

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

META PLATFORMS, INC.,
Petitioner

v.

SITNET LLC,
Patent Owner

Case IPR2026-00112
U.S. Patent No. 12,256,463

**PETITION FOR *INTER PARTES* REVIEW
OF U.S. PATENT NO. 12,256,463**

Mail Stop "PATENT BOARD"
Patent Trial and Appeal Board
U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	IDENTIFICATION OF THE CHALLENGE (37 C.F.R. §42.104(B))	2
	A. Identification of Prior Art.....	2
	B. Grounds Summary.....	2
III.	THE '463 PATENT	3
	A. Overview of the '463 Patent.....	3
	B. Person of Ordinary Skill in the Art	6
	C. Claim Construction.....	6
IV.	GROUND 1: CLAIMS 1-12 WOULD HAVE BEEN OBVIOUS OVER KRAFT IN VIEW OF ALTMAN.	7
	A. Motivation to Combine Kraft and Altman	7
	B. Independent Claim 1	12
	1. [1.P]: “ <i>A method for forming a situational network...</i> ”	12
	2. [1.A]: “ <i>maintaining a database...</i> ”	16
	3. [1.B]: “ <i>obtaining an indication of an occurrence of a situation</i> ”	18
	4. [1.C]: “ <i>forming the situational network...</i> ”	19
	5. [1.C.1]: “ <i>establishing an event node...</i> ”	19
	6. [1.C.2]: “ <i>wherein the event node is discoverable...</i> ”	21
	7. [1.C.3]: “ <i>creating a first subset of the plurality of user nodes...</i> ”	24
	8. [1.C.4]: “ <i>presenting the information pertinent to the situation...</i> ”	26
	9. [1.C.5]: “ <i>joining at least a first node of the first subset of the plurality of user nodes to the event node...</i> ”	26
	10. [1.D]: “ <i>receiving an indication of the supplemental information</i> ”	28
	11. [1.E]: “ <i>analyzing the database...</i> ”	29
	12. [1.F]: “ <i>providing ... the supplemental information</i> ”	32

13.	[1.G]: “ <i>in response to interacting...</i> ”	33
C.	Independent Claim 7	34
D.	Claim 2	36
E.	Claim 3	38
F.	Claim 4	38
G.	Claim 5	38
H.	Claim 6	39
I.	Claim 8	39
J.	Claim 9	39
K.	Claim 10	40
L.	Claim 11	40
M.	Claim 12	40
V.	GROUND 2: CLAIMS 1-12 WOULD HAVE BEEN OBVIOUS OVER WONG IN VIEW OF GOGIC AND GAGE.	40
A.	Wong	40
B.	Gogic	42
C.	Gage.....	43
D.	Motivation to Combine Wong, Gogic, and Gage	44
E.	Independent Claim 1	48
1.	[1.P].....	48
2.	[1.A]	51
3.	[1.B]	53
4.	[1.C]	56
5.	[1.C.1]	56
6.	[1.C.2]	57
7.	[1.C.3]	59
8.	[1.C.4]	60
9.	[1.C.5]	62
10.	[1.D]	63

11.	[1.E].....	64
12.	[1.F].....	66
13.	[1.G]	66
F.	Independent Claim 7	67
G.	Claim 2	70
H.	Claim 3	71
I.	Claim 4	71
J.	Claim 5	71
K.	Claim 6	73
L.	Claim 8	73
M.	Claim 9	73
N.	Claim 10	74
O.	Claim 11	74
P.	Claim 12	74
VI.	GROUND 3: CLAIMS 1-12 WOULD HAVE BEEN OBVIOUS OVER WONG IN VIEW OF GOGIC, GAGE, AND KRAFT.	74
VII.	CERTIFICATION THAT THE PATENT MAY BE CONTESTED VIA IPR BY THE PETITIONER AND STANDING (37 C.F.R. § 42.104(A)).....	75
VIII.	MANDATORY NOTICES (37 C.F.R. § 42.8(A)(1)).....	75
IX.	CONCLUSION.....	77

EXHIBIT LIST

Exhibit No.	Description
1001	U.S. Patent No. 12,256,463 to Cona et al., issued March 18, 2025 (“the ’463 patent”)
1002	Prosecution History of U.S. Patent No. 12,256,463 (“’463 File History”)
1003	Declaration of Dr. Jeremy Cooperstock
1004	<i>Curriculum Vitae</i> of Dr. Jeremy Cooperstock
1005	U.S. Patent No. 7,747,648 to Kraft et al. (“Kraft”)
1006	U.S. Publication No. 2007/0281690 to Altman et al. (“Altman”)
1007	U.S. Publication No. 2008/0103784 to Wong <i>et al.</i> (“Wong”)
1008	U.S. Patent No. 8,103,300 to Gogic (“Gogic”)
1009	U.S. Publication No. 2008/0139165 to Gage <i>et al.</i> (“Gage”)
1010	<i>Meta Platforms, Inc. v. SitNet LLC</i> , IPR2024-00529, Paper 33 (Final Written Decision) (P.T.A.B. Sept. 8, 2025)
1011	Palen <i>et al.</i> , <i>Online Forums Supporting Grassroots Participation in Emergency Preparedness and Response</i> , Communications of the ACM, Vol. 50, No. 3 (March 2007)
1012	U.S. Patent No. 7,730,216 to Issa et al. (“Issa”)
1013	Boyd & Ellison, <i>Social Network Sites: Definition, History, and Scholarship</i> , Journal of Computer-Mediated Communication, 13 (2008) pp. 210-230.
1014	U.S. Patent No. 8,024,330 to Franco <i>et al.</i> (“Franco”)
1015	November 26, 2006 Wikipedia page “Social network” (from web.archive.org) (accessed January 24, 2024)

Exhibit No.	Description
1016	<i>Meta Platforms, Inc. v. SitNet, LLC</i> , IPR2024-00530, Final Written Decision, Paper 30 (P.T.A.B. Sept. 8, 2025)
1017	U.S. Patent No. 8,346,864 to Amidon <i>et al.</i> (“Amidon”)
1018	U.S. Publication No. 2006/0272012 to Wu (“Wu”)
1019	U.S. Patent No. 6,910,077 to Najork (“Najork”)
1020	Claim Construction Order in <i>SitNet LLC v. Meta Platforms, Inc.</i> , Case No. 1:23-cv06389-AS (SDNY) (Dkt. 79) filed July 26, 2024

I. INTRODUCTION

Meta Platforms, Inc. (“Petitioner”) petitions for *inter partes* review, seeking cancellation of claims 1-12 of U.S. Patent No. 12,256,463 (“’463 patent”; EX1001), assigned to SitNet LLC (“Patent Owner”). The ’463 patent is part of the same family as U.S. Patent Nos. 8,332,454; 9,877,345; and 11,470,682. The Board found all claims of those patents unpatentable and should do so again here.

The ’463 patent claims purport to invent techniques for “forming a situational network.” EX1001, Claims 1, 7. But the “situational network” of the ’463 patent provides no technical advancement. The claims recite little more than maintaining a database of users, obtaining an indication of an occurrence of a situation, identifying users within geographic proximity to the situation using standard location-tracking technology, and providing information about the situation to the users over a standard computer network (e.g., the Internet). *Id.* The ’463 patent describes a “situation” as broadly including social events, emergency events, weather phenomena, natural disasters, and simply “the need for goods or services.” *See* EX1001, 5:9-21, 6:43-45, 31:64-65. Such techniques for delivering information to users about an event were well known long before the ’463 patent.

This Petition is supported by the declaration of Dr. Jeremy Cooperstock (EX1003), an expert in computer networking and telecommunications. Dr. Cooperstock’s testimony confirms that all challenged claims are unpatentable.

Accordingly, the Board should cancel all claims of the '463 patent.

II. IDENTIFICATION OF THE CHALLENGE (37 C.F.R. §42.104(B))

A. Identification of Prior Art

The '463 patent's earliest possible priority date is February 2, 2007. Without conceding that this is the correct priority date, all references relied upon herein are prior art as of February 2, 2007, and all references are prior art under at least 35 U.S.C. § 102(e).

Kraft (EX1005) was filed on February 14, 2005, and issued on June 29, 2010.

Altman (EX1006) was filed on June 1, 2006, and published on December 6, 2007.

Wong (EX1007) was filed on October 25, 2006, and published on May 1, 2008.

Gogic (EX1008) was filed April 4, 2006, and issued on January 24, 2012.

Gage (EX1009) was filed on December 11, 2006, and published on June 12, 2008.

B. Grounds Summary

Petitioner requests *inter partes* review based on the Grounds summarized

below.

Ground	35 U.S.C.	Claims	References
1	§ 103(a)	1-12	Kraft-Altman
2	§ 103(a)	1-12	Wong-Gogic-Gage
3	§ 103(a)	1-12	Wong-Gogic-Gage-Kraft

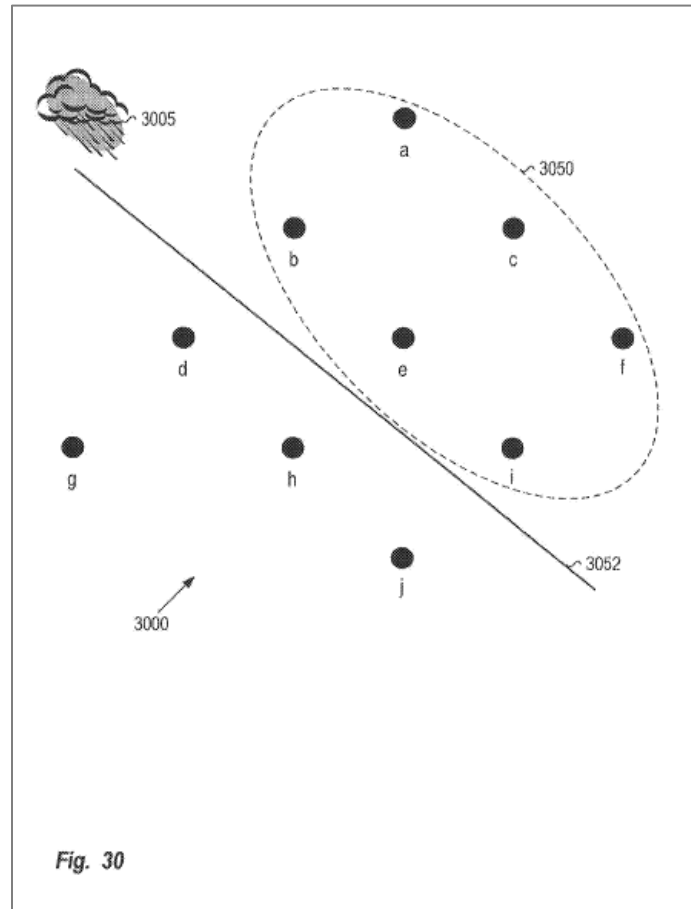
III. THE '463 PATENT

A. Overview of the '463 Patent

The '463 patent is directed to “forming the situational network as a subset of the multi-dimensional information network.” EX1001, Claim 1. A “situational network allows the participants ... to interact and exchange information over connections to or through a computer network ... regarding the event or situation.” EX1001, 4:24-27. The '463 patent describes a “situation” as broadly including social events, emergency events, weather phenomena, natural disasters, etc. *See* EX1001, 5:9-21, 31:64-65. A “situation” may also include “weather related activities, such as skiing or surfing.” EX1001, 5:9-21. A “projection” is described as “a subset of the nodes” of a social network and can be determined based on a wide variety of criteria, including the geographic location of user devices. EX1001, 17:4-5, 22:52-23:39. In short, the '463 patent relates to allowing a set of participants in a social network to receive information about situations (e.g., events) and exchange information about them using standard, well-known

networking technology. EX1003, ¶¶29-30.

Figure 30 shows an example of a geographic projection 3050 of nodes of a situational network 3000. EX1001, 23:8-9.



EX1001, FIG. 30.

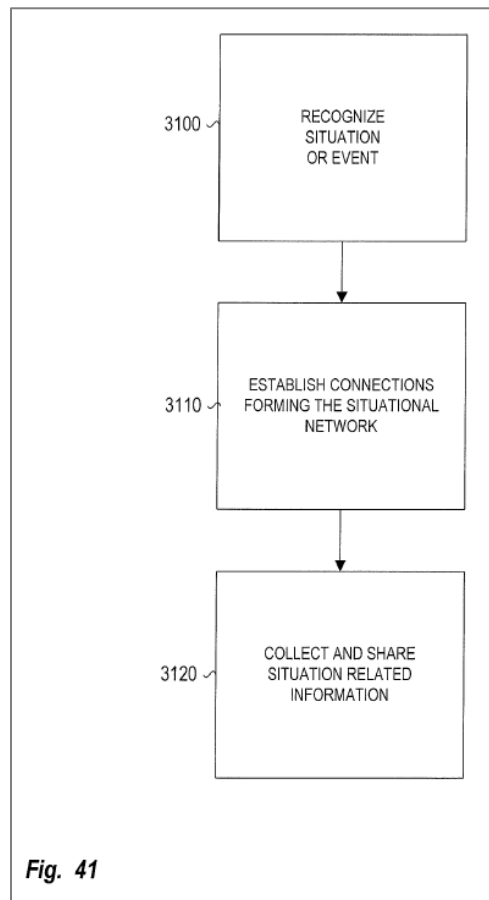
Network 3000 includes ten nodes labeled (a) through (j). EX1001, 23:9-10.

In this example, the situation 3005 is a severe rain storm posing a flood threat to persons located on one side of a river (boundary 3052). EX1001, 23:13-16.

Geographic projection 3050 includes a subset of the nodes that are included based on their location with respect to boundary 3052, i.e., those users threatened by

flood waters. EX1001, 23:9-18; EX1003, ¶¶31-32.

The '463 patent states that “[a] variety of different architectures may be used to connect the devices of participants in the situational network.” EX1001, 6:58-59. Regardless of the architecture used, the same generic process is used to form the situational network, which is shown in Figure 41. EX1001, 7:48-53.



EX1001, FIG. 41.

The situational network is implemented using known and conventional technologies. Users connect to the situational network using known devices such as cell phones, PDAs, personal computers, network servers, or “other devices

generally known to those skilled in the art that enable connection to, from and through the computer network.” EX1001, 4:52-57. Further, participants in the situational network are associated with “nodes,” which simply represent the users’ point of connection to the network and which “may be implemented using a wide variety of available hardware and technologies generally known in the art.” EX1001, 15:34-51, 15:59-63. The nodes “may be interconnected and may communicate with each other using a wide variety of available hardware and technologies generally known in the art, such as TCP/IP over an Ethernet or a wireless network.” EX1001, 15:63-67; EX1003, ¶¶33-34. Thus, the ’463 patent does not provide any technical solutions—it merely connects a subset of users of a larger network using off-the-shelf technology. EX1003, ¶34.

B. Person of Ordinary Skill in the Art

A person of ordinary skill in the art (“POSA”) would have had a bachelor’s degree in computer or electrical engineering or equivalent discipline, and approximately two years’ experience in telecommunications or computer networking. Additional education could substitute for professional experience, and significant work experience could substitute for formal education. EX1003, ¶¶36-37.

C. Claim Construction

Claims must be given their ordinary and customary meaning in light of the

specification—the meaning the term would have had to a POSA at the time of the invention.

The Board and district court previously construed the terms “situational network” and “web browser application” and determined “event node” needs no construction. EX1010, 8-12; EX1016, 12-18; EX1020, 10. The Board’s constructions were consistent with the district court’s. While Petitioner submits no claim terms require construction for the purposes of this IPR, the art nevertheless teaches the claims under these prior constructions. EX1003, ¶¶38-41.

IV. GROUND 1: CLAIMS 1-12 WOULD HAVE BEEN OBVIOUS OVER KRAFT IN VIEW OF ALTMAN.

Kraft-Altman renders obvious claims 1-12. EX1003, ¶¶63-164.

A. Motivation to Combine Kraft and Altman

Kraft is directed to “systems and methods for information retrieval and communication using a world model.” EX1005, 2:35-37. A “[w]orld server 160 maintains a world model data store 162.” EX1005, 6:33-35. “The world model is made up of **interrelated entity models**, where each entity model corresponds to an entity (or abstraction) in the real world, such as a **person**, place, business, other tangible thing, community, **event**, or thought.”¹ EX1005, 2:37-46, 8:28-31. The entity models are “linked to each other by navigable relationships.” EX1005, 8:1-3.

¹ Emphasis added throughout, unless otherwise noted.

Kraft's "world model can include features of a conventional social network" but "allows other types of entities, not just users, to be included as full participants in the network." EX1005, 10:25-30.

Kraft describes its world server 160 includes a query response module 166 that interacts with client systems 120 to retrieve information from the world model or to add/modify entity models 164. EX1005, 6:52-65. An example "world model" is illustrated in Figure 2 of Kraft. EX1005, 8:35-38; EX1003, ¶¶64-65.

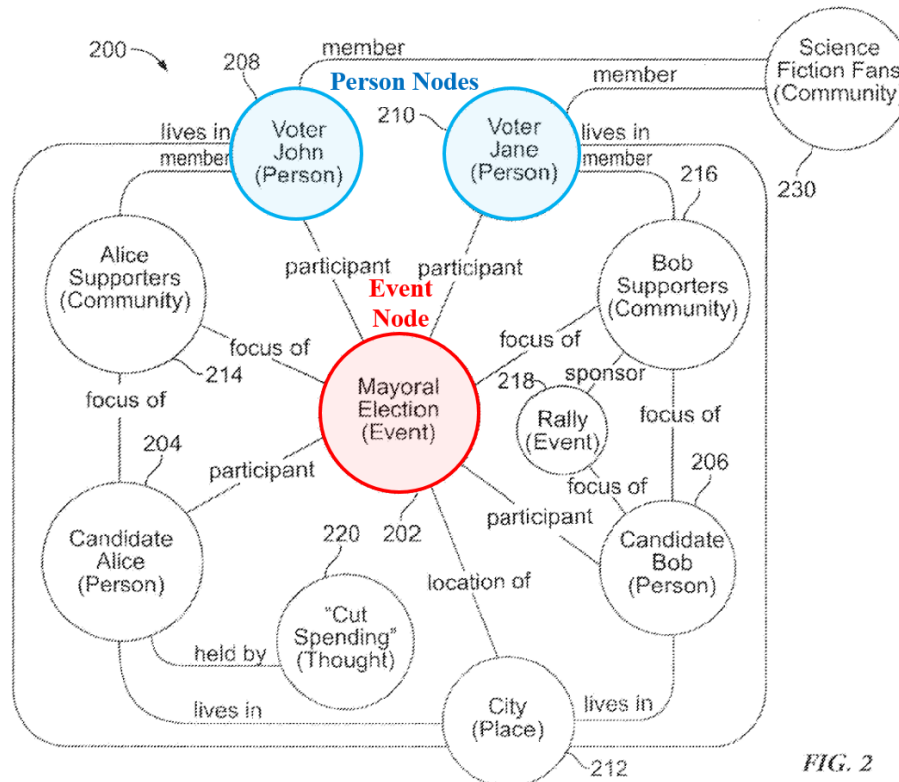


FIG. 2

EX1005, FIG. 2 (annotated); EX1003, ¶65.

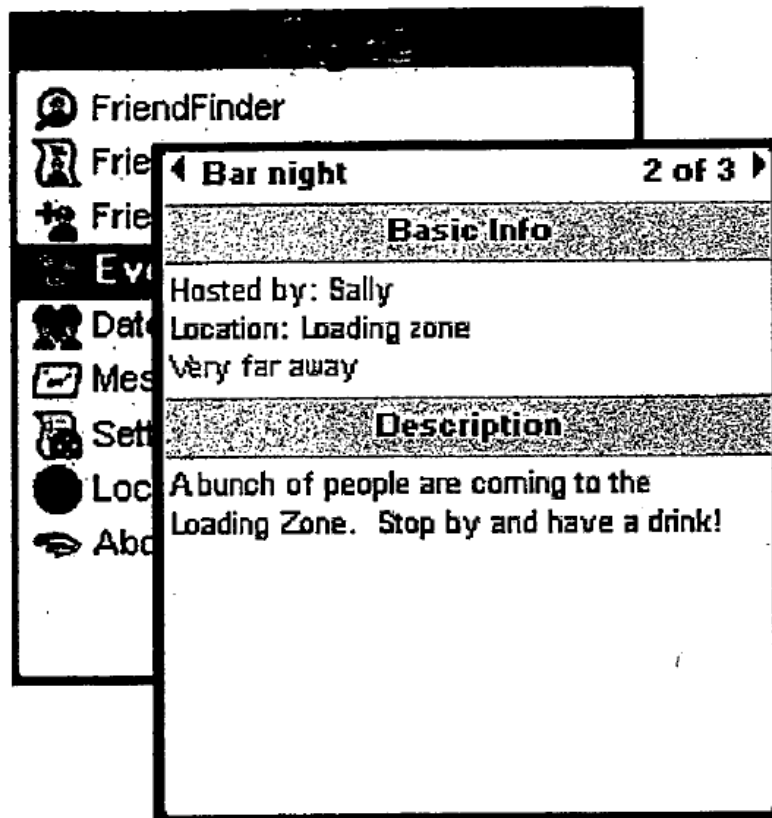
As illustrated in Figure 2, "[n]ode 202 represents the event, in this example a mayoral election," and "[o]ther participants in the election include voter Joe (node 208) and voter Jane (node 210)." EX1005, 8:40-45. Kraft explains, "[e]ach entity

model is advantageously implemented as a data structure that provides access to information about a real-world entity that the node represents.” EX1005, 8:26-28. And the “types of information that may be contained in an entity model include ... text or media content related to the corresponding entity.” EX1005, 3:18-24.

Kraft defines “relationships that may exist among entity models belonging to the same or different categories,” for example, connecting a “Person” to a created “Event” as a “participant” or a “Person” to a “Place” where they live. EX1005, 10:10-21, FIG. 3. Kraft’s system can define relationships “based on structured metadata fields,” such as a “Location” field, but Kraft’s system focuses on a static location entered by the user such as an “address.” EX1005, 11:39-41, 16:30-34. Thus, Kraft does not explicitly disclose techniques for connecting users to events based on their current location, which would have led a POSA to a reference like Altman. EX1003, ¶¶66-67.

Altman provides “a social networking system that helps initiate communication and messaging among users based on the relative location of the users with respect to each other or a place of interest.” EX1006, ¶6. Altman’s “process determines the geographic location of a mobile communication device operated by a user within an area,” and then “[m]essaging and alert functions using the communications capability of the mobile device can incorporate the location information resulting in interaction among users.” EX1006, ¶8.

Like Kraft, Altman's "social network manager" includes an "event manager [that] allows the user to create and manage various events using date and location information and send invitations or messages regarding the events to friends." EX1006, ¶53. Figure 8A illustrates an example that includes "a description of the event including the time and place of the event, as well as any other relevant information." EX1006, ¶54; EX1003, ¶¶68-69.



EX1006, FIG. 8A.

Altman's system provides "[a] database specifying places and/or events," and information "can be provided to [a] user in a 'push' model in which the server sends relevant POI information to a user based on a user condition, such as if the

user goes near a particular POI,” e.g., the location of an event. EX1006, ¶¶55, 61 (disclosing “alerting the user to the ... location of events of interest when the user enters a particular area”); EX1003, ¶70. Thus, Altman’s techniques enable identification of users within a particular geographic proximity to an event and providing information to that subset of users. EX1003, ¶70.

Both Kraft and Altman are in the same general field of connecting subsets of users and other entities within a larger social network. *See, e.g.*, EX1005, 10:10-26, 12:64-66; EX1006, ¶6; EX1003, ¶71. A POSA would have been motivated to employ Altman’s geolocation-based, user-identification techniques in Kraft’s system to identify and connect users to events nearby. EX1003, ¶71. Kraft supports a wide range of events, including “occurrences such as elections, natural disasters, sports events, and so on.” EX1005, 9:65-66. A POSA would have understood that, for location-based events such as sports events or other social activities—or even natural disasters—Altman’s geolocation-based, user-identification techniques would allow users in close proximity to be identified and notified of the event, for example by “alerting the user to the ... location of events of interest when the user enters a particular area.” EX1006, ¶61; EX1003, ¶72. These techniques would further Kraft’s objectives—for example, “facilitat[ing] multi-user discussion of the real-world entity [(i.e., the event)] to which the model pertains.” EX1005, 12:64-66; EX1003, ¶72.

A POSA would have had a reasonable expectation of success because incorporation of Altman’s geolocation-based, user-identification techniques would amount to nothing more than incorporating well-known techniques into Kraft’s known system for connecting real-world entities. EX1003, ¶73. Kraft already discloses a framework for creating, storing, and presenting information to users regarding real-world entities such as people and events. EX1005, 2:37-61, 8:28-31; EX1003, ¶73. Moreover, like Altman, Kraft’s users operate well-known devices such as “cell phone[s]” that are “capable of interfacing directly or indirectly to the Internet.” EX1005, 5:13-19; EX1006, ¶31 (“[A] plurality of mobile communication devices, such as cell phones or similar devices 102 are coupled to a communication network ...”). Thus, no modifications to Kraft’s network structure or user devices would be needed to incorporate Altman’s techniques. EX1003, ¶73.

Therefore, a POSA would have been motivated, with a reasonable expectation of success, to combine Kraft and Altman. EX1003, ¶74.

B. Independent Claim 1

1. [1.P]: “*A method for forming a situational network...*”

To the extent limiting, Kraft-Altman teaches this element. The ’463 patent broadly describes that a “situational network 3000 is created when an occurrence or expected occurrence of an event or situation 3005 causes connections, also referred to as links, to be established between, within or among a set of

participants.” EX1001, 4:20-24, FIG. 1. The ’463 patent provides several examples of “situations,” including “a social event, such as a concert or festival.” EX1001, 31:64-65; *see also* EX1001, 5:9-24. Claim 1 broadly recites “*a situation*” without further limitation. EX1003, ¶76.

Kraft discloses “systems and methods for information retrieval and communication using a world model.” EX1005, 2:35-37. “The world model is made up of interrelated entity models, where each entity model corresponds to an entity (or abstraction) in the real world, such as a person, place, business, other tangible thing, community, event, or thought.” EX1005, 2:37-41, 8:28-31. Kraft discloses an entity model may be assigned an “event” category “for entity models representing occurrences such as elections, natural disasters, sports events, and so on.” EX1005, 9:50-66. Kraft’s events align with the types of situations disclosed in the ’463 patent, which describes a “situation” as broadly including social events, emergency events, weather phenomena, natural disasters, etc. *See* EX1001, 5:9-24, 31:64-65. Thus, Kraft’s “event” entity models each correspond to “*a situation*,” as recited in claim 1 of the ’463 patent. EX1003, ¶¶77-78. And “world-model participants can create and update entity models,” such as event entities, “via client application 125 (FIG. 1), which interacts with world-builder module 165 of world server 160.” EX1005, 15:21-28, FIG. 1.

Kraft further discloses, “the world model advantageously defines types of

relationships that may exist among entity models belonging to the same or different categories.” EX1005, 10:10-13. For example, as illustrated in Figure 3, a “Person” can be directly linked to a created “Event” as a “participant.” EX1005, 10:13-21, FIG. 3.

	Person	Business	Place	Thing	Community	Thought	Event
Person	trusts trusted by	owner of employed by customer of	lives at	owns	member of	thinks subject of	sponsors participates in focus of
Business	owned by employer of patronized by	owns owned by distributor for	located at	makes sells	interest of	subject of	sponsors participates in focus of
Place	home of	location of	located in	location of	interest of location of	subject of	location of focus of
Thing	owned by	made by sold by	located at	type of includes	interest of	subject of	used in focus of
Community	includes	interested in	located at interested in	interested in	interested in interest of	subject of interested in	sponsor of participates in focus of
Thought	thought by	is about	is about	is about	is about interest of	subject of	is about focus of
Event	sponsored by participant focused on	sponsored by participant focused on	occurs at focused on	uses focused on	sponsored by focused on participant	subject of focused on	focus of

EX1005, FIG. 3 (annotated).

A “Person” entity can also be indirectly related to an “Event” by being a “member of” a community that is “focused on,” or a “participant” in, an event. EX1005, FIG. 3. Each entity model can be “implemented as a data structure that can reference other entity model data structures, e.g., using labels, pointers or other suitably persistent references, thereby allowing relationships among entity models to be defined.” EX1005, 9:42-47. Moreover, Kraft discloses that relationships between entities may be defined when the event is created. EX1005, 15:41-52,

16:28-30 (When creating a “new entity model 400,” “relationships of the new entity model 400 to existing entity models 400 in world model data store 162 are defined.”). Accordingly, Kraft teaches “[a] *method for forming a situational network*,” defining connections between Event entities and Person entities in response to occurrence of an event. EX1003, ¶¶79-80.

Additionally, Altman teaches techniques for automatically identifying individuals based on proximity to an event. Similar to Kraft, Altman discloses an “event manager [that] allows the user to create and manage various events using date and location information and send invitations or messages regarding the events to friends.” EX1006, ¶53; *see also* EX1006, ¶55 (“[E]vents can be stored in data store 120.”). Altman further discloses that information “can be provided to [a] user in a ‘push’ model in which the server sends relevant POI information to a user based on a user condition, such as if the user goes near a particular POI,” e.g., the location of an event. EX1006, ¶55. In this manner, Altman teaches identifying a subset of users within a given proximity to an event and providing information about the event to those users. *Id.*; *see also* EX1006, ¶61 (disclosing “alerting the user to the ... location of events of interest when the user enters a particular area”); EX1003, ¶¶81-82. A POSA would have been motivated to employ Altman’s geolocation-based, user-identification techniques in Kraft’s system to identify and connect users to events in close proximity, thereby creating “*a situational network*”

corresponding to an event. *See* Section IV.A; EX1003, ¶82.

Kraft-Altman further teaches “*providing supplemental information*,” including updates to entity information (e.g., the location of an event), as discussed for [1.F] below. *Infra* Section IV.B.12; EX1003, ¶83. Therefore, Kraft, alone or in combination with Altman, teaches the preamble of claim 1.

2. [1.A]: “*maintaining a database...*”

The ’463 patent uses “multi-dimensional personal information network” and “N-dimensional social network (NDSN)” interchangeably. *See* EX1001, 6:24-28, 8:4-8, 15:1-4. The ’463 patent describes a “multi-dimensional personal information network[] captures and manages multi-dimensional relationships between persons and other entities that are users of the network,” such as “family, professional connection[s],” or shared “preferences.” EX1001, 15:1-20. As discussed for [1.P], Kraft’s “world model” provides such “*a multi-dimensional information network.*”

Specifically, Kraft discloses its world server 160 “*maintain[s] a database,*” i.e., “world model data store 162,” which contains “a searchable set of interrelated entity models 164.” EX1005, 6:33-40, FIG. 1. Each of these interrelated entity models 164 corresponds “to some entity existing in the real world, such as a **person.**” EX1005, 6:35-42. Kraft discloses a “real-world person who is a world-model participant may choose to create” one or more “Person” entity models “to represent himself or herself in the world model.” EX1005, 14:1-17. Kraft’s

“Person” entity models, therefore, are “*a plurality of user nodes*” stored in database 162. EX1003, ¶¶84-85.

Kraft’s entity models are further “linked to each other by navigable relationships,” i.e., “*dimensions in a multi-dimensional information network.*” EX1005, 8:1-3. Kraft discloses world model 162 “can be represented visually using a network graph, with each node representing an entity model 164 and each edge representing a relationship between entity models.” EX1005, 8:32-35. Person entity models “can have trust (or friendship) relationships with each other” and the world model “can include features of a conventional social network.” EX1005, 10:22-26. Kraft discloses world model 200 can model “the full complexity and scope of interrelationships that exist in the real world.” EX1005, 9:3-5. For example, another type of relationship disclosed by Kraft is “employer to employee.” EX1005, 16:45-47. Users may also be linked by common interests and other community involvement; for example, two users may be linked by an interest in “science fiction.” EX1005, 9:5-14, FIG. 2; EX1003, ¶¶86-87.

Kraft’s world model thus captures and stores relationships between user nodes along multiple dimensions—e.g., trust/friendship and common interests—which are “*multi-dimensional node-to-node links characterizing relationships between the plurality of user nodes via dimensions in a multi-dimensional information network.*” EX1003, ¶88.

3. [1.B]: “*obtaining an indication of an occurrence of a situation*”

Kraft discloses “Event” entity models that “represent[] occurrences such as elections, natural disasters, sports events, and so on,” EX1005, 9:65-66—i.e., “*an occurrence of a situation.*” Kraft’s “world-model participants can create and update entity models,” such as event entity models, “via client application 125 (FIG. 1), which interacts with world-builder module 165 of world server 160.” EX1005, 15:21-28, FIG. 1. As part of this process, “the participant selects a category for the new entity model,” e.g., “Event.” EX1005, 9:65-66, 15:47-52. The user also populates information such as a “name” and “content section” associated with the event. EX1005, 15:53-16:14. Kraft’s system “*obtain[s] an indication of an occurrence of a situation*” by receiving the data pertaining to the new entity: “[A]fter all information has been entered, **the participant commits the new entity model to world model data store 162,**” and “it becomes accessible to other users via various search and navigation interfaces and tools” EX1005, 16:52-57; EX1003, ¶¶89-90.

Altman similarly discloses, “*obtaining an indication of an occurrence of a situation.*” Altman discloses an “event manager [that] allows the user to create and manage various events using date and location information and send invitations or messages regarding the events to friends.” EX1006, ¶53. Events can include information such as “the time and place of the event,” “[t]he location of the event,”

and “other relevant information.” EX1006, ¶54. Like Kraft, Altman’s system “*obtain[s] an indication of an occurrence of a situation*” by receiving the data pertaining to the new event, and created “events can be stored in [Altman’s] data store 120.” EX1006, ¶55; EX1003, ¶91.

4. [1.C]: “*forming the situational network...*”

For the reasons discussed for [1.P] and below, Kraft-Altman teaches “*forming the situational network ... based at least in part on the situation.*” See Sections IV.B.1, IV.B.5-IV.B.9. And, as discussed for [1.P] and [1.A], Kraft-Altman teaches the “*situational network*” is formed “*as a subset of the multi-dimensional information network,*” connecting a subset of users and an event within Kraft’s world model. See Sections IV.B.1-IV.B.2.

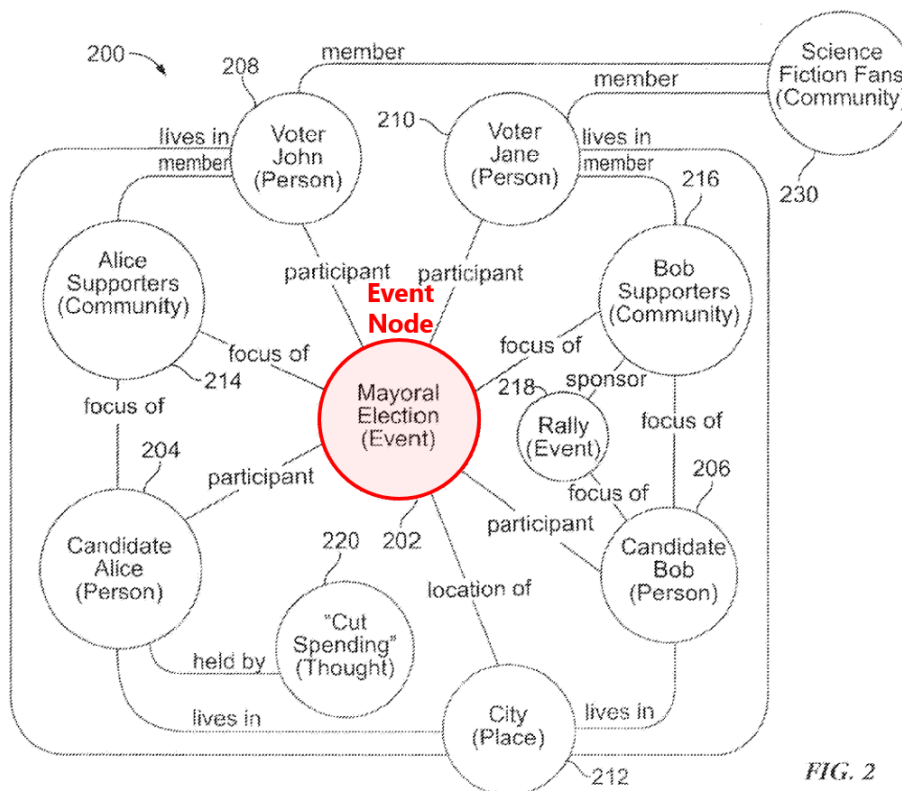
5. [1.C.1]: “*establishing an event node...*”

Kraft discloses “Event” entity models that “represent[] occurrences such as elections, natural disasters, sports events, and so on,” EX1005, 9:65-66—i.e., “*the situation.*” Kraft’s “world-model participants can create and update entity models,” such as event entity models (“*event node[s]*”), “via client application 125 (FIG. 1), which interacts with world-builder module 165 of world server 160.” EX1005, 15:21-28, FIG. 1.

As part of this process, “the participant selects a category for the new entity model,” e.g., “Event.” EX1005, 15:47-52. The user also populates information

such as a “name” and “content section” associated with the event. EX1005, 15:53-16:14. “[A]fter all information has been entered, **the participant commits the new entity model to world model data store 162**”—i.e., “*establishing an event node corresponding to the situation*”—and “it becomes accessible to other users via various search and navigation interfaces and tools.” EX1005, 16:52-57; EX1003, ¶¶94-95.

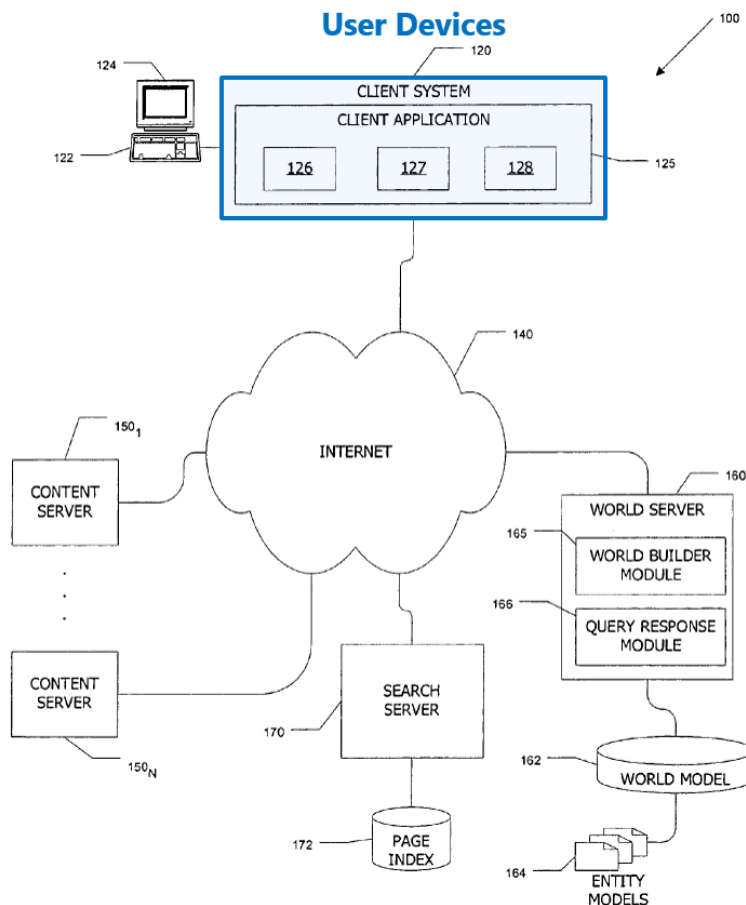
Figure 2 of Kraft illustrates an example event node 202, established within Kraft’s world model, that represents a mayoral election. EX1005, 8:40-45, FIG. 2; EX1003, ¶96.



EX1005, FIG. 2 (annotated).

6. [1.C.2]: “*wherein the event node is discoverable...*”

First, Kraft discloses “a plurality of user devices associated with the plurality of user nodes.” Kraft teaches users interact with its system via a “client system 120,” which is “configured to communicate with a world server system 160 and a search server system 170, e.g., to perform searches, to interact with a world model as described below, and to communicate with other users of world server 160 and/or search server 170.” EX1005, 4:64-5:12.



EX1005, FIG. 1 (annotated).

Kraft discloses “client system 120 could include a **desktop personal**

computer, workstation, laptop, personal digital assistant (PDA), cell phone, or any WAP-enabled device or any other computing device capable of interfacing directly or indirectly to the Internet.” EX1005, 5:15-19. “A client application 125 executing on client system 120 advantageously includes instructions for controlling client system 120 and its components to communicate with server systems 150₁ to 150_N, 160 and 170 and to process and display data content received therefrom.” EX1005, 5:44-49. Kraft further discloses that a “real-world person who is a world-model participant may choose to create” one or more **“Person entity models”** (“*user nodes*”) via client application 125 “to represent himself or herself in the world model.” EX1005, 14:1-17, 15:23-28. Thus, Kraft teaches “*a plurality of user devices associated with the plurality of user nodes.*” EX1003, ¶¶98-99.

Second, Kraft teaches, “*the event node is discoverable to each respective user device ... by browsing a data feed provided based on the database.*” Kraft discloses that after a participant commits a new entity model to world model data store 162, **“it becomes accessible to other users via various search and navigation interfaces and tools.”** EX1005, 16:52-59. Kraft discloses client system 120 (“*user device*”) can “communicate with a world server system 160” (e.g., through “world search module 126”) “to search world model data store 162 for entity models ... that match user-specified criteria.” EX1005, 5:8-12, 6:52-59, 18:31-54. For example, users may search for “entities located near a specified

geographic location.” EX1005, 18:47-50.

Once a search query is submitted, “the search is performed,” and “search results, including links to matching entity models from world model data store 162, are returned to the user, e.g., **in the form of a search results Web page listing the matched entity models**” (“*a data feed provided based on the database*”). EX1005, 18:61-19:16; EX1003, ¶¶100-01. “In some embodiments, the matched entity models might be returned in a format other than a list,” such as “by reference to locations on a map” (also “*a data feed provided based on the database*”). EX1005, 19:17-23; EX1003, ¶101.

Kraft’s search result listing is consistent with the ’463 patent’s use of the term “*data feed*.” EX1003, ¶102. The ’463 patent does not limit the form of a data feed, but provides embodiments where a “[u]ser 250 requests the PIA 400 to receive a data feed,” receiving back a “provideData message.” EX1001, 12:52-64. Moreover, the ’463 patent describes that “[t]he event node may be discovered” by “**searching ... the network** for information about the situation or event.” EX1001, 20:46-51. Kraft’s user performs a similar operation, searching the network for entity models (including events) via the user’s device. EX1003, ¶102. Thus, Kraft teaches “*the event node*” (the event entity model) “*is discoverable to each respective user device ... by browsing a data feed provided based on the database.*”

Third, Kraft teaches “*the event node contains information pertinent to the situation.*” Kraft teaches the user may select a matched entity model from the search results and be shown an “entity view” that “displays **information from the entity model** in a user-readable form.” EX1005, 19:37-41. “Each entity model is advantageously implemented as a data structure that provides access to **information about a real-world entity that the node represents.**” EX1005, 8:26-28. And the “types of information that may be contained in an entity model include ... text or media content related to the corresponding entity.” EX1005, 3:18-24. For example, entity models may contain a “name” and “Location” metadata that, for event entities, specify a location of the event. EX1005, 15:53-56, 16:32-34; EX1003, ¶103. In other words, Kraft teaches a user may select an event node, which returns information (e.g., “text or media content,” EX1005, 3:18-24) pertinent to the event (i.e., “*information pertinent to the situation*”). EX1003, ¶103.

7. [1.C.3]: “***creating a first subset of the plurality of user nodes...***”

Altman discloses use of “mobile devices are location-aware mobile communication devices.” EX1006, ¶8. Altman’s “process **determines the geographic location of a mobile communication device** operated by a user within an area,” and then “[m]essaging and alert functions using the communications capability of the mobile device can incorporate the location information resulting in interaction among users.” *Id.* Altman discloses that its

“location determination component can be a GPS module or assisted GPS (A-GPS) that provides the location of the mobile communication devices in terms of latitude/longitude coordinates.” EX1006, ¶40.

Altman further employs “[a] database specifying places and/or events,” and information “can be provided to [a] user in a ‘push’ model in which the server sends relevant POI information to a user based on a user condition, such as if the user goes near a particular POI,” e.g., the location of an event. EX1006, ¶55; EX1003, ¶¶105-06. For example, Altman discloses “alerting the user to the ... location of events of interest when the user enters a particular area.” EX1006, ¶61. Thus, a POSA would have understood that Altman’s techniques allow for identification of users within a particular geographic proximity to an event and provide information to that subset of users. EX1003, ¶106.

As discussed in Section IV.A, a POSA would have been motivated to employ Altman’s geolocation-based, user-identification techniques in Kraft’s system to identify and connect users to events in close proximity, i.e., “*creating a first subset of the plurality of user nodes based on a determination that the first subset of the plurality of user nodes is associated with devices that are in geographic proximity to the situation.*” EX1003, ¶107. These techniques would enable users in Kraft-Altman’s system to be alerted to such events and to “facilitate multi-user discussion of the real-world entity [(i.e., the event)] to which the model

pertains.” EX1005, 12:64-66; EX1003, ¶107.

8. [1.C.4]: “*presenting the information pertinent to the situation...*”

As discussed for [1.C.2], Kraft discloses that its event entity models contain “*information pertinent to the situation,*” such as “Location” metadata that specifies a location of the event and other “text or media content” pertinent to the event. EX1005, 3:18-24, 16:32-34; EX1003, ¶109. And, as discussed for [1.C.3], Altman discloses “alerting the user to the ... location of events of interest when the user enters a particular area.” EX1006, ¶61; EX1003, ¶109. Therefore, a POSA would have recognized that in the combined system of Kraft-Altman, “*devices associated with the first subset of the plurality of user nodes*” (the user devices in geographic proximity to the event) would advantageously be alerted with “*the information pertinent to the situation,*” e.g., the location of, and other information pertinent to, the event. EX1003, ¶109. Presentation of this information would enable users in geographic proximity to the event to discover the event without needing to separately search for it. *Id.*

9. [1.C.5]: “*joining at least a first node of the first subset of the plurality of user nodes to the event node...*”

Kraft-Altman teaches this element in at least two ways.

First, Kraft discloses that once an event is created, “Person” entities (“*user nodes*”) can be directly joined to the “Event” entity (“*event node*”) as

“participant[s].” EX1005, 10:13-21, FIG. 3. Kraft does not explicitly disclose how a person becomes a participant in an event, but Altman does. EX1003, ¶111. In particular, Altman further discloses that its “event manager allows the user to create and manage various events using date and location information and **send invitations** or messages **regarding the events**.” EX1006, ¶53.

A POSA would have been motivated to incorporate Altman’s event invitations as part of “*the presented information pertinent to the situation*” to facilitate participation in the event. EX1003, ¶112. And by accepting the invitation, Kraft’s system can create a “participant” relationship between the “Person” and “Event” entities, i.e., “*joining at least a first node of the first subset of the plurality of user nodes to the event node based on interaction with the presented information pertinent to the situation.*” EX1005, 10:13-21, FIG. 3; EX1003, ¶112.

Second, Kraft discloses that “channels can be defined” for entity models “to facilitate multi-user discussion of the real-world entity [(i.e., the event)] to which the model pertains.” EX1005, 12:64-66. “For example, a chat room channel 426 may be defined, and a user who has retrieved entity model 400 from world model data store 162 can use channel 426 to enter a chat room and discuss the entity in real time with other users.” EX1005, 12:66-13:3.

Once the user is alerted to an event in the system of Kraft-Altman, a POSA would have recognized the benefits of allowing the user to enter the chat room by

“interact[ing] with the presented information pertinent to the situation,” e.g., by directing the user to the chat room (or the entity model containing a link to the chat room) via selection of a link within the *“presented information.”* EX1003, ¶¶113-14; EX1005, 19:27-32 (discussing “clickable hyperlinks” directing a user to an entity model). This operation would, for example, “facilitate multi-user discussion” of the event without the user needing to separately search for the event entity model. EX1005, 12:64-66; EX1003, ¶114. In this manner, Kraft-Altman renders obvious *“joining at least a first node of the first subset of the plurality of user nodes,”* via its associated device, *“to the event node”* through a chat room channel corresponding to the event node. EX1005, 19:37-48; EX1003, ¶114.

10. [1.D]: *“receiving an indication of the supplemental information”*

Kraft discloses that its “[w]orld builder module 165 advantageously also supports modification of an entity model 400 that is already in world model data store 162.” EX1005, 17:9-11. For example, “modification to content section 404 and communication channels section 420 for an existing entity model,” such as an event entity, can be made “by the entity manager of that entity model.” EX1005, 17:18-21. Similarly, modification to other “existing information,” such as the “[l]ocation” of an event, can be made. EX1005, 15:64-16:2, 17:11-17.² When

² The ’463 patent does not use the term *“supplemental information”* outside

information related to an entity model is updated, such as information related to an event, that “*supplemental information*” is received by Kraft’s system and “committed to world model data store 162.” EX1005, 17:30-34; EX1003, ¶116. Moreover, Kraft discloses that entity models may “be automatically updated to reflect changes in real-world relationships that can be ... reported to world server 160”; for example, if a user joins a community group, that transaction can be reported to world server 160, which can modify the Person entity model to reflect the user’s membership in the corresponding Community entity model. EX1005, 18:17-26; EX1003, ¶117.

Thus, Kraft teaches “*receiving an indication of the supplemental information*” as part of updating relationships or other information associated with an existing entity model. EX1003, ¶118.

11. [1.E]: “*analyzing the database...*”

As discussed for [1.C.5], Kraft discloses that once an event is created, “Person” entities (“*user nodes*”) can be directly joined to the “Event” entity (“*event node*”) as “participant[s].” EX1005, 10:13-21, FIG. 3. In the systems of Kraft-Altman, a POSA would have understood that more than one “*node of the first subset of the plurality of user nodes*” may be joined to the event node as a

of the claims or limit the type of information that may satisfy this limitation.

participant. EX1003, ¶119. Thus, in addition to a “*first node*” that is joined to the event node, Kraft-Altman teaches “*a third node of the database*” that is joined to the “*event node*.” *Id.*

Kraft further discloses that its “world model provides a searchable set of interrelated entity models.” EX1005, 6:35-40. For example, a “participant might access a search-and-navigation interface ... to identify entity models that should be related.” EX1005, 16:36-42, 18:31-19:32 (discussing Kraft’s search process). For instance, when the “*third node*” initiates a search “to view related entity models,” “all related entity models up to some maximum degree of separation (e.g., 2) from the current entity may be shown.” EX1005, 20:59-67; EX1003, ¶120. A POSA would have understood that to identify the related entity models, Kraft’s system “*analyz[es] the database that comprises the multi-dimensional node-to-node links to identify a second node included in the database,*” e.g., one of the nodes connected to the event within two degrees of separation from the event. EX1003, ¶120.

Kraft further teaches that the “*second node ... is connected via at least one dimension in the multi-dimensional information network to [the] third node of the database, wherein the at least one dimension is indicative of potential interest in the situation.*” EX1003, ¶121. A POSA would have understood that by searching for entities within two “degree[s] of separation” from an event node, EX1005,

20:59-67, Kraft's system would identify both user nodes connected to the event node (e.g., as a "participant," EX1005, 10:13-21, FIG. 3) and user nodes (i.e., "*a second node*") indirectly connected to the event node through another node (e.g., through the "*third node*"). EX1003, ¶121.

For example, the "*second node*" and "*third node*" may be "Person" nodes "hav[ing] trust (or friendship) relationships with each other." EX1005, 10:22-25, FIG. 3. As another example, the "*second node*" and "*third node*" may both be "members of" a "Community" node that is a "sponsor of," or "participates in," the event. EX1005, FIG. 3; *see also* EX1005, 8:53-62 (discussing user nodes linked to an event node via membership in a community node).

A POSA would have understood that each of these examples illustrates the "*second node*" and "*third node*" connected via at least one "*dimension [that] is indicative of potential interest in the situation.*" EX1003, ¶¶122-23. For instance, if each node is a member of a community that sponsors an event, that relationship would be "*indicative of potential interest in the situation.*" *Id.*; EX1005, 8:49-62 (providing an example of a user's potential interest in a "rally" ("event node") based on membership in a community sponsoring the rally). Likewise, when the "*third node*" is a participant in an event, a "trust (or friendship)" relationship between the "*second node*" and "*third node*" indicates that the "*second node*" may also be interested in the event. EX1005, 10:22-25; EX1003, ¶123.

12. [1.F]: “*providing ... the supplemental information*”

As discussed for [1.C.3] and [1.C.4], Altman discloses “alerting the user to the ... location of events of interest when the user enters a particular area.”

EX1006, ¶61. A POSA would have recognized that users not yet connected to an event, but having a potential interest in the event, would benefit from being alerted when they enter an area in close proximity to the event. EX1003, ¶125. For example, if a user in Kraft-Altman’s system is a friend of a participant in the event, or a member of a community sponsoring the event, as discussed for [1.E], the user may have an interest in attending the event. Altman’s techniques advantageously allow the user to be alerted with information related to the event, including the latest updates to the location of, or content associated with, the event (“*the supplemental information*”) when the user is in proximity to the event. EX1006, ¶61; EX1003, ¶125. As noted for [1.C.4], presentation of this information would enable users in geographic proximity to the event to discover the event without needing to separately search for it. EX1003, ¶125.

Additionally, Altman teaches that a user may send “messages regarding ... events to friends.” EX1006, ¶53. A POSA would have been motivated to enable a user to send information regarding an event (including the latest “*supplemental information*”) to friends within Kraft-Altman’s system to inform the user of an event of interest, even when the user is not in close proximity to the event.

EX1003, ¶126. For example, when the “*third node*” is a participant in an event, they may choose to send event information to a friend (the “*second node*”) to inform the friend of the event. A POSA also would have had a reasonable expectation of success including Altman’s messages regarding the event because Kraft’s “world model” already “enables a user to send a message to any entity represented therein.” EX1005, 9:29-39; EX1003, ¶¶126-27.

13. [1.G]: “*in response to interacting...*”

Kraft discloses that its user devices, i.e., “Client system 120,” “typically runs a browsing program, such as Microsoft’s Internet Explorer™ browser, Netscape Navigator™ browser, Mozilla™ browser, Opera™ browser, or a WAP-enabled browser in the case of a cell phone.” EX1005, 5:19-26. Thus, Kraft teaches “*a web browser application operating on the device associated with the second node.*” EX1003, ¶128.

Kraft further discloses that a user may access an “entity view” of an entity model “by clicking on the link to that entity model.” EX1005, 19:37-38. “The entity view advantageously displays information from the entity model in a user-readable form,” and “the user can interact with the displayed information to explore the world model.” EX1005, 19:39-42. And the “entity view” may be “implemented as a Web page” accessible on the user’s device. EX1005, 19:46-48, FIG. 8. In the case of an event entity, the “entity view” thus provides “*a webpage*

containing information related to the situation.” EX1003, ¶129.

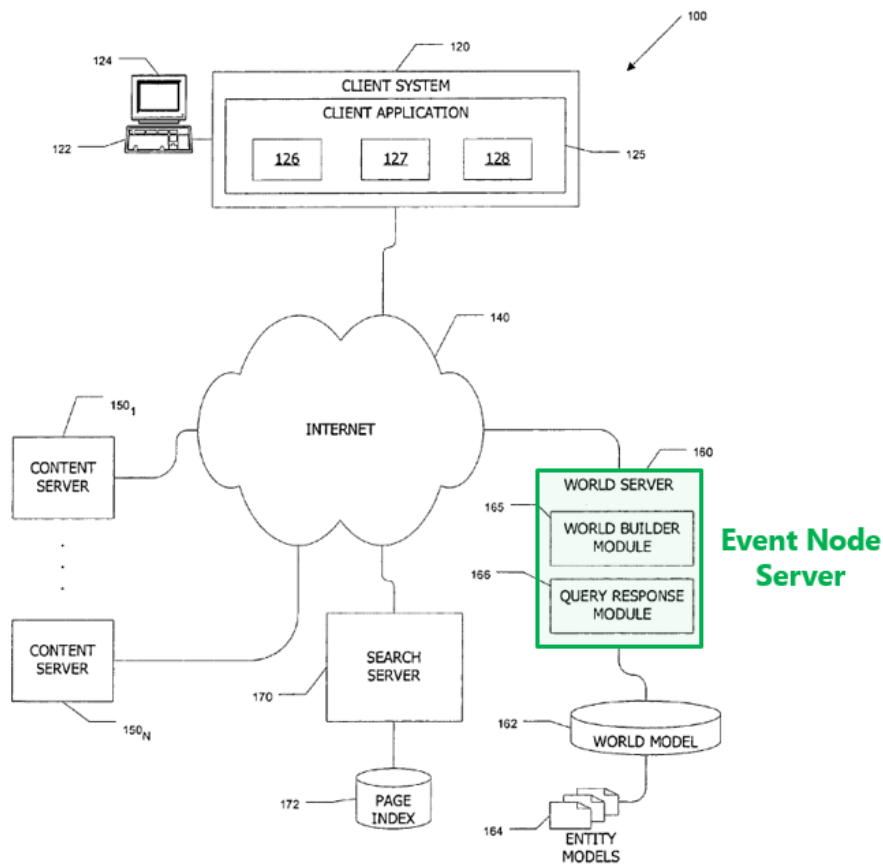
As discussed for [1.F], Kraft-Altman teaches alerting a “*device associated with the second node*” in proximity to an event with information about the event, including “*the supplemental information.*” A POSA would have been further motivated to allow a user to access the “entity view” of the event entity model by “*interacting with the supplemental information*” in the alert. EX1003, ¶130; EX1005, 19:37-38 (user may access “entity view” by “clicking on the link to that entity model.”). For example, by selecting the event in the alert, the user’s device would be able to access “a Web page” providing more detailed information regarding the event. EX1005, 19:46-48; EX1003, ¶130. In this manner, Kraft-Altman teaches “*causing a redirection of a web browser application operating on the device associated with the second node to a webpage containing information related to the situation*” by “*interacting with the supplemental information*” in the alert transmitted to the user’s device. EX1005, 19:37-45; EX1003, ¶131.

C. Independent Claim 7

Claim 7 sets forth elements substantially the same as claim 1, which are rendered obvious for the same reasons as claim 1. EX1003, ¶¶132-33.

Claim 7 further recites “*an event node server*” that includes “*one or more central processing units*” and “*one or more network controllers*” configured to perform the functions recited in claim 7. Kraft’s “world server,” as illustrated in

Figure 1, provides the recited “*event node server.*” EX1003, ¶¶134-35.



EX1005, FIG. 1 (annotated).

Kraft describes that “[w]orld server 160 maintains [the] world model data store 162 that stores a ‘world model’” and “includes a world-builder module 165 and a query response module 166 that interact with client system 120.” EX1005, 6:33-35, 6:52-60. “[W]orld-model participants can create and update entity models,” such as event nodes, “via client application 125 (FIG. 1), which interacts with **world-builder module 165 of world server 160.**” EX1005, 15:21-28.

Kraft further discloses that its “client system 120 and all of its components”

include “a central processing unit such as an Intel Pentium™ processor, AMD Athlon™ processor, or the like or multiple processors” to “communicate with server systems 150₁ to 150_N, 160 and 170 and to process and display data content received therefrom.” EX1005, 5:40-49. A POSA would have understand that Kraft’s servers, including world server 160, would similarly include “*one or more central processing units*” and “*one or more network controllers*” to operate the “world-builder module 165 and a query response module 166,” and to communicate information with client systems 120 through Internet 140. EX1005, 6:33-35, 6:52-60, 15:21-28, FIG. 1; EX1003, ¶¶136-39.

Accordingly, Kraft teaches the additional “event node server” limitations of independent claim 7.

D. Claim 2

Kraft-Altman renders obvious this claim for the reasons discussed for [1.C.5] of claim 1. *See* Section IV.B.9. Specifically, Kraft-Altman renders obvious this claim in at least two ways. *First*, Kraft discloses that once an event is created, “Person” entities (“*user nodes*”) can be directly joined to the “Event” entity (“*event node*”) as a “participant.” EX1005, 10:13-21, FIG. 3. Altman further discloses “send[ing] invitations ... regarding the events.” EX1006, ¶53. A POSA would have been motivated to incorporate Altman’s event invitations as part of “*the supplemental information*” to facilitate participation in the event. EX1003, ¶¶141-

43. And by accepting the invitation, Kraft's system can create a "participant" relationship between the "Person" and "Event" entities, i.e., "*in response to interacting with the supplemental information, joining the second node to the event node.*" EX1005, 10:13-21, FIG. 3; EX1003, ¶143.

Second, Kraft discloses that "channels can be defined" for entity models "to facilitate multi-user discussion of the real-world entity [(i.e., the event)] to which the model pertains." EX1005, 12:64-66. "For example, a chat room channel 426 may be defined, and a user who has retrieved entity model 400 from world model data store 162 can use channel 426 to enter a chat room and discuss the entity in real time with other users." EX1005, 12:66-13:3.

Once the user of the "*second node*" is alerted to an event in the system of Kraft-Altman, a POSA would have recognized the benefits of allowing the user to enter the chat room by "*interacting with the supplemental information,*" e.g., by directing the user to the chat room (or the entity model containing a link to the chat room) via selection of a link within the "*supplemental information.*" EX1003, ¶¶144-45. This operation would, for example, "facilitate multi-user discussion" of the event without the user needing to separately search for the event entity model. EX1005, 12:64-66; EX1003, 145. In this manner, Kraft-Altman teaches "*joining the second node*" (via its associated device) "*to the event node*" through a chat room channel corresponding to the event node. EX1005, 19:37-48; EX1003, 145.

E. Claim 3

Kraft-Altman renders obvious this claim for the reasons discussed for [1.E].
See Section IV.B.11. In particular, as explained for [1.E], Kraft-Altman teaches that “*the third node is one of the first subset of the plurality of nodes.*” *Id.* And a POSA would have understood that by searching for entities within two “degree[s] of separation” from an event node, EX1005, 20:59-67, Kraft’s system would identify both user nodes connected to the event node (e.g., “*the third node*”) and user nodes (e.g., “*the second node*”) indirectly connected to the event node through another node. EX1003, ¶147. For example, as explained for [1.E], Kraft teaches that the “*second node*” and “*third node*” may be “Person” nodes “hav[ing] trust (or friendship) relationships with each other” (“*a direct link*”). EX1005, 10:22-25; FIG. 3. Thus, Kraft-Altman teaches “*identifying a direct link between the second node and the third node, wherein the third node is one of the first subset of the plurality of user nodes.*” EX1003, ¶147.

F. Claim 4

Kraft-Altman renders obvious this claim for the reasons discussed for [1.E] and claim 3. *See* Sections IV.B.11, IV.E; EX1003, ¶149.

G. Claim 5

Kraft-Altman renders obvious this claim for the reasons discussed for [1.E]. *See* Section IV.B.11. In particular, Kraft-Altman teaches that the “*second node*” and “*third node*” may both be “members of” a “Community” node that is a

“sponsor of” or “participates in” the event. EX1005, FIG. 3; *see also* EX1005, 8:53-62. In this case, the “Community” node provides “*an indirect link between the second node and the third node.*” EX1003, ¶151.

A POSA would have also understood that the “Community” node connects “*the second node and the third node ... by a preference dimension to an additional node.*” EX1003, ¶152. For example, Kraft explains that “Community” “entity models represent[] groups of people united by a common interest or characteristic,” such as “science fiction fans.” EX1005, 9:5-7, 9:61-63; EX1003, ¶152.

H. Claim 6

Kraft-Altman renders obvious this claim for the reasons discussed for [1.E]. *See* Section IV.B.11. In particular, Kraft-Altman teaches “*identifying the second node*” based on a potential interest in the situation, rather than “*interaction with the event node.*” *See id.*; EX1003, ¶154.

I. Claim 8

Kraft-Altman renders obvious this claim for the reasons discussed for claim 2. *See* Section IV.D.

J. Claim 9

Kraft-Altman renders obvious this claim for the reasons discussed for claim 3. *See* Section IV.E.

K. Claim 10

Kraft-Altman renders obvious this claim for the reasons discussed for claim

4. *See* Section IV.F.

L. Claim 11

Kraft-Altman renders obvious this claim for the reasons discussed for claim

5. *See* Section IV.G.

M. Claim 12

Kraft-Altman renders obvious this claim for the reasons discussed for claim

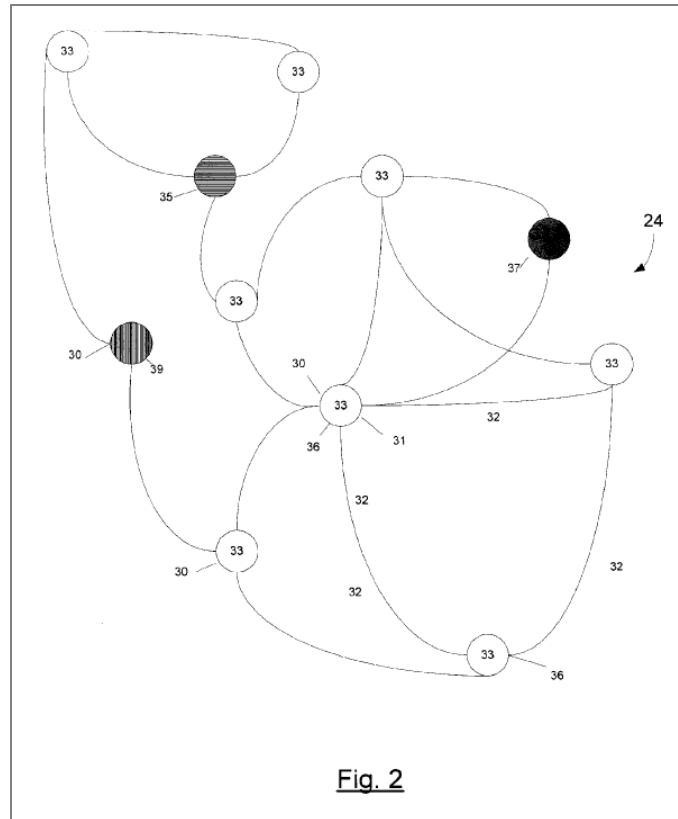
6. *See* Section IV.H.

V. GROUND 2: CLAIMS 1-12 WOULD HAVE BEEN OBVIOUS OVER WONG IN VIEW OF GOGIC AND GAGE.

Wong-Gogic-Gage renders obvious claims 1-12. EX1003, ¶¶165-255.

A. Wong

Wong relates to a “method and system for generating an interactive computerized biological network consisting of living and non-living entities based upon the multiple relationship types which can exist between entities.” EX1007, Abstract. Wong teaches creating a social network. *See, e.g.*, EX1007, ¶¶2, 3, 17-19, FIG. 2.



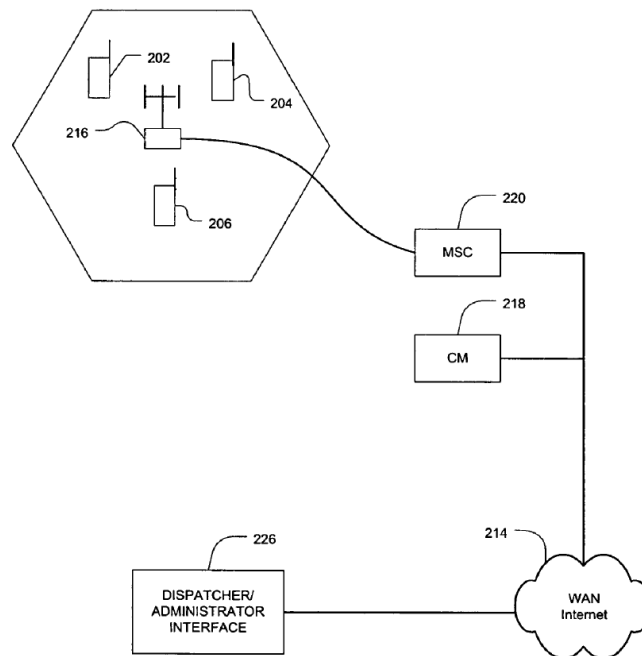
EX1007, FIG. 2.

In Wong, the “network of living and non-living entities is represented by a number of elements, each representing a living or non-living entity, which are referred to as ‘nodes’ 30, joined by connections 32, referred to as ‘linkages’, to other nodes 30.” EX1007, ¶21. Wong also teaches communication between nodes in a social network: “The social networking features ... facilitate many forms of communication, such as notification of updates, alerts, sharing of files and photos, blogs, instant messaging and comments.” EX1007, ¶44. Each node of the network represents a living or non-living entity, such as people, places, objects, or animals. EX1007, ¶21. People or organizations “can represent themselves to other persons

or organizations of persons through their active nodes and interact electronically with other persons or organizations of persons represented by an active node.” *Id.*, ¶30; EX1003, ¶¶56-58.

B. Gogic

Gogic is directed to “providing group communication services to an ad-hoc group formed according to vicinity with other users of communication device(s) (CD), or according to proximity of a given locality, in an existing communication system.” EX1008, 4:16-20; *see also* EX1008, Abstract. “Group members communicate with each other using an assigned communication device, shown as communication devices (CD) 202, 204, and 206” in Figure 2. EX1008, 6:22-24.



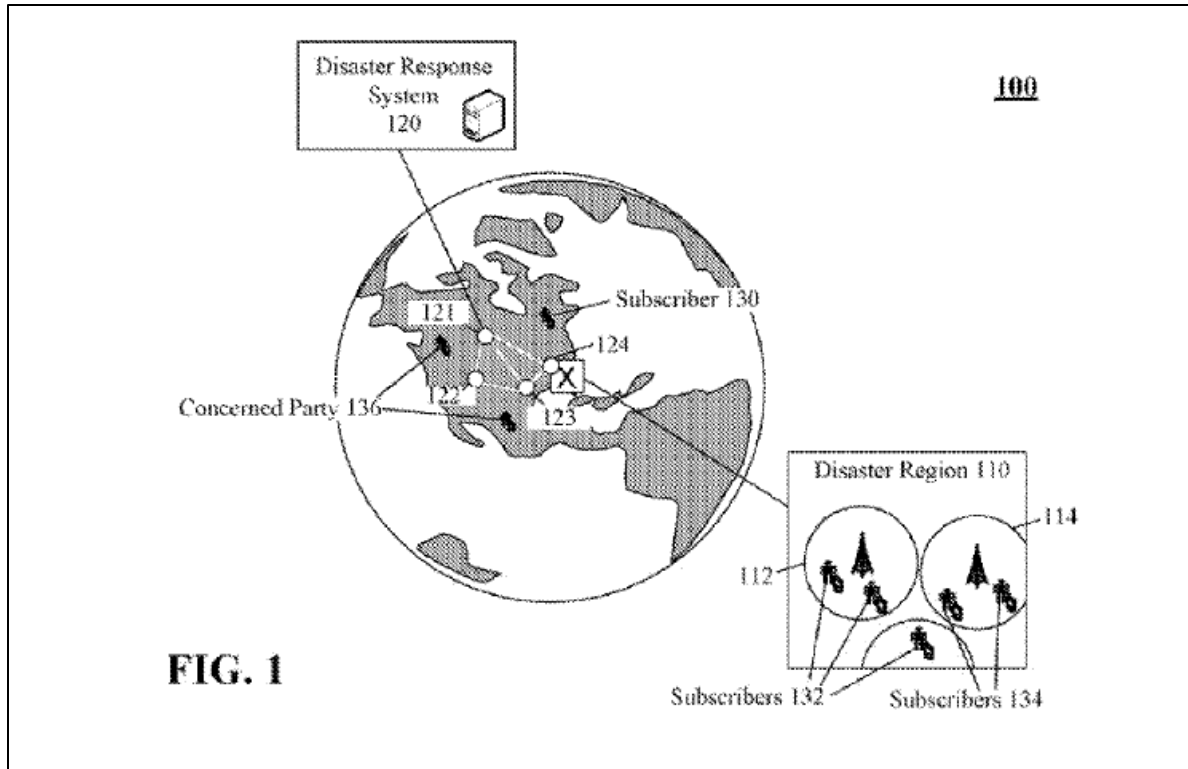
EX1008, FIG. 2.

An ad-hoc communication group may be formed “in response to an

emergency notification,” such as “the occurrence or presence of an event or condition wherein communications between proximately located users could be beneficial.” EX1008, 10:16-21, FIG. 4. Gogic explains “[t]here is a need for emergency response teams to establish communication with any and all users in an area affected by a large scale natural disaster.” EX1008, 2:12-14. When an event occurs, users are invited to join the communication group and, if they meet the designated criteria, may accept the invitation. EX1008, 10:26-11:9; *see also* EX1003, ¶¶59-60.

C. Gage

Gage is directed to “emergency communications and, more particularly, to emergency notification systems for mobile telephone users within a disaster region to quickly and efficiently convey situational status indicators to concerned parties.” EX1009, ¶2. Gage provides “a disaster response system 100,” as illustrated in Figure 1, “for informing concerned parties 136 of a situation status of subscribers 130-134, who may have been [a]ffected by a disaster,” such as “a hurricane, flood, fire, tsunami, and the like.” EX1009, ¶19.



EX1009, FIG. 1.

When a disaster occurs, “a server can request location information from mobile devices,” and “a determination can be made as to whether any subscribers have been affected by the disaster ... based on the location information.” EX1009, ¶¶36; *see also* EX1009, ¶8. “Concerned parties, such as family members,” can then “be contacted and informed of the status indicator and the location” of an affected subscriber, and “can be granted access to the Web site, through which they can look-up the last known location and situational status of the subscriber.” EX1009, ¶37; EX1003, ¶¶61-62.

D. Motivation to Combine Wong, Gogic, and Gage

As the Board has previously determined in IPR2024-00529, a POSA would

have been motivated to combine Wong and Gogic. EX1010, 34-37. In particular, a POSA would have been motivated to modify Wong's social network communication system to incorporate Gogic's teachings of an ad-hoc location-based communication group. EX1010, 34-37; EX1003, ¶¶166.

Prior to 2007, it was known that online forums could be used to aid in emergency planning and response. EX1011, 56. In 2005 during Hurricane Katrina, the website www.katrina.com served as a popular online resource for hurricane information, including pointers to other websites and a message board to help locate missing people. *Id.* Other websites collected and shared location-specific information about the storm and its damage. *Id.* Wong expressly teaches that "notification of updates" or "alerts" may be communicated via its social network. EX1007, ¶44. A POSA would have recognized the benefits in Wong's social network system of sending such updates or alerts to users located in an affected area during an emergency, similar to the known use of online forums to provide this information. EX1003, ¶¶167-68.

This recognition would have led a POSA to Gogic. EX1003, ¶169. Like Wong, Gogic is directed to group communication over a network. Gogic teaches that "[d]uring emergency situations, the formation of a communication group based on proximity of other users, or based on user's location being confined to a given area, may allow emergency services to be more efficiently or more

appropriately deployed.” EX1008, 4:20-24.

A POSA would have had a reasonable expectation of success in implementing Gogic’s ad-hoc location-based communication group in Wong’s social network communication system. EX1003, ¶170. Gogic recognizes that its invention can be used with “any wireless communication system,” “wireline telephones, paging devices, [and] portable or desktop computers,” and that it applies to “all of the various forms of media, including, but not limited to, voice, speech, data, [and] video.” EX1008, 4:40-57. In Wong, users communicate with other users via the social network and may access the social network over any device capable of communicating over a network, such as “laptops, desktops, handheld, personal digital assistants, [or] mobile telephones.” EX1007, ¶17.

A POSA would have recognized Gogic’s teachings of ad-hoc location-based communication group could be implemented in the “communication system” of Wong’s social network. EX1003, ¶171. A POSA would have been motivated to do so, at least in an emergency situation, to allow for efficient communication and appropriate deployment of emergency services. *Id.* Further, a POSA would have had a reasonable expectation of success implementing the combination. *Id.*, ¶172. The proposed combination simply combines prior-art elements (e.g., Wong’s social network communication system and Gogic’s ad-hoc location-based communication group) according to known methods to yield predictable results,

and amounts to the use of a known technique (implementing Gogic's ad-hoc location-based communication group) to improve similar devices (Wong's social network communication system) in the same way. *Id.*.

Additionally, a POSA would have been motivated to combine the system of Wong-Gogic with Gage's "concerned party" notification techniques to ensure concerned third parties are notified of pertinent information related to the event. In particular, Gage discloses "a solution for providing a situational status and a location of a subscriber potentially affected by a disaster to concerned parties," such as "family members." EX1009, ¶¶8, 37, Abstract. For example, in the event of an emergency such as a "hurricane," family members (e.g., "a mother," "an aunt," "an out of state brother," etc.) "can be contacted and informed of the status indicator and the location information of the mobile device." EX1009, ¶¶37, 44, 46; EX1003, ¶173. A POSA would have readily recognized the benefits of providing status and location information to concerned friends and family in an automated fashion, without concerned parties needing to establish direct contact with the individual affected by the situation. EX1003, ¶173.

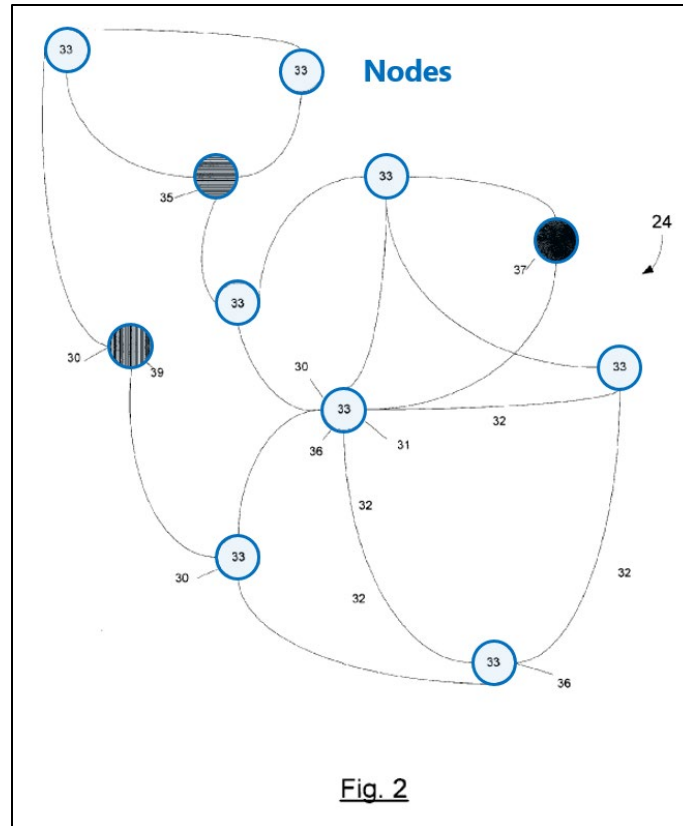
A POSA would have had a reasonable expectation of success incorporating Gage's techniques into Wong-Gogic's system. EX1003, ¶174. Wong already discloses storing relationships between individuals, including "familial relationships" such as "mother/daughter." EX1007, ¶¶2, 23; EX1003, ¶174.

Moreover, Wong discloses that “notification of updates” or “alerts” may be communicated via its social network. EX1007, ¶44; EX1003, ¶174. Thus, incorporation of Gage’s techniques for notifying concerned parties into Wong-Gogic’s social network communication system would amount to nothing more than incorporating well-known techniques according to known methods to yield predictable results, and would improve Wong-Gogic’s system in the same way (e.g., communicating status/location information to family members in an emergency situation). EX1003, ¶174.

E. Independent Claim 1

1. [1.P]

To the extent limiting, Wong-Gogic-Gage teaches this element. Wong discloses a “network of living and non-living entities is represented by a number of elements, each representing a living or non-living entity, which are referred to as ‘nodes’ 30, joined by connections 32, referred to as ‘linkages’, to other nodes 30.” EX1007, ¶21. “[N]odes 30 represent people 33 (living and deceased), places 35, objects 37 and animals 39,” and Wong discloses that more “main node types” and “sub-types” may be included. EX1007, ¶¶21-22.



EX1007, FIG. 2 (annotated).

“Nodes can be linked by more than one linkage type, representing the multiple types of relationships between the entities represented by the nodes.” EX1007, ¶24. For instance, “A linkage of a person node to another person node can be, for example: mother/daughter, best friend, biological, social, or genetic.” *Id.* Thus, Wong teaches a network of people, places, objects, animals, and other nodes linked by multiple relationships. EX1003, ¶¶176-77.

Gogic teaches “providing group communication services to an ad-hoc group formed according to vicinity with other users of communication device(s) (CD), or according to proximity of a given locality, in an existing communication system.”

EX1008, 4:16-20. For example, “[d]uring emergency situations, the formation of a communication group based on proximity of other users, or based on user’s location being confined to a given area, may allow emergency services to be more efficiently or more appropriately deployed.” EX1008, 4:20-24.

Gogic’s system “identifies the occurrence or presence of an event or condition [(“*a situation*”)] wherein communications between proximately located users could be beneficial” and transmits an “invitation to join a group to all recipient CDs with their invitation acceptance being conditional upon the CD qualifying according to the location criteria” transmitted with the invitation. EX1008, 10:18-50. Users within the specified geographic proximity to the event may accept the invitation, in which case they are joined “as a confirmed member of the group,” allowing members “to transmit to others of the plurality of wireless communication devices of the communication group.” EX1008, 10:62-11:9, 4:30-35, Abstract; EX1003, ¶¶178-79. Thus, Gogic teaches “*forming a situational network*” of users within proximity to the event. EX1003, ¶179.

A POSA would have been motivated to incorporate Gogic’s teachings of an ad-hoc, location-based communication group into Wong’s social network communication system to be able to, for example, send updates or alerts to users located in an affected area during an emergency. Section V.D; EX1003, ¶180. Thus, in the Wong-Gogic combination, a POSA would have been motivated to

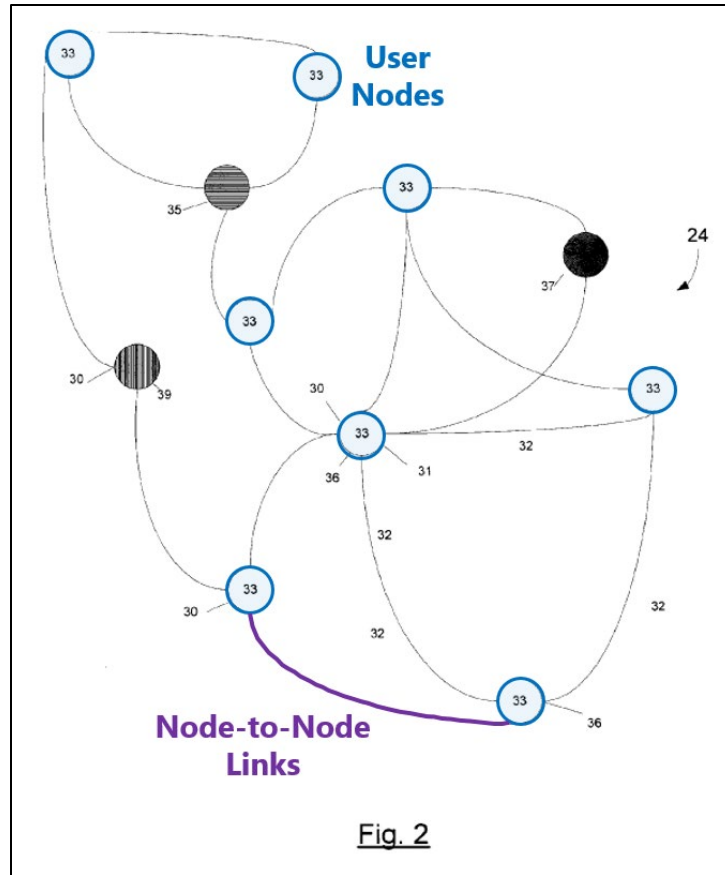
“*form[] a situational network*” including the subset of nodes in Wong’s social network accepting invitations to participate in the ad-hoc location-based communication group. EX1003, ¶180.

Wong-Gogic-Gage further teaches “*providing supplemental information*,” as discussed further for [1.F]. See Section V.E.12. Gage teaches “subscriber status reporting” techniques for use “during disasters,” and “[c]oncerned parties, such as family members,” can “be contacted and informed of the status indicator and the location” of an affected subscriber.” EX1009, ¶¶26, 27, 37. Thus, Gage teaches “*providing supplemental information*,” e.g., the status of an individual in proximity to the event, to concerned parties. EX1003, ¶181. A POSA would have been motivated to incorporate these notification techniques into Wong-Gogic’s system to ensure concerned parties are notified of pertinent information related to the event. Section V.D; EX1003, ¶181.

Accordingly, Wong-Gogic-Gage teaches the preamble of claim 1.

2. [1.A]

Wong’s network 24 provides a “*multi-dimensional personal information network*,” as illustrated in Wong’s Figure 2. EX1003, ¶183.



EX1007, FIG. 2 (annotated).

As noted for [1.P], network 24 includes nodes 30 (“a plurality of user nodes”) joined by connections 32, also called “linkages” (“node-to-node links”). EX1007, ¶21. Each node represents a living or non-living entity, such as “people 33 (living and deceased), places 35, objects 37 and animals 39.” *Id.* Thus, Wong’s “nodes 30” include “a plurality of user nodes,” e.g., “people 33.” EX1007, ¶21; see also EX1007, ¶20 (“The user can edit the user’s own node”); EX1003, ¶184.

Linkages 32 have a defined linkage type, “representing the actual type [of] relationship which exists between the person, place, object or animal represented by the linked nodes.” EX1007, ¶24. Wong further teaches “multi-dimensional

node-to-node links characterizing relationships between the plurality of user nodes via dimensions in [the] multi-dimensional information network”: “Nodes can be linked by *more than one* linkage type, representing the multiple types of relationships between the entities represented by the nodes.” *Id.*; *see also* EX1007, ¶33, FIG. 4. In Wong, each node contains communication tools for “communicat[ing] with other entities within or outside the network using the features of the social network” and/or “communicat[ing] with nodes in the same network.” EX1007, ¶19; *see also* EX1007, ¶¶31-32. Thus, in line with the ’463 patent, Wong’s network 24 “captures and manages multi-dimensional relationships between persons and other entities that are users of the network.” EX1001, 15:1-20; EX1003, ¶185.

Wong further discloses that its nodes and linkages are maintained in “*a database*.” EX1003, ¶186. Wong discloses, “A social network server or servers 20 maintain a system comprising an Internet website, **database** and associated data, which is accessible to users 10.” EX1007, ¶17, FIG. 1. “**Nodes, linkages, linkage types, and all data pertaining to the network can be categorized, sorted and stored in the same database** which forms part of the system and retrievable from the same system.” EX1007, ¶36; EX1003, ¶186.

3. [1.B]

Gogic and Gage each teach “*obtaining an indication of an occurrence of a*

situation.” EX1003, ¶188. In Gogic, “[a] dispatcher 400 **identifies the occurrence or presence of an event or condition** wherein communications between proximately located users could be beneficial,” such as “a large scale natural disaster.” EX1008, 2:12-14, 10:18-21. When such a “*situation*” is identified, Gogic’s system “*obtain[s] an indication of an occurrence of a situation*” via “a dispatcher interface configured to generate an invitation to join a communication group with the invitation including group membership location criteria.” EX1008, 2:54-58. Gage similarly discloses “**detecting an occurrence of a disaster** affecting a region.” EX1009, Claim 15; *see also* EX1009, ¶9 (“**[W]hen a disaster is detected**, mobile devices of subscribers can be queried for location and wireless connectivity by a centrally located disaster response system.”).

A POSA would have been motivated to incorporate these techniques for forming an ad-hoc communication group in response to detection of an emergency event into Wong’s social network communication system to facilitate communication of information to and among users within the group. *See* Section V.D; EX1003, ¶188. Wong-Gogic-Gage thus teaches this claim element.

Additionally, Wong-Gogic-Gage’s system “*obtain[s] an indication of an occurrence of a situation*” as part of “*establishing an event node*,” as discussed further for [1.C.1]. In Wong, each node contains “communication tools” for “communicat[ing] with nodes in the same network of living and non-living

entities,” allowing nodes to “exchange information.” EX1007, ¶¶19, 31. Wong further describes four exemplary “main node types”—people, places, objects, animals—but also teaches that more “main node types” and “sub-types” may be included. EX1007, ¶¶21-22. For example, “Object sub-types can be groups, organizations, products, businesses, books, songs, etc.” EX1007, ¶22.

Because communication in Wong’s network occurs between nodes, a POSA would have recognized that a new node (“*an event node*”) corresponding to the identified event (“*situation*”) would be useful in Wong’s social network to facilitate communication related to the event or condition. EX1003, ¶¶189-90; EX1011, 39-40 (Board previously finding same). For example, in Wong’s network, a “node can contain information pertaining to the entity that it represents,” and Wong provides “tools to allow one or more living individual persons to view, add, edit, or delete information pertaining to the entity.” EX1007, ¶31. In the case of an “event node,” a POSA would have recognized that this information would include information pertinent to the event, such as the type (e.g., an “earthquake or hurricane,” EX1008, 1:27) and location information related to the event. EX1003, ¶190. And Wong teaches providing “notification of data updates within a node” and “alerts,” in line with Gogic’s desire “for users in an area to be given emergency assistance information” when a situation occurs. EX1007, ¶44; EX1008, 2:12-17; EX1003, ¶191.

Wong discloses creation of a new node by “select[ing] a node type for the new node” and “a node sub-type from a menu provided for that node type, or by entering an acceptable sub-type.” EX1007, ¶26. Wong’s system then stores the created node in its database managed by social network server(s) 20. EX1007, ¶¶17, 36. When Wong’s system receives the information for creating a new node related to the identified event, Wong-Gogic-Gage’s system “*obtain[s] an indication of an occurrence of a situation.*” EX1003, ¶192.

4. [1.C]

For the reasons discussed for [1.P] and below, Wong-Gogic-Gage teaches “*forming the situational network ... based at least in part on the situation,*” for example, based on “the occurrence or presence of an event or condition wherein communications between proximately located users could be beneficial.” *See* EX1008, 10:16-21; Sections V.E.1, V.E.5-V.E.9; EX1003, ¶¶194. And, as discussed for [1.P], [1.A], and further below, Wong-Gogic-Gage teaches that the “*situational network*” is formed “*as a subset of the multi-dimensional information network,*” connecting a subset of user nodes within Wong’s social network based on proximity to an emergency event. *See* Sections V.E.1-V.E.2, V.E.5-V.E.9; EX1003, ¶¶194.

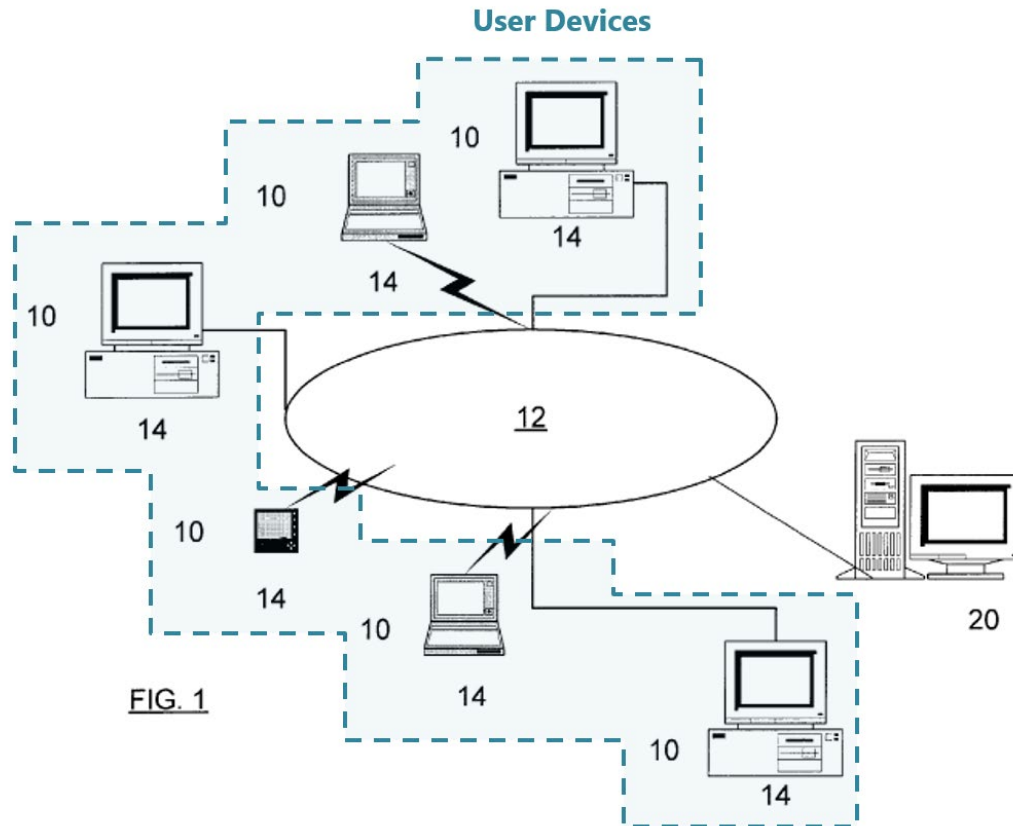
5. [1.C.1]

Wong-Gogic-Gage teaches this element for the reasons discussed for [1.B].

See Section V.E.3. As noted above, a POSA would have recognized that a new node (“*an event node*”) corresponding to the identified event (“*situation*”) would be useful in Wong’s social network to facilitate communication related to the event or condition. Section V.E.3; EX1003, ¶196. Wong-Gogic-Gage teaches “*establishing*” the “*event node*” by creating and storing the node in its social network database. EX1007, ¶¶17, 26, 36; Section V.E.3; EX1003, ¶196. Indeed, the Board previously found that Wong-Gogic taught this limitation. EX1011, 39-40 (finding “the teachings of Wong and Gogic would have suggested to an ordinarily skilled artisan the utility of connecting Wong’s users to a new event node to facilitate more effective handling of the event”).

6. [1.C.2]

Wong discloses “a number of users 10 having **computer terminals 14, whether laptops, desktops, handheld, personal digital assistants, mobile telephones or any other device** capable of communicating over a network, have access to a computer network 12 such as the Internet.” EX1007, ¶17.



EX1007, FIG. 1 (annotated).

When a user 10 registers in Wong’s system, “a representation in the system, hereinafter referred to as a ‘node’ 30, is created for the user.” EX1007, ¶18. Thus, Wong teaches “a plurality of user devices associated with the plurality of user nodes.” EX1003, ¶¶198-99.

Wong also teaches that nodes are “discoverable” to users within the network. EX1003, ¶¶200-02. Wong teaches that users may find an “existing node” by “searching and selecting from keyword identifiers or other search terms.” EX1007, ¶28. “Each node can be viewed by the user or third parties as a web page having features designated by the user it represents.” EX1007, ¶22; EX1003, ¶200.

Wong further teaches that the “network of living and non-living entities 24 **can be viewed in many ways, such as graphically** as a set of nodes 30 connected by their associated linkages 32, **or as a list.**” EX1007, ¶35.

A POSA would have recognized that when a user searches for an existing node, Wong’s system allows “*each respective user device*” to “*brows[e] a data feed*” by presenting a list or graphical display of nodes matching the search query. EX1003, ¶¶201-02. And the “*data feed*” is “*based on the database*” because Wong’s “[n]odes, linkages, linkage types, and all data pertaining to the network” are stored in its social network database. EX1007, ¶36; EX1003, ¶¶201-02.

Wong further teaches that “*the event node contains information pertinent to the situation*” for the reasons discussed for [1.B]. See Section V.E.3; EX1003, ¶203.

7. [1.C.3]

Wong-Gogic-Gage teaches this element for the reasons discussed for [1.P]. See Section V.E.1. In particular, in response to the occurrence of an emergency event (“*situation*”), Gogic teaches transmitting invitations to join an ad-hoc communication group and joining to the group users within geographic proximity to the event upon acceptance of the invitation. *Id.*; EX1008, 4:30-39, 10:18-50, 10:62-11:9, Abstract. Gogic expressly teaches “*determin[ing] that the first subset of the plurality of user nodes is associated with devices that are in geographic*

proximity to the situation” by evaluating “group membership location criteria” prior to joining user to the group. EX1008, 10:26-11:9; EX1003, ¶205.³ And a POSA would have been motivated to incorporate Gogic’s teachings of an ad-hoc location-based communication group into Wong’s social network communication system to be able to, for example, send updates or alerts to the subset of network users located in an affected area during an emergency. Section V.D; EX1003, ¶205.

8. [1.C.4]

Wong-Gogic-Gage teaches this element in at least two ways.

First, as discussed for [1.B], a POSA would have recognized that “*information pertinent to the situation*” in Wong-Gogic-Gage’s system would include information such as the type (e.g., an “earthquake or hurricane,” EX1008, 1:27) and location information related to the event. Section V.E.3; EX1003, ¶207. Further, as discussed for [1.P] and [1.C.3], Wong-Gogic-Gage teaches transmitting invitations to join an ad-hoc communication group and joining to the group users

³ Gage similarly teaches this element by determining a subset of users “affected by the disaster” based on “location information from mobile devices.” EX1009, ¶36; EX1003, ¶205.

within geographic proximity to the event upon acceptance of the invitation.⁴

Sections V.E.1, V.E.7; EX1003, ¶207.

Gogic further teaches invitations sent to users include “location criteria” related to the event, such as a “region” or “inclusive boundary” associated with the event. EX1008, 10:26-29, 10:35-50. Moreover, a POSA would have recognized the benefit of providing other information pertinent to the event in the invitation, such as the type and severity of the event (e.g., in the case of “a large scale natural disaster,” EX1008, 2:12-14), so users can evaluate whether to accept the invitation to the ad-hoc communication group. EX1003, ¶208. Wong-Gogic-Gage thus teaches “*presenting the information pertinent to the situation to devices associated with the first subset of the plurality of user nodes*” as part of invitations sent to users.

Second, once joined to the group, Gogic aims “for users in an area to be given emergency assistance information” related to the situation. EX1008, 2:12-17. Wong further teaches providing “notification of data updates within a node” and “alerts” to other nodes within the network. EX1007, ¶44. Based on these teachings, a POSA would have recognized the benefit of presenting updated information

⁴ The claims do not preclude presenting information to devices beyond those “*associated with the first subset of the plurality of user nodes.*”

regarding the event (*“information pertinent to the situation”*) *“to devices associated with the first subset of the plurality of user nodes,”* for example, when information contained in the event node is updated to “add[] details” related to the event. EX1007, ¶¶38 (discussing editing node information), 44; EX1003, ¶209.

9. [1.C.5]

Wong-Gogic-Gage teaches this element in at least two ways.

First, Wong-Gogic-Gage teaches *“joining at least a first node of the first subset of the plurality of user nodes to the event node”* when a user accepts an invitation to join the ad-hoc communication group (*“based on interaction with the presented information pertinent to the situation”*), enabling communication with and among the users of the group. EX1003, ¶211; EX1008, 2:12-14, 2:35-38. A POSA would have recognized this group relationship would be reflected in Wong’s network, in particular by creating a “linkage” from the user node to the event node. EX1007, ¶24 (*“Each linkage type represents the actual relationship type which exists between a node and any other node type.”*); EX1003, ¶211. Indeed, Gogic discloses maintaining a “group list” including the user devices joined to the group, EX1008, 10:66-11:9, which can be recorded through a linkage between user nodes and the event node in Wong’s system. EX1003, ¶211.

Second, Wong teaches each node (including “inactive” nodes like the *“event node”*) contains “a home page” with “information pertaining to the entity. EX1007,

¶31; *see also* EX1007, ¶22 (“Each node can be viewed by the user or third parties as a web page ...”). In Wong-Gogic-Gage’s system, a POSA would have recognized the benefit of providing a link to the home page of the “*event node*” in either the group invitation or when an alert regarding the event is transmitted to group members. EX1003, ¶212. This operation would enable a user to access the home page of the “*event node*” to view detailed information regarding the event, and to “exchange information pertaining to the” event (i.e., “*joining at least a first node ... to the event node based on interaction with the presented information pertinent to the situation*”). EX1007, ¶31; EX1003, ¶212.

10. [1.D]

Gage teaches, “[w]hen 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.” EX1009, ¶9. For example, “[s]oftware 212 on device 210 can permit subscriber 214 to **report situation status information** to system 230,” such as “OK, NEED HELP, and IN CRITICAL NEED.” EX1009, ¶27. The user can also convey “location information to system 230,” obtained, for example, “through either a Global Position System (GPS) component or through triangulation based upon a relative position of a mobile device within a wireless mobile communication network.” EX1009, ¶¶19, 32. Gage thus teaches “*receiving an indication of the supplemental information,*” e.g., status and location information

of users affected by the situation. EX1003, ¶214.

As explained in Section V.D, a POSA would have been motivated to incorporate Gage's techniques for obtaining "a situational status and a location of a subscriber potentially affected by a disaster" into Wong-Gogic's system to ensure concerned parties are notified of pertinent information related to the event.

EX1009, ¶8; EX1003, ¶215. A POSA would have also had a reasonable expectation of success in doing so, as such information could be received by Wong's "social network server or servers 20" and stored in Wong's associated database. EX1007, ¶¶17, 36; EX1003, ¶215; Section V.D.

11. [1.E]

Gage discloses "providing a situational status and a location of a subscriber potentially affected by a disaster to concerned parties," such as "family members." EX1009, ¶¶8, 37, Abstract. For example, in the event of an emergency such as a "hurricane," family members (e.g., "a mother," "an aunt," "an out of state brother," etc.) or other "emergency contacts" "can be contacted and informed of the status indicator and the location information of the mobile device." EX1009, ¶¶37, 44, 46; EX1003, ¶217.

As noted in Section V.D, A POSA would have recognized the benefits of providing status and location information to concerned friends and family in an automated fashion in Wong-Gogic-Gage's system, without concerned parties

needing to establish direct contact with the individual affected by the situation.

EX1003, ¶218. Wong teaches storing relationships between individuals in its database, including, for example, “familial relationships” such as “mother/daughter,” as well as providing “notification of updates” or “alerts” to users. EX1007, ¶¶2, 23, 44; EX1003, ¶218. Therefore, a POSA would have stored “concerned party” relationships, such as familial relationships and emergency contact relationships, in Wong’s database. EX1007, ¶36; EX1003, ¶218. Wong-Gogic-Gage’s system would thus identify concerned party nodes by “*analyzing the database that comprises the multi-dimensional node-to-node links*” (Wong’s social network database, EX1007, ¶36) “*to identify a second node included in the database,*” e.g., a family member or other emergency contact, “*that is connected via at least one dimension in the multi-dimensional information network to a third node of the database,*” e.g., one of the “*first subset of the plurality of user nodes*” affected by the situation. EX1003, ¶219.

A POSA would have also recognized that “*the at least one dimension is indicative of potential interest in the situation.*” For example, a “a mother” (a “concerned party”) would be interested in “determin[ing] whether her daughter ... is alright in the aftermath of a disaster,” EX1009, ¶20, and thus the mother/daughter relationship is “*indicative of potential interest in the situation.*” EX1003, ¶220. The same would be true of any “emergency contact” relationship.

EX1009, ¶¶43-44; EX1003, ¶220.

12. [1.F]

Wong-Gogic-Gage teaches this element for the reasons discussed for [1.E].
See Section V.E.11. In particular, Wong-Gogic-Gage teaches providing status and location information (“*the supplemental information*”) to a concerned party (“*the second node*”). Gage further discloses the information is received via a “device 244,” which would correspond to a user device in Wong’s network. EX1009, ¶¶26, 37; EX1007, ¶17, FIG. 1 (disclosing various user devices); EX1003, ¶222.

13. [1.G]

Gage discloses “a Web site containing subscriber status information can be updated with the subscriber’s status indicator and location,” and “[c]oncerned parties, such as family members, can be granted access to the Web site, through which they can look-up the last known location and situational status of the subscriber.” EX1009, ¶37. Gage further teaches “combin[ing] 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.” EX1009, ¶31. “For example, server 240 can provide satellite images of a disaster region, which can be combined with a subscriber location so that a concerned party 246 is able to see not only a status indicator and a location for a subscriber 214, but a picture of that area as well.” *Id.*

As noted previously, each node in Wong includes a “home page” containing information pertaining to the node, which “can be viewed by the user or third parties as a web page” via “an internet browser” on the user’s device. EX1007, ¶¶17, 22, 31; *see also* Section V.E.9. A POSA would have thus recognized the benefit of making Gage’s “comprehensive situation assessment” data, which is already provided via “a Web site” in Gage, EX1009, ¶¶31, 37, available on the home page of the “*event node*” (i.e., “*a webpage containing information related to the situation*”). EX1003, ¶¶223-24.

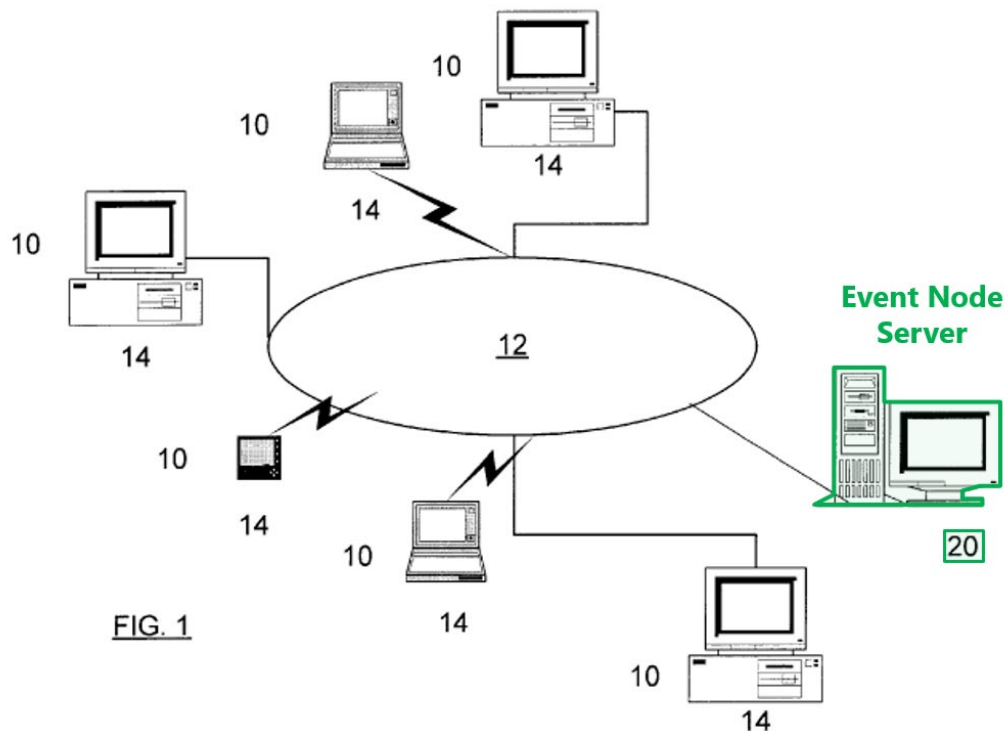
A POSA would have further recognized the benefit of providing a link to the home page of the “*event node*” with the provided “*supplemental information*” (e.g., allowing the user to click on the “*supplemental information*” to access the home page). EX1003, ¶225. This operation would enable concerned parties to quickly access more detailed information regarding the event through their browser, including the “comprehensive situation assessment” of Gage, when they are notified of status information. EX1003, ¶225. Wong-Gogic-Gage thus teach, “*in response to interacting with the supplemental information, causing a redirection of a web browser application operating on the device associated with the second node to a webpage containing information related to the situation.*” EX1003, ¶225.

F. Independent Claim 7

Claim 7 sets forth elements substantially the same as claim 1, which are

rendered obvious for the same reasons as claim 1. EX1003, ¶¶226-27.

Claim 7 further recites “an event node server” that includes “one or more central processing units” and “one or more network controllers” configured to perform the steps recited in claim 1. Wong’s “social network server or servers 20,” as illustrated in Figure 1, provides the recited “event node server.” EX1003, ¶228.



EX1007, FIG. 1 (annotated).

Wong teaches its “social network server or servers 20 maintain a system comprising an Internet website, database and associated data, which is accessible to users 10.” EX1007, ¶17. “Server 20 has the hardware and software required to operate an internet-accessible social network, including web server, email server, databases, data storage and the like.” *Id.* Wong further discloses nodes are created

and maintained through server 20 via the “system website” and “database.”

EX1007, ¶¶17, 18 (“[U]ser 10 accesses the system website” and, once registered, “a ‘node’ 30, is created for the user.”), 36 (“**Nodes, linkages, linkage types, and all data pertaining to the network** can be categorized, sorted and **stored in the same database which forms part of the system and retrievable from the same system.**”); EX1003, ¶¶229-30. Moreover, each node hosted by server 20 contains “communication tools” that facilitate communication in Wong’s network, allowing users to “exchange information pertaining to the entity that it represents.” EX1007, ¶31. Thus, a POSA would have recognized that Wong’s server 20 provides an “*event node server*” configured to perform the functions recited in claim 7. EX1003, ¶230.

A POSA would have further recognized that Wong’s server 20 would include “*one or more central processing units*” and “*one or more network controllers*” for carrying out its operations and facilitating communication with users. EX1003, ¶¶231-33. For example, Wong describes its server 20 “operate[s] an internet accessible social network” and is connected to “a computer network 12.” EX1007, ¶17, FIG. 1. Consistent with the ’463 patent, which merely describes a “network controller 1016” as facilitating network connectivity for a generic

computer, EX1001, 33:37-41,⁵ a POSA would have recognized Wong’s server 20 would include a “*network controller*” to facilitate connection to network 12 and users of the network. EX1003, ¶¶231-33.

G. Claim 2

Wong-Gogic-Gage renders obvious this claim for the reasons discussed for [1.G]. See Section V.E.13. In particular, Wong-Gogic-Gage teaches “*joining the second node*” (via its associated device) “*to the event node*” through a connection to the home page of the “*event node*,” allowing the user associated with the “*second node*” to “exchange information pertaining to the” event. EX1007, ¶¶17, 22, 31; EX1009, ¶¶31, 37; EX1003, ¶235.

Additionally, once a concerned party is identified in Wong-Gogic-Gage’s system, a POSA would have recognized that the relationship would be represented in Wong’s network by a linkage between the concerned party’s node (“*the second node*”) and “*the event node*.” EX1003, ¶236. Indeed, Wong discloses “[n]odes are [] linked by precise linkage types representing the actual type relationship which

⁵ Moreover, the ’463 patent provides no other disclosure of network controller 1016, suggesting that a POSA “was more than capable of” implementing the claimed “*one or more network controllers*.” *Uber Techs., Inc. v. X One, Inc.*, 957 F.3d 1334, 1339 (Fed. Cir. 2020).

exists between ... the linked nodes.” EX1007, ¶24. Thus, a POSA would have recognized that “*the second node*” would also be joined to “*the event node*” by a linkage representing concerned party. EX1003, ¶236.

H. Claim 3

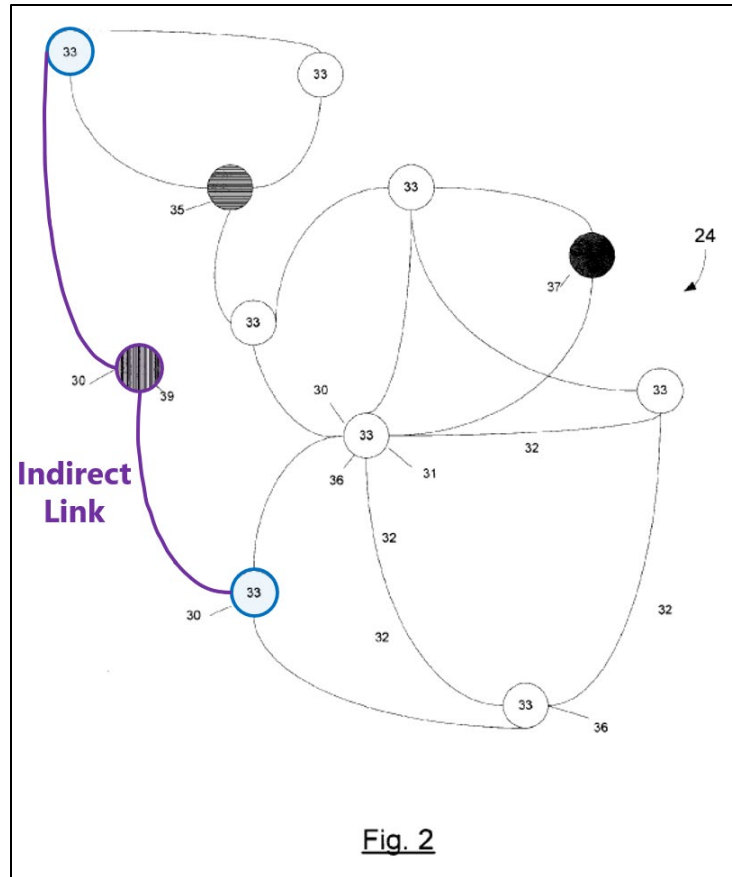
Wong-Gogic-Gage renders obvious this claim for the reasons discussed for [1.E]. *See* Section V.E.11. In particular, as explained for [1.E], Wong-Gogic-Gage teaches that “*the third node is one of the first subset of the plurality of nodes,*” and that familial relationships and emergency contact relationships provide “*a direct link between the second node and the third node.*” *Id.*; EX1003, ¶238.

I. Claim 4

Wong-Gogic-Gage renders obvious this claim for the reasons discussed for [1.E] and claim 3. *See* Sections V.E.11, V.H; EX1003, ¶240.

J. Claim 5

Wong teaches “nodes can be linked by more than one linkage type,” and a linkage may be “*an indirect link between*” nodes—“the chain of links and nodes between non-adjacent nodes.” EX1007, ¶21.



EX1007, FIG. 2 (annotated).

Wong also teaches user nodes may be “*connected by a preference dimension to an additional node*,” such as being a “customer,” “fan,” “admirer,” or “member”) of particular “groups, organizations, products, businesses, books, songs, etc.” EX1007, ¶¶22, 24; EX1003, ¶243. For example, Wong discloses, “A linkage of a person node to an object node can be, for example, customer, fan, owner, admirer, member and the like. When “*the second node and the third node*” are connected by such a common preference, “*both the second node and the third node are connected by a preference dimension to an additional node*”—an

“[o]bject” node representing the group, organization, product, business, book, or song. EX1007, ¶¶21-22; EX1003, ¶¶242-43.

Wong further teaches nodes may be searched and identified by “setting a single node as the root of the network,” e.g., “*the third node*” affected by the situation, “and displaying a set number of linkages [] radiating from the root node.” EX1007, ¶35. Thus, as part of “*identifying the second node*,” as discussed for [1.E], Wong-Gogic-Gage’s system would identify “*indirect link[s] between the second node and the third node*,” including common connections to other object nodes. EX1003, ¶¶242-43.

K. Claim 6

Wong-Gogic-Gage renders obvious this claim for the reasons discussed for [1.E]. *See* Section V.E.11. In particular, Wong-Gogic-Gage teaches “*identifying the second node*” based on a potential interest in the situation—e.g., a concerned party interested in the situation’s effect on another—rather than “*interaction with the event node*.” *See id.*; EX1003, ¶245.

L. Claim 8

Wong-Gogic-Gage renders obvious this claim for the reasons discussed for claim 2. *See* Section V.G.

M. Claim 9

Wong-Gogic-Gage renders obvious this claim for the reasons discussed for claim 3. *See* Section V.H.

N. Claim 10

Wong-Gogic-Gage renders obvious this claim for the reasons discussed for claim 4. *See* Section V.I.

O. Claim 11

Wong-Gogic-Gage renders obvious this claim for the reasons discussed for claim 5. *See* Section V.J.

P. Claim 12

Wong-Gogic-Gage renders obvious this claim for the reasons discussed for claim 6. *See* Section V.K.

VI. GROUND 3: CLAIMS 1-12 WOULD HAVE BEEN OBVIOUS OVER WONG IN VIEW OF GOGIC, GAGE, AND KRAFT.

To the extent argued that Wong-Gogic-Gage does not expressly teach an “*event node*,” Kraft does. EX1003, ¶¶256-57. Kraft discloses nodes that represent “[m]any types of real-world entities,” including “events.” EX1005, 8:23-31, 9:65-66 (disclosing an “**Event**” node type “representing occurrences such as elections, **natural disasters**, sports events, and so on.”), 15:47-52; *see also* Section IV.B.5. Wong discloses that additional “main node types” may be included in its network, EX1007, ¶¶21-22, and thus a POSA would have been motivated to incorporate Kraft’s “Event” node type in Wong-Gogic-Gage’s system to further extend the types of nodes that may be used in Wong’s social network communication system. Such incorporation would require no changes to Wong-Gogic-Gage’s system aside

from including an event type as a valid “node type” or “sub-type.” EX1007, ¶¶26-27; EX1003, ¶256.

Therefore, Wong-Gogic-Gage-Kraft also renders obvious claims 1-12.

VII. CERTIFICATION THAT THE PATENT MAY BE CONTESTED VIA IPR BY THE PETITIONER AND STANDING (37 C.F.R. § 42.104(A))

Petitioner certifies that the ’463 patent is available for IPR and Petitioner is not barred or estopped from requesting IPR of any ’463 patent claim.

VIII. MANDATORY NOTICES (37 C.F.R. § 42.8(A)(1))

REAL PARTY-IN-INTEREST: The real party-in-interest is Petitioner Meta Platforms, Inc.

RELATED MATTERS: The ’463 patent is at issue in *SitNet LLC v. Meta Platforms, Inc. f/k/a Facebook, Inc.*, Civil Action No. 1:25-cv-06185 (S.D.N.Y.), filed July 28, 2025.

Petitioner is concurrently filing petitions for the following U.S. Patents, all of which are also at issue in the above-captioned civil action.

U.S. Patent No.	Proceeding No.
10,117,290	IPR2025-00100
12,120,769	IPR2025-00100
12,238,815	IPR2025-00111
12,245,325	IPR2025-00101
12,336,052	IPR2025-00113

The ’463 patent claims the benefit of U.S. Patent Nos. 12,120,769; 11,470,682; 10,524,307; 10,375,759; 10,117,290; 9,877,345; 9,143,535;

8,332,454; and 8,069,202.

The Board granted requests for adverse judgment or issued Final Written Decisions in the following proceedings and determined that several claims were unpatentable:

- IPR2024-00528 (U.S. Patent No. 8,249,932)
- IPR2024-00612 (U.S. Patent No. 8,249,932)
- IPR2024-00529 (U.S. Patent No. 8,332,454)
- IPR2024-00530 (U.S. Patent No. 9,877,345)
- IPR2024-00531 (U.S. Patent No. 11,470,682)

LEAD AND BACK-UP COUNSEL: Under 37 C.F.R. §§ 42.8(b)(3) and 42.10(a), Petitioner appoints **Jonathan Tuminaro** (Reg. No. 61,327) as lead counsel, and **Michael D. Specht** (Reg. No. 54,463), **Jennifer Meyer Chagnon** (Reg. No. 55,440), **Steven M. Pappas** (Reg. No. 73,904), and **Timothy L. Tang** (Reg. No. 75,187) as back-up counsel, all at the address: STERNE, KESSLER, GOLDSTEIN & FOX PLLC, 1101 K Street, NW, Washington, DC, 20005, phone (202) 371-2600, and facsimile (202) 371-2540.

SERVICE INFORMATION: Petitioner consents to electronic service by email at: **jtuminar-PTAB@sternekessler.com**, **mspecht-PTAB@sternekessler.com**, **jchagnon-PTAB@sternekessler.com**, **spappas-PTAB@sternekessler.com**, **ttang-PTAB@sternekessler.com**, and **PTAB@sternekessler.com**.

IX. CONCLUSION

The challenged claims are unpatentable as obvious and IPR is warranted.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX PLLC

/Jonathan Tuminaro/

Jonathan Tuminaro

Registration No. 61,327

Attorney for Petitioner Meta Platforms, Inc.

Date: November 10, 2025

1101 K Street, NW, 10th Floor
Washington, DC 20005
(202) 371-2600

Claims Appendix – U.S. Patent No. 12,256,463

Claim 1

Element	Claim Language
[1.P]	A method for forming a situational network and providing supplemental information comprising:
[1.A]	maintaining a database of a plurality of user nodes and multi-dimensional node-to-node links characterizing relationships between the plurality of user nodes via dimensions in a multi-dimensional information network;
[1.B]	obtaining an indication of an occurrence of a situation;
[1.C]	forming the situational network as a subset of the multi-dimensional information network based at least in part on the situation by:
[1.C.1]	establishing an event node corresponding to the situation,
[1.C.2]	wherein the event node is discoverable to each respective user device of a plurality of user devices associated with the plurality of user nodes by browsing a data feed provided based on the database and wherein the event node contains information pertinent to the situation;
[1.C.3]	creating a first subset of the plurality of user nodes based on a determination that the first subset of the plurality of user nodes is associated with devices that are in geographic proximity to the situation;
[1.C.4]	presenting the information pertinent to the situation to devices associated with the first subset of the plurality of user nodes;
[1.C.5]	joining at least a first node of the first subset of the plurality of user nodes to the event node based on interaction with the presented information pertinent to the situation;
[1.D]	receiving an indication of the supplemental information;
[1.E]	analyzing the database that comprises the multi-dimensional node-to-node links to identify a second node included in the database that is connected via at least one dimension in the multi-dimensional information network to a third node of the database, wherein the at least one dimension is indicative of potential interest in the situation;
[1.F]	providing to a device associated with the second node the supplemental information; and

[1.G]	in response to interacting with the supplemental information, causing a redirection of a web browser application operating on the device associated with the second node to a webpage containing information related to the situation.
-------	--

Claim 2

Element	Claim Language
[2]	The method of claim 1, further comprising: in response to interacting with the supplemental information, joining the second node to the event node.

Claim 3

Element	Claim Language
[3]	The method of claim 1, wherein the identifying the second node included in the database that is connected via the at least one dimension in the multi-dimensional information network to the third node of the database comprises: identifying a direct link between the second node and the third node, wherein the third node is one of the first subset of the plurality of user nodes.

Claim 4

Element	Claim Language
[4]	The method of claim 1, wherein the identifying the second node included in the database that is connected via the at least one dimension in the multi-dimensional information network to the third node of the database comprises: identifying a direct link between the second node and the third node, wherein the third node is joined to the event node.

Claim 5

Element	Claim Language
[5]	The method of claim 1, wherein the identifying the second node included in the database that is connected via the at least one

	dimension in the multi-dimensional information network to the third node of the database comprises: identifying an indirect link between the second node and the third node, wherein the third node is joined to the event node and wherein both the second node and the third node are connected by a preference dimension to an additional node.
--	--

Claim 6

Element	Claim Language
[6]	The method of claim 1, wherein the identifying the second node comprises identifying the second node based on a dimension in the multi-dimensional information network other than a dimension indicative of interaction with the event node.

Claim 7

Element	Claim Language
[7,P]	A system for forming a situational network and providing supplemental information comprising:
[7.A]	one or more central processing units of an event node server configured to:
[7.A.1]	maintain a database of a plurality of user nodes and multi-dimensional node-to-node links characterizing relationships between the plurality of user nodes via dimensions in a multi-dimensional information network;
[7.A.2]	obtain an indication of an occurrence of a situation; and
[7.A.3]	form the situational network as a subset of the multi-dimensional information network based at least in part on the situation by:
[7.A.4]	establishing an event node corresponding to the situation,
[7.A.5]	wherein the event node is discoverable to each respective user device of a plurality of user devices associated with the plurality of user nodes by browsing a data feed provided based on the database and wherein the event node contains information pertinent to the situation;
[7.A.6]	creating a first subset of the plurality of user nodes based on a determination that the first subset of the plurality of user nodes is

	associated with devices that are in geographic proximity to the situation; and
[7.B]	one or more network controllers of the event node server configured to: present the information pertinent to the situation to devices associated with the first subset of the plurality of user nodes;
[7.C]	wherein the one or more central processing units are configured to:
[7.C.1]	join at least a first node of the first subset of the plurality of user nodes to the event node based on interaction with the presented information pertinent to the situation;
[7.C.2]	receive an indication of the supplemental information; and
[7.C.3]	analyze the database that comprises the multi-dimensional node-to-node links to identify a second node included in the database that is connected via at least one dimension in the multi-dimensional information network to a third node of the database, wherein the at least one dimension is indicative of potential interest in the situation;
[7.D]	wherein the one or more network controllers are configured to: provide to a device associated with the second node the supplemental information; and
[7.E]	wherein the one or more central processing units are configured to: in response to interacting with the supplemental information, cause a redirection of a web browser application operating on the device associated with the second node to a webpage containing information related to the situation.

Claim 8

Element	Claim Language
[8]	The system of claim 7, wherein the one or more network controllers are configured to: in response to interacting with the supplemental information, join the second node to the event node.

Claim 9

Element	Claim Language
---------	----------------

[9]	The system of claim 7, wherein the one or more network controllers are configured to identify the second node included in the database that is connected via the at least one dimension in the multi-dimensional information network to the third node of the database by: identifying a direct link between the second node and the third node, wherein the third node is one of the first subset of the plurality of user nodes.
-----	--

Claim 10

Element	Claim Language
[10]	The system of claim 7, wherein the one or more network controllers are configured to identify the second node included in the database that is connected via the at least one dimension in the multi-dimensional information network to the third node of the database by: identifying a direct link between the second node and the third node, wherein the third node is joined to the event node.

Claim 11

Element	Claim Language
[11]	The system of claim 7, wherein the one or more network controllers are configured to identify the second node included in the database that is connected via the at least one dimension in the multi-dimensional information network to the third node of the database by: identifying an indirect link between the second node and the third node, wherein the third node is joined to the event node and wherein both the second node and the third node are connected by a preference dimension to an additional node.

Claim 12

Element	Claim Language
[12]	The system of claim 7, wherein the one or more network controllers are configured to identify the second node by identifying the second node based on a dimension in the multi-dimensional information network other than a dimension indicative of interaction with the event node.

CERTIFICATE OF WORD COUNT (37 C.F.R. § 42.24(d))

1. This Petition for *Inter Partes* Review complies with the type-volume limitation of 14,000 words, comprising 13,987 words, excluding the parts exempted by 37 C.F.R. § 42.24(a)(1).

2. This Petition for *Inter Partes* Review complies with the general format requirements of 37 C.F.R. § 42.6(a) and has been prepared using Microsoft® Word 2016 in 14-point Times New Roman font.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX PLLC

/Jonathan Tuminaro/

Jonathan Tuminaro
Registration No. 61,327
Attorney for Petitioner Meta Platforms, Inc.

Date: November 10, 2025

1101 K Street, NW, 10th Floor
Washington, DC 20005
(202) 371-2600

CERTIFICATE OF SERVICE (37 C.F.R. §§ 42.6(e), 42.105(a))

I certify that the above-captioned **PETITION FOR *INTER PARTES***
REVIEW FOR U.S. PATENT NO. 12,256,463 and associated Exhibits 1001-
1020 were served in their entireties upon the Patent Owner on November 10, 2025,
via FedEx® Express at the following addresses:

HALEY GUILIANO LLP
75 Broad Street, Suite 510
New York, NY 10004
Patent Owner's Correspondence Address of Record for
U.S. Patent No. 12,256,463

HECHT PARTNERS LLP
125 Park Ave, 25th Floor
New York, NY 10017
Additional Address Known to Petitioner as Likely to Effect Service

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX PLLC

/Jonathan Tuminaro/

Jonathan Tuminaro
Registration No. 61,327
Attorney for Petitioner Meta Platforms, Inc.

Date: November 10, 2025

1101 K Street, NW, 10th Floor
Washington, DC 20005
(202) 371-2600