

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

META PLATFORMS, INC.,
Petitioner

v.

SITNET, LLC,
Patent Owner

Case IPR2026-00101
U.S. Patent No. 12,245,325

**DECLARATION OF DR. JEREMY COOPERSTOCK IN SUPPORT OF
PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO.
12,245,325**

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

Meta EX1003
Meta v. SitNet
IPR2026-00101

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	MY BACKGROUND AND QUALIFICATIONS	2
III.	SUMMARY OF OPINIONS.....	5
IV.	MATERIALS CONSIDERED	6
V.	LEGAL UNDERSTANDING.....	8
A.	My Understanding of Claim Construction.....	8
B.	My Understanding of Obviousness	8
C.	A Person of Ordinary Skill in the Art	11
VI.	OVERVIEW OF THE '325 PATENT	12
VII.	THE CLAIMS OF THE '325 PATENT ARE SUBSTANTIALLY SIMILAR TO THE CLAIMS OF THE '454 PATENT (IPR2024-00529).....	16
VIII.	OVERVIEW OF THE TECHNOLOGY.....	19
A.	Social Networks	19
B.	Sharing Information Related to Situations or Events.....	21
IX.	PROSECUTION HISTORY	22
X.	PERSON OF ORDINARY SKILL IN THE ART	23
XI.	CLAIM CONSTRUCTION	24
XII.	OVERVIEW OF THE PRIOR ART	25
A.	Amidon.....	25
B.	Issa	29
C.	Wong	32
D.	Gogic	35
E.	Kraft.....	37
XIII.	GROUND 1: AMIDON IN VIEW OF ISSA RENDERS OBVIOUS CLAIMS 1-18.....	39
A.	A POSA would have found it obvious to combine Amidon and Issa.....	39
B.	Independent Claim 1	43

1.	[1.P]: A method of creating a situational network based on a projection from a multi-dimensional personal information network and for transmitting information related to a situation, the method comprising:.....	43
2.	[1.1]: (a) creating, by an event node server, an event node in the multi-dimensional personal information network, wherein the multi-dimensional personal information network comprises member nodes, and the event node that corresponds to the situation, wherein the event node is discoverable by browsing the multi-dimensional personal information network;	46
3.	[1.2]: (b) identifying a subset of the member nodes of the multi-dimensional personal information network based on geographic proximity to the situation of a plurality of devices corresponding to the member nodes in the multi-dimensional personal information network;	58
4.	[1.3]: (c) transmitting an invitation to establish a respective link with the event node to devices corresponding to each node in the subset formed in step (b);.....	60
5.	[1.4]: (d) receiving a response from at least one of the devices from step (c) accepting the invitation to establish the respective link with the event node;.....	64
6.	[1.5]: (e) establishing the respective link with each device accepting the invitation to form the situational network;	64
7.	[1.6]: (f) identifying a target member node wherein the target member node is connected to at least one node of the subset of the member nodes via at least one dimension of the multi-dimensional personal information network;	67
8.	[1.7]: (g) transmitting information related to the situation to the identified target member node.	74
C.	Independent Claim 10	76
D.	Claims 2 and 11	80
E.	Claims 3 and 12	82
F.	Claims 4 and 13	85
G.	Claims 5 and 14	87
H.	Claims 6 and 15	88

I.	Claims 7 and 16.....	90
J.	Claims 8 and 17.....	92
K.	Claims 9 and 18.....	93
XIV.	GROUND 2: CLAIMS 1-18 WOULD HAVE BEEN OBVIOUS OVER WONG, GOGIC, AND KRAFT.	94
A.	A POSA would have found it obvious to combine Wong, Gogic, and Kraft.....	94
B.	Independent Claim 1	100
1.	[1.P]: A method of creating a situational network based on a projection from a multi-dimensional personal information network and for transmitting information related to a situation, the method comprising:.....	100
2.	[1.1]: (a) creating, by an event node server, an event node in the multi-dimensional personal information network, wherein the multi-dimensional personal information network comprises member nodes, and the event node that corresponds to the situation, wherein the event node is discoverable by browsing the multi-dimensional personal information network;	107
3.	[1.2]: (b) identifying a subset of the member nodes of the multi- dimensional personal information network based on geographic proximity to the situation of a plurality of devices corresponding to the member nodes in the multi-dimensional personal information network;	115
4.	[1.3]: (c) transmitting an invitation to establish a respective link with the event node to devices corresponding to each node in the subset formed in step (b);.....	117
5.	[1.4]: (d) receiving a response from at least one of the devices from step (c) accepting the invitation to establish the respective link with the event node;.....	119
6.	[1.5]: (e) establishing the respective link with each device accepting the invitation to form the situational network;	122
7.	[1.6]: (f) identifying a target member node wherein the target member node is connected to at least one node of the subset of the member nodes via at least one dimension of the multi- dimensional personal information network;	123

8.	[1.7]: (g) transmitting information related to the situation to the identified target member node.	125
C.	Independent Claim 10	126
D.	Claims 2 and 11	131
E.	Claims 3 and 12	133
F.	Claims 4 and 13	134
G.	Claims 5 and 14	136
H.	Claims 6 and 15	137
I.	Claims 7 and 16	139
J.	Claims 8 and 17	140
K.	Claims 9 and 18	141
XV.	CONCLUSION	143

I, Jeremy Cooperstock, hereby declare as follows.

I. INTRODUCTION

1. I have been retained as an expert witness on behalf of Petitioner Meta Platforms, Inc. (“Petitioner”) for the above-captioned *inter partes* review (IPR). I am being compensated for my time in connection with this IPR at my standard consulting rate. My compensation is not contingent on either my expert opinion or the outcome of this litigation. I have no other interest in this proceeding.

2. I understand that this declaration accompanies a petition for IPR involving U.S. Patent No. 12,245,325 (“the ’325 patent”) (EX1001), which resulted from U.S. Patent Application No. 18/883,830 (“the ’830 application”), filed on September 12, 2024. I understand that the ’325 patent alleges a priority date of February 2, 2007. I refer to this date throughout this declaration.

3. In preparing this declaration, I have reviewed the ’325 patent and each of the documents cited herein, in light of general knowledge in the art before February 2, 2007. In formulating my opinions, I have relied upon my experience, education, and knowledge in the relevant art. In formulating my opinions, I have also considered the viewpoint of a person of ordinary skill in the art (“POSA”) (*i.e.*, a person of ordinary skill in the field of telecommunications and computer networking) prior to February 2, 2007.

II. MY BACKGROUND AND QUALIFICATIONS

4. I am a professor in the Department of Electrical and Computer Engineering at McGill University. My *Curriculum Vitae* is attached as Exhibit 1004.

5. I received my B.Sc. in Electrical Engineering (with Honors) from the University of British Columbia in 1990, my M.Sc. in Computer Science from the University of Toronto in 1992, and my Ph.D. in Electrical and Computer Engineering from the University of Toronto in 1996.

6. I have been employed at McGill University since November 2017, where I am currently a Full Professor and Werner Graupe Distinguished Chair in Automation Engineering in the Department of Electrical and Computer Engineering. In this capacity, I conduct and supervise research activities and teach courses at the upper undergraduate and graduate level on human-computer interaction, artificial intelligence, embedded systems, and haptic interaction design.

7. I am a member of the Centre for Intelligent Machines, a founding member of the Centre for Interdisciplinary Research in Music Media and Technology, a member of the International Laboratory on Learning System, a member of the McGill Institute for Aerospace Engineering, and an associate member of Biomedical Engineering at McGill University. I presently direct a group of approximately 50 researchers at the Shared Reality Lab at McGill, which

focuses on computer mediation to facilitate high-fidelity human communication and the synthesis of perceptually engaging, multimodal, immersive environments. Among other projects, I led the development of the Intelligent Classroom, a high-fidelity orchestra rehearsal simulator, a simulation environment that renders graphic, audio, and vibrotactile effects in response to footsteps, and a mobile game treatment for amblyopia.

8. I have been developing and working with network media distribution technologies since 1990, and I led the world's first demonstrations of high-fidelity multichannel audio streaming over the Internet in 1999 and 2000, followed by multiple simultaneous streams of uncompressed high-definition video in 2005. My work on the Ultra-Videoconferencing system was recognized by an award for Most Innovative Use of New Technology from ACM/IEEE Supercomputing and a Distinction Award from the Audio Engineering Society. The research I supervised on the Autour project earned the Hochhausen Research Award from the Canadian National Institute for the Blind and an Impact Award from the Canadian Internet Registry Association, and my Real-Time Emergency Response project won the Gold Prize (brainstorm round) of the Mozilla Ignite Challenge. I am also a recipient of several "best paper" awards from scholarly societies for my research.

9. I have carried out significant research involving network communication protocols, including wireless communication employing IEEE

802.11 (WiFi) and IEEE 802.15 (Bluetooth). My experience in these areas includes development of the Adaptive File Distribution Protocol (AFDP, 1995), analysis of the tradeoffs between bandwidth, power demands, and latency for audio streaming over WiFi, Bluetooth, and ultra-wideband protocols (2007), and assessment of the performance and scalability of wireless audio streaming for applications requiring latency-optimized multimedia streaming (2008).

10. I have led all aspects of development and experimentation in the Autour project (2009-2016), which employs a combination of wireless communication protocols, and manages authentication for communication between clients and server, in addition to third-party information services. I have supervised a variety of projects that require sharing of WiFi network access credentials across multiple devices. I led a research project (MIMIC), which communicates sensor data between two coupled smartwatches using Bluetooth for local communication between the smartwatches and their peered smartphones, and the public Internet between the smartphones. I also led a project that uses both Bluetooth and WiFi communication between smartphones, a GPU-based physics engine, and a microelectronics architecture that renders vibrotactile effects on mobile footwear.

11. I have worked with IBM at the Haifa Research Center, Israel, and the Watson Research Center in Yorktown Heights, New York, the Sony Computer Science Laboratory in Tokyo, Japan, and was a visiting professor at Bang &

Olufsen, Denmark, where I conducted research on telepresence technologies as part of the World Opera Project. I led the theme of Enabling Technologies for a Networks of Centres of Excellence on Graphics, Animation, and New Media (GRAND), served as an associate editor of the Institute of Electrical and Electronics Engineers (IEEE) Transactions on Haptics, and the Journal of the Audio Engineering Society. I am presently an associate editor of the Frontiers Journal in Virtual Reality and Associate Editor-in-Chief of IEEE Transactions on Haptics.

III. SUMMARY OF OPINIONS

12. In forming my opinions about the '325 patent, I have considered the following grounds of unpatentability. Based on my review of the prior art references that form the basis of these grounds, it is my opinion that claims 1-18 of the '325 patent would have been obvious to a POSA prior to February 2, 2007.

Ground	Basis	Claims	References
1	§103	1-18	Amidon and Issa
2	§103	1-18	Wong-Gogic-Kraft

13. I have been asked to consider how a POSA would have understood the challenged claims in light of the disclosures of the '325 patent. I have also been asked to consider how a POSA would have understood the prior art references Amidon, Issa, Wong, Gogic, and Kraft.

14. Further, I have been asked to consider and provide my technical review, analysis, insights, and opinions regarding whether a POSA would have understood that the combinations of the prior art references listed in the table above render obvious claims 1-18 of the '325 patent.

IV. MATERIALS CONSIDERED

15. In formulating my opinions, I have relied upon my training, knowledge, and experience that are relevant to the '325 patent. I have also reviewed and am familiar with the following documents and materials in addition to any other documents cited in this declaration:

Exhibit No.	Description
1001	U.S. Patent No. 12,245,325 to Cona <i>et al.</i> (“’325 patent”).
1002	Prosecution History of U.S. Patent No. 12,245,325 (“’325 File History”).
1004	<i>Curriculum Vitae</i> of Dr. Jeremy Cooperstock
1005	U.S. Patent No. 8,346,864 B1 to Amidon <i>et al.</i> (“Amidon”)
1006	U.S. Patent Application Publication No. 2008/0103784 A1 to Wong <i>et al.</i> (“Wong”)
1007	U.S. Patent No. 8,103,300 B2 to Gogic (“Gogic”)
1008	U.S. Patent No. 7,801,971 B1 to Amidon <i>et al.</i> (“Amidon-971”)
1009	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)
1010	U.S. Patent No. 7,016,307 B2 to Vasudev <i>et al.</i> (“Vasudev”)

Exhibit No.	Description
1011	U.S. Patent Application Publication No. 2006/0230053 A1 to Eldering (“Eldering”)
1012	Harghirian <i>et al.</i> , <i>Increasing Advertising Value of Mobile Marketing – An Empirical Study of Antecedents</i> , Proceedings of the 38th Hawaii Int’l Conf. on System Sciences, IEEE (2005).
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)
1016	Barry Wellman, <i>Network Analysis: Some Basic Principles</i> , Sociological Theory, Vol. 1 (1983) pp. 155-200 (“Wellman”)
1017	U.S. Patent No. 8,332,454 to Cona <i>et al.</i> (“’454 patent”)
1018	U.S. Patent No. 7,730,216 to Issa <i>et al.</i> (“Issa”)
1019	U.S. Patent No. 7,747,648 to Kraft <i>et al.</i> (“Kraft”)
1020	<i>Meta Platforms, Inc. v. SitNet, LLC</i> , IPR2024-00529, Final Written Decision, Paper 33 (PTAB September 8, 2025)
1021	<i>Meta Platforms, Inc. v. SitNet, LLC</i> , IPR2024-00529, Petition, Paper 1 (PTAB February 27, 2024)
1022	<i>Meta Platforms, Inc. v. SitNet, LLC</i> , IPR2024-00529, Declaration of Dr. Jeremy Cooperstock in Support of Petition, EX1003 (PTAB February 27, 2024)
1023	<i>Meta Platforms, Inc. v. SitNet, LLC</i> , IPR2024-00530, Final Written Decision, Paper 30 (PTAB September 8, 2025)
1024	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

16. To the best of my knowledge, the above-mentioned documents and materials are true and accurate copies of what they purport to be. An expert in the field would reasonably rely on the technical documents to formulate opinions such as those set forth in this declaration.

V. LEGAL UNDERSTANDING

17. I have also relied upon various legal principles (as explained to me by Meta's counsel) in formulating my opinions. My understanding of these principles is summarized below.

A. My Understanding of Claim Construction

18. I understand that during an *inter partes* review proceeding, claims are to be construed in light of the specification as would be read by a person of ordinary skill in the relevant art at the time the application was filed. I understand that claim terms are given their ordinary and customary meaning as would be understood by a person of ordinary skill in the relevant art in the context of the entire disclosure. A claim term, however, will not receive its ordinary meaning if the patentee acted as his own lexicographer and clearly set forth a definition of the claim term in the specification. In this case, the claim term will receive the definition set forth in the patent.

B. My Understanding of Obviousness

19. I understand that a patent claim is invalid if the claimed invention would have been obvious to a POSA at the time the application was filed. This

means that even if all of the requirements of the claim cannot be found in a single prior art reference that would anticipate the claim, the claim can still be invalid.

20. To obtain a patent, a claimed invention must have, as of the priority date, been nonobvious in view of the prior art in the field. I understand that an invention is obvious when the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious to a POSA at the time the invention was made.

21. I understand that to prove that prior art or a combination of prior art renders a patent obvious, it is necessary to:

(1) identify the particular references that, singly or in combination, render the patent obvious;

(2) specifically identify which elements of the patent claim appear in each of the asserted references; and

(3) explain how the prior art references could have been combined in order to create the inventions claimed in the asserted claim.

22. I also understand that prior art references can be combined under several different circumstances. For example, it is my understanding that one such circumstance is when a proposed combination of prior art references results in a system that represents a predictable variation, which is achieved using prior art elements according to their established functions.

23. I also understand that when considering the obviousness of a patent claim, one should consider whether a teaching, suggestion, or motivation to combine the references exists so as to avoid impermissibly applying hindsight when considering the prior art. I understand this test should not be rigidly applied, but that the test can be important to avoid such hindsight.

24. I understand that certain objective indicia can be important evidence as to whether a patent is obvious or nonobvious. Such indicia include: (1) commercial success of products covered by the patent claims; (2) a long-felt need for the invention; (3) failed attempts by others to make the invention; (4) copying of the invention by others in the field; (5) unexpected results achieved by the invention as compared to the closest prior art; (6) praise of the invention by the infringer or others in the field; (7) the taking of licenses under the patent by others; (8) expressions of surprise by experts and those skilled in the art at the making of the invention; and (9) the patentee proceeded contrary to the accepted wisdom of the prior art.

25. At this point, I am not aware of any secondary indicia of non-obviousness. But I reserve the right to review and opine on any evidence of objective indicia of nonobvious that may be presented during this proceeding.

26. I also understand that “obviousness” is a legal conclusion based on the underlying factual issues of the scope and content of the prior art, the differences

between the claimed invention and the prior art, the level of ordinary skill in the prior art, and any objective indicia of non-obviousness.

27. For that reason, I am not rendering a legal opinion on the ultimate legal question of obviousness. Rather, my testimony addresses the underlying facts and factual analysis that would support a legal conclusion of obviousness or non-obviousness, and when I use the term obvious, I am referring to the perspective of one of ordinary skill at the time of invention.

C. A Person of Ordinary Skill in the Art

28. I understand that a person of ordinary skill in the relevant art (“POSA”) is presumed to be aware of all pertinent art, thinks along conventional wisdom in the art, and is a person of ordinary creativity—not an automaton.

29. I have been asked to consider the level of ordinary skill in the field that someone would have had at the time the claimed invention was made. In deciding the level of ordinary skill, I considered the following:

- the levels of education and experience of persons working in the field;
- the types of problems encountered in the field; and
- the sophistication of the technology.

30. My opinion below explains how a POSA would have understood the technology described in the references I have identified herein around the February

2, 2007, timeframe, which I have been advised is the earliest possible effective filing date for the '325 patent. However, my opinions herein would not be affected if the '325 patent is found to only be entitled to a later effective filing date.

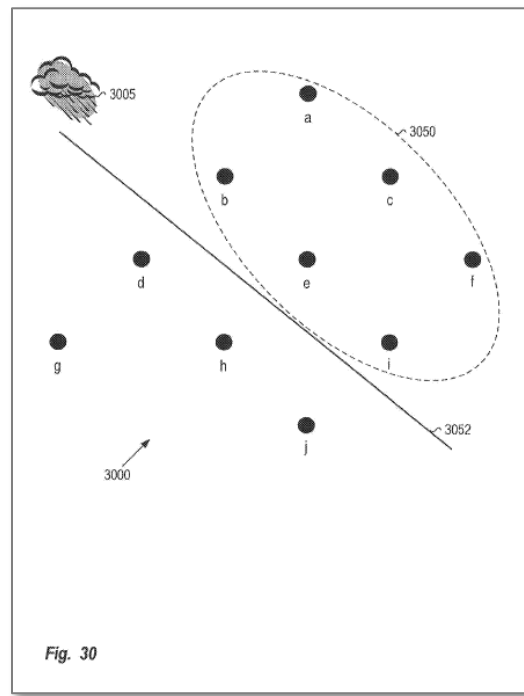
31. Regardless of whether I use “I” or a “POSA” during my technical analysis below, all of my statements and opinions are always to be understood to be based on how a POSA would have understood or read a document at the time of the alleged invention.

VI. OVERVIEW OF THE '325 PATENT

32. The '325 patent is directed to a “method of creating a situational network based on a projection” or “subset” of nodes from a “multi-dimensional personal information network.” EX1001, Cl. 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.” *Id.*, 4:24-27. The '325 patent describes a “situation” as broadly including social events, emergency events, weather phenomena, natural disasters, etc. *E.g., id.*, 5:10-20, 31:64-65. A “situation” also includes “weather related activities, such as skiing or surfing.” *Id.*, 5:10-20. A “projection,” also referred to as “a ‘projected’ view,” 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 the user device, as recited in the '325 patent claims. *Id.*, 17:4-5, 22:52-23:39. In short, the '325 patent relates

simply to methods and systems that allow a set of participants in a social network to exchange information about an event or situation.

33. I have reproduced Figure 30 below, which shows an example of a geographic projection 3050 of nodes of a situational network 3000. EX1001, 23:8-9.

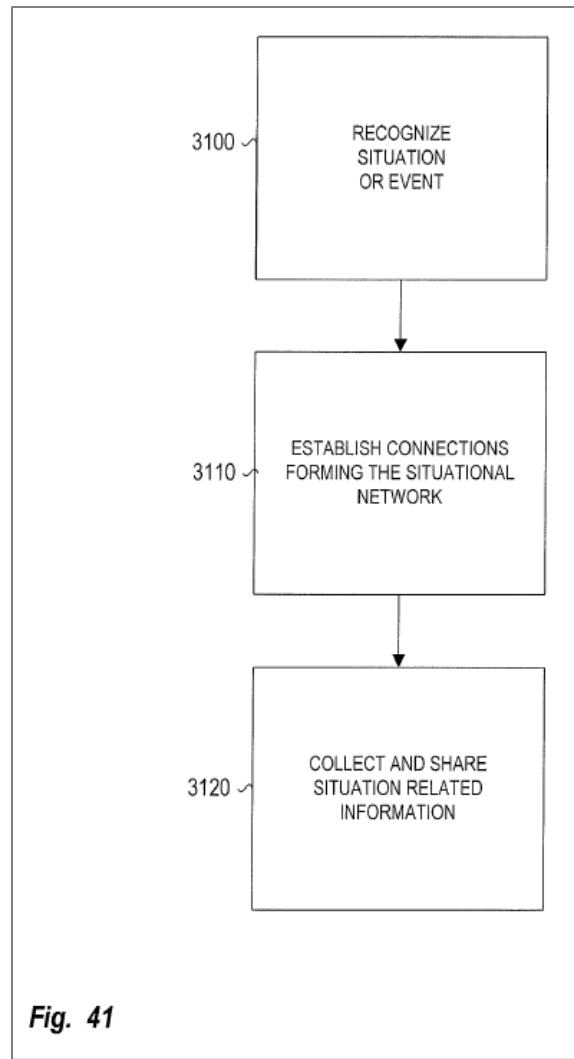


EX1001, FIG. 30.

34. As seen from Figure 30, network 3000 includes the ten nodes labeled (a) through (j). EX1001, 23:9-10. In this example, the situation 3005 is a severe rainstorm posing a flood threat to persons located on one side of a river (boundary 3052). *Id.*, 23:13-16. Geographic projection 3050 includes a subset of the nodes, *i.e.*, nodes (a), (b), (c), (e), (f), and (i), which are included based on their location

with respect to boundary 3052, *i.e.*, those users threatened by flood waters. *Id.*, 23:9-18.

35. The '325 patent makes clear that its methods are architecture agnostic. *See* EX1001, 6:59-60 (“A variety of different architectures may be used to connect the devices of participants in the situational network.”). Regardless of the architecture used, the same generic process is used to form the situational network. *Id.*, 7:48-53. This process is shown in Figure 41, reproduced below.



EX1001, FIG. 41.

36. The '325 patent also says that the situational network is implemented using conventional technologies. For example, users are connected 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, 4:53-58. Participants in the situational network are associated with

“nodes,” which are simply 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, such as software on a personal computer or a handheld PDA.” *Id.*, 15:34-51, 15:59-63. The nodes of the network, the ’325 patent says, “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.” *Id.*, 15:63-67.

VII. THE CLAIMS OF THE ’325 PATENT ARE SUBSTANTIALLY SIMILAR TO THE CLAIMS OF THE ’454 PATENT (IPR2024-00529)

37. Based on my review, I note that the independent claims of the ’325 patent are substantially similar to those that the Board determined were unpatentable from the ’454 patent in IPR2024-00529. *Compare* EX1001, Cl. 1 *with* EX1017, Cl. 1. For example, the concepts recited in claim elements [1.P]-[1.5] of the ’325 patent are nearly identical to the concepts recited in [1.P]-[1.5] of the ’454 patent. EX1020, 3-6; EX1021, 14-29, 50-59. I have provided a table below that demonstrates this substantial similarity.

Claim 1 of the ’325 Patent	Claim 1 of the ’454 Patent
[1.P]: A method of creating a situational network based on a projection from a multi-dimensional personal information network and for transmitting information related to a situation, the method comprising:	[1.P]: A method of creating a projection of a situational network, the method comprising:

[1.1]: (a) creating, by an event node server, an event node in the multi-dimensional personal information network, wherein the multi-dimensional personal information network comprises member nodes, and the event node that corresponds to the situation, wherein the event node is discoverable by browsing the multi-dimensional personal information network;	[1.1]: (a) creating, by an event node server, an event node in a multi-dimensional personal information network, the event node corresponding to a situation;
[1.2]: (b) identifying a subset of the member nodes of the multi-dimensional personal information network based on geographic proximity to the situation of a plurality of devices corresponding to the member nodes in the multi-dimensional personal information network;	[1.2]: (b) forming a projection of nodes of the situational network using geographic locations of a plurality of devices corresponding to nodes in the multi-dimensional personal information network;
[1.3]: (c) transmitting an invitation to establish a respective link with the event node to devices corresponding to each node in the subset formed in step (b);	[1.3]: (c) transmitting an invitation to establish a link with the event node server to the devices corresponding to each node in the projection formed in step (b);
[1.4]: (d) receiving a response from at least one of the devices from step (c) accepting the invitation to establish the respective link with the event node;	[1.4]: (d) receiving a response from at least one of the devices from step (c) accepting the invitation to establish a link with the event node server; and
[1.5]: (e) establishing the respective link with each device accepting the invitation to form the situational network;	[1.5]: (e) establishing a link with each device accepting the invitation.
[1.6]: (f) identifying a target member node wherein the target member node is connected to at least one node of the subset of the member nodes via at least	

one dimension of the multi-dimensional personal information network; and	
[1.7]: (g) transmitting information related to the situation to the identified target member node.	

38. I understand that the Board has already determined that Amidon and Wong-Gogic render obvious all elements of claim 1 from the '454 patent. EX1020, 41-42. Because the claims of the '325 patent are nearly identical to those from the '454 patent, the Board should reach the same conclusions here for the reasons that I provide below in Sections XIII-XIV. The explanation that I provide below is similar to the explanation I provided in IPR2024-00529. EX1021; EX1022.

39. Overall, as seen from the table that I have provided above, the functionality of claim 1 is substantially the same as the functionality recited in claim 1 of the '454 patent. In terms of differences, I note that independent claim 1 of the '325 patent states that “*the event node is discoverable*” and adds [1.6] and [1.7], which recite identifying a “*target member node*” and then “*transmitting information related to the situation to the identified target member node.*” The dependent claims recite additional requirements for the *target member node* and linkages to other nodes.

40. As I further explain with reference to the Amidon-Issa and Wong-Gogic-Kraft grounds, however, a POSA would have understood that such features were already well known in the prior art. Sections XIII-XIV.

VIII. OVERVIEW OF THE TECHNOLOGY

41. As I explained above, the '325 patent describes forming a “situational network” as a subset of a social network, otherwise referred to in the '325 patent claims as a “multi-dimensional personal information network.” EX1001, Abstract, claim 1. The claims of the '325 patent broadly recite general concepts, such as “creating a situational network based on a projection from a multi-dimensional personal information network,” “creating ... an event node in the multi-dimensional personal information network,” and then inviting the devices corresponding to each node in the projection to link to the event node and linking to devices that accept the invitation. *See, e.g.*, EX1001, claim 1. Dependent claims are directed to communicating and receiving information about the situation to and from the linked devices. These concepts were well known before the '325 patent's earliest possible priority date. For instance, social networks were well known at the time, as were systems for sharing information related to situations or events.

A. Social Networks

42. The earliest social network sites were launched in the late 1990s, with such sites growing in popularity through the 2007 priority date of the '325 patent.

EX1013, 212. In November 2006, the Wikipedia page for “Social network” described a “social network” as a “social structure made of nodes which are generally individuals or organizations.” EX1015, 1. The Wikipedia page confirms the popularity of Internet based social networks in this time frame. EX1015, 3-4.

43. Further, as described in the Background section of Amidon, “a ‘social network’ refers to a group of persons or other entities ... linked to one another through one or more types of social connections.” EX1005, 1:27-30. Amidon continues, describing that “[m]any social networking systems attempt to provide computer-based tools for maintaining, enhancing, and creating social networks.” EX1005, 1:38-40. Amidon also describes that communication among users of social networking web sites was known. *See, e.g.*, EX1005, 1:41-49.

44. The Background section of Wong also confirms that online social networking systems were known and were “popular” for connecting with and sharing information with other users via the Internet. EX1006, ¶3.

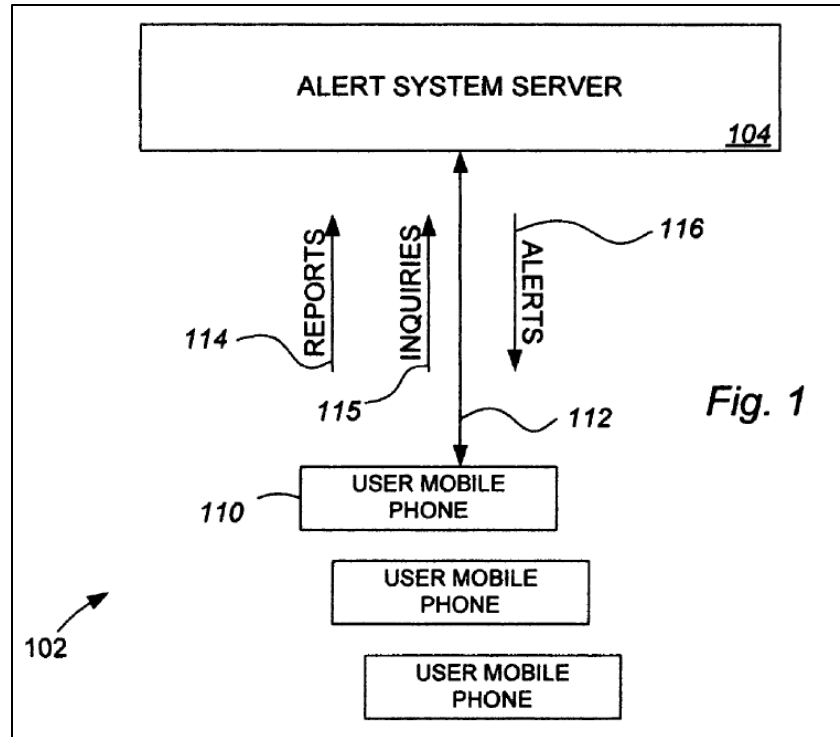
45. Similarly, the Background section of Issa also confirms that “a “social network” refers to a group of persons or other entities (“members”) linked to one another through one or more types of social connections.” EX1018, 1:30-33. Issa also describes that “social networking web sites” such as “<http://www.myspace.com>, <http://www.facebook.com>, and

http://www.friendster.com,” were used to “provide users with web space to create a profile and link to various other users designated as ‘friends’” EX1018, 1:44-53.

46. Indeed, this confirms my opinion that the concept of communication via online social networks was well known and would have been readily appreciable by a POSA in the relevant time frame.

B. Sharing Information Related to Situations or Events

47. The broad concept of sharing information related to situations or events was also known prior to the '325 patent. For instance, it was known for emergency warning systems to receive information describing emergency events from users near the events, and to use that information to warn other nearby users of the event. For instance, Franco discloses an “incident alert system” in which “[a] user uses a networked mobile phone with geo-positioning capability to communicate with a server to report incidents... based on the user’s current geographic position.” EX1014, Abstract. “Reports of incidents are transmitted to the server accompanied by the current position of the user/mobile phone.” EX1014, Abstract. The server then reports the information related to the incident to certain users within a “zone of interest” near the incident. EX1014, 2:17-25, 3:7-28. Franco’s Figure 1, below, illustrates “an alert system 102 includes a server 104 that receives reports 114 from and responds to inquiries 115 from a plurality of users’ networked mobile phones 110.” EX1014, 4:7-9.



EX1014, FIG. 1.

48. Franco thus capitalized on the intuitive idea that “facilitating information sharing based on users’ geographic locations... significantly opens the opportunities for individuals to be Good Samaritans by informing others of hazards or by responding to urgent requests for assistance by others in need.” EX1014, 1:53-58. Indeed, this confirms my opinion that the concept of sharing information related to situations was well known and would have been readily appreciable by a POSA in the relevant time frame.

IX. PROSECUTION HISTORY

49. The '325 patent issued on March 4, 2025, from U.S. Patent Application No. 18/883,830 (“’830 application”), and claims a priority date of

February 2, 2007. I note that the '325 patent issued following one office action in which the Examiner rejected the claims for obviousness-type double patenting over the claims of other SitNet issued patents including the '454 patent that I previously reviewed. EX1002, 269-275. In response to this Office Action, the Applicant filed Terminal Disclaimers. EX1002, 276-278. The Examiner subsequently issued a Notice of Allowance, but did not provide any specific explanation or comments on reasons for why the claims were determined to be allowable. EX1002, 291-296.

X. PERSON OF ORDINARY SKILL IN THE ART

50. 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.

51. I am well qualified to determine the level of ordinary skill in the art. I am very familiar with the technology of the '325 patent during the February 2007 timeframe. As mentioned above, by 2007, I had obtained both a Masters (in Computer Science) and a Ph.D. (in Electrical and Computer Engineering) from the University of Toronto and had acquired extensive experience relating to computer networking and telecommunications.

XI. CLAIM CONSTRUCTION

52. I have been informed that the challenged claims of the '325 patent are to be given their ordinary and customary meaning as understood by one of ordinary skill in the art at the time of the invention in light of the specification and the prosecution history pertaining to the patent.

53. Based on my review of the Final Written Decision in IPR2024-00529, I understand that the Board determined that the term “event node” required no construction and that additional limitations from the specification should not be imported into the claims. EX1020, 8-12. I agree with this assessment, and it is my opinion that the same understanding should apply to the claims of the '325 patent. I understand that the Board determined in IPR2024-00529 that Amidon and Wong-Gogic teach the claimed “event node.” EX1020, 18-24, 37-41.

54. I note that the Board construed the term “situational network” in IPR2024-00530. EX1023, 12-18. Specifically, the Board indicated that “situational network” should be construed as “a network created in response to an event or situation” but “a created ‘situational network’ does not exclude pre-established networks and does not require new connections to be established incorporating new elements.” EX1023, 18. I also understand that the district court construed the term “projection” to mean “subset.” EX1024, 5. As I further explain in Grounds 1

and 2, the art teaches the claimed “situational network” and “projection” under these constructions as well. Sections XIII-XIV.

55. It is my opinion that no claim terms require explicit constructions for the purpose of this *inter partes* review and assessing the obviousness of the claims based on the prior art that I have discussed in this declaration. Regardless, the art teaches the claims of the ’325 patent under the prior constructions as well.

XII. OVERVIEW OF THE PRIOR ART

A. Amidon

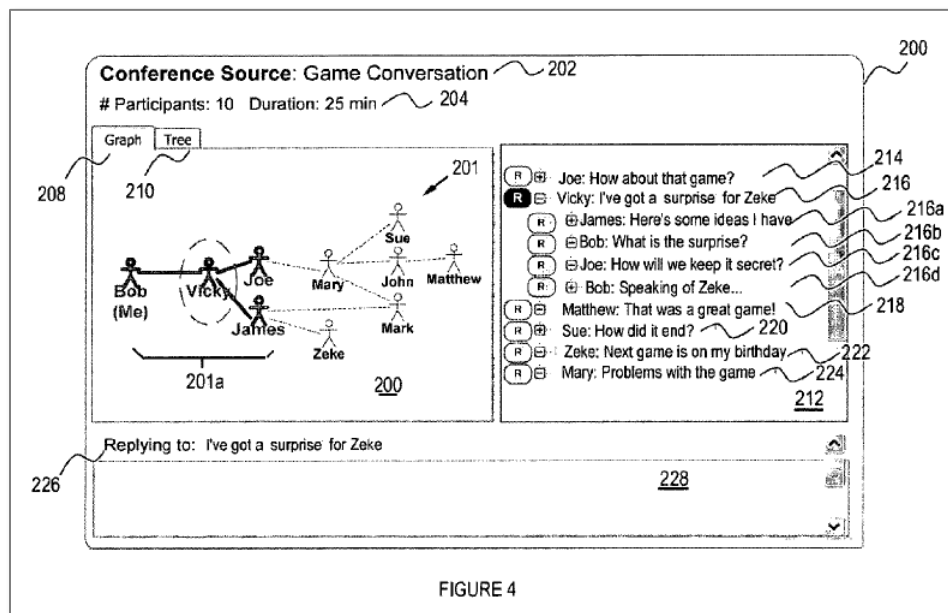
56. Amidon is directed to “providing systems and methods for users to conduct online conferences based on underlying social network structures.”

EX1005, 2:54-56. I understand that the Board determined in IPR2024-00529 that Amidon’s conference teaches an *event node*. EX1020, 18-24.

57. Amidon describes the formation and facilitation of a “conference” that allows users of a social network to communicate and exchange information. The list of participants in a social network conference may be specified based on various “parameters,” examples of which include degree of separation from a first user, geographic considerations, user parameters (*e.g.*, identity, interests, demographic characteristics), or classification of user relationship. *See* EX1005, 2:57-60, 3:22-47, 4:5-9, 12:37-65. A user may initiate this discussion within the social network and specify the parameters defining the list of participants in the

conference. EX1005, 10:11-24. Once a conference has been initiated, users participating in the conference can direct messages to particular users within the conference, selected based on the same and/or other parameters as those used to set up the conference. EX1005, 2:60-63.

58. Figure 4 of Amidon “illustrates an exemplary user interface which may be used by one or more users participating in social network conferences.” EX1005, 16:65-67. A social network conference can be accessed, for example, in window 200 of a user interface such as that shown in Figure 4.

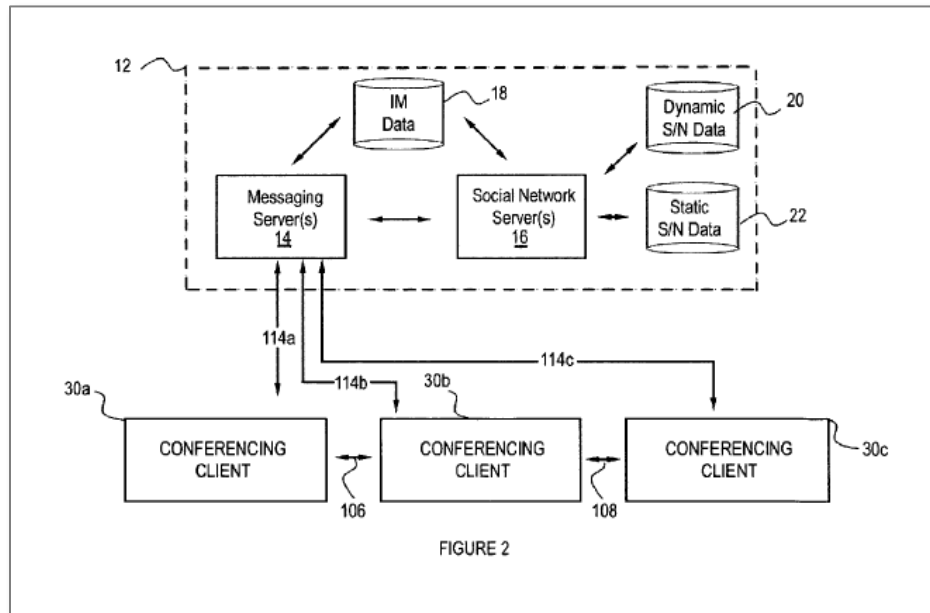


EX1005, FIG. 4, 16:65-18:50 (describing the features of window 200).

59. As seen from Figure 4, the conference window 200 includes title bar 202, which provides a description of the conference (*i.e.*, “Game Conversation”). EX1005, 17:2-7. Thread display area 212 includes “data (messages, content, etc.)

exchanged amongst the members of conference 201.” EX1005, 17:21-55; *see also* EX1005, 16:65-18:50 (describing the features of window 200).

60. Figure 2 from Amidon illustrates an example of system 12 that supports social network-based conferencing. EX1005, 8:1-3.



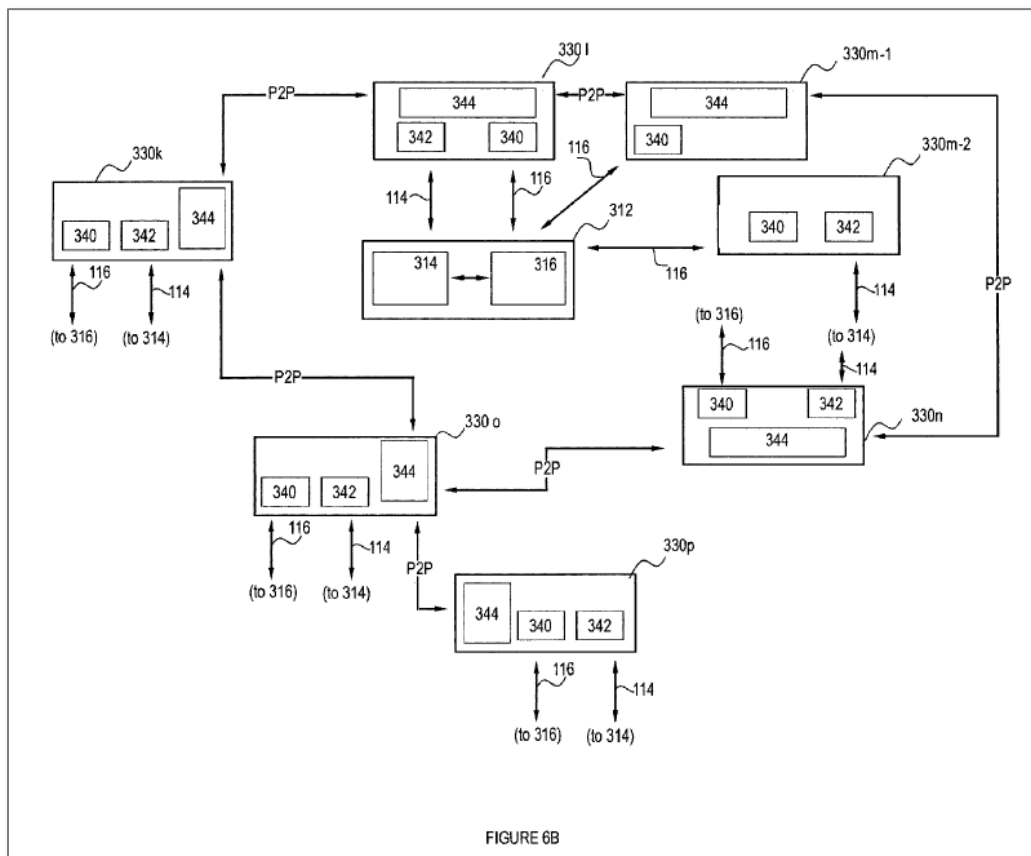
EX1005, FIG. 2.

61. System 12 includes messaging server 14 and social network server 16. EX1005, 8:3-5. Messaging server 14 facilitates sending messages between users. EX1005, 8:44-9:8. Social network server 16 defines social network relationships and preferences, and stores data defining social networks, member data (*e.g.*, profile information), relationships, etc. EX1005, 9:9-38.

62. “Users may participate in social network conferences by way of any suitable communication technique(s),” including, for example, textual messages

(such as instant message (IM)), audio messages (such as voice chat or telephone communication), video messages, or combinations thereof. EX1005, 3:4-15. Each of conferencing clients 30a, 30b, 30c comprises one or more computing devices that interface with the messaging server 14 of system 12. EX1005, 8:12-35, FIG. 2.

63. Figure 6B illustrates an embodiment of a social network based conferencing system 312.



EX1005, FIG. 6B.

64. Computing devices 330 are respectively associated with each user in the social network 300. EX1005, 19:42-67. As in the system 12 of Figure 2, system

312 includes “one or more social network servers 316 and one or more messaging servers 314” and “various data stores” (not shown). EX1005, 20:1-7.

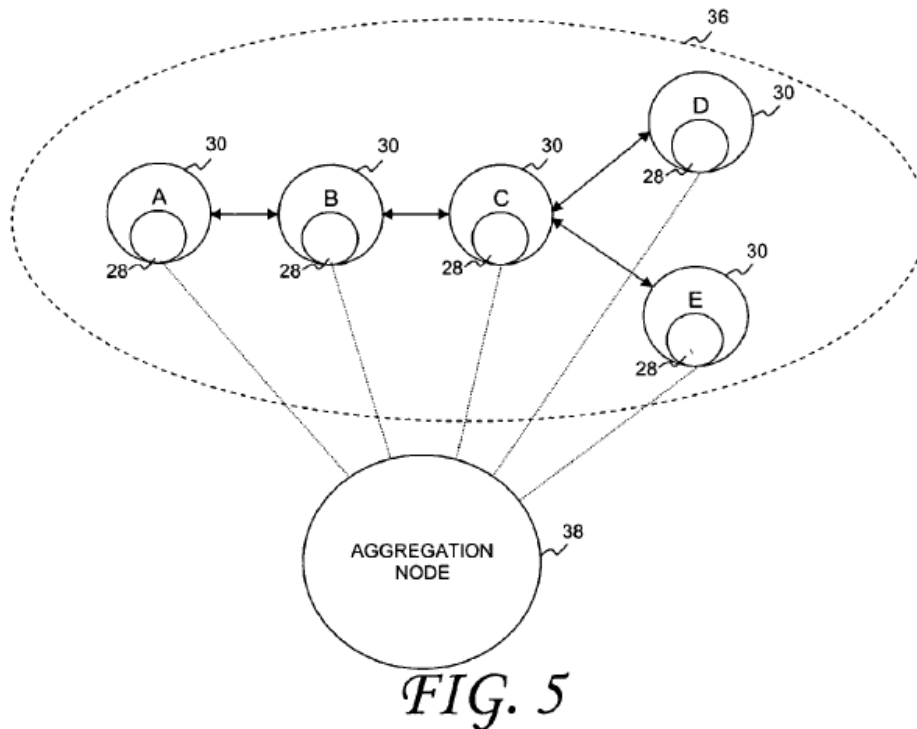
65. Additionally, a POSA would have understood that the embodiments of Figures 2 and 6B of Amidon disclose similar features, and the teachings of one could be applied to the other with a reasonable expectation of success. Amidon explicitly describes in discussing the embodiment of Figure 6B that “[a]s was noted previously, the social network server(s) and messaging server(s) have access to various data stores including data defining social networks, user preferences, messaging status, and the like, but such stores are not illustrated in this example for purposes of clarity.” EX1005, 20:1-7 (emphasis added). The earlier discussion of “data stores” in Amidon was in relation to the embodiment of Figure 2, *e.g.*, data stores 18, 22. *See* EX1005, 8:1-11, 8:55-59, 9:23-38, 10:3-6.

B. Issa

66. Issa describes an “aggregation node” that operates in the context of a social network. EX1018, Abstract. As I further explain in Ground 1, Issa’s “aggregation node” teaches an *event node* operating in a *multi-dimensional personal information network* as recited in the claims. Further, Issa explains that such nodes are discoverable and describes listing an “identifier” for a node in a “directory for discovery by other nodes or web users.” EX1018, 15:17-23.

67. Issa teaches connecting “multiple social network nodes using an aggregation node.” EX1018, Title. “Members of a pre-existing social network may selectively activate embedded latent peers and link to an aggregation node.” EX1018, Abstract. Using this aggregation node, Issa’s social network configuration provides “live communication links among networked users” and aggregates and shares content, including “instant messaging, web-based communications, file and content sharing, [and] audio communications.” EX1018, 2:57-3:4; *see also id.*, 13:60-14:15. “When the peers associated with each content sharing node are activated and connected to the aggregation node, the aggregation node is configured for collecting digital content and/or metadata about such content from such nodes.” EX1018, 4:1-8.

68. An example of Issa’s aggregation node and its connection to social network nodes is depicted in Figure 5. *See* EX1018, 12:33-13:59, FIG. 5.



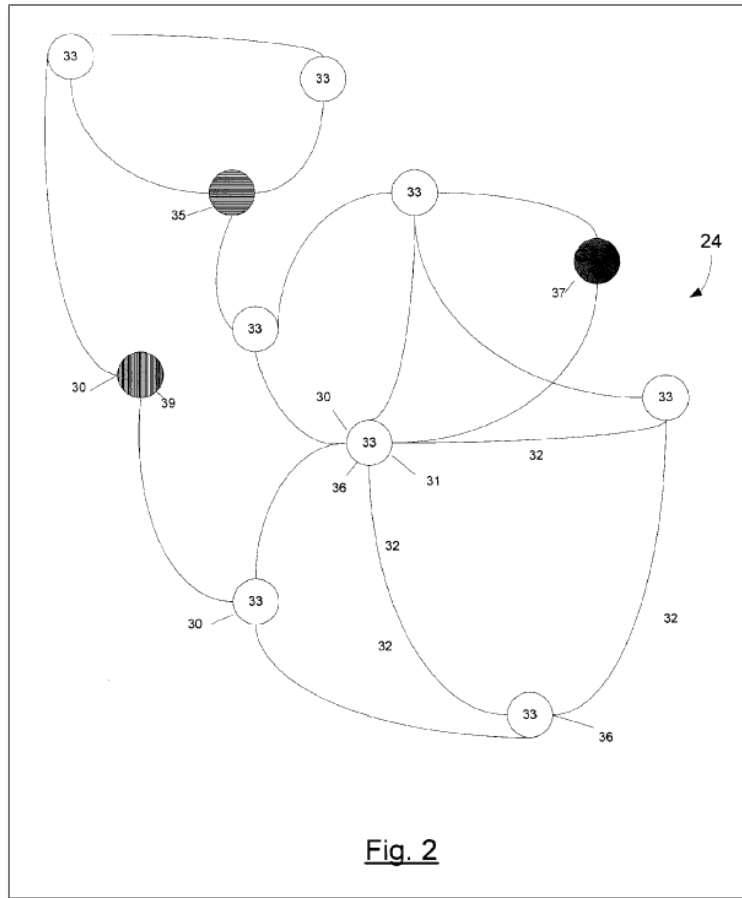
EX1018, FIG. 5.

69. As depicted in Figure 5, “aggregation node 38 may comprise a centralized server and/or a proxy server.” EX1018, 13:7-20. To provide for content sharing, aggregation node 38 obtains “digital content and/or metadata” from the nodes participating in the social network. EX1018, 13:40-59. One way of receiving content and then distributing aggregated content is to establish a “virtual peer” in the social network. EX1018, 2:66-3:39, 12:50-13:6, 14:37-15:12, 15:55-16:23. The aggregation node forms a “virtual peer” within the pre-existing social network and uses the “virtual peer” to receive content from the social media participants and to “serve content requests.” EX1018, 13:40-59; *see also id.*, 3:20-25 (the virtual peer allows “multiple social network nodes communicatively connected to the

aggregation node to be addressed with a single request.”), 12:63-67, 14:27-36. The aggregation node’s virtual peer is a single node that can be used to aggregate content from social media participants and provide aggregated content to “[m]ember and non-member peers.” EX1018, 15:13-23; *see also id.*, 2:66-3:4.

C. Wong

70. Wong is directed 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.” EX1006, Abstract. Wong teaches creating a social network. *See, e.g.*, EX1006, ¶¶2, 3, 17-19. I have provided Figure 2 of Wong below, which depicts an example of Wong’s social network.



EX1006, FIG. 2.

71. 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.” EX1006, ¶21.

72. 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.” EX1006, ¶44. As described in Wong, each node of the

network represents a living or non-living entity, such as people, places, objects, or animals. EX1006, ¶21. People or organizations, as Wong describes, “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.” EX1006, ¶30. The sender of communications can select which nodes in the network can receive a particular communication. EX1006, ¶44.

73. Each of the main node types as explained by Wong above can also have sub-types, such as “[o]bject sub-types can be groups, organizations, products, businesses, books, songs, etc.” EX1006, ¶22, FIG. 3.

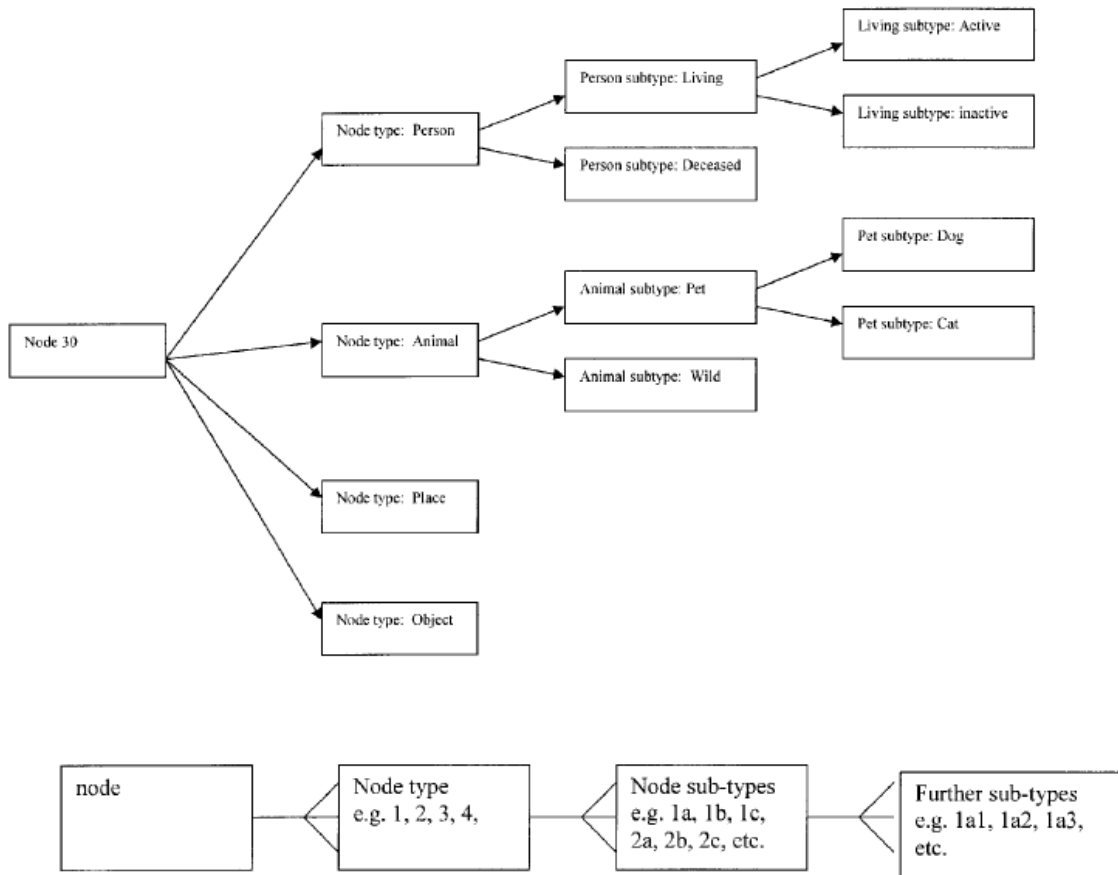


FIG. 3

EX1006, FIG. 3 (showing the types of nodes in the social network).

74. Wong also teaches that “[t]he social networking features of the network of living and non-living entities facilitate many forms of communication” and that a “sender can select those in the network of living and non-living entities who can receive or view a particular communication or file.” EX1006, ¶44.

D. Gogic

75. Gogic is directed to “a system and method for 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.” EX1007, 4:16-20; *see also id.*, Abstract.

76. Gogic teaches that “[i]n group communication system 200, a group of communication device users, individually known as group or net members, communicate with one another using a wireless communication device (CD) assigned to each group or net member.” EX1007, 5:65-6:2.

77. In Gogic, an ad-hoc communication group may be formed, for example, in response to an emergency notification and based on the geographic proximity of users to a designated location. EX1007, 10:16-11:13, FIG. 4. Users are invited to join the communication group, and if they meet the designated criteria, may accept the invitation. EX1007, 10:45-11:9.

78. For instance, Gogic describes “the formation of an ad-hoc group in response to an emergency notification, wherein the group is formed on the basis of proximity to a designated location.” EX1007, 10:16-18, FIG. 4. Within this ad-hoc group, “a dispatcher 400 identifies the occurrence or presence of an event or condition wherein communications between proximately located users could be beneficial.” EX1007, 10:18-21. Gogic also teaches using various *dimensions* within the “group membership location criteria” that defines the “inclusive boundary of users that are invited to join the group.” EX1007, 10:26-29.

E. Kraft

79. Kraft is directed to “systems and methods for information retrieval and communication using a world model.” EX1019, 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.” EX1019, 2:37-41, 8:28-31 (emphasis added). 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.” EX1019, 10:25-30. Kraft depicts an example of a “world model” in Figure 2. EX1019, 8:35-38.

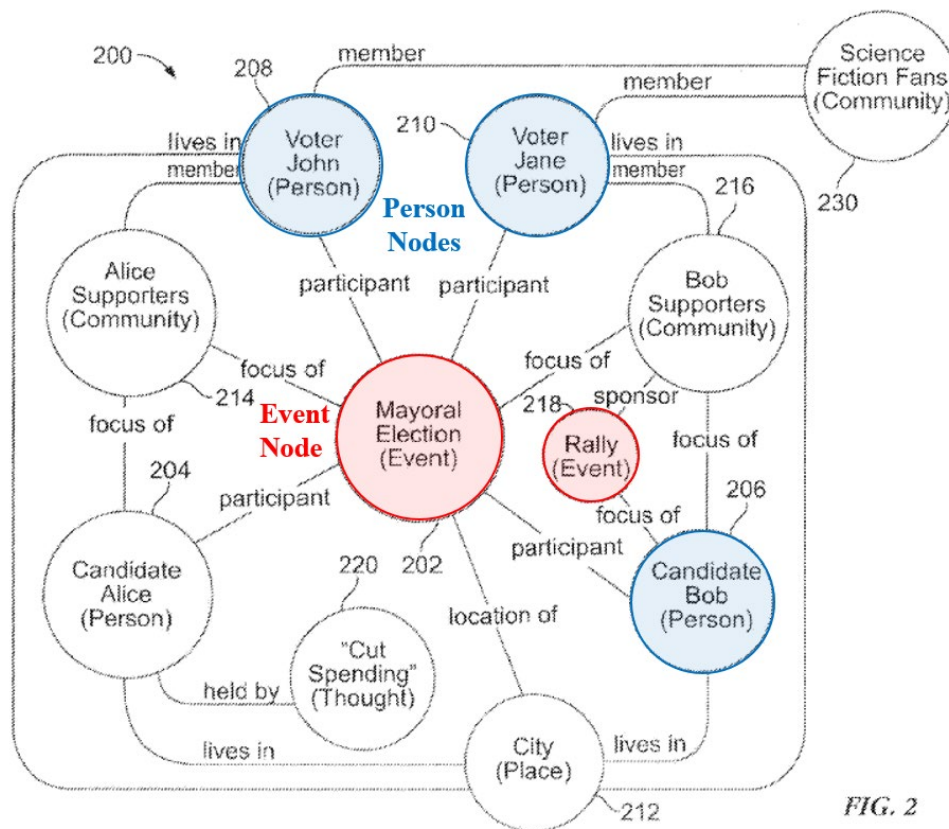


FIG. 2

EX1019, FIG. 2 (annotated).

80. As seen from 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).” EX1019, 8:39-44 (emphasis added). Kraft explains that event nodes or event models can represent “occurrences such as elections, *natural disasters*, sports events.” EX1019, 9:65-66 (emphasis added). “Each entity model,” Kraft says, “is advantageously implemented as a data structure that provides access to information about a real-world entity that the node represents.” EX1019, 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.” EX1019, 3:18-24.

81. Kraft further explains that a “user request may include a search query specifying a property for the information contained in the entity models.” EX1019, 2:66-3:2, 9:33-36 (a “user can also send a message to a non-person entity; for example, the user might send a message to the election (node 202)”). “A world server receives a request from a querying user for an entity model,” and “[t]he world server returns the information contained in the requested entity model.” EX1019, 3:52-57. Because Kraft’s framework “enables authorized users to update the world model,” for example by “modifying entity models,” the information contained in an event node can remain up to date. EX1019, 6:54-57.

XIII. GROUND 1: AMIDON IN VIEW OF ISSA RENDERS OBVIOUS CLAIMS 1-18

82. In my opinion, Amidon in view of Issa renders obvious claims 1-18.

A. A POSA would have found it obvious to combine Amidon and Issa.

83. In my opinion, a POSA would have been motivated to modify Amidon's social network communication system to incorporate Issa's teachings of an aggregation node framework and discoverable nodes.

84. I note that both Amidon and Issa have the same inventors (*i.e.*, Christopher Amidon, Richard Walsh, Alfredo Issa). EX1005, (75); EX1018, (75). Based on this common inventorship, a POSA would have recognized and known of the teachings in both Amidon and Issa. As a result, a POSA would have been motivated to incorporate Issa's aggregation node framework to provide a process for aggregating, caching, and distributing shared content in Amidon's social network conferences. EX1018, 13:40-59; EX1005, 2:45-48, 3:4-15.

85. For instance, Issa's framework provides "content sharing ... including but not limited to forming and playing content playlists and distributing digital content within a social network." EX1018, 13:40-59. Such a framework would have furthered Amidon's goal of providing data exchanges, data distribution, and facilitating content distribution in a social network conference. EX1005, 2:45-48, 3:4-15.

86. Issa's aggregation node also "selectively cache[s] all or a portion of the content shared by the participating peers" to serve content requests, which would have furthered Amidon's goal of caching "[a]t least some data exchanged amongst conference participants (such as messages or shared content)," such that the caching "may be used to 'catch up' users who temporarily leave a conference and/or otherwise join a conference already in progress." EX1018, 13:52-56; EX1005, 4:23-44; *see also* EX1005, 15:57-16:48.

87. Using an aggregation node, Issa's social network configuration provides "live communication links among networked users" and facilitates the aggregation and sharing of content including "instant messaging, web-based communications, file and content sharing, [and] audio communications." EX1018, 2:57-66; *see also id.*, 9:47-50, 10:36-45, 13:60-14:15. Issa further explains that the aggregation node "combines (or aggregates) the metadata and/or content into a single collection of data," upon which the "aggregation node [] may selectively cache all or a portion of the content shared by the participating peers" to serve content requests. EX1018, 13:40-59; *see also id.*, 12:63-67.

88. As noted above, Issa's framework and functionality provides "content sharing" and distribution of "digital content within a social network." EX1018, 13:40-59. "The digital content available at each participating peer may include, for example, images, videos, hypertext transfer markup language (HTML) code,

documents, presentations, spreadsheets, graphics, audio, or the like.” EX1018, 13:60-63; *see also id.*, 16:17-23. A POSA would have therefore recognized and would have been motivated to implement the content sharing provided by Issa’s aggregation node framework to also aggregate, cache, and distribute shared content as described in Amidon.

89. A POSA would have also been motivated to implement Issa’s teaching of listing an aggregation node and virtual peer in a “directory for discovery by other nodes or web users” or a “meta-directory about virtual peers that is searchable by member and/or non-member peers.” EX1018, 15:17-23. Amidon explains that social networking sites provide “instant messaging and online chat rooms,” “and other content to web pages accessible to various parties of their choosing (for example, to ‘friends only’ or to the public at large).” EX1005, 1:41-49, 15:36-39, 17:36-42. For example, in Amidon, “conference participation can be determined based on geographical parameters, such as users within a certain distance, users from a particular location, and so on,” meaning that if a user wishes to set a conference to be accessible publicly—*e.g.*, so that users in geographic proximity can locate and join the conference—a POSA would have recognized that Issa’s description of a searchable “directory for discovery by other nodes or web users” would have been a simple way to further Amidon’s functionality. EX1005, 12:56-65; EX1018, 15:17-23. Based on these benefits, a

POSA would have known of, and would have been motivated to implement, Issa's teaching of discoverable nodes in Amidon's social network conferences.

90. A POSA would have also known how to combine Amidon and Issa and would have recognized that implementing Issa would have amounted to a predictable variation of Amidon. In addition to having the same inventors, both references describe using a well-known and generic server/client infrastructure to aggregate messages and content received from connected nodes and to distribute those messages and content to other connected nodes and users. EX1005, 4:60-5:2, 8:44-9:38; EX1018, 1:44-53, 3:60-4:8, 5:12-21, 13:7-20; *see also* EX1018, 2:57-66, 13:60-14:15, 16:5-23; EX1005, 3:4-15, 13:43-56 (describing the posting of other content such as video and audio). In view of these shared implementation details, a POSA would have readily been able to implement Issa's aggregation node framework with Amidon.

91. Based on these commonalities and well-known components, a POSA would have recognized that implementing Issa with Amidon would have amounted to nothing more than combining well-known aspects of the prior art in a predictable way using known methods. The results would have been predictable as well. In the combination, the combined system would have used an aggregation node to obtain, aggregate, and distribute content from participants of a social

network conference. I further explain this combination and its teaching of all elements of claim 1 below.

B. Independent Claim 1

- 1. [1.P]: A method of creating a situational network based on a projection from a multi-dimensional personal information network and for transmitting information related to a situation, the method comprising:**

92. I understand that in certain circumstances the preamble of a claim may be limiting. To the extent the preamble is determined to be limiting, it is my opinion that Amidon teaches the preamble.

93. Amidon teaches “systems and methods for users to conduct online conferences based on underlying social network structures.” EX1005, 2:54-56. As described in the ’325 patent, a “situational network 3000 is created when an occurrence or expected occurrence of an event or situation 3005 causes connection, also referred to as links, to be established between, within or among a set of participants.” EX1001, 4:20-24, FIG. 1. Many embodiments of the ’325 patent are described in the context of the situation being some sort of emergency. *See* EX1001, 5:10-25. But the ’325 patent is not limited to such situations. The ’325 patent also provides examples of non-emergency “situations,” including “a social event, such as a concert or festival,” or “a forecasted snow storm” as relevant to “skiing at a popular ski destination.” EX1001, 31:63-64, 32:33-46. Claim 1 broadly recites “a situation” with no further limitation.

94. In Amidon, “[u]sers may participate in social network conferences by way of any suitable communication technique(s).” EX1005, 3:4-5. Further, Amidon describes “automatic conference formation” and forming a conference “based on user preferences and past activity.” EX1005, 13:58-60. For example, Amidon explains forming conferences “based on content metadata—for instance, a user may provide for the system to automatically form a conference including all users currently listening to the same song, music by the same artist, music of the same genre, etc.,” also including other “network activity” *i.e., situations* such as “user wish[ing] to automatically create a new conference any time the user is involved in a subset of a social network circuit related to a game when the subset includes three or more people.” EX1005, 13:65-14:25. In my opinion, Amidon’s teaching of a set of users communicating via a conference, which was created in response to a situation, corresponds to *a situational network*. See also Section XIII.B.2 (analysis of element [1.1], where I provide further details regarding Amidon’s teachings of a *situation*).

95. Further, in Amidon, a “user can specify the nature and extent of a conference amongst members of a social network based on various parameters, including social network parameters.” EX1005, 2:57-60. “Once a conference has been initiated, users participating in the conference can direct messages to desired users in the conference based on the same and/or other parameters.” EX1005, 2:60-

63. Conference metadata is used to manage a social network conference and includes “data identifying one or more members of a social network and at least one distribution parameter.” EX1005, 3:22-25. “Based on the social network data and the distribution parameter(s), multiple other users may be identified for inclusion in a social network conference” (*i.e., based on a projection*). EX1005, 3:33-36.

96. In this manner, Amidon’s identification of users for inclusion in a social network conference teaches *creating a situational network based on a projection from a multi-dimensional personal information network*.

97. Additionally, Amidon teaches that “[s]ocial network server [] uses the distribution parameters and other information to assemble a participant list for potential inclusion in the social network conference.” EX1005, 10:37-39. “For each parameter set, application [] renders a filtered view of the social network.” EX1005, 21:21-22. This list of users for potential inclusion in the conference is the claimed *projection*. I note that this aligns with the ’325 patent’s description of “a ‘projected’ view” as “a subset of the nodes” of the social network. EX1001, 17:4-5; *see also id.*, 22:52-55 (indicating that “a ‘projected’ view” is “also referred to as a projection”).

98. Amidon’s social network conference also includes *transmitting information related to a situation*. “Once a conference has been initiated, users

participating in the conference can direct messages to desired users in the conference.” EX1005, 2:60-63. These messages can include “shared audio files” or “video files” and other “file and content sharing.” EX1005, 3:4-15, 6:48-57, 13:43-56. Amidon also describes “sharing content on a particular topic (‘Vacation’).” EX1005, 21:18-45. The conference corresponds to *a situation*—*e.g.*, users listening to the same music, a certain number of users in the social network are involved in a conversation (*e.g.*, related to a game), or users sharing content on a particular topic. EX1005, 13:57-14:29; *see also id.*, 4:6-9, 12:37-65 (“Additional parameters may include geographical parameters.”).

99. Thus, in my opinion, Amidon teaches the preamble.

2. **[1.1]: (a) creating, by an event node server, an event node in the multi-dimensional personal information network, wherein the multi-dimensional personal information network comprises member nodes, and the event node that corresponds to the situation, wherein the event node is discoverable by browsing the multi-dimensional personal information network;**

100. In my opinion, the Amidon-Issa combination teaches this element, which can be viewed as including four components: (i) *creating, by an event node server, an event node*; (ii) *the event node is in a multi-dimensional personal information network that comprises member nodes*; (iii) *the event node corresponds to the situation*; and (iv) *the event node is discoverable by browsing*

the multi-dimensional personal information network. The Amidon-Issa combination teaches all four components of [1.1].

101. **First, for component (i),** Amidon teaches *creating, by an event node server, an event node.* Amidon's social network server 16 (*an event node server*) "uses the distribution parameters and other information to assemble a participant list for potential inclusion in the social network conference." EX1005, 10:37-39, FIG. 2; *see also id.*, 9:9-38. Amidon also discloses that the "[d]ata defining the social network conference, including the participant list, is then stored in computer-readable form. For example, data defining social network conferences may be maintained in one or more additional databases accessible by social network conferencing system." EX1005, 10:40-44; Furthermore, "Once the other users have been identified, the social network conference is tracked, including storing data defining the conference in at least one computer-readable medium." EX1005, 3:36-39.

102. Additionally, Amidon's social network conference (as defined by the stored data and accessible via window 200) is the claimed *event node*. *See* EX1005, FIGs. 4, 5.

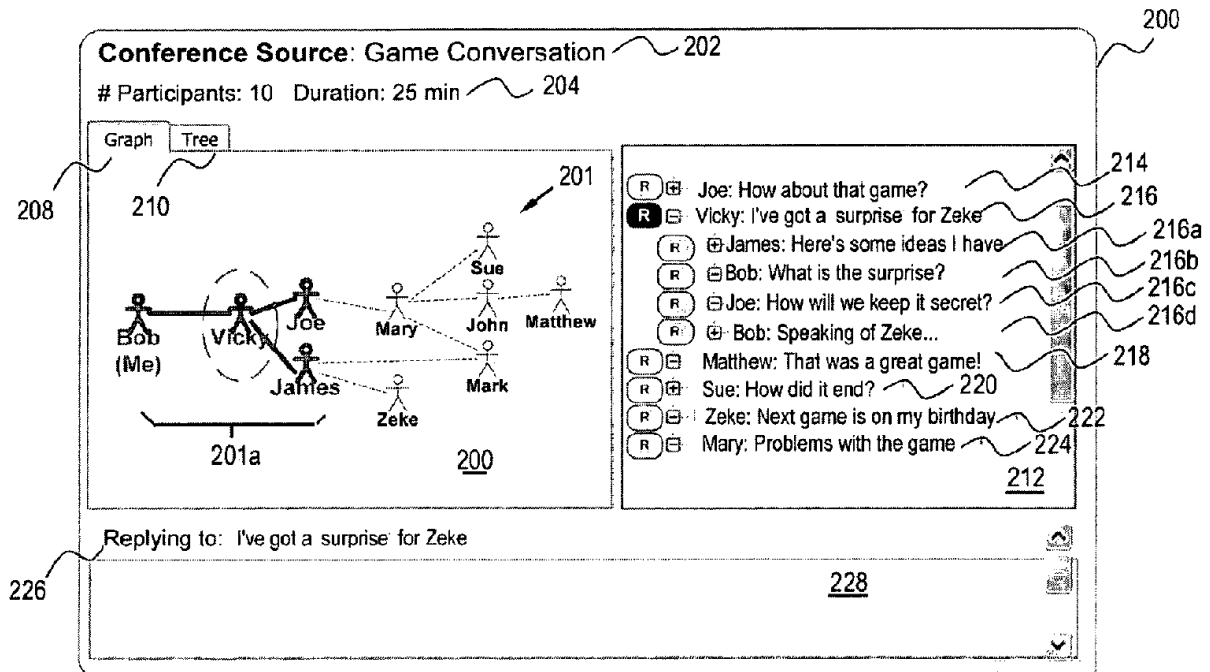


FIGURE 4

EX1005, FIG. 4.

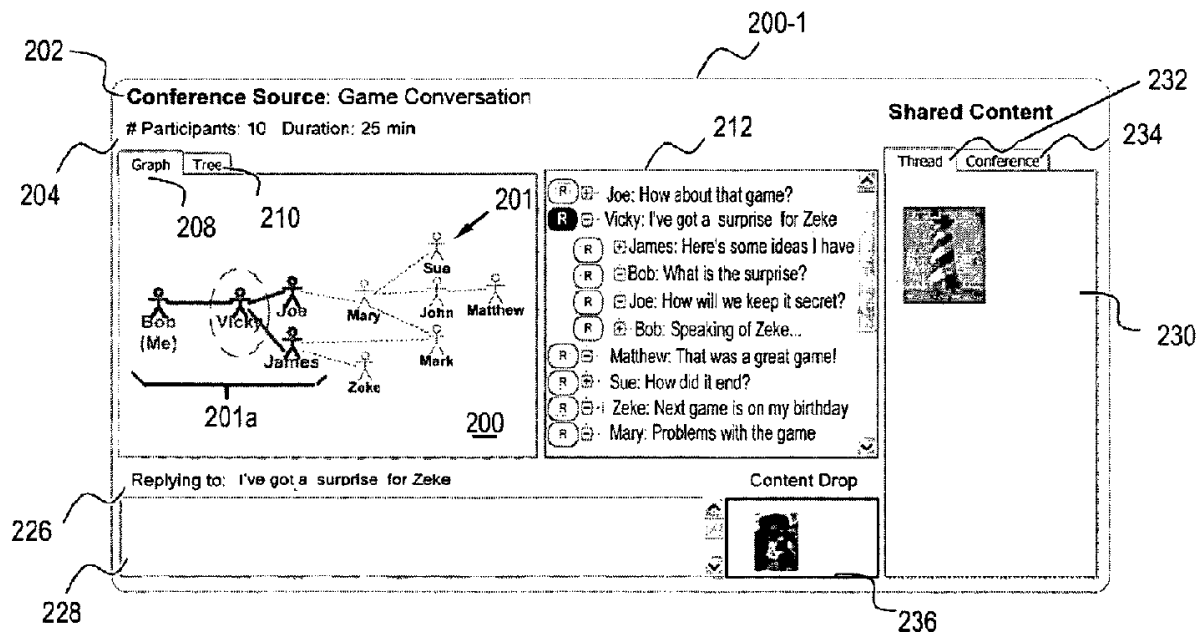


FIGURE 5

EX1005, FIG. 5.

103. For instance, “conferencing system 12,” Amidon teaches, “may store data defining social network conferences in any suitable fashion and location(s).” EX1005, 15:6-10, FIG. 3. This is consistent with the ’325 patent’s description of a node as “provid[ing] an associated entity with the ability to store and manage [its] profile and relationships with other users of the [social network].” EX1001, 15:37-39. This also is consistent with the ordinary and customary meaning of node, wherein nodes may represent people, organizations, communities, locations, websites, or any other unit that is part of the network. For example, Vasudev describes that “nodes can represent persons, locations, entities, information, and the like,” with “nodes [being] typically arranged with directed edges that establish connections between the nodes.” EX1010, 1:13-16; *see also* EX1010, 3:56-59 (“Nodes in the social network can include, but are not limited to, a user, a friend, a relative, a classmate, a location, a resource, a contact, a domain, a message address, and a member.”). As another example, Wellman identifies the “social network concept of *ties* linking *nodes* in a social system,” describing examples of nodes as “persons, groups, organizations, or clusters of ties.” EX1016, 157.

104. Amidon describes multiple ways of forming (*creating*) a social network conference (*event node*). EX1005, 13:34-35. For example, “system 12 may support automatic conference formation and/or suggest conference formation

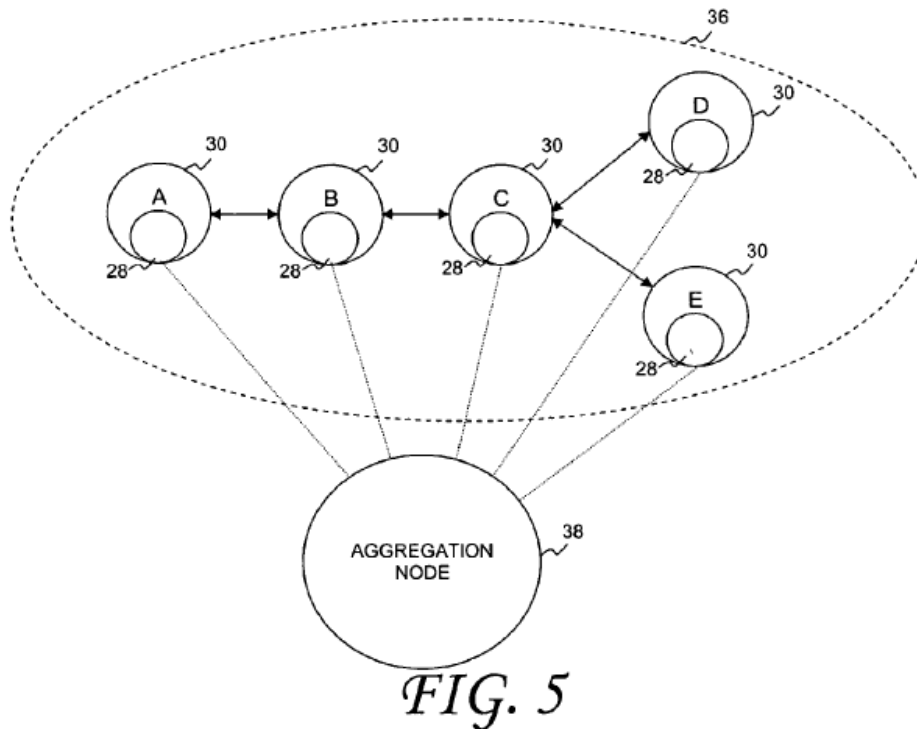
based on user preferences and past activity.” EX1005, 13:57-60. As another example, “a user may provide for the system to automatically form a conference including all users currently listening to the same song, music by the same artist, music of the same genre, etc.” EX1005, 13:65-14:3. Amidon then teaches that “[o]ther conferences may be formed based on network activity, such as sharing content of a particular data type (photos, movies, etc.) and/or content having similar metadata (sharing of particular music, songs, movies, etc.).” EX1005, 14:3-7.

105. Additionally, Amidon discloses that the “[s]ocial network server 16 [(i.e., the *event node server*)] may be configured to analyze data describing current messaging sessions or other activity, such as social network circuit activity, and periodically compare such data to conference formation parameters provided by one or more users.” EX1005, 14:13-18. Amidon continues, “[f]or example, a user may indicate that the user wishes to automatically create a new conference any time the user is involved in a subset of a social network circuit related to a game when the subset includes three or more people. Social network server 16 can access circuit data and automatically form a conference including such users.” EX1005, 14:22-27. In this example, a conference is automatically formed when a group of three or more users are in live communication (*i.e.*, a conversation) about a game.

106. In another example, Amidon explains, “assume that user O wishes to engage in a conference,” “but [with] only those users who are also sharing content on a particular topic (‘Vacation’).” EX1005, 21:18-26. Amidon teaches that “[f]or each parameter set, application [] renders a filtered view of the social network,” which includes users that meet the first user’s criteria. EX1005, 21:21-35. Furthermore, in this example, “[a]ssume that users K, M, and P are currently sharing vacation photos via respective instances of P2P client.” EX1005, 21:26-28. In this case, “O sends a message (‘Hey, let’s talk about vacation’) and, pending acceptance by K and P, a conference including users K, O, and P is created and tracked by social network server.” EX1005, 21:35-37.

107. Thus, in my opinion, Amidon teaches the social network conference (as defined by the stored data and accessible via window 200) (*i.e., the event node*) is *created by* the social network server (*i.e., event node server*).

108. Additionally, Issa also teaches the claimed *event node*. For example, as seen from Issa’s Figure 5, Issa’s aggregation node 32 teaches the claimed *event node* as well. EX1018, Abstract, 3:20-25, 12:63-67, 13:40-59, 14:27-36.



EX1018, FIG. 5.

109. Issa connects “multiple social network nodes using an aggregation node.” EX1018, Title; *see also id.*, 1:28-53, 2:55-66, 8:60-9:20. “Members of a pre-existing social network may selectively activate embedded latent peers and link to an aggregation node.” EX1018, Abstract; *see also id.*, 12:33-49. To receive and distribute content, the aggregation node establishes a “virtual peer” in the social network that allows “multiple social network nodes communicatively connected to the aggregation node to be addressed with a single request.” EX1018, 3:20-25; *see also id.*, 2:66-3:4, 12:50-13:6, 13:40-59, 14:27-15:23, 15:55-16:23.

110. Issa also discloses that, “aggregation node 38 may comprise a centralized server and/or a proxy server.” EX1018, 13:7-20. To provide “content

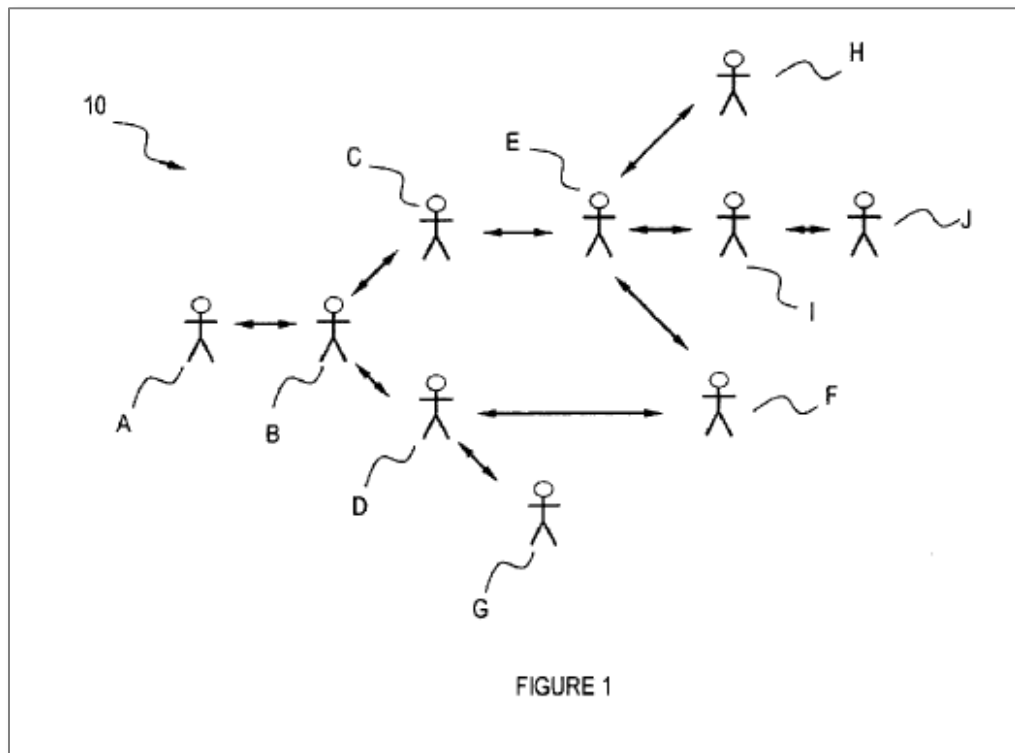
sharing” capabilities “aggregation node 38 operates to obtain selected digital content and/or metadata describing all or a portion of a number of different content pieces shared by the participating nodes.” EX1018, 13:40-59.

111. Thus, in my opinion, similar to Amidon, Issa also teaches the claimed creation of an *event node in a multi-dimensional personal information network* by an *event node server*. The Amidon-Issa combination therefore teaches an *event node* as recited in claim 1.

112. **Second, for component (ii)**, Amidon teaches a *multi-dimensional personal information network* that *comprises member nodes*. I note that the ’325 patent uses the terms “multi-dimensional personal information network” and “N-dimensional social network (NDSN)” interchangeably. *See* EX1001, 6:25-29, 8:4-8, 15:1-4. The ’325 patent states that an NDSN “captures and manages multi-dimensional relationships between persons and other entities that are users of the network.” EX1001, 15:1-4. The ’325 patent also says that “[t]he NDSN uses multiple dimensions of association to characterize the relationships between users or members.” EX1001, 15:9-10. For example, the NDSN uses multiple dimensions to characterize the relationship between two or more users, such as “friendship,” “family, professional connection, consumer (e.g., consumer-to-merchant) relationship and healthcare-relation (e.g., providers, insurers, etc.).” EX1001, 15:9-

17. In the '325 patent, “[n]odes may connect via different dimensions.” EX1001, 15:39-40.

113. Similar to this description, Amidon's social network 10 as seen in Figure 1 is a *multi-dimensional personal information network* that *comprises member nodes*.



EX1005, FIG. 1.

114. As depicted in Figure 1, participants or members of Amidon’s social network may be “linked to one another through *one or more types [dimensions] of social connections*,” including, for example, *dimensions* such as “common friendship, place or field of employment, place of education, place of residence, membership in a club or other group, or common hobbies or topical interests.”

EX1005, 1:27-38. In Figure 1, “links between users A, B, C, D, E, F, G, H, I, and J [*member nodes*] are shown by double-ended arrows.” EX1005, 6:60-63. Amidon further teaches that “one of skill in the art will recognize that social networks may be much more extensive than social network 10,” and, for example, “links between friends (or other contacts) ... may be densely intertwined and overlap extensively.” EX1005, 7:38-47. Similar to the ’325 patent, the relationships between members of Amidon’s social network are characterized in multiple dimensions, *i.e.*, friendship, place of employment, common hobbies, etc. Thus, Amidon’s social network 10 is a *multi-dimensional personal information network* comprising *member nodes*.

115. **Third, for component (iii)**, Amidon teaches the *event node correspond[s] to a situation*. The ’325 patent provides several examples of “situations,” including “a social event, such as a concert or festival.” EX1001, 31:64-65. Other examples include “weather phenomenon, such as hurricanes, tornadoes, severe thunderstorms, or winter storms; emergency situations, such as building fires, aircraft crashes, or toxic substance releases; natural disasters, such as earthquakes, tsunamis, or floods; weather related activities, such as skiing or surfing; navigation and/or travel incidents, such as road closures or construction, vehicle accidents, traffic congestion, roadway debris, or air turbulence; and public health crises, such as disease outbreak.” EX1001, 5:10-20. Claim 1 broadly recites “*a situation*” with no further limitation.

116. In Amidon, a social network conference (*i.e., the event node*) is created by social network server 16 (*i.e., the event node server*) upon detecting various *situations*—*e.g.*, “a user may provide for the system to automatically form a conference including all users currently listening to the same song, music by the same artist, music of the same genre, etc.,” or “conferences may be formed based on network activity, such as sharing content of a particular data type (photos, movies, etc.) and/or content having similar metadata (sharing of particular music, songs, movies, etc.).” EX1005, 13:57-14:29. Thus, the social network conference (as defined by the stored data and accessible via window 200) (*i.e., the event node*) *corresponds to the situation*. Additionally, a POSA would have understood that, regardless of the *situation* to which the event node corresponds, the same social network architecture would be used to implement the system and methods of the challenged claims. In other words, the claimed method operates in the same way regardless of the subject matter of the *situation*.

117. Amidon’s teaching of a “*situation*” also applies when Amidon is combined with Issa. For example, implementing Issa’s aggregation node with Amidon would have enabled the aggregation and distribution of content corresponding to *a situation*, such as the various situations described in Amidon. EX1018, 4:1-8, 13:40-59; EX1005, 13:57-14:29.

118. **Fourth, for component (iv)**, Issa teaches that an *event node* (e.g., Issa's aggregation node with virtual peer functionality) *is discoverable by browsing the multi-dimensional personal information network*. Issa explains that each aggregation node and virtual peer includes an identifier which "consists of any unique and memorable moniker chosen by the first node owner, such as 'Richard's Posse' or 'Mike's Work Group', etc." EX1018, 14:55-58. Other identifiers may also include "an e-mail address, an IM username or address, an Internet Protocol (IP) address, a Uniform Resource Identifier (URI) including Uniform Resource Locators (URLs) or others, a Media Access Control (MAC) identifier and/or any other suitable type of parameter for identifying the virtual peer." EX1018, 14:58-65. Issa further explains that "[t]he identifier for each virtual peer may be listed in a ***directory for discovery by other nodes or web users***." EX1018, 15:17-23 (emphasis added). "There may also be a ***meta-directory about virtual peers that is searchable*** by member and/or non-member peers. Member and non-member peers use the virtual peer identifier to join to the established sharing network." *Id.* (emphasis added). Based on these teachings, Issa describes nodes that are discoverable via browsing. When combined with Amidon, the Issa-Amidon combination teaches an *event node* that is *discoverable by browsing a multi-dimensional personal information network*.

119. A POSA would have been motivated to implement Issa's aggregation node and virtual peer framework along with Issa's discoverability functionality for the reasons that I previously explained. Section XIII.A.

120. Thus, in my opinion, Amidon and Issa render obvious element [1.1].

3. **[1.2]: (b) identifying a subset of the member nodes of the multi-dimensional personal information network based on geographic proximity to the situation of a plurality of devices corresponding to the member nodes in the multi-dimensional personal information network;**

121. In my opinion, Amidon teaches this element.

122. *First*, Amidon teaches *identifying a subset of the member nodes of the multi-dimensional personal information network*. According to Amidon, conference metadata is used to manage a social network conference and includes "data identifying one or more members of a social network and at least one distribution parameter." EX1005, 3:22-25. "Based on the social network data and the distribution parameter(s), multiple other users may be identified for inclusion in a social network conference." EX1005, 3:33-36. Amidon also describes how to use the distribution parameters "to assemble a participant list for potential inclusion in the social network conference," and then "[f]or each parameter set, application 340 renders a filtered view of the social network." EX1005, 10:37-39, 21:21-22. This list of users for possible inclusion in the conference is the claimed

subset. This is consistent with the '325 patent's description of "a subset of the nodes" of the social network. EX1001, 17:4-5; *see also id.*, 22:52-55.

123. For example, the '325 patent describes that the "projected view [subset] may be created along one or several dimensions of the NDSN," based on, for example, user interests (*e.g.*, cooking) or geographic location (*e.g.*, users in a certain zip code or with a particular travel destination). EX1001, 17:10-25; *see also id.*, 22:61-23:39. In the same way, Amidon's distribution parameters—that define the subset of users included in the conference—may include degree(s) of separation relative to a distributing or other user; "user parameters, such as user identity, membership in a group, interests, demographic characteristics, and the like"; "user activity" such as content sharing; "classifications of user relationships" such as friend, coworker, family, etc.; or geographic parameters. EX1005, 12:37-65. Amidon explains that "[s]ocial network server 16 then uses the distribution parameters and other information to assemble a participant list for potential inclusion in the social network conference." EX1005, 10:37-39. Thus, Amidon's identification of participants to include in the social network conference teaches *identifying a subset of the member nodes of the multi-dimensional personal information network*.

124. *Second*, Amidon also teaches that the *subset of the member nodes* may be based on *geographic proximity*, as claimed, because Amidon discloses that

“participation [in a social network conference] may be defined *geographically*, such as limiting a conference to users within a particular locale or within a certain distance from one another.” EX1005, 4:6-9; *see also id.*, 12:37-59 (“Additional parameters may include geographical parameters.”). Amidon recognizes, “*user devices* and/or the conferencing system *may support location-based services* such that the location of particular users can be determined.” EX1005, 12:59-61. “Based on the user location data, conference participation can be determined based on geographical parameters, such as users within a certain distance, users from a particular location, and so on.” EX1005, 12:62-65. So, when identifying the subset of users to include in the social network conference, Amidon defines participation in a conference geographically and limits participation to users in a particular location or who are close to one another. EX1005, 4:6-9; *see also id.*, 12:59-65 (“Based on the user location data, conference participation can be determined based on geographical parameters, such as users within a certain distance, users from a particular location, and so on.”).

125. Thus, in my opinion, Amidon teaches element [1.2].

4. **[1.3]: (c) transmitting an invitation to establish a respective link with the event node to devices corresponding to each node in the subset formed in step (b);**

126. In my opinion, Amidon and Issa teach this element.

127. *First*, Amidon teaches *transmitting an invitation ... to devices corresponding to each node in the subset formed in step (b)*. Amidon discloses that invitations are transmitted to users to join a social network conference via a “[s]erver [that] may provide a conference participant list to messaging server [], which sends one or more notifications to the requisite users.” EX1005, 21:3-5. In one example, “messaging server [] may send an invitation to users K through P [*i.e., the subset*] to join in the conference via messaging connections [] and messaging client applications.” EX1005, 21:5-8; *see also* EX1005, 19:54-67, FIG. 6B¹. In another example, user “O sends a message ... and, pending acceptance by K and P, a conference including users K, O, and P is created and tracked by social network server.”² EX1005, 21:18-38.

128. Amidon also teaches storing “data defining social network conferences” as a record for each user “indicating the status of each user with regard to one or more conferences.” EX1005, 15:6-15. The “status indicators may

¹ A POSA would have understood that the embodiments of Figures 2 and 6B of Amidon disclose similar features, and the teachings of one could be applied to the other with a reasonable expectation of success. *See for e.g.*, EX1005, 20:1-7.

² Claim 1 does not require the invitation to be transmitted from a computer system and does not foreclose the invitation transmission being initiated by a user.

include ‘active,’ ‘*invited* but inactive,’ and ‘*invited* but declined,’” EX1005, 15:15-17, further indicating that Amidon contemplates inviting users to join conferences.

129. *Second*, Amidon teaches that the *invitation is to establish a respective link with the event node* via the *event node server*. For a user to participate in a conference, a link 116 (*a link*) is established between users’ devices, *e.g.*, device 330, and the social network server 316 (*the event node server*). EX1005, 20:1-7, 20:39-62, FIG. 6B. For example, Amidon discloses that a “[s]ocial network conference system 312 may comprise one or more social network servers 316 and one or more messaging servers 314.” EX1005, 20:1-3. Amidon continues and explains that “each instance of social networking application 340 is in communication with one or more social networking servers 316 via a link 116 [*a respective link*].” EX1005, 20:39-45; *see also id.*, FIG. 6B. Thus, a POSA would have understood that in sending an invitation to participate in a conference, Amidon teaches sending an *invitation to establish a link with the event node server*. I provide further details and explanation regarding Amidon’s teachings of *establishing a link* below in my discussion of element [1.5]. Thus, in my opinion, Amidon teaches element [1.3].

130. Additionally, I note that Issa also teaches element [1.3]. Issa teaches transmitting “invitations” that “include the name of the virtual peer ... so that the invited nodes can pass the identifier back to the aggregation node for verification

purposes if such nodes decide to join the content sharing network.” EX1018, 15:24-33, 15:42-54. For instance, Issa teaches in one example that “the first originating node(s) to establish the network can pass around an additional token to invited users [*transmitting an invitation*] that must be presented to the aggregation node [*event node*] when an invited user decides to join [*i.e., establish a respective link*].” EX1018, 15:46-49. When the invited users accept the invitation, a link is established with Issa’s aggregation node. EX1018, 2:55-66, 3:57-59, 9:36-40, 15:36-41, 15:66-16:4. For example, Issa teaches “social network circuit instances for defining live communication links among networked users.” EX1018, 2:60-62. Issa also teaches that “[a] list of nodes which are linked to share content in the network may also be provided.” EX1018, 3:57-59. In another example, Issa teaches that “[u]sers A, B, C, D, and E, and is tracked using one or more computing devices that receive session information identifying live communication links between the users in the circuit.” EX1018, 9:37-40. Issa also discloses additional example where “a message may be sent through the IM network that has a link that activates the latent peer and passes the peer any information it needs to become part of the sharing network.” EX1018, 15:38-41. In another example, Issa discloses that “a user is able to view a first display portion [] including linked members in the content sharing network, a second display portion [] including

content that the given user is sharing, and a third display portion [] indicating what content other linked users in the network are sharing.” EX1018, 15:67-16:4.

131. Thus, in my opinion, Issa and Amidon teach element [1.3].

5. [1.4]: (d) receiving a response from at least one of the devices from step (c) accepting the invitation to establish the respective link with the event node;

132. In my opinion, Amidon teaches this element.

133. As I explained with reference to element [1.3], Amidon teaches *establishing the respective link with the event node*. Section XIII.B.4. Amidon also discloses monitoring for responses to invitations:

[T]he conferencing system provides feedback as to the conference initiation process. For instance, after inviting various members, [the user] may be presented with a pop-up window and/or other notification(s) of progress. The *window may indicate*, for example, which members have received invitations, which members are in the process of responding, and *the response(s) received*.

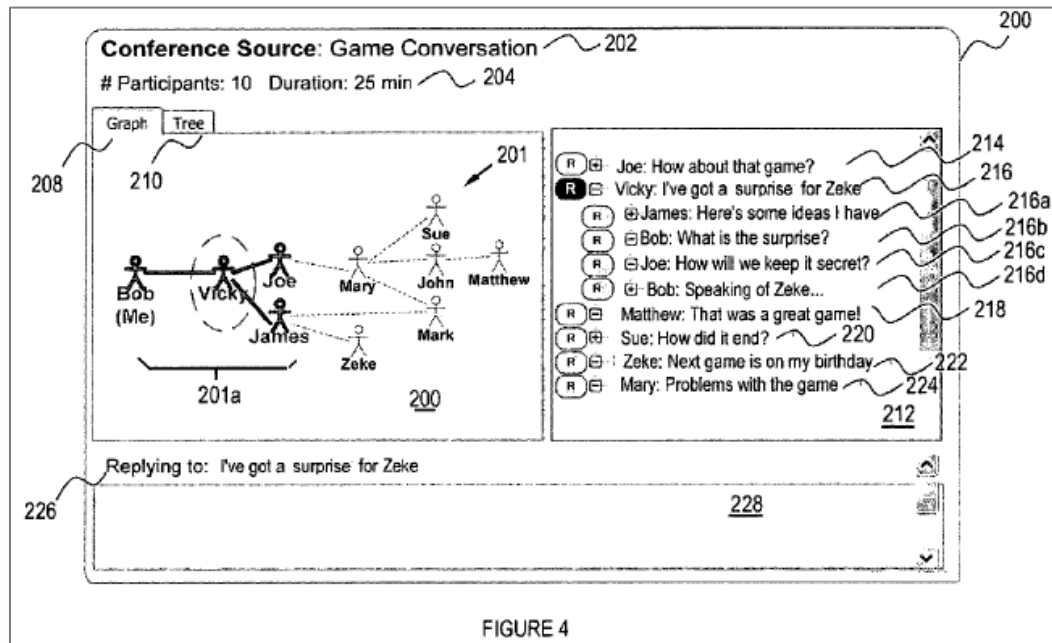
EX1005, 21:54-61 (emphasis added). Thus, in my opinion, Amidon teaches element [1.4].

6. [1.5]: (e) establishing the respective link with each device accepting the invitation to form the situational network;

134. In my opinion, Amidon teaches this element.

135. Amidon teaches *establishing the respective link with each device accepting the invitation to form the situational network* because Amidon discloses

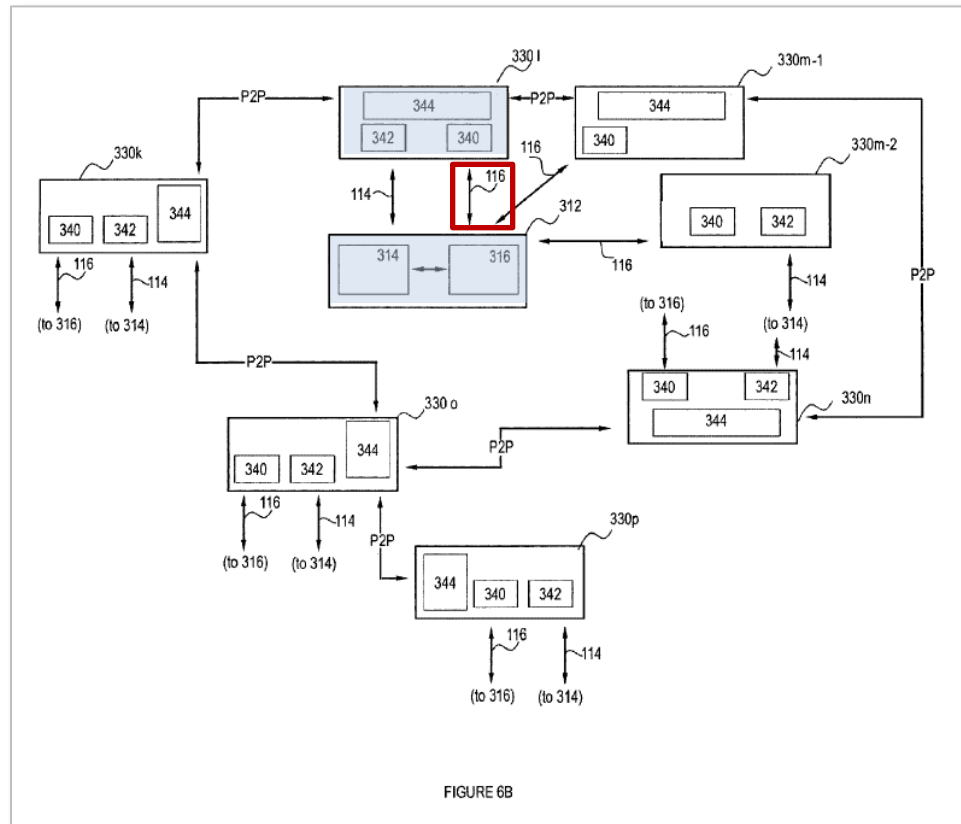
that user devices can participate in a social network conference. For example, Amidon's Figure 4 illustrates an exemplary user interface showing one or more users participating in a social network conference.



EX1005, FIG. 4.

136. To participate in such a social network conference, Amidon teaches that user devices may be linked to one or more social networking servers 316, which creates the conference and tracks the conference participation. For instance, Amidon describes that “[s]ocial network conference system 312 may comprise one or more social network servers 316 and one or more messaging servers 314.” EX1005, 20:1-3. Further, “each instance of social networking application 340 [(which are executed on the users’ computing devices 330)] is in communication with *one or more* social networking servers 316 via a link 116.” EX1005, 20:39-

45; *see also id.*, 8:60-9:8 (clients may interface with multiple messaging servers which in turn interface (directly or indirectly) with social network server), 9:9-22 (clients may be in communication with social network server); Section XIII.B.4 (claim element [1.3]). This is further illustrated in Figure 6B:



EX1005, FIG. 6B (annotated).

137. Amidon further discloses that user devices may be linked to one or more social networking servers 316, which creates the conference and tracks participation. EX1005, 20:39-43, 21:36-38, 21:62-63. The establishment of these links with the client devices forms a *situational network* as described with reference to [1.P]. Section XIII.B.1.

138. Thus, in my opinion, Amidon teaches element [1.5].

7. **[1.6]: (f) identifying a target member node wherein the target member node is connected to at least one node of the subset of the member nodes via at least one dimension of the multi-dimensional personal information network;**

139. Amidon and Issa teach this element for the reasons I provide in this section and as I further explain with reference to dependent claims 2-9 and 11-18. Sections XIII.D-XIII.K.

140. *First*, Amidon teaches *identifying a target member node* when “determin[ing] which users receive messages by evaluating the parameters.” EX1005, 2:57-3:3; *see also id.*, 4:10-22, 4:39-44, 10:25-11:14, 12:37-13:33, 13:65-14:12. Amidon describes several parameters for distributing messages to members participating in a social network conference. EX1005, 4:39-44, 10:11-24, 10:45-58, 12:37-13:33. When Amidon’s conferencing system 12 and social network server 16 receive a particular message for distribution, Amidon uses these parameters to identify specific target recipients for the message. *Id.*

141. For example, Amidon explains that “each message may be associated with a unique identifier that is cross-referenced to a particular distribution list and conference.” EX1005, 11:42-55. Amidon also explains that “[u]sers may specify any number or combination of rules, preferences, and parameters in defining the extent of conference participation, distribution of messages, and distribution of replies to messages.” EX1005, 12:37-40; *see also id.*, 4:39-44, 10:11-11:14, 12:40-

13:33. Amidon depicts an example of linked users in Figure 1 and further describes several examples of setting parameters to distribute messages among these users:

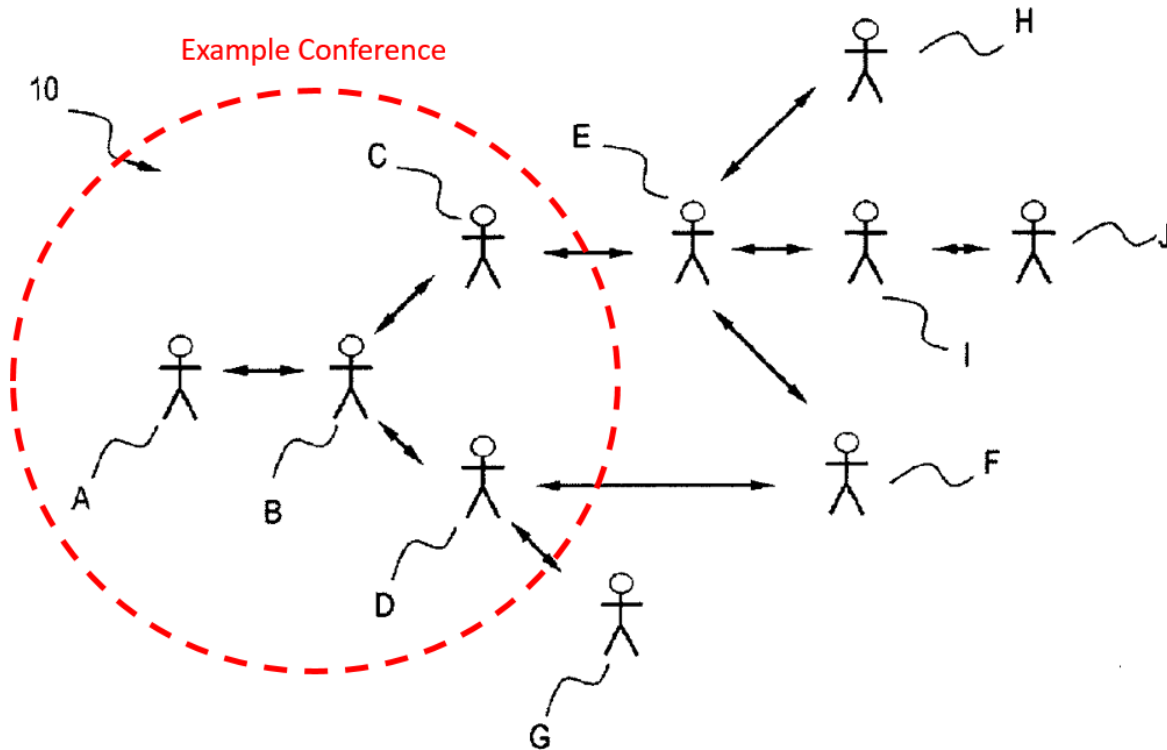


FIGURE 1

EX1005, FIG. 1.

142. For example, Amidon describes a scenario where “once the conference is established and includes users A, B, C, and D, assume user A wishes to send a message.” EX1005, 10:45-58. “User A may send the message to the entire conference, or may further limit the message by specifying additional parameters.” *Id.* “A may select ‘full distribution,’ or A’s system may be configured

to distribute the message to all users unless a more limited distribution is specified.” *Id.*

143. In one “limited distribution” example, “user A may specify that the message is to be distributed only to members within ***one degree of separation.***”

EX1005, 11:1-7 (emphasis added). Amidon explains:

Server 16 determines the participants in the conference that meet the criterion; in this case, user B is the only member of the social network underlying the conference who is in within one degree of separation from user A. Therefore, ***the recipient list provided to messaging server 14 includes only user B. Messaging server 14 relays user A’s message to user B, but not to users C or D.***

EX1005, 11:8-14 (emphasis added).

144. Based on these teachings, Amidon teaches *identifying a target member node* when using distribution parameters to determine the recipients of a particular message.

145. *Second*, Amidon teaches that the *target member node is connected to at least one node of the subset of the member nodes via at least one dimension of the multi-dimensional personal information network*. Continuing from the above discussion describing limited distribution, Amidon teaches that “user A may wish to send the message to a more restricted group within the conference,” whereupon “user A may specify that the message is to be distributed only to members within

one degree of separation.” EX1005, 11:1-14 (emphasis added). Specifically, the *target member node* (user B, from the example) being *connected to at least one node of the subset of member nodes* (“more restricted group within the conference” including users B, C, and D) *via at least one dimension* (“one degree of separation”).

146. Further, Amidon’s description of two participants in a social network conference who are linked together (*e.g.*, as “*one degree of separation*” or “friends”) teaches this claim element when Amidon’s system delivers a message or content from one participant to the other participant (*i.e.*, the *target member node*). EX1005, 6:66-7:18, 10:11-24, 12:53-58, 12:66-13:7.

147. I note that the ’325 patent states that “friendship is a dimension” that is used in its N-dimensional social network. EX1001, 15:11-20. Other dimensions may include “family” or “preferences and behaviors.” *Id.* Amidon teaches these same dimensions and connecting friends and family members with varying degrees of separation as well. EX1005, 6:66-7:47, 10:11-24, 12:1-22, 12:37-65, 13:8-33.

148. Returning to the claim, Amidon’s disclosure of a message being transmitted to a friend, to a “friend-of-a-friend (FOAF),” or to a connection with one or more degrees of separation teaches the claimed *target member node* being *connected to at least one node of the subset of the member nodes via at least one dimension of the multi-dimensional personal information network*. EX1005, 6:66-

7:18. For example, returning to the example in Figure 1, “users A through J may have designated one another as ‘friends’ in a social networking site” where “A has designated B as a friend, B has designated C and D as friends, and so forth.”

EX1005, 6:66-7:18, 7:38-47. When user A designates user B as an acceptable recipient of a transmitted message, Amidon’s conferencing system 12 identifies user B as a target user, and user B is a friend of user A. EX1005, 11:1-14; *see also id.*, 3:48-4:4. In this example, the users are connected *via at least one dimension*.

149. Amidon also describes examples where users can designate additional degrees of separation. For example, when user A indicates that recipients within two degrees of separation should receive a message, conference system 12 also identifies users C and D as target member nodes as well. EX1005, 10:11-24; *see also id.*, 12:8-9 (describing social network server 16 determining “which participants in the present conference meet [a user’s] criteria”). “Server 14 then relays A’s message to conferencing clients associated with each of B, C, and D.” EX1005, 10:66-67; *see also id.*, 10:45-66. In this manner, Amidon teaches additionally identifying *target member nodes* via multiple dimensions of friendship as well.

150. When transmitting messages to any of these recipients, a POSA would have recognized that the recipients would have corresponded to a node of the subset for the reasons presented for [1.2]. Section XIII.B.3. For example, when a

subset of users are in a conference based on “geographical parameters,” communication among or between those users (*e.g.*, friends) results in communication between a target member node and a node that is part of the subset identified in [1.2]. EX1005, 12:59-65. For example, if user D forms a conference with users A, B, and C, based on geographic proximity, communications between users A and B result in conference system 12 identifying target member node recipients for message delivery and where the *target member node* is connected to a *node of the subset*. EX1005, 10:45-58, 11:1-14, 12:59-65. Thus, in my opinion, Amidon teaches the elements of [1.6].

151. To the extent that SitNet argues that Amidon’s target user is not a *node*, the combination of Amidon and Issa also renders obvious a *target member node* for the reasons that I provided for [1.1] (*member nodes*). For example, Issa’s framework refers to users as “nodes” in a social network and explains that such nodes are recipients of digital content subject to “distribution parameters.” *See* EX1018, 5:64-6:47. Issa’s Figure 1 “illustrates an exemplary social network of users sharing digital content in accordance with certain controls on distribution. *Users are designated generally in FIG. 1 as nodes.*” EX1018, 5:64-6:4 (emphasis added).

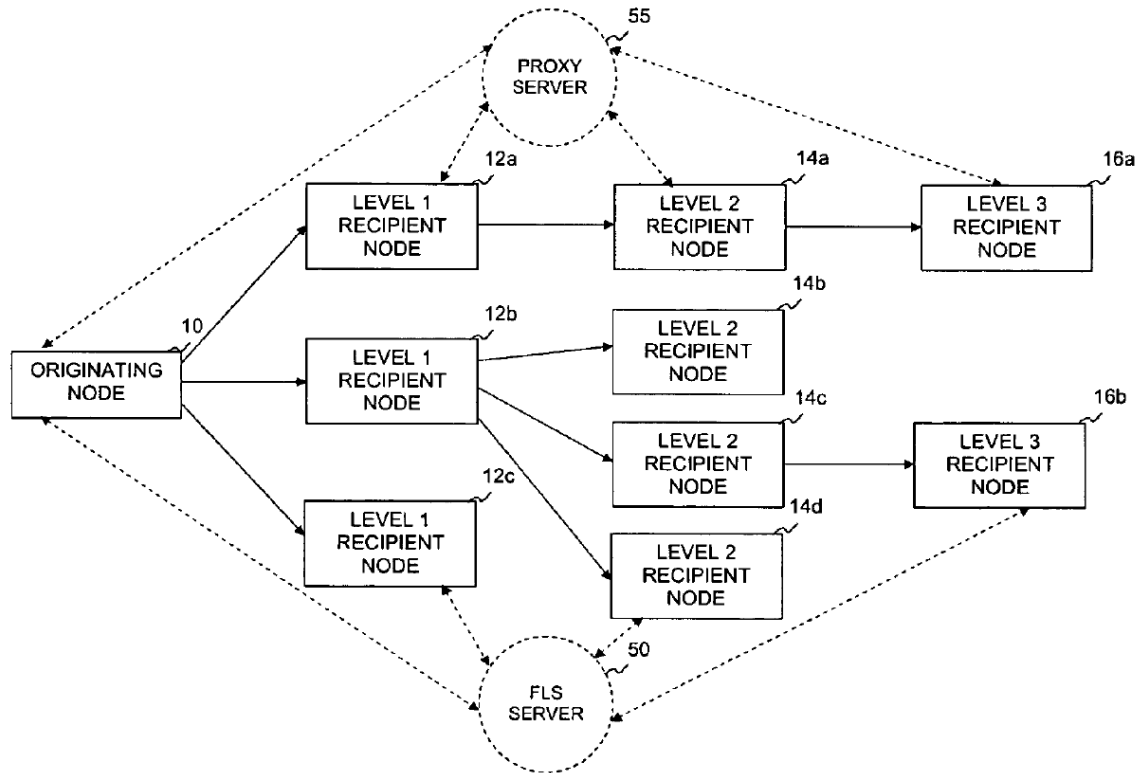


FIG. 1

EX1018, FIG. 1.

152. Issa additionally explains that these originating and recipient nodes may be characterized based on a “degree of separation” for controlling the distribution of content like Amidon as well. EX1018, 1:59-64, 6:15-25, 8:52-59. For instance, Issa explains that “[a] content provider may limit the extent to which selected digital content may be shared by establishing a ‘degree of separation’, or maximum level distance from a content provider the content can be distributed through a dynamically created sharing network.” EX1018, 1:59-64. Issa also teaches “[d]istribution parameters can include such information as a level limit

representative of the maximum number of ‘degrees of separation’ allowed between the originating node and any recipient node.” EX1018, 6:15-25.

153. In this manner, Issa confirms a POSA’s understanding that the term “user” and “node” would have been used interchangeably. This is particularly true in the context of identifying recipient users based on distribution parameters and transmitting messages and content similar to Amidon. Thus, a POSA would have recognized that Amidon’s description of users and client devices also teaches nodes, and that Amidon’s recipient user teaches a *target member node* as claimed. A POSA would have implemented Issa’s node framework with Amidon for the reasons that I previously explained. Section XIII.A. Thus, in my opinion, Amidon and Issa also teach element [1.6].

8. [1.7]: (g) transmitting information related to the situation to the identified target member node.

154. In my opinion, Amidon teaches this element.

155. As I explained with reference to claim elements [1.P], [1.1], and [1.6], Amidon teaches transmitting messages and content to social network members participating in a “social network conference” related to a situation. Sections XIII.B.1-2, XIII.B.7; EX1005, 6:58-60. Amidon’s social network conference may be created automatically upon detecting various *situations*. For example, this includes users listening to the same music, a certain number of users in the social network involved in a conversation (*e.g.*, related to a game), or users sharing

content on a particular topic. EX1005, 13:57-14:29; *see also id.*, 4:6-9, 12:37-65 (describing additional location-based conferencing). As I described with reference to claim elements [1.P], [1.1], and [1.6], conference system 12 identifies a user (*target member node*) to receive a message related to a situation according to parameters set by sender and then transmits the message to those identified users. EX1005, 4:60-5:2, 10:59-11:14.

156. For instance, Amidon teaches that “[b]ased on the distribution parameter(s), the social network server(s) can generate a recipient list and provide the recipient list to the messaging server(s),” subsequent to which “[t]he messaging server(s) can then relay the message to the appropriate conference participants.” EX1005, 4:65-5:2. As another example, Amidon discloses that “user A may wish to send the message to a more restricted group within the conference,” for which “one-degree parameter is included in the message metadata and relayed to server 16 by server 14,” and “the recipient list provided to messaging server 14 includes only user B,” due to which “server 14 relays user A's message to user B, but not to users C or D.” EX1005, 11:1-14.

157. In the embodiment of Amidon’s Figure 4, users send messages about a game (*i.e., information related to the situation*). EX1005, 17:21-35. Amidon explains, “each thread compris[es] data (messages, content, etc.).” EX1005, 17:22-26. Amidon’s “messages” and “content” contained in thread 214 are “[b]ased on

information received from [the] social network conferencing system [(i.e., the *situation*)].” *Id.*

158. Thus, based on Amidon’s disclosures and transmission of situation information, Amidon teaches element [1.7].

C. Independent Claim 10

159. In my opinion, Amidon-Issa teaches Claim 10.

160. Claim elements [10.1]-[10.7] are substantially the same as claim elements [1.1]-[1.7], respectively. Therefore, in my opinion, Amidon-Issa teaches claim elements [10.1]-[10.7] for the same reasons. Sections XIII.B.2-XIII.B.8. Claim 10 further recites generic sever components in claim elements [10.P] and [10.A]-[10.D], including “*central processing units*” and “*network controllers*.” I explain how Amidon-Issa teaches these components below.

Independent Claim 10	Independent Claim 1
[10.P] A system of creating a situational network based on a projection from a multi-dimensional personal information network and for transmitting information related to a situation, the method comprising:	[1.P] A method of creating a situational network based on a projection from a multi-dimensional personal information network and for transmitting information related to a situation, the method comprising:
[10.A] one or more central processing units of an event node server configured to:	

[10.1] (a) create an event node in the multi-dimensional personal information network, wherein the multi-dimensional personal information network comprises member nodes, and the event node that corresponds to the situation, wherein the event node is discoverable by browsing the multi-dimensional personal information network;	[1.1] (a) creating, by an event node server, an event node in the multi-dimensional personal information network, wherein the multi-dimensional personal information network comprises member nodes, and the event node that corresponds to the situation, wherein the event node is discoverable by browsing the multi-dimensional personal information network;
[10.2] (b) identify a subset of the member nodes of the multi-dimensional personal information network based on geographic proximity to the situation of a plurality of devices corresponding to the member nodes in the multi-dimensional personal information network; and	[1.2] (b) identifying a subset of the member nodes of the multi-dimensional personal information network based on geographic proximity to the situation of a plurality of devices corresponding to the member nodes in the multi-dimensional personal information network;
[10.B] one or more network controllers of the event node server configured to:	
[10.3] (c) transmit an invitation to establish a respective link with the event node to devices corresponding to each node in the subset formed in step	[1.3] (c) transmitting an invitation to establish a respective link with the event node to devices corresponding to each node in the subset formed in step

(b); and	(b);
[10.4] (d) receive a response from at least one of the devices from step (c) accepting the invitation to establish the respective link with the event node;	[1.4] (d) receiving a response from at least one of the devices from step (c) accepting the invitation to establish the respective link with the event node;
[10.C] wherein the one or more central processing units are configured to:	
[10.5] (e) establish the respective link with each device accepting the invitation to form the situational network; and	[1.5] (e) establishing the respective link with each device accepting the invitation to form the situational network;
[10.6] (f) identify a target member node wherein the target member node is connected to at least one node of the subset of the member nodes via at least one dimension of the multi-dimensional personal information network; and	[1.6] (f) identifying a target member node wherein the target member node is connected to at least one node of the subset of the member nodes via at least one dimension of the multi-dimensional personal information network; and
[10.D] wherein the one or more network controllers are configured to:	
[10.7] (g) transmit information related to the situation to the identified target member node.	[1.7] (g) transmitting information related to the situation to the identified target member node.

161. Regarding claim element [10.P], Amidon's system 12 supports social network based conferencing and teaches the claimed *system* for the reasons I provided for [1.P]. EX1005, 8:1-3, FIG. 2; Section XIII.B.1.

162. Regarding claim elements [10.A] and [10.C], Amidon's social network server 16 together with messaging server 14 teaches the claimed *event node server* and *central processing units* for reasons similar to those I presented for [1.1]. Section XIII.B.2; EX1005, 5:56-6:10 ("server processes discussed herein may be implemented using a single server or multiple servers working in combination."), 9:39-10:10, 10:59-67. A POSA would have recognized that servers like social network server 16 and/or messaging server 14 include central processing units and would have employed a central processing unit to perform the functionality described in Amidon. Indeed, Amidon's server functionality "may be implemented by one or more general-purpose or customized computing devices accessing software instructions rendered in a computer-readable form." EX1005, 6:19-32. "One of ordinary skill in the art will recognize the inherent flexibility of computer-based systems allows for a great variety of possible configurations, combinations, and divisions of tasks and functionality between and among components." EX1005, 5:59-63. "Such devices may access one or more computer-readable media that embody computer-readable instructions which, when executed by at least one computer, cause the at least one computer to implement one or more

embodiments of the methods disclosed herein.” EX1005, 6:33-39. Thus, Amidon’s server functionality uses *one or more central processing units*.

163. Regarding claim elements [10.B] and [10.D], Amidon also teaches *one or more network controllers*. For example, Amidon’s system can “relay [] communicated data over a network such as the Internet” as well as other “alternative networks such as a dial-in network, a local area network (LAN), wide area network (WAN), public switched telephone network (PSTN), the Internet, intranet or Ethernet type networks and others over any combination of hard-wired or wireless communication links.” EX1005, 6:11-18. Amidon describes implementing and facilitating these network communications using “hard-wired logic or other circuitry, including, but not limited to application-specific circuits.” EX1005, 6:27-30. “In some embodiments, social network server 16, messaging server 14, and/or other computing devices support social network circuit functionality.” EX1005, 9:39-41.

164. Thus, in my opinion, Amidon teaches using *one or more network controllers* with an event node server to perform the functionality described in claims 1 and 10.

D. Claims 2 and 11

165. Claims 2 and 11 depend from claims 1 and 10, respectively, and further recite: “*wherein the target member node is directly connected to the at least*

one node of the subset of the member nodes by a single dimension.” In my opinion, Amidon teaches these claims.

166. Amidon and Issa teach these claims as I explained with reference to claim element [1.6]. Section XIII.B.7. At the outset, I note that the '325 patent explains that “friendship is a dimension.” EX1001, 15:11-20. Other dimensions may include “family” or “preferences and behaviors.” *Id.* Amidon similarly teaches a connection between two users who are directly connected by a *single dimension*. I have annotated Figure 1 below. Figure 1 depicts a single connection between users A and B where “A has designated B as a friend,” and users A and B are “within one degree of separation.” EX1005, 7:6-10, 11:8-14.

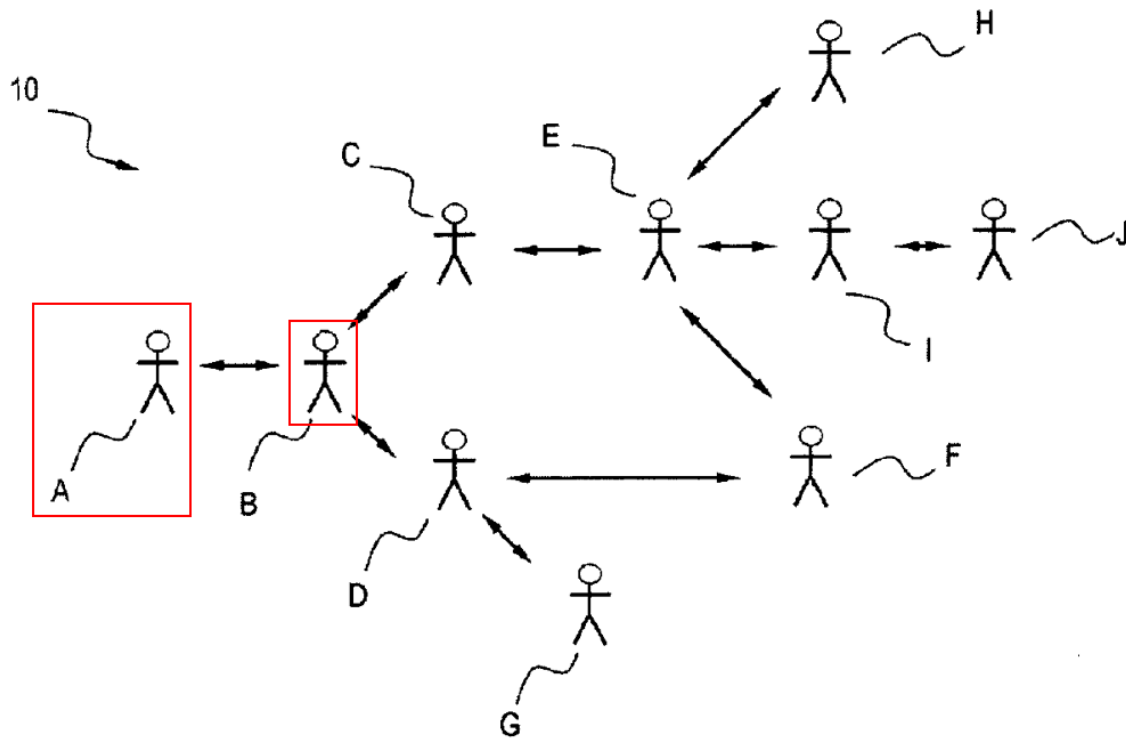


FIGURE 1

EX1005, FIG. 1 (annotated).

167. As I explained with reference to claim element [1.6], “user A may specify that [a] message is to be distributed only to members within one degree of separation.” EX1005, 11:4-7. “Server 16 determines the participants in the conference that meet the criterion; in this case, user B is the only member of the social network underlying the conference who is in within one degree of separation from user A.” EX1005, 11:8-11. “Therefore, the recipient list provided to messaging server 14 includes only user B.” EX1005, 11:11-14. Because users A and B are directly connected and because they are connected via a friendship dimension, Amidon teaches a *target member node* that is connected to a node of the subset of member nodes by a *single dimension* as I explained here and with reference to claim elements [1.2] and [1.6]. Sections XIII.B.3, XIII.B.7.

168. Thus, in my opinion, Amidon teaches claims 2 and 11.

E. Claims 3 and 12

169. Claims 3 and 12 depend from claims 1 and 10, respectively, and further recite: “*wherein the target member node is indirectly connected to the at least one node of the subset of the member nodes by a plurality of dimensions.*” In my opinion, Amidon teaches these claims.

170. Amidon and Issa teach these claims as I explained with reference to claim element [1.6]. Section XIII.B.7. The ’325 patent explains that “[t]wo nodes

that are separated by two or more degrees of separation are indirectly connected.”

EX1001, 16:66-67. Amidon similarly teaches a connection between two users who are indirectly connected by a *plurality of dimensions* (e.g., two). EX1005, 6:66-7:10, 12:37-65, 12:66-13:7, 13:23-33. I have reproduced Figure 1 below, which depicts two connections between users A and C (i.e., A is friend of B, and B is a friend of C) where Amidon explains, “assume that user A wishes to initiate a conference with all users of social network 10 within two degrees of separation (i.e. B, C, and D) ... [t]he conference would therefore begin with users A, B, and C.” EX1005, 15:48-51.

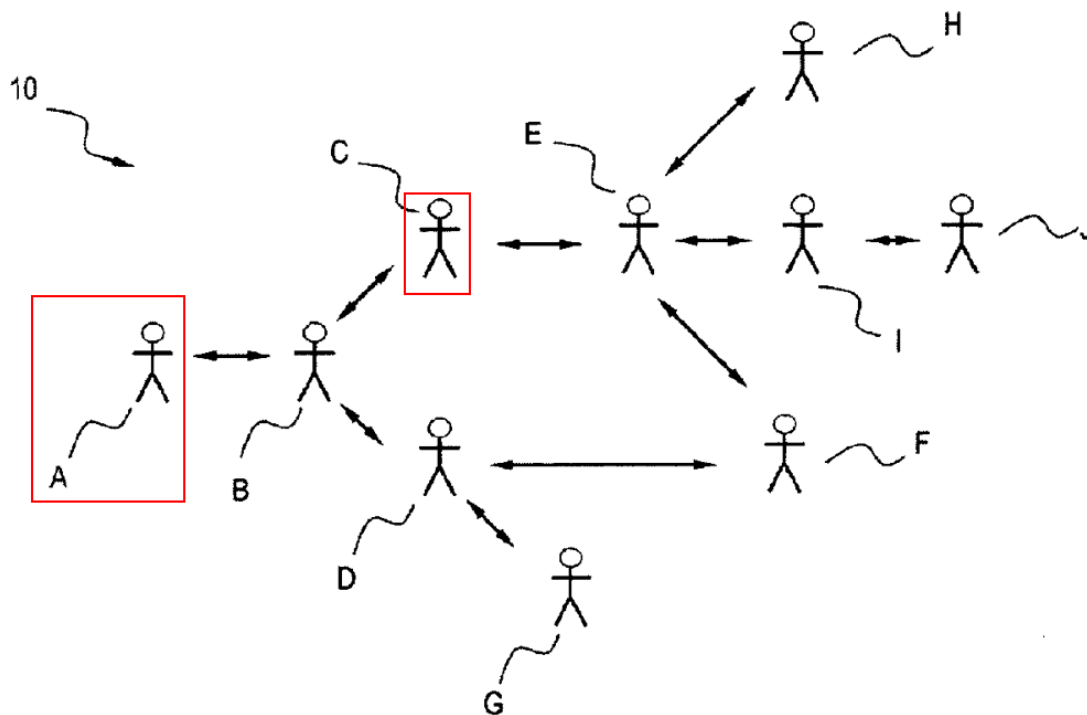


FIGURE 1

EX1005, FIG. 1 (annotated).

171. This “friend-of-a-friend (FOAF)” configuration teaches the claimed *indirect connection*. EX1005, 6:66-7:10, 12:37-65, 12:66-13:7, 13:23-33. For example, “a user may specify distribution [of messages] based on degrees of separation,” and “a social network may define various classifications of user relationships, such as ‘friend,’ ‘co-worker,’ ‘family,’ etc.” EX1005, 12:37-65. Amidon’s linking of users through different relationship types (e.g., friends, family, or co-workers) teaches the claimed *plurality of dimensions*. EX1005, 7:6-13 (describing friendship links as well as users D and F being “designated as brothers” and users I and J as “co-workers” in Figure 1). Amidon also explains how users are *indirectly connected*, “users within 2 degrees of separation from a moderator may be allowed to fully participate, users within four degrees of separation may be allowed to view the conference but not participate.” EX1005, 13:23-33.

172. As I explained with reference to claim element [1.6], when user A specifies distribution parameters allowing for the distribution to user C (e.g., when specifying two degrees of separation or no limits to distribution), Amidon’s conferencing system 12 identifies user C as a *target member node*. EX1005, 10:49-67. Because users A and C are indirectly connected via, for example, two friendship links or friendship dimensions, Amidon teaches identifying a *target member node* being *indirectly connected* when delivering a message from user A

to user C. Similarly, in the chain from user A to user C, dimensions such as friends, family, or co-workers may exist (e.g., user A is friends with user B and user B is a co-worker with user C). EX1005, 7:6-13. These different user relationships teach that the indirect connection can occur via a *plurality of dimensions*. Similarly, Amidon also describes a scenario where “user A could specify users within a single degree of separation from user E” and form a conference with and deliver messages to “users E, C, H, I, and F.” EX1005, 10:21-24. When different user relationships occur along this chain (e.g., friends, family, or co-workers), this provides another example of identifying a *target member node* connected via a *plurality of dimensions* when user A delivers a message to user H (e.g., four links between users A and H not all having the same dimension).

173. Thus, in my opinion, Amidon teaches identifying a *target member node* that is connected to a node of the subset of member nodes by a *plurality of dimensions* as I explained with reference to [1.2] and [1.6]. Sections XIII.B.3, XIII.B.7.

F. Claims 4 and 13

174. Claims 4 and 13 depend from claims 3 and 12, respectively, and further recite: “*wherein the target member node being indirectly connected to the at least one node of the subset of the member nodes comprises: the target member node being connected by a preference dimension to an additional node, and the at*

least one node of the subset of the member nodes being connected by the preference dimension to the additional node.”

175. Amidon and Issa teach these claims as I explained with reference to claim element [1.6]. Section XIII.B.7. The ’325 patent states that an “NDSN might utilize dimensions that link participants by preferences and behaviors, e.g., a preference for a type of product or service.” EX1001, 15:17-20.

176. Amidon explains users may be connected by preferences (the claimed *preference dimension*), such as “users currently listening to the same song, music by the same artist, music of the same genre, etc.” EX1005, 13:65-14:12, 14:22-25. “[A] user may provide for a conference to be formed when ***at least three users within two degrees of separation*** are listening to music performed by a specified artist.” EX1005, 14:9-12 (emphasis added). In this example, Amidon’s users that have “two degrees of separation” are *indirectly connected*, as recited in this claim. This indirect connection that exists between the users is based on them listening to the same song, artist, or genre (*i.e.*, the claimed *preference dimension*). Amidon describes other preferences or “interests” as well, such as for users “engaged in file sharing at certain times” or “sharing content on a particular topic (‘Vacation’).” EX1005, 12:37-46, 21:18-45, 20:63-66.

177. Thus, in my opinion, Amidon teaches claims 4 and 13.

G. Claims 5 and 14

178. Claims 5 and 14 depend from claims 1 and 10, respectively, and further recite: “*wherein the identifying the target member node comprises identifying the target member node based on a dimension of the multi-dimensional personal information network other than interaction with the event node.*” In my opinion, Amidon teaches these claims.

179. Amidon and Issa teach these claims as I explained with reference to claim element [1.6]. Section XIII.B.7. Specifically, Amidon explains that some users may have varying interaction permissions based on degrees of separation (e.g., friendship dimensions). EX1005, 12:37-46. “A participation policy or participation policies may be provided to any desired degree of granularity.” EX1005, 13:29-30. For example, “users within 2 degrees of separation from a moderator may be allowed to fully participate, [while] users *within four degrees of separation may be allowed to view the conference but not participate.*” EX1005, 13:23-29 (emphasis added); *see also id.*, 4:10-22 (“users meeting certain criteria may be able to view and participate in a conference, while users meeting other criteria may be limited to viewing, but not participating in, the conference”).

180. Based on this teaching, when a user transmits a message in such a conference, Amidon’s system identifies a recipient within four degrees of separation who may view the message but may not otherwise interact with the

conference (i.e., a dimension other than interaction with the event node). This recipient “may be able to view the conference, but not to send messages to the conference.” EX1005, 13:19-20. Amidon still identifies this message recipient—who is four friendship links or friendship dimensions away—according to set distribution parameters as I previously explained. Section XIII.B.7. The identification of such a user who is linked by one or more friendship dimensions but is unable to participate in the conference teaches the features of claims 5 and 14. Thus, in my opinion, Amidon teaches identifying a *target member node based on a dimension other than interaction with the event node* and therefore teaches claims 5 and 14.

H. Claims 6 and 15

181. Claims 6 and 15 depend from claims 1 and 10, respectively, and further recite: “*wherein the identifying the target member node comprises identifying the target member node based on a dimension of the multi-dimensional personal information network that indicates a connection to another node that interacted with the event node.*” In my opinion, Amidon teaches these claims.

182. Amidon teaches claims 6 and 15 for reasons I provided for claims 5 and 14. Section XIII.G. As I previously explained, Amidon describes a conference where “users within 2 degrees of separation from a moderator may be allowed to fully participate, [while] users *within four degrees of separation may be allowed*

to view the conference but not participate.” EX1005, 13:23-29 (emphasis added).

In this scenario, the nodes within two degrees of separation correspond to *another node that interacted with the event node* while the nodes having three and four degrees of separation are identified based on connections to the nodes within two degrees of separation and therefore teach the claimed *target member node*. These connections can be seen from Amidon’s Figure 1 below:

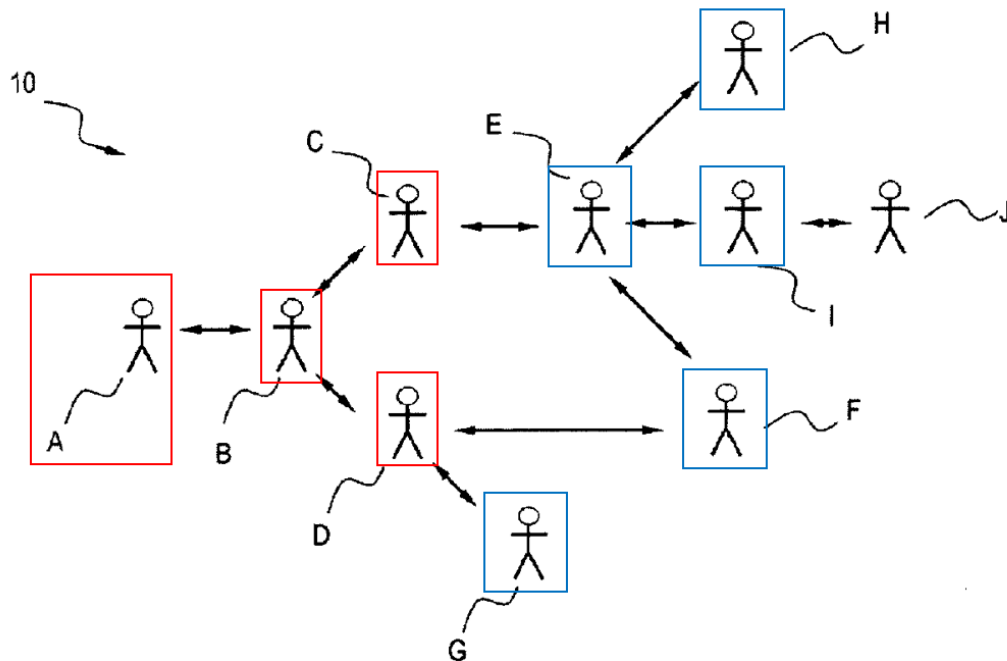


FIGURE 1

EX1005, FIG. 1 (annotated).

183. For example, users B, C, and D are within two degrees of separation from user A while users E, H, I, F, and G are within four degrees of separation from user A. In an example where user C interacts with the conference while user E views conference messages but does not participate, user E teaches the claimed

target member node. EX1005, 6:66-7:18, 7:38-47. Namely, user E is connected to user C, which is *another node that interacted with the event node*.

184. Thus, in my opinion, Amidon teaches claims 6 and 15.

I. Claims 7 and 16

185. Claims 7 and 16 depend from claims 1 and 10, respectively, and further recite: “*wherein the identifying the target member node comprises identifying the target member node based on a dimension of the multi-dimensional personal information network that indicates a connection to another node that established a link with the event node.*” In my opinion, Amidon teaches these claims.

186. Amidon discloses claims 7 and 16 for the reasons I provided for claims 6 and 15 as well as for claim elements [1.3]-[1.5]. Section XIII.B.4-XIII.B.6, XIII.H. As I previously explained, Amidon establishes links between an event node and users who have accepted an invitation. *Id.* This may form the conference depicted in Figure 1:

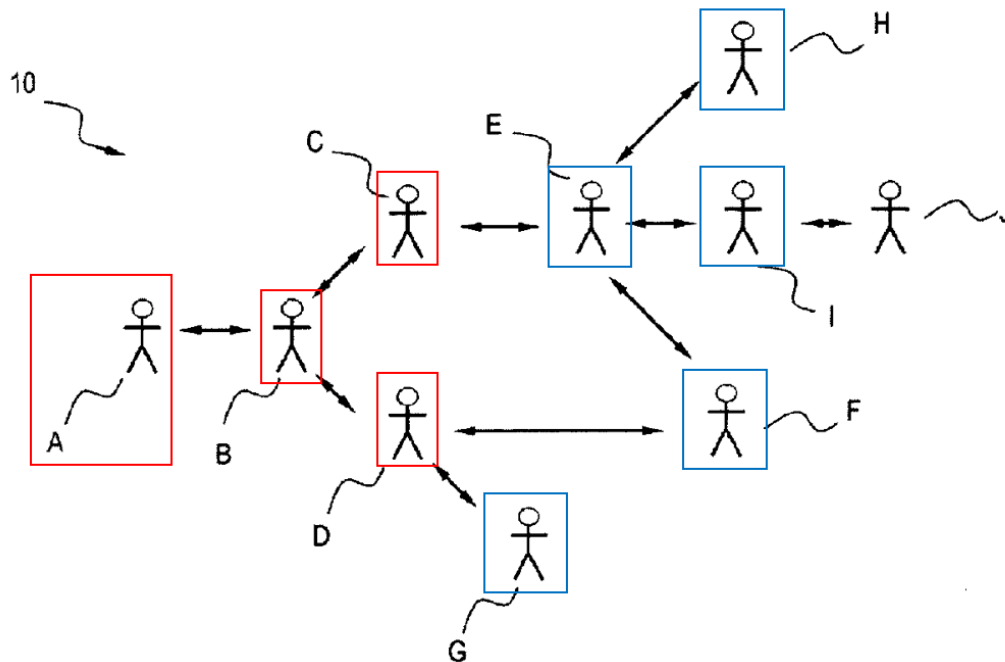


FIGURE 1

EX1005, FIG. 1 (annotated).

187. As I previously explained, Amidon describes a conference where “users within 2 degrees of separation from a moderator may be allowed to fully participate, [while] users *within four degrees of separation may be allowed to view the conference but not participate.*” EX1005, 13:23-29 (emphasis added). For example, users A, B, C, and D may participate in a conference formed by accepting a link. EX1005, 10:45-67. In the example where user C established a link with the event node to interact with the conference while user E views conference messages but does not participate, user E teaches the claimed *target member node*. EX1005, 6:66-7:18, 7:38-47. Namely, user E is connected to user C, which is *another node that established a link with the event node*.

188. Thus, in my opinion, Amidon teaches claims 7 and 16.

J. Claims 8 and 17

189. Claims 8 and 17 depend from claims 1 and 10, respectively, and further recite: “*wherein the identifying the target member node comprises identifying the target member node based on a dimension of the multi-dimensional personal information network that indicates a common dimension with another node that interacted with the event node.*” In my opinion, Amidon teaches these claims.

190. Amidon discloses claims 8 and 17 for the reasons I presented for claims 6 and 15. Section XIII.H. Specifically, I note that claims 8 and 17 recite a “common dimension” rather than a “connection” as recited claims 6 and 15, but Amidon discloses the claimed “common dimension” for the same reasons. *Id.* For example, Amidon’s Figure 1 depicts users C and E linked as friends. EX1005, 7:6-18 (“users A through J may have designated one another as ‘friends’ in a social networking site in the manner illustrated (i.e. A has designated B as a friend, B has designated C and D as friends, and so forth)”).

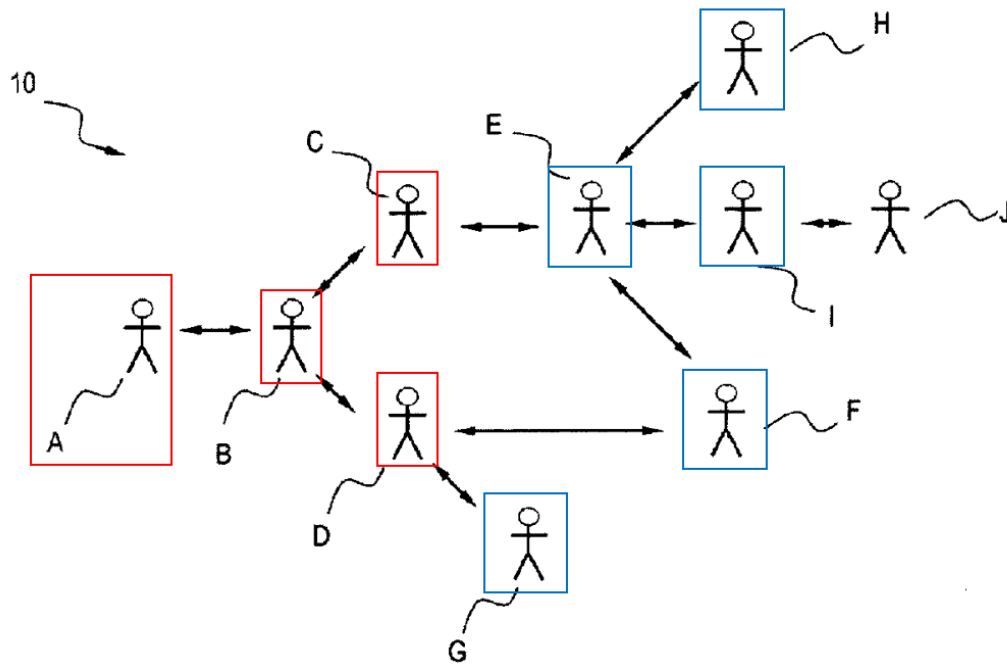


FIGURE 1

EX1005, FIG. 1 (annotated).

191. This friendship between users C and E is a *common dimension* for the reasons that I previously explained with reference to [1.6]. Section XIII.B.7. This is also consistent with the '325 patent, which indicates that “friendship is a dimension.” EX1001, 15:11-17.

192. Thus, in my opinion, Amidon teaches claims 8 and 17.

K. Claims 9 and 18

193. Claims 9 and 18 depend from claims 1 and 10, respectively, and further recite: “*wherein the identifying the target member node comprises identifying the target member node based on a dimension of the multi-dimensional personal information network that indicates a common dimension with another*

node, that is linked to the event node.” In my opinion, Amidon teaches these claims.

194. Amidon discloses claims 9 and 18 for the reasons I presented for claims 7 and 16. Section XIII.I. Claims 9 and 18 recite a “common dimension” rather than a “connection” as recited claims 7 and 16, but Amidon discloses the claimed “common dimension” for the same reasons as I explained with reference to claims 8 and 17. Sections XIII.J. In the example with users C and E, when user C has established a link with the event node and user E views conference messages based on a common dimension or connection with user C, user E teaches the claimed *target member node*. EX1005, 6:66-7:18, 7:38-47.

195. Thus, in my opinion, Amidon teaches claims 8 and 17.

XIV. GROUND 2: CLAIMS 1-18 WOULD HAVE BEEN OBVIOUS OVER WONG, GOGIC, AND KRAFT.

196. In my opinion, the combination of Wong-Gogic-Kraft renders obvious claims 1-18.

A. A POSA would have found it obvious to combine Wong, Gogic, and Kraft.

197. I understand that the Board determined in IPR2024-00529 that a POSA would have been motivated to combine Wong and Gogic. EX1020, 34-37. To the extent SitNet continues to argue that the combination of Wong and Gogic do not render obvious an “event node,” Kraft explicitly teaches such an event node.

EX1019, 8:39-44, 9:65-66. In my opinion, a POSA would have been motivated to incorporate Kraft in the Wong-Gogic combination to further extend the “node types” described in Wong, which would enable further categorization and linking of additional types of information and allow for additional types of connections between nodes. EX1006, ¶¶22, 26; EX1019, 2:29-31. Additionally, a POSA would have incorporated Kraft with Wong-Gogic to provide a discoverable event node.

198. As I previously explained in IPR2024-00529, 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. EX1022, ¶¶163-168; *see also* EX1020, 34-37; EX1021, 47-49.

199. Prior to 2007, it was known that online forums could be used to aid in emergency planning and response. EX1009, 56. For example, 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 were created to collect and share location-specific information about the storm and the damage in its aftermath. *Id.* Wong teaches that “notification of updates” or “alerts” may be communicated via its social network. EX1006, ¶44. A POSA would have recognized that it would be useful in Wong’s social network system to send such updates or alerts to users located in an emergency-affected area, similar to the

known use of online forums to provide this information.³ This would have been a natural extension of using online forums. Around the time of the invention, a transition from topic-focused online communities, such as forums, to person-focused networks, such as social network sites, was occurring. *See, e.g.*, EX1013, 219 (“Early public online communities such as Usenet and public discussion forums were structured by topics or according to topical hierarchies, but social network sites are structured as personal (or ‘egocentric’) networks, with the individual at the center of their own community.”).

200. This would have led a POSA to Gogic. 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,” facilitates the deployment of emergency services. EX1007, 4:20-24.

201. In my opinion, 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. Gogic expressly recognizes that its invention is not limited to the wireless CDMA communication system described in

³ Kraft also supports this understanding and explicitly describes the concept of “event” nodes that can represent “natural disasters.” EX1019, 8:39-44, 9:65-66.

the exemplary embodiments, and that it can be used in “any wireless communication system including GSM systems, AMPS systems, TDMA systems, satellite communication systems, as well as other communications systems.”

EX1007, 4:40-57. Gogic further discloses that its invention is not limited to wireless communication systems, but can also be used with, for example, “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.” EX1007, 4:46-57. 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, for example, “laptops, desktops, handheld, personal digital assistants, [or] mobile telephones.” EX1006, ¶17. Thus, both Gogic and Wong envision communication using similar technologies.

202. A POSA would have recognized that Gogic’s teachings of an ad-hoc location-based communication group could be implemented in the “communication system” of Wong’s social network. In my opinion, a POSA would have been motivated to do so, at least in an emergency situation, to facilitate communications in an emergency and for appropriate deployment of emergency services. EX1007, 1:22-26. Gogic expressly recognizes this motivation, noting 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 facilitate the deployment of emergency services. EX1007, 4:20-24.

203. Further, as I explained above, a POSA would have had a reasonable expectation of success in implementing the combination. The proposed combination simply combines prior-art elements (*e.g.*, combines Wong's social network communication system with Gogic's ad-hoc location-based communication group) according to known methods to yield predictable results, and is also 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.

204. Additionally, in my opinion, a POSA would have been motivated to implement Kraft with Wong and Gogic to further extend the types of nodes that may be used in Wong's social-network communication system and to provide node discovery and navigability. EX1006, ¶¶22, 26; EX1019, 16:36-57. For example, both Wong and Kraft describe nodes that can correspond to people, places, businesses, or groups. *Id.*; EX1019, 9:50-10:6. Additionally, Kraft describes nodes for an "event," which can represent "occurrences such as elections, natural disasters, sports events, and so on." EX1019, 8:39-44, 9:65-66. Kraft also describes "Community" and "Thought" nodes. *Id.*, 9:50-10:6. Given the overlap in the types of nodes that Wong already provides, a POSA would have recognized that

implementing additional node types would have been a natural extension of Wong. Additionally, a POSA would have been motivated to implement Kraft's teaching of "navigable" nodes and a "search-and-navigation interface" allowing a user to discover other nodes. EX1019, 8:1-10, 9:15-28, 10:36-41, 13:16-59. Navigable nodes would have extended Wong's functionality of "searching" for and "selecting" a node to link to another node by allowing users to discover additional nodes for linkage. EX1006, ¶28. For example, this would enable discovering an "event" node and allow linking to such an event node to receive or communicate information related to an event, such as a natural disaster or emergency described in Kraft and Gogic. EX1019, 8:39-44, 9:65-66; EX1007, 2:12-17.

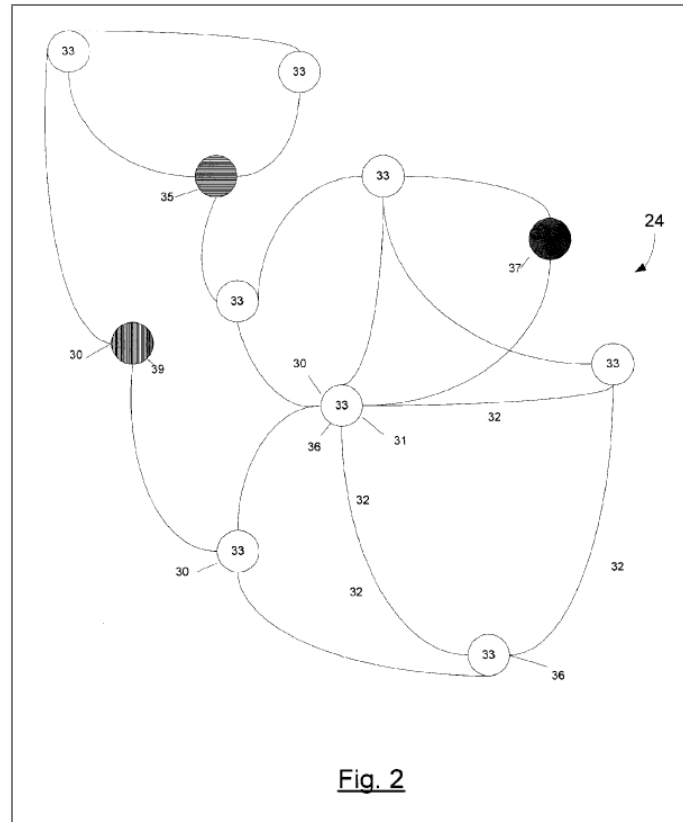
205. Similar to combining Wong and Gogic, a POSA would have also easily combined Kraft with Wong-Gogic given that both Kraft and Wong describe node implementations using a "conventional social network." EX1006, ¶44; EX1019, 10:22-30. Thus, forming the combination of Wong, Gogic, and Kraft would have predictably amounted to combining prior-art elements according to known methods to yield predictable results and using a known technique to improve similar devices in the same way.

B. Independent Claim 1

- 1. [1.P]: A method of creating a situational network based on a projection from a multi-dimensional personal information network and for transmitting information related to a situation, the method comprising:**

206. I understand that in certain circumstances the preamble of a claim may be limiting. To the extent the preamble is determined to be limiting, it is my opinion that the combination of Wong-Gogic-Kraft teaches the preamble.

207. Wong and Kraft teach the claimed *multi-dimensional personal information network*. In Wong, “[t]he network ... 24 can be viewed in many ways, such as graphically as a set of nodes 30 connected by their associated linkages 32.” EX1006, ¶35. “The network ... can be presented graphically by setting a single node as the root of the network ... and displaying a set number of linkages 32 radiating from the root node.” *Id.* Figure 2 depicts an example of Wong’s network.



EX1006, FIG. 2.

208. Kraft also describes a similar network and teaches a “world model.” Figure 2 from Kraft depicts “world model 200” as a “network graph” that “represents entities relevant to a real-world event.” EX1019, 8:32-38.

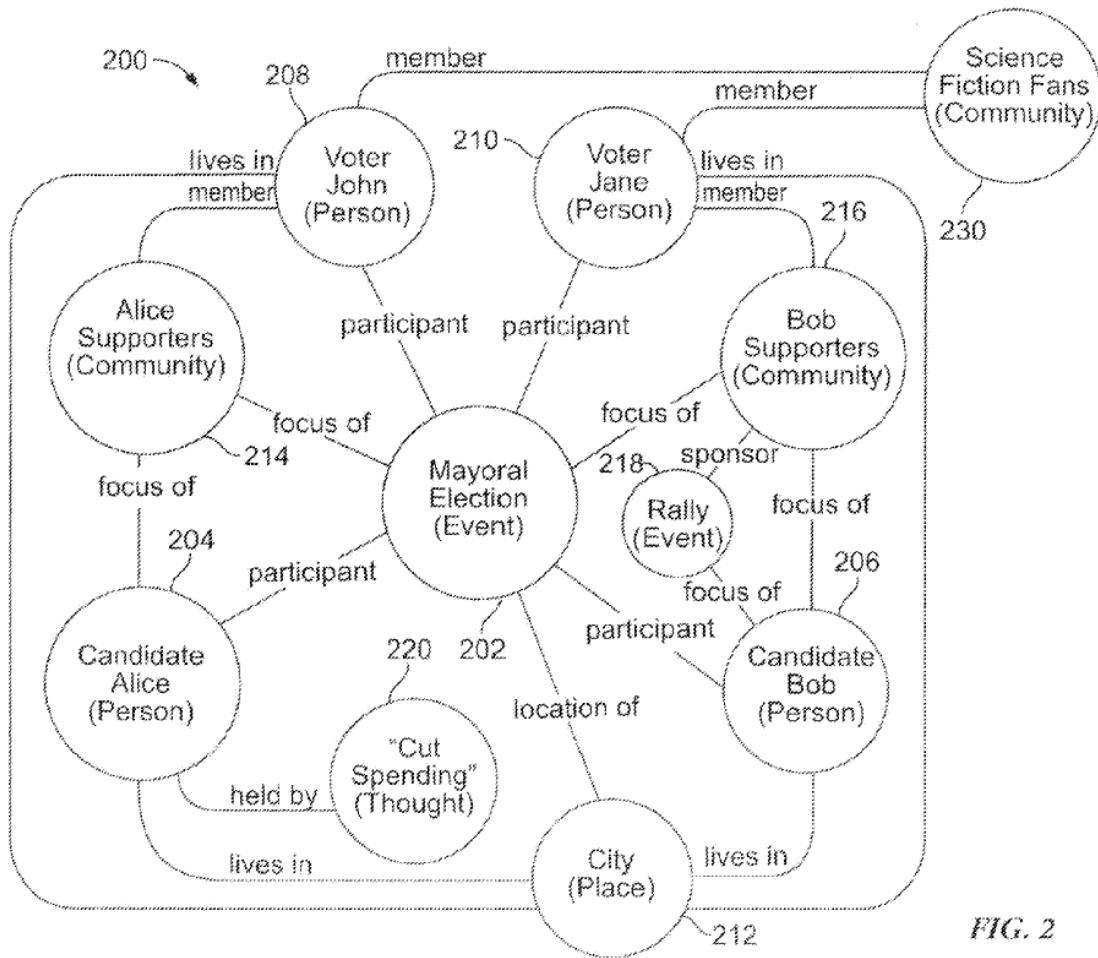


FIG. 2

EX1019, FIG. 2.

209. Kraft's world model includes a "collection of interrelated data objects" represented as "nodes" corresponding to respective entity models. EX1019, 8:32-38. Kraft explains that an 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.*" EX1019, 9:42-47 (emphasis

added). In Figure 2, each line or “edge” represents “a relationship between entity models.” EX1019, 8:33-38.

210. Kraft explains that each of the entity models (*i.e.*, “nodes”) correspond to different categories. EX1019, 9:50-10:6. For example, a “Person” node represents “individual human beings,” a “Businesses” node represents “commercial enterprises, non-profit organizations, or individuals acting as providers of goods or services,” and an “Event” node represents “occurrences such as elections, natural disasters, sports events, and so on.” *Id.*

211. Additionally, and similar to Wong, Kraft explains that the “world model can include features of a conventional social network.” EX1019, 10:22-30. For example, “Person entity models can have trust (or friendship) relationships with each other; a Person entity model may trust another Person entity model or be trusted by another Person entity model.” *Id.* In addition to relationships between Person nodes, the world model allows other entities to provide “additional avenues for categorizing, filtering and retrieving information.” *Id.* Based on these teachings, in my opinion, both Wong and Kraft teach the claimed *multi-dimensional personal information network*.

212. Additionally, I note that Wong and Kraft in view of Gogic further renders obvious *creating a situational network based on a projection and transmitting information related to a situation*. Gogic discloses a “method for

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.” EX1007, 4:16-20. For example, Gogic teaches identifying users and forming an “ad-hoc group” and “providing group communication services” to users experiencing an “emergency situation.” EX1007, 4:16-24, Abstract. Gogic continues by explaining 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 facilitate the deployment of emergency services. EX1007, 4:20-24. Gogic explains that “group membership location criteria such as region or location criteria defining the inclusive boundary of users that are invited to join the group,” may be used to identify a particular set of users or communication devices to form into a group. EX1007, 10:16-34. Thus, Gogic describes identifying and connecting certain communication devices in a geographic proximity and therefore teaches *creating a situational network based on a projection*. EX1007, 6:3-21; EX1001, 17:4-5, 22:52-23:39.

213. Gogic further explains that *information related to a situation* can be transmitted to each member of the ad-hoc group. For example, Gogic describes granting “[p]ermission to transmit to others of the plurality of wireless communication devices of the communication group.” EX1007, Abstract. Gogic

describes the transmission of “[a]udio, including voice, video, or data (collectively referred to herein as media).” EX1007, 9:8-10. Gogic further explains that this information is related to a situation because Gogic’s transmissions operate over an “emergency broadcast channel,” which would allow communications related to an “emergency situation.” EX1007, 10:51-61, 12:1-18. Gogic also allows a “disabled user to make voice requests for emergency services or may allow monitoring of situational or conditional data.” EX1007, 12:3-6. Thus, Gogic facilitates the communication of information related to a situation.

214. Both Wong and Kraft also aggregate and distribute information via nodes. For example, Wong communicates information, “such as notification of updates, alerts, sharing of files and photos, blogs, instant messaging and comments,” using conventional “social networking features.” EX1006, ¶44. Wong also teaches that “[t]he network ... 24 can be viewed in many ways, such as graphically as a set of nodes 30 connected by their associated linkages 32.” EX1006, ¶35. “The network ... can be presented graphically by setting a single node as the root of the network ... and displaying a set number of linkages 32 radiating from the root node.” *Id.* Kraft similarly aggregates and distributes “media content such as photographs or other images of the real-world entity, audio or video clips featuring the real-world entity, or clips reporting on or discussing the real-world entity.” EX1019, 11:58-63. When used for an Event node, this content

includes information related to situations like “natural disasters.” EX1019, 8:39-44, 9:65-66. In this manner, both Wong and Kraft also teach the distribution of *information related to a situation*.

215. As I discussed above, 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 emergency-affected area. Kraft further supports this understanding via the use of an “event” node to represent an event like a natural disaster. EX1019, 8:39-44, 9:65-66. Thus, in the combination of Wong, Gogic, and Kraft, a POSA would have been motivated to select the particular subset of nodes in Wong’s social network that are invited to participate in the ad-hoc location-based communication group based on the location thereof, *e.g.*, in the affected area.

216. Thus, in my opinion, the Wong-Gogic-Kraft combination teaches the preamble.

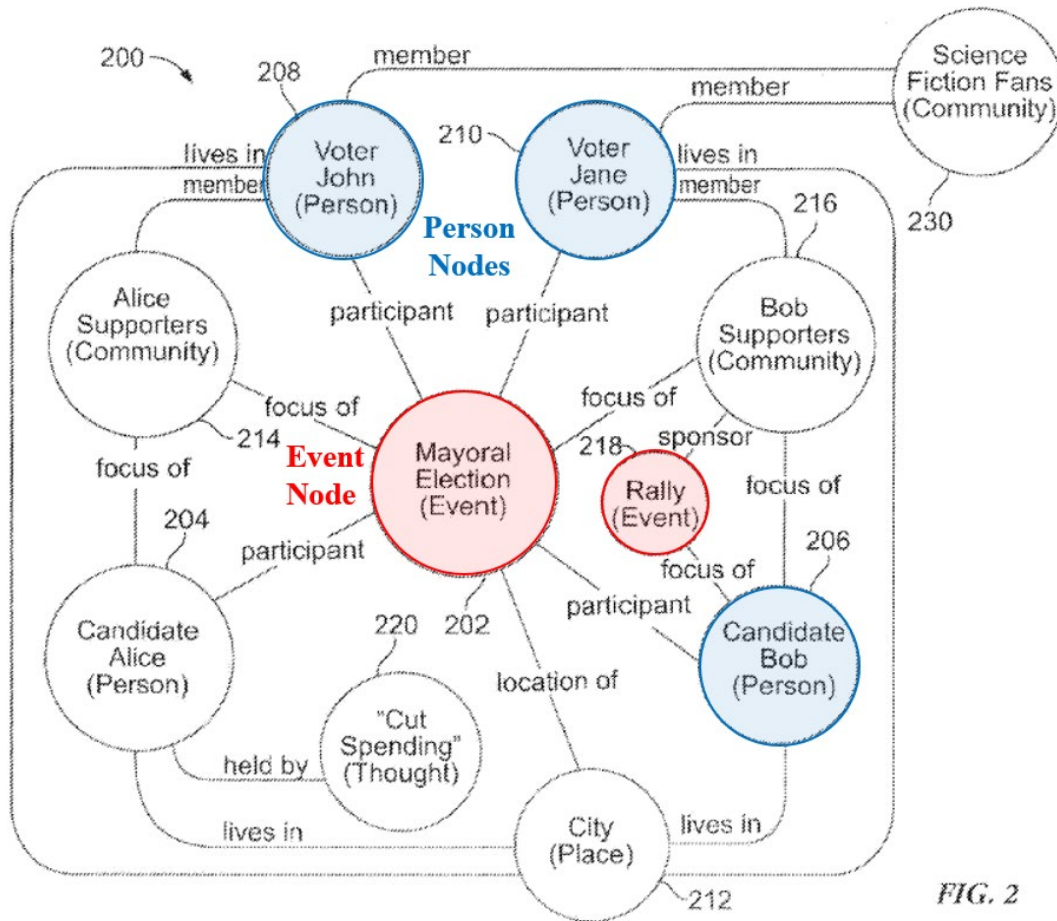
2. **[1.1]: (a) creating, by an event node server, an event node in the multi-dimensional personal information network, wherein the multi-dimensional personal information network comprises member nodes, and the event node that corresponds to the situation, wherein the event node is discoverable by browsing the multi-dimensional personal information network;**

217. In my opinion, the Wong-Gogic-Kraft combination teaches this element, which can be viewed as including four components: (i) *creating, by an event node server, an event node*; (ii) *the event node is in a multi-dimensional personal information network that comprises member nodes*; (iii) *the event node corresponds to the situation*; and (iv) *the event node is discoverable by browsing the multi-dimensional personal information network*. In my opinion, the Wong-Gogic-Kraft combination teaches all four components of [1.1].

218. **First, for component (i)**, the combination of Wong-Gogic-Kraft teaches the creation of an *event node* by an *event node server*. Wong describes network 24 that includes nodes 30 joined by connections 32, which are also referred to as “linkages.” EX1006, ¶21. While Wong describes four exemplary “main node types”—people, places, objects, animals—Wong also teaches that there may be additional main node types and that new nodes may be created. EX1006, ¶¶21-22, 26-27, FIGs. 5, 6. As taught in Gogic and Kraft, one such type of node is an event node. Section XIV.A.

219. For example, Gogic teaches identifying “the occurrence or presence of an event or condition wherein communications between proximately located users could be beneficial.” EX1007, 10:18-21. In response to identifying the event or condition, Gogic creates an ad-hoc communication group as initiated, for example, by dispatcher 400 via administrator interface 226. EX1007, 7:25-34, 10:16-11:13, FIG. 4. Based on Gogic’s teachings and because Wong’s communication happens between nodes (EX1006, ¶44), a POSA would have recognized that a new node (*i.e., an event node*) related to the identified event or condition would be useful in Wong’s social network to facilitate communication related to the event or condition. The nodes/users would be linked to this newly created event node in Wong’s system and would form an ad-hoc communication group, which is desirable as taught by Gogic.

220. Additionally, Kraft confirms that event nodes were well-known and commonly implemented as I previously explained. Section XII.E. Figure 2 from Kraft depicts an example of an event node with additional linked nodes. EX1019, 8:39-44, 9:65-66.



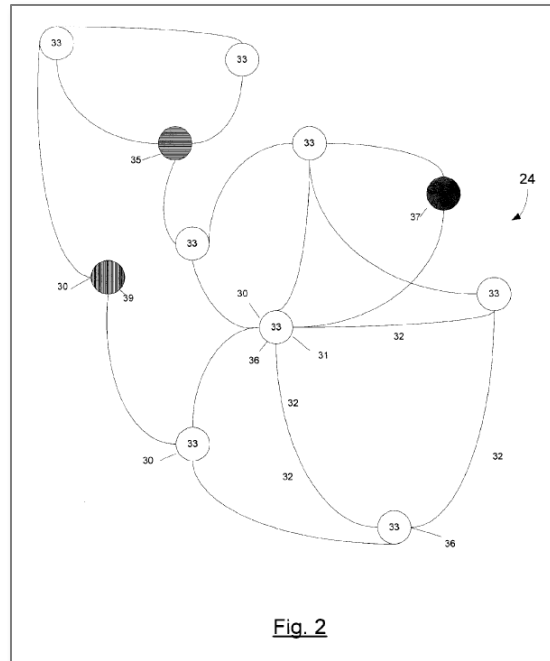
EX1019, FIG. 2 (annotated).

221. In Wong, each node can contain, for example, information pertaining to the person or entity that it represents, a home page, communication tools, data and files, storage space, network information, and/or editing tools. EX1006, ¶¶19, 31-32. A POSA would have understood that each node is created by and associated with a server to provide these capabilities. For instance, to create and implement the event node, Wong describes a “social network server or servers 20” that create node. EX1006, ¶17 (“A social network server or servers 20 maintain a system comprising an Internet website, database and associated data, which is accessible

to users 10. 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.”), ¶18 (creation of nodes is “carried out in a manner well known to web site programmers”). Wong’s server 20, thus, discloses or at least suggests the claimed *event node server*. Kraft similarly discloses a “world server” that facilitates the creation of nodes like an “Event” node. EX1019, 2:47-61, 6:33-7:10. Wong’s server 20 as combined with Gogic and Kraft’s event node and “world server” teachings, therefore renders obvious the claimed *event node server*. This is consistent with the ’325 patent’s teaching that “users may have their nodes hosted in a common location, e.g., on a local or remote server.” EX1001, 16:1-2.

222. Thus, in my opinion, the Wong-Gogic-Kraft combination teaches an event node created by an event node server.

223. **Second, for component (ii)**, Wong teaches a *multi-dimensional personal information network* that *comprises member nodes*. As I explained with reference to [1.P], Wong’s network 24 teaches a *multi-dimensional personal information network*. EX1006, FIG. 2. Section XIV.B.1.



EX1006, FIG. 2.

224. As seen in Wong’s Figure 2, network 24 includes nodes 30 joined by connections 32, also called “linkages.” EX1006, ¶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.* Linkages 32 have a defined linkage type, “representing the actual type relationship which exists between the person, place, object or animal represented by the linked nodes.” EX1006, ¶24. “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* EX1006, ¶33 (“The relationship of a node to another node within the same network of living and non-living entities can also be represented by more than one defined linkage type.”), 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.” EX1006, ¶19; *see* EX1006, ¶¶31-32. Wong also teaches that “notification of updates” or “alerts” may be communicated via its social network. EX1006, ¶44.

225. In the Wong-Gogic-Kraft combination, the event node described in Gogic and Kraft would have been implemented in Wong’s social network. Section XIV.A. For example, Wong describes four exemplary “main node types”—people, places, objects, animals—but also teaches that there may be additional main node types. EX1006, ¶¶21-22. Wong also discloses creating new nodes. EX1006, ¶¶26-27, FIGs. 5, 6. As I discussed above, Wong teaches that a “notification of updates” or “alerts” may be communicated via its social network. EX1006, ¶44. Further, as Kraft explains, an event node can be linked to person nodes, which can be linked via a “conventional social network.” EX1019, 8:39-44, 10:25-30, FIG. 2. The Wong-Gogic-Kraft combination therefore renders obvious the claimed *event node* being part of a *multi-dimensional personal information network* that comprises *member nodes*. Section XIV.A.

226. **Third, for component (iii),** Gogic and Kraft teach the *event node* corresponding to a *situation*. Gogic teaches that “the occurrence or presence of an event or condition wherein communications between proximately located users could be beneficial.” EX1007, 10:18-21. In response to identifying the event or

condition, Gogic creates an ad-hoc communication group as initiated, for example, by dispatcher 400 via administrator interface 226. EX1007, 7:25-34, 10:16-11:13, FIG. 4. Based on these teachings of Gogic—and because, in Wong, communication happens between nodes, EX1006, ¶44—a POSA would have recognized that a new node (*i.e., an event node*) related to the identified event or condition (*i.e., a situation*) would be useful in Wong’s social network to facilitate communication related to the event or condition. The nodes/users linked to this new event node in Wong’s system would, thus, form an ad-hoc communication group, which is desirable as taught by Gogic.

227. Additionally, Kraft also describes event nodes that correspond to a situation. 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).” EX1019, 8:39-44 (emphasis added). Kraft further explains that event nodes or event models can represent “occurrences such as elections, *natural disasters*, sports events.” EX1019, 9:65-66 (emphasis added). Kraft explains that “[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.” EX1019, 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.” EX1019, 3:18-24.

228. This is consistent with how a POSA would have understood the term “node.” For example, Vasudev describes that “nodes can represent persons, locations, entities, information, and the like,” with “nodes [being] typically arranged with directed edges that establish connections between the nodes.” EX1010, 1:13-16; *see also* EX1010, 3:56-59 (“Nodes in the social network can include, but are not limited to, a user, a friend, a relative, a classmate, a location, a resource, a contact, a domain, a message address, and a member.”).

229. Thus, the combination of Wong-Gogic-Kraft also teaches the claimed *event node* corresponding to a *situation*.

230. **Fourth, for component (iv),** Wong-Gogic-Kraft teaches *the event node is discoverable by browsing the multi-dimensional personal information network*. For example, Wong describes a user “searching” for and “selecting” a node to link to another node. EX1006, ¶28. Kraft similarly explains that entity models or nodes can be “navigable” via their linked relationships. EX1019, 8:1-10. “World model 200 advantageously allows a user to navigate among related entities.” EX1019, 9:15-28. Kraft explains that users can follow the links between nodes to discover other nodes, which teaches the claimed *discoverable by browsing*. EX1019, 9:15-28, 10:36-41, 13:16-26, 16:36-57. Kraft further explains that a user may “access a search-and-navigation interface to world model data store 162 in order to identify entity models.” EX1019, 16:28-42, 16:52-59. As I

previously explained, one such entity model or node that Kraft describes is an “event” node, which can correspond to a natural disaster similar to the natural disaster or emergency described in Gogic. EX1007, 2:12-17.

231. Thus, in my opinion, the Wong-Gogic-Kraft combination teaches all four features of element [1.1].

3. **[1.2]: (b) identifying a subset of the member nodes of the multi-dimensional personal information network based on geographic proximity to the situation of a plurality of devices corresponding to the member nodes in the multi-dimensional personal information network;**

232. In my opinion, the Wong-Gogic-Kraft combination teaches claim element [1.2]. In particular, (i) Wong teaches *identifying a subset of the member nodes of the multi-dimensional personal information network*, and (ii) Gogic teaches that the identification of nodes is *based on geographic proximity to the situation of a plurality of devices*, as I explain below.

233. *First*, Wong teaches *identifying a subset of the member nodes of the multi-dimensional personal information network*. In Wong, a user “with an active node can view the connection, one or a series of defined linkages of nodes, between its own node and any other node in the network of living and non-living entities.” EX1006, ¶34. “The network ... 24 can be viewed in many ways, such as graphically as a set of nodes 30 connected by their associated linkages 32.” EX1006, ¶35. “The network ... can be presented graphically by setting a single

node as the root of the network ... and displaying a set number of linkages 32 radiating from the root node.” *Id.* Wong also teaches that a “sender can select those in the network ... who can receive or view a particular communication.” EX1006, ¶44. This is consistent with the ’325 patent’s description of “a ‘projected’ view” as “a subset of the nodes” of the NDSN. EX1001, 17:4-5.

234. *Second*, Gogic identifies *a subset of member nodes based on geographic proximity of a plurality of devices to the situation* when determining which users to invite to the ad-hoc communication group. As described with respect to Gogic’s Figure 4, “the group is formed on the basis of proximity to a designated location.” EX1007, 10:16-18. Gogic also describes including “group membership location criteria such as region or location criteria defining the inclusive boundary of users that are invited to join the group.” EX1007, 10:26-29. “[R]epresentative location criteria may include a location centerpoint and an acceptable radius, perimeter locations, servicing base station identifier, as well as other location based identifiers know[n] by those of ordinary skill in the art.” EX1007, 10:30-34. In this manner, Gogic describes identifying users that are “proximately located” to “the occurrence or presence of an event or condition.” EX1007, 10:18-21. This aids emergency response teams when establishing “communication with any and all users in an area affected by a large scale natural disaster” and providing “emergency assistance information that is specific to the

area where they are located.” EX1007, 2:12-17. Gogic therefore teaches identifying users and user communication devices that are geographically proximate to an emergency situation.

235. As I previously explained, 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 emergency-affected area. Section XIV.A. Kraft confirms this understanding and describes updating information related to entity models or nodes such as an “Event” node. EX1019, 8:39-44, 9:65-66, 11:47-57, 15:20-28, 17:28-34, 18:17-19. Thus, in the Wong-Gogic-Kraft combination, a POSA would have been motivated to identify and select the particular subset of nodes in Wong’s social network that are invited to participate in the ad-hoc location-based communication group based on the geographic locations of the devices used to access the social network.

236. Thus, in my opinion, the Wong-Gogic-Kraft combination teaches element [1.2].

4. **[1.3]: (c) transmitting an invitation to establish a respective link with the event node to devices corresponding to each node in the subset formed in step (b);**

237. In my opinion, the Wong-Gogic-Kraft combination teaches this element.

238. *First*, the combination teaches *transmitting an invitation ... to devices corresponding to each node in the subset formed in step (b)*. Gogic teaches *transmitting an invitation* to join the ad-hoc communication group. “MSC/BS_N 408 as previously directed 418 by CM 404 transmits 420 a broad or indiscriminant or generalized invitation to join a group to all recipient CDs with their invitation acceptance being conditional upon the CD qualifying according to the location criteria also transmitted in the broad indiscriminant invitation.” EX1007, 10:45-50. “The CDs 412, 414, 416 receive the broad indiscriminant invitation to join the group with the right to accept the invitation being conditional upon the CD qualifying according to the location criteria also transmitted with the broad indiscriminant invitation in the emergency broadcast channel.” EX1007, 10:57-61.

239. Based on Gogic’s teachings, a POSA would have been motivated to similarly transmit an invitation to participate in the ad-hoc location-based communication group to the devices corresponding to the particular subset of nodes in Wong’s social network determined to meet the geographic-location criteria. Alternatively, as in Gogic, a POSA would have been motivated to transmit a broad invitation to all nodes in the network along with geographic-location criteria. I note that the claim language does not require the invitation to be sent *only* to the devices corresponding to the nodes in the projection. *See also* EX1001,

18:23-27 (describing that a “node may be able to discover other nodes by broadcasting a message on the local network.”).

240. *Second*, the combination teaches the *invitation is to establish a respective link with the event node*. In the Wong-Gogic-Kraft combination, participating in the ad-hoc communication group results in a linkage between the user node and the newly created event node. This is because communication in the Wong system occurs between nodes. EX1006, ¶44. Again, I note that Kraft confirms that connecting Person nodes to an Event node was also a well-known concept in the prior art. EX1019, FIG. 2, 8:39-44, 9:65-66. Thus, a POSA would have understood that an invitation to join the ad-hoc communication group constitutes an invitation to link to the event node and its associated server. I provide further details below regarding the combination’s teachings of *establishing a respective link* in my discussion of claim element [1.5]. Section XIV.B.6.

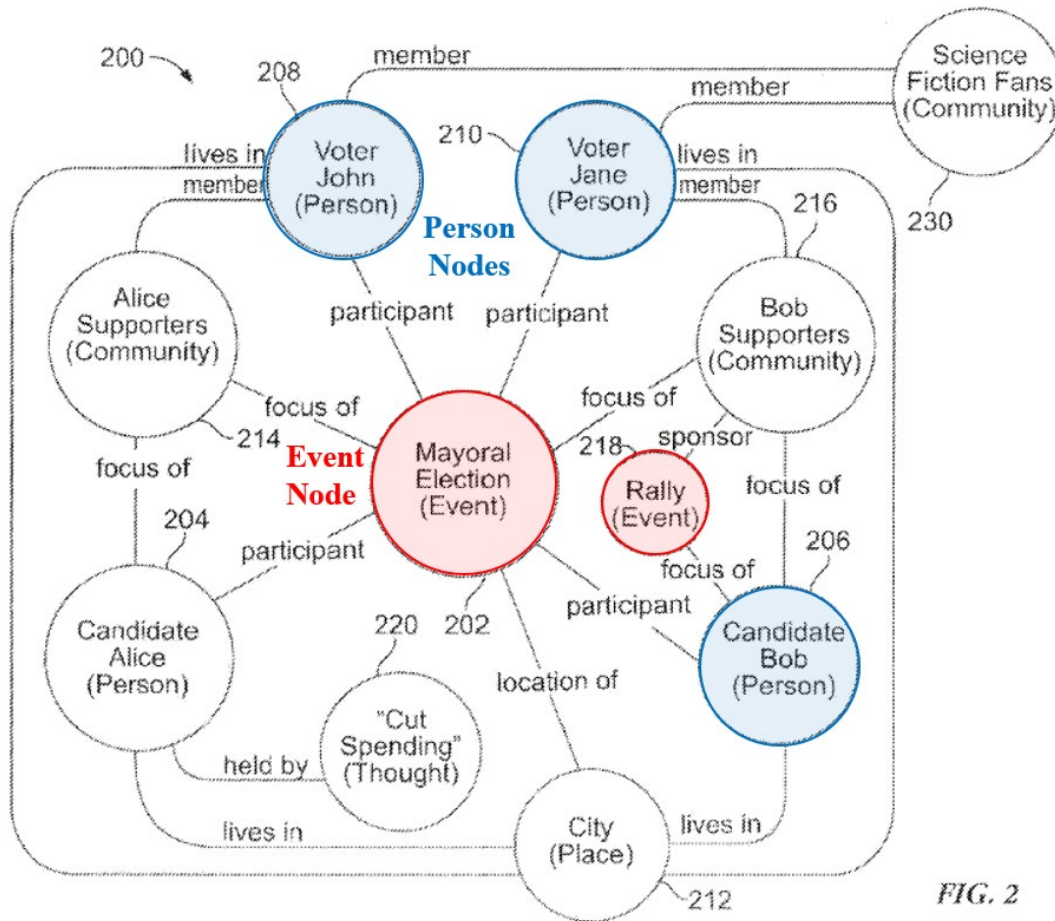
241. Thus, in my opinion, the Wong-Gogic-Kraft combination teaches element [1.3].

5. [1.4]: (d) receiving a response from at least one of the devices from step (c) accepting the invitation to establish the respective link with the event node;

242. In my opinion, the Wong-Gogic-Kraft combination teaches this element.

243. Gogic teaches *receiving a response from at least one of the devices ... accepting the invitation* to join the ad-hoc communication group. “FIG. 4 illustrates CD₁ 412 as qualifying to join the group and accordingly accepting 440 the invitation which is relayed back to dispatcher 400 through CM 404.” EX1007, 10:66-11:2; *see also* EX1007, 11:4-7 (CD₂ also accepting the invitation).

244. A POSA would have understood the nodes in Wong’s social network that receive an invitation and also qualify to join the group would likewise accept the invitation. In response to this acceptance, the nodes corresponding to users would be linked to an event node similar to the linking described in Kraft, which describes linking Person nodes to an Event node. EX1019, 8:1-3 (nodes “can be linked to each other by navigable relationships”), 8:40-62, 9:15-28.



EX1019, FIG. 2 (annotated).

245. This linking would facilitate the communication of emergency information (as described in Gogic) to nodes linked to the emergency. EX1007, 4:16-24, 5:65-6:2, Abstract.

246. Thus, in my opinion, the Wong-Gogic-Kraft combination teaches element [1.4].

6. [1.5]: (e) establishing the respective link with each device accepting the invitation to form the situational network;

247. In my opinion, the Wong-Gogic-Kraft combination teaches this element.

248. As I discuss above with reference to claim element [1.4], in the Wong-Gogic-Kraft combination, participating in the ad-hoc communication group formed by the combination results in a linkage between the user node and the newly created event node. Section XIV.B.5. This is because communication in the Wong system occurs between nodes. EX1006, ¶44. In Gogic, communication device(s) (CD) are added to the ad-hoc communication group in response to accepting the invitation. EX1007, 11:3-9; *see also* EX1007, 6:3-5 (“The term ‘group’ or ‘net’ denotes a collection of communication device users authorized to communicate with each other.”), 11:2-9. Thus, a POSA would have understood that a user device associated with the user node accepting the invitation would be linked to the event node to participate in the ad-hoc communication group. As I explained for claim element [1.4], Kraft confirms this understanding and teaches the linking of Person nodes to an Event node. EX1019, FIG. 2, 8:40-45; *see also* EX1019, 5:13-39. Further, a POSA would have understood that, to the extent a particular user’s device was not previously linked to the particular server associated with the event node to which it has been invited, it would have been

obvious that a new link would be established in order to facilitate participation in the ad-hoc communication group as described in Gogic. EX1007, 10:43-61.

249. Thus, in my opinion, the Wong-Gogic-Kraft combination teaches element [1.5].

7. **[1.6]: (f) identifying a target member node wherein the target member node is connected to at least one node of the subset of the member nodes via at least one dimension of the multi-dimensional personal information network;**

250. Wong and Gogic teach this element for the reasons I provided in this section and as I further explain with reference to dependent claims 2-9 and 11-18. Sections XIV.D-XIV.K.

251. Wong and Gogic describe *identifying a target member node* when delivering information or content. For example, Wong describes using “social networking features” to “facilitate many forms of communication, such as notification of updates, alerts, sharing of files and photos, blogs, instant messaging and comments.” EX1006, ¶44. Additionally, the “sender can select those in the network ... who can receive or view a particular communication or file.” *Id.* “The interaction can be direct communication between individual persons, sharing of data, receiving data, editing data, ***notification of data updates within a node***, transfer of data to another node, and addition of data to another node.” *Id.* (emphasis added). Accordingly, Wong describes a system that identifies recipient users (i.e., *target member node*) when providing communications and/or updates

related to nodes. Gogic teaches a similar identification when identifying the particular group members and communication devices to receive information related to emergencies. EX1007, 2:12-17, 4:16-24, 8:26-38 (describing the transmission of “[a]udio, visual, or other information” to “other group members”), 12:1-6, Abstract.

252. Wong and Gogic also teach the claimed *target member node* that is *connected to at least one node of the subset of the member nodes via at least one dimension of the multi-dimensional personal information network*. For example, Wong teaches that nodes can be connected by “one or more defined linkage types representing different relationship types.” EX1006, ¶33. Each linkage type corresponds to a *dimension* by which the connections may be characterized. For example, Wong describes a “direct link between two adjacent nodes” as well as a “chain of links and nodes between non-adjacent nodes.” EX1006, ¶21. “A linkage of a person node to another person node can be, for example: mother/daughter, best friend, biological, social, or genetic.” EX1006, ¶¶24-25, 34.

253. In view of these linkages, when linked nodes in Wong are grouped into an ad-hoc communication group as described in Gogic, and communications are shared among those linked nodes, a recipient node in that group is a *target member node* that is *connected to at least one node of the subset of the member nodes via at least one dimension of the multi-dimensional personal information*

network. For instance, as I discussed above, Wong teaches that “notification of updates” or “alerts” may be communicated via its social network. EX1006, ¶44.

This grouping occurs for nodes that are directly linked (considered to be “adjacent”) or indirectly linked (considered to be “non-adjacent”). EX1006, ¶21; EX1007, 10:45-61. For both direct and indirect links, Gogic explains identifying users that are “proximately located” to “the occurrence or presence of an event or condition.” EX1007, 10:16-25.

254. Thus, in my opinion, the combination teaches identifying the claimed *target member node* and the *target member node* being connected via at least one dimension to a subset of the member nodes.

8. [1.7]: (g) transmitting information related to the situation to the identified target member node.

255. In my opinion, the Wong-Gogic-Kraft combination teaches this element.

256. As I explained with reference to claim elements [1.P], [1.1], and [1.6], Wong and Gogic teach transmitting messages and content to linked nodes participating in an ad-hoc communication group related to an emergency situation. Sections XIV.B.1-2, XIV.B.7. As I previously discussed, Wong teaches that “notification of updates” or “alerts” may be transmitted to recipient nodes. EX1006, ¶44. This includes transmitting information such as “sharing of data, receiving data, editing data, notification of data updates within a node, transfer of

data to another node, and addition of data to another node.” *Id.* Gogic further explains that *information related to the situation* is transmitted to members of the ad-hoc group experiencing the “emergency situation.” EX1007, 2:12-17, 4:16-24, 8:26-38, 12:1-6, Abstract. Kraft further confirms this understanding based on the sharing of “media content such as photographs or other images of the real-world entity, audio or video clips featuring the real-world entity, or clips reporting on or discussing the real-world entity,” which may correspond to an event. EX1019, 11:58-64, 12:4-18. As I explained with reference to claim element [1.6], the combination of Wong and Gogic renders obvious transmitting the information related to the situation to a *target member node*. Section XIV.B.7.

257. Thus, in my opinion, the combination of Wong-Gogic-Kraft teaches element [1.7].

C. Independent Claim 10

258. In my opinion, Wong-Gogic-Kraft renders obvious Claim 10. Claim elements [10.1]-[10.7] are substantially the same as claim elements [1.1]-[1.7], respectively. Wong-Gogic-Kraft therefore renders obvious claim elements [10.1]-[10.7] for the same reasons. Sections XIV.B.2-XIV.B.8. Claim 10 additionally recites generic sever components in claim elements [10.P] and [10.A]-[10.D]; however, the Wong-Gogic-Kraft combination renders these components obvious for the reasons I explain below.

Independent Claim 10	Independent Claim 1
[10.P] A system of creating a situational network based on a projection from a multi-dimensional personal information network and for transmitting information related to a situation, the method comprising:	[1.P] A method of creating a situational network based on a projection from a multi-dimensional personal information network and for transmitting information related to a situation, the method comprising:
[10.A] one or more central processing units of an event node server configured to:	
[10.1] (a) create an event node in the multi-dimensional personal information network, wherein the multi-dimensional personal information network comprises member nodes, and the event node that corresponds to the situation, wherein the event node is discoverable by browsing the multi-dimensional personal information network;	[1.1] (a) creating, by an event node server, an event node in the multi-dimensional personal information network, wherein the multi-dimensional personal information network comprises member nodes, and the event node that corresponds to the situation, wherein the event node is discoverable by browsing the multi-dimensional personal information network;
[10.2] (b) identify a subset of the member nodes of the multi-	[1.2] (b) identifying a subset of the member nodes of the multi-

dimensional personal information network based on geographic proximity to the situation of a plurality of devices corresponding to the member nodes in the multi-dimensional personal information network; and	dimensional personal information network based on geographic proximity to the situation of a plurality of devices corresponding to the member nodes in the multi-dimensional personal information network;
[10.B] one or more network controllers of the event node server configured to:	
[10.3] (c) transmit an invitation to establish a respective link with the event node to devices corresponding to each node in the subset formed in step (b); and	[1.3] (c) transmitting an invitation to establish a respective link with the event node to devices corresponding to each node in the subset formed in step (b);
[10.4] (d) receive a response from at least one of the devices from step (c) accepting the invitation to establish the respective link with the event node;	[1.4] (d) receiving a response from at least one of the devices from step (c) accepting the invitation to establish the respective link with the event node;
[10.C] wherein the one or more central processing units are configured to:	
[10.5] (e) establish the respective link with each device accepting the invitation to form the situational network; and	[1.5] (e) establishing the respective link with each device accepting the invitation to form the situational network;

[10.6] (f) identify a target member node wherein the target member node is connected to at least one node of the subset of the member nodes via at least one dimension of the multi-dimensional personal information network; and	[1.6] (f) identifying a target member node wherein the target member node is connected to at least one node of the subset of the member nodes via at least one dimension of the multi-dimensional personal information network; and
[10.D] wherein the one or more network controllers are configured to:	
[10.7] (g) transmit information related to the situation to the identified target member node.	[1.7] (g) transmitting information related to the situation to the identified target member node.

259. Regarding element [10.P], the combination of Wong-Gogic-Kraft teaches the claimed *system* for the reasons I provided for element [1.P]. Section XIV.B.1. For example, Wong describes a “social network server or servers 20 [that] maintain a system comprising an Internet website, database and associated data, which is accessible to users 10.” EX1006, ¶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.” EX1006, ¶17. A system, such as the one described in Wong, would have been configured to implement the functionality described in Gogic and Kraft, as I previously

explained for element [1.P]. Section XIV.B.1. Thus, in my opinion, the combination of Wong-Gogic-Kraft teaches element [10.P].

260. Regarding claim elements [10.A] and [10.C], Wong's social network server as combined with the functionality from Kraft's world server system 160 and Gogic's communication system, teaches the claimed *event node server* and *central processing units* for reasons similar to those I presented for [1.1]. Section XIV.B.2. For example, Wong's "social network server" may implement the event node functionality provided by Kraft's world server system 160 and Gogic's organization of ad-hoc communication groups for emergency situations. EX1006, ¶17; EX1007, 4:16-24, Abstract; EX1019, 6:33-7:10. A POSA would have recognized that servers like social network server 20 include central processing units and would have employed a central processing unit to perform the functionality described in Wong. For example, Wong explains that its social network system and "online (Internet) method" can be applied in a "computer network." EX1006, ¶45. Gogic further explains that data networks and communication system components such as a "server" can employ a "general purpose processor," such as a "microprocessor" or "any conventional processor." EX1007, 5:17-44, 12:27-13:3. Thus, as I described here and with reference to claim 1, the Wong-Gogic-Kraft combination, in my opinion, teaches an *event node*

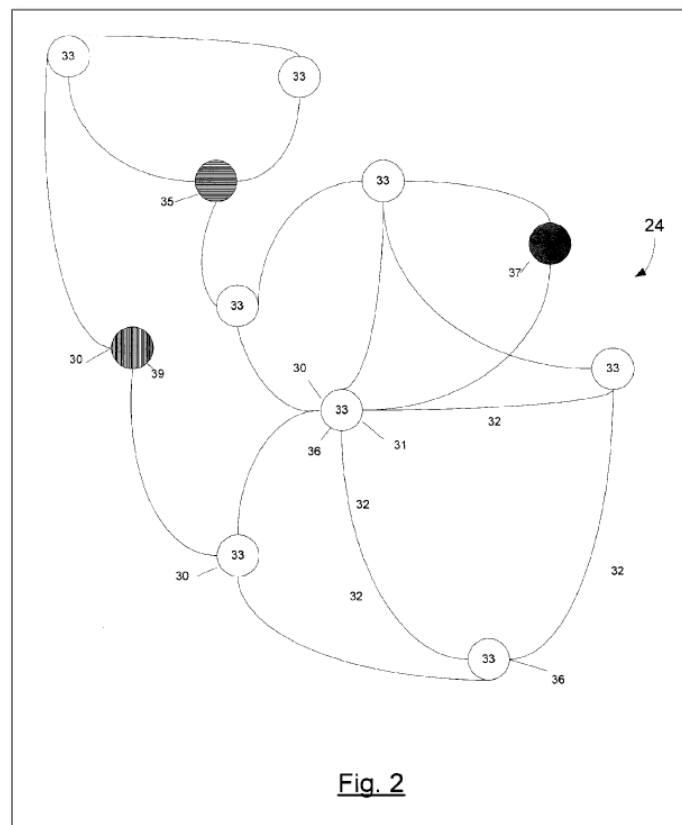
server with one or more central processing units configured to perform the functions recited in claim 10.

261. Regarding claim elements [10.B] and [10.D], Wong-Gogic-Kraft also teaches implementing *one or more network controllers* on a server. For example, to provide social network functionality via the “Internet,” Wong’s social media server 20 includes the “hardware and software required to operate an internet-accessible social network.” EX1006, ¶17. Gogic further explains that to accommodate the transmission of Internet data, “various Internet access technologies are utilized.” EX1007, 5:9-16. “An example would be the Internet Protocol (IP), which is a data-oriented protocol used by source and destination hosts for communicating data across a packet-switched network (e.g., the Internet), and examples include IPv4, IPv6, and the like.” *Id.* To perform the functionality recited in claim 10 and to “route data packets in accordance with Internet Protocol (IP),” the Wong-Gogic-Kraft combination would have implemented *one or more network controllers* on a server. *Id.*, 8:18-20.

D. Claims 2 and 11

262. Claims 2 and 11 depend from claims 1 and 10, respectively, and further recite: “*wherein the target member node is directly connected to the at least one node of the subset of the member nodes by a single dimension.*” In my opinion, the Wong-Gogic-Kraft combination teaches these claims.

263. Wong and Gogic teach claims 2 and 11 for the reasons that I presented with reference to claim element [1.6]. Section XIV.B.7. For example, Wong teaches that nodes can be connected by “one or more defined linkage types representing different relationship types.” EX1006, ¶33. “A linkage of a person node to another person node can be, for example: mother/daughter, best friend, biological, social, or genetic.” EX1006, ¶24. Each linkage type corresponds to a *dimension* by which the connections may be characterized. For example, Wong describes a “direct link between two adjacent nodes” and depicts examples of direct linkages in Figure 2. EX1006, ¶21.



EX1006, FIG. 2.

264. In this manner, Wong teaches the direct connection of nodes of a social network by a single dimension. As I explained for claim element [1.6], the combination of Wong and Gogic teaches the *target member node* being *connected to at least one node of the subset of the member nodes* when linked nodes in Wong are grouped into an ad-hoc communication group as described in Gogic. Section XIV.B.7.

265. Thus, in my opinion, the Wong-Gogic-Kraft combination teaches claims 2 and 11.

E. Claims 3 and 12

266. Claims 3 and 12 depend from claims 1 and 10, respectively, and further recite: “*wherein the target member node is indirectly connected to the at least one node of the subset of the member nodes by a plurality of dimensions.*” In my opinion, Wong and Gogic teach these claims.

267. Wong and Gogic teach claims 3 and 12 for the reasons that I presented with reference to claim element [1.6]. Section XIV.B.7. For example, Wong teaches that nodes can be indirectly linked via a “chain of links and nodes between non-adjacent nodes.” EX1006, ¶21, Claim 21. Wong provides example linkages between person nodes: “mother/daughter, best friend, biological, social, or genetic.” EX1006, ¶24. An example of a non-adjacent node connection may be between a mother and her daughter’s friend. This non-adjacent node connection

would include (1) a link between a mother and her daughter and (2) another link between the daughter and the daughter's friend. Based on such a connection between non-adjacent nodes, the mother and daughter's friend are *indirectly connected* using two links, which include a family dimension and a friendship dimension (i.e., *a plurality of dimensions*). As I explained for claim element [1.6], the combination of Wong and Gogic teaches the *target member node* being *connected to at least one node of the subset of the member nodes* when linked nodes in Wong are grouped into an ad-hoc communication group as described in Gogic. Section XIV.B.7.

268. Thus, in my opinion, Wong and Gogic teach claims 3 and 12.

F. Claims 4 and 13

269. Claims 4 and 13 depend from claims 3 and 12, respectively, and further recite: "*wherein the target member node being indirectly connected to the at least one node of the subset of the member nodes comprises: the target member node being connected by a preference dimension to an additional node, and the at least one node of the subset of the member nodes being connected by the preference dimension to the additional node.*" In my opinion, Wong and Gogic teach these claims.

270. As I previously explained, the '325 patent states that an “NDSN might utilize dimensions that link participants by preferences and behaviors, e.g., a preference for a type of product or service.” EX1001, 15:17-20.

271. Wong teaches different linkage types, including a linkage based on an “object” or “product.” EX1006, ¶¶2, 21-22, 24. “Each linkage type represents the actual relationship type between the nodes, such as person, place, *object* or animal represented by the nodes.” EX1006, ¶Abstract (emphasis added). Wong explains that “object subtypes” can include “groups, organizations, *products*, businesses, books, songs, etc.” EX1006, ¶22 (emphasis added). “A linkage of a person node to an object node can be, for example, customer, *fan*, *owner*, *admirer*, member and the like.” EX1006, ¶24 (emphasis added). In this manner, Wong teaches the same “preference” dimension described in the '325 patent.

272. Further, as I explained for claims 3 and 12, Wong also describes a “chain of links and nodes between non-adjacent nodes.” EX1006, ¶21, Claim 21; Section XIV.E. Based on the different linkage types between nodes described in Wong, a POSA would have recognized that Wong teaches a configuration of two person nodes (*target member node*; *node of the subset*) connected to a common object or product node (*additional node*) via a “fan,” “owner,” or “admirer” linkage (*preference dimension*). EX1006, ¶¶24, 33, FIG. 4. In this manner, Wong also teaches an indirect connection between nodes using a *preference dimension*.

As I explained for claim element [1.6], the combination of Wong and Gogic teaches the *target member node* being connected to at least one node of the subset of the member nodes when linked nodes in Wong are grouped into an ad-hoc communication group as described in Gogic. Section XIV.B.7.

273. Thus, in my opinion, Wong and Gogic teach claims 4 and 13.

G. Claims 5 and 14

274. Claims 5 and 14 depend from claims 1 and 10, respectively, and further recite: “*wherein the identifying the target member node comprises identifying the target member node based on a dimension of the multi-dimensional personal information network other than interaction with the event node.*” Wong-Gogic teaches these claims. In my opinion, Wong and Gogic teach these claims.

275. For example, Wong teaches that using conventional “social networking features,” Wong’s system can “facilitate many forms of communication, such as notification of updates, alerts, sharing of files and photos, blogs, instant messaging and comments.” EX1006, ¶44. The “sender can select those in the network ... who can receive or view a particular communication or file.” *Id.* The selection of other members of the network indicates that the recipient (*target member node*) is also networked with or linked to the sender. The sender can send an “electronic message ... addressed to the addressee’s username.” *Id.*

Based on the sender's selection or designation of a recipient, Wong's system can identify a *target member node* which may be linked to the sender's node.

276. When considered in combination with Gogic, the Wong-Gogic combination teaches claims 5 and 14 when a sender node is experiencing an emergency while a designated recipient node is not experiencing the emergency. For example, a sender node may be part of the ad-hoc communication group described in Gogic and may transmit a message or content to a linked recipient (e.g., a friend or family member), according to Wong that is not part of the ad-hoc communication group. EX1007, 4:16-24, 10:16-25, Abstract; EX1006, ¶¶22-25, 44. Additionally, Wong describes sending a "notification of data updates within a node" which may also be transmitted to linked recipients not in the ad-hoc communication group. EX1006, ¶44. In this manner, Wong describes communications based on connections or links between nodes that do not necessarily interact with an event node.

277. Thus, in my opinion, the Wong-Gogic combination teaches claims 5 and 14.

H. Claims 6 and 15

278. Claims 6 and 15 depend from claims 1 and 10, respectively, and further recite: "*wherein the identifying the target member node comprises identifying the target member node based on a dimension of the multi-dimensional*

personal information network that indicates a connection to another node that interacted with the event node.” In my opinion, Wong and Gogic teach these claims.

279. Wong and Gogic teach claims 6 and 15 for reasons similar to those that I presented for claims 5 and 14. Section XIV.G. As I previously explained, Wong describes selecting or designating a recipient of a message or content. EX1006, ¶44. The “sender can select those in the network ... who can receive or view a particular communication or file.” *Id.* The selection of other members of the network indicates that the recipient (*target member node*) is also linked to the sender. The sender can send an “electronic message ... addressed to the addressee’s username.” EX1006, ¶44. Based on the sender’s selection or designation of a recipient, Wong’s system can identify a *target member node* which may be linked to the sender’s node.

280. When considered in combination with Gogic, the Wong-Gogic combination teaches claims 6 and 15 when a sender node (*another node*) is experiencing an emergency and has designated a recipient node (*target member node*) to receive a message or content. For example, a sender node may be part of the ad-hoc communication group described in Gogic and may transmit a message or content to a linked recipient (*e.g.*, a friend or family member) according to Wong. EX1007, 4:16-24, 10:16-25, Abstract; EX1006, ¶¶22-25, 44. Additionally,

Wong describes sending a “notification of data updates within a node,” which may also be transmitted to linked recipients. EX1006, ¶44. In this manner, Wong describes communications based on connections or links between nodes where one of the nodes (a sender node; claimed *another node*) may be part of, and interact with, the ad-hoc communication group described in Gogic and transmit a message to a recipient node (*target member node*).

281. Thus, in my opinion, Wong and Gogic teach claims 6 and 15.

I. Claims 7 and 16

282. Claims 7 and 16 depend from claims 1 and 10, respectively, and further recite: “*wherein the [identifying the target member node comprises] identifying the target member node based on a dimension of the multi-dimensional personal information network that indicates a connection to another node that established a link with the event node.*” In my opinion, Wong and Gogic teach these claims.

283. Wong-Gogic render obvious claims 7 and 16 for the reasons I provided for claims 6 and 15 as well as for claim elements [1.3]-[1.5]. Sections XIV.B.4-XIV.B.6, XIV.H. As I previously explained, the combination of Wong and Gogic establishes links between an event node and users who have responded with an acceptance of an invitation to join an ad-hoc communication group. *Id.*

284. Additionally, the Wong-Gogic combination teaches identifying a *target member node* based on a dimension indicating a connection with *another node* that established a link with the event node when a sender node (*another node*) joins the ad-hoc communication group based on proximity to an emergency situation and has designated a recipient node (*target member node*) to receive a message or content. *Id.*

285. Thus, in my opinion, Wong and Gogic teach claims 7 and 16.

J. Claims 8 and 17

286. Claims 8 and 17 depend from claims 1 and 10, respectively, and further recite: “*wherein the identifying the target member node comprises identifying the target member node based on a dimension of the multi-dimensional personal information network that indicates a common dimension with another node that interacted with the event node.*” In my opinion, Wong and Gogic teach these claims.

287. Wong and Gogic teach claims 8 and 17 for the reasons I presented for claims 6 and 15. Section XIV.H. Claims 8 and 17 recite a “common dimension” rather than a “connection” as recited claims 6 and 15, but Wong discloses the claimed “common dimension” for the same reasons. *Id.* For example, Wong describes linkages between nodes. EX1006, ¶¶21-22, 24. When a sender node (*another node*) selects and transmits a message to a recipient node (*target member*

node) that is part of the same network as the sender node, this indicates that the nodes share a common dimension based on linkage. For example, a sender node (*another node*) may be part of the ad-hoc communication group described in Gogic and may transmit a message or content to a linked recipient (*e.g.*, a friend or family member) according to Wong. EX1007, 4:16-24, 10:16-25, Abstract; EX1006, ¶¶22-25, 44.

288. Thus, in my opinion, Wong and Gogic teach claims 8 and 17.

K. Claims 9 and 18

289. Claims 9 and 18 depend from claims 1 and 10, respectively, and further recite: “*wherein the identifying the target member node comprises identifying the target member node based on a dimension of the multi-dimensional personal information network that indicates a common dimension with another node, that is linked to the event node.*” In my opinion, Wong and Gogic teach these claims.

290. Wong and Gogic teach claims 9 and 18 for the reasons I presented for claims 7 and 16. Section XIV.I. Claims 9 and 18 recite a “common dimension” rather than a “connection” as recited claims 7 and 16, but Wong discloses the claimed “common dimension” for the same reasons. *Id.* For example, Wong describes linkages between nodes. EX1006, ¶¶21-22, 24. When a sender node (*another node*) selects and transmits a message to a recipient node (*target member*

node) that is part of the same network as the sender node, this indicates that the nodes share a common dimension. For example, a sender node (*another node*) may be part of the ad-hoc communication group described in Gogic and may transmit a message or content to a linked recipient (*e.g.*, a friend or family member) according to Wong. EX1007, 4:16-24, 10:16-25, Abstract; EX1006, ¶¶22-25, 44.

291. Thus, in my opinion, Wong and Gogic teach claims 9 and 18.

XV. CONCLUSION

292. In signing this declaration, I recognize that the declaration will be filed as evidence in an *inter partes* review before the Patent Trial and Appeal Board of the United States Patent and Trademark Office. I also recognize that I may be subject to cross-examination in the case and that cross-examination will take place within the United States. If cross-examination is required, I will appear for cross-examination within the United States during the time allotted.

293. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Executed on this 6th day of November 2025, in Westmount, Quebec.



Jeremy Cooperstock, Ph.D.