

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MOTOROLA SOLUTIONS, INC.,
Petitioner,

v.

STA GROUP LLC,
Patent Owner.

IPR2023-01292
Patent 7,324,802 B2

Before MICHAEL J. FITZPATRICK, DAVID C. McKONE, and
KEVIN C. TROCK, *Administrative Patent Judges*.

McKONE, *Administrative Patent Judge*.

DECISION

Granting Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

Motorola Solutions, Inc., (“Petitioner”) filed a Petition (Paper 1, “Pet.”) requesting *inter partes* review of claims 1–21 of U.S. Patent No. 7,324,802 B2 (Ex. 1001, “the ’802 patent”). STA Group LLC (“Patent Owner”) filed a Preliminary Response to the Petition. Paper 7 (“Prelim. Resp.”). Petitioner filed a Preliminary Reply to the Preliminary Response (Paper 9, “Prelim. Reply”) and Patent Owner filed a Preliminary Sur-reply to the Preliminary Reply (Paper 10, “Prelim. Sur-reply”).

We have authority to determine whether to institute an *inter partes* review. *See* 35 U.S.C. § 314 (2016); 37 C.F.R. § 42.4(a) (2019). The standard for instituting is set forth in § 314(a), which provides that an *inter partes* review may not be instituted “unless . . . there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” For the reasons explained below, we institute an *inter partes* review of the ’802 patent.

II. BACKGROUND

A. *Related Proceedings*

The parties identify *STA Group LLC v. Motorola Solutions, Inc.*, Case No. 2:22-cv-00381-JRG (E.D. Tex. filed Sept. 30, 2022) (“Texas case”) as related to this proceeding. Pet. ix; Paper 4, 1.

B. *The ’802 Patent*

The ’802 patent relates to managing communications in a wireless emergency communication system. Ex. 1001, 1:8–11. Emergency communication systems are used by emergency service providers such as

fire departments, police forces, and hospitals. *Id.* at 1:13–15. According to the '802 patent,

[e]ach emergency communication system supports a plurality of communication channels, wherein each channel may be dedicated to a group/locality/unit. For example, the fire department can allocate one channel to every school, or other public places such as shopping malls, so as to enable effective communication during an emergency.

This allocation of dedicated channels to different entities results in the possibility of multiple messages being received in the form of radio messages on different channels at one time. The receipt of multiple radio messages at one time creates confusion for an operator who needs to reply/act on each incoming radio message.

Id. at 1:15–27.

Figure 1 is reproduced below:

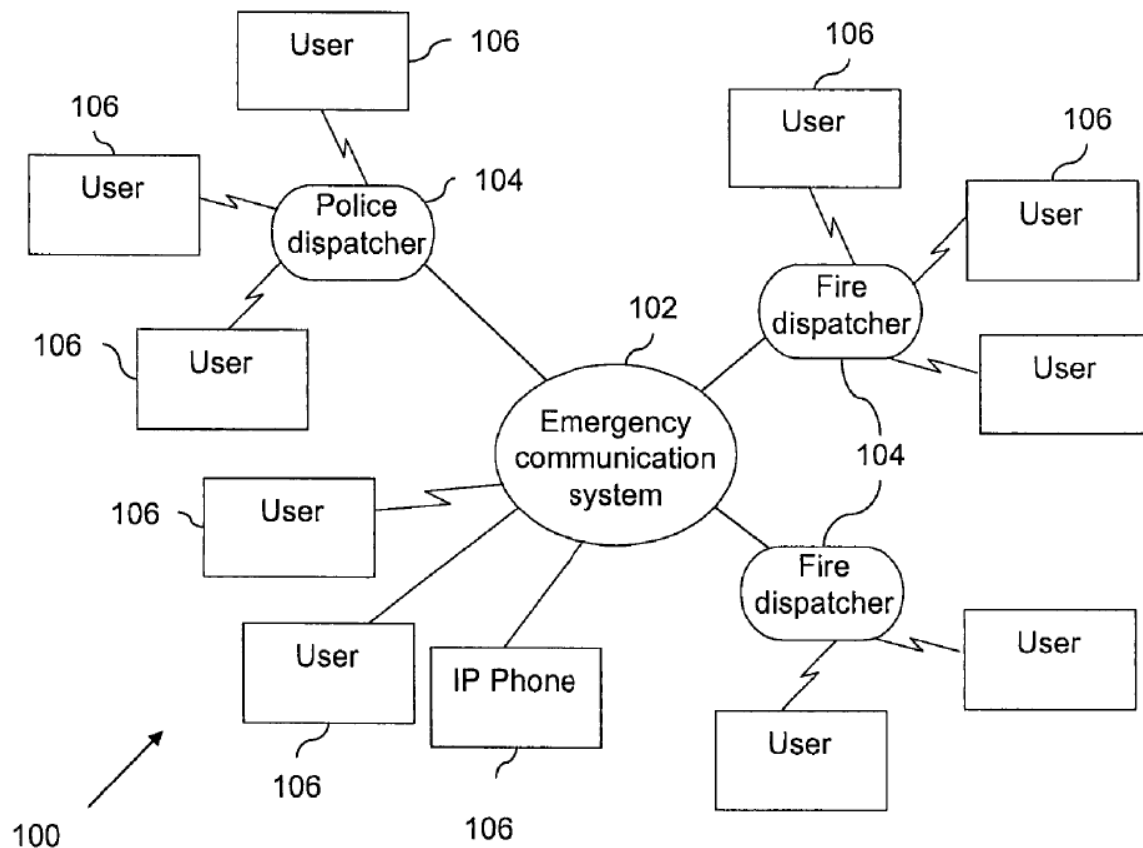


FIG. 1

Figure 1 is a block diagram of an emergency communication environment. *Id.* at 3:19–21, 3:52–54. Emergency communication system 102 receives messages on a plurality of communication channels from dispatchers 104, who handle the communication for emergency teams and respond to emergency messages received from users 106. *Id.* at 3:55–63. Emergency communication system 102 receives a plurality of simultaneous messages from separate users 106, resulting in messages overlapping in time. *Id.* at 4:6–9. Emergency communication system 102 plays a single highest priority radio message at one time and stores the remaining radio messages in a queue, based on their priorities, and subsequently plays the stored messages. *Id.* at 4:16–25.

Figure 3 is reproduced below:

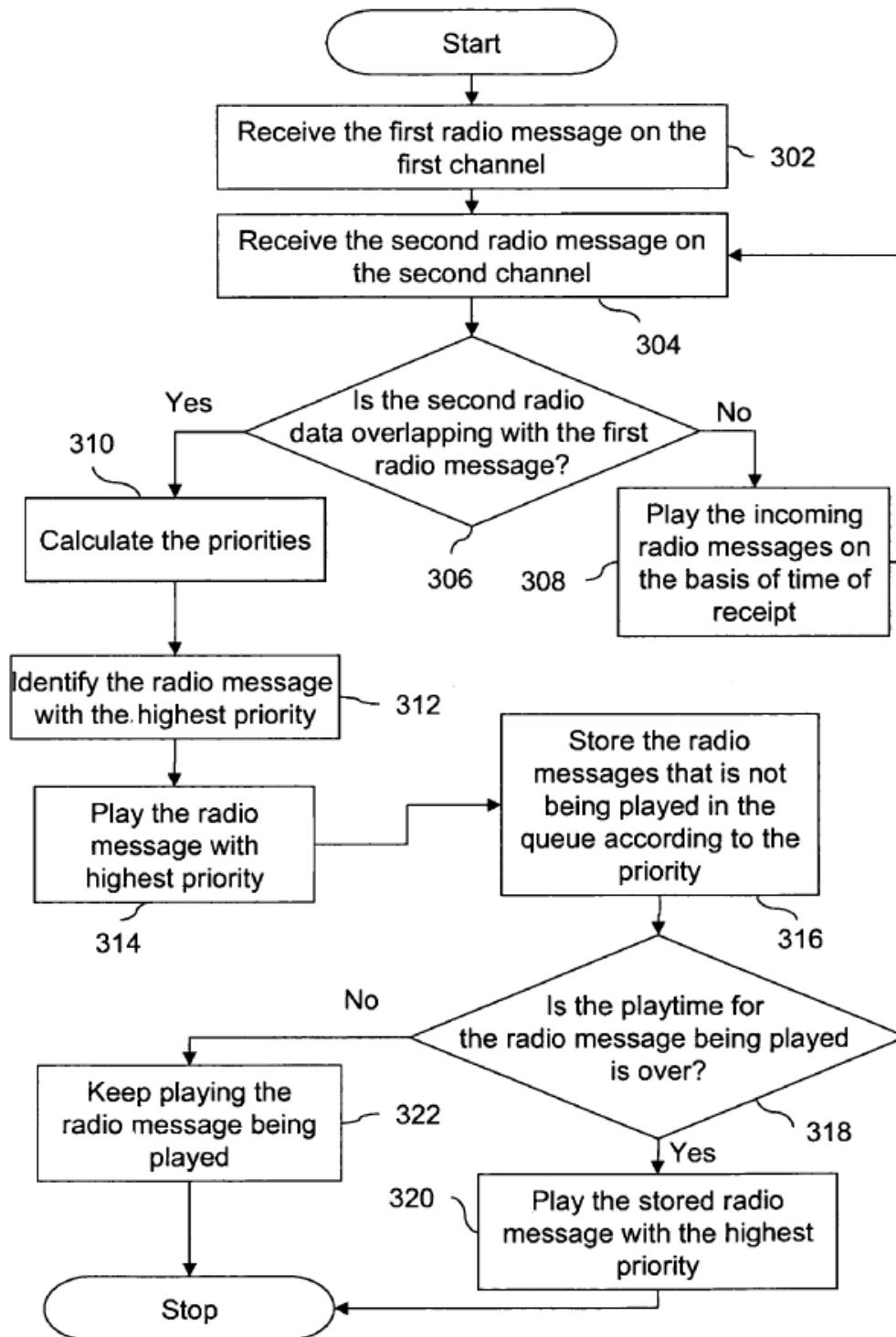


FIG. 3

Figure 3 is a flowchart of a method for managing communication in an emergency communication system. *Id.* at 3:26–29, 4:40–43.

Emergency communication system 102 receives a first radio message on a first channel (step 302) and at least a second radio message on a channel other than the first channel (step 304). *Id.* at 4:43–47. Emergency communication system 102 checks whether the second radio message overlaps with the first in time (step 306) and, if not, each of the received radio messages is played based on their times of receipt (step 308). *Id.* at 4:47–52. If the system identifies overlap (step 306), the system calculates a priority for each incoming radio message (e.g., based on the types of the radio messages, the sizes of the radio messages, the bandwidth requirement, or the channels from which radio messages are received) (step 310) and identifies the radio message with the highest priority (step 312). *Id.* at 4:54–64. The highest priority message is played (step 314) and the remaining radio messages are stored in a queue (step 316). *Id.* at 4:64–66. Once the highest priority message is done playing, the stored radio message with the next highest priority is played (steps 318, 320). *Id.* at 5:1–6.

While the message with the highest priority is being played, if a new message is received that is higher priority than the message being played, the new message will be played and the currently playing message will be stored until the new message completes playing. *Id.* at 5:10–15.

Claim 1, reproduced below (bracketed numbering added to track that used by Petitioner (Pet. xi–xii)) is illustrative of the subject matter at issue:

1. A method of managing communication in a communication system, the communication system receiving messages from a plurality of channels, the method comprising:

- [1a] receiving a first message on a first dedicated channel from amongst the plurality of channels at the communication system, the plurality of channels being dedicated to different entities, the first dedicated channel being dedicated to receiving messages from a first entity;
- [1b] receiving a second message on a second dedicated channel being dedicated to receiving messages from a second entity from amongst the plurality of channels at the communication system, the second message overlapping with the first message in time;
- [1c] determining one or more priorities for the first message received on the first dedicated channel from the first entity and the second message received on the second dedicated channel from the second entity based on at least one pre-defined parameter;
- [1d] determining which message out of the first message and the second message should be stored and subsequently played based on the second message overlapping with the first message in time and one or more priorities assigned to the first and the second message;
- [1e] playing the message having a higher priority between the first and the second message;
- [1f] storing at least one message having a lower priority between the first and the second message based on the determination; and
- [1g] playing the stored message subsequent to completing playing of the message having higher priority.

C. Evidence

Petitioner relies on the references listed below.

Reference		Date	Exhibit No.
Ohel	US 2004/0117859 A1	June 17, 2004	1004
Nigawara	US 4,914,705	Apr. 3, 1990	1007
Doolin	US 2006/0176169 A1	Aug. 10, 2006	1008

Petitioner also relies on the Declaration of David Hilliard Williams (Ex. 1002).

D. The Asserted Grounds of Unpatentability

Petitioner contends that claims 1–21 are unpatentable under the following grounds. Pet. 1.

Claims Challenged	35 U.S.C. §	References
1–21	103(a) ¹	Ohel
1–7, 11–21	103(a)	Nigawara
3, 8–10	103(a)	Nigawara, Doolin

III. ANALYSIS

A. Level of Skill in the Art

Petitioner, relying on the testimony of Mr. Williams contends that a person of ordinary skill in the art “would have had at least a bachelor’s degree in computer science, electrical engineering, or a similar field, and

¹ The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284, 287–88 (2011), amended 35 U.S.C. § 103. Because the ’802 patent was filed before March 16, 2013, for purposes of this Decision, we apply the pre-AIA version of § 103.

would have had approximately two years industry experience in networking or communication systems.” Pet. 3 (citing Ex. 1002 ¶¶ 55–58). Patent Owner does not dispute Petitioner’s proposal. Prelim. Resp. 6. Petitioner’s proposal is consistent with the technology described in the Specification and the cited prior art. For purposes of this Decision, we adopt this level of skill.

B. Claim Construction

We construe claims “using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. 282(b), including construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.” 37 C.F.R. § 42.100(b); *see also Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc).

1. Order of steps of claim 1; “storing”

As Patent Owner observes (Prelim. Resp. 6), in the Texas case, as to claim 1, the parties agreed that “[t]he ‘receiving’ and ‘determining’ steps must occur before the ‘storing at least one message. . .’ step, and the ‘storing at least one message. . .’ step must occur before the ‘playing the stored message’ step.” Ex. 2001 (Joint Claim Construction Charts), 12. Petitioner acknowledges that the parties have proposed terms for construction in the Texas case and argues that “[t]he Petition accounts for both parties’ proposals, and, as described, the claims are invalid under any proposal or any reasonable construction.” Pet. 3.

Two of these steps are:

determining which message out of the first message and the second message should be stored and subsequently played based on the second message overlapping with the first message in time and one or more priorities assigned to the first and the second message; . . . [and] storing at least one message having a lower priority between the first and the second message based on the determination;

Neither party proposes an express construction for these terms. However, the parties' respective application of this language to Nigawara reveals a dispute as to the meaning of this language.

Patent Owner contends that "Claim 1 requires that the **determining** of message priority (limitation 1[d]) occurs before the storing of a message **based on the determination** (limitation 1[f])." Prelim. Resp. 18. Patent Owner argues that "Nigawara stores all messages regardless of priority, and does not store messages based on any determination of priority as claimed." *Id.* at 17; *see also* Prelim. Sur-reply 5 ("Unlike the '802 Patent claims, Nigawara clearly teaches storing each message *before* prioritization. . . . Because Nigawara does not teach *storing* messages in priority order, as required under claim 1 of the '802 Patent, Nigawara fails to render the '802 Patent claims as obvious."). According to Patent Owner, "Petitioner's expert explicitly acknowledges that Nigawara stores messages before determining priority." *Id.* at 18 (citing Ex. 1002 ¶ 251; Ex. 1007, 3:68–4:5).

In response, Petitioner argues that "Nigawara discloses that, when multiple messages overlap, priorities are determined for each message and played in priority order," and that "[b]ecause messages are played in priority order, when higher priority messages are being played, lower priority messages are 'stored in a voice message signal memory 10' before being

played.” Prelim. Reply 4 (quoting Ex. 1007, 4:2; citing Ex. 1007, 3:68–4:5, 7:23–28). Thus, Petitioner concludes, “[e]very time a lower priority message is in storage at the time a higher priority message is playing, as Nigawara describes, the claim is practiced—even if the higher priority message was first stored.” *Id.*; *see also* Pet. 70 (“A [person of ordinary skill in the art] would have understood that delayed lower priority messages would be stored in voice signal memory 10 for the duration of that delay.”).

From these arguments, we understand the parties to dispute the meaning of the “storing” limitation. Specifically, Patent Owner appears to contend that claim 1 is not practiced when a lower-priority message is stored before it is assigned a priority, while Petitioner appears to contend that claim 1 is practiced when a stored message, once determined to be lower-priority, continues to be stored.

The claim language “storing at least one message having a lower priority between the first and the second message based on the determination,” does not appear limited to the instant in time at which data are committed to memory, nor does it appear to exclude continuing to store a message based on a determination that the message has a lower priority than another message. The claim language also does not appear to otherwise specify that the message is not to be stored until its priority is assigned. Patent Owner does not explain why the claim language should be read so narrowly. Prelim. Resp. 18–19; Prelim. Sur-reply 4–5.

As to the Specification, Petitioner contends that “overlapping messages can **both** be stored so long as the lower priority message is stored when the higher priority overlapping message is first played.” Prelim. Reply 5 (citing Ex. 1001, Fig. 4). In one example, shown in Figure 4,

message D is stored when received because currently playing message C has a higher priority; message E is subsequently received and played after message C finishes playing; and message D continues to be stored until message E finishes playing. Ex. 1001, 5:47–54. This description supports Petitioner’s position (Prelim. Reply 4) that the “storing” limitation of claim 1 contemplates receiving and storing a message, determining that a higher-priority message is playing, and continuing to store the received message until the higher-priority message finishes playing. At this stage of the proceeding, Patent Owner does not explain why the Specification supports its narrower reading.

On the current record, we agree with Petitioner that “storing at least one message having a lower priority between the first and the second message based on the determination” is broad enough to encompass continuing to store a message having a lower priority based on a determination of which message out of the first message and the second message should be stored and subsequently played.

2. “*entity*”

Claim 1 recites “the first dedicated channel being dedicated to receiving messages from a first *entity*” and “a second dedicated channel being dedicated to receiving messages from a second *entity*.”

In mapping Ohel to claim 1, Petitioner contends that individual police officers and the police dispatcher communicating over channels using communications units are examples of entities. Pet. 16–22. In opposing Petitioner’s mapping of Ohel to claim 1, Patent Owner contends that “[n]either a dispatcher, nor another specific user, is an entity as claimed in

the '802 Patent.” Prelim. Resp. 16. According to Patent Owner, “(i) the claimed entity is an organizational unit with an identity that is distinct from any individual user; and (ii) a dispatcher is not an entity.” Prelim. Sur-reply 1. Thus, the parties dispute the meaning of “entity,” and whether an “entity” can include an individual user (such as a police officer) and a dispatcher.

Patent Owner (Prelim. Resp. 15) relies on the following disclosure in the Specification:

Each emergency communication system supports a plurality of communication channels, wherein each channel may be dedicated to a group/locality/unit. For example, the fire department can allocate one channel to every school, or other public places such as shopping malls, so as to enable effective communication during an emergency.

This allocation of dedicated channels to different entities results in the possibility of multiple messages being received in the form of radio messages on different channels at one time.

Ex. 1001, 1:15–25. From this description, Patent Owner concludes that “the claimed entities are groups, localities, and units.” Prelim. Resp. 15; *see also* Sur-reply 2 (“In the context of the '802 patent, a [person of ordinary skill in the art] would understand that each claimed channel is dedicated to a defined group, locality, unit, or similar organizational entity.”).

Patent Owner also relies on a dictionary definition of “entity,” i.e., “any organization (as a business or governmental unit) that has an identity separate from those of its members.” Prelim. Resp. (citing *entity*, MERRIAM-WEBSTER’S COLLEGIATE DICTIONARY 417 (11th ed. 2020) (Ex. 2002)). In light of this definition and the Specification, Patent Owner contends that, in the context of the '802 patent, “an ‘entity’ is ‘an organization (as a business or governmental unit) that has an identity separate from those of its

members.” Prelim. Sur-reply 2 (citing Ex. 1001, 1:23–41, 1:46–58, 1:64–2:9, 6:53–56). Patent Owner argues that “[t]he groups, localities, units, or similar organizational entities that use the claimed systems and methods are fire departments, police departments, and the like,” and that “[e]ach of these is an organization (as a business or governmental unit) that has an identity separate from those of its members.” *Id.* at 2–3.

Petitioner observes that, in addition to “group/locality/unit,” “users” and “devices” are also examples of entities described in the Specification. Pet. 18 n.5 (citing Ex. 1001, 1:15–21, 7:18–20). As the Specification states, “[t]he invention can operate between any two processes or entities including users, devices, functional systems, or combinations of hardware and software.” Ex. 1001, 7:18–20. Thus, contrary to Patent Owner’s position, the Specification expressly states that “users” can be entities.

Moreover, as Petitioner argues (Prelim. Reply 1–3), and as is shown in Figure 1 (reproduced above), the Specification expressly describes communication system 102 receiving messages from dispatchers over channels. Ex. 1001, 3:59–62, Fig. 1. Thus, Patent Owner’s position, that dispatchers cannot be entities, would exclude the preferred embodiment. “Such an interpretation is rarely, if ever, correct and would require highly persuasive evidentiary support, which is wholly absent in this case.” *Vitronics Corp. v. Conception, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996). Patent Owner has yet to introduce such highly persuasive evidence.

As to Patent Owner’s proposed dictionary definition, Petitioner argues that other definitions are broader and more relevant and would not exclude a dispatcher. Reply 3 (citing Ex. 2002 (“independent, separate, or self-contained existence”)). “Dictionaries or comparable sources are often useful

to assist in understanding the commonly understood meaning of words.” *Phillips*, 415 F.3d at 1322. However, “extrinsic evidence may be useful to the court, but it is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence.” *Id.* at 1319. Here, consistent with Petitioner’s argument in favor of a broader definition, the Specification suggests that users and dispatchers are entities as are a group/locality/unit. Thus, we are not persuaded that Patent Owner’s dictionary definition should lead to a narrower construction.

In sum, on the current record, “entity” is broad enough to encompass a user (such as a police officer) and a dispatcher.

3. *Remaining Terms*

Petitioner proposes constructions (including functions and corresponding structures) for terms of claim 13 that are written in a format such that their meaning is presumably governed by 35 U.S.C. § 112 ¶ 6. Pet. 4–6. Petitioner also applies those constructions to similar terms in claims 13–17 that use terms such as “module” and “calculator.” *Id.* Patent Owner does not yet propose constructions for these terms. Prelim. Resp. 5–6. Based on the record before us, we do not find it necessary to provide express claim constructions for these or any other remaining terms. *See Nidec*, 868 F.3d at 1017; *Vivid Techs.*, 200 F.3d at 803.

C. *Obviousness over Ohel*

Petitioner contends that claims 1–21 would have been obvious over Ohel. Pet. 1. For the reasons explained below, Petitioner has shown that it is reasonably likely to prevail on this ground as to at least one claim.

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

1. Overview of Ohel

Ohel describes “[a] multiple channel data recorder and a method for recording data on multiple wireless communications channels.” Ex. 1004, code (57), ¶ 4. According to Ohel, prior art multi-party communications typically occurred over a single communications channel (e.g., using walkie-talkies), such that, when a first party talks to a second party, all other parties on that communication channel are muted until the first party finishes.

Id. ¶ 4. In Ohel’s solution,

a user has the ability to preserve all electronically communicated data, including, but not limited to, voice, code, pictures, and video, that previously would have been lost when a first transmitting entity was talked over by a second transmitting entity or when a second transmitting entity tried to communicate while a first entity was already transmitting.

Id. ¶ 42.

² The record does not include allegations or evidence of objective indicia of nonobviousness.

Figure 2, reproduced below, illustrates an example of a device that would be used to communicate in Ohel's system:

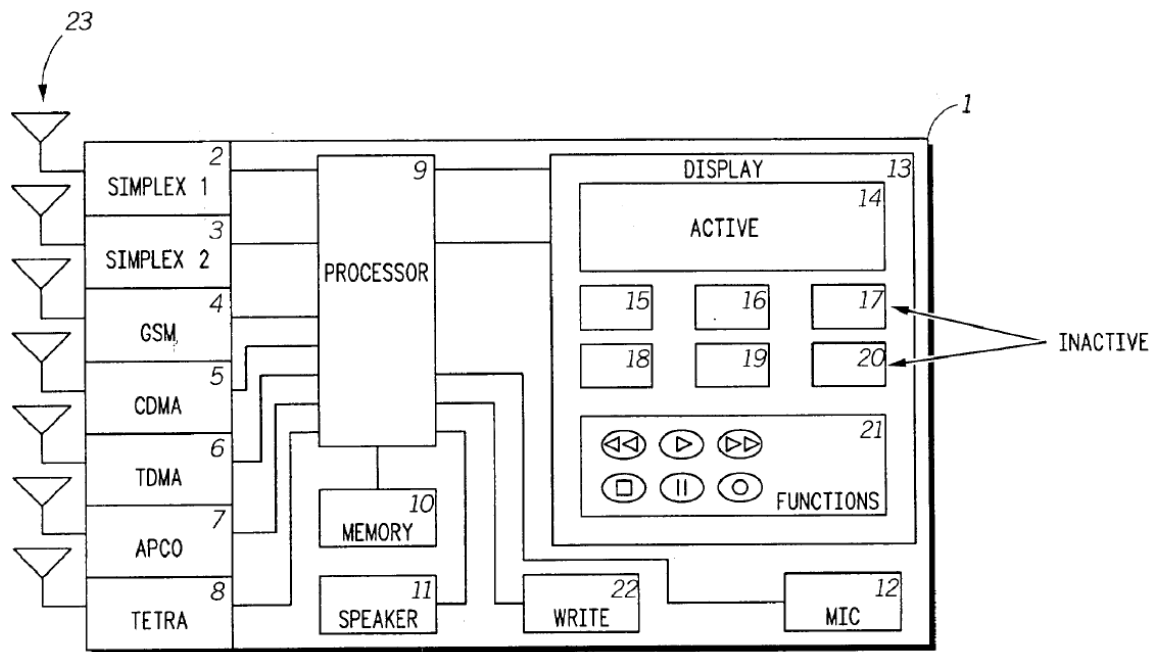


FIG. 2

Figure 2 is a block circuit diagram of a communications unit. *Id.* ¶ 41.

Communications unit 1 includes several different transceiver units (2–8) for communication over separate channels and/or networks: “For example, the first simplex unit 2 can be set to a dispatch channel, in other words, a channel common to many users, and the second simplex unit 3 can be set to a particular channel of another specific user for direct, two-way communication.” *Id.* ¶ 60. Other transceiver units (e.g., 4–6) can include cell phone-type units communicating on networks such as GSM, CDMA, and TDMA. *Id.* ¶ 61. In one example,

A user is a police officer. The officer can communicate with other individuals or entities via cell phone using any of the three cell phone transceivers 4, 5, or 6, for example. Communication with the police dispatcher can take place, for

example, over one of the public safety transceivers 7, 8 or by radio through one of the simplex transceiver units 2, 3.
Id. ¶ 68.

Figure 1 of Ohel is reproduced below:

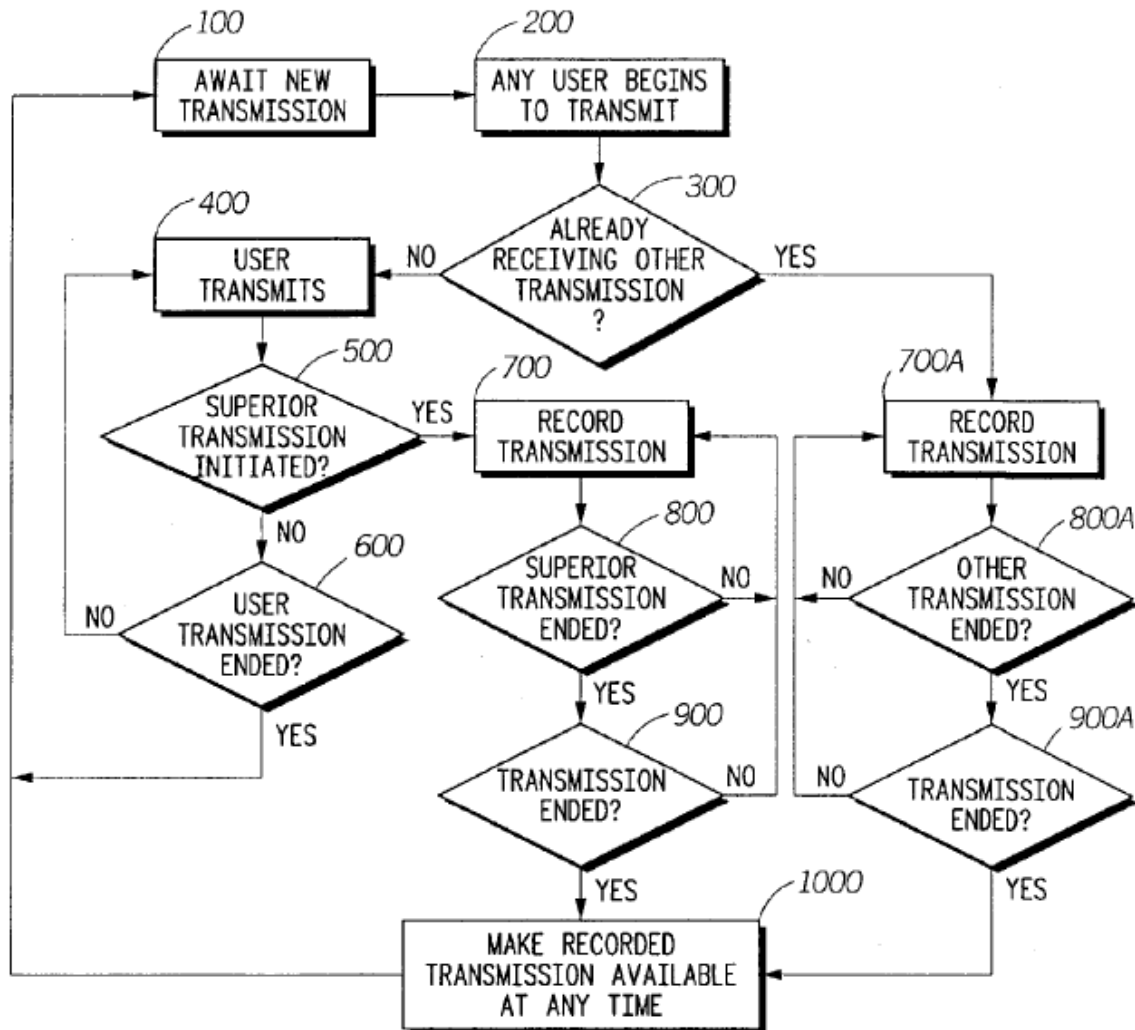


FIG. 1

Figure 1 is a flow chart of a method of communication among users.

Id. ¶¶ 42–43. A transmitting user decides to transmit a message (e.g., electronic voice communication) using a transceiver unit (step 200), the

transceiver unit determines whether the receiver already is receiving a transmission from a different user (step 300) and, if not, the transceiver unit begins transmitting the user's message over a communication link (step 400). *Id.* ¶¶ 45–47. If the receiver already is receiving a transmission, then the user's transceiver unit records the transmission without transmitting it (step 700A) and the recorded message can be made available for playback at any time (step 1000). *Id.* ¶¶ 51–52.

While the user is transmitting the message (step 400), if a superior user, such as a dispatcher, transmits a message (step 500), the user's transmission can be interrupted, and the user's unit begins recording the user's message (step 700), such that the recipient can receive and listen to the message at a later time. *Id.* ¶¶ 47–48. When the superior transmission ends (step 800), the user's unit continues recording the user's message until that message ends (step 900), and, assuming no other user is transmitting, the user's transmission can be made available immediately to the recipient (step 1000). *Id.* ¶ 49. The recording can be performed at the transmitting user's unit or, alternatively, at any or all other users' devices. *Id.*

If the interrupting message is not from a superior user, the message from the other user who is transmitting the interrupting transmission will be recorded and the recording will be made available to the user at a later time. *Id.* ¶ 50.

2. Analysis of Claims 1–21

Petitioner contends that Ohel's disclosure of “a method for recording data on multiple wireless communications channels” teaches a “method of managing communication in a communication system, the communication

system receiving messages from a plurality of channels,” as recited in claim 1. Pet. 16 (quoting Ex. 1004, code (57); citing Ex. 1004 ¶¶ 2, 9, 38–42, 72; Ex. 1002 ¶¶ 122–124).

As to claim limitations [1a] and [1b], Petitioner contends that Ohel’s transceiver units (shown as items 2–8 in Figure 2) correspond to different channels, and that each channel is associated with a different entity. *Id.* at 16–19, 20–22. In one example, “the first simplex unit 2 can be set to a dispatch channel . . . and the second simplex unit 3 can be set to a particular channel of another specific user for direct, two-way communication.” Ex. 1004 ¶ 60. In this example, petitioner maps simplex unit 2 to a “first dedicated channel being dedicated to receiving messages from a first entity” and simplex unit 3 to a “second dedicated channel being dedicated to receiving messages from a second entity,” as recited in claim 1. Pet. 16–18 (citing Ex. 1004 ¶¶ 35, 59–64, 70; Ex. 1002 ¶¶ 125–127), 20–21 (citing Ex. 1004 ¶¶ 47, 60; Ex. 1002 ¶¶ 133–134). Petitioner contends that a skilled artisan would have understood that transceivers 2–8 would operate in a similar fashion. *Id.* at 20 (citing Ex. 1004 ¶¶ 63–66, 72; Ex. 1002 ¶¶ 130–131), 22 (citing Ex. 1002 ¶¶ 135–136).

Petitioner contends that Ohel teaches receiving messages on first and second dedicated channels. *Id.* at 19, 21–22. In particular, Ohel describes an example in which an “officer is presently talking to another individual by cell phone over the CDMA transceiver 5” and “[d]uring the conversation, the police dispatcher begins to transmit one or more messages to the officer over the APCO transceiver 7.” Ex. 1004 ¶ 69. In this scenario, “no information still being received over the CDMA transceiver 5 would be lost because at least the officer’s unit 1 would immediately start recording all

information received by the CDMA transceiver 5 from the point in time when the APCO transceiver 7 took over.” *Id.* ¶ 70.

Patent Owner does not yet dispute that Ohel describes receiving first and second messages on first and second dedicated channels from amongst a plurality of channels. However, Patent Owner contends that Ohel does not teach “the first dedicated channel being dedicated to receiving messages from a first entity” and “second dedicated channel being dedicated to receiving messages from a second entity.” Prelim. Resp. 13. In particular, Patent Owner argues that “[n]either a dispatcher, nor another specific user, is an entity as claimed in the ’802 Patent.” *Id.* at 16. *See also id.* at 15 (“[A] dispatcher is not an entity as claimed in the ’802 Patent.”). Thus, Patent Owner argues, “[e]ven in Petitioner’s best example, Ohel fails to teach a single channel dedicated to receiving messages from an entity, let alone two channels dedicated to receiving messages from two respective entities.” *Id.* at 16.

As explained above, we preliminarily construe “entity” to be broad enough to encompass users (such as police officers) and dispatchers. Ohel describes an example in which the first simplex unit of a user’s transceiver can be set to a dispatch channel and the second simplex unit can be set to a particular channel of another user. Ex. 1004 ¶ 60. Ohel describes another example in which a police officer is talking to another individual by cell phone over a CDMA channel and, during the conversation, a dispatcher transmits a message to the officer over the APCO channel. *Id.* ¶ 69. On the current record, these are examples of “receiving a first message on a first dedicated channel . . . , the first dedicated channel being dedicated to receiving messages from a first entity,” and “receiving a second message on

a second dedicated channel being dedicated to receiving messages from a second entity,” as recited in claim limitations [1a] and [1b]. Patent Owner’s arguments, which are not commensurate in scope with our preliminary claim construction, are not persuasive.

As to claim limitation [1c], “determining one or more priorities for the first message received on the first dedicated channel from the first entity and the second message received on the second dedicated channel from the second entity based on at least one pre-defined parameter,” Petitioner points to Ohel’s description of inquiring to determine whether an interrupting user (e.g., a dispatcher) is a superior user who would preempt a first user’s (e.g., another individual’s) continued transmission and recording of the lower-priority transmission for later playback. Pet. 23–24 (citing Ex. 1004 ¶¶ 43–52, 70–72, Fig. 1 (steps 400, 500); Ex. 1002 ¶¶ 141–142).

As to claim limitation [1d], “determining which message out of the first message and the second message should be stored and subsequently played based on the second message overlapping with the first message in time and one or more priorities assigned to the first and the second message,” Petitioner points to Ohel’s description of a user’s transmission being interrupted by a message from a superior user, recording the user’s message, and making the recording available for playback at a later time. *Id.* at 25–26 (citing Ex. 1004 ¶¶ 35, 36, 47, 48, 50, 55, 70–72, Fig. 1 (steps 300, 400, 500, 700, 700A, 1000); Ex. 1002 ¶¶ 143–145).

As to claim limitation [1e], “playing the message having a higher priority between the first and the second message,” Petitioner points to Ohel’s disclosure of transmitting/playing the superior user’s (e.g., the dispatcher’s) transmission instead of the currently transmitting user’s

transmission. *Id.* at 26 (citing Ex. 1004 ¶¶ 47, 50, 70–72; Ex. 1002 ¶¶ 146–148).

As to claim limitation [1f], “storing at least one message having a lower priority between the first and the second message based on the determination,” Petitioner points to Ohel’s description of storing a user’s message when the user’s transmission is interrupted by a superior user. *Id.* at 26–27 (citing Ex. 1004 ¶¶ 36, 47, 49, 55, 70–72, Fig. 1 (steps 300, 400, 500, 700, 700A); Ex. 1002 ¶¶ 149–151).

As to claim limitation [1g], “playing the stored message subsequent to completing playing of the message having higher priority,” Petitioner points to Ohel’s description of playing back the user’s message after the superior user’s transmission has ended. *Id.* at 27–28 (citing Ex. 1004 ¶¶ 17, 18, 35, 36, 47, 49, 50, 70–72, Fig. 1 (steps 800, 800A, 900, 900A, 1000); Ex. 1002 ¶¶ 152–154).

Patent Owner does not yet challenge Petitioner’s allegations as to claim limitations [1c]–[1g], and we find Petitioner’s arguments and evidence as to these claim limitations sufficient at this stage of the proceeding.

In sum, on the current record, Petitioner is reasonably likely to show that claim 1 would have been obvious over Ohel.

Petitioner introduces evidence that claims 2–21 would have been obvious over Ohel. Pet. 29–52. Patent Owner does not yet present separate arguments for claims 2–21. Because we institute as to claim 1 over Ohel, we proceed as to all challenged claims. *See* 37 C.F.R. § 42.108(a).

D. Obviousness over Nigawara

Petitioner contends that claims 1–7 and 11–21 would have been obvious over Nigawara. Pet. 1. For the reasons explained below, Petitioner has shown that it is reasonably likely to prevail on this ground as to at least one claim.

1. Overview of Nigawara

Nigawara relates to

a method and system for announcing, by voice messages, the operating conditions of a plant such as a thermal power plant, or announcing a change or changes in the operating conditions of such a plant, and more particularly to an announcing method and system suitable for application to a plant where a plurality of voice message announcing devices are provided.

Ex. 1007, 1:6–13. Figure 1, reproduced below, illustrates an example:

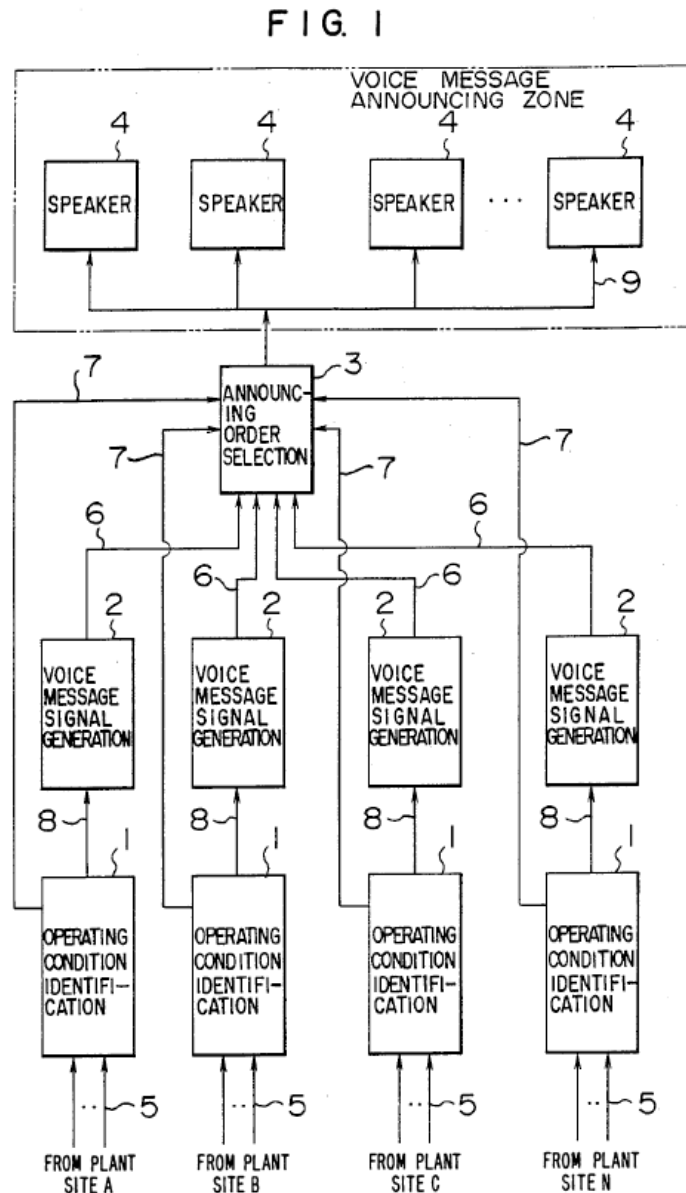


Figure 1 is a block diagram of the structure of an automatic voice message announcing system. *Id.* at 2:6–8.

A thermal power plant includes plant sites A–N. *Id.* at 2:26–27. Plant sites A–N send information signals 5 indicative of operating conditions of the plant sites and identification units 1 identify the operating conditions based on the information signals. *Id.* at 2:30–44. Examples of operating conditions can include

- (1) Whether or not the speed of the plant's steam turbine has increased up to its rated speed;
- (2) whether or not the pressure of oil lubricating the bearings of the turbine driving the boiler feed water pump has decreased to a dangerously low level;
- (3) whether or not the quality (iron content, turbidity, pH value, etc.) of boiler feed water has become normal enough to end the water clean-up treatment.

Id. at 2:46–54. Based on the information signals 5, the identification units 1 send announcement instruction signals 8 to voice message signal generating units 2, which generate voice message signals that can be understood by a human. *Id.* at 2:59–3:2.

Nagawara's Figure 2 is reproduced below:

FIG. 2

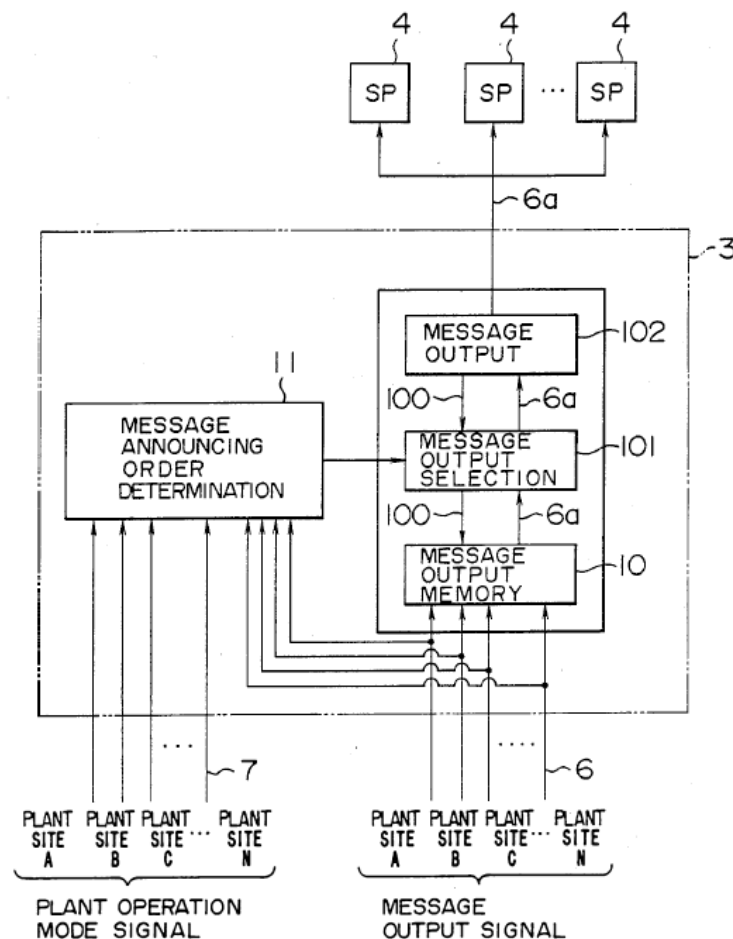


Figure 2 is a block diagram of message announcing order selection unit 3 of Figure 1. *Id.* at 2:9–11. 3:66–68. Voice message signals 6 from voice message signal generating units 2 are stored in voice message signal memory 10 and are applied, along with plant operation mode information signals 7 to message announcing order determination unit 11. *Id.* at 3:68–4:5. Voice message signals 6a selected by message signal selection unit 101 are sequentially applied to message output unit 102 according to a priority order determined by message announcing order determination unit 11 and are announced from speakers 4. *Id.* at 4:13–24. An example of priority order is a message pertaining to “serious trouble in main machinery and equipments” being given higher priority over a message regarding “a change in operating conditions of auxiliary machinery and equipment.” *Id.* at 4:60–5:23 (Table 1).

Nigawara’s Figure 3 is reproduced below:

FIG. 3

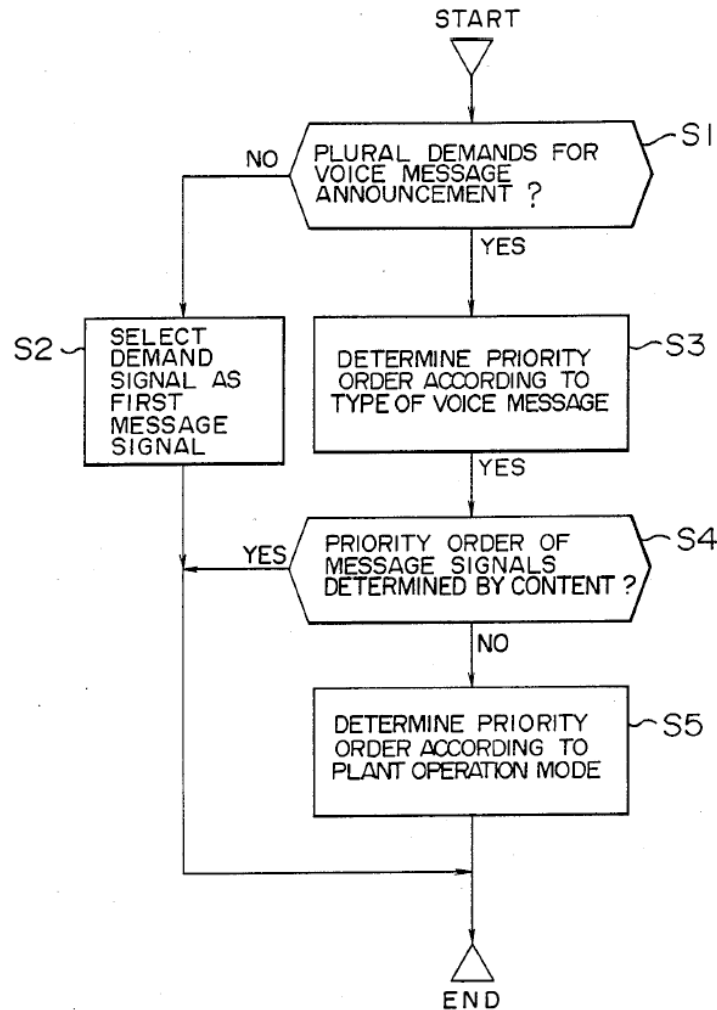


Figure 3 is a flow chart of the steps of processing in the voice message announcing order determination unit 11 of Figure 2. *Id.* at 2:12–14, 6:16–18. Voice message announcing order determination unit 11 determines whether there are a plurality voice message signals 6 with demands for voice message announcements (step S1). *Id.* at 6:22–27. If there is only one voice message signal 6, that signal is selected as a first message to message signal selection unit 101 (step S2) and is applied by message output unit 102 to a corresponding speaker 4, which announces the voice message. *Id.* at 6:27–

35. If there are plural voice message signals 6, the priority order shown in Table 1 is applied to classify the signals as first message signal, second message signal, etc. (step S3) and message signals can be played in that order (step S4). *Id.* at 6:35–46.

2. Analysis of Claims 1–7 and 11–21

Petitioner contends that Nigawara’s voice message announcing method is a “method of managing communication in a communication system, the communication system receiving messages from a plurality of channels,” as recited in the preamble of claim 1. Pet. 56 (citing Ex. 1007, 1:40–62, 7:35–47).

As to claim limitations [1a] and [1b], Petitioner contends that Nigawara teaches receiving information signals 5 for plants A and B (“first message” and “second message”) on communication links though units 1 and 2 (“first dedicated channel being dedicated to receiving messages from a first entity,” “second dedicated channel being dedicated to receiving messages from a second entity”), and that a second message may be overlapping in time with a first message. *Id.* at 56–61 (citing Ex. 1007, 1:40–48, 1:56–65, 2:27–3:41, 3:53–60, 4:30–37, 5:29–31, Figs. 1, 3 (step S1), 4; Ex. 1002 ¶¶ 237–244).

As to claim limitation [1c], Petitioner argues that Nigawara’s order selection unit determines a priority order for announcing received voice message signals based on plant operation mode signals and, for example, the hierarchies of message types and content shown in Tables 1 and 2. *Id.* at 62–63 (citing Ex. 1007, 1:56–62, 3:33–47, 4:6–15, 4:39–58, 4:60–5:23

(Table 1), 5:24–68, 6:1–15 (Table 2), 6:35–7:2, 7:20–28, Fig. 3 (steps S3–S5); Ex. 1002 ¶¶ 245–249).

Claim limitation [1d] recites “determining which message out of the first message and the second message should be stored and subsequently played based on the second message overlapping with the first message in time and one or more priorities assigned to the first and the second message.” Petitioner (Pet. 63–65) points to description in Nigawara that “[v]oice message output signals 6 from the voice message signal generating units 2 of the individual plants are stored in a voice message signal memory.” Ex. 1007, 3:67–42. Nigawara continues, “[t]he voice message signals are also applied, together with the plant operation mode information signals 7, to a message announcing order determination unit 11.” *Id.* at 4:3–5. “According to the priority order determined by the message announcing order determination unit 11, the voice message signals 6*a* selected by a message signal selection unit 101 are sequentially applied to a message output unit 102.” *Id.* at 4:16–20.

As to claim limitation [1f], “storing at least one message having a lower priority between the first and the second message based on the determination,” Petitioner argues that Nigawara describes storing overlapping voice message output signals 6 in voice message signal memory 10 and announcing them after a suitable delay. Pet. 69–70 (citing Ex. 1007, 3:68–4:5, 7:23–28, Fig. 2). Petitioner argues that “[a person of ordinary skill in the art] would have understood that delayed *lower priority* messages would be *stored* in voice signal memory 10 for the duration of that delay.” *Id.* at 70 (citing Ex. 1007, 1:40–2:3, 2:59–3:2, 3:66–4:58, 6:35–7:2, 7:10–28; Ex. 1002 ¶¶ 257–259).

An example pattern for storing and playing messages in Nigawara's system is shown in Figure 4B, reproduced below:

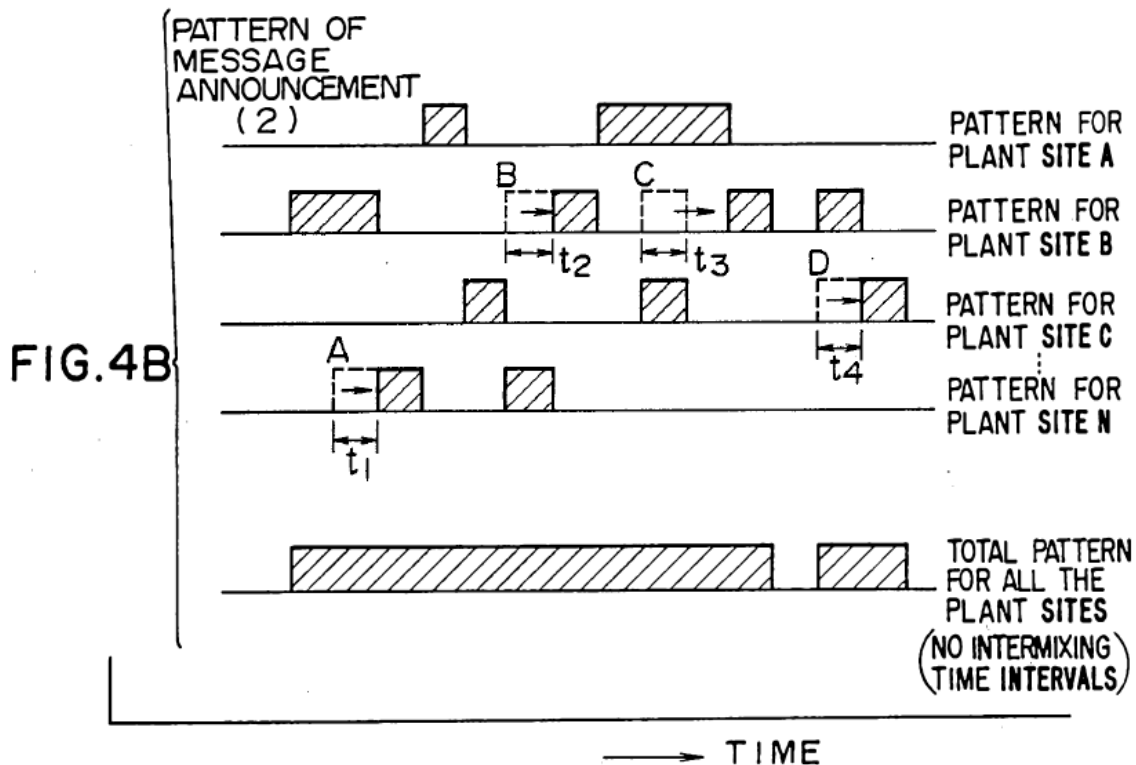


Figure 4B of Nigawara is a picture of a message announcing pattern of voice message announcements for plant sites A, B, C, . . . N. Ex. 1007, 2:17–18, 7:21–22. Nigawara describes that “in time intervals t_1 , t_2 , t_3 and t_4 , where announced messages overlap each other, those voice message signals having priority lower than the others are announced with a suitable delay according to the priority order.” *Id.* at 7:22–26.

Patent Owner argues that claim 1 requires determining message priority (limitation [1d]) before storing a message based on the determination (limitation [1f]), and that, in contrast, Nigawara stores all messages, regardless of priority, before determining priority. Prelim. Resp. 17–18 (citing Ex. 1007, 3:68–45, Fig. 2; Ex. 1002 ¶ 251); *see also* Prelim. Sur-reply 4 (“Nigawara fails to disclose the storing of prioritized messages

based on a previous determination of priority.”), 5 (“Unlike the ’802 Patent claims, Nigawara clearly teaches storing each message *before* prioritization.”) (citing Ex. 1007, 3:68–4:20, Fig. 2).

Petitioner responds that, in Nigawara, “[b]ecause messages are played in priority order, when higher priority messages are being played, lower priority messages are ‘stored in a voice message signal memory 10’ before being played.” Prelim. Reply 4 (quoting Ex. 1007, 4:2). According to Petitioner, “[e]very time a lower priority message is in storage at the time a higher priority message is playing, as Nigawara describes, the claim is practiced—even if the higher priority message was first stored.” *Id.* (citing *Hewlett–Packard Co. v. Mustek Sys., Inc.*, 340 F.3d 1314, 1326 (Fed. Cir. 2003) (prior art “that sometimes, but not always, embodies a claimed method nonetheless teaches that aspect of the invention”))).

As explained above, we preliminarily construe “storing at least one message having a lower priority between the first and the second message based on the determination” as broad enough to encompass continuing to store a message having a lower priority based on a determination of which message out of the first message and the second message should be stored and subsequently played. Thus, Patent Owner’s arguments are not commensurate in scope with claim 1, as we have preliminarily construed it, and are not persuasive.

As shown in Figure 4B above, Nigawara describes an instance in which a message is received (e.g., for plant site N) while a higher-priority message (e.g., for plant site B) is being played and, after time t_1 , the message for plant site N is played. Ex. 1007, 7:22–26. The preliminary record supports the conclusion that Nigawara’s system determines that the message

for plant site N should continue to be stored until the message for plant site B concludes. Ex. 1002 ¶¶ 251–252, 257–258. At this stage of the proceeding, we credit the testimony of Mr. Williams that “a [person of ordinary skill in the art] would have understood that lower priority messages announced with a suitable delay would be stored in voice signal memory 10 for the duration of that delay.” Ex. 1002 ¶ 258. Thus, for purposes of this Decision, Petitioner shows sufficiently that Nigawara teaches limitations [1d] and [1f].

As to claim limitation [1e], Petitioner contends that after Nigawara’s message announcing order selection unit 3 determines the priority order of announcement of the voice messages, the messages are played from speakers 4 in that priority order. Pet. 67–68 (citing Ex. 1007, 2:59–3:2, 3:30–65, 4:16–30, 4:39–58, 6:35–7:2, 7:20–28, Fig. 1; Ex. 1002 ¶¶ 254–256).

As to claim limitation [1g], Petitioner points to Nigawara’s Figure 4B to show that a voice message signal having lower priority (e.g., for plant site N) is stored in voice message signal memory 10 for a suitable delay (e.g., t_1) until a higher priority message (e.g., for plant site B) finishes playing, after which the lower priority message is played. Pet. 70–71 (citing Ex. 1007, 7:22–28; Ex. 1002 ¶¶ 260–262).

Patent Owner does not yet challenge Petitioner’s allegations as to claim limitations [1a]–[1c], [1e], and [1g] and we find Petitioner’s arguments and evidence as to these claim limitations sufficient at this stage of the proceeding.

In sum, on the current record, Petitioner is reasonably likely to show that claim 1 would have been obvious over Nigawara.

Petitioner introduces evidence that claims 2–7 and 11–21 would have been obvious over Ohel. Pet. 71–92. Patent Owner does not yet present separate arguments for claims 2–7 and 11–21. Because we institute as to claim 1 over Nigawara, we proceed as to all challenged claims. *See* 37 C.F.R. § 42.108(a).³

E. Obviousness over Nigawara and Doolin

Petitioner contends that claims 3 and 8–10 would have been obvious over Nigawara and Doolin. Pet. 1. For the reasons explained below, Petitioner has shown that it is reasonably likely to prevail on this ground as to at least one claim.

1. Overview of Doolin

Doolin is directed to “a wireless network used to sense environmental conditions for situational awareness and response, especially where positionally accurate data are necessary.” Ex. 1008 ¶ 3. Relevant to this proceeding, Doolin describes storing sensor data and forwarding such data using technology such as radio frequency (RF) transceivers, laser

³ Claim 20 depends from claim 1 and adds “wherein playing the message comprises playing the message having a higher priority between the first and second message without storing the message having the higher priority if no other message is being played.” Petitioner appears to acknowledge that Nigawara’s system stores all incoming messages before determining priority of the respective messages. Reply 5; Ex. 1002 ¶ 251. As to claim 20, Mr. Williams testifies that “when the two overlapping messages do not have the same priority, the higher priority message is announced first, without delay.” *Id.* ¶ 318. If Mr. Williams is testifying that the higher priority is played without first having been stored in memory 10, such testimony appears inconsistent with Nigawara (e.g., Ex. 1007, 3:68–4:5) and Mr. Williams’ testimony at paragraph 251.

transceivers, wireless communications mechanisms, cell phones, satellite, session initiation protocol (SIP), Internet Protocol (IP), and hypertext transfer protocol (HTTP). *Id.* ¶¶ 17, 26, 39, 40, 42.

2. Analysis of Claims 3 and 8–10

Claims 8, 9, and 10 depend from claim 1 and add, respectively, that a message includes “voice over internet protocol communications,” “mobile phone communications,” and “radio communications.” Petitioner acknowledges that Nigawara does not teach communication using these protocols, but argues that Doolin does disclose communicating using these protocols. Pet. 93–97 (citing Ex. 1008 ¶¶ 26, 39, 40, 42, Fig. 1; Ex. 1002 ¶¶ 330–339). Mr. Williams testifies that a skilled artisan “would have looked to Doolin for additional details regarding how to implement a system of transmitting prioritized remote sensor data of various types to a central server.” Ex. 1002 ¶ 327. Mr. Williams testifies that this would “enable[e] additional functionality, flexibility, and efficient installation and would have been a predictable combination of known elements reasonably expected to succeed.” *Id.* ¶ 328.

Claim 3 depends from claim 1 and adds “the predefined parameter comprises a bandwidth requirement of the received messages.” Doolin describes that its “[s]ensors 30–40 on the sensor nodes 18–28 can be prioritized so that if there is a lack of resources (e.g., limited bandwidth), the sensor readings with higher priority can be communicated first.” Ex. 1008 ¶ 41. Mr. Williams testifies that a skilled artisan “would have been motivated to include this prioritization factor in Nigawara’s system because ‘a lack of resources (e.g., limited bandwidth),’ is a problem that frequently

plagues data transmissions, particularly in systems that use multiple data types like Nigawara and Doolin,” and that “it would have been understood that this inclusion would make Nigawara’s system more robust and would have had a reasonable expectation of success.” Ex. 1002 ¶ 342 (quoting Ex. 1008 ¶ 41). Patent Owner does not present separate argument as to claims 3 and 8–10. We credit Mr. Williams’ uncontroverted testimony at this stage of the proceeding. On the current record, Petitioner has shown sufficiently that Nigawara and Doolin teach the additional limitations of claims 3 and 8–10 and that a skilled artisan would have had reasons, with rational underpinning, for combining the teachings of Nigawara and Doolin.

F. Discretionary Denial

Patent Owner contends that we should deny the Petition because the parallel Texas District Court case will resolve the patentability issues prior to our deadline for a final written decision. Prelim. Resp. 21–26.

Institution of *inter partes* review is discretionary. *See Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) (“[T]he PTO is permitted, but never compelled, to institute an IPR proceeding.”); 35 U.S.C. § 314(a). The Board has held that the advanced state of a parallel district court action is a factor that may weigh in favor of denying a petition under § 314(a). *See Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential); *NHK Spring Co. v. Intri-Plex Techs., Inc.*, IPR2018-00752, Paper 8 at 20 (PTAB Sept. 12, 2018) (precedential); Patent

Trial and Appeal Board, Consolidated Trial Practice Guide, 58 & n.2 (Nov. 2019) (“Trial Practice Guide”)⁴.

The Director has issued additional guidance on the application of *Fintiv*. See Katherine K. Vidal, *Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation* (June 21, 2022)⁵ (“*Fintiv* Memo”). According to the Director, “[w]hen a petitioner stipulates not to pursue in a parallel district court proceeding the same grounds as in the petition or any grounds that could have reasonably been raised in the petition, it mitigates concerns of potentially conflicting decisions and duplicative efforts between the district court and the PTAB.” *Id.* at 7 (citing *Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12 at 18–19 (PTAB Dec. 1, 2020)). To that end, “the PTAB will not discretionarily deny institution of an IPR . . . in view of parallel district court litigation where a petitioner stipulates not to pursue in a parallel district court proceeding the same grounds as in the petition or any grounds that could have reasonably been raised in the petition.” *Id.*

Petitioner has filed a stipulation that it “will not pursue an invalidity defense in the district court action (*STA Group LLC v. Motorola Solutions, Inc.*, Case No. 2:22-cv-00381 (E.D. Tex.)) that the patent claims subject to the instituted IPR are invalid based on grounds that were raised or reasonably could have been raised in the IPR.” Ex. 1029. Petitioner represents that it “has provided a *Sotera* stipulation in this proceeding” and

⁴ Available at <https://www.uspto.gov/sites/default/files/documents/tpgnov.pdf>.

⁵ Available at https://www.uspto.gov/sites/default/files/documents/interim_proc_discretionary_denials_aia_parallel_district_court_litigation_memo_20220621_.pdf

that, pursuant to the *Fintiv* Memo, we should not exercise our discretion to deny the Petition. Prelim. Repl. 1. Patent Owner does not respond, in the Preliminary Sur-reply, to Petitioner's Reply argument regarding discretionary denial or argue that we nevertheless should deny the Petition in light of Petitioner's stipulation. *See, generally*, Prelim. Sur-Reply.

Upon consideration of these factors and the parties' arguments, we decline to exercise our discretion to deny the Petition in light of Petitioner's *Sotera* stipulation. *Fintiv* Memo 7.

IV. CONCLUSION

Petitioner has established a reasonable likelihood that it would prevail with respect to at least one claim of the '802 patent.

Our factual findings, conclusions of law, and determinations at this stage of the proceeding are preliminary, and based on the evidentiary record developed thus far. This is not a final decision as to the patentability of claims for which *inter partes* review is instituted. Our final decision will be based on the record as fully developed during trial.

V. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that pursuant to 35 U.S.C. § 314(a), an *inter partes* review is instituted as to claims 1–21 of the '802 patent on all of the grounds set forth in the Petition; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is given of the institution of a trial; the trial will commence on the entry date of this Decision.

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Patent 7,324,802 B2

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