

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC,
Petitioner,

v.

UNILOC LUXEMBOURG S.A.,
Patent Owner.

Case IPR2017-02085
Patent 8,199,747 B2

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

BOUDREAU, *Administrative Patent Judge*.

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

I. INTRODUCTION

Google, Inc., now known as Google LLC¹ (“Petitioner”), filed a Petition requesting *inter partes* review of claims 1–15 of U.S. Patent No. 8,199,747 B2 (Ex. 1001, “the ’747 patent”). Paper 2 (“Pet.”). Petitioner identifies Motorola Mobility LLC, Huawei Device Co., Ltd., Huawei Device USA, Inc., Huawei Investment & Holding Co., Ltd., Huawei Technologies Co., Ltd., and Huawei Device (Dongguan) Co., Ltd. as additional real parties in interest. See Pet. 1. Uniloc Luxembourg S.A. (“Patent Owner”) filed a Preliminary Response. Paper 8 (“Prelim. Resp.”). With authorization from the Board, Petitioner additionally filed a Reply to Patent Owner’s Preliminary Response, to address Patent Owner’s arguments concerning application of the Board’s institution discretion under 35 U.S.C. §§ 314(a) and 325(d). Paper 9.

We have authority under 35 U.S.C. § 314. Upon considering the information presented in the Petition, the Preliminary Response, and Petitioner’s Reply, and for reasons discussed below, we deny the Petition and do not institute *inter partes* review of claims 1–15 of the ’747 patent.

II. BACKGROUND

A. Related Matters

The parties indicate that the ’747 patent is involved in *Uniloc USA, Inc. v. Google, Inc.*, No. 2:17-cv-00214 (E.D. Tex.), *Uniloc USA, Inc. v. Google, Inc.*, No. 2:17-cv-00231 (E.D. Tex.), *Uniloc USA, Inc. v. Motorola Mobility LLC*, No. 2:16-cv-00992 (E.D. Tex.), and *Uniloc USA, Inc. v.*

¹ See Paper 5.

Huawei Device USA, Inc., No. 2:16-cv-00994 (E.D. Tex.), among numerous other actions in the United States District Court for the Eastern District of Texas. Pet. 1–2; Paper 10, 2.

Certain claims of the ’747 patent also have been the subject of previous petitions for *inter partes* review filed by Facebook, Inc. and WhatsApp Inc. (Case IPR2017-01257; institution denied Dec. 4, 2017) and Samsung Electronics America, Inc. (Case IPR2017-01799; trial instituted Feb. 6, 2018, with respect to claims 2 and 12). Facebook, Inc. and WhatsApp Inc. additionally filed a petition and motion for joinder on March 6, 2018 (Case IPR2018-00748), in which they seek joinder in Case IPR2017-01799.

B. The ’747 Patent

The ’747 patent, entitled “System and Method for Instant VoIP Messaging,” relates to Internet telephony, and more particularly, to instant voice over IP (“VoIP”) messaging over an IP network, such as the Internet. Ex. 1001, [54], 1:14–18. The ’747 patent acknowledges that “[v]oice messaging” and “instant text messaging” in both the VoIP and public switched telephone network environments were previously known. *Id.* at 2:18–42. In prior art instant text messaging systems, according to the ’747 patent, a server would present a user of a client terminal with a “list of persons who are currently ‘online’ and ready to receive text messages,” the user would “select one or more” recipients and type the message, and the server would immediately send the message to the respective client terminals. *Id.* at 2:30–42. According to the ’747 patent, however, “there is still a need in the art for . . . a system and method for providing instant VoIP messaging over an IP network,” such as the Internet. *Id.* at 2:43–47. The

invention of the '747 patent is thus directed to such a system and method.
Id. at 1:15–18, 6:43–45.

In one embodiment, the '747 patent discloses local instant voice messaging (“IVM”) system 200, depicted in Figure 2 below. *Id.* at 6:18–20.

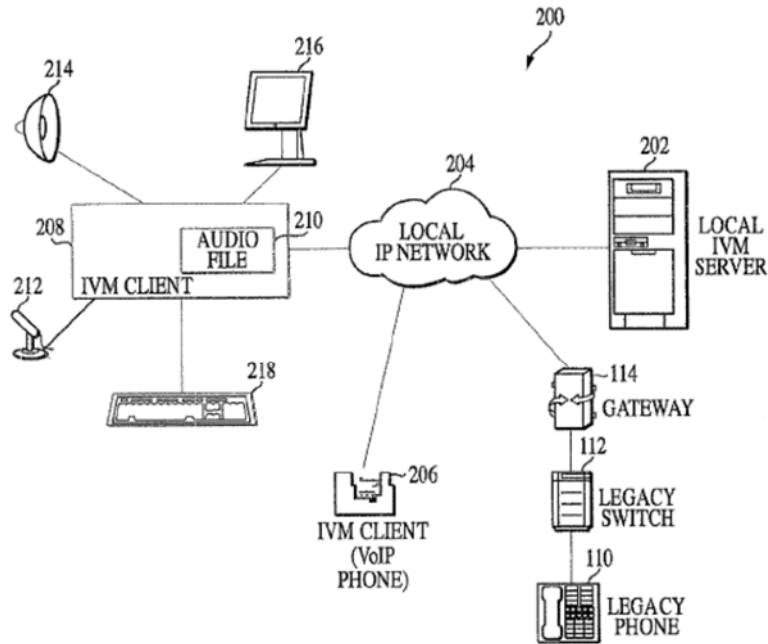


FIG. 2

As illustrated in Figure 2, local packet-switched IP network 204, which may be a local area network (“LAN”), “interconnects” IVM clients 206, 208 and legacy telephone 110 to local IVM server 202. *Id.* at 6:46–65; *see id.* at 7:19–20, 7:57–61. Local IVM server 202 enables instant voice messaging functionality over network 204. *Id.* at 7:57–61.

In “record mode,” IVM client 208 “displays a list of one or more IVM recipients,” provided and stored by local IVM server 202, and the user selects recipients from the list. *Id.* at 7:53–55, 7:61–67. IVM client 208 then transmits the selections to IVM server 202 and “records the user’s

speech into . . . digitized audio file 210 (i.e., an instant voice message).” *Id.* at 8:1–7.

When the recording is complete, IVM client 208 transmits audio file 210 to local IVM server 202, which delivers the message to the selected recipients via local IP network 204. *Id.* at 8:11–25. “[O]nly the available IVM recipients, currently connected to . . . IVM server 202, will receive the instant voice message.” *Id.* at 8:29–30. IVM server 202 “temporarily saves the instant voice message” for any IVM client that is “not currently connected to . . . local IVM server 202 (i.e., is unavailable)” and “delivers it . . . when the IVM client connects to . . . local IVM server 202 (i.e., is available).” *Id.* at 8:30–35; *see id.* at 9:13–17. Upon receiving the instant voice message, the recipients can audibly play the message. *Id.* at 8:25–28.

C. Illustrative Claims

Of the challenged claims, claims 1–3 are independent. Those claims are reproduced below:

1. A method for instant voice messaging over a packet-switched network, the method comprising:
 - generating an instant voice message, wherein generating includes recording the instant voice message in an audio file and attaching one or more files to the audio file;
 - transmitting the instant voice message having one or more recipients;
 - receiving an instant voice message when a recipient is available; and
 - receiving a temporarily stored instant voice message when a recipient becomes available, wherein the instant voice message is temporarily stored when at least one recipient is unavailable.
2. A method for instant voice messaging over a packet-switched network, the method comprising:

- receiving a list of nodes within the packet-switched network, the list of nodes including a connectivity status of each node, said connectivity status being available and unavailable, wherein a node within the list is adapted to be selected as a recipient of an instant voice message;

- displaying said list of nodes;

- transmitting the instant voice message having one or more recipients;

- receiving an instant voice message when a recipient is available; and

- receiving a temporarily stored instant voice message when a recipient becomes available, wherein the instant voice message is temporarily stored when at least one recipient is unavailable.

3. A method for instant voice messaging over a packet-switched network, the method comprising:

- generating an instant voice message; and

- controlling a method of generating the instant voice message based upon a connectivity status each recipient;

- transmitting the instant voice message having one or more recipients;

- receiving an instant voice message when a recipient is available; and

- receiving a temporarily stored instant voice message when a recipient becomes available, wherein the instant voice message is temporarily stored when at least one recipient is unavailable.

Ex. 1001, 23:55–24:29.

D. Asserted Grounds of Unpatentability

Petitioner asserts four grounds of unpatentability (Pet. 6):

Challenged Claims	Basis	Reference(s)
1–6, 8, 12, 13	§ 102(b)	Zydney ²
2–6, 8, 12, 13	§ 103(a)	Zydney and Gralla ³
7, 9–11, 14, 15	§ 103(a)	Zydney, Gralla, and Okano ⁴
7, 10	§ 103(a)	Zydney, Gralla, and Ereksen ⁵

Petitioner also relies on a Declaration of Paul S. Min, Ph.D., filed as Exhibit 1003.

III. DISCUSSION

A. Claim Construction

In an *inter partes* review, claim terms in an unexpired patent are given their broadest reasonable interpretation (“BRI”) in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b); *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016) (upholding the use of the BRI standard as the claim interpretation standard to be applied in *inter partes* reviews). We presume a claim term carries its plain meaning, which is the meaning customarily used by those of skill in the relevant art at the

² Zydney et al., WO 01/11824 A2, published Feb. 15, 2001 (Ex. 1004).

³ Preston Gralla, *How the Internet Works* (6th ed. 2002) (Ex. 1005).

⁴ Okano et al., US 6,031,915, issued Feb. 29, 2000 (Ex. 1006).

⁵ Ereksen et al., WO 01/65786 A1, published Sept. 7, 2001 (Ex. 1007).

time of the invention. *Trivascular, Inc. v. Samuels*, 812 F.3d 1056, 1062 (Fed. Cir. 2016). 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).

Consistent with the above principles, Petitioner contends that all claim terms of the '747 patent should be given their plain meaning under the BRI standard, with the exception that Petitioner contends that the BRI of “list of nodes” and “node,” as recited in claim 2, “may not be entirely clear.”

Pet. 11. Petitioner asserts that those specific terms “do not appear in the specification of the '747 patent” and “were [not] . . . substantively discussed during prosecution of the '747 patent,” but that the surrounding claim language “suggests that a ‘node’ is simply a ‘recipient.’” *Id.* at 11.

According to Petitioner, that interpretation “is consistent with the position Patent Owner has taken in certain district court proceedings, asserting that the term ‘node’ means ‘potential recipient.’” *Id.* at 11–12 (citing Ex. 1013, 14 (Joint Claim Construction Statement, at Ex. A, p. 4 ¶ 5, *Uniloc USA, Inc. v. Samsung Elecs. Am., Inc.*, No. 2:16-cv-00642-JRG)). Arguing that “the broadest reasonable interpretation ‘must construe the claim language in a way that at least encompasses the broadest interpretation of the claim language for purposes of infringement,’” Petitioner “asks that Patent Owner’s construction be adopted here” for purposes of this proceeding. *Id.* at 12 (quoting *Ex parte Schulhauser*, Appeal No. 2013-007847, slip op. at 9 (PTAB Apr. 28, 2016) (precedential)).

In the Preliminary Response, Patent Owner contends that “the Board need not presently construe any claim term in a particular manner in order to arrive at the conclusion that the Petition is substantively deficient.” Prelim. Resp. 20. With respect specifically to the term “node,” Patent Owner contends that “Petitioner fails to show that ‘node’ requires an express construction to resolve the issues here” and that “the absence of an express definition [in the ’747 patent] is not a legitimate rationale for adopting an unreasonably broad construction.” *Id.* at 20–21. In the context of claim 2, according to Patent Owner, “a node is a recipient device connected to and able to communicate over a packet-switched network.” *Id.* at 22. Based on the language of claim 2 and consistent with the specification of the ’747 patent, Patent Owner further contends, “a node is a device, such as a computer, laptop, or other device,” not a software agent or a person. *Id.* at 22–23. According to Patent Owner, “[i]f a ‘node’ were a person, which it isn’t, the claimed connectivity statuses of ‘available’ and ‘unavailable’ [recited in claim 2] would refer to alternative statuses of a person, as opposed to the person’s device.” *Id.* at 23. Moreover, Patent Owner contends, “[t]he ’747 Patent consistently refers to a ‘recipient’ as a receiving device.” *Id.* at 22 (citing Ex. 1001, 2:66–67, 3:53–54, 7:61–65, 8:25–28, 8:30–32).

Having considered the parties’ respective arguments and cited evidence, we conclude, particularly in view of Patent Owner’s proposed construction in related litigation, that “node” is properly construed for purposes of this Decision as encompassing a “potential recipient.” See Pet. 10–11; Ex. 1013, 14; *see also Facebook, Inc. v. Pragmatus AV, LLC*, 582 Fed. App’x 864, 869 (Fed. Cir. 2014) (“The broadest reasonable

interpretation of a claim term may be the same as or broader than the construction of a term under the *Phillips* standard. But it cannot be narrower.”).⁶ Although we acknowledge Patent Owner’s arguments that, for example, “Petitioner overlooks an important consequence of its proposed construction: a person may be ‘available’ or ‘unavailable’ for communication independent of the online/offline status of their communication device” and that “a person may inform a system that they are ‘unavailable,’ that they do not wish to be disturbed during resting hours, etc. regardless whether their recipient device is online during that time” (Prelim. Resp. 23), we do not understand Petitioner’s contentions of unpatentability in this case to be based on a reading of a “potential recipient”—and hence a “node”—to be “a person” (see Pet. 22–25 (discussion mapping Zydney to claim elements reciting “nodes”)).

⁶ We also note that, although the prior decisions are not binding on us in this case, we adopted the same construction in our decisions on institution in Cases IPR2017-01257 and IPR2017-01799 involving the ’747 patent. See *Facebook, Inc. v. Uniloc USA, Inc.*, Case IPR2017-01257, slip op. at 7–8 (PTAB Dec. 4, 2017) (Paper 8); *Samsung Electronics America, Inc. v. Uniloc Luxembourg S.A.*, Case IPR2017-01799, slip op. at 7–9 (PTAB Feb. 6, 2018) (Paper 9).

B. Analysis of Asserted Grounds of Unpatentability

1. Principles of Law

A claim is anticipated under 35 U.S.C. § 102 “only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros., Inc. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987). Moreover,

unless a reference discloses within the four corners of the document not only all of the limitations claimed but also all of the limitations arranged or combined in the same way as recited in the claim, it cannot be said to prove prior invention of the thing claimed and, thus, cannot anticipate under 35 U.S.C. § 102.

Net MoneyIN, Inc. v. VeriSign, Inc., 545 F.3d 1359, 1371 (Fed. Cir. 2008); *accord In re Arkley*, 455 F.2d 586, 587 (CCPA 1972).

A patent claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the claimed subject matter and the prior art are “such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” *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;⁷ and (4) objective evidence of

⁷ Petitioner’s declarant, Dr. Min, opines that a person of ordinary skill in the art of the ’747 patent “would have had at least an undergraduate degree in computer science, electrical engineering, or a related field, and at least two years of experience in the field of telecommunications devices and systems, or an equivalent advanced education in the field of telecommunications systems.” Ex. 1003 ¶ 24. Patent Owner does not dispute Dr. Min’s

nonobviousness, i.e., secondary considerations, when presented.⁸ *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). “To satisfy its burden of proving obviousness, a petitioner cannot employ mere conclusory statements. The petitioner 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). We analyze the asserted grounds with the principles stated above in mind.

2. *Anticipation of Claims 1–6, 8, 12, and 13 by Zydney*

a. *Overview of Zydney*

Zydney, entitled “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. 1004, [54], [57], 1:4–5.⁹ While acknowledging that e-mail and instant messaging systems were well-known text-based communication systems utilized by users of online 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.*

proffered assessment. To the extent necessary, we adopt Dr. Min’s assessment for purposes of this Decision.

⁸ Patent Owner does not contend in its Preliminary Response that any such secondary considerations are present.

⁹ Consistent with Petitioner’s usage, citations to Exhibit 1004 in this Decision refer to the original field and page numbers of the Zydney PCT publication rather than to the page numbers added by Petitioner.

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.

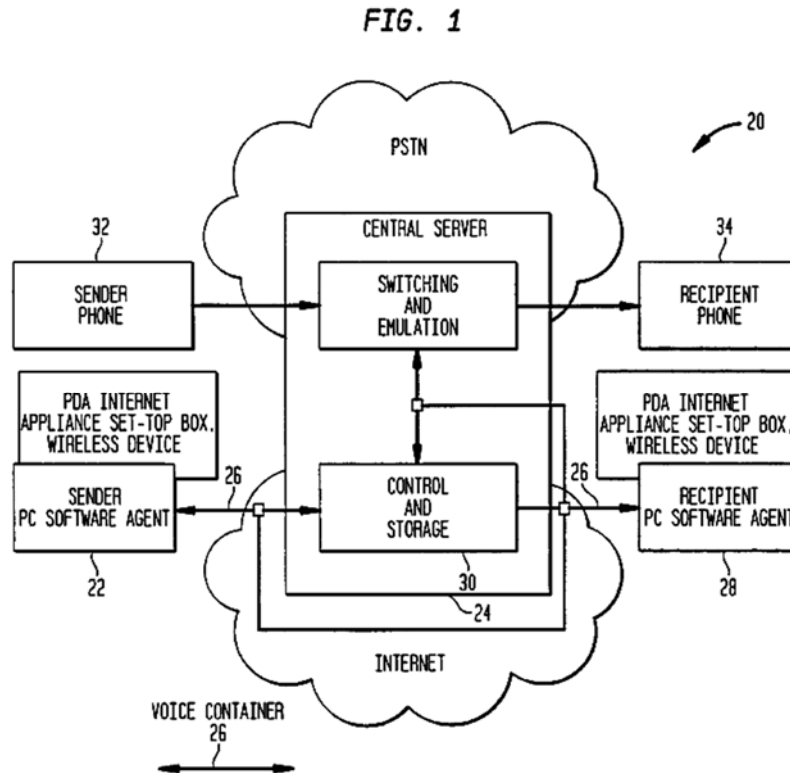


Figure 1, above, illustrates a high-level functional block diagram of Zydney’s system for voice exchange and voice distribution. *Id.* at 10:19–20. Referring to Figure 1, system 20 allows software agent 22, with a user interface, in conjunction with central server 24 to send messages using voice containers 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. *Id.* at 11:3–6.

In the use of Zydney’s system and method, the message originator selects one or more intended recipients from a list of names that have been previously entered into the software agent. Ex. 1004, 14:17–19. The agent permits distinct modes of communication based on the status of the recipient, including the “core states” of whether the recipient is online or offline and “related status information” such as whether the recipient does not want to be disturbed. *Id.* at 14:19–15:1. Considering the core states, the software agent offers the originator alternative ways to communicate with the recipient, the choice of which can be either dictated by the originator or automatically selected by the software agent, according to stored rules. *Id.* at 15:3–6. If the recipient is online, the originator can either begin a real-time “intercom” call, which simulates a telephone call, or a voice instant messaging session, which allows for an interruptible conversation. *Id.* at 15:8–10. If the recipient is offline, the originator can begin a voice mail conversation that either will be delivered the next time the recipient logs in or can be delivered to the recipient’s e-mail as a digitally encoded Multipurpose Internet Mail Extension (“MIME”) attachment. *Id.* at 15:15–17. Zydney explains that the choice of the online modes “depends on the activities of both parties, the intended length of conversation and the quality of the communications path between the two individuals, which is generally not controlled by either party,” and that the choice of the offline delivery options “is based on the interests of both parties and whether the recipient is

sufficiently mobile that access to the registered computer is not always available.” *Id.* at 15:10–14, 15:17–19.

Once the delivery mode has been selected, the originator digitally records messages for one or more recipients using a microphone-equipped device and the software agent. Ex. 1004, 16:1–3. The software agent compresses the voice and stores the file temporarily on the PC if the voice will be delivered as an entire message. *Id.* at 16:3–4. If the real-time “intercom” mode has been invoked, a small portion of the digitized voice is stored to account for the requirements of the Internet protocols for retransmission and then transmitted before the entire conversation has been completed. *Id.* at 16:4–7. Based on status information received from the central server, the agent then decides whether to transport the voice container to a central file system and/or to send it directly to another software agent using the IP address previously stored in the software agent. *Id.* at 16:7–10. If the intended recipient has a compatible active software agent online after log on, the central server downloads the voice recording almost immediately to the recipient. *Id.* at 16:10–12. The voice is uncompressed and the recipient can hear the recording through the speakers or headset attached to its computer. *Id.* at 16:12–14. The recipient can reply in a complementary way, allowing for near real-time communications. *Id.* at 16:14–15. If the recipient’s software agent is not online, the voice recording is stored in the central server until the recipient’s software agent is active. *Id.* at 16:15–17. In both cases, the user is automatically notified of available messages once the voice recordings have been downloaded to storage on their computer. *Id.* at 16:17–19. The central server coordinates with software agents on all computers continuously, updating addresses,

uploading and downloading files, and selectively retaining voice recordings in central storage. *Id.* at 16:19–21.

Zydney discloses that the voice container also has the ability to have other data types attached to it. Ex. 1004, 19:6–7. Formatting the container using 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
334	NO AUTOMATIC REPEAT
336	REPEAT TIMES
338	REPEAT SCHEDULE

Figure 3, above, illustrates an exemplary embodiment of Zydney's voice container structure, including voice data and voice data properties

components. Ex. 1004, 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.

b. Arguments and Analysis

i. Claims 1 and 13

Petitioner contends that Zydney discloses all limitations of independent claim 1 and dependent claim 13. Pet. 15–21, 35–37. With respect specifically to the claim 1 step of "generating an instant voice message, wherein generating includes recording the instant voice message in an audio file and attaching one or more files to the audio file," Petitioner contends, first, that "Zydney's system allows instant voice message originators . . . to 'digitally **record**[] messages,'" and that "[t]he recorded messages are placed into transmittable 'voice containers,' which Zydney teaches are '**a container object that** contains no methods, but **contains voice data** or voice data and voice data properties.'" *Id.* at 16 (quoting Ex. 1004, 12:6–8, 16:1–4). Relying on the testimony of Dr. Min, Petitioner asserts that a person of ordinary skill in the art "would have recognized that a 'container object' containing 'voice data' is a 'voice message,'" and "[t]hus, Zydney's 'voice containers' are the claimed 'instant voice messages.'" *Id.* (citing

Ex. 1003 ¶ 47). “As for the ‘voice data’ contained within the message,” Petitioner asserts, “a digital recording of a user’s voice is an ‘audio file’”; “Zydney teaches that such data can be encoded in an MP3 (MPEP [sic] Layer-3) format,” which “is an audio file format”; and “[t]hus, Zydney teaches the feature of ‘recording the instant voice message in an audio file’” *Id.* at 17 (citing Ex. 1003 ¶ 48; Ex. 1004, 11:14–12:23, 21:14–22:2, cl. 19). Finally with regard to this step, Petitioner asserts that “Zydney also teaches attaching files to its voice containers,” citing as one example that “Zydney teaches appending ‘multimedia attachments’ to its voice containers” *Id.* at 17–18.

Petitioner further contends that “[t]he ’747 patent does not explain exactly how one or more files are attached to an audio file of the instant message,” but “[r]ather, the ’747 patent merely states in conclusory fashion that various files can be ‘attached to the instant message,’” and “[t]hus, under the BRI, the ‘attaching’ aspect of th[is] step . . . must at least encompass an operation that provides the end result described by the ’747 patent of an instant voice message, which comprises an audio file, and at least one other file attached to the instant voice message.” *Id.* at 17 n.1 (citing Ex. 1001, 12:20–28). Thus, Petitioner contends, “Zydney discloses the feature of ‘attaching one or more files to the audio file’ as recited” *Id.* at 18.

In response to Petitioner’s contentions, Patent Owner argues that “[t]he instant Petition is largely duplicative of IPR2017-[0]1257, and IPR2017-[0]1799,” and that “while the petitions are not identical, the reliance on *Zydney* is the same.” Prelim. Resp. 23. Patent Owner further contends that the Board’s analysis and conclusions in denying the petitions

in IPR2017-01257, as well as in Cases IPR2017-01523 and IPR2017-01524, concerning a patent related to the '747 patent, apply equally here. *Id.*

We agree with Patent Owner that our reasoning in denying the petition in IPR2017-01257, wherein claim 1 was asserted to have been obvious over Zydney, is applicable here as well. In that case, we were not persuaded that the petitioner there had established sufficiently that Zydney teaches or suggests “attaching one or more files to the audio file,” as recited in claim 1, to demonstrate a reasonable likelihood of succeeding on the asserted ground. We agreed with Patent Owner in that case that the portions of Zydney now relied upon by Petitioner as allegedly disclosing this limitation instead disclose attaching additional files (e.g., a multimedia file) to a voice container, rather than to an audio file as recited in claim 1. See Case IPR2017-01257, slip op. at 18 (PTAB Dec. 4, 2017) (Paper 8) (“1257 DI”); Ex. 1004, 19:2–12, Figs. 16–18. We further observed that Zydney discloses that a voice container may “contain[] voice data or voice data and voice data properties” (Ex. 1004, 12:6–8) and also “has the ability to have other data types attached to it” (*id.* at 19:6), but we explained that “[e]ven if we regard Zydney’s voice data as being an audio file, however, we are not persuaded that Zydney’s disclosure that another file may be attached to a voice container that contains such an audio file teaches or suggests attaching that other file to the audio file.” 1257 DI 18–19. That conclusion applies *a fortiori* in this case, where Petitioner is alleging Zydney *anticipates* claim 1.

Petitioner maps Zydney’s voice container onto certain instances of the “instant voice message” recited in claim 1 (*see, e.g.*, Pet. 16), but that mapping breaks down where claim 1 recites “generating [the instant voice

message] includes recording the instant voice message in an audio file,” because Zydney does not teach or suggest that the voice container is “record[ed] . . . in an audio file.” As did the petitioner in IPR2017-01257, Petitioner appears to recognize the same, arguing that Zydney teaches the feature of “recording the *instant voice message* in an audio file” based on alleged teaching in Zydney that voice data can be encoded in an MP3 format, rather than, for example, arguing that the generation of a voice container in Zydney includes recording the *voice container* in an audio file. See Pet. 17 (citing Ex. 1004, 11:14–12:23, 21:14–22:2, claim 19).

We also acknowledge Petitioner’s contention that “under BRI, ‘attaching one or more files to an audio file’ encompasses attaching at least one other file to an instant voice message,” based on an alleged failure of the ’747 patent to explain “exactly how files are attached to an audio file of the instant message.” *Id.* at 17 n.1, 18. Notwithstanding Petitioner’s citation of *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996), for the proposition that “a construction that excludes the preferred embodiment ‘is rarely, if ever, correct’” (*id.* at 17 n.1), we disagree with the premise that the ’747 patent’s statement that files can be “attached to the instant message” means the preferred embodiment of the ’747 patent requires attaching such files to anything other than the recited “audio file.” Indeed, because claim 1 explicitly recites “recording the instant voice message in an audio file,” attaching files to the instant voice message *recorded in the audio file* would necessarily involve attaching such files “to the audio file.” Where Petitioner’s argument breaks down, however, as stated above, is in its failure to show that Zydney’s voice container, which Petitioner maps to the recited “instant voice message,” is “recorded in an

audio file.” Without that link, Petitioner does not persuade us that Zydney’s disclosure of attaching files to the voice container discloses attaching files to an audio file.

For the reasons given, we are not persuaded by Petitioner’s evidence that Zydney discloses “generating an instant voice message, wherein generating includes recording the instant voice message in an audio file and attaching one or more files to the audio file,” as recited in claim 1. Accordingly, we conclude that Petitioner has not established a reasonable likelihood that it would prevail in showing that either claim 1 or claim 13, which depends from claim 1 and accordingly includes the same limitation, is anticipated by Zydney.

ii. Claims 2 and 12

Petitioner contends that Zydney discloses all limitations of independent claim 2 and dependent claim 12. Pet. 21–25, 34–35. With respect specifically to the claim 2 step of “receiving a list of nodes within the packet-switched network, the list of nodes including a connectivity status of each node, said connectivity status being available and unavailable, wherein a node within the list is adapted to be selected as a recipient of an instant voice message,” Petitioner argues that “Zydney’s software agent allows a user . . . to ‘select[] one or more intended recipients from a list of names . . . [and] further teaches that the list of potential recipients (i.e., the claimed ‘list of nodes’ . . .) provided to the software agents by the central server conveys the ‘connectivity status’ of the potential recipients in the list.” *Id.* at 22–23 (citing Ex. 1004, 14:17–19; Ex. 1003 ¶ 63). In particular, according to Petitioner, “Zydney teaches that its central server maintains the connectivity status of all software agents” and “that its central server will

provide the list of potential recipients and their connectivity status to the software agents in the network.” *Id.* at 23 (citing Ex. 1004, 13:12–14, 14:6–13, 14:20–22, 16:7–10, 26:10–14, 32:9–17, Fig. 2).

Petitioner further contends that Zydney also teaches that the connectivity status of each recipient software agent . . . can be ‘available’ or ‘unavailable,’” citing statements in Zydney that recipient status conveyed to the software agent by the central server “includes the core states of whether the recipient is online or offline” and that “[s]oftware agents may also be in other states that will be communicated to the other logged on software agents . . . : Available . . . ; Not Available . . . ; [and] Not logged on” *Id.* at 23–24 (citing Ex. 1004, 14:20–15:1, 32:18–33:2. According to Petitioner, “[a]t a minimum, Zydney’s ‘available’ state corresponds to the claimed ‘available’ connectivity status, while Zydney’s ‘Not logged on’ (or ‘offline’) state corresponds to the claimed ‘unavailable’ connectivity status.” *Id.* at 24 (citing Ex. 1003 ¶¶ 63, 82, 84). Finally with respect to this step, Petitioner asserts that Zydney “plainly teaches” that “a node within the list is adapted to be selected as a recipient of an instant voice message,” based on Zydney’s disclosure that “[t]o use the present invention system and method for voice exchange and voice distribution, the originator selects one or more intended recipients from a list of names that have been previously entered into the software agent.” *Id.* (quoting Ex. 1004, 14:17–19; citing Ex. 1003 ¶ 64).

On the record before us, Petitioner has not established sufficiently that Zydney discloses “receiving a list of nodes . . . , the list of nodes including a connectivity status of each node,” as recited in claim 2, to demonstrate a reasonable likelihood of succeeding in showing that claims 2 and 12 are

anticipated by Zydney. Claim 2 explicitly recites “the list of nodes” that is received as “including a connectivity status of each node,” and separately recites “displaying said list of nodes.” Ex. 1001, 24:3–5, 24:8. Petitioner, however, has not persuasively identified any entity or device in Zydney that receives a list that includes a connectivity status of each node.

Notwithstanding Petitioner’s assertions that Zydney teaches that a “list of potential recipients . . . provided *to the software agents by the central server* conveys ‘connectivity status’ of the potential recipients in the list” and that “Zydney teaches that its central server will provide the list of potential recipients and connectivity status to the software agents in the network” (Pet. 22–23 (emphasis added)), we find that the user’s software agent in Zydney supplies and maintains, rather than receives, any list of potential recipients. See Ex. 1004, 14:17–19 (“To use the present invention system and method . . . , the originator selects one or more intended recipients from a list of names that have been previously entered into the software agent.”), Fig. 7 (disclosing “originator(s): . . . selecting one or more recipients from a list maintained by the originator and present visually by the agent”). Thus, although the portions of Zydney cited by Petitioner disclosing that the central server can “maintain and provide the status of all software agents” and may “frequently convey [such status] to the software agent” (Ex. 1004, 13:12–14, 14:20–22 (cited in Pet. 23)) may suggest that the software agents receive connectivity status of members of the list already maintained by the software agent, they do not disclose that the software agents receive *a list*

including both potential recipients and their connectivity status.¹⁰ Further, although Zydney discloses that the message originator software agent receives status information and also discloses displaying such information visually to the user in a list format, Petitioner points to no disclosure that a “list . . . including a connectivity status of each node” is “received,” as required by claim 2, in addition to being “displayed,” as separately required by the claim. *See, e.g.,* Ex. 1004, 14:17–23, Fig. 7.

For the reasons given, we are not persuaded by Petitioner’s evidence that Zydney discloses “receiving a list of nodes . . . , the list of nodes including a connectivity status of each node,” as recited in claim 2. Accordingly, we conclude that Petitioner has not established a reasonable likelihood that it would prevail in showing that either claim 2 or claim 12, which depends from claim 2 and accordingly includes the same limitation, is anticipated by Zydney. We recognize that we previously instituted trial with respect to claims 2 and 12 over the combined teachings of Zydney with another reference (Griffin et al., US 8,150,922 B2) in Case IPR2017-01799. In that case, however, the petitioner proffered expert testimony and

¹⁰ Although Petitioner does not argue that Zydney’s central server’s receipt of the list of potential recipients from the software agent might instead disclose this limitation, we note that such an argument would also be unavailing. To the extent the list of potential recipients is transmitted to—and thus received by—Zydney’s central server, Petitioner has not shown that Zydney discloses that such a list, as received by the central server, includes a connectivity status for each member of the list. Indeed, if the user/message originator already had the status of other software agents to provide to Zydney’s central server, there would be no apparent reason for the central server to “track and maintain the status of all software agents” and to convey to the message originator’s software agent “[t]he status of all recipients entered into the software agent.” *See* Ex. 1004, 14:8–9, 14:20–22.

advanced arguments, materially different from those presented here, which when analyzed together with the information presented in the preliminary response we deemed sufficient to establish a reasonable likelihood that “receiving a list of nodes . . . , the list of nodes including a connectivity status of each node” would have been obvious to a person of ordinary skill in the art over the combination asserted there.

iii. Claims 3–6 and 8

Petitioner contends that Zydney discloses all limitations of independent claim 3 and dependent claims 4–6 and 8. Pet. 26–34. With respect specifically to the first two steps recited in claim 3, Petitioner argues that “Zydney teaches ‘generating an instant voice message’ in the form of a ‘voice container,’” and that the choice between Zydney’s “pack and send” and “intercom” communication modes can be made “based on the status of the recipient”—“[f]or example, Zydney teaches that the intercom mode can be executed when the recipient is online (e.g., available) while the pack and send mode can be executed when the recipient is either online or offline (e.g., unavailable)” —thus “disclos[ing] the claimed step of ‘controlling a method of generating the instant voice message based upon a connectivity status [of] each recipient.’” *Id.* at 26–27 (citing Ex. 1004, 1:20–22, 10:14–18, 12:6–8, 14:17–16:21; Ex. 1003 ¶¶ 46–50, 73–74).

Petitioner further contends, “[e]ven if Patent Owner (improperly) argues that [the controlling step] requires the ‘method of generating the instant voice message’ to be chosen/selected/controlled automatically by a computing device (e.g., a client or server) and not manually by a user, Zydney’s disclosure meets this overly narrow interpretation,” because, “[f]or example, Zydney explains that the choice of ‘alternative ways to

communicate with the recipient . . . can either be dictated by the originator or automatically selected by the software agent, according to rules that are stored.” *Id.* at 27 (citing Ex. 1003 ¶ 75; Ex. 1004, 15:4–7).

On the record before us, we determine that Petitioner has not established sufficiently that Zydney discloses “controlling a method of generating [an] instant voice message based upon a connectivity status [of] each recipient,” as recited in claim 3, to demonstrate a reasonable likelihood of succeeding in showing that claim 3 is anticipated by Zydney. The cited portions of Zydney disclose that the instant voice message is generated as a voice container that may be delivered via different communication modes. However, Petitioner does not show that the selection between those communication modes discloses control of *generating* the instant voice message. In other words, regardless whether the “pack and send” or the “intercom” communication mode is selected, Petitioner identifies only a single method of generating an instant voice message, namely, “‘generating an instant voice message’ in the form of a ‘voice container,’” and Petitioner does not persuasively explain how generation of the voice container is controlled by the selection of one or the other communication mode.

We acknowledge Dr. Min’s testimony relied upon by Petitioner, including that “Zydney . . . discloses that the instant voice message is generated in different manners in [the pack and send and intercom] modes of operation,” in support of which he testifies that “in the ‘real time “intercom” mode’ Zydney discloses that ‘[a] small portion of the digitized voice is stored to account for the requirements of the Internet protocols for retransmission and then transmitted before the entire conversation has been completed,’” and that “[i]n at least some embodiments, in the pack and send

mode, the entire instant voice message is recorded prior to transmission.” Ex. 1003 ¶ 73 (quoting Ex. 1004, 16:4–7; citing Ex. 1004, 11:1–13, 15:8–16:17). Nonetheless, neither Petitioner nor Dr. Min explains sufficiently for purposes of demonstrating anticipation how the cited portions of Zydney disclose that the method of generating the voice container differs depending on the selection of the mode. We note in this regard that the quoted portion of Zydney states that “a small portion of the digitized voice . . . is transmitted before the entire *conversation* has been completed” when intercom mode is invoked, which does not necessarily mean any portion of the digitized voice is transmitted before *a given message within that conversation* has been completed. Ex. 1004, 16:4–7 (emphasis added). By the same token, to the extent an “entire instant voice message”¹¹ might be recorded prior to transmission in the pack and send mode, that would not preclude transmitting portions of a message “before the entire *conversation* has been completed.” Indeed, Figure 7 of Zydney suggests that messages may be partitioned into smaller containers for transmission irrespective of the selected mode. See Ex. 1004, Fig. 7 (“1.1.6. Partitioning long voices into small containers to allow for faster delivery of containers between originators and recipients”). Regardless, even if we were to read Zydney as disclosing that voice containers would contain smaller chunks of voice data when the intercom mode is invoked than when pack and send mode is invoked (a contention the Petition does not explicitly state), that would not

¹¹ We understand Dr. Min’s reference to an “instant voice message” in this context to refer to a voice data file, despite Petitioner’s and Dr. Min’s otherwise consistent mapping of Zydney’s voice container to the instant voice message recited in the challenged claims.

necessarily mean that the *method of generating* the voice container is any different in the intercom mode than in the pack and send mode, such that we could conclude that Petitioner has proffered evidence of anticipation by Zydney performing the required “*controlling* a method for generating.”

For the reasons given, we are not persuaded by Petitioner’s evidence that Zydney discloses “controlling a method of generating [an] instant voice message based upon a connectivity status [of] each recipient,” as recited in claim 3. Accordingly, we conclude that Petitioner has not established a reasonable likelihood that it would prevail in showing that either claim 3 or claims 4–6 and 8, which depend from claim 3 and accordingly include the same limitation, are anticipated by Zydney.

3. *Obviousness of Claims 2–6, 8, 12, and 13 over Zydney and Gralla*

a. *Claims 2 and 12*

Petitioner argues that, to the extent Zydney’s teachings are deemed insufficient by the Board with respect to the claim 2 step of “displaying said list of nodes,” that step would have been obvious in view of Gralla. Pet. 39–41. Regarding the claim 2 step of “receiving a list of nodes within the packet-switched network, the list of nodes include a connectivity status of each node,” however, Petitioner relies only on its arguments based on Zydney alone, discussed above, in connection with its assertion that claim 2 is unpatentable over the combination of Zydney and Gralla. *Id.* at 38. For the reasons stated in our discussion of those arguments in Section III.B.2.b.ii above, we conclude that Petitioner has not demonstrated a reasonable likelihood of prevailing in establishing that either claim 2 or its dependent claim 12 is unpatentable over the combined teachings of Zydney and Gralla.

b. Claims 3–6 and 8

Petitioner argues that, to the extent Zydney’s teachings are deemed insufficient by the Board with respect to the claim 3 step of “controlling a method of generating the instant voice message based upon a connectivity status [of] each recipient” “under a narrow construction requiring the ‘method of generating . . .’ to be chosen/selected/controlled automatically by a computing device . . . and not manually by a user),” that step would have been obvious in view of Gralla. Pet. 42–43 (citing Ex. 1003 ¶¶ 112–115). In particular, Petitioner contends, “Gralla describes computer software for facilitating PC phone calls on the Internet,” wherein the software “generates compressed digital voice data as the user talks into a microphone.” *Id.* at 42 (citing Ex. 1005, 132–33).¹² According to Petitioner, “Gralla’s software . . . automatically ‘determines the speed of the Internet connection’ and varies the sound quality of the recorded voice accordingly.” *Id.* (quoting Ex. 1005, 133). Accordingly, Petitioner contends, “Gralla teaches a [person of ordinary skill in the art] that computer software can automatically vary the manner in which it generates digital voice data based on a predetermined control variable.” *Id.* at 43 (citing Ex. 1003 ¶ 113). Further, Petitioner contends, “[w]hile Zydney concerns a different control variable—**recipient** connectivity status (e.g., online/offline), as opposed to **sender** connectivity status (e.g., high/low connection speed)—a POSITA would readily appreciate that Gralla’s concept of **automatically** controlled voice data

¹² Citations to Exhibit 1005 in this Decision refer to the original page numbers of the Gralla book rather than to the page numbers added by Petitioner.

generation would also improve Zydney's similar system and method by removing a **manual** step that would otherwise burden the user," and "[r]ecognition of this predictable improvement would have motivated the POSITA to modify Zydney's system and method in accordance with Gralla's teachings." *Id.* (citing Ex. 1003 ¶ 113; MPEP 2143(I), 2144).

On the record before us, Petitioner has not sufficiently established that the combination of Zydney and Gralla teaches or suggests the step of "controlling a method of generating [an] instant voice message based upon a connectivity status [of] each recipient," so as to demonstrate a reasonable likelihood of succeeding in showing that claim 3 is unpatentable over the combination. As set forth in Section III.B.2.b.iii above, the deficiency of Zydney regarding this step is not with respect to whether the method of generating must be "chosen/selected/controlled automatically by a computing device . . . and not manually by a user," but rather that Zydney does not disclose that a method of generating an instant voice message may be controlled—manually or otherwise—based upon connectivity status of each recipient. Thus, even if Zydney's selection between pack and send and intercom communication modes were made automatic based on Gralla's teaching of automatically varying message sound quality, that still would not teach or suggest controlling a method of generating the instant voice message based upon a connectivity status of each recipient.

Further, even if we were to accept Petitioner's assertions that (1) Gralla's disclosure of varying message sound quality based on a sender's Internet connection speed would have taught a person of ordinary skill in the art that computer software can automatically vary the manner in which digital voice data is generated, based on a predetermined control variable,

and (2) high/low connection speed connotes “connectivity status” (see Pet. 42–43), we are not persuaded that Gralla teaches or suggests controlling a method of generating an instant voice message based upon a connectivity status of each *recipient*, as required by claim 3. Notably, whereas Petitioner suggests that application of Gralla’s techniques to Zydney’s system would have been a “use of a known technique to improve similar devices (methods, or products) in the same way” (see *id.* at 43), Dr. Min’s testimony cited in support focuses on whether it would have been obvious to “remov[e] a **manual** step” and “**automatically** control voice data generation,” rather than on whether it would have been obvious to control a method of generating a message based on recipients’ connectivity statuses (see Ex. 1003 ¶¶ 114, 115).

Accordingly, we are not persuaded that Gralla cures Zydney’s deficiency with respect to claim 3, and we conclude, therefore, that Petitioner has not established a reasonable likelihood that it would prevail in showing that either claim 3 or claims 4–6 and 8, which depend from claim 3 and accordingly include the same limitation, are unpatentable over the combination of Gralla and Zydney.

c. Claim 13

Claim 13 depends from claim 1 and further recites “displaying an indication that an instant voice message has been received; separating the instant voice message into an audio file and one or more files; and playing the audio file.” Ex. 1001, 25:6–26:3. Petitioner argues that, to the extent Zydney’s teachings are deemed insufficient by the Board with respect to the “separating” step of claim 13, that step would have been obvious in view of Gralla. Pet. 52–53. Nonetheless, Petitioner does not allege that Gralla

remedies the deficiency of Zydney identified in Section III.B.2.b.i above with respect to the step of “generating an instant voice message, wherein generating includes recording the instant voice message in an audio file and attaching one or more files to the audio file,” as recited in claim 1 from which claim 13 depends. Accordingly, we conclude for the same reasons as set forth in Section III.B.2.b.i that Petitioner also has not demonstrated a reasonable likelihood of prevailing in establishing that claim 13 is unpatentable over the combined teachings of Zydney and Gralla.

4. Remaining Grounds

Claims 7, 9–11, 14, and 15 depend directly or indirectly from claim 3. Petitioner contends that the further limitations set forth in each of those claims were taught or suggested by the combination of Zydney, Gralla, and Okano, and that the limitations of claims 7 and 10 also were taught or suggested by the combination of Zydney, Gralla, and Erikson. Pet. 54–71.

Nonetheless, Petitioner does not allege that Okano or Erikson remedies the deficiency of the Zydney/Gralla combination identified in Section III.B.3.b above with respect to the step of “controlling a method of generating the instant voice message based upon a connectivity status [of] each recipient,” as recited in claim 3. Accordingly, we conclude for the same reasons as set forth in Section III.B.3.b that Petitioner also has not demonstrated a reasonable likelihood of prevailing in establishing either that any of claims 7, 9–11, 14, and 15 are unpatentable over the combined teachings of Zydney, Gralla, and Okano or that claim 7 or claim 10 is unpatentable over the combined teachings of Zydney, Gralla, and Erikson.

IV. ADDITIONAL PATENT OWNER ARGUMENTS

Patent Owner has advanced a variety of additional arguments concerning the repeated challenges to the '747 patent and related patents asserted by other parties, an alleged failure on the part of Petitioner to name all real parties in interest, and the constitutionality of *inter partes* review proceedings. Prelim. Resp. 1–17, 29. We have considered those arguments, but in view of our determination not to institute trial on the basis of Petitioner's substantive grounds, we do not address those arguments further herein.

V. CONCLUSION

In summary, we do not institute *inter partes* review on any challenged claim as shown below:

Ground	Basis	Claim(s) Challenged	Claims Instituted
1	§ 102(b) Zydney	1–6, 8, 12, 13	None
2	§ 103(a) Zydney and Gralla	2–6, 8, 12, 13	None
3	§ 103(a) Zydney, Gralla, and Okano	7, 9–11, 14, 15	None
4	§ 103(a) Zydney, Gralla, and Erikson	7, 10	None
Summary		1–15	None

VI. ORDER

Upon consideration of the record before us, it is, therefore,
ORDERED that the Petition is *denied*, and no trial or *inter partes*
review is instituted on any asserted ground.

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