship to the stored message. Pet. 22–23. We agree that the representative relationship is satisfied, as the StoreMessageId and MessageId each pertains uniquely to the stored message. *Id.* (citing Ex. 1007, 11:38–40, 13:66–14:3, 16:50–17:23). For the reasons discussed above regarding the proper scope of the claim, it is not relevant that the StoreMessageId, in some embodiments of Clark, may be in a record (row of the MessageSummary table (*see* Ex. 1007, 16:58–60)) separate from the record that stores the message in message store 23.

But even under Patent Owner's narrow reading of the claim, we note that Petitioner persuasively *rebutts* Patent Owner's single-record distinctions because the unique identifier of Clark's StoreMessageId is not limited to being stored in a record that is separate from the record that contains the message in the message store. Pet. 22; Reply 19–20 (arguing that in Figure 5B of Clark, the MessageId is contained in the *same record* as the message data (<message.data>)). Thus, the record that contains the message (Message table 54 in Fig. 5A and Message table 54' in Fig. 5B) includes both the message and the unique identifier (StoreMessageId in Fig. 5A and MessageId in Fig. 5B). As discussed above, in either Figure 5A or Figure 5B, Clark depicts the unique identifier (StoreMessageId or MessageId, respectively) stored in the Message table, together with the message. Ex. 1007, Figs. 5A, 5B; 11:1–5, 11:38–40, 11:55–64, 16:50–63. As

explained by Petitioner and supported by Clark, it is evident that a *single record* of the Message table includes both the message and the unique identifier.

Patent Owner also argues that Petitioner speculates that catalog database 28 and the message store of Clark could be combined, as in Figure 5B. PO Resp. 37. This argument is not persuasive. Clark expressly discloses that in the embodiment shown in Figure 5B, catalog database 28 and message store 23 are integrated into a single database. Ex. 1007, 11:1–3. Patent Owner finally argues that Petitioner identified only “StoreMessageId,” which is not shown in Figure 5B. PO Resp. 37. This argument is also not persuasive. Petitioner expressly identified “MessageId” in connection with the embodiment of Clark’s Figure 5B. Pet. 22.

Accordingly, based on the evidence provided by Petitioner, we find unpersuasive Patent Owner’s arguments that Clark does not teach “wherein the instant voice message is represented by a database record including a unique identifier,” even under Patent Owner’s claim scope arguments, with which we do not agree.

-d-

Patent Owner challenges the rationale to combine Clark and Griffin that we discussed in Section “-c-” above. Patent Owner argues that Clark teaches away from including the message data in the same table as MessageSummary table 52. PO Resp. 37–38. This argument is not persuasive. Petitioner’s asserted combination does not rely on modifying Clark’s MessageSummary table to include the message data. As we explained above, we do not view the claim scope as requiring that a single database record include both the instant voice message and the unique

identifier. Therefore, an argument that Clark precludes a single-database-record modification is not commensurate with the claim scope. We have discussed above, nevertheless, that Clark teaches a single record that includes both the message and the unique identifier: a record in the Message table. Accordingly, we are not persuaded that Clark teaches away from the combination of the teachings and reasons to combine discussed in Section “-c-” above.

-e-

Claim 1 recites “wherein the instant voice messaging application includes a file manager system performing at least one of storing, deleting and retrieving the instant voice messages from the message database in response to a user request.” Petitioner explains that Griffin stores inbound and outbound messages in the mobile terminal in response to a user selection after click-holding the right softkey, when viewing the inbound chat message display shown in Figure 13. Pet. 27 (citing Ex. 1005, 12:38–42). Furthermore, Petitioner identifies Griffin’s chat history display, which lists the chat messages stored at the mobile terminal, each of which can be selected for playback, which means that the chat message is retrieved from storage 305 of terminal 100. *Id.* (citing Ex. 1005, 5:42–48, 10:20–25, 10:39–47, 12:38–42; Haas Decl. ¶ 131). From these disclosures, we are persuaded that the software of Griffin’s mobile terminal includes a file manager system for storing and retrieving the instant voice message in response to a user’s selection to save the message (storing) and for playback of the message (retrieving). Because, according to our analysis in section “-c-,” we have determined that Griffin would include a message database at the mobile terminal for organizing the speech chat messages, any such

storing or retrieving of speech chat messages would be performed in connection with the message store in which the speech chat messages are stored. Accordingly, we are persuaded that Griffin, in view of Clark's teachings as discussed in section "-c-" above, teaches the limitation of "wherein the instant voice messaging application includes a file manager system performing at least one of storing, deleting and retrieving the instant voice messages from the message database in response to a user request."

Petitioner argues in the alternative that if Patent Owner characterizes the claim language as requiring all three functions (storing, deleting, and retrieving), Clark teaches deleting messages. Pet. 27–29. Although Patent Owner misquotes the claim language as "file manager system storing, retrieving, and deleting the instant voice message" (*see, e.g.*, PO Resp. 39), Patent Owner's arguments do not seem to distinguish the claim based on whether the performing of "at least one" of the three functions requires performance of all three functions. Rather, Patent Owner argues that the claim language requires the recited "file manager system" included in "the instant voice messaging application" to be located in a sending device. PO Resp. 40 (citing Claim 1). Patent Owner argues against the combination of Griffin and Clark asserted as teaching the *deleting* function of the file manager system. Petitioner, however, has shown that Griffin *alone* performs *storing and retrieving*—two of the recited functions. Pet. 27. The claim language, in the context of the specification, does not require all three functions to be performed, as it states that the "file manager system perform[s] at least one of storing, deleting and retrieving . . . in response to a user request." *See* Ex. 1001, 12:40–42 ("The file manager 308 services requests from the user to record, delete or retrieve messages to/from the

message database 310.”). Accordingly, Patent Owner’s arguments focusing on the deleting function disclosures of Clark are not responsive to Petitioner’s contention that Griffin alone teaches at least one of the recited functions.

As to Griffin’s teachings of storing and retrieving, Patent Owner argues that Griffin’s sender does not store a copy of messages sent. PO Resp. 41. Mr. Easttom opines that Griffin’s sender does not store a copy of the sent message and that, in order to have a copy of a sent message, the sender must copy the message to herself, so the sender can become the recipient or the message is gone and cannot be stored or received. Easttom Decl. ¶ 61. We do not agree with Patent Owner’s arguments and do not credit Mr. Easttom’s testimony, which contradicts the teachings of Griffin. Griffin expressly discloses echoing, which is where the broadcaster sends a copy of the outbound chat message to the transmitting terminal or where the transmitting terminal directly copies the message to the local display. Ex. 1005, 10:25–52. In this manner, we find that Griffin teaches that the speech chat message is copied at the sending device, and, thus, stored at the sending mobile terminal. Patent Owner’s arguments to the contrary are not persuasive.

-f-

In conclusion, we determine that, after considering the arguments and evidence on a full record, Petitioner has demonstrated by a preponderance of the evidence that claim 1 of the ’433 patent is unpatentable as obvious over Griffin, in view of Clark, as discussed above.

2. Dependent Claims 2, 3, and 8

Claim 2 depends from claim 1, and further recites “wherein the message database includes a plurality of instant voice messages received over the packet-switched network.” Petitioner relies on Griffin as teaching this limitation because Griffin discloses storing the inbound speech messages received over packet-based network 203. Pet. 30. In particular, Griffin discloses that its chat history display lists all received (and sent) speech chat messages, and that a user has the option to save inbound chat messages in permanent storage 305. Ex. 1005, 10:20–35; 23:38–42. In light of the combination with Clark’s message store (“message database”) as discussed above in section “-c-”, we are persuaded that Griffin in view of Clark teaches that the “message database includes a plurality of voice messages received over the packet-switched network.” Patent Owner does not argue dependent claim 2 separately from claim 1. Based on the foregoing disclosures of Griffin and Clark, and Petitioner’s arguments, we determine that Petitioner has shown by a preponderance of the evidence that claim 2 is unpatentable as obvious over the combination of Griffin and Clark.

Claim 3 depends from claim 2, and further recites “wherein the instant voice messaging application displays at least one of the plurality of instant voice messages stored in the message database.” Petitioner relies on Figure 11 of Griffin, which is the chat history display that includes a content region with a list of entries indicating the received outbound and inbound chat messages. Pet. 30; Ex. 1005, Fig. 11, 10:20–25. According to Petitioner, and we agree, the entries show at least one speech chat message (element 1105) accessible at terminal 100, and Griffin teaches that “locked” messages

are saved in permanent storage 305. Pet. 30–31 (citing Ex. 1005, 10:39–47, 10:58–62, 12:41–42). Patent Owner does not argue dependent claim 3 separately from claim 1. Based on the foregoing disclosures of Griffin and Clark, and Petitioner’s arguments, we determine that Petitioner has shown by a preponderance of the evidence that claim 3 is unpatentable over the combination of Griffin and Clark.

Claim 8 depends from claim 1, and further recites “wherein the instant voice message application generates an audible or visual effect indicating receipt of an instant voice message.” Petitioner points out Griffin’s inbound chat message indicator 905, which appears on the display and is accompanied by an audible sound when the icon is first displayed. Pet. 32 (citing Ex. 1005, 8:29–33). We agree with Petitioner that this disclosure of Griffin teaches the limitation further recited in claim 8. Patent Owner does not argue dependent claim 8 separately from claim 1. Based on the foregoing disclosures of Griffin and Clark, and Petitioner’s arguments, we determine that Petitioner has shown by a preponderance of the evidence that claim 8 is unpatentable over the combination of Griffin and Clark.

### 3. Dependent Claim 4

Claim 4 depends from claim 1, and further recites “wherein the instant voice messaging application includes an audio file creation system creating an audio file for the instant voice message based on input received via an audio input device.” Petitioner explains that Griffin teaches capturing speech from a microphone, which is an audio input device, and encoding the speech using voice codec 307. Pet. 34 (citing Ex. 1005, 4:30–45, 4:52–53; Haas Decl. ¶¶ 151–152). Petitioner argues, and we agree, that the encoded speech is included in content field 406 of outbound chat message 400,

generated by Griffin’s terminal. Ex. 1005, 6:39–44, Fig. 4; Haas Decl.

¶ 153. Petitioner acknowledges, however, that Griffin does not disclose that the speech is in the form of an “audio file.” Pet. 35. Thus, Petitioner relies on Zydney’s teaching of digitally recording a voice message in an “audio file,” such as an MP3 file. *Id.* (citing Ex. 1006, 16:1–4, 21:15–18, 39:16). Petitioner argues, and we agree, that it would have been obvious for a person of ordinary skill in the art to modify the message content of Griffin to be in the form of an audio file as taught by Zydney. *Id.* (citing Haas Decl. ¶ 157). The combination, we are persuaded, is a predictable substitution of one known element for another. *KSR*, 550 U.S. at 416–17. Patent Owner does not argue claim 4 separately from claim 1. Based on the foregoing discussion of Griffin and Zydney, and Petitioner’s arguments, we determine that Petitioner has shown by a preponderance of the evidence that claim 4 is unpatentable over the combination of Griffin, Clark, and Zydney.

#### 4. Dependent Claim 5

Claim 5 depends from 1, and further recites “wherein the instant voice messaging application includes an encryption/decryption system for encrypting the instant voice messages to be transmitted over the packet-switched network and decrypting the instant voice messages received over the packet-switched network.” Petitioner relies on Väänänen’s teachings of encrypting the finished recording of the voice message before sending the message to the recipient. Pet. 45 (citing Ex. 1008, 1:3–8, 2:25–3:2, 5:1–30). Väänänen also teaches that, to play the message, the recipient terminal decrypts the file prior to opening the message. *Id.* (citing Ex. 1008, 18:4–10). Petitioner argues, and we agree, that it would have been obvious to encrypt/decrypt Griffin’s speech chat messages communicated to/from



packet-based network 203. *Id.* In particular, Petitioner argues that the encryption/decryption technique would secure the privacy of the message content. *Id.* at 46. Dr. Haas’s testimony, which we credit, establishes that encryption and decryption of messages was well-known, as taught in Väänänen, and that Griffin already provides for encryption at the server side, which is evidence that Griffin contemplates, and thus provides explicit motivation for, securing the privacy of the message in its system. Haas Decl. ¶¶ 182–184. Patent Owner does not challenge Petitioner’s showing for claim 5 separately from claim 1. Based on the foregoing discussion of Griffin and Väänänen, and Petitioner’s arguments and evidence of record, we determine that Petitioner has shown by a preponderance of the evidence that claim 5 is unpatentable over the combination of Griffin, Clark, and Väänänen.

#### 5. Dependent Claim 7

Claim 7 depends from claim 1, and further recites “wherein the instant voice messaging application displays an indicia for each of the one or more potential recipients indicating whether the potential recipient is currently available to receive an instant voice message.” Petitioner argues that each entry in Griffin’s buddy list, as shown in Figure 9 of Griffin, includes a presence status icon 911 that varies depending on presence status 702 of the corresponding potential recipient (i.e., whether the potential recipient is currently available to receive a speech message). Pet. 38 (citing Ex. 1005, 5:11–30, 8:24–28, 8:47–52, Fig. 9). Petitioner also argues that Griffin’s presence manager 302 maintains the presence status of each potential recipient in a table with presence data records 700. *Id.* at 39 (citing Ex. 1005, 4:62–5:2, Fig. 7). Griffin’s Figure 7 illustrates at least two

instances of presence status (“Available” and “Off”), indicating “whether the recipient is ready to receive the particular type of message.” *Id.* (citing Ex. 1005, 5:11–30, Fig. 7). When a presence status of a buddy changes, presence manager 302 detects this change and sends a buddy list update message 600 to the appropriate terminals 100. *Id.* at 40 (citing Ex. 1005, 5:15–22, 5:27–30, 7:39–42, 7:48–49, 8:1–8, Fig. 6). In this manner, Griffin teaches that each terminal 100 receives current presence status information for each buddy of the buddy list displayed in Figure 9, together with the indicia that represents that presence status. Dr. Haas’s testimony, which we credit, states that presence manager 302 provides the current status 702 of each terminal 100 as “Available” or “Off,” which terminals use to determine the appearance of the presence status icon 911 corresponding to each entry in the buddy list. Haas Decl. ¶ 166. These disclosures in Griffin demonstrate by a preponderance of the evidence that Griffin alone teaches that “the instant voice messaging application displays an indicia for each of the one or more potential recipients indicating whether the potential recipient is currently available to receive an instant voice message.”

In particular, we are persuaded that Griffin, by disclosing that the presence status can be “Available” or “Off,” a buddy of the buddy list will have an indicator (via icon 911 of Figure 9) that informs the sender “whether the recipient is ready to receive the particular type of message.” *See* Ex. 1005, 5:11–30, Fig. 7; Haas Decl. ¶ 166. The claim language requires indicating “whether the potential recipient is currently available to receive an instant voice message.” Ex. 1001, 24:54–56. This is precisely what Griffin discloses, indicating that the buddy, which uses its terminal to communicate with others in Griffin’s system, is ready to receive the

particular type of message. Griffin also includes other types of presence status, such as “Text Only,” which may indicate availability for receiving text-only messages, and not speech chat messages. *See* Ex. 1005, Fig. 7. This disclosure, however, does not undermine the teaching that for “Available” buddies, without qualification, Griffin indicates that such a buddy “is ready to receive” a speech chat message. On the other hand, when Griffin provides the “Off” status, Griffin indicates that the buddy and terminal cannot receive *any* messages. Ex. 1040, 165:18–166:7. The claim language does not require more. If a buddy cannot receive any messages, then the potential recipient is not “currently available to receive an instant voice message,” as recited in claim 7. If a buddy is “Available,” the potential recipient is “currently available to receive an instant voice message.”

Accordingly, we determine that Petitioner has shown by a preponderance of the evidence that Griffin alone teaches the limitation of claim 7. We note that Petitioner went further in the analysis of the claim on the basis that Griffin does not provide *additional details* regarding what precisely status 702 indicates. Pet. 40. We do not find that additional details are necessary because Griffin’s disclosure and Mr. Easttom’s testimony provide persuasive evidence that Griffin’s presence status indicates “whether the recipient is ready to receive the particular type of message, speech and/or text messages only,” consistent with the scope of claim 7. Ex. 1005, 5:11–15, 6:64–7:11 (describing message delivery for “available” targets), Fig. 7; Ex. 1040, 165:18–166:7 (Mr. Easttom testifying that “Off” is “unavailable for any communication at all” and simply means “you can’t communicate with them in any fashion”); *see also* PO Resp. 15 n.1 (Patent

Owner arguing that Griffin does show what presence status indicates and calling Petitioner's statement "disingenuous"). Therefore, the *additional details* provided by Zydney, again, are not necessary to show that claim 7 would have been obvious, as Petitioner shows, by a preponderance of the evidence that Griffin alone teaches the further limitation of claim 7.

Nevertheless, because Patent Owner spent a significant portion of its resources responding to the ground based on the combination of Griffin with Zydney, we address the asserted combination. Petitioner relies on Zydney specifically for the teaching of the "Available" status indicating that a software agent is logged onto the system and available for messaging, and the "Not logged on" status indicating that the software agent is logged off the system. Pet. 41 (citing Ex. 1006, 33:1–2). Petitioner argues that these Zydney statuses teach indicating whether the software agent is "currently available" as claimed. *Id.* (citing Haas Decl. ¶ 169). We agree with Petitioner that Zydney's statuses of "Available" and "Not logged on" indicate "whether the potential recipient is currently available to receive an instant voice message." Much like in Griffin, an "Available" indicator means that the software agent is ready to receive a message, and a "Not logged on" status, equivalent to Griffin's "Off" indicator, means that the software agent is unavailable for receiving any messages.

*i. Motivation to Combine Griffin's and Zydney's Teachings*

Petitioner argues that it would have been obvious to a person of ordinary skill in the art to combine the teachings such that Griffin's presence manager maintains the terminal's status in the presence data record, "Available" and "Not logged on," to indicate that the terminal is either connected to the server or not. Pet. 41–42 (citing Haas Decl. ¶ 170).

Petitioner asserts several reasons for the combination. We discuss the most persuasive. According to Petitioner, Zydney itself provides a motivating teaching because the software agents, by maintaining and conveying their status, provide to other users a way to conveniently determine which software agents are currently able to exchange messages and to select the most appropriate mode of communication. *Id.* at 43 (citing Haas Decl. ¶¶ 173–174; Ex. 1006, 14:20–15:1, 14:9–11, 16:7–17). According to Dr. Haas, who we credit in this regard, these teachings of Zydney confer specific advantages that a person of ordinary skill in the art would have recognized and considered implementing. Haas Decl. ¶¶ 173–174. Dr. Haas opines, and we agree, that the information of whether a terminal is available to receive a speech chat message was well-known. *Id.* ¶ 172. Griffin, in combination with Zydney’s teachings, would implement a presence status that includes whether terminal 100 is “currently connected to server complex 204.” *Id.*

Patent Owner offers multiple arguments against the motivation to combine. Each of these arguments is addressed below.

*ii. Incompatibility of Griffin and Zydney*

Patent Owner argues that the combination of Griffin and Zydney’s teachings cannot be achieved because the “connectivity status” in Griffin and Zydney mean different things. Easttom Decl. ¶ 52; PO Resp. 14. This argument is not persuasive. First, we do not agree with Patent Owner’s characterization of Griffin as being unconcerned with recipient’s immediate availability. PO Resp. 16. As discussed above with respect to claim 1, we have determined that the “instant” voice message of Griffin is a real-time speech chat message that is received as such at the terminal, and that when

the terminal displays the chat history window, the message is played automatically, otherwise it is queued for playback. Thus, any distinction based on Griffin as not receiving “immediately” speech chat messages, is contrary to Griffin’s teachings and unpersuasive. Second, the fact that Zydney delivers voice messages in a peer-to-peer manner is irrelevant to the combination of teachings of the connectivity status. The teaching of a status that is “Available” and “Not logged on” is not less useful to Griffin merely because Zydney delivers voice messages from software agent to software agent, while Griffin, allegedly, delivers messages from terminal to server. If anything, we are persuaded of the contrary. A device-to-device communication may actually be reason to incorporate Zydney’s status in Griffin’s system, because Griffin also has the capability for terminals to send messages directly to each other, in a point-to-point fashion. Ex. 1005, 8:8–14 (stating that the presence information would still come from the server, but the messages may be delivered from terminal to terminal). Thus, we do not see any incompatibility between the Griffin’s presence status and Zydney’s connectivity status.

Finally, Patent Owner’s arguments are not focused on the combination of teachings, but rather on a bodily incorporation of communication principles of Zydney into Griffin, and vice versa. *In re Keller*, 642 F.2d 413, 425 (CCPA 1981); *see also In re Nievelt*, 482 F.2d 965, 968 (CCPA 1973) (“Combining the *teachings* of references does not involve an ability to combine their specific structures.”). For instance, Mr. Easttom opines that the suggested combination would require Griffin to be substantially changed before its principle of operation could be compatible with Zydney, because Griffin uses the server for delivery of messages, while Zydney bypasses the

central server in favor of a faster peer-to-peer delivery. Easttom Decl. ¶ 55. Mr. Easttom’s testimony focuses on whether delivery speed or mode would necessitate a modification of Griffin. Griffin, however, already discloses real-time speech conversations (Ex. 1005, 1:10–11), and there is no explanation as to why implementing the *connectivity status* teaching of Zydney would require a modification of Griffin’s mobile-to-server delivery as alleged by Mr. Easttom. Again, the combination of teachings is not focused on using Zydney’s peer-to-peer delivery transport into Griffin. Therefore, any argument that Zydney’s delivery scheme is incompatible with Griffin and vice versa is not germane to the asserted combination, and, therefore, is unpersuasive.

*iii. Frustration of Zydney’s Purpose*

Patent Owner’s next argument focuses on whether Zydney would be rendered inoperable for its intended purpose. PO Resp. 16 (arguing that including Griffin in the system described by Zydney would frustrate, if not eliminate, the purpose of Zydney, and citing Easttom Decl. ¶ 54). We are not persuaded by this argument. Again, Patent Owner focuses here on whether Zydney’s communications are instantaneous versus Griffin’s alleged indifference of whether a recipient is “actually online.” *Id.* (citing Easttom Decl. ¶ 54). These distinctions are contrary to Griffin’s teachings of providing presence status information that is constantly updated (Ex. 1005, 5:27–30), showing that Griffin is not indifferent as to the status of its recipients, and providing for an “Off” and “Available” status that the system utilizes to determine whether to deliver the speech chat message (*id.* at 5:2–15). Thus, we do not credit Mr. Easttom’s testimony that Griffin does not know and does not care about the recipient’s status online. Easttom

Decl. ¶ 54. We also do not credit Mr. Easttom's testimony that Zydney's purpose would be frustrated or eliminated. *Id.* The combined teachings do not involve any changes or modifications of Zydney. Thus, the purpose of Zydney is not compromised (or even impacted) by the asserted combination of teachings. Finally, the arguments provided by Patent Owner and Mr. Easttom regarding Zydney's frustrated purpose are generic and devoid of factual support, and, therefore, not entitled to any weight.

*iv. Griffin's Substantial Modification*

Patent Owner also argues that a person of ordinary skill in the art would not be motivated to combine the teachings of Griffin and Zydney because Griffin would have to be "substantially changed, which would require time and expense before it could be compatible with Zydney." PO Resp. 16 (citing MPEP § 2143). It is entirely unclear what modification Patent Owner alleges would be needed. If the modification Patent Owner alludes to is that of incorporating a peer-to-peer communication scheme, such argument is contrary to Griffin's own teachings. As stated above, Griffin also contemplates terminal-to-terminal communications, and, thus, would benefit from having connectivity information regarding other terminals with which to communicate. *See* Ex. 1005, 4:19–21, 8:8–14. Further, if the modification involves incorporation of other features of Zydney's system into Griffin, the argument is focused on a bodily incorporation of the references that is not germane to the assertion that a person of ordinary skill in the art would have combined the *teaching* of Zydney's *connectivity status* with the *teaching* of Griffin's *presence status*. Nevertheless, neither Mr. Easttom nor Patent Owner sufficiently explains



with factual support the alleged modification. The argument is, therefore, unpersuasive.

v. *Combination Would Result in Zydney's Message Being Lost*

Patent Owner argues that Griffin makes available only the most recent messages because of the explanation that queuing of the message occurs when the terminal is not on the chat history display when a speech chat message arrives. PO Resp. 17 (citing Ex. 1005, 11:50–53). Mr. Easttom opines that a person of ordinary skill in the art would understand Griffin to mean that “*only* the most recently received speech message (or portion thereof) is queued at the receiving terminal.” Easttom Decl. ¶ 56. We do not credit this testimony as it is contrary to the teachings of Griffin. As we discussed above, Griffin’s chat history display contains a list of sent and received speech chat messages. Ex. 1005, 10:20–25. The chat history display entries include more than the last received speech chat message. *See id.* Fig. 11, item 1105. The queuing only occurs because the speech chat message arrived while the terminal display was not on the chat history display as discussed above. This is not the same as disclosing that Griffin only stores the last received message. We find the opposite: Griffin expressly discloses storing messages in permanent storage, without qualification, i.e., regardless of whether the message was the last to be received. *See id.* at 12:38–42. Thus, the argument that Griffin would only be concerned with storing the last received message, and no others, is contrary to Griffin’s disclosure, and, therefore, is unpersuasive.

vi. *Text-Only Buddy Embodiment Would Not Work*

Finally, Patent Owner argues that because Griffin's "text-only" buddy lacks "speech messaging capability," showing an "Available" status, as disclosed in Zydney, would result in a "text-only" buddy being available for selection of a speech chat message, when Griffin contemplates otherwise. PO Resp. 18–19. Patent Owner argues that Griffin would be rendered inoperable, as the modified Griffin would send speech chat message to "text-only" buddies. *Id.* at 19–20. We do not agree with Patent Owner's argument.

The combination of Griffin and Zydney does not do away with Griffin's current status of "text-only" capability. The combination of teachings adds to Griffin's "Available" and "Off" statuses the meanings ascribed to the "Available" and "Not logged on" statuses of Zydney. *See* Haas Decl. ¶ 168 ("[I]t is my opinion that such a person would have been motivated to configure status 702 to include connectivity information indicating whether client 100 is currently connected to server complex 204 ("currently available")."). The Zydney statuses do not replace or modify any other status in Griffin, including that of the "text-only" buddies. As Petitioner states, the "text-only" status would continue to operate in the same manner. Reply 14. That is, presence status 702 "Available" would indicate that Griffin's terminal 100 is connected to server 204 (according to Zydney's status), without restriction, while the "text-only" status would indicate that the terminal is connected to server 204 and technically capable of receiving only text messages. *Id.* at 14–15. We agree with Petitioner that the "text-only" status is not rendered inoperable in Griffin by the asserted combination.

In conclusion, having considered the proffered motivation to combine and support thereof (discussed in Section “i” above), and after review of Patent Owner’s argument to the contrary, we are persuaded that Petitioner has shown by a preponderance of the evidence that a person of ordinary skill in the art would have been motivated to combine Griffin and Zydney with respect to the teachings of the connectivity status as recited in claim 7.

Based on the foregoing, we determine that Petitioner has shown by a preponderance of the evidence that claim 7 is unpatentable as obvious over Griffin alone, or in combination with Zydney.

6. Independent Claim 9

Claim 9 is similar to claim 1, discussed above, in that it recites an instant voice messaging application comprising two further limitations: a client platform system and a messaging system. Identical to claim 1, the language of claim 9 requires that the “client platform system” generates an instant voice message and that the “messaging system” transmits the instant voice message over a packet-switched network. Petitioner provides the same arguments and evidence discussed above with respect to claim 1. For the reasons discussed above (Section IV.E.1.(-a-)) with respect to the same limitations of claim 1, we find that Griffin teaches these limitations.

As for the final limitation, claim 9 recites “wherein the instant voice message application attaches one or more files to the instant voice message.” Petitioner asserts that either Griffin alone or in combination with Zydney’s teachings of attachments teaches this limitation. Pet. 48–49. We discuss first whether Griffin alone teaches the limitation.

Griffin explains that the chat software of terminal 100 provides the user with the option of attaching files to the outbound message. Ex. 1005,

6:38–52; 10:53–58, 12:63–66, Fig. 4. We agree with Petitioner that Griffin discloses attaching files to the outbound message, and particularly to a text message. According to our construction of the “attached to” phrase, claim 9 requires indicating that another file (or files) is associated with the “instant voice message.” When a user attaches a file to the outbound message, Griffin explains that the message includes a field that indicates the number of attachments for that particular message. Ex. 1005, Fig. 4, item 407, 6:38–44. This is evidence that Griffin associates the attachment(s) with the outbound message, which, according to Figure 4, would be of a message type “speech” (Ex. 1005, Fig. 4, item 401). This results in Griffin indicating that the attachment is associated with the instant voice message as required by claim 9.

Although Griffin does not *explicitly* describe attaching a file to a *speech* chat message, we find that Griffin’s explanation of Figure 4 teaches or suggests to a person of ordinary skill in the art that a speech chat message would also have the attachment capability. Dr. Haas, who we credit in this regard, testifies that a person of ordinary skill in the art “would have recognized that files could be attached to text and speech chat messages in the same way and for the same reasons and advantages (e.g. the ability to collectively send one or more files along with a chat message to a recipient, and/or the ability to concurrently receive one or more files along with a chat message by the recipient.)”. Haas Decl. ¶ 191. That is, Griffin explicitly teaches attaching files to a text message (Ex. 1005, 12:63–67), and describes the structure of the outbound message to include, even for speech chat messages, the fields necessary to indicate that files are attached (*id.* at 6:38–44). Thus, we are persuaded by Dr. Haas’s testimony, that Griffin,

having the capability to effect attachments to an outbound message, would teach a person of ordinary skill in the art that such attachments would also be effective for a speech chat message. As Dr. Haas opines, and we agree, a person of ordinary skill in the art “would not have faced any technical impediments in implementing such a configuration.” Haas Decl. ¶ 191.

Patent Owner responds that Petitioner is correct in admitting that Griffin does not *explicitly* describe attaching files to a speech message. PO Resp. 24. Patent Owner, however, does not address the further argument and evidence that, notwithstanding the lack of explicit disclosures, Griffin teaches or suggests the recited attachment because a person of ordinary skill in the art would have recognized the benefits of such attachments to a speech chat message. As stated above, we have found Petitioner’s argument and evidence persuasive that Griffin teaches or suggests the limitation. Accordingly, we determine that Petitioner has shown by a preponderance of the evidence that claim 9 would have been obvious over Griffin, as asserted by Petitioner.

As for the further contention that Griffin and Zydney in combination teaches the attaches limitation, we note that dependent claim 14, further addresses the combination, and Petitioner’s contention is addressed there. Because we have determined that Griffin alone teaches the limitation of claim 9, we need not discuss that contention here.

In sum, we determine that Petitioner has demonstrated by a preponderance of the evidence that claim 9 is unpatentable as obvious over Griffin.

7. Dependent Claim 10

Claim 10 depends from claim 9, and further recites “wherein the packet-switched network comprises a WiFi network.” Petitioner argues that Griffin discloses network 203, which is a packet-based network such as the Internet or the World Wide Web, a private network such as a corporate intranet, or a combination of public and private network elements. Pet. 69 (citing Ex. 1005, 3:49–51, 3:59–65, 4:48–51, Fig. 2). Griffin does not disclose that network 203 is a Wi-Fi network. *Id.* Petitioner, however, argues that it would have been obvious to a person of ordinary skill in the art, in view of the teachings of Lee, to include a Wi-Fi network in network 203. *Id.* at 69–70. In particular, Petitioner argues that at the time of the invention, one of the most popular wireless technologies for a packet-switched network was based on the IEEE 802.11 wireless network specification, commercially known as “WiFi.” Pet. 70 (citing Haas Decl. ¶¶ 48–51, 241). Indeed, Dr. Haas opines, and we agree, that at the time of the invention a person of ordinary skill in the art would have been well aware of Wi-Fi for wirelessly connecting devices to a packet-switched network, and would have considered and been motivated to use a Wi-Fi network with Griffin’s system. Haas Decl. ¶ 243. In particular, Dr. Haas explains Lee’s disclosure of connecting cellular devices to the Internet via a Wi-Fi network and explains that Griffin would have benefited from the same configuration of Lee so that Griffin’s terminals are enabled to connect to network 203 via a Wi-Fi network. Haas Decl. ¶¶ 244–247. We credit this testimony and find that Petitioner has shown by a preponderance of the evidence that claim 10 is unpatentable as obvious over Griffin and Lee.

8. Dependent Claim 11

Claim 11 depends from claim 9, and further recites “wherein the instant voice messaging application displays one or more controls for audibly playing the instant voice message.” Petitioner relies on Griffin as teaching this further recited limitation. Pet. 50. In particular, Griffin explains that after receiving inbound message 500, click-holding the right softkey, labeled “write,” presents the user options to playback the available speech. Ex. 1005, 12:18–40. This feature, Petitioner explains, shows that Griffin provides a control for audibly playing the instant voice message. Pet. 50–51. Petitioner also argues that this feature, although described with respect to the inbound message, i.e. at a recipient terminal, exists also for the sender terminal. *Id.* at 51 (citing Ex. 1005, 10:25–30; Haas Decl. ¶ 198). We find that Griffin teaches the recited controls for audibly playing the instant voice message. Patent Owner does not provide argument with respect to this claim. We determine that Petitioner has shown by a preponderance of the evidence that claim 11 is unpatentable as obvious over Griffin.

9. Dependent Claim 12

Claim 12 depends from claim 9, and further recites “wherein the instant voice messaging application encrypts the instant voice message.” Petitioner explains that Griffin discloses providing encryption at the server “to secure the privacy of message content.” Pet. 68 (citing Ex. 1005, 5:38–40). Griffin, however, does not disclose that the terminal software encrypts speech messages. *Id.* Here, as for claim 5, Petitioner relies on Väänänen’s teachings of encrypting the finished recording of the voice message before sending the message to the recipient. Pet. 68 (referring to

the claim 5 analysis at page 45 of the Petition, which cites Ex. 1008, 1:3–8, 2:25–3:2, 5:1–30). As stated with respect to claim 5, we agree that it would have been obvious for Griffin’s terminal to encrypt speech chat messages. *Id.* In particular, Petitioner argues that the encryption/decryption technique would secure the privacy of the message content. *Id.* at 46. Dr. Haas’s testimony, which we credit, establishes that encryption and decryption of messages was well-known, as taught in Väänänen, and that Griffin already provides for encryption at the server side, which is evidence that Griffin contemplates, and thus, is an explicit motivation for, securing the privacy of the message in its system. Haas Decl. ¶¶ 182–184, 238. Patent Owner does not challenge Petitioner’s showing for claim 12 separately from claim 9. Based on the foregoing discussion of Griffin and Väänänen, and Petitioner’s arguments and evidence of record, we determine that Petitioner has shown by a preponderance of the evidence that claim 12 is unpatentable as obvious over Griffin and Väänänen.

#### 10. Dependent Claim 14

Claim 14 depends from claim 9, and further recites “wherein the instant voice messaging application invokes a document handler to create a link between the instant voice message and the one or more files.” Petitioner argues that Griffin discloses the recited “document handler” because when terminal 100 generates an outbound message, the software provides the user with the option of attaching files to the message. Pet. 52–53 (citing Ex. 1005, 5:42–48, 6:50–52, 10:53–58, 12:63–66; Haas Decl. ¶¶ 200–201). Petitioner also relies on Zydney’s disclosures of providing a user the option to “associate” a file with a voice container. *Id.* at 53 (citing Ex. 1006, Figs. 6, 16, 17, 18). Further, Petitioner points out that



Zydney describe using the MIME standard to “allow for non-textual messages and multipart message bodies to be specified in the message headers.” *Id.* (citing Ex. 1006, 19:7–10). These disclosures persuade us that both Griffin and Zydney disclose attachments as associations, consistent with our claim construction analysis discussed above in Section IV.A.2.

Petitioner’s analysis goes further and discusses the recited “links.” Pet. 53–54. For instance, Petitioner proffers Dr. Haas’s testimony that a person of ordinary skill in the art would have understood, based on the disclosures of Griffin and Zydney, that attaching a file to a speech message creates an association between the message and the file, which discloses the claimed “link.” *Id.* at 53 (citing Haas Decl. ¶ 202). More particularly, Petitioner argues that the MIME standard provides another way to create a link because the MIME message includes parts that are associated to one another, such as by internal “links.” *Id.* at 54 (citing Ex. 1016).

These arguments rely in part on the analysis of claim 9, under the ground of obviousness in which Griffin is combined with the “attachment” teachings of Zydney. Pet. 49–50. In that alternative combination, Petitioner asserts that it would have been obvious for Griffin to attach a file to a speech chat message, based on Zydney’s teachings of attaching a file to a voice container, using the well-known MIME standard. *Id.* at 49 (citing Ex. 1006, 19:1–7, 19:6–20:9). For a rationale, Petitioner argues that a person of ordinary skill in the art would have been motivated to enable attachments to speech chat messages in Griffin because “it would have enhanced the capabilities and convenience of Griffin’s system/process by providing users with the ability to collectively send and receive files with a speech message, instead of needing to send the files and message separately.” *Id.* (citing

Haas Decl. ¶ 193). Petitioner also proffers that Zydney itself provides a reason for such attachments: to provide a richer communication environment. *Id.* (citing Ex. 1006, 19:2–4).

We are persuaded by Petitioner’s showing that, in the alternative combination with Zydney for claim 9, it would have been obvious to attach files to a speech chat message. Pet. 48–50, 52–54. Zydney discloses attaching a digitized greeting card or other data types to the voice container to be transported to the recipient. Ex. 1006, 19:1–7 (stating that an important part of voice exchange and distribution is “attaching other media to the voice container” and that voice containers may have “digitized greeting cards appended to them”). Zydney describes “attachment” as “associating” in referring to Figure 6, which discloses that the software agent asks the user “what multimedia file *to associate* [to] this voice container.” Ex. 1006, Fig. 6 (emphasis added). Figure 16 of Zydney also describes, at step 5.1.4 “associating the multimedia file with the originator’s voice container, as well as networked voices.” Ex. 1003, Fig. 16, 35:15–17; *see also id.* at Fig. 17. These disclosures of Zydney teach attaching one or more files to a voice container as an association of the one or more files to that voice container.

Zydney’s teaching of performing the attachment is further informed by the use of the MIME standard. For example, Zydney discloses formatting voice containers using the MIME format, which allows attachment of files to be specified in a message header. Ex. 1006, 19:6–12. According to this embodiment then, a voice container would be formatted under the MIME standard, where a header identifies the file or files attached to the MIME-formatted voice container. *Id.* We find that this MIME-

formatted voice container, which includes the voice data or digitized audio, includes the information necessary in the header to link the files that the user has attached to the voice container. The claim requires attaching the one or more files to the instant voice message, and because we have construed the attachment to mean that the files are associated to the instant voice message, the identification of the files in the header performs the necessary association.

In the resulting combination, therefore, Griffin's software, which already has the functionality to perform attachments to the outbound chat message, would perform attachments or the required associations in the manner described in Zydney. That is, Griffin's speech chat message would be formatted, as with the MIME standard, to provide for headers that provide the internal "links" or associations that the claim requires. We also credit Dr. Haas's testimony that a person of ordinary skill in the art would be motivated to provide for attachment of one or more files to the speech chat message of Griffin because the users would find it more convenient than performing separate actions of sending files and attachments. Haas Decl. ¶ 193. We are also persuaded by Dr. Haas's testimony that Zydney provides a motivation to provide a richer communications environment by specifically allowing for attachments of multimedia files to a voice container, which includes the recorded message. *Id.* We find that the combination applies the known technique of attaching files in a known manner, such as by formatting the speech chat message using the MIME standard and utilizing the MIME header to indicate the files associated with the speech chat message. *See KSR*, 550 U.S. at 417. The combination predictably would have resulted in speech chat messages having

attachments, as Griffin already discloses attaching files to the outbound message. *See* Haas Decl. ¶ 194 (“Griffin’s system/process would perform the same function of transmitting/receiving speech chat messages in the same way described in Griffin, with the added ability to attach one or more files to such messages.”). We are also persuaded that it would have been within the capability and knowledge of a person or ordinary skill in the art to make such a modification. *Id.* ¶ 195.

We are further persuaded that Zydney discloses creating “a link,” as claim 14 requires. As stated above, Petitioner has shown that Zydney discloses the use of the MIME standard as a way to format the voice container to include internal links. Pet. 54 (citing Ex. 1016, which describes internal linkages and also describes using an ATTACHMENT-type header). Petitioner has also shown that Zydney teaches attaching and the association of the file with the message creates an association and the required “link.” Ex. 1006, 19:7–10, 19:13–20:9, Figs. 6, 17–18; Haas Decl. ¶ 202. These disclosures and testimony, which we credit, further support Petitioner’s contention that Griffin in combination with Zydney teaches or suggests attaching of one or more files to the instant voice message (claim 9) and that a document handler creates a link between the instant voice message and the one or more files (claim 14).

Patent Owner argues that neither Griffin nor Zydney attaches a file to an audio file. PO Resp. 24–31. First, Patent Owner argues that Griffin does not explicitly describe attaching files to a speech message. *Id.* at 24. We have addressed this argument above with respect to claim 9. Second, Patent Owner argues that Zydney’s voice container is not an “instant voice message,” and that Zydney’s attachment to a voice container is not an

attachment to the “instant voice message.” *Id.* at 24–31. We are not persuaded by this second argument. Petitioner’s theory of obviousness relies on Griffin’s speech chat message as the “instant voice message.” That is, Petitioner argues that the combination results in Griffin attaching files to *Griffin’s speech chat message*. Pet. 49. This combination does not rely on Zydney’s voice container as teaching the “instant voice message.” Rather, Zydney contributes the teaching of how to perform attachments to a Griffin speech chat message because attachments provide a richer communication environment. *Id.*; *see also* Ex. 1006, 19:2–4. Therefore, Patent Owner’s arguments focusing on the differences between Zydney’s voice container and an “instant voice message” are not germane to our analysis.

Furthermore, the issue is more particularly focused on the scope of “attaching.” As stated above in Section IV.A.2, attaching means indicating that another file (or files) is associated with the “instant voice message.” And claim 14 requires creating a “link” between the files and the instant voice message. There is no requirement that the link be direct to the audio file in a speech chat message or to the audio data inside a voice container. Neither claim 9 nor claim 14 precludes the association or linking that is evident by use of headers and “internal linkages” in a MIME formatted speech chat message.

Patent Owner further argues that the MIME disclosures in Zydney “are directed to the voice container itself being a MIME attachment to an email, and not the voice container, let alone the instant voice message[] having a MIME attachment.” PO Resp. 28–29. We do not agree with Patent Owner’s characterization of Zydney in this regard. Zydney describes the MIME format as the standard for formatting the voice container to

include the header that identifies the attachments of multimedia files. Ex. 1006, 19:6–12; *see also* Easttom Decl. ¶ 48 (“Zydney explains that various industry standards, such a Multipurpose Internet Mail Extension (MIME) format, may be used to format the voice container so that attachments may be associated with it.”). This disclosure provides additional detail of the technology that Zydney uses to format the voice container to identify attachments of files. We acknowledge that Zydney also teaches the use of MIME for another purpose: to construct an email message with the “voice mail conversation” as a digitally-encoded MIME attachment. Ex. 1006, 15:15–17, 17:2–4. There is no argument, however, in the Petition that Zydney teaches the required attachment of a file to an instant voice message by using the MIME format to make *the voice container itself* an attachment to an email. Instead, we find that Zydney describes two different uses for the MIME standard. The first, and the one relevant to our discussion, is the use of MIME formatting to include a header for the necessary associations of files to the voice container. The second, not relevant to our discussion, is the use of MIME encoding to attach voice containers to an email message as a way to transport undelivered voice containers via email or to have voice conversations with email recipients. We have discussed above the first use of MIME as being particularly instructive in providing the technical details of how Zydney actually performs the attachment. *See also* Haas Decl. ¶ 202 (stating that the MIME format may be used to format the voice container thus providing another conventional way to create a link between a message and a file). Patent Owner’s arguments about MIME use for email attachments are

unpersuasive, as they address the second use of MIME, on which Petitioner does not rely.

Patent Owner next argues that Griffin and Zydney cannot be combined because a person of ordinary skill in the art would not have expected success from such an attempt to combine. PO Resp. 27–28. This argument appears to rely on the arguments related to the combination of Griffin and Zydney concerning other limitations not recited in either claim 9 or 14. Nevertheless, it is unclear from the argument why there is no expectation of success. Patent Owner argues, supported by its declarant, that the combination would defeat the underlying purpose of Zydney. *Id.* at 27 (citing Easttom Decl. ¶ 54). We addressed this argument above with respect to dependent claim 7. *See supra*, Section IV.E.5.ii-iii. We also did not credit Mr. Easttom’s testimony with regard to the arguments that Griffin and Zydney are incompatible and that Zydney’s purpose would be frustrated.

Patent Owner finally argues that Zydney “teaches away” from the attaching limitation because Zydney does not attach any files to “an instant voice message within the voice container,” but instead teaches attaching files to the voice container itself. PO Resp. 31–32. These arguments focus on a distinction between the message content and container. *Id.* We are not persuaded, as discussed above, that the distinction is germane to the claim scope of “attaching” limitation. As already stated, the attachment of files to the “instant voice message” is effected by associating the files, such as by linking or setting flags. Neither the plain reading of the claim nor our construction leaves room for exalting differences between the format of the voice container and the data content that it carries. Whether the message content is packaged in a certain manner, and with other data, for transport is

not germane to the claim requirements concerning attachments. And none of these arguments actually rebut Petitioner's combination, which relies on Griffin's speech chat message as the "instant voice message." Focusing, thus, on Zydney's voice container as distinguishing over the "instant voice message" is, therefore, unpersuasive. Accordingly, we do not agree with Patent Owner's arguments that Zydney teaches away from the proposed combination.

In sum, we are persuaded that Petitioner has demonstrated by a preponderance of the evidence that claim 14 is unpatentable as obvious over Griffin in combination with Zydney.<sup>5</sup>

11. Dependent Claims 15, 16, and 17

Claim 15 depends from claim 9, and further recites "wherein the instant voice messaging application displays the attachment." Petitioner relies on Griffin as teaching this limitation because Griffin explains that after receiving the inbound message containing an attachment, the recipient can view the attachment by click-holding the right softkey label 607. Pet. 54–55 (citing Ex. 1005, 12:19–20, 12:24–26, 12:39–40). We agree with Petitioner

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<sup>5</sup> We note here that the analysis of the "attaches" limitation is applicable to claim 9, which we analyzed above as obvious over Griffin alone. We recognize that the Petition identifies the ground for claims 9, 11, 14–17, 25, and 26 as asserting obviousness over the combination of Griffin and Zydney (Pet. 7). However, as stated for claim 9, in the body of the Petition we see the analysis of claim 9 as also asserting obviousness over Griffin alone (Pet. 48). Nevertheless, because in connection with claim 14, we conclude that the subject matter of "attaching," also recited in claim 9, would have been obvious over Griffin and Zydney, our conclusion of obviousness for claims 9, 11, 15–17, 25, and 26, also includes a conclusion of obviousness over Griffin and Zydney, if not expressly stated as such.



that Griffin teaches the limitation as shown in the Petition and supported by Griffin. Patent Owner does not argue dependent claim 15 separately from claim 9. Based on the foregoing disclosure of Griffin, and Petitioner's arguments, we determine that Petitioner has shown by a preponderance of the evidence that claim 15 is unpatentable as obvious over Griffin.

Claim 16 depends from claim 9, and further recites "wherein the instant voice messaging application displays one or more controls for performing at least one of reviewing, re-recording or deleting the instant voice message." Petitioner points out Griffin's chat history display which allows a user to display and review speech chat messages. Pet. 55–56 (citing Ex. 1005, 10:20–25, 10:39–47, Fig. 11; Haas Decl. ¶ 206). When a user clicks a softkey while the speech chat message is selected, Griffin's software gives the user options to playback the available speech. Ex. 1005, 11:36–39, 12:38–39, Figs. 11 and 13. We agree with Petitioner that Griffin teaches displaying controls for reviewing the instant voice message. Patent Owner does not argue dependent claim 16 separately from claim 9. Based on the foregoing disclosures of Griffin, and Petitioner's arguments, we determine that Petitioner has shown by a preponderance of the evidence that claim 16 is unpatentable as obvious over Griffin.

Claim 17 depends from claim 9, and recites "further comprising an instant voice messaging server receiving the instant voice message and an indication of one or more intended recipients of the instant voice message." Petitioner explains that Griffin's server complex 204 is the instant voice message server. Pet. 57–58 (citing Haas Decl. ¶¶ 209–10). Griffin further describes that terminal 100 transmits outbound message 400, which server 204 receives. *Id.* at 58 (citing Ex. 1005, 3:51–61, 4:11–15, 4:44–54,

4:62–5:5). Outbound message 400 includes an indication of the recipient identifiers in field 403. *Id.* (citing Ex. 1005, 6:37–41, Fig. 4). Therefore, Griffin teaches that server 204 receives the speech chat message and the identifiers of the target recipients of the message. Patent Owner does not argue dependent claim 17 separately from claim 9. Based on the foregoing disclosures of Griffin, and Petitioner’s arguments, we determine that Petitioner has shown by a preponderance of the evidence that claim 17 is unpatentable as obvious over Griffin.

#### 12. Dependent Claim 25

Dependent claim 25 depends from claim 17, and further recites “wherein the instant voice messaging server determines the availability of the one or more intended recipients for receipt of the instant voice message.” Petitioner relies on Griffin as disclosing the presence manager that maintains presence status 702 for each terminal in presence data records 700. Pet. 60 (citing Ex. 1005, 4:62–5:2, 5:11–30). The status 702 includes status “Available” and “Off” indicating “whether the recipient is ready to receive the particular type of message.” *Id.* (citing Ex. 1005, 5:11–30). Petitioner concludes, and we agree, that Griffin’s server 204 determines the availability of intended recipients for receipt of speech messages. *Id.* (citing Haas Decl. ¶ 215). We incorporate here our analysis of claim 7, which recites a similar limitation. *See supra*, Section IV.E.5. That analysis concludes, as we do here, that Griffin alone discloses the limitation. However, we also analyze the alternative contention that Griffin and Zydney discloses the limitation. Petitioner, for claim 25, provides the same alternative contention. Accordingly, we incorporate here the analysis of the combination of Griffin and Zydney.

We determine that based on the foregoing disclosures of Griffin, and the analysis provided for claim 7, that Petitioner has demonstrated by a preponderance of the evidence that claim 25 is unpatentable as obvious over Griffin alone, or over Griffin in combination with Zydney.

13. Dependent Claim 26

Claim 26 depends from claim 15 and recites follows (with added numbering for easier reference):

26. The system of claim 25, wherein the instant voice messaging server:

(i) delivers the instant voice message to the one or more intended recipients who are determined to be currently available;

(ii) stores the instant voice message for the one or more intended recipients who are not currently available; and

(iii) delivers the instant voice message for the one or more intended recipients who are not currently available when the instant voice messaging server determines that the not currently available one or more intended recipients become available.

For limitation (i), Petitioner points to broadcaster 303 of Griffin's server 204, as compiling a list of target recipients of outbound message 400 and querying presence manager to establish the recipient's current status 702. Pet. 61–62 (citing Ex. 1005, 4:62–5:15, 6:56–64). For each recipient available, Griffin's broadcaster prepares inbound message 500 and delivers it to the recipient's terminal. *Id.* (citing Ex. 1005, 6:64–7:11). As discussed with respect to claim 25 (and further explained in connection with our analysis of claim 7), the status indicates whether terminal 100 is currently "Available" or "Off." *Id.* (citing Ex. 1005, 4:62–5:2, 5:11–30, Fig. 7). We

agree that Griffin teaches limitation (i), for the same reasons discussed with respect to 25 (and claim 7).

For limitations (ii) and (iii), Petitioner relies on Griffin's server queuing the message at server 204 for later playback, when the user's terminal is not displaying the chat history display. *Id.* at 63 (citing Ex. 1005, 11:48–67). We agree that this disclosure teaches that Griffin's server stores the speech chat message, when the server determines that the user's terminal is not positioned to receive it. Griffin's server, however, cannot be said to either store or deliver the message because the user is not "Available" as determined by the presence status. That is, the position of the chat history display in no way correlates to whether the presence status is "Available" or "Off." Indeed, a user may be "Available" on the presence status, and the server may queue up the message because the chat history window is not displayed.

Petitioner, in the alternative, relies on Zydney's disclosure of storing the messages at the server when the recipient is not available. Pet. 64 (citing Ex. 1006, 2:3–5). Zydney's Figure 4 expressly states that "if recipient is not online, client sends voice container to server file." Ex. 1006, Fig. 4; Pet. 65. Further, when the recipient reconnects, Petitioner argues, Zydney's server transmits the stored voice container to the recipient. Pet. 65 (citing Ex. 1006, 13:19–22, 14:14–16, 15:15–16, 16:10–12, 25:1–4, 30:1–7, 33:7–10, Figs. 4, 8). Petitioner also points out that Zydney contemplates determining whether the recipient is online or offline after the voice container is uploaded to the server. *Id.* at 65–66 (relying on Fig. 8, step 1.2.3, (describing uploading to the central server when the recording is complete), step 1.2.5 (describing notifying the available software agent of

the arrival of a new message in real time or notifying the software agent of stored voice containers at the central server, when the agent first becomes available). Thus, Zydney discloses two options. First, Zydney's software agent sends the voice container to the server if the recipient is not available, at which point the server stores it and delivers it when the recipient becomes available. Second, Zydney's software agents send recorded voice containers to the server, which then determines whether the recipient is available or not in order to either send the voice container in real time to those available, or store the voice container and deliver it as the recipient becomes available. This second option, we are persuaded, teaches the limitations recited in (ii) and (iii).

Petitioner contends that a person of ordinary skill in the art would have been motivated to configure Griffin's system such that server 204 stores speech chat messages for terminals that are not connected to server 204, and delivers the stored messages when terminal 100 is connected and available, in accordance with Zydney's available status. *Id.* at 66. Petitioner argues that a person of ordinary skill in the art would have recognized that Griffin's terminals would benefit from not missing messages while disconnected. *Id.* at 66 (citing Haas Decl. ¶ 231). This configuration of Zydney would also enable terminals 100 to send messages to disconnected users for later delivery. *Id.* According to Petitioner, Griffin already stores messages at the server for queuing playback when terminals are connected but not on the chat history display. *Id.* at 67 (citing Ex. 1005, 11:48–67). Petitioner posits that the combination is nothing more than a combination of known methods, in a known manner, to achieve predictable results, under *KSR*. *Id.* at 52 (citing *KSR*, 550 U.S. at 417).

We agree with Petitioner that it would have been obvious to combine the proffered teachings of Griffin and Zydney for the reasons and evidence identified above. In particular, we are persuaded, as we discussed with respect to claim 7, that the combination of the status of Zydney with the presence status of Griffin results in “Available” and “Off” conferring information about whether the terminal is connected to server 204. Griffin already discloses storing messages at the server for later delivery. The only change of Griffin is that instead of storing at the server the speech chat message that cannot be played automatically (terminal out of chat history display), Griffin would temporarily store the message, and subsequently deliver the message, based on whether the terminal is “Available” or “Off,” dictated by Zydney’s meaning of “Available” or “Not logged on.” Dr. Haas’s testimony, which we credit, supports this conclusion: “The primary difference would have been simply that server complex 204 temporarily stores and delivers messages based on status 702, in addition to, or instead of, temporarily storing and delivering based on whether or not the chat history display is visible.” Haas Decl. ¶ 235. We also are persuaded by Dr. Haas’s testimony that a person of ordinary skill in the art would recognize the benefit of allowing messages to be delivered, even though the terminal was disconnected when the message was initially sent. *Id.* ¶ 231. Such a feature also avoids the inefficiency of a sender having to resend messages. *Id.*

Patent Owner did not argue claim 26 separately. And to the extent Patent Owner proffered arguments that are relevant to claim 26, those have been addressed in connection with related limitations, such as those recited

in claims 7. Consequently, we determine that Petitioner has shown that claim 26 is unpatentable as obvious over Griffin, in view of Zydney.

Petitioner asserts another alternative ground with respect to claim 26, based on the combination of Griffin, Zydney, and Vuori. Pet. 76–78. This ground asserts that Vuori also teaches storing speech messages at a SVM service center (“SVMC”), where the SVMC determines availability of the intended recipient and sends the short voice message to those who are available. *Id.* at 77 (citing Ex. 1015 ¶¶ 34, 47, 50). Vuori further describes that the SVMC temporarily stores and delivers the short voice message when the recipients become available or there is a time out. *Id.* (citing Ex. 1015 ¶¶ 8, 54). Petitioner contends that it would have been obvious to combine Vuori’s teachings with Griffin and Zydney for the same reasons provided for the combination of Griffin and Zydney above. *Id.* Petitioner also proffers that the references are in the same technical field, teach solutions to common problems in the field, and describe technologies that were well known, similar, and compatible. *Id.* at 78.

Patent Owner does not challenge this ground. We are persuaded that Petitioner has shown that Vuori teaches the recited limitations of claim 26 as described above. Vuori’s SVMC delivers short voice messages to recipients that are available, and stores the short voice message destined for unavailable recipients. Ex. 1015 ¶¶ 8, 34, 47, 50, 54. When the unavailable recipient becomes available, Vuori’s SVMC delivers the message to the recipient. *Id.* We are persuaded that a person of ordinary skill in the art would have had reason to combine Vuori with Griffin. As stated above with regard to Zydney, we credit Dr. Haas’s testimony that a person of ordinary skill in the art would recognize the benefit of allowing messages to be

delivered, even though the terminal was disconnected when the message was initially sent. *Id.* ¶ 231. Such a feature also avoids the inefficiency of a sender having to resend messages. *Id.*

In sum, we determine that Petitioner has demonstrated by a preponderance of the evidence that claim 26 is unpatentable as obvious over the combination of Griffin, Zydney, and Vuori.

## V. MOTION TO EXCLUDE

Patent Owner filed a Motion to Exclude addressing portions of deposition transcripts that “exceed the permissible scope of cross examination.” Mot. 2. In particular, Patent Owner asserts that Petitioner questioned Mr. Easttom on matters outside the scope of his direct testimony in violation of 37 C.F.R. § 42.53(d)(4)(ii). *Id.* Patent Owner provides a few examples of “hypotheticals” that were not contemplated in his direct testimony. For instance, Patent Owner points to the question about whether a delay of an hour at the time be an instant message. *Id.* (citing Ex. 1040 31:25–32:6). Patent Owner asserts that it objected to the questions as outside the permissible scope of the deposition. *Id.* at 3. The Motion then proceeds to list, without explanation, 89 portions of three deposition transcripts alleged to contain objectionable questions. *Id.* at 3–5.

Petitioner responds that given the breadth of Mr. Easttom’s direct testimony, Petitioner’s cross-examination questions were within the scope of permissible questioning. Opp’n 4–9. Petitioner then identifies for each of the multitude citations to the transcripts in Patent Owner’s motion the correlation to Mr. Easttom’s declaration in this and co-pending proceedings. *Id.* at 9–12 (citing Exhibit 2001; IPR2017-01797, Exhibit 2001; IPR2017-01798, Exhibit 2001; IPR2017-01799, Exhibit 2001; IPR2017-01800,



Exhibits 2001 and 2009; IPR2017-01802, Exhibit 2001). Finally, Petitioner argues that Patent Owner's Motion is facially deficient as it leaves it to the Board to figure out "whether and where the objected-to portions of Mr. Easttom's testimony are relied upon in the record, which is improper." *Id.* at 4.

We agree with Petitioner. First, Patent Owner, as the movant, has the burden to show that it is entitled to the relief requested. 37 C.F.R. § 42.20(c). Patent Owner's general allegations of questions and hypotheticals being outside the scope, with a lengthy list of deposition citations without explanation, are insufficient to carry the burden. For this reason alone, the Motion is *denied*.

Moreover, in reviewing the transcript of the deposition testimony, we highly doubt that the lodged objections are sustainable. For instance, asking Mr. Easttom about Figure 1 of the Griffin patent was objected to under a "form, scope" objections. Ex. 1040, 148:22–25. We do not see anything wrong with the form of the question. And certainly we are puzzled as to how the scope is exceeded when Mr. Easttom testified that he relied on Griffin and provided detailed explanations of how Griffin operates. Ex. 2001 ¶¶ 11, 61–70. Petitioner's Opposition also provides adequate explanation to rebut Patent Owner's general allegation of the irrelevance of the questions to the direct testimony of Mr. Easttom. Opp'n 9–12. Relying on Petitioner's explanations, in light of Patent Owner's very general allegations, we find an additional basis to *deny* Patent Owner's Motion to Exclude.

VI. ORDER

It is ORDERED that claims 1–5, 7–12, 14–17, 25, and 26 of the '433 patent have been shown to be unpatentable;

FURTHER ORDERED that Patent Owner's Motion to Exclude is denied; and

FURTHER ORDERED that, because this is a Final Written Decision, parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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Patent 8,995,433 B2

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