

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

META PLATFORMS, INC.,
Petitioner,

v.

SITNET, LLC,
Patent Owner.

IPR2024-00530
Patent 9,877,345 B2

Before THU A. DANG, NEIL T. POWELL, and
KARA L. SZPONDOWSKI, *Administrative Patent Judges*.

DANG, *Administrative Patent Judge*.

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

I. INTRODUCTION

A. Background

Meta Platforms, Inc. (“Petitioner”) filed a Petition requesting an *inter partes* review of claims 1–16 (“the challenged claims”) of U.S. Patent No. 9,877,345 B2 (Ex. 1001, “the ’345 patent”). Paper 1 (“Pet.”). SitNet, LLC (“Patent Owner”) filed a Preliminary Response. Paper 6 (“Prelim. Resp.”). Pursuant to our authorization (Ex. 3001), Petitioner filed a Preliminary Reply. Paper 7 (“Prelim. Reply”). Patent Owner then filed a Preliminary Sur-reply. Paper 8 (“Prelim. Sur-reply”).

Under 35 U.S.C. § 314, the Board has authority to determine whether to institute an *inter partes* review. Applying the standard set forth in 35 U.S.C. § 314(a), which requires demonstration of a reasonable likelihood that Petitioner would prevail with respect to at least one challenged claim, we grant Petitioner’s request and institute an *inter partes* review of all challenged claims.

B. Related Proceedings

The parties identify the ’345 patent as the subject of *SitNet LLC v. Meta Platforms, Inc.*, No. 1:23-CV-06389 (S.D.N.Y.) (“the district court litigation”). Pet. 2; Paper 4.

Petitioner also identifies the following USPTO proceedings challenging other, related patents asserted by Patent Owner in the district court litigation: *Meta Platforms, Inc. v. SitNet, LLC*, IPR2024-00528 (PTAB), challenging U.S. Patent No. 8,249,932 B1; *Meta Platforms, Inc. v. SitNet, LLC*, IPR2024-00529 (PTAB), challenging U.S. Patent No.

8,332,454 B1; and *Meta Platforms, Inc. v. SitNet, LLC*, IPR2024-00531 (PTAB), challenging U.S. Patent No. 11,470,682 B1. Pet. 2.

C. The '345 Patent

The '345 patent, titled “Method and System for Using a Situational Network,” issued on January 23, 2018, from Application No. 14/861,340 filed on September 22, 2015. Ex. 1001, codes (54), (45), (21), (22) (emphasis and capitalization omitted). The '345 patent discloses methods and systems for creating a projection of a situational network, by creating, by an event node server, an event node in a multi-dimensional personal information network, where the event node corresponds to a situation. *Id.* at code (57). A projection of nodes of the situational network is formed using geographic locations of a plurality of devices corresponding to nodes in the multi-dimensional personal information network, and an invitation is transmitted to establish a link with the event node server to the devices corresponding to each node in the projection. *Id.* A response is received from at least one of the devices accepting the invitation to establish a link with the event node server, and a link with each device accepting the invitation is established. *Id.*

Figure 1 of the '345 patent, reproduced below, illustrates a network diagram for a Situational Network (SitNet). Ex. 1001, 1:64–66, 4:3–15.

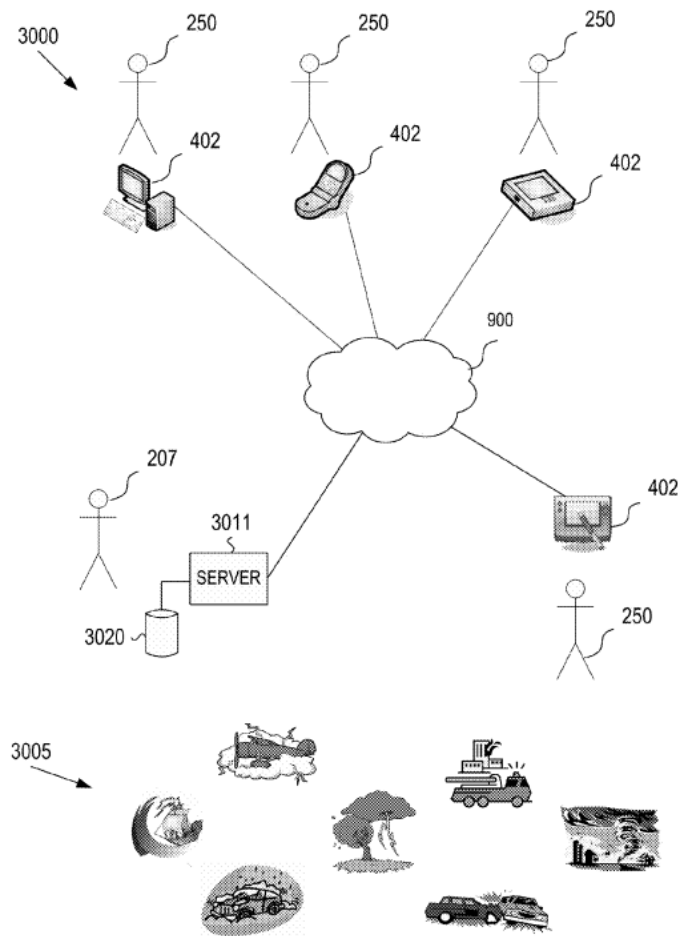


Fig. 1

Figure 1 illustrates a network diagram for a Situational Network 3000.
Ex. 1001, 1:64–66, 4:3–15.

Situational network (SitNet) 3000 illustrated in Figure 1 is created when an occurrence of an event or situation 3005 causes connections/links to be established between, within, or among a set of participants 250, 207. Ex. 1001, 4:3–15. The SitNet allows the participants (e.g., 250, 207) to interact and exchange information over connections to, or through, computer network 900 regarding event or situation 3005. *Id.* Examples of events or situations 3005 that may initiate the formation of a SitNet include a weather phenomenon (e.g., hurricanes), emergency situations (e.g., building fires),

natural disasters (e.g., earthquakes), weather related activities (e.g., skiing), navigation or travel incidents (e.g., road closures or construction), and public health crises. *Id.* at 4:59–5:7.

If the event or situation is not stationary, or changes over time (e.g., in scope or location, such as, for example, a weather event with a time-dependent trajectory or size), participants in the SitNet may also change as the situation evolves over time. Ex. 1001, 5:8–15. Some, or all, of the participants included in SitNet 3000 may have no prior knowledge of (or connection or contact with) each other or with other participants of the situational network, through any other type of social network or personal interactions. *Id.* at 4:10–15.

Participants 207 in SitNet 3000 are “external entities . . . also called situation authorities, central authorities or trusted providers, that generally are able to aggregate and provide comprehensive information related to the situation,” and include news organizations, weather agencies, traffic agencies, emergency relief organizations, and government agencies (e.g., local fire departments, state Departments of Transportation, and Federal Emergency Management Agency (FEMA)). Ex. 1001, 4:15–32. A situation authority server 3011 (also called an event node server) corresponds to each situation authority 207. *Id.* at 4:27–32. Situation authority server 3011 may be connected to a database 3020 for storing information related to situation 3005 or data related to other participants in SitNet 3000. *Id.*

Participants 250 in SitNet 3000 are “users . . . which are alternately referred to as individuals or members,” and they are connected via SitNet 3000 using devices 402 (such as cell phones, PDA’s, personal computers, and so on). Ex. 1001, 4:33–47. Devices 402 may be connected into SitNet

3000 automatically, by requesting a connection, or by receiving an invitation to connect. *Id.*

The '345 patent also describes a “roll-call” or “check-in” feature that may be included in a SitNet for a disaster or emergency event, to establish a list of persons that might be missing or may need assistance. Ex. 1001, 27:3–29. A server corresponding to an event node of the SitNet may invite users determined to be physically threatened by a disaster or emergency event, to check-in. *Id.* The server of the event node may determine user Personal Information Aggregators (PIAs) that are to be contacted through stored lists, such as apartment or office building occupancy records, or postal records for streets or zip codes. *Id.* at 27:9–15; *see also id.* at 8:14–31 (describing PIAs). People identified with a PIA are sent an unsolicited message to reply if they are alright (i.e., provide a positive response). *Id.* at 27:12–20. A user may also respond to the check-in that they need assistance and provide location information to emergency responders. *Id.* Non-responding PIAs are reported to emergency management officials to decide further actions that may be required to locate those individuals. *Id.*

A situation authority or trusted provider establishing an event node for a server that hosts the roll-call or check-in feature may provide a searchable message board to users connected to the SitNet (as well as visitors not connected to the SitNet) that allows sharing of information about individuals in the SitNet with persons outside the SitNet. Ex. 1001, 27:30–36. A visitor to the website can search the message board for information related to a specific situation or event. *Id.* at 27:47–48. The information may be tagged with a location coordinate so that check-in and other information can be searched and obtained down to a zip code, street, or individual household

level. *Id.* at 27:49–52. The searchable message board also allows visitors not connected or unable to connect to the SitNet the opportunity to post or view messages that are relevant to a specific situation, such as, for example, searching for information on a missing family member or friend. *Id.* at 27:52–56. Other visitors with information about the situation can respond to those messages with any information that they can share. *Id.* at 27:57–59. The most recent roll-call list for the search criteria entered by the visitor may be available using a link on the webpage. *Id.* at 27:59–60.

D. The Challenged Claims

Of the challenged claims (claims 1–16), claims 1, 8, and 13 are independent claims. Claims 1 and 8 are illustrative and are reproduced below:

1. A method of accessing situation related information, the method comprising:
 - receiving an indication of an occurrence of a situation;
 - forming a situational network related to the occurrence of the situation with a plurality of participant devices determined to be geographically proximate to the situation, each of the participant devices corresponding to a participant in the situational network;
 - presenting a roll call query to each of the plurality of participant devices soliciting a reply related to a status of the participant;
 - receiving a status response from one or more of the participants; and
 - aggregating the status responses from responsive participants into a roll call list.
8. A method of providing situation related information to a situation authority via a situational network, the method comprising:

receiving, by a participant device, a roll call query soliciting a reply related to a status of a participant based on the participant being determined, by the situation authority, to be geographically proximate to the situation;

receiving, by the participant device, a selection of a status response from the participant; and

sending the status response to the central authority, wherein the status response is included in a roll call list.

Ex. 1001, 34:8–22, 34:46–57.

E. Asserted Grounds of Unpatentability

Petitioner challenges the patentability of claims 1–16 of the ’345 patent on the following grounds (Pet. 12):

Claim(s) Challenged	35 U.S.C. §¹	Reference(s)/Basis
1, 3–8, 10–13, 15, 16	103	Gage ²
2, 9, 14	103	Gage, Mitchell ³

¹ The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284, 287–88 (2011), amended various provisions of 35 U.S.C. § 103. Because the ’345 patent claims the benefit of the filing date from an application filed before March 16, 2013, we apply the pre-AIA version of the statutory basis for unpatentability. *See* Ex. 1001, code (60) (indicating the ’345 patent is a “[c]ontinuation of application No. 13/612,964, filed on Sep. 13, 2012, now Pat. No. 9,143,535, which is a continuation of application No. 13/274,712, filed on Oct. 17, 2011, now Pat. No. 8,332,454, which is a division of application No. 11/924,711, filed on Oct. 26, 2007, now Pat. No. 8,069,202.”).

² U.S. Patent Appl. Publication No. 2008/0139165 A1, published June 12, 2008, filed December 11, 2006 (Ex. 1005, “Gage”).

³ U.S. Patent Appl. Publication No. 2007/0194938 A1, published August 23, 2007, filed February 22, 2006 (Ex. 1013, “Mitchell”).

Claim(s) Challenged	35 U.S.C. § ¹	Reference(s)/Basis
1, 3, 4, 6–8, 10–13, 15	103	Shida ⁴
2, 5, 9, 14, 16	103	Shida, Sinha ⁵

Petitioner relies on the declarations of Jeremy Cooperstock, Ph.D. (Ex. 1003, “Cooperstock Declaration”; Ex. 1026, “Cooperstock Declaration Supporting POPR”) in support of its unpatentability contentions.

II. ANALYSIS

A. 35 U.S.C. § 314(a)

Patent Owner argues that we should exercise discretion to deny institution under 35 U.S.C. § 314(a) because the factors identified in *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential), weigh in favor of denying institution in view of the district court litigation. Prelim. Resp. 28–30.

Our analysis is guided by the USPTO Director’s Memorandum issued June 21, 2022, titled “Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation”, *available at* https://www.uspto.gov/sites/default/files/documents/interim_proc_discretionary_denials_aia_parallel_district_court_litigation_memo_20220621_.pdf (“Interim Procedure”). That Memorandum provides that “the PTAB will not deny institution of an IPR or PGR under *Fintiv* . . . where a petitioner

⁴ U.S. Patent Appl. Publication No. 2003/0162557 A1, published August 28, 2003, filed December 24, 2002 (Ex. 1006, “Shida”).

⁵ U.S. Patent Appl. Publication No. 2008/0208605 A1, published August 28, 2008, filed October 20, 2007 (Ex. 1007, “Sinha”).

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, i.e., a *Sotera* stipulation.” Interim Procedure 9.

Petitioner has submitted such a stipulation. Paper 7, 10. Thus, we do not exercise discretion to deny institution under 35 U.S.C. § 314(a).

B. Claim Construction

We construe each 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). Under this standard, claim terms are generally given their plain and ordinary meaning as would have been understood by a person of ordinary skill in the art (POSITA) at the time of the invention and in the context of the entire patent disclosure. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc).

Only those terms 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. Matal*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

Petitioner “submits that all claim terms should receive their plain and ordinary meaning in the context of the ’345 patent specification.” Pet. 17. Patent Owner proposes construction for “situational network” as recited in claims 1, 5, 8, 12, 13, and 16 (Prelim. Resp. 3–12), “roll call query” as recited in claims 1, 8, and 13 (*id.* at 12–14), and “situation authority” as recited in claims 4, 8, 9, and 13 (*id.* at 14–16).

In light of the parties' arguments and evidence, we address claim terms "situational network," "roll call query," and "situation authority," but only to the extent necessary to resolve the disputed issues before us.

1. "situational network" (claims 1, 5, 8, 12, 13, 16)

In its Preliminary Response, according to Patent Owner, "[b]oth [parties] agree that a 'situational network' is created in response to the occurrence of an event or situation." Prelim. Resp. 3–4. Further, Patent Owner contends the '345 patent states that "participants included in the situational network (SitNet) 3000 may have no prior knowledge of or connection or contact with each other or other participants of the situational network through *any other type of social network* or personal interactions" (*id.* at 4 (citing Ex. 1001, 4:3–15)), and thus, the '345 patent further "classifies a 'situational network' as a type of social network." *Id.*

Petitioner responds in its Reply that Patent Owner's proposed construction in the Preliminary Response for "situational network" "is substantially narrower than its proposed construction in district court." Prelim. Reply 1. In particular, Petitioner contends that "situational network" is not "limited" to a "social network," wherein "[t]he specification repeatedly confirms that the situational network is established using a social network in only a single embodiment." *Id.* at 2 (citing Ex. 1001, 7:52–59, 14:52–57, 20:20–24; Ex. 1026 ¶ 4) (emphasis omitted).

In its Preliminary Sur-reply, Patent Owner notes that a *Markman* hearing was conducted in the district court litigation and submits the transcript and Opinion and Order as exhibits in the current IPR proceeding. Prelim. Sur-reply 1. Patent Owner "requests the Board to consider and adopt" the district court's construction. *Id.* Patent Owner then

acknowledges that the district court construed the term “[s]ituational [n]etwork as ‘a network created in response to an event or situation,’” and “not a social network.” *Id.*

As there is no controversy with respect to the claim construction of “situational network,” we determine no explicit construction is necessary. *See Vivid Techs.*, 200 F.3d at 803. As Patent Owner points out in its Preliminary Response, “[b]oth parties agree with the construction of “situational network” as “a network created in response to the occurrence of an event or situation.” Prelim. Resp. 3–4. Further, Patent Owner requests that we adopt the district court’s construction, wherein Patent Owner acknowledges that the district court construes “situational network” similarly and “not a social network,” as originally proposed by Patent Owner in the Preliminary Response. Prelim. Sur-reply 1.

2. “roll call query” (claims 1, 8, 13)

Patent Owner contends that “the specification provides a clear definition” for “roll call query.” Prelim. Resp. 12. In particular, according to Patent Owner, the Specification’s discussion of the term “is limited to two paragraphs” wherein, “in all examples, the ‘roll call query’ is detailed as an optional service provided by the ‘event node server.’” *Id.* at 12–13.

Petitioner responds that Patent Owner “seeks to limit a roll call query by the component that provides it—an event node server,” but this element “is not limited to an event node server.” Prelim. Reply 3–4 (citing Ex. 1001, 27:3–6; Ex. 1026 ¶¶ 7–8).

In its Preliminary Sur-reply, Patent Owner acknowledges that the District Court was not asked to construe the term “roll call query.” Prelim. Sur-reply 2. However, Patent Owner contends that

Independent claims 1, 8, and 13 each require aggregating or including the responses to the roll call query into a “roll call list.” For this to occur, the responses to the roll call query must be received by a node in the situational network corresponding to the event or situation. Otherwise, the responses would get lost in the ether of the network. The specification defines such a node as an event node. 345 Patent, 7:59-61 (“The situation or event itself may also be associated with a node on the SitNet, known as the event node.”). If there is an event node to receive the responses, there must be a server hosting the event node.

Additionally, claims 8 and 13 require the responses be sent to or received by a situational authority. However, situational authorities, as the Court construed the term, do not aggregate information. Accordingly, something more must be provided to enable the situational authority to include or aggregate the responses into a roll call list. That something else is defined in the specification as the event node server. 345 Patent, 4: 27-29 (“There is a corresponding situational authority server 3011, also referred to as an event node server, for each situation authority 207”).

Prelim. Sur-reply 2–3.

We are unpersuaded by Patent Owner’s contentions that a “roll call query” is “an optional service provided by an ‘event node server.’” Prelim. Resp. 13; Prelim. Sur-reply 2–3. Although Patent Owner points to “examples” in the Specification in which “roll call query” is “detailed” (Prelim. Resp. 13), these portions of the Specification merely show exemplary embodiments and not a definition. That is, although the referenced portions of the Specification indicate “examples” in which the “roll call query” is “an optional service provided by an ‘event node server’” (*id.*), nothing in the Specification limits “roll call query” to “an optional service provided by the ‘event node server,’” as Patent Owner contends. *Id.* Any special definition for a claim term must be set forth in the Specification

with reasonable clarity, deliberateness, and precision. *See In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). We do not discern such clarity, deliberateness, and precision to be present here.

In view of the plain language of the claims and the Specification, we determine that the term “roll call query” as claimed is not limited to an optional service provided by any event node server. We determine no further explicit construction is necessary to resolve the controversy. *See Vivid Techs.*, 200 F.3d at 803.

3. “situation authority”

In its Preliminary Response, Patent Owner argues that a “situation authority” is “an external entity able to aggregate and provide comprehensive information related to situation and that operates an event node server hosting one or more event nodes that provide information concerning the situation or event.” Prelim. Resp. 14–16. In its Reply, Petitioner responds that Patent Owner’s construction is “substantially narrower than its proposed construction in district court” as the “construction . . . improperly imports limitations by requiring the situational authority to operate on an event node server.” Prelim. Reply 4–5.

In its Preliminary Sur-reply, Patent Owner “requests the Board to consider and adopt [the district court’s construction]” (Prelim. Sur-reply 1), but acknowledges that the district court construed the term “situation authority” as “an entity providing information concerning a situation” while rejecting Patent Owner’s proposed construction that “the situation authority ‘operat[es] a server with one or more event nodes.’” Prelim. Sur-reply 2.

As there is no controversy with respect to the claim construction of “situation authority,” we determine no explicit construction is necessary.

See Vivid Techs., 200 F.3d at 803. Here, Patent Owner requests that we adopt the district court's construction. Prelim. Sur-reply 1. However, as Patent Owner acknowledges, the district court has rejected Patent Owner's proposed construction that "the situation authority 'operat[e] a server with one or more event nodes.'" *Id.* at 2.

C. Principles of Law

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 ordinary skill in the art; and (4) objective evidence of nonobviousness. *Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 17–18 (1966).

D. Claims 1, 3–8, 10–13, 15, and 16 as Obvious over Gage (Ground 1); claims 2, 9, and 14 as Obvious over Gage and Mitchell (Ground 2)

Petitioner contends that claims 1, 3–8, 10–13, 15, and 16 of the '345 patent would have been obvious over Gage. Pet. 12, 22–44; *see also* Prelim. Reply 5–8. Petitioner also contends that dependent claims 2, 9, and 14 would have been obvious over Gage in further view of Mitchell. *See* Pet. 12, 44–49.

In response, Patent Owner contends

The Petition fails to demonstrate Gage . . . discloses: 1) a “situational network” as recited in independent claims 1, 8, and 13; 2) a “roll call query” as recited in independent claims 1, 8, and 13; or 3) a “situation authority” as recited in independent claims 8 and 13. Gage, therefore, cannot render the challenged claims invalid and unpatentable.

Prelim. Resp. 16–23; *see also* Prelim. Sur-reply 3–4. As to claims 2, 9, and 14, Patent Owner argues that “[t]he Petition fails to assert Mitchell . . . overcomes the deficiencies [of Gage].” *See* Prelim. Resp. 23.

We summarize the asserted art Gage and Mitchell below.

1. Gage

Gage is titled “Disaster Response System for Conveying a Situation Status and Location of Subscribers and for Initiating Preconfigured Response Plans,” and relates to “emergency notification systems for mobile telephone users within a disaster region to quickly and efficiently convey situational status indicators to concerned parties.” Ex. 1005, codes (54), (57), ¶ 2 (emphasis and capitalization omitted). When a disaster is detected, mobile devices of subscribers may be queried for location and wireless connectivity by a centrally located disaster response system. *Id.* ¶ 9. When

a subscriber is away from a disaster area, this information can be recorded and it can be presumed that the subscriber is all right, but when a subscriber is proximate to a disaster area, the subscriber's device can be queried for a status indicator and for an optional, user-provided message. *Id.*

Figure 2 of Gage, reproduced below, illustrates a subscriber status reporting system 200 configured for use during disasters. Ex. 1005 ¶¶ 16, 26.

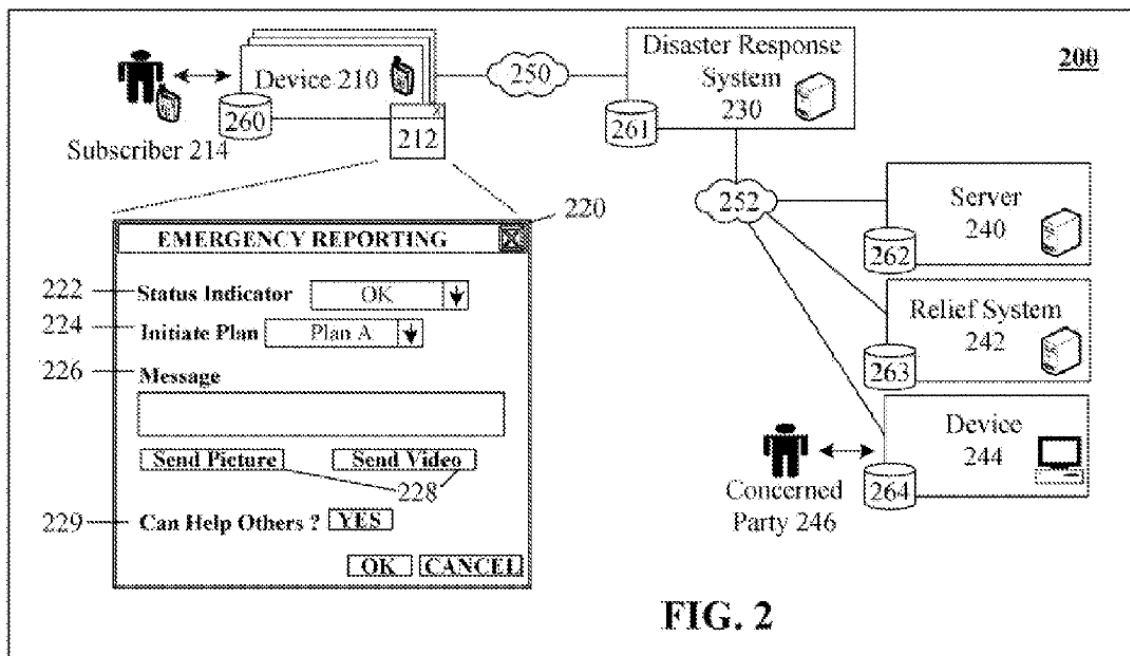


Figure 2 illustrates a subscriber status reporting system 200 configured for use during disasters. Ex. 1005 ¶¶ 16, 26.

In system 200 shown in Figure 2, a device 210 (e.g., a mobile telephone, a computer, a two-way radio, a GPS device, a media player) associated with a subscriber 214 may be linked to disaster response system 230 via network 250. Ex. 1005 ¶¶ 26, 32. System 230 may be linked to server 240, relief system 242, and device 244 via network 252. *Id.* Device 244 is a device associated with concerned party 246. *Id.* Software 212 on

device 210 permits subscriber 214 to report situation status information to system 230. *Id.* ¶ 27. Interface 220 in Figure 2 illustrates a reporting interface, with which a user can select a status indicator 222, such as OK, NEED HELP, and IN CRITICAL NEED. *Id.*

System 230 may combine data obtained from one or more devices 210 with information obtained from other sources, such as server 240, in order to create a more comprehensive situation assessment. Ex. 1005 ¶ 31. For example, server 240 may provide satellite images of a disaster region, which may be combined with a subscriber location so that a concerned party 246 is able to see a status indicator and a location for a subscriber 214, as well as a picture of that area. *Id.* Disaster response system 230 may convey data to one or more disaster relief systems 242, which can provide assistance to needful subscribers 214. *Id.*

Figure 3 of Gage, reproduced below, is a flow chart of a process used by a disaster response system. Ex. 1005 ¶¶ 17, 35.

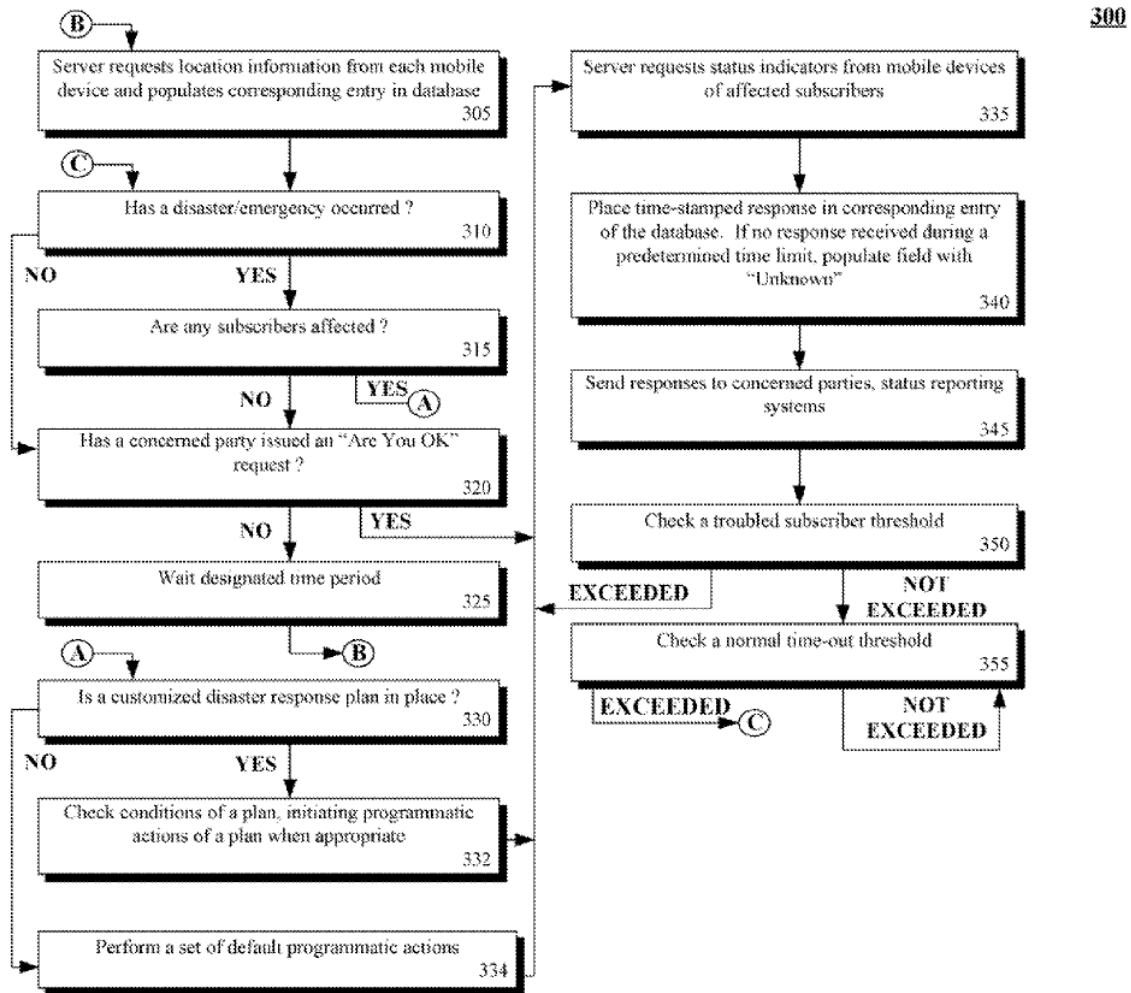


FIG. 3

Figure 3 of Gage, reproduced above, is a flow chart of a process 300 used by a disaster response system. Ex. 1005 ¶¶ 17, 35.

The method illustrated in Figure 3 begins at step 305 at which a server requests location information from mobile devices and populates corresponding database entries using this information. Ex. 1005 ¶ 36. A determination is made as to whether a disaster has occurred (step 310) and if so, the method proceeds to step 315 where a determination is made as to whether any subscribers have been affected by the disaster. *Id.* This

determination may be based on the location information of step 305. *Id.* Step 315 may take into consideration a quantity of subscribers that have manually activated an emergency response plan. *Id.* Then, a subscriber, having an unknown affected status and proximately located to other subscribers that have each manually activated an emergency response plan, can be presumed to be affected by an emergency. *Id.* Further, sufficient subscriber emergency plan activations in a given area may cause step 310 to be automatically evaluated as true for that area. *Id.*

If results of step 310 or step 315 are negative, the method proceeds to step 320, where a check is performed to determine if anyone issued an “Are You OK” request. Ex. 1005 ¶ 36. The method may also wait for a specified period, as shown in step 325, after which the method may repeat step 305. *Id.*

If per step 315 one or more subscribers are affected by a disaster, the method proceeds to step 330 where a disaster response system determines whether conditions have been satisfied for a user defined plan. Ex. 1005 ¶ 37. If so, programmatic actions associated with that plan may be initiated, as shown at step 332. *Id.* Otherwise, a set of default actions for the subscriber can be taken (step 334). *Id.* For example, a master contact may be contacted and informed of the status indicator and the location information of the mobile device, other contacts associated with the subscriber may be contacted, or a Web site containing subscriber status information is updated with the subscriber’s status indicator and location. *Id.* Concerned parties, such as family members, may be granted access to the Web site, through which they can look-up the last known location and situational status of the subscriber. *Id.*

An affirmative response at step 320 leads to step 335, where a server of a disaster response system requests conditions for each affected or queried subscriber. Ex. 1005 ¶ 38. Then, at step 340, a time-stamp response to each of these queries is placed in a corresponding database entry, and if no response is received within a predetermined time period, the response field is populated with an “Unknown” indication. *Id.* When all responses have been determined, responses are sent (step 345) to each concerned party and/or to status reporting systems (such as the aforementioned Web site). *Id.* At step 350, a troubled subscriber timeout threshold is checked, where the threshold is associated with potentially threatened subscribers (such as users having an “Unknown” status, and subscribers who set a status indicator to indicate that they were not alright). *Id.* ¶ 39. When the threshold has been exceeded, the method loops to step 335, where the server requests condition information for the potentially threatened subscribers. *Id.*

2. Mitchell

Mitchell is titled “Real Time Automatic Headcount System,” and relates to “an intelligent crisis headcount system which is operable to account for all persons associated with a site during a crisis event in real time.” Ex. 1013, code (54), ¶ 1 (emphasis and capitalization omitted). Mitchell’s real time automatic headcount system is configured with a portable transmitter operated by a crisis coordinator, to output an alert signal which is received by a plurality of receivers coupled to respective persons associated with a crisis-event site. *Id.* at code (57). The receivers each generate an acknowledgement signal transmitted via a central processing unit to the transmitter. *Id.* Upon receiving the acknowledgement signal, the central processing unit is operable to update a check list of all persons

associated with the crisis-event site, identify those who have not been accounted for, and implement back-up procedures for locating and accounting for the previously unaccounted persons, in real time. *Id.*

3. Analysis

a. *Claims 1, 3–8, 10–13, 15, and 16 as Obvious over Gage (ground 1)*

Petitioner contends that claims 1, 3–8, 10–13, 15, and 16 would have been obvious over Gage. Pet. 22–33. We begin by addressing in detail Petitioner’s contentions and Patent Owner’s arguments with respect to the limitations of independent claims 1, 8, and 13.

i. *Preamble – a method of “accessing situation related information” (claim 1); a method of “providing situation related information to a situation authority via a situational network” (claim 8); a system for “accessing situation related information” (claim 13)*

With respect to claims 1 and 13, Petitioner contends that Gage discloses the preamble. Pet. 22–24, 36. In particular, Petitioner contends that “Gage discloses ‘a method for reporting a status indicator’ (*situation related information*) to a disaster response system.” *Id.* at 22 (citing Ex. 1005, Abstract).

With respect to the preamble of claim 8, Petitioner contends that, “[t]o the extent limiting,” Gage teaches that a subscriber device communicates the “status indicator (*situation related information*)” to “the disaster response system (a *situation authority*) through a subscriber status reporting system that implements a network configured for use during disasters (*situational network*).” Pet. 34 (citing Ex. 1005 ¶¶ 19, 25). According to Petitioner,

Gage’s disaster response system is a “situation authority” because it “‘detect[s] an occurrence of a disaster affecting a region’ (*situation*), receives and ‘aggregate[s]’ information related to the disaster, and provides the information to various participants in the network,” such as disaster relief agencies and rescue personnel. *Id.* (citing Ex. 1005 ¶¶ 8–9, 21, 36, 45; Ex. 1003 ¶ 104).

At this stage of the proceeding, Patent Owner does not present arguments in the Preliminary Response addressing the specific merits of Petitioner’s contentions with respect to the preambles of claims 1 and 13. *See* Prelim. Resp. 16–23. However, with respect to the preamble of claim 8, Patent Owner contends that “claim 8 requires the use of a ‘situational network’” (*id.* at 16), and recites a “situation authority.” *Id.* at 21.

As to “situational network,” Patent Owner argues that Gage fails to present a network as a “social network.” Prelim. Resp. 17. Further, Patent Owner contends that Gage also fails to disclose “a network created [in response to the] occurrence of an event or situation” because “connections between the subscriber and Gage’s disaster response system are . . . formed prior to the occurrence or expected occurrence of an event or situation.” *Id.* at 18–19 (emphases omitted).

With respect to “situation authority,” Patent Owner contends that, in reliance on Gage’s disaster response system for teaching a “situation authority,” Petitioner “ignores the fact that a ‘situation authority’ is an ‘external entity.’” Prelim. Resp. 22. Further, Patent Owner contends that “Petitioner has identified Gage’s disaster response system as the ‘situation network,’” wherein “Gage’s disaster response system . . . cannot be both a ‘situational network’ and a ‘situation authority.’” *Id.* at 22–23.

Having reviewed all of Petitioner’s assertions regarding the preamble in claims 1 and 13, as well as the supporting evidence, we determine on this record that Petitioner has made a sufficient showing that Gage teaches a method of “accessing situation related information” as recited in claims 1 and 13.⁶

With respect to claim 8, based on the current record, we find Patent Owner’s arguments unavailing. In particular, we find unavailing Patent Owner’s contention that Gage fails to teach a “situational network” (Prelim. Resp. 16) or a “situation authority” as recited in claim 8. *Id.* at 21.

As to “situational network,” although Patent Owner argues in its Preliminary Response that Gage fails to present a network as a “social network” (Prelim. Resp. 17), as discussed *supra* Section II(B)(1), Patent Owner subsequently requests that we adopt the district court’s construction as “not a social network.” Prelim. Sur-reply 1. Further, although Patent Owner contends that “Petitioner has identified Gage’s disaster response system as the ‘situation network’” (Prelim. Resp. 22–23), Petitioner specifically relies on Gage’s disaster response system as a “situation authority,” which, “through a subscriber status reporting system . . . implements a network configured for use during disasters (*situational network*).” Pet. 34. According to Petitioner, Gage’s disaster response system aggregates information related to a disaster and “provides the information to various participants in the network, such as disaster relief

⁶ Because we find availing Petitioner’s contention that Gage teaches the preambles, for purposes of institution, we do not determine whether the preambles are limiting. *See Nidec*, 868 F.3d at 1017 (noting that “we need only construe terms ‘that are in controversy’” (quoting *Vivid*, 200 F.3d at 803)).

agencies and rescue personnel.” *Id.* That is, Petitioner identifies a network “configured for use” *by* the disaster response system during a disaster as the “situational network,” rather than the disaster response system itself, wherein the disaster response system then provides the information *to the various participants in the network*. *Id.*

We also find unavailing Patent Owner’s contention that Gage’s “connections between the subscriber and Gage’s disaster response system are . . . formed prior to the occurrence or expected occurrence of an event or situation.” Prelim. Resp. 18–19. Instead, we find availing Petitioner’s contention that “Gage discloses that ‘when a disaster is detected’ (occurrence of the situation), ‘a centrally located disaster response system’ queries mobile devices of subscribers located near the disaster for status indicators,” wherein “Gage forms a situational network related to the occurrence of the disaster.” Pet. 26 (citing Ex. 1005 ¶ 9; Ex. 1003 ¶¶ 80–83) (emphasis omitted). That is, according to Petitioner, the disaster recovery system “establishes ‘multiple communication/information transmission options . . . to enable subscribers 130–134 to communicate with system 120.’” *Id.* (citing Ex. 1005 ¶ 25). We agree with Petitioner that the ’345 patent similarly discloses that “situational networks are formed by ‘caus[ing] connections . . . to be established between, within or among a set of participants.” *Id.* at 27 (citing Ex. 1001, 4:3–10, 7:29–51).

As to “situation authority,” we find unavailing Patent Owner’s contention that Petitioner “ignores the fact that a ‘situation authority’ is an ‘external entity.’” Prelim. Resp. 22. We note that Patent Owner is proposing a construction of “situation authority” as an “external entity” that is not part of the construction it argued in the district court and Patent Owner

asks us to adopt. *See* Prelim Sur-reply 1–2 . At this time, we take no position on whether the situation authority is required to be an “external entity.”

Nevertheless, as Petitioner points out, Gage’s disaster response system is an “external” entity because “it is ‘outside’ [of] the disaster region.” Prelim. Reply 7–8 (citing Ex. 1005 ¶¶ 8, 22–23). As Petitioner explains, Gage’s disaster response system “comprises a server that connects with various participants to form a situational network,” wherein the disaster response system “is not the situational network itself.” *Id.*

On this preliminary record, we are also persuaded that Petitioner has made a sufficient showing that Gage teaches “providing situation related information to a situation authority via a situational network,” as recited in claim 8.⁷

ii. a “central server, corresponding to a situation authority” (claim 13)

Petitioner contends that “Gage discloses ‘a centralized disaster response system’ providing ‘situational status,’” wherein the disaster response system “includes a ‘disaster response server’ (*central server*).” Pet. 36 (citing Ex. 1005 ¶¶ 8, 10). As discussed *supra* Section II(3)(a)(i), we find unavailing Patent Owner’s contention that Petitioner fails to provide a “situation authority” that is an “external” entity. Prelim. Resp. 22. As Petitioner points out, Gage’s centralized disaster response system is an

⁷ Because we find availing Petitioner’s contention that Gage teaches the method recited in the preamble of claim 8, for purposes of institution, we do not determine whether the preamble is limiting. *See Nidec*, 868 F.3d at 1017.

“external” entity because “it is ‘outside’ [of] the disaster region.” Prelim. Reply 7–8 (citing Ex. 1005 ¶¶ 8, 22–23).

On this preliminary record, we are persuaded that Petitioner has made a sufficient showing that Gage teaches a “central server, corresponding to a situation authority,” as recited in claim 13.

iii. *“receiv[ing] an indication of an occurrence of a situation” (claims 1, 13)*

Petitioner contends that Gage’s disaster response system receives a message that indicates an occurrence of a situation. Pet. 24, 37. In particular, Petitioner contends that the disaster response system “receives messages indicating (i.e., *receiving an indication*) that subscribers have activated an ‘emergency response plan,’ and these received messages indicate the occurrence of a disaster (i.e., *an occurrence of a situation*).” *Id.* at 24 (citing Ex. 1005 ¶¶ 28, 36).

At this stage of the proceeding, Patent Owner does not present arguments in the Preliminary Response addressing the specific merits of Petitioner’s contentions with respect to this limitation. *See* Prelim. Resp. 16–23.

Having reviewed all of Petitioner’s assertions regarding these limitations, as well as the supporting evidence, we determine on this record that Petitioner has made a sufficient showing that Gage teaches or at least suggests “receiving an indication of an occurrence of a situation,” as recited in claim 1 and similarly recited in claim 13.

- iv. “*form[ing] a situational network related to the occurrence of the situation with a plurality of participant devices determined to be geographically proximate to the situation, each of the participant devices corresponding to a participant in the situational network*” (claims 1, 13)

Petitioner contends Gage discloses that “‘when a disaster is detected’ (*occurrence of the situation*), ‘a centrally located disaster response system’ queries mobile devices of subscribers located near the disaster for status indicators.” Pet. 26 (citing Ex. 1005 ¶ 9). Thus, “Gage forms a *situational network related to the occurrence of the disaster*.” *Id.* (citing Ex. 1003 ¶¶ 80–83). According to Petitioner, a POSITA would have understood that “the disaster response system *forms a situational network* by connecting with subscribers 132-134 in the disaster region 110 using one or more . . . communication channels for querying subscribers’ situation status.” *Id.* at 27 (citing Ex. 1005 ¶¶ 9–10, 21, 31, 33, 36, 38, Figs. 1, 3; Ex. 1003 ¶¶ 84–85).

Petitioner further contends that Gage’s “situational network” is formed with a plurality of participant devices determined to be geographically proximate to the situation because Gage’s “subscriber devices 132-134 [are] located in the disaster region.” Pet. 29 (citing Ex. 1005 ¶¶ 9, 19, 36; Ex. 1003 ¶ 88). Petitioner then contends that, in Gage, “each of the participant devices in its situational network *corresponds to a participant in the situational network*,” for example, each of subscriber devices 132–134 is “associated with a subscriber.” *Id.* (citing Ex. 1003 ¶ 89).

As discussed *supra* Section II(D)(3)(a)(i), we find unavailing Patent Owner’s contention that Petitioner fails to provide a “situational network” as a “social network” (Prelim. Resp. 17) because, as discussed *supra* Section II(B)(1), Patent Owner subsequently requests in its Sur-reply that we adopt the district court’s construction as “not a social network.” Prelim. Sur-reply 1.

We also find unavailing Patent Owner’s contention that Gage’s “connections between the subscriber and Gage’s disaster response system are . . . formed prior to the occurrence or expected occurrence of an event or situation.” Prelim. Resp. 18–19. As Petitioner points out in its Preliminary Reply, Patent Owner “conflates the participants’ initial subscription with the communicative situational network formed in response to a disaster, using communication channels selected based on the disaster.” Prelim. Reply 6 (citing Prelim. Resp. 19).

We instead find availing Petitioner’s contention that a POSITA would have understood that Gage’s “disaster response system forms a situational network by connecting with subscribers 132-134 in the disaster region 110 using one or more . . . communication channels for querying subscribers’ situation status.” Pet. 27. We agree with Petitioner that the ’345 patent similarly discloses that “situational networks are formed by ‘caus[ing] connections . . . to be established between, within or among a set of participants.” *Id.*; *see* Ex. 1001, 4:3–10, 7:29–51.

Having reviewed all of Petitioner’s assertions regarding this limitation, as well as Patent Owner’s arguments to the contrary, we determine on this record that Petitioner has made a sufficient showing that Gage teaches “forming a situational network related to the occurrence of the

situation with a plurality of participant devices determined to be geographically proximate to the situation, each of the participant devices corresponding to a participant in the situational network,” as recited in claim 1 and similarly recited in claim 13.

- v. “*present[ing] a roll call query to each of the plurality of participant devices soliciting a reply related to a status of the participant*” (claims 1, 13); “*receiving, by a participant device, a roll call query soliciting a reply related to a status of a participant*” (claim 8)

Petitioner contends that, in Gage, when a subscriber is proximate to a disaster area, the subscriber’s device is “queried for a status indicator and for an optional user provided message,” wherein “[t]he query is a *roll call query*” as claimed because “it is provided to the subscriber devices that are ‘proximate to a disaster area’ (i.e., *participant devices*),” and “solicits a ‘status indicator’ and ‘message’ from subscriber (i.e., *a reply related to a status of the participant*).” Pet. 30 (citing Ex. 1005 ¶¶ 9, 10, 27, 30, Fig. 2; Ex. 1003 ¶¶ 92–93); *see also id.* at 34, 37.

Patent Owner argues Petitioner fails to establish Gage discloses presenting a “roll call query” as claimed, because the Specification “presents a ‘roll call query’ as an optional service provided by an ‘event node server.’” Prelim. Resp. 20. However, as discussed *supra* Section II(B)(1), in view of the plain language of the claims and the Specification, we determine that the term “roll call query” as claimed does not require an event node server provide the query.

We find availing Petitioner’s contention that Gage teaches a roll call query as claimed because Gage provides a query to subscriber devices that

are proximate to a disaster area and solicits status and from a subscriber. Pet. 30. Further, as Petitioner explains, even assuming Patent Owner’s contention that the query provided by an “event node server” is required, Gage’s disaster response comprises such a node that propagates up-to-date information about a disaster, wherein the disaster response system “can convey data to one or more disaster relief systems,” and the location and status are continuously updated, “allowing the concerned parties to receive current information about subscribers.” Prelim. Reply 7 (citing Ex. 1005 ¶¶ 8, 21, 31, 37–38; Ex. 1026 ¶¶ 17–18).

Having reviewed all of Petitioner’s assertions regarding this limitation, as well as Patent Owner’s arguments to the contrary, we determine on this record that Petitioner has made a sufficient showing that Gage teaches “a roll call query . . . soliciting a reply related to a status of the participant,” as recited in claim 1 and similarly recited in claims 8 and 13.

vi. Remaining limitations of claims 1, 8, and 13

Petitioner provides detailed explanations as to how Gage teaches the remaining claim limitations as recited in claims 1, 8, and 13, citing Dr. Cooperstock’s testimony for support. Pet. 31–39 (citing Ex. 1003 ¶¶ 98–117). For example, Petitioner presents evidence that Gage discloses a “status response from one or more of the participants,” as recited in claim 1 and similarly recited in claims 8 and 13. *Id.* at 31–32, 35–36, 37 (citing Ex. 1005 ¶¶ 9, 25, 27, 30, 34, 38; Ex. 1003 ¶¶ 95–96, 107, 114, 116). Petitioner also presents that Gage discloses “aggregating the status responses from responsive participants into a roll call list,” as recited in claim 1 and similarly recited in claims 8 and 13. *Id.* at 32–33, 36, 37 (citing Ex. 1005 ¶¶ 21, 37–38, 45; Ex. 1003 ¶¶ 98–102, 106, 114, 116–117).

At this stage in the proceeding, Patent Owner does not address separately Petitioner's explanations and supporting evidence regarding the remaining limitations in claims 1, 8, and 13. *See generally* Prelim. Resp. 16–23.

Having reviewed Petitioner's arguments and supporting evidence in the present record, we determine that Petitioner has made a sufficient showing that Gage teaches the remaining limitations recited in claims 1, 8, and 13.

vii. Dependent claims 3–7, 10–12, 15, and 16

Petitioner provides detailed explanations as to how Gage teaches the limitations recited in dependent claims 3–7, 10–12, 15, and 16, citing Dr. Cooperstock's testimony for support. Pet. 39–43 (citing Ex. 1005 ¶¶ 8, 9, 11, 19, 21, 23, 25, 27, 28, 31–32, 37–39, Figs. 1, 3; Ex. 1003 ¶¶ 119, 121, 123–128, 131–132, 135, 138). At this stage in the proceeding, Patent Owner does not separately address the dependent claims. *See* Prelim. Resp. 16–23.

Having reviewed Petitioner's arguments and supporting evidence in the present record, we determine Petitioner has made a sufficient showing that Gage teaches the subject matter of claims 3–7, 10–13, 15, and 16.

viii. Conclusion

For the foregoing reasons, we determine that the evidence and arguments presented show a reasonable likelihood that Petitioner would prevail in establishing that the subject matter of claims 1, 3–8, 10–13, 15, and 16 would have been obvious over Gage.

b. Claims 2, 9, and 14 as Obvious over Gage and Mitchell (ground 2)

Petitioner asserts that claims 2, 9, and 14 would have been unpatentable over Gage and Mitchell. Pet. 44–49. In particular, Petitioner contends that a POSITA reading Gage, “would have understood that there could be many reasons for a subscriber to fail to respond to the disaster response system queries” (*id.* at 44), and “would have sought out references similar to Gage that additionally teach techniques for enabling other users or subscribers to provide status updates for non-responsive subscribers” (*id.* at 45).

According to Petitioner, “Mitchell discloses a similar system as Gage,” wherein “an ‘intelligent headcount system’ . . . ‘ensur[es] that all persons have been accounted for . . . in real time in response to an emergency or disaster declaration” (Pet. 45 (citing Ex. 1013 ¶ 11)), wherein the POSITA “would have been motivated to modify Gage to enable accounted for (responsive) subscribers to provide information relating to the status of unaccounted for (nonresponsive) subscribers, as taught by Mitchell.” *Id.* at 46 (citing Ex. 1003 ¶¶ 142–144).

At this stage in the proceeding, Patent Owner merely asserts that “[f]or the reasons detailed *supra*, Gage fails to disclose all the elements of independent claims 1, 8, and 13 upon which claims 2, 9, and 14, respectively depend,” wherein “[t]he Petition fails to assert Mitchell . . . overcomes the deficiencies.” Prelim. Resp. 23.

As discussed *supra* Section II(D)(3)(a), we find unavailing Patent Owner’s contention that Gage fails to disclose all the elements of independent claims 1, 8, and 13. Having reviewed Petitioner’s arguments

and supporting evidence in the present record, we determine that Petitioner has made a sufficient showing that Gage in further view of Mitchell teaches the limitations recited in claims 2, 9, and 14. Furthermore, based on this preliminary record, we are persuaded that Petitioner has made a sufficient showing that a POSITA would have had a reason to combine the teachings of Gage and Mitchell.

For the foregoing reasons, we determine that the evidence and arguments presented show a reasonable likelihood that Petitioner would prevail in establishing that the subject matter of claims 2, 9, and 14 would have been obvious over Gage and Mitchell.

E. Claims 1, 3, 4, 6–8, 10–13, and 15 as Obvious over Shida (Ground 3); claims 2, 5, 9, 14, and 16 as Obvious over Shida and Sinha (Ground 4)

Petitioner contends that claims 1, 3, 4, 6–8, 10–13, and 15 of the '345 patent would have been obvious over Shida. Pet. 12, 49–68; *see also* Prelim. Reply 8–10. Petitioner then contends that dependent claims 2, 5, 9, 14, and 16 would have been obvious over Shida in further view of Sinha. *See* Pet. 12, 68–78.

In response, Patent Owner contends

The Petition fails to demonstrate Shida . . . discloses: 1) a “situational network” as recited in independent claims 1, 8, and 13; and 2) a “roll call query” as recited in independent claims 1, 8, and 13. Shida thus cannot render the challenged claims invalid and unpatentable.

Prelim. Resp. 23–28; *see also* Prelim. Sur-reply 4–5. With respect to claims 2, 5, 9, 14, and 16, Patent Owner argues that “[t]he Petition fails to assert [Sinha] overcomes the deficiencies [of Shida].” *See* Prelim. Resp. 28.

We summarize the asserted art to Shida and Sinha below.

1. Shida

Shida is titled “Method for Processing Information Associated with Disaster,” and “relates to a safety confirmation technique when the disaster occurred” thereby “mak[ing] it possible to confirm the safety of persons who have the possibility of encountering the damage of the disaster when the disaster occurred.” Ex. 1006, codes (54), (57), ¶ 1 (emphasis and capitalization omitted). Shida describes a system that receives information of a disaster occurring region, and information on subscribers in the disaster occurring region and stores the information in a disaster region subscriber table storage unit. *Id.* at code (57). A disaster notice is transmitted to a subscriber terminal in the disaster occurring region, and when information on the position of the subscriber terminal (or a voluntary safety confirmation response from the subscriber terminal) in the region is received, the system judges whether the subscriber is safe and stores that judgment result in the disaster region subscriber table storage unit. *Id.*

Figure 1 of Shida, reproduced below, is a diagram illustrating the configuration of a system for processing information associated with a disaster. Ex. 1006 ¶¶ 13, 27.

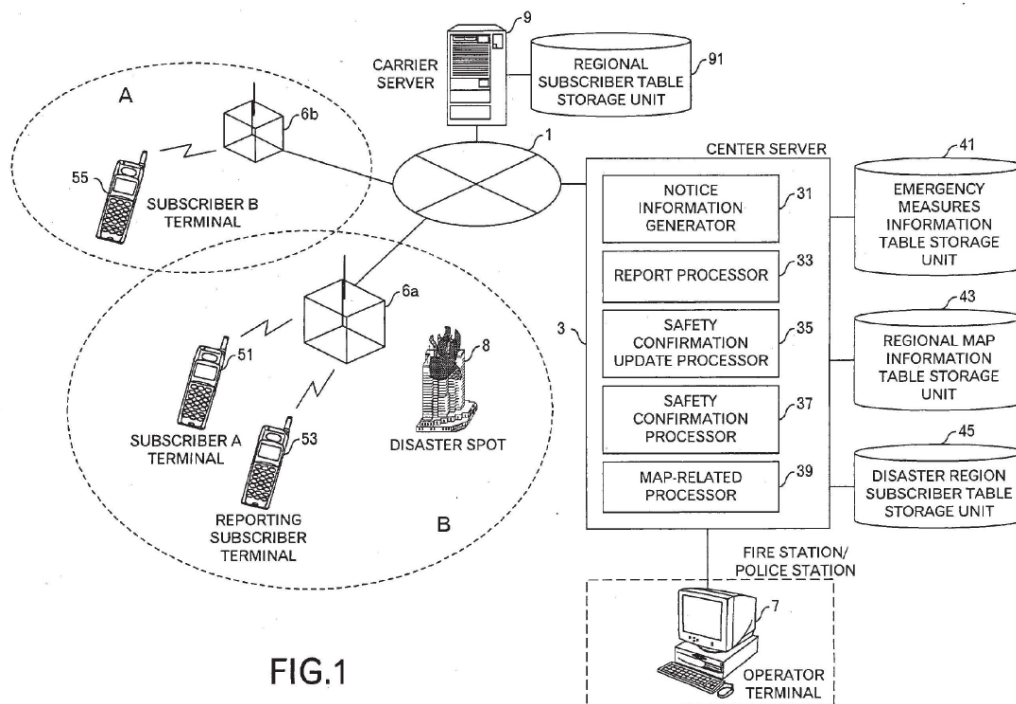


FIG.1

Figure 1 is a diagram illustrating the configuration of a system for processing information associated with a disaster. Ex. 1006 ¶¶ 13, 27.

The system illustrated in Figure 1 includes base station 6a for region A, base station 6b for region B, carrier server 9, and center server 3, which are connected to network 1 (such as a public network or the Internet). Ex. 1006 ¶ 27. Subscriber A terminal 51 and reporting subscriber terminal 53 exist in region A. *Id.* When a disaster occurs, these terminals perform wireless communication mainly with base station 6a. *Id.* Subscriber B terminal 55 (with a function similar to subscriber A terminal 51) is operated by subscriber B in region B. *Id.* When the disaster occurs, subscriber B terminal 55 carries out wireless communication mainly with base station 6b. *Id.*

Center server 3 employs (i) an emergency measures information table storage unit 41 for storing an emergency measures information table with information associated with the emergency measures, (ii) regional map

information table storage unit 43 for storing a regional map information table with information on various places and information on a place of refuge, and (iii) a disaster region subscriber table storage unit 45 for storing a disaster region subscriber table useful for managing safety information of subscribers that are in the disaster occurring region. Ex. 1006 ¶ 30. Center server 3 is also connected to operator terminal 7 that is provided in facilities such as fire stations and police stations. *Id.*

When a disaster occurs at disaster spot 8, a reporting subscriber inputs disaster information by operating reporting subscriber terminal 53. Ex. 1006 ¶ 32. Reporting subscriber terminal 53 then generates a disaster occurrence report including disaster information and the subscriber's ID, and transmits the report to carrier server 9 through base station 6a which is in the area where the disaster is occurring. *Id.* ¶ 33.

Carrier server 9 receives the disaster occurrence report, retrieves the regional subscriber table (stored in regional subscriber table storage unit 91) by the received subscriber ID, specifies the disaster occurring region, and extracts subscribers that are in the disaster occurring region, storing their information in a storage device. Ex. 1006 ¶¶ 33–37. Carrier server 9 then transmits information regarding the reporting subscriber (e.g., subscriber ID), disaster information (from the disaster occurrence report), information on the disaster occurring region, and information listing subscribers in the disaster occurring region, to center server 3. *Id.* ¶ 37.

Report processor 33 of center server 3 receives the information from carrier server 9, and then transmits the information to operator terminal 7, so that the operator using operator terminal 7 becomes aware of the disaster. Ex. 1006 ¶ 38. Report processor 33 of center server 3 also generates a

disaster regional subscriber table from the disaster region ID and the list information of subscribers in the disaster region, and stores it into disaster region subscriber table storage unit 45. *Id.* ¶ 39.

Map-related processor 39 retrieves the regional map information table stored in regional map information table storage unit 43 by using the disaster region ID, and obtains a map of the neighborhood and information on a place of refuge. Ex. 1006 ¶ 41. Next, map-related processor 39 calculates a standard required time and a route from the disaster region to the place of refuge. *Id.* ¶ 42. Map-related processor 39 then transmits the map of the neighborhood and the information on the required time, to operator terminal 7. *Id.*

Operator terminal 7 receives the neighborhood map (which includes the place of refuge and the route to it) and the information on the required time, from center server 3. Ex. 1006 ¶ 44. Operator of terminal 7 judges whether it should carry out a safety confirmation of subscribers in the disaster region, based on the information displayed on operator terminal 7, and inputs to terminal 7 information as to whether a safety confirmation is necessary or unnecessary. *Id.* If the operator instructs that a safety confirmation is necessary (or if safety confirmation is otherwise indicated as being necessary), operator terminal 7 sets a safety confirmation necessity flag, and transmits to center server 3 an instruction for broadcasting a notice, which includes the reporting subscriber ID, the safety confirmation necessity flag, and instructions on emergency measures. *Id.*

Notice information generator 31 of center server 3 receives the broadcasting instruction and reads out the information on emergency measures. Ex. 1006 ¶ 45. Notice information generator 31 also retrieves the

disaster region subscriber table stored in disaster region subscriber table storage unit 45 (by using the received reporting subscriber ID from operator terminal 7), and acquires data on subscribers (subscribers to be notified, which are subscribers in the disaster region) that should be informed of the disaster. *Id.* ¶ 46. Notice information generator 31 then generates notice information to be broadcast, which includes information associated with the map, emergency measures information, and the safety confirmation necessity flag, and transmits the notice information to the subscribers that are to be notified. *Id.* The mobile communication network system distributes the notice information to be broadcast from center server 3, to the subscribers. *Id.*

Safety confirmation update processor 35 of center server 3 transmits a safety confirmation result to a subscriber terminal (e.g., subscriber A terminal 51) that displays the safety confirmation result. Ex. 1006 ¶¶ 47, 49, 60. The safety confirmation received and displayed by subscriber A terminal 51 may be, for example, a message such as “Moved to the safe area,” “Safety was confirmed,” or “It is still in the vicinity of the region of the disaster. Please take refuge at once.” *Id.* ¶¶ 49, 60. If the safety confirmation result is “OK,” subscriber A terminal 51 ends the processing. *Id.* ¶¶ 52, 56, 61.

2. Sinha

Sinha is titled “Systems and Methods for Responding to the Occurrence of an Event,” and “relates to systems and methods for providing a business application that provides business continuity for a workforce.”

Ex. 1007, code (54), ¶ 2 (emphasis and capitalization omitted).⁸ Sinha’s system and method provide a business continuity application to a portion of a displaced workforce of an organization when an event occurs. *Id.* at code (57). The business continuity application, executing on a server within a data center, is used to define a response scenario to the occurrence of an event. *Id.* The business continuity application allows for notifications to be sent to the workforce using a notification service that interfaces with the server, and further provides remote access to computing resources via a remote access server that interfaces with the server. *Id.* A communication gateway installed between the server and a private branch exchange further provides a portion of the business continuity application. *Id.* Displays of portions of the business continuity application after the occurrence of the event are sent to end users that can access the computing device. *Id.*

In accordance with Sinha, a notification may be issued to at least a portion of the workforce by placing a call to a number designated by a caller so that communications can be established between a first endpoint and a second endpoint. *Id.* ¶ 8. Placing the call to the second endpoint includes placing a call to a member of the workforce. *Id.* Feedback information may

⁸ Sinha was filed on October 20, 2007 and published on August 28, 2008. Petitioner submits evidence that Sinha is prior art because “it claims priority to U.S. Provisional Patent Application No. 60/862,365 (‘Sinha Provisional,’ EX1008), which was filed on October 20, 2006,” wherein “the Sinha Provisional provides written-description support for at least one claim of Sinha as well as for the portions of Sinha relied on [in the Petition].” Pet. 4–12. At this stage of the proceeding, Patent Owner does not contest Petitioner’s assertion that Sinha is prior art (*see generally* Prelim. Resp.), and thus, in the absence of a controversy, we assume without decide that Sinha is prior art.

be received, indicative of the failure to establish communication between the first endpoint and the second endpoint, and the call may then be redirected to a portion of the notification service. *Id.* Contact information associated with the caller designated number and indicative of a third endpoint is then retrieved from a storage element, and a call is then placed to the retrieved contact information to establish communication between the first endpoint and the third endpoint. *Id.* Retrieved contact information may include an emergency number associated with the member of the workforce. *Id.*

3. Analysis

a. *Claims 1, 3, 4, 6–8, 10–13, and 15 as Obvious over Shida (ground 3)*

Petitioner contends that claims 1, 3, 4, 6–8, 10–13, and 15 would have been obvious over Shida. Pet. 49–62. We address below Petitioner’s contentions and Patent Owner’s arguments with respect to the limitations of independent claims 1, 8, and 13.

i. *Preamble – a method of “accessing situation related information, the method comprising” (claim 1); a method of “providing situation related information to a situation authority via a situational network” (claim 8); a system for “accessing situation related information” (claim 13)*

With respect to claims 1 and 13, Petitioner contends that Shida discloses the preamble. Pet. 49–50, 61. In particular, Petitioner contends that “Shida discloses that a ‘center server’ ‘receiv[es] information concerning a disaster occurring region and information of a user . . . in the disaster occurring region, and stor[es] it in a storage device.” *Id.* (citing Ex. 1006 ¶¶ 6, 27, 37, 49–50, Fig. 1; Ex. 1003 ¶ 155).

With respect to the preamble of claim 8, Petitioner contends that, “[t]o the extent limiting,” Shida teaches “a subscriber terminal in the disaster occurring region that communicates a safety confirmation response (*situation related information*) to a center server (*a situation authority*) via *situational network*.” Pet. 59 (citing Ex. 1006 ¶¶ 50; Ex. 1003 ¶ 178). According to Petitioner, Shida’s center server is a “situation authority” because it “determines ‘the occurrence of the disaster,’ stores ‘emergency measures information,’ and is ‘connected to an operator terminal [] provided in facilities,’” such as fire stations and police stations. *Id.* (citing Ex. 1006 ¶¶ 6, 30, 38, 46; Ex. 1003 ¶ 178).

At this stage of the proceeding, Patent Owner does not present arguments in the Preliminary Response addressing the specific merits of Petitioner’s contentions with respect to the preambles of claims 1 and 13. *See* Prelim. Resp. 23–28. However, with respect to the preamble of claim 8, Patent Owner contends that “claim 8 requires the use of a ‘situational network.’” *Id.* at 24. Patent Owner argues that Shida fails to present a network as a “social network.” *Id.* Further, Patent Owner contends that Shida also fails to disclose “a network *created when an occurrence or expected occurrence of an event or situation causes connections to be established*” because “connections formed between Shida’s center server and subscribers are formed prior to the occurrence or expected occurrence of an event or situation.” *Id.* at 25–26 (boldface omitted).

Having reviewed all of Petitioner’s assertions regarding the preamble in claims 1 and 13, as well as the supporting evidence, we determine on this record that Petitioner has made a sufficient showing Shida teaches a method of “accessing situation related information” as recited in claims 1 and 13.

With respect to claim 8, based on the current record, we find Patent Owner’s arguments unavailing. In particular, we find unavailing Patent Owner’s contention that Shida fails to teach a “situational network” as recited in claim 8. Prelim. Resp. 24–26.

Although Patent Owner argues that Shida fails to present a network as a “social network” (Prelim. Resp. 24), as discussed *supra* Section II(B)(1), Patent Owner subsequently requests in its Sur-reply that we adopt the district court’s construction as “not a social network.” Prelim. Sur-reply 1.

We also find unavailing Patent Owner’s contention that Shida does not teach a “situational network” because “connections formed between Shida’s center server and subscribers are formed prior to the occurrence or expected occurrence of an event or situation.” Prelim. Resp. 25–26. Instead, we find availing Petitioner’s contention that “Shida’s center server forms a situational network . . . by establishing connections for communicating with ‘the subscribers . . . who should be informed of the occurred disaster.’” Pet. 52 (citing Ex. 1006 ¶ 46; Ex. 1003 ¶¶ 159–166) (emphasis omitted). We agree with Petitioner that the ’345 patent similarly discloses that “situational networks are formed by ‘caus[ing] connections . . . to be established between, within or among a set of participants.” *Id.* at 53 (citing Ex. 1001, 4:3–10, 7:29–51). As Petitioner explains in the Preliminary Reply, Patent Owner “conflates the initial subscriptions with the communicative situational network formed in response to the occurrence of a disaster,” wherein, participants’ previous subscription to the system “does not negate the fact that the situational network is formed in response to a disaster to establish communications among participants.” Prelim. Reply 9–10 (citing Ex. 1026 ¶ 23).

On this preliminary record, we are persuaded that Petitioner has made a sufficient showing that Shida teaches “providing situation related information to a situation authority via a situational network,” as recited in claim 8.⁹

- ii. “*form[ing] a situational network related to the occurrence of the situation with a plurality of participant devices determined to be geographically proximate to the situation, each of the participant devices corresponding to a participant in the situational network*” (claims 1, 13)

Petitioner contends that (i) “Shida’s center server *forms a situational network related to the occurrence of the situation* by establishing connections for communicating with ‘the subscribers... who should be informed of the occurred disaster’” and “[t]he center server [of Shida] also establishes connections for communication with an ‘operator terminal’ that is ‘provided in facilities such as fire stations and police stations,’” (ii) “Shida’s *situational network* is formed with a plurality of participant devices determined to be geographically proximate to the situation,” and (iii) “each of the subscriber terminals in Shida’s situational network *corresponds to a participant in the situational network.*” Pet. 52–55, 62 (citing Ex. 1006 ¶¶ 8, 27, 38–39, 46, 50, 56, 60, Fig. 1; Ex. 1003 ¶¶ 159–166).

As discussed *supra* Section II(E)(3)(a)(i), we find unavailing Patent Owner’s contention that Petitioner fails to provide a “situational network” as a “social network” (Prelim. Resp. 24) because, as discussed *supra* Section

⁹ Because we find availing Petitioner’s contention that Shida teaches the method recited in the preambles, for purposes of institution, we do not determine whether the preamble is limiting. *See Nidec*, 868 F.3d at 1017.

II(B)(1), Patent Owner subsequently requests in its Sur-reply that we adopt the district court's construction as "not a social network." Prelim. Sur-reply 1.

We also find unavailing Patent Owner's contention that Shida's connections between Shida's center server and the subscribers are formed prior to the occurrence or expected occurrence of an event or situation. Prelim. Resp. 25–26. Instead, we find availing Petitioner's contention that Shida's center server establishes connections for communication with an "operator terminal" that is "provided in facilities such as fire stations and police stations," wherein "the situational network enables participants of the network, such as subscriber terminals, the center server, and the operator terminal, to communicate information regarding the disaster." Pet. 53 (citing Ex. 1006 ¶ 30; Ex. 1003 ¶¶ 162–164). We agree with Petitioner that the '345 patent similarly discloses that "situational networks are formed by 'caus[ing] connections . . . to be established between, within or among a set of participants." *Id.*; see Ex. 1001, 4:3–10, 7:29–51.

Having reviewed all of Petitioner's assertions regarding this limitation, as well as Patent Owner's arguments to the contrary, we determine on this record that Petitioner has made a sufficient showing that Shida teaches "forming a situational network related to the occurrence of the situation with a plurality of participant devices determined to be geographically proximate to the situation, each of the participant devices corresponding to a participant in the situational network," as recited in claim 1 and similarly recited in claim 13.

- iii. “*present[ing] a roll call query to each of the plurality of participant devices soliciting a reply related to a status of the participant*” (claims 1, 13); “*receiving, by a participant device, a roll call query soliciting a reply related to a status of a participant*” (claim 8)

Petitioner contends that Shida’s subscribers receive “broadcast notice information” including a “safety confirmation necessity flag,” wherein, when the safety confirmation necessity flag is included in the notice information, “the received notice information is a *roll call query* because it solicits a ‘safety confirmation response’ from the subscriber (*reply related to a status of the participant*).” Pet. 55–57 (citing Ex. 1006 ¶¶ 46, 49, 50, Figs. 10, 12; Ex. 1003, ¶¶ 170–171).

Patent Owner argues Petitioner fails to establish Shida discloses presenting such a query because Shida makes no disclosure that “center server 3” providing the query is an “event node server.” Prelim. Resp. 27–28. Although Patent Owner acknowledges that “Shida’s center server 3 appears to be aggregating data from various sources for distribution,” according to Patent Owner, “center server 3 would have to host an ‘event node’ . . . for the query provided by Shida’s center server 3 to qualify as a ‘roll call query.’” *Id.*

However, as discussed *supra* Section II(B)(1), in view of the plain language of the claims and the Specification, we determine that the term “roll call query” as claimed does not require an event node server provide the query. We find availing Petitioner’s contention that Shida teaches a roll call query as claimed because Shida provides a query to subscriber devices that are proximate to a disaster area and solicits status and from a subscriber.

Pet. 55. Further, as Petitioner explains, even assuming Patent Owner’s contention that the query provided by an “event node server” is required, “Shida’s center server comprises a node in the situational network that communicates with (propagates information to) subscriber terminals and the operator terminal to provide information relating to the disaster.” Prelim. Reply 10 (citing Prelim. Resp. 27–28; Ex. 1006 ¶¶ 31, 38, 46–47; Ex. 1026 ¶¶ 24–25).

Having reviewed all of Petitioner’s assertions regarding this limitation, as well as Patent Owner’s arguments to the contrary, we determine on this record that Petitioner has made a sufficient showing that Shida teaches “a roll call query . . . soliciting a reply related to a status of the participant,” as recited in claim 1 and similarly recited in claims 8 and 13.

iv. Remaining limitations of claims 1, 8, and 13

Petitioner provides detailed explanations as to how Shida teaches the remaining claim limitations as recited in claims 1, 8, and 13, citing Cooperstock’s testimony for support. Pet. 50–51, 57–61 (citing Ex. 1003 ¶¶ 157, 174, 176–177, 180–181, 184–185, 188, 190). In particular, Petitioner presents evidence that “Shida’s ‘center server’ receives *an indication of an occurrence of a situation* because it receives information related to a disaster.” *Id.* at 50. Petitioner further presents that Shida discloses that “the mobile communication network system forwards the safety conformation response [*status response*] from the subscriber [] terminal [] to the center server” and that, upon receiving the response, “the center server [] carries out the safety confirmation updating processing.” *Id.* at 57–58. Petitioner then presents that “Shida discloses that the center server *aggregates the statuses from responsive participants into a roll call list* by

‘generat[ing a] disaster regional subscriber table [*roll call list*] from the disaster occurring region ID and list information of the subscribers in the disaster occurring region.’” *Id.* at 58.

At this stage in the proceeding, Patent Owner does not address separately Petitioner’s explanations and supporting evidence regarding the remaining limitations in claims 1, 8, and 13. *See generally* Prelim. Resp. 23–28.

Having reviewed Petitioner’s arguments and supporting evidence in the present record, we determine that Petitioner has made a sufficient showing that Shida teaches the remaining limitations recited in claims 1, 8, and 13.

v. Dependent claims 3, 4, 6, 7, 10–12, and 15

Petitioner provides detailed explanations as to how Shida teaches the limitations recited in dependent claims 3, 4, 6, 7, 10–12, and 15, citing Dr. Cooperstock’s testimony for support. Pet. 61–68 (citing Ex. 1006 ¶¶ 2, 6, 30–31, 39, 41, 49–50, 52, 56, 58, 60, 62–63, Fig. 6; Ex. 1003 ¶¶ 192, 194, 196–203, 206–209, 212). At this stage in the proceeding, Patent Owner does not separately address the dependent claims. *See* Prelim. Resp. 23–28.

Having reviewed Petitioner’s arguments and supporting evidence in the present record, we determine Petitioner has made a sufficient showing that Shida teaches the subject matter of dependent claims 3, 4, 6, 7, 10–12, and 15.

vi. Conclusion

For the foregoing reasons, we determine that the evidence and arguments presented show a reasonable likelihood that Petitioner would

prevail in establishing that the subject matter of claims 1, 3, 4, 6–8, 10–13, and 15 would have been obvious over Shida.

b. Claims 2, 5, 9, 14, and 16 as Obvious over Shida and Sinha (ground 4)

Petitioner asserts that claims 2, 5, 9, 14, and 16 would have been unpatentable over Shida and Sinha. Pet. 68–78. In particular, Petitioner contends that a POSITA “would have found it obvious to modify Shida to implement Sinha’s message board and roll call features.” *Id.* at 68 (citing Ex. 1003 ¶¶ 213–226). According to Petitioner, a POSITA “would have sought references teaching systems similar to Shida that also provide mechanisms for communicating with subscribers in a disaster region.” *Id.* at 69. According to Petitioner, “[l]ike Shida, Sinha sends ‘alerts and notifications’ related to location-specific events to users proximate to the event,” wherein a POSITA “would have found it obvious to modify Shida based on Sinha’s teachings” to “implement a user interface that includes a message board and roll call that could be accessed by subscribers and certain concerned parties.” *Id.* at 69–72 (citing Ex. 1003 ¶¶ 220–224).

At this stage in the proceeding, Patent Owner merely asserts that “[f]or the reasons detailed supra, Shida fails to disclose all the elements of independent claims 1, 8, and 13 upon which claims 2, 5, 9, 14, and 16 depend,” wherein “[t]he Petition fails to assert [Sinha] overcomes the deficiencies.” Prelim. Resp. 28 (emphasis omitted).

As discussed *supra* Section II(E)(3)(a), we find unavailing Patent Owner’s contention that Shida fails to disclose all the elements of independent claims 1, 8, and 13. Having reviewed Petitioner’s arguments and supporting evidence in the present record, we determine that Petitioner

has made a sufficient showing that Shida in further view of Sinha teaches the limitations recited in claims 2, 5, 9, 14, and 16. Furthermore, based on this preliminary record, we are persuaded that Petitioner has made a sufficient showing that a POSITA would have had a reason to combine the teachings of Shida and Sinha.

For the foregoing reasons, we determine that the evidence and arguments presented show a reasonable likelihood that Petitioner would prevail in establishing that the subject matter of claims 2, 5, 9, 14, and 16 would have been obvious over Shida and Sinha.

III. CONCLUSION

Because we determine that Petitioner has demonstrated a reasonable likelihood that it would prevail in showing at least one of the challenged claims is unpatentable, we institute *inter partes* review as to all challenged claims and grounds presented in the Petition. At this stage of the proceeding, we have not made a final determination as to the patentability of any of these challenged claims.

IV. ORDER

For the reasons given, it is

ORDERED that pursuant to 35 U.S.C. § 314, an *inter partes* review is instituted as to claims 1–16 of the '345 patent to determine whether:

1) claims 1, 3–8, 10–13, 15, and 16 are unpatentable under 35 U.S.C. § 103 as obvious over Gage;

2) claims 2, 9, and 14 are unpatentable 35 U.S.C. § 103 as obvious over Gage and Mitchell;

3) claims 1, 3, 4, 6–8, 10–13, and 15 are unpatentable under 35 U.S.C. § 103 as obvious over Shida; and

4) claims 2, 5, 9, 14, and 16 are unpatentable under 35 U.S.C. § 103 as obvious over Shida and Sinha; and

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

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