

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

META PLATFORMS, INC.,
Petitioner

v.

SITNET LLC,
Patent Owner

Case IPR2026-00113
U.S. Patent No. 12,336,052

**PETITION FOR *INTER PARTES* REVIEW
OF U.S. PATENT NO. 12,336,052**

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EXHIBIT LIST

Exhibit No.	Description
1001	U.S. Patent No. 12,336,052 to Cona et al., issued June 17, 2025 (“the ’052 patent”)
1002	Prosecution History of U.S. Patent No. 12,336,052 (“’052 File History”)
1003	Declaration of Dr. Bernard Jansen
1004	<i>Curriculum Vitae</i> of Dr. Bernard Jansen
1005	U.S. Patent No. 7,747,648 B1 to Kraft et al. (“Kraft”)
1006	U.S. Patent Publication No. 2005/0033615 A1 to Nguyen et al. (“Nguyen”)
1007	U.S. Publication No. 2008/0103784 A1 to Wong et al. (“Wong”)
1008	U.S. Publication No. 2007/0233635 to Burfeind et al. (“Burfeind”)
1009	U.S. Publication No. 2006/0270419 to Crowley et al. (“Crowley”)
1010	U.S. Publication No. 2007/0281690 to Altman et al. (“Altman”)
1011	U.S. Patent No. 8,024,330 to Franco <i>et al.</i> (“Franco”)
1012	U.S. Publication No. 2006/0047825 to Steenstra <i>et al.</i> (Steenstra”)
1013	U.S. Publication No. 2003/0197615 to Roche <i>et al.</i> (“Roche”)
1014	U.S. Patent No. 8,346,864 B1 to Amidon <i>et al.</i> (“Amidon”)
1015	Boyd & Ellison, <i>Social Network Sites: Definition, History, and Scholarship</i> , Journal of Computer-Mediated Communication, 13 (2008) pp. 210-230
1016	U.S. Patent Application Publication No. 2007/0194938 to Mitchell (“Mitchell”)
1017	U.S. Publication No. 2003/0162557 to Shida (“Shida”)
1018	November 26, 2006 Wikipedia page “Social network” (from web.archive.org) (accessed Jan. 24, 2024)
1019	Adamic & Adar, <i>How to Search a Social Network</i> , SOCIAL NETWORKS 27, 187-203 (2005), accessed at https://www.cs.toronto.edu/~bor/303s19/docs/adamic-adar.pdf

Exhibit No.	Description
1020	Caroline Haythornthwaite, <i>Social Networks and Internet Connectivity Effects</i> , INFORMATION, COMMUNICATION & SOCIETY 125-147 (2005), accessed at https://www.dhi.ac.uk/san/waysofbeing/data/communication-zangana-haythornthwaite-2005.pdf
1021	Andrew Turner, <i>Introduction to Neogeography</i> 36-37 (2006).
1022	Gary Rivlin, <i>Friendster, Love and Money</i> , N.Y. TIMES (Jan. 24, 2005), accessed at https://www.nytimes.com/2005/01/24/technology/friendster-love-and-money.html
1023	<i>Myspace Events</i> , MYSPACE, (from web.archive.org) (accessed Nov. 5, 2025)
1024	Alex Williams, <i>MySpace: A Site with 26 Million 'Friends'</i> , N.Y. TIMES (Sept. 1, 2005), accessed at https://www.nytimes.com/2005/09/01/technology/myspace-a-site-with-26-million-friends.html .
1025	Theodora Stites, <i>Someone to Watch Over Me</i> (on a Google Map), N.Y. TIMES (July 9, 2006), https://www.nytimes.com/2006/07/09/fashion/sundaystyles/someone-to-watch-over-me-on-a-google-map.html
1026	Amanda Lenhart & Mary Madden, <i>Social Networking Websites and Teens</i> , PEW RSCH. CTR. (Jan. 7, 2007), available at https://www.pewresearch.org/internet/2007/01/07/social-networking-websites-and-teens/
1027	Janet Kornblum, <i>Teens Hang Out at MySpace</i> , USA TODAY (Jan. 8, 2006) (from web.archive.org) (accessed Nov. 3, 2025)
1028	<i>Subset</i> , DICTIONARY.COM, https://www.dictionary.com/browse/subset (accessed Nov. 3, 2025)
1029	Joseph T. Plummer, <i>The Concept and Application of Life Segmentation</i> , 38 J. MKTG. 1, 33-37 (Jan. 1974)
1030	<i>Meta Platforms, Inc. v. SitNet LLC</i> , IPR2024-00529, Final Written Decision, Paper 33 (P.T.A.B. Sept. 8, 2025).

Exhibit No.	Description
1031	<i>Meta Platforms, Inc. v. SitNet, LLC</i> , IPR2024-00530, Final Written Decision, Paper 30 (P.T.A.B. Sept. 8, 2025)
1032	Claim Construction Order in <i>SitNet LLC v. Meta Platforms, Inc.</i> , Case No. 1:23-cv-06389-AS (SDNY) (Dkt. 79) filed July 26, 2024
1033	A Systematic Review on Search Engine Advertising
1034	U.S. Publication No. 2006/0272012 to Wu (“Wu”)
1035	U.S. Patent No. 6,910,077 to Najork (“Najork”)
1036	Best Computer Science Scientists - Data Sources for the 11th Edition of the Research.com Best Computer Science Scientists Ranking (Page 14), accessed at https://research.com/scientists-rankings/computer-science?page=14

I. INTRODUCTION

Meta Platforms, Inc. (“Petitioner”) petitions for *inter partes* review, seeking cancellation of claims 1-12 of U.S. Patent No. 12,336,052 (“’052 patent”; EX1001), assigned to SitNet LLC (“Patent Owner”). The ’052 patent is in the same family as U.S. Patent Nos. 8,332,454 and 11,470,682. The Board previously found all claims of those patents unpatentable and should do the same here.

The ’052 patent relates to methods and systems that allow a set of participants in a social network to exchange information about an event or situation. The ’052 patent uses nothing more than a conventional computer network, and does not claim or allege any new networking technology. EX1003, ¶¶44-66.

This Petition is supported by the declaration of Dr. Bernard Jansen (EX1003), an expert in computer networking and telecommunications. Dr. Jansen’s testimony confirms that all challenged claims are unpatentable. Thus, the Board should institute IPR and cancel all claims of the ’052 patent.

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

A. Identification of Prior Art

The ’052 patent’s earliest possible priority date is February 2, 2007. Without conceding this priority date is correct, all references relied on here are prior art under at least 35 U.S.C. § 102(e) as of February 2, 2007.

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

Nguyen (EX1006) was filed February 23, 2004 and published February 10, 2005.

Altman (EX1010) was filed June 1, 2006 and published December 6, 2007.

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

Burfeind (EX1008) was filed April 4, 2006 and published October 4, 2007.

Crowley (EX1009) was filed on May 11, 2005 and published November 30, 2006. Crowley also is prior art under § 102(a).

B. Grounds Summary

Petitioner requests *inter partes* review based on the following grounds.

Ground	35 U.S.C.	Claims	References
1	§103(a)	1-12	Kraft-Nguyen-Altman
2	§103(a)	1-12	Wong-Burfeind-Crowley

III. THE '052 PATENT

A. Overview of the '052 Patent

The '052 patent relates to creating a situational network or “SitNet.” A “situational network allows the participants ... to interact and exchange information over connections to or through a computer network ... regarding the event or situation.” EX1001, 4:28-31. The '052 patent describes examples of events or situations as broadly including social events, emergencies, natural disasters, and weather phenomena. *Id.*, 5:10-20, 32:4-7. A “projection” or “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 ’052 patent claims. *Id.*, 17:6-7, 22:55-23:42. The ’052 patent relates to methods and systems that allow participants in a social network to exchange information about an event or situation.

One example embodiment of a SitNet 3000 is illustrated in Figure 28, reproduced below.

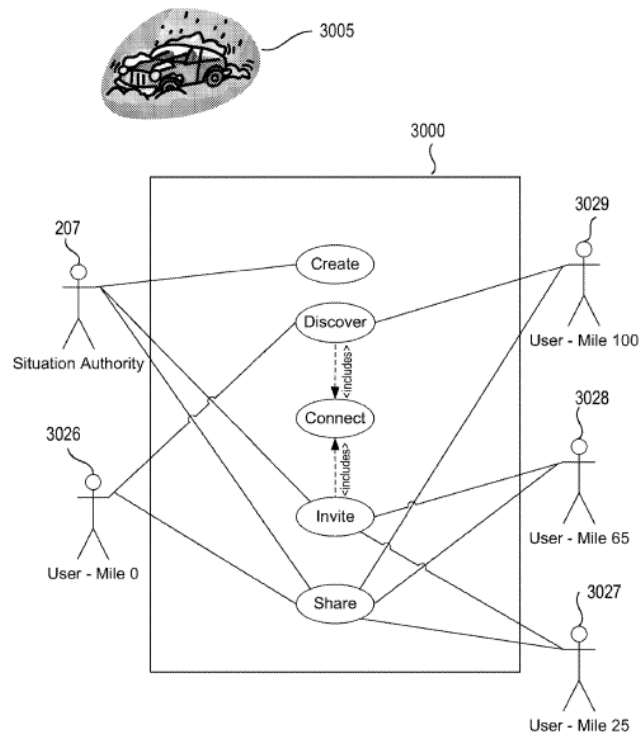


Fig. 28

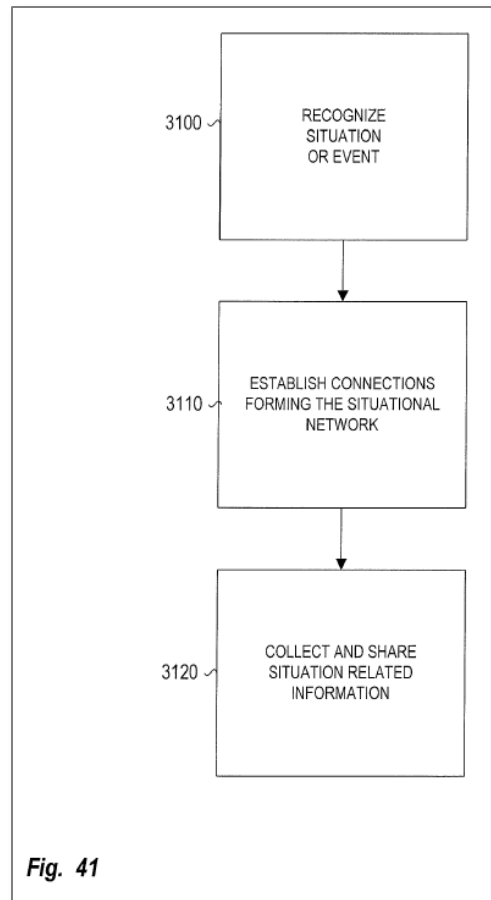
EX1001, FIG. 28

Here, situation authority 207 creates an event node (not shown in Figure 28) relating to a storm event 3005. EX1001, 24:20-31. Users (i.e., travelers 3026-3029)

connect to the event node, either by discovering it or being invited to join if they are within a pre-determined distance from the location associated with the event. *Id.*, 24:31-36. Information regarding the event (e.g., traffic, weather) is shared between users and/or by the situation authority. *Id.*, 24:37-51; *also* 24:52–26:15 (discussing additional ways to share information).

The '052 patent also describes a “roll call” feature, which can be included in the situational network. EX1001, 27:24-27. Using this feature, a message is sent out to users, and the user responses are received and recorded. *Id.*, 27:27-42. The responses may be made viewable to users within the situational network or to users not connected to the situational network. *Id.*, 27:42-28:15.

The '052 patent makes clear that the implementation of its methods is architecture agnostic. *See id.*, 6:63-64. Regardless of the architecture, 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.

The '052 patent also says that the situational network is implemented using known and conventional technologies. For example, users are connected via 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, 4:57-62. Further, 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.*, 15:36-53, 15:61-65. The ’052 patent also explains that the nodes of the network “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.*, 15:65-16:2. *See* EX1003, ¶¶36-45.

B. Person of Ordinary Skill in the Art

A person of ordinary skill in the art (“POSA”) would have had a bachelor’s degree in Computer or Electrical Engineering or equivalent discipline, and approximately two years’ experience in telecommunications or computer networking. Additional education could substitute for professional experience, and significant work experience could substitute for formal education. EX1003, ¶¶68-69.

C. Claim Construction

Claims must be given their ordinary and customary meaning in light of the specification—the meaning the term would have had to a POSA at the time of the invention.

The Board and district court previously construed the terms “situational network” and “projection” and determined “event node” needs no construction. EX1030, 8-12, 18-24, 37-41; EX1031, 12-18; EX1032, 2-6. The Board’s

constructions were consistent with the district court's. While Petitioner submits no claim terms require construction for the purposes of this IPR, the art nevertheless teaches the claims under these prior constructions. EX1003, ¶¶70-73.

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

A. Kraft

Kraft is directed to “systems and methods for information retrieval and communication using a world model.” EX1005, 2:35-37. A “[w]orld server 160 maintains a world model data store 162.” *Id.*, 6:33-35. “The world model is made up of *interrelated entity models*, where each entity model corresponds to an entity (or abstraction) in the real world, such as a *person*, place, business, other tangible thing, community, *event*, or thought.”¹ *Id.*, 2:37-41, 8:28-31. The entity models are “linked to each other by navigable relationships.” *Id.*, 8:1-3. 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.” *Id.*, 10:25-30.

Kraft’s world server 160 includes a query response module 166 that interacts with client systems 120 to retrieve information from the world model or to add/modify entity models 164. *Id.*, 6:52-65. An example “world model” is

¹ Emphasis added throughout, unless otherwise noted.

illustrated in Figure 2 of Kraft. *Id.*, 8:35-38; EX1021, ¶¶63.

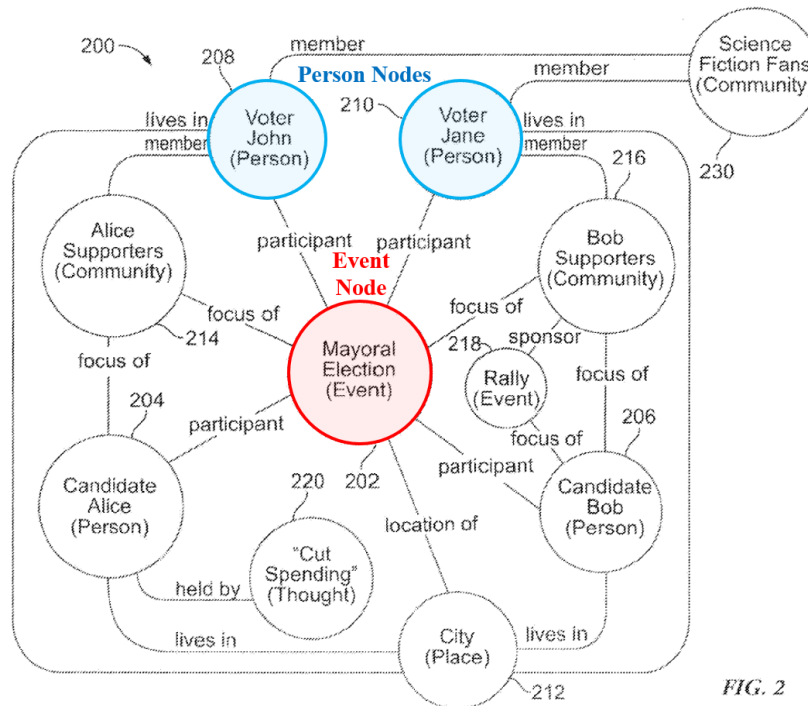


FIG. 2

EX1005, FIG. 2 (annotated).

See also EX1003, ¶¶74-75.

B. Nguyen

Nguyen is directed to an event planning system that allows “an event planner, to organize events and manage information associated with events.” EX1006, ¶3. Nguyen describes an “important advantage of the event planning system ... is that it facilitates event planning tasks,” including “inviting guests” and “tracking RSVP status of each invited guest.” *Id.*, ¶23. See also EX1003, ¶76.

C. Altman

Altman is directed to a “location-based social network manager process.” EX1010, ¶8. The manager allows users “to set up virtual networks that connect that

user to other people, places, and events” and “utilizes the geographic location information for each of these items.” *Id.*, ¶39. Mobile communication devices include a location determination component, such as a GPS module. *Id.*, ¶40. Location information, “such as location histories, frequently visited areas, and so on, is stored in the location database 126.” *Id.*, ¶37. *See also* EX1003, ¶77.

D. Motivation to Combine.

A participant in Kraft’s world model (e.g., an event manager) can create an Event entity model that represents an event, “such as elections, natural disasters, sports events, and so on.” EX1005, 9:50-66, 15:28-16:54. Relationships of the Event entity to existing entity models 400 (e.g. Person entity models) are also defined—for example, a person entity may be a “participant” of an event. *Id.*, 10:7-18, 16:28-42, FIG. 3. But Kraft does not explicitly disclose techniques for connecting users to events based on their current location and does not disclose methods for tracking responses from the invited entity, which a POSA would have recognized to be useful in Kraft’s world model to facilitate event planning tasks, such as inviting Persons to connect to an Event. EX1003, ¶¶88-95. This would have led a POSA to references like Nguyen and Altman.

Like Kraft, Nguyen is directed to a network for connecting users. A POSA would have been motivated to incorporate Nguyen’s invitation and tracking system into Kraft to achieve the explicit advantages taught by Nguyen of facilitating event

planning tasks (sending invitations and tracking responses) to managing relationships between an Event and other entities (e.g., to update the relationship of a Person as a “participant” of the Event by providing a “yes” response to an invitation to join the event). EX1003, ¶¶96-98.

A POSA would have had a reasonable expectation of success in implementing Nguyen’s invitation and RSVP tracking in Kraft because both Kraft and Nguyen use conventional elements, such as servers that send/receive communications to/from clients and databases. *See e.g.*, EX1005, 4:64-5:14, FIG. 1; EX1006, ¶55, FIG. 1A; EX1003, ¶99. The Kraft-Nguyen combination combines known prior-art elements (e.g., Kraft’s communication network that includes world server with Nguyen’s event planning functions) according to known methods to yield predictable results (e.g., the ability of Kraft’s system to send and track invitations to join, or otherwise have a relationship, to an event). EX1003, ¶100.

Similar to Kraft, Altman discloses a virtual network that connects users to people, places, and events. EX1010, ¶39. And similar to Nguyen, Altman discloses its social network manager includes “an event manager module” that allows a user to create and manage events and send invitations regarding the events. *Id.*, ¶53. Kraft discloses its entities may include a “Location” field, but Kraft’s system focuses on a static location entered by the user, such as an “address.” EX1005, 11:39-41. A POSA would have found it obvious that it would be useful to

incorporate Altman's teachings of a location determination component (e.g., GPS module) into Kraft's world model (as modified by Nguyen). EX1003, ¶103. A POSA would have been motivated to include Altman's teachings of GPS location to use a more precise and current location of users that are close enough to the event to invite to participate. EX1003, ¶¶101-105.

A POSA would have had a reasonable expectation of success in implementing Altman's GPS and location history in Kraft-Nguyen, and been further motivated to make the combination, because it is simply a predictable combination of known elements (Kraft's database that stores location information with Altman's database that obtains and stores GPS location and location history) according to known methods to yield predictable results (Kraft's world model storing specific GPS location information and location history). EX1003, ¶106.

E. Independent Claim 1

1. [1.P]

To the extent limiting, Kraft-Altman teaches this element. EX1003, ¶¶107-115. The '052 patent broadly describes that a "situational network 3000 is created when an occurrence or expected occurrence of an event or situation 3005 causes connections, also referred to as links, to be established between, within or among a set of participants." EX1001, 4:24-30, FIG. 1. The '052 patent provides several examples of "situations," including "a social event, such as a concert or festival."

Id., 32:3-4; *see also* 5:14-29.

Kraft discloses “systems and methods for information retrieval and communication using a world model.” EX1005, 2:35-37. “The world model is made up of interrelated entity models, where each entity model corresponds to an entity (or abstraction) in the real world, such as a person, place, business, other tangible thing, community, event, or thought.” *Id.*, 2:37-41, 8:28-31. Kraft discloses an entity model may be assigned an “event” category “for “entity models representing occurrences such as elections, natural disasters, sports events, and so on.” *Id.*, 9:50-66. Kraft’s events align with the types of situations disclosed in the ’052 patent, which describes a “situation” as broadly including social events, emergency events, weather phenomena, natural disasters, etc. *See* EX1001, 5:9-24, 31:64-65. EX1003, ¶¶108-109.

Kraft further discloses, “the world model advantageously defines types of relationships that may exist among entity models belonging to the same or different categories.” EX1005, 10:10-13. For example, a “Person” can be directly linked to a created “Event” as a “participant.” *Id.*, 10:13-21, FIG. 3. A Person entity can also be indirectly related to an event by being a “member of” a community that is “focused on” or a “participant” in an event. *Id.*, FIG. 3. Accordingly, Kraft teaches “[a] method for creating a situational network as a subset of a larger multi-dimensional information network comprising a plurality of

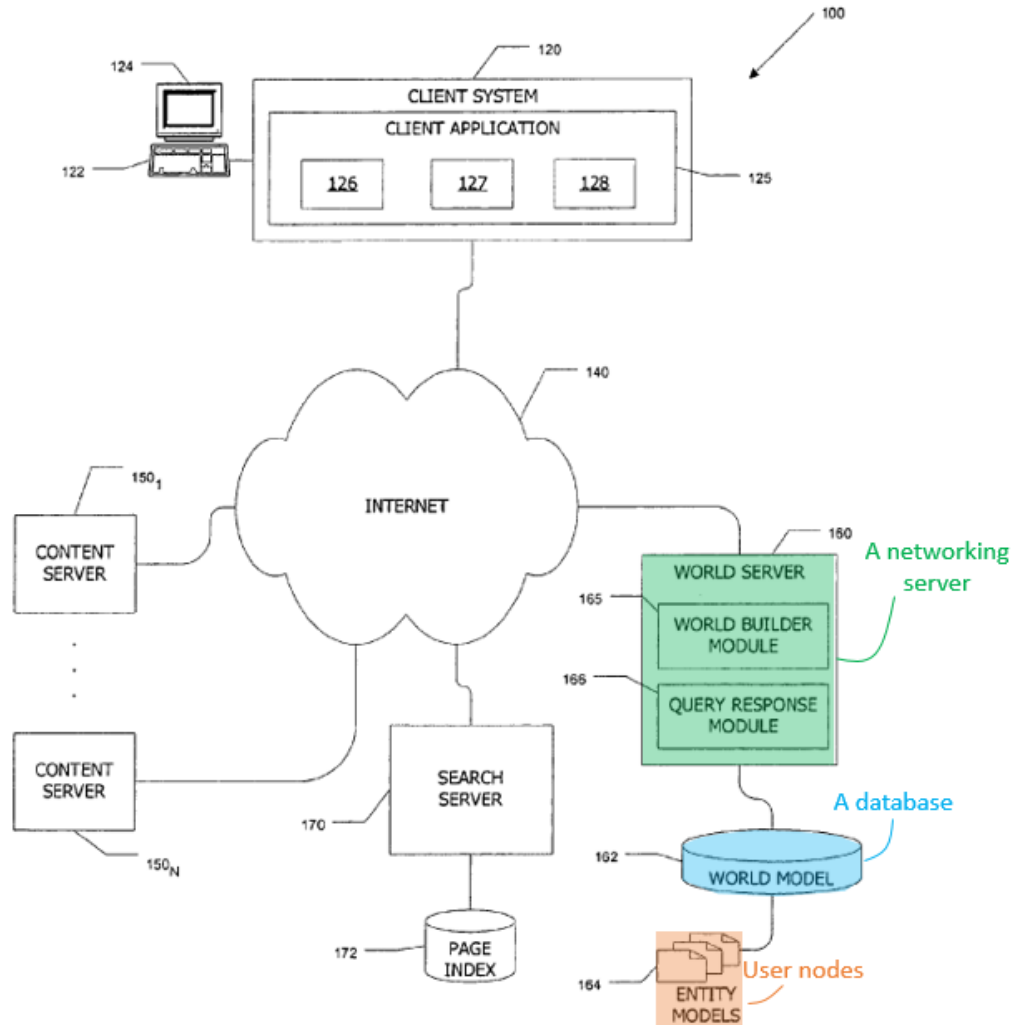
nodes, wherein the situational network is formed in response to an event in a particular geographical area” through its teachings of establishing an event node associated with an event (a *situation*) in a geographical area (as discussed in element [1.C]) and defining connections between the Event entities and Person entities (i.e., joining user nodes to the event node as discussed in element [1.F.1]). EX1003, ¶¶110-112.

For the reasons discussed for element [1.H] and [1.I], Kraft-Altman teaches “*delivering information to selected user nodes based in at least part on the situational network*” through their combined teachings that: i) a third subset of nodes is identified based at least in part on data representing user devices joined to the event node (i.e., *based ... on the situational network*) ([1.H]); and ii) additional information is delivered to the identified third nodes ([1.I]). EX1003, ¶¶113-114.

2. [1.A]

Kraft teaches this element. EX1003, ¶¶116-123.

First, Kraft teaches “*maintaining, by a networking server configured to maintain data ... a database.*” Kraft’s world server 160 is a *networking server* that maintains a *database* (world model data store 162). EX1005, 6:33-35; EX1003, ¶117. Figure 1 illustrates Kraft’s system.



EX1005, FIG. 1 (annotated)

Second, Kraft’s world model is “*data defining the multi-dimensional information network.*” The ’052 patent uses a “multi-dimensional personal information network” and “N-dimensional social network (NDSN)” interchangeably. *See* EX1001, 6:24-28, 8:4-8, 15:1-4. The “NDSN uses multiple dimensions of association to characterize the relationships” (e.g., family, professional connection). *Id.*, 15:9-16. Kraft’s world model “provides a searchable

set of interrelated entity models 164.” EX1005, 6:35-37. Each entity model 164 “corresponds to some entity existing in the real world, such as **a person**” and is “implemented as a data structure” that provides information about the real-world entity. *Id.*, 6:37-42, 8:26-31. EX1003, ¶¶118-119.

Third, Kraft discloses a “real-world person who is a world-model participant may create” one or more Person models “to represent himself or herself in the world model.” EX1005, 14:1-15. The Person models are *a plurality of user nodes* stored in database 162. EX1003, ¶120. Kraft’s entity models are “linked to each other by navigable relationships,” i.e., “*dimensions in the multi-dimensional information network.*” EX1005, 8:1-3. Kraft’s world model captures and stores relationships between user nodes along multiple dimensions, which are “*node-to-node links characterizing relationships between the plurality of user nodes via dimensions in the multi-dimensional information network.*” EX1003, ¶121. Kraft discloses world model 162 “can be represented visually using a network graph, with each node representing an entity model 164 and each edge representing a relationship between entity models.” EX1005, 8:32-36. Person entity models “can have trust (or friendship) relationships with each other” and world model “can include features of a conventional social network.” *Id.*, 10:22-26. Kraft’s world model 200 can model “the full complexity and scope of interrelationships that exist in the real world” (e.g., employer to employee). *Id.*, 9:3-5, 16:45-48. Users may

also be linked by common interests and community involvement; for example, two users (e.g., Jane node 210 and Joe node 202) may be linked by an interest in “science fiction.” *Id.*, 9:5-14, FIG. 2.

Fourth, Kraft teaches “*wherein at least some respective user nodes of the plurality of user nodes are associated with respectively user data.*” Kraft discloses its entity models include “structured metadata section 406” that “stores a number of field-value pairs related to the real-world entity being modeled”; content section 404 provides content “that pertains to the real-world entity being modeled”; and “[r]elationships section 430 defines relationships between the entity model and other entity models.” *Id.*, 11:36-12:18, 13:6-26, FIG. 4. For Person models (*user nodes*), the metadata fields “might include name, age, sex, address, occupation, or the like” and “may be varied as desired.” *Id.*, 11:39-43. The metadata fields, content data, and relationship data is *user data associated with* the Person entity (*user node*). EX1003, ¶122.

3. [1.B]

Kraft teaches this element. EX1003, ¶¶124-130.

First, Kraft’s client devices are “*a plurality of user devices associated with the plurality of user nodes*” (the real-world persons associated with Person models). Kraft discloses users may interact with world model using client devices 120 (*user devices* such as cell phones) and may use devices 120 to communicate

with other users of world server 160. EX1005, 5:7-19, 6:61-65. Client system 120 interacts with world server 160 as a “user” (to retrieve information from the world model) or as “a participant” (to add or modify entity models 164 in world model data store 162). *Id.*, 6:61-65. Kraft’s entities store contact information, such as an IM or other communication channel, to contact the entity manager (e.g., for a Person entity, the real-world person the entity represents). *Id.*, 11:5-29, 13:61-14:15. In other words, users may be contacted at devices identified in the communication channel (e.g., at a device associated with the IM contact). EX1003, ¶¶125-127.

Second, Kraft’s world server 160 (*the networking server*) includes “a query response module 166” which “*provid[es] ... a respective composite data feed that based on the database.*” EX1005, 6:51-59; EX1003, ¶128. The query response module interacts with client system 120” and “enables users to search world model data store 162 for entity models 164 that match user-specified criteria.” EX1005, 6:51-59. A user “can access world model data store 162 to facilitate information retrieval” through “a world search module 126 of client application 125, which interacts with query response module 166 of world server 160.” *Id.*, 18:31-40. For example, a user can submit a query to world server 160 through “a conventional Web browser to a page providing search interface to world server 160. *Id.*, 18:41-44. Once a search query is submitted, “the search is performed,” and “search

results, including links to matching entity models from world model data store 162 are returned to the user” (“*composite data feeds*”). *Id.*, 18:61-19:9.

Kraft’s search result listing is consistent with the ’052 patent’s use of the term “data feed.” EX1003, ¶129. The ’052 patent discusses data feeds broadly. It does not limit the form of a data feed but provides embodiments where a “[u]ser 250 requests the PIA 400 to receive a data feed” by “sending a requestData message” to an entity, to which the entity responds by “provid[ing] the requested data feed to the PIA 400 by sending the provideData message to the PIA 400.” EX1001, 12:55-66. The ’052 patent further describes the data feed may be “single use” such that static data is provided to the user. *Id.*, 10:32-39, 13:34-45. Moreover, the ’052 patent says, “[t]he event node may be discovered” by “searching ... the network for information about the situation or event.” *Id.*, 20:49-52. Kraft’s user performs similar operation, searching the network for entity models (including events) via the user’s device. EX1003, ¶129.

4. [1.C]

Kraft teaches this element. EX1003, ¶¶131-136.

First, Kraft’s world server 160 “may include multiple servers and associated database systems.” EX1005, 7:45-48. Kraft teaches “*establishing, by an event node server*” (the server of world server 160 that creates and stores an Event entity) “*an event node associated with the event*” (an “event” entity model) “*in the particular*

geographical area” (the “location” specified in the metadata). EX1003, ¶¶132-133.

Kraft discloses an entity model may be assigned an “event” category “for “entity models representing occurrences such as elections, natural disasters, sports events, and so on.” EX1005, 9:50-66. Kraft’s “world-model participants can create and update entity models via client application 125 (FIG. 1), which interacts with world-builder module 165 of world server 160.” *Id.*, 15:21-28, FIG. 1. The participant selects a category for the new entity model 400 (e.g., event); completes core information for the entity model, including structured metadata (e.g., location); and populates content section 404. *Id.*, 15:45-52, 15:64-16:14.

Relationships of the new entity model to existing entity models are also defined—for example, “if the metadata includes a ‘Location’ field, a relationship to a Place entity model representing that location can be automatically defined.” *Id.*, 16:28-34. Figure 2 of Kraft illustrates an example event node 202 that represents a mayoral election located in a city represented by node 212. *Id.*, 8:40-45, FIG. 2.

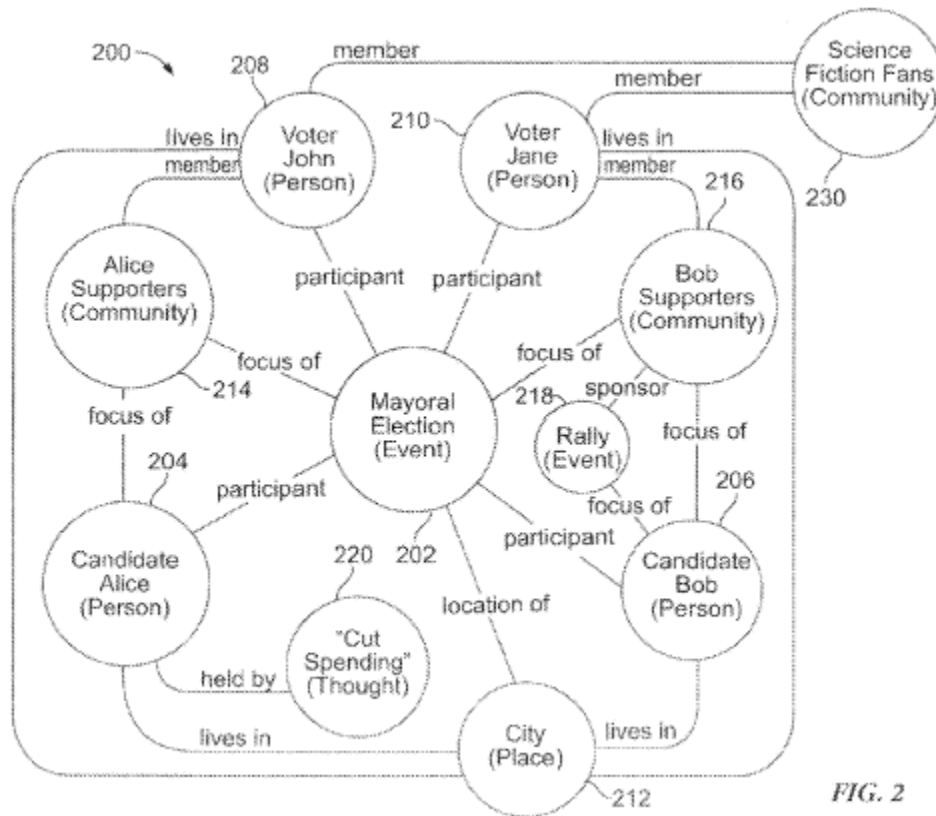


FIG. 2

EX1005, FIG. 2.

Second, Kraft teaches *the event node* (Event model) “*is discoverable by each user device of the plurality of user devices by browsing the respective composite data feed*” (client devices may search and browse a list of entity models). EX1003, ¶¶134-135. After a participant commits a new entity model to Kraft’s world model data store 162, “it becomes accessible to other users via various search and navigation interfaces and tools.” EX1005, 16:53-59. As described in claim element [1.B], client system 120 (*user device*) can “communicate with a world server system 160” (e.g., through “world search module 126”) “to search world model data store 162 for entity models 164 that match user-specified criteria” (e.g., events

located near a specified location). EX1005, 5:8-10, 6:51-59, 18:31-54. For example, users may search for “entities located near a specified geographic location,” and, in some embodiments, the “matched entity models might be shown by reference to locations on a map.” *Id.*, 18:47-50, 19:17-23. The user may select a matched entity model of interest to show an “entity view” which “displays information from the entity model in a user-readable form.” *Id.*, 19:37-41.

5. [1.D]

Kraft-Altman teaches this element. EX1003, ¶¶137-146.

First, Kraft teaches “*creating, by the networking server, based on the database, a projection of the plurality of user nodes*” (world server 160 creates a view of Person entities that match specified criteria upon user request). EX1003, ¶¶138-140. The ’052 patent describes a “projected view,” which “is also referred to as a projection,” as a subset of nodes of the NDSN. EX1001, 17:4-5, 22:52-54. Kraft discloses that a participant may “access a search-and-navigation interface to the world model data store 162,” for example, to identify entity models that should be related. EX1005, 16:36-39. The interface “may include a network view, similar to FIGS. 2 and 5, as well as other components” of exemplary search and navigation interfaces. *Id.*, 16:36-42, FIGS. 2, 5. Users may search for entity models that match specified criteria and a “network graph ... might be used to display the matching entity model as well as related entity models.” EX1005, 19:6-8, 19:29-32; *also*

20:59-21:9.

Second, Kraft-Altman renders obvious “*the projection comprising a first subset of the plurality of user nodes associated with a first subset of the plurality of user devices*” (the user device(s) associated with the user node(s) in the projection).² EX1003, ¶141. As explained for claim element [1.B], Kraft teaches user devices associated with user nodes. Additionally, Kraft’s world model defines relationships that exist among entity models. EX1005, 10:7-15, FIG. 3. One such relationship is *ownership*—e.g., a Person can “own” a “thing” entity, which can be “focused on” an event.” *Id.*, 10:10-18, FIG. 3. A POSA would have understood the user may create a “Thing entity” to add a “user device” (e.g., a client device 120, such as a cell phone) to Kraft’s world model and define an “own” relationship with its Person entity to model its real-world relationship with the device. A POSA would have been motivated to create a “user device” entity and associate it with a user because Kraft explains that “any type of real-world entity can be represented by an entity model,” including “tangible things” and its world model “advantageously” reflect real-world relationships. EX1003, ¶142; EX1005, 8:23-

² The plain and ordinary meaning of subset includes a set of “one”; thus, the claim does not require multiple nodes to be in the first subset or any other claimed subset. EX1003, ¶141 n.1.

31, 10:7-12, FIG. 3. Such a real-world relationship between a user and a device was well-known, as evidenced by Altman's teachings of associating user profile information and user location with a mobile device operated by the user. EX1010, ¶¶8, 32, 36-37, 44. A POSA would have been further motivated to create an association between a user and a device in Kraft's world model to allow the location of a user to be more precisely determined (as taught by Altman and further discussed in Section IV.D).

Third, Kraft-Altman renders obvious "*wherein the projection is created based on respective distances of devices of the first subset of the plurality of user devices from the event.*" EX1003, ¶142. Kraft discloses the metadata associated with its entities includes a "location" or "address" field." EX1005, 11:36-45. Kraft teaches that a search may be performed that is "constrained in some way by geographic location" and that the projection (network view) can be based on geographic location. *Id.*, 19:17-32. For example, Figure 2 of Kraft illustrates a projection in which the candidate and voter participants in the mayoral election event all live in the same city 212. *Id.*, FIG. 3. A participant (such as the event organizer) would have been motivated to create such a view of a first subset of user nodes "*based on respective distances of devices of the first subset of the plurality of user devices from the event*" to identify potential participants close enough to the event to participate. EX1005, 16:36-39. EX1005, 11:5-8, 21:3-8; EX1003, ¶143.

However, Kraft's location is static and does not explicitly disclose creating the projection based on current respective distances between the device (e.g., mobile device) and event at the time the projection is created.

Altman determines the geographic location of a mobile communication device operated by a user and the location of event(s). EX1010, ¶¶8, 39. The location information "is transmitted and stored in the server computer of the network." *Id.*, ¶63. The GPS location of the device may be provided on a real-time basis or by polling each device at a set frequency. *Id.*, ¶¶65-67. Based on the location of the device, relative distances to events may be provided to the user and users may be alerted of locations of events of interest when the user enters a particular area (i.e., alerted *based on respective distances of devices ... from the event*). *Id.*, ¶¶54, 61. Kraft teaches its entities may be automatically updated to reflect changes that can be detected or reported to world server 160. EX1005, 18:16-29; *also* 11:45-55 (describing portions of content server 404 may be automatically updated). A POSA would have found it obvious to include Altman's teachings of obtaining and storing the GPS location of a user device in Kraft (e.g., in the location field of a Person entity associated with the device or in a location field of a Thing entity that represents the device) and would have been motivated to do so for the reasons discussed in Section IV.D. Thus, Kraft-Altman renders obvious claim element [1.D]. EX1003, ¶¶144-145.

6. [1.E]

The Kraft-Nguyen-Altman combination renders obvious this element.
EX1003, ¶¶147-152.

The '052 patent describes a “roll call” as a “check-in” feature to invite users to respond to an invitation. EX1001, 27:20-26. Kraft does not explicitly describe transmitting requests to connect to the event node in the form of roll calls.

Nguyen does. It discloses “an event planning system that facilitates event planning tasks.” EX1006, ¶11. Nguyen’s system allows the event planner to specify “invited guest information including information indicative of addresses of the invited guests” and “allowable RSVP methods indicating procedures by which an invitee may RSVP for the planned event.” EX1006, ¶60. Nguyen’s server then “generates and sends the specified invitations to the specified invitees ... each invitation soliciting a response.” *Id.*, ¶62. Thus, Nguyen teaches *transmitting*, by a server, *a respective request in a form of a roll call* (requesting the invitee to check-in with an RSVP response) to respond to an event invitation. EX1003, ¶149.

As discussed in Section IV.D, a POSA would have been motivated to incorporate Nguyen’s teachings of transmitting invitations to specified invitees and soliciting a response (a *roll call*) into Kraft’s world model to facilitate event planning and achieve the advantages of Nguyen’s system. EX1003, ¶150. Kraft describes how a participant (e.g., the event planner) can create an Event entity

node and “define relationships” between the Event entity node and other entities (e.g., *user nodes*) EX1005, 16:28-42. A POSA would have understood, or found obvious, that Kraft’s participant (event planner) would be motivated to use Nguyen’s event-planning teachings to invite the users to connect to the event node to facilitate event planning. Thus, Kraft-Nguyen-Altman renders obvious *transmitting, by the networking server* (Kraft’s world server), *the claimed respective request ... to connect to the event node to each respective device of the first subset of the plurality of user devices* (the devices associated with the first subset of user nodes as discussed in claim elements [1.B] and [1.D]) and that, because the request would solicit a response as taught by Nguyen, the requests are *in a form of a roll call*. EX1003, ¶151.

7. [1.F.1]

Kraft-Nguyen teaches this element. EX1003, ¶¶153-159.

Kraft’s world model defines relationships that exist among entity models and provides a matrix that illustrates exemplary relationship types that may be defined among the entities. EX1005, 10:7-15, FIG. 3. For example, relationship types that may be defined between a Person entity and an Event entity include “participant” and “focused on.” *Id.*, 10:10-18, FIG. 3. A Person entity can also be indirectly related to an event by being a “member of” a community that is “focused on” or a “participant” of an event. EX1005, FIG. 3. World builder module 165

“supports modification of an entity model 400 that is already in world model data store.” *Id.*, 17:9-17. Relationships between two entity models might be modifiable by the entity manager of either entity model. *Id.*, 17:35-37. Kraft also discloses that some relationships may be “automatically defined.” *Id.*, 16:28-34.

A POSA would have recognized from Kraft’s description of its relationships, that after a user has responded “yes” to the request to connect to the event node (as described in claim element [1.E]), Kraft’s relationships enable the user to *join the event node* by modifying the relationship data of the Person entity (*event node*) to indicate the Person entity associated with the user (*user node*) is a “participant” of the event, thus *joining the user node to the event node* based on the *response to the request*. EX1005, 17:11-17, 17:35-37, FIG. 3; EX1003, ¶156. A POSA would have recognized the modification of the relationship could also occur automatically (e.g., based on the RSVP response), as taught by Kraft. EX1005, 16:28-34; EX1003, ¶157. A POSA would have further understood that, to the extent additional nodes are part of the *second subset* (*see supra*, fn2), a similar process would be applied to join additional users that respond “yes” to the event node. EX1003, ¶157.

Kraft also teaches, or renders obvious the *user nodes* are joined to a *centralized architecture for the event node*, because, as described in claim element [1.F.2], the event node is configured as a *central node in the centralized*

architecture. EX1003, ¶158.

8. [1.F.2]

Kraft teaches this element. EX1003, ¶¶160-164.

First, Kraft's Event entity (*event node*) "*is configured as a central node in the centralized architecture for accessing information associated with the event*" because the event node is stored and accessed from its central location on the world server 160 to obtain information associated with the event. EX1003, ¶161; EX1005, FIG. 1. As described in claim elements [1.B] and [1.C], Kraft's client systems communicate with world server system to "search world model data store 162 for entity models 164 that match user-specified criteria." EX1005, 5:8-10, 6:51-59, 18:31-40. A user may select a matched entity model (e.g., an Event entity) to obtain "information about the entity." *Id.*, 19:37-41, 19:55-59. For example, information that may be stored (and displayed) for an entity model includes content section 404 that "provides content (or links to content) that pertains to the real-world entity being modeled." *Id.*, 11:47-49.

Second, Kraft teaches the information is accessed *from a location in the multi-dimensional network* because, as discussed in claim elements [1.A], [1.B], and [1.D], client systems 120 are part of Kraft's multi-dimensional network and at least some of the devices are associated with user nodes. EX1005, 4:64-5:12, FIG. 1; EX1003, ¶162.

Third, for the same reasons as discussed in [1.D], Kraft renders obvious *the second subset of the plurality of user nodes is associated with a second subset of the plurality of user devices* (the user devices associated with the persons/users represented by the user nodes). EX1003, ¶163.

9. [1.G]

Kraft teaches this element. EX1003, ¶¶165-169.

As discussed in claim element [1.A], Kraft's world model captures and stores relationships between entities (i.e. *node-to-node* links) and stores these links in its database (world model data store 162). EX1005, 6:33-35, 8:1-3, 8:32-36. Thus, once each of the user nodes in the second subset are joined to the event node by creating a relationship between the user node and Event (as discussed in claim element [1.F.1]), the relationships "*representing the joining of the second subset of the plurality of user nodes to the event node*" is "*stor[ed], as node-to-node links in the database.*"

10. [1.H]

For the reasons discussed in claim elements [1.B] and [1.E], Kraft's users may search for entity models that match specified criteria, and a participant may access a search-and-navigation interface to identify entity models that should be related. EX1005, 16:36-42, 18:31-19:32. A network graph may be displayed (similar to FIGS. 2 and 5) and all related entity models up to a maximum degree of

separation (e.g., 2) from the current entity may be shown. *Id.*, 20:59-67. When world server performs the specified search, it is “*analyzing the database to identify ... nodes in the database.*” EX1003, ¶171.

Kraft’s network graph view further teaches the analysis is *to identify* the claimed *third subset of the plurality of user nodes*. In view of Kraft’s description of displaying a network graph related to the currently viewed entity for two degrees of separation, the network graph of the Event entity will show the user nodes (Person models) connected to the Event entity and other user nodes within two degrees of separation from the Event entity; the claimed *third subset* may be any subset of one or more of the displayed user nodes identified using a variety of criteria as further discussed in the analysis of the dependent claims. The analysis is *based at least in part on the data representing the joining of the second subset of the plurality of user devices to the event node* because it includes analysis of the data representing the joining of the second subset of user nodes joined to the Event (as discussed in element 1.F.1) to identify nodes connected within two degrees of separation. EX1003, ¶¶172-173. Thus, Kraft renders obvious [1.H]. EX1003, ¶¶170-174.

11. [1.I]

Kraft-Altman teaches this element. EX1003, ¶¶175-180.

First, for the reasons described in [1.A], [1.D], and [1.F.2], Kraft and

Altman teach “*a third subset of user devices associated with the third subset of the plurality of user nodes.*” EX1003, ¶176.

Second, Kraft-Altman teaches “*delivering additional information*” to the “*third subset of user devices.*” Altman describes “[a] database specifying places and/or events,” and information “can be provided to [a] user in a ‘push’ model in which the server sends relevant POI [(“point of interest”)] information to a user [device] based on a user condition, such as if the user goes near a particular POI.” EX1010, ¶55; EX1003, ¶177. Altman further discloses an alert function can be used to facilitate “interactive features, such as displaying or alerting the user to the location of places of interest in the displayed area or the time and location of events of interest when the user enters a particular area.” EX1010, ¶61. Altman’s delivery of information (e.g., events or places of interest in a particular area) teaches *delivering information to user devices*.

A POSA would have understood Altman’s alert functionality could be employed in Kraft to *deliver additional information* to the *third subset of user devices* (associated with the *third subset ... of nodes* identified in [1.H]) and would have been motivated to do so to provide useful information on events of interest to identify and connect users to events. EX1003, ¶178. Kraft supports a wide range of events, including “occurrences such as elections, natural disasters, sports events, and so on.” EX1005, 9:65-66. A POSA would have understood that Altman’s alert

system would advantageously allow information to be delivered to identified user devices (the *third subset*) of all events or POI in a particular area (i.e., *additional information*) for connecting the user to events and places of potential interest. For example, using Altman's alert techniques, a user may be notified about a rally event related to the Event node that they may be of potential interest. *See* EX1005, FIG. 2 (illustrating a rally event related to a Mayoral event). A POSA would have had a reasonable expectation of success, and been further motivated, of employing Altman's alert functionality because it would amount to nothing more than incorporating well-known techniques into Kraft's system, which includes mobile communication devices and content servers to store Altman's database of event and POI information. EX1005, 4:67-5:19, FIG. 1; EX1003, ¶178.

Third, Kraft-Altman teaches "*the supplemental information was received from an information node configured to store and provide supplemental information via the multi-dimensional information network.*" Kraft discloses its network includes content servers configured to communicate with client systems (e.g., user devices). EX1005, 4:67-5:2. In the Kraft-Altman combination, a POSA would have understood that Altman's database of events and places would be stored on a content server, and thus the *supplemental information is received from an information node configured to store and provide supplemental information*

(the content server storing the database of places of interest and events). EX1003, ¶179.

F. Independent Claim 7

Kraft-Nguyen-Altman renders obvious claim 7. EX1003, ¶¶181-191. Claim 7 recites elements that are substantially the same as claim 1 and are thus rendered obvious for the same reasons as claim 1.

Kraft-Nguyen-Altman also renders obvious the additional generic server components (*network controller, central processing units*) recited in claim 7. EX1003, ¶182. Kraft discloses “elements in the system shown in FIG. 1” (including world server 160) include “conventional, well-known elements.” EX1005, 5:14-15, FIG. 1; *also* EX1006, ¶¶55-56 (Nguyen’s teachings of exemplary components of a network system). A POSA would have recognized *network controller(s)* of world server 160 (the claimed *networking server*) are *configured to perform the provide, transmit, and deliver* limitations because Kraft’s world server 160 communicates with client system 120 via a network, such as the Internet. EX1005, 5:8-12, 5:33-39, FIG. 1; EX1003, ¶184. Finally, a POSA would have recognized that *one or more central processing units* of world server 160 and the specific server that is the *event node server* perform their respective recited functions because a CPU is a conventional component that executes instructions to perform server functions. EX1003, ¶¶185-190.

G. Claims 2 and 8

Kraft teaches these claims. EX1003, ¶¶192-194. For the reasons discussed in claim element [1.H], Kraft's network graph within two degrees of separation from the Event teaches the claimed analysis to identify *the third subset*, which may be any subset of the user nodes displayed in the network graph. *E.g.*, EX1005, 20:59-67. Because the displayed user nodes from which the third subset may be identified includes the *second subset of user nodes*, Kraft teaches *the third subset ... includes at least a portion of second subset of the plurality of user nodes*. EX1003, ¶193. One example of such a third subset is a set including a first Person that joined the event based on a response to the request (i.e., a node in the *second subset*) and a second Person connected by a relationship (e.g., a trust relationship) to the first Person.

H. Claims 3 and 9

Kraft teaches these claims. EX1003, ¶¶195-198. For the reasons discussed in claim element [1.H], Kraft's network graph within two degrees of separation from the Event teaches the claimed analysis to identify *the third subset*, which may be any subset of the user nodes displayed in the network graph. *E.g.*, EX1005, 20:59-67. A POSA would have understood that by searching for entities within two “degree[s] of separation” from an event node, *id.*, 20:59-67, Kraft's system would identify both user nodes connected to the event node (i.e., *identifying the data*

representing the joining of the second subset joined to the event as discussed in element [1.F.1], [1.G] and [1.H]) and user nodes indirectly connected to the event node through another node. EX1003, ¶196.

Kraft further teaches *identifying the third subset ... in conjunction with identifying a set of data stored in the multi-dimensional information network representing at least one of: demographics, interests or behaviors*. Kraft teaches its entities include Communities that represent groups united by a common interest or characteristic. EX1005, 9:61-63. A POSA would have understood such Communities include communities based on *demographics* (e.g., a senior citizen community), *interests* (e.g., membership in “Science Fiction Fans 230”), or *behaviors* (e.g., an optimism club) because Kraft’s world model models the full complexity and scope of the real world. EX1005, 9:3-5, FIG. 2; EX1003, ¶197. The network graph of the Event within two or three degrees of separation displays “Community nodes” and its members connected to the Event. *E.g.*, EX1005, FIG. 2, 8:53-62 (discussing user nodes linked to an event node via membership in a community node). Thus, Kraft’s network graph identifies data representing *demographics, interests, or behaviors* through membership in a community. EX1005, FIG. 2; EX1003, ¶197.

I. Claims 4 and 10

Kraft teaches these claims. EX1003, ¶¶199-201. For the reasons discussed in claim element [1.H], Kraft's network graph within two degrees of separation from the Event teaches the claimed analysis to identify *the third subset*. *E.g.*, EX1005, 20:59-67. A POSA would have understood that the network graph would identify *a direct link between a user node of the third subset ... and a user node of the second subset* (i.e., a user node connected to the event within two degrees of separation through a relationship with a user node that joined the event). EX1003, ¶200. For example, Kraft teaches Person models (*user nodes*) may be connected through a trust or friendship relationship with each other (*a direct link*). EX1005, 10:22-25.

J. Claims 5 and 11

Kraft teaches these claims. EX1003, ¶¶202-204. For the reasons discussed for claim 3, a POSA would have understood that a network graph of the Event within two or three degrees of separation would display "Community nodes" connected to the event. *E.g.*, EX1005, FIG. 2; 8:53-62. A user node joined to the event as described in [1.F.1] (*a user node of the second subset*) and *a user node of the third subset* may both be members of a "Community" node that is linked to the Event through a "focus on" relationship (e.g., members of Bob Supporters Community in Kraft's example Figure 2). *Id.*, FIG. 2. In this case, the

“Community” node provides “*an indirect link between a user node of the third subset ... and a user node of the second subset.*” EX1003, ¶203.

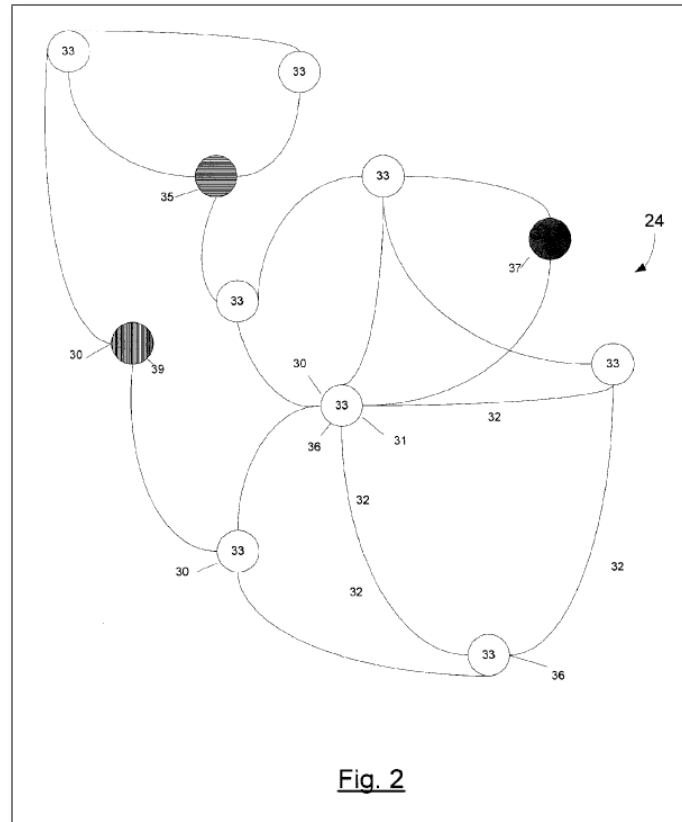
K. Claims 6 and 12

Kraft teaches these claims for the reasons discussed for claim 5. EX1003, ¶¶205-207. A POSA would have understood that the “Community” node connects “*the user node of the third subset*” and “*the user node of the second subset ... by a preference dimension to an additional node*” (i.e., the *additional node* is another member of the community). EX1003, ¶206. Kraft explains that “Community” “entity models represent[] groups of people united by a common interest or characteristic,” such as “science fiction fans” (i.e., *a preference*). EX1005, 9:5-7, 9:61-63.

V. GROUND 2: CLAIMS 1-12 WOULD HAVE BEEN OBVIOUS IN VIEW OF WONG, BURFEIND, AND CROWLEY.

A. Wong

Wong teaches creating a social network. *See, e.g.*, EX1007, Abstract, ¶¶2-3, 17-19. Wong’s network 24 is illustrated in Figure 2, reproduced below.



EX1007, FIG. 2.

Wong’s social “network ... is represented by a number of elements, ... which are referred to as ‘nodes’ 30, joined by connections 32, referred to as ‘linkages’, to other nodes 30.” EX1007, ¶21. Each node of Wong’s network represents a living or non-living entity, such as people, places, objects (e.g., groups, organizations, or businesses), or animals. *Id.*, ¶¶21-22. When a new node is created, the new node is linked to existing nodes. *See id.*, ¶¶27, 41, FIG. 6. Two existing nodes may also be linked. *Id.*, ¶28, FIG. 7.

In Wong, people or organizations “can represent themselves to other persons or organizations of persons through their active nodes and interact electronically

with other persons or organizations of persons represented by an active node.”

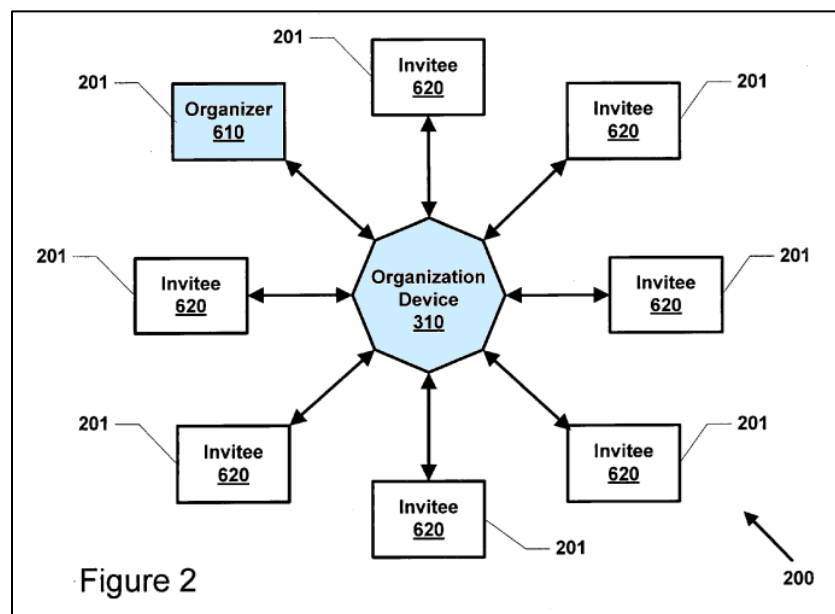
EX1007, ¶30. Users 10 access the network via computer terminals 14. *Id.*, ¶17.

Communication between the nodes may occur, via Wong’s “social networking features” including e.g., “notification of updates, alerts, sharing of files and photos, blogs, instant messaging and comments.” *Id.*, ¶44. The sender of communications can select which nodes in the network can receive a particular communication. *Id.*, ¶44. *See also* EX1003, ¶¶78-81.

B. Burfeind

Burfeind’s system enables a user to “schedule[] a location-specific event.”

EX1008, Abstract. In Burfeind’s network 200, “users 201 ... are communicatively coupled to an organization device 310,” which facilitates event planning. EX1008, ¶54, FIG. 2.



EX1008, FIG. 2.

“[E]vent organizer 610” (a user) provides event information—including time, location, and invitees for the event—to “organization device 310,” which in turn communicates the invitations and other event information to invitees 620.

EX1008, ¶¶52-57, 108, 111-113, 115.

Invitees can view events to which they are invited in event listing 2110. *Id.*, ¶¶120-122, FIG. 21. “[E]ach entry 2115 includes a hyperlink 2117 associated with a webpage containing additional information about the event,” including the event name and time. *Id.*

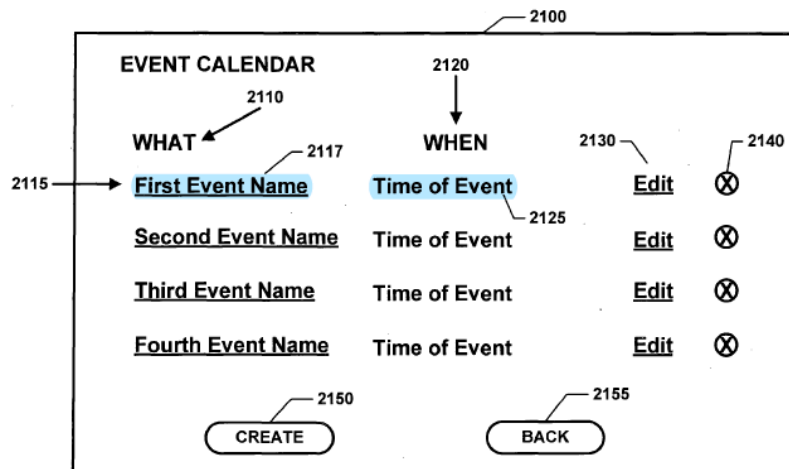


Figure 21

EX1008, FIG. 21 (annotated).

See also EX1003, ¶¶82-85.

C. Crowley

Crowley’s system coordinates meetings between friends and acquaintances. EX1009, Abstract. Crowley discloses “location-based social software” for

“establishing connection between users of mobile devices.” EX1009, ¶¶7-8.

Specifically, Crowley’s system determines when a user’s participating acquaintances are geographically proximate to an event venue, and automatically sends invitations to those individuals, inviting them to meet the user at that venue.

Id., ¶45. *See also* EX1003, 86.

D. Motivation to Combine

Wong teaches creating a social network made up of nodes (representing entities, e.g., users or objects) and connections (representing the relationship between entities). EX1007, ¶¶6, 17, 22-24; Section V.A. In Wong, the “individual represented by an active node can join groups, organize memberships, send emails from the node, and the like and in particular **take advantage of the activities facilitated by the social networking features** of the network of living and non-living entities, such as using certain communication tools.” EX1007, ¶44. Wong, thus, explicitly recognizes the benefit of including and utilizing various “social networking features.” EX1003, ¶209.

In February 2007, it was well known to use social networks to facilitate and organize events, including location-specific events. EX1003, ¶50. A POSA would have been motivated to include such well-known event-organizing capabilities in Wong’s social network, and would have looked for references including implementation details for event-organization functionality. EX1003, ¶210.

Burfeind and Crowley are such references.

A POSA would have been motivated to include the event-organizing capabilities of Burfeind's user network as an additional "social networking feature" in Wong's social network because it would have amounted simply to including a known technique (event-organizing capabilities) into a known system ready for improvement (Wong's social network) to yield predictable results (a social network including event-organizing capabilities). EX1003, ¶211.

Burfeind's organization device communicates invitations and other information regarding an event to invitees. EX1008, ¶¶52-57, 108, 115; Section V.B. Based on these teachings of Burfeind—and because, in Wong, communication happens between nodes in the network³, EX1007, ¶44—a POSA would have recognized that a **new node related to the event** (i.e., an *event node*) would be useful in Wong's social network to facilitate the event-related communication in the social network. Wong discloses that users (such as Burfeind's organizer 610) can create new nodes and link them to existing nodes.

³ In Wong, each node contains communication tools for "communicat[ing] with other entities within or outside the network using the features of the social network" and/or "communicat[ing] with nodes in the same network." EX1007, ¶19; *see id.*, ¶¶31-32.

Id., ¶¶26-27, 41, FIGS. 5, 6. And although Wong describes four exemplary “main node types”—people, places, objects, animals—Wong also teaches that there may be additional node types. EX1007, ¶¶21-22. Therefore, in the Wong-Burfeind combination, a new node associated with the event would be created in Wong’s network 24. EX1003, ¶212.

A POSA would have had a reasonable expectation of success in implementing Burfeind’s features in Wong, including the creation of a new *event node*. Wong recognizes that creating nodes was “well known to web site programmers.” EX1007, ¶18. In Wong, nodes are created and/or edited by a user accessing the network via user device, and information representing the nodes is stored on the social network server. EX1007, ¶¶17-19. Likewise, in Burfeind, events are created and/or edited by the event organizer (a user) accessing the organization device (a server) via a user device and updating the information related to the event. EX1008, ¶¶57, 59. And, as in Wong, Burfeind’s users access the user network via user devices, such as computers or cellular phones, and Burfeind’s event organizer 610 communicates with organization device 310 over a networked environment. *Id.*, ¶¶56-57, FIG. 3. EX1003, ¶213.

Similar to Burfeind, Crowley discloses a system for coordinating meetings between friends and acquaintances. EX1009, Abstract; Section V.C. Unlike Burfeind’s manual selection of invitees, EX1008, ¶¶159-161, FIG. 33, Crowley’s

system determines when a user's participating acquaintances are geographically proximate to an event venue, and automatically sends invitations to those individuals, inviting them to meet the user at that venue. EX1009, ¶45. Indeed, Crowley acknowledges the inefficiencies of systems like Burfeind that "require the organizer to select attendees from a manually-created list of acquaintances, such as members of an e-mail address book." EX1009, ¶4. EX1003, ¶¶214-216.

Crowley's system provides numerous advantages, such as enabling "spontaneous socializing" and "convenient communication among friends." EX1009, ¶6. Crowley also "help[s] avoid the problem of friends who were out near each other, but never realized it until later." *Id.*, see also ¶35. Crowley thus provides express motivation for implementing its location-based features in the Wong-Burfeind combination. A POSA would have thus been motivated to enable the Wong-Burfeind system to identify and invite all contacts that are geographically proximate to the event location, as taught by Crowley. EX1009, ¶¶45, 78; EX1003, ¶217.

A POSA would have had a reasonable expectation of success in implementing these features in the Wong-Burfeind combination. EX1003, ¶218. Similar to Crowley, Burfeind already contemplates "location-specific event[s]" that are held at the event organizer's current location and tracks its users' GPS locations to determine the "arrival information" for the user. EX1008, ¶¶3, 110,

112, 136, 143-145, 169-171, FIG. 36. A POSA would have readily been able to adapt this location-tracking feature to identify user locations for the purpose of inviting individuals who are located near the event location. EX1003, ¶¶219-220. A POSA also would have thus readily been able to modify the Wong-Burfeind combination to determine the event organizer's contacts that are located proximate the selected event venue, and to send invitations to that group of contacts, as taught by Burfeind and Crowley. EX1003, ¶¶220-221.

A POSA would have understood that implementing Crowley's techniques in the Wong-Burfeind combination would merely amount to the use of a known technique (Crowley's location-based messaging) to improve similar systems (Wong-Burfeind's social network based invitation system) in the same way (enabling the system to automatically send messages/invitations to nearby individuals), as well as applying a known technique to a known system ready for improvement to yield predictable results. EX1003, ¶222.

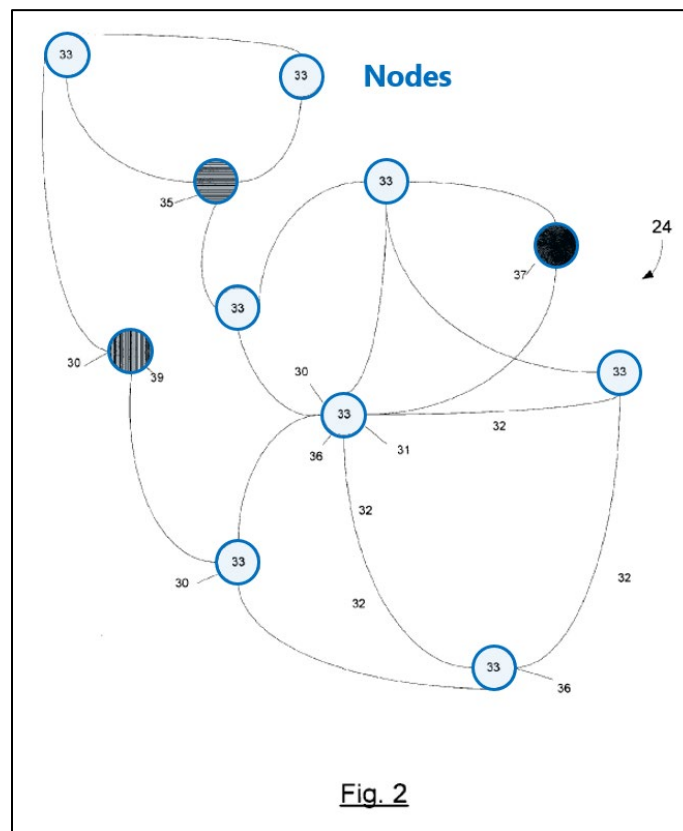
E. Independent Claim 1

1. [1.P]

To the extent limiting, Wong-Burfeind-Crowley teaches this element. EX1003, ¶¶223-229. As noted above, the '052 patent specifically identifies one example of a "situation" is "a social **event**, such as a concert or festival." EX1001, 32:3-4; *see also*, 5:14-29.

Wong discloses a *multi-dimensional information network comprising a plurality of nodes*. In particular, Wong teaches a “network of living and non-living entities is represented by a number of elements, ... referred to as ‘nodes’ 30, joined by connections 32, referred to as ‘linkages’, to other nodes 30.” EX1007, ¶21.

“[N]odes 30 represent people 33 (living and deceased), places 35, objects 37 and animals 39” *Id.*, ¶¶21-22.



EX1007, FIG. 2 (annotated).

“Nodes can be linked by more than one linkage type, representing the multiple types of relationships between the entities represented by the nodes.”

EX1007, ¶24. Thus, Wong teaches a network of people, places, objects, animals,

and other nodes linked by multiple relationships, i.e., the network is *multi-dimensional*. EX1003, ¶¶225-226.

Wong-Burfeind further teaches *the situational network is formed in response to an event in a particular geographical area*. As explained above (Section V.D), a POSA would have recognized that a new node related to an event (i.e., *an event node associated with the event*) would be useful in Wong's social network to facilitate event-related communication in the social network. As discussed further, for element [1.C], Wong-Burfeind teaches *establishing ... an event node associated with the event in the particular geographical area*. See Section V.E.4. The *situational network is formed* when, as explained for element [1.B], users that are invited to the event are linked to the *event node*. See Section V.E.3. EX1003, ¶227.

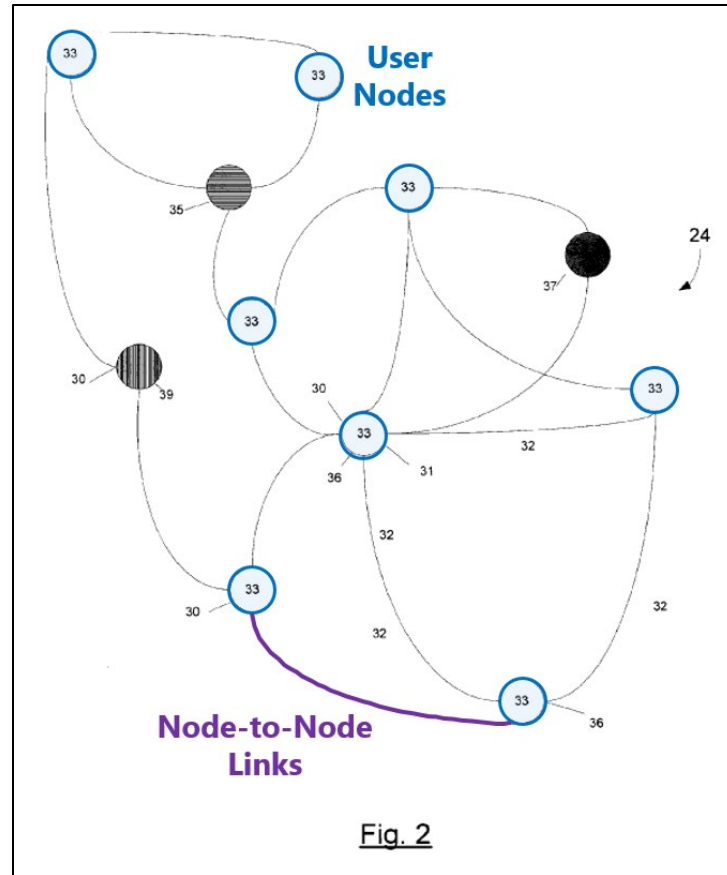
Finally, Wong-Burfeind teaches *the situational network is created for delivering information to selected user nodes based in at least part on the situational network*. As explained for element [1.G]-[1.I], advertisements (*information*) are delivered to advertising targets (users associated with a *third subset of ... user nodes/devices*). See Sections V.E.9-11; *see also* EX1008, ¶¶54, 181-183 (“provid[ing] targeted advertisements to event participants,” which includes event invitees); EX1009, ¶¶98, 101 (tailoring “advertising targeted to the particular users” to “thereby receive advertising and messages from [a] brand”).

These advertising targets are at least in part identified *based ... on the data representing the joining of the second subset of ... user nodes to the event node*, or in other words *based ... on the situational network*, because the users associated with the *second subset of ... user nodes* are part of the *situational network* (i.e., they are a group of users that have been invited to the event). See *id.* EX1003, ¶228.

2. [1.A]

Wong teaches this element. EX1003, ¶¶230-235.

Wong discloses a social network server 20 (*a networking server*) that *maintain[s] data defining a social network 24 (the multi-dimensional information network)*. EX1007, ¶17. That data, Wong explains, is stored in “the same database [(a database)] which forms part of the system.” *Id.*, ¶36. The stored data includes “[n]odes, linkages, linkage types, and all data pertaining to the network” ((1) *a plurality of user nodes*, and (ii) *a plurality of multi-dimensional node-to-node links characterizing relationships between the plurality of user nodes via dimensions in the multi-dimensional information network*). EX1007, ¶36, also ¶¶21, 24, 33; EX1003, ¶¶232-233. Wong’s network 24 (*multi-dimensional information network*) is illustrated in FIG. 2, reproduced below.



EX1007, FIG. 2 (annotated).

Wong also teaches that *at least some respective user nodes of the plurality of user nodes are associated with respectively [sic] user data* because, according to Wong, each node in network 24 represents a living or non-living entity, such as “people 33 (living and deceased), places 35, objects 37 and animals 39.” EX1007, ¶21. In Wong, each of these nodes is associated with information pertaining to the person or entity that it represents (*user data*). EX1007, ¶¶18-19, 31-32.

3. [1.B]

Wong-Burfeind teaches this element. EX1003, ¶¶236-243.

Wong’s users 10 access and interact with Wong’s social network using

computer terminals 14 (*each user device of a plurality of user devices*) and are associated with the plurality of user nodes 30. EX1007, ¶¶17-18, FIG. 1; EX1003, ¶237.

In Burfeind, each invitee can “view the status of each event to which the individual is a party,” e.g., to which the user is invited, via interface 2100 which includes “a listing 2110 of events” (*a respective composite data feed*). EX1008, ¶¶120-121, FIG. 21; *also* ¶¶163-165, FIG. 35.

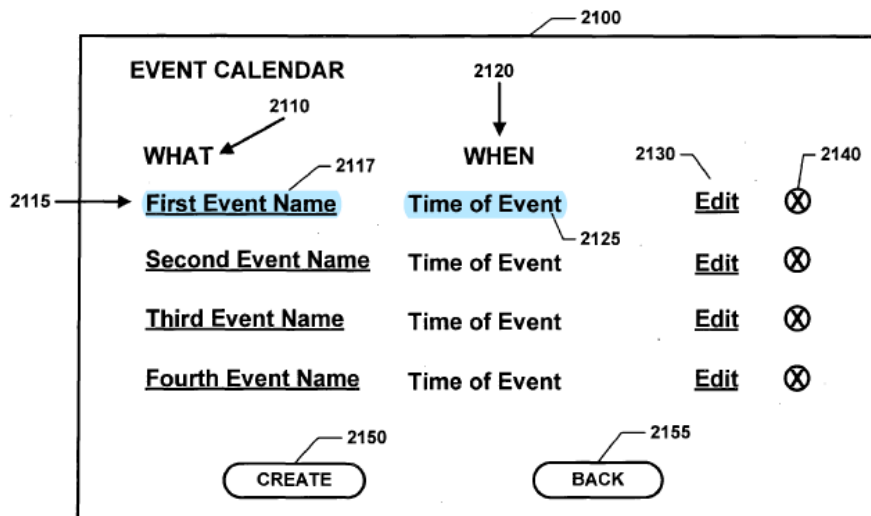


Figure 21

EX1008, FIG. 21 (annotated).

These event listings 2110 are *respective composite data feed[s]* because, consistent with the disclosure in the '052 patent, they, upon request, provide the user with an updated listing of all events they are invited to. See EX1001, 8:53-9:6, 12:55-67, 20:48-51. EX1003, ¶238.

Wong-Burfeind also teaches the event listings 2110 (*composite data feed[s]*) are *based on the database*. In the combined system, Burfeind's events are implemented as nodes (*event node*) in Wong's network. See §§V.D, V.E.4. When a user is invited to an event, a link is created between that user's node and the corresponding event node, and stored in the *database* of the social network server (*networking server*). EX1007, ¶¶27-28, 36. The information included in the event listing comes from this database. EX1003, ¶¶239-241.

Finally, Wong's social network server (*networking server*), *provide[s]* Burfeind's event listing (*respective composite data feed*) to *each user device*. Wong's system includes "an Internet website, database and associated data, which is accessible to users" and is maintained by social network server 20. EX1007, ¶17. In the combined system, Burfeind's interface 2100 is accessed via this Internet website.

4. [1.C]

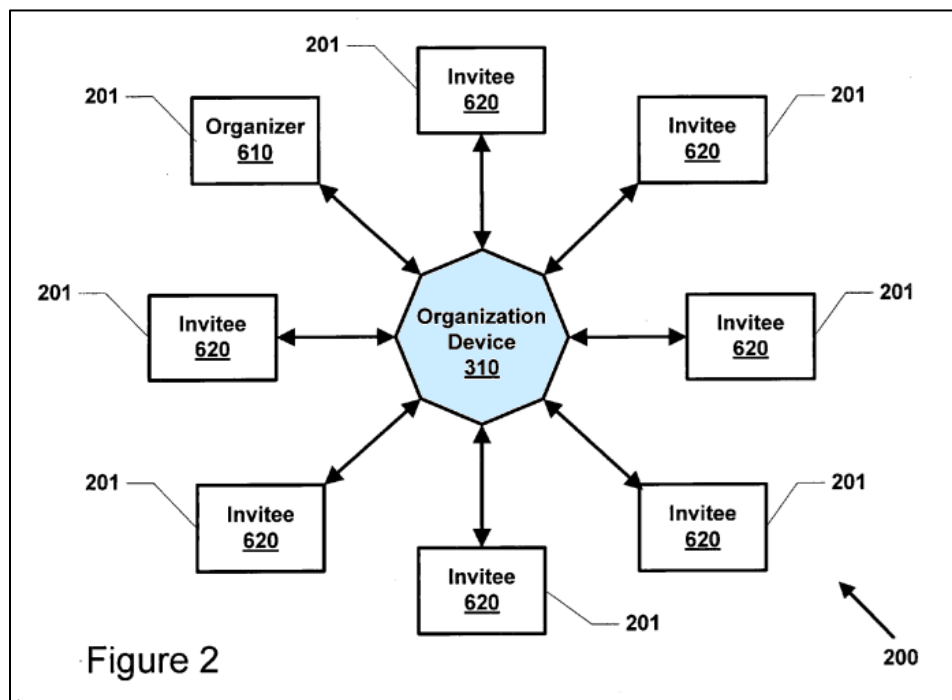
Wong-Burfeind teaches this element. EX1003, ¶¶244-253.

Burfeind's organization device 310 (*event node server*) is a "computer server" that "schedules a location-specific event" (*establish[es] an event in the particular geographical area*). EX1008, Abstract, ¶59.

As explained above (Section V.D), a POSA would have recognized that a new node related to the event (i.e., *an event node associated with the event*) would

be useful in Wong's social network to facilitate event-related communication in the social network. EX1003, ¶246. A POSA would have understood that each node in Wong is created by and associated with a server to provide the home page, communication tools, data and files, storage space, network information, and/or editing tools associated therewith. EX1003, ¶246; EX1007, ¶¶17-19, 31-32. This is consistent with the '052 patent's teaching that "users may have their nodes hosted in a common location, e.g., on a local or remote server." EX1001, 16:3-4.

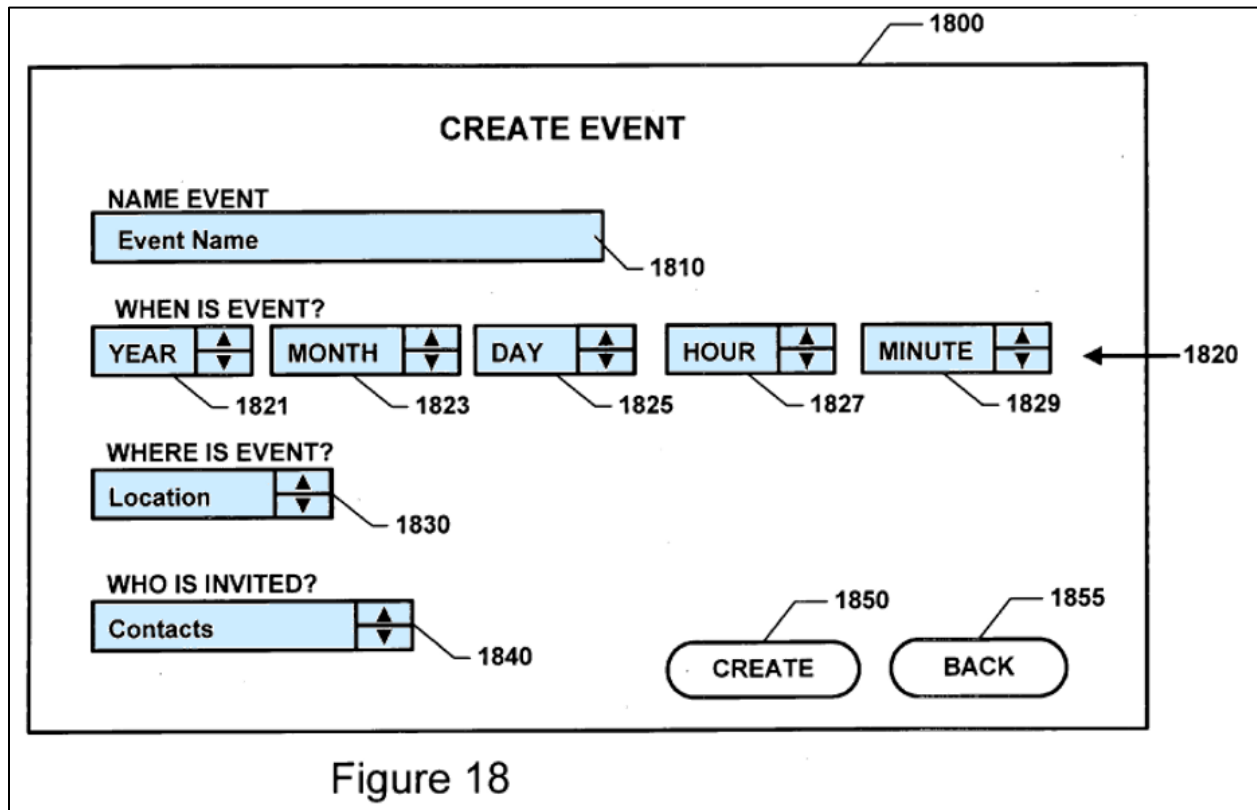
Burfeind's organization device (*event node server*) "executes a number of processes at the request of the event organizer 610," including creating and scheduling an event. EX1008, ¶¶78, 107, 111, 114, *see also* ¶¶146, 155, FIGS. 18, 33.



EX1008, FIG. 2 (annotated).

In doing so, the event organizer inputs information identifying the event—e.g., name, time, date, and location of the event, as well as individuals to be invited.

EX1008, ¶¶111-114, *see also* ¶¶147, 155-162, FIG. 18.



EX1008, FIG. 18 (annotated).

Wong-Burfeind also teaches *the event node is discoverable by each user device of the plurality of user devices by browsing the respective composite data feed*. EX1003, ¶¶249-252. Burfeind’s organization device transmits invitations to the user devices of the respective individuals invited to the event. EX1008, ¶¶108, 115. Invitations may be sent to “one or more groups” of the event organizer’s contacts. *Id.*, ¶159, *see also* ¶89, FIGS. 11-13. The devices associated with these

event invitees are *the plurality of user devices*.⁴ Once a user has been invited to an event, that event is viewable in their event listing 2110 (*composite data feed*).

EX1008, ¶¶120-121, FIG. 21.

In Burfeind, each event has a corresponding webpage, accessible via an interface tool 2117 (e.g., a hyperlink) in the event listing. EX1008, ¶121. Likewise, each of Wong's nodes is accessible via a web page. EX1007, ¶22. Thus, in the combined system a user (via their *user device*) can *brows[e]* their *respective* listing of events (*composite data feed*) and access (*discover[]*) the event webpage (associated with the *event node*). EX1007, ¶¶17, 28; EX1008, ¶121. Thus, each event node is *discoverable to each respective user device* as claimed. EX1003, ¶¶249-252.

5. [1.D]

Wong-Burfeind-Crowley teaches this element. EX1003, ¶¶254-261.

The '052 patent depicts an example of what is meant by "a geographic

⁴ The claim language does not foreclose additional user nodes beyond the claimed *plurality of user nodes* (i.e., Burfeind's invitees) being included in the multi-dimensional information network. Indeed, the preamble identifies that the *situational network* is formed as *a subset of a larger multi-dimensional information network*.

projection of nodes” in Figure 30. EX1001, 3:30-31, 23:11-21.

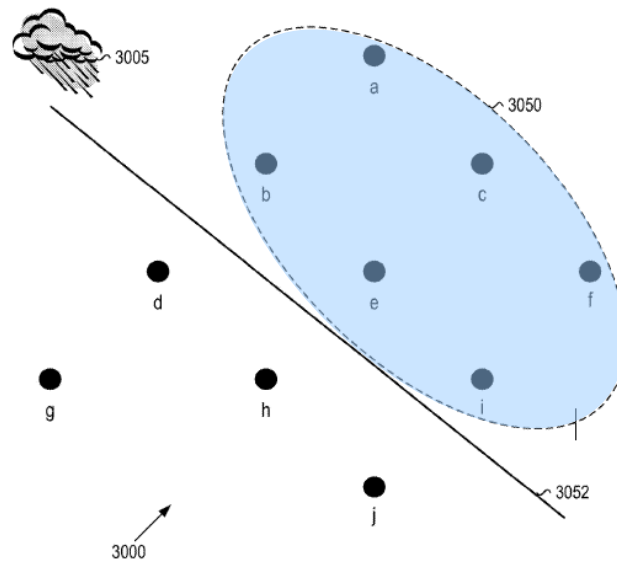


Fig. 30

EX1001, FIG. 30 (annotated).

Consistent with this example, Wong teaches *creating, by the networking server, based on the database, a projection of the plurality of user nodes*. In Wong, the information defining Wong’s network is stored in the *database*. EX1007, ¶36; *see* [1.A]. Wong’s “network ... 24 can be viewed in many ways, such as graphically as a set of nodes 30 connected by their associated linkages 32, or as a list.” EX1007, ¶35. Wong teaches that different parts of the network can be viewed

by selecting different nodes as the root of the graphical view (*projection*). EX1007, ¶35. EX1003, ¶256.

Wong-Burfeind-Crowley also teaches *the projection ... compris[es] a first subset of the plurality of user nodes associated with a first subset of the plurality of user devices that is selected based on respective distances of devices of the first subset of the plurality of user devices from the event*. A POSA would have been motivated to identify nodes that have not yet sent a response, in order to send event reminders and to encourage greater participation in the event. EX1003, ¶258. Indeed, Burfeind teaches sending “event reminders” and that in response an invitee can “*provide or update their participation status.*” EX1008, ¶¶176-180, FIG. 37. Burfeind tracks user locations, such as a “distance the invitee [] is from the event location.” *Id.*, ¶¶136, 138, *see also* ¶131, 143-145, 169-171, FIG. 36. And Burfeind determines users’ proximity to the event location, but does not explicitly disclose sending reminders to users based on their proximity.

Crowley provides that explicit suggestion. It teaches inviting users to events based on their geographic proximity (*based on respective distances of devices of the first subset of the plurality of user devices from the event*). EX1009, ¶¶45, 64. Based on these teachings, a POSA likewise would have been motivated to send reminders to this subset of users because users located geographically proximate to an event are more likely to attend. EX1003, ¶259. As discussed above, a POSA

would have been motivated to implement Crowley's location-based invitations into Wong-Burfeind. *See* Section V.D. EX1003, ¶260.

6. [1.E]

Wong-Burfeind-Crowley teaches this element. EX1003, ¶¶262-265.

As explained above, Burfeind-Crowley teaches sending (*transmitting*) reminders (*respective request[s]*) to a group of invitees (i.e., users associated with *the first subset of the plurality of user devices*) that are geographically proximate the event location. *See* EX1009, ¶45, *see also* ¶78. These reminders (*the respective request[s]*) are *in a forms of a roll call*. Burfeind teaches that upon receiving an invitation from the organization device, invitees can provide “a response to the invitation” by transmitting their respective participation statuses to the organization device. EX1008, ¶119, *see also* ¶¶52, 117, 133. And in response to a reminder, an invitee can “*provide or update their participation status.*” EX1008, ¶¶176-180, FIG. 37. The reminders (*respective request[s] ... to connect*), thus, prompt users to respond with their participation statuses so that the system can “track[] the participation status of each invitee,” and are therefore *a roll call*. EX1008, ¶52. This is consistent with the disclosure of “roll calls” in the '052 patent, in which a user is presented with an unsolicited message and an option to respond. EX1001, 27:24-50. EX1003, ¶263. The reminders are *respective request[s] ... to connect to the event node* because, as discussed below for element [1.F.1], when a user

provides an affirmative response to this reminder, they are communicatively connected to the event node. *See* Section V.E.7.

Finally, a POSA would have understood that, in the combination, the communications between nodes, including *transmitting* the reminders, are implemented by the social network server (*by the networking server*) because the communications are facilitated by the social network features of Wong's system. EX1007, ¶¶17, 44. EX1003, ¶264.

7. [1.F.1]

Wong-Burfeind-Crowley teaches this element. EX1003, ¶¶266-269.

Burfeind's response includes a participation status (and an optional message), which is saved for future reference. EX1008, ¶¶117-119. In the combination, for users that provide an affirmative response to the event reminder (*based on responses to each of the respective requests*), their corresponding nodes (*a second subset of the plurality of user nodes*) are, thus, *join[ed] ... to a centralized architecture for the event node*. As discussed below for element [1.F.2] *the event node is configured as a central node in the centralized architecture* because it facilitates the communication between the user devices associated with event participants (i.e., communication is "through the organizing device," EX1008, ¶56). A POSA would have understood that in order to participate in this communication, these nodes (*second subset*), and their corresponding devices,

must be communicatively connected *join[ed] ... to [the] centralized architecture*.

EX1003, ¶268.

8. [1.F.2]

Wong-Burfeind-Crowley teaches this element. EX1003, ¶¶270-275.

As discussed above, Burfeind’s event organizer utilizes an organizing device to create an *event node* in Wong’s social network. Sections V.D, V.E.4. In the combined system, *the event node is configured as a central node in the centralized architecture for accessing information associated with the event*. Like the “centralized architecture” disclosed in the ’052 patent (*see* EX1001, 6:66-7:14, FIG. 43; EX1003, ¶271), Burfeind teaches that users “communicate with one another through the organizing device.” EX1008, ¶56. Further, the organizing device “can also provide to event participants (*[is configured ... for accessing]*) ... information pertaining to the event” (*information associated with the event*). *Id.*, ¶131, *also* ¶139 (“event status interface 2600 includes additional information 2660 pertaining to the event”), FIG. 26. EX1003, ¶272.

Figure 26

2600

EVENT NAME ← 2605

2640

2615 ☒ First Invitee Name ← 2610
Arrival Information ← 2620
Optional message ← 2630

☐ Second Invitee Name
Arrival Information
Optional message

☐ Third Invitee Name
Arrival Information
Optional message

☐ Fourth Invitee Name
Arrival Information
Optional message

OPTIONAL INFORMATION 2660

EX1008, FIG. 26 (annotated).

Further, Wong-Burfeind teaches the *information associated with the event [is accessed] from a location in the multi-dimensional information network* because the *information* is stored in “one or more databases on the organization device” (*event node server*). In the combined system the *event node* (and therefore the *event node server*) is a part of Wong’s social network 24 (*the multi-dimensional information network*). EX1008, ¶132; EX1003, ¶273.

Finally, Wong-Burfeind teaches that the *second subset of the plurality of user **nodes** is associated with a second subset of the plurality of user **devices*** because each event invitee, which is associated with a respective node 30 (*user node*), accesses the social network via their respective computer terminal 14 (*user device*). EX1007, ¶¶17-18, FIG. 1; EX1003, ¶274.

9. [1.G]

Wong-Burfeind teaches this element. EX1003, ¶¶276-280.

As discussed above for element [1.A] Wong teaches maintaining a database of nodes and node-to-node links. Burfeind teaches *storing* an invitee's response, in a database in the organization device. EX1008, ¶¶117-119. Based on these teachings, a POSA would have understood that for *the second subset of ... user nodes*, i.e., those that have responded in the affirmative to attending the event and are, thus, *join[ed] ... to the event node* (see Section V.E.7), the *database* would reflect the *node-to-node link* between the *second subset of ... user nodes* and the *event node*. EX1003, ¶277. Indeed, Wong explains that a user's network can be constructed "by linking existing nodes," and that communication happens between nodes within a network. EX1007, ¶¶21, 28, 44; EX1003, ¶¶278-279.

10. [1.H]

Wong-Burfeind-Crowley teaches this element. EX1003, ¶¶281-285.

Burfeind teaches "provid[ing] targeted advertisements to event participants."

EX1008, ¶¶54, 181-183, FIG. 38. Crowley teaches tailoring “advertising targeted to the particular users.” EX1009, ¶98. A POSA would have been motivated to send such advertisements to affirmative respondents to the event, for example, to advertise other stores or restaurants near the event, as taught by Burfeind. EX1008, ¶183. A POSA would have been further motivated to send advertisements to “direct friends, ... friends of friends and other further relations” of the affirmative respondents to encourage them to also attend the event along with their friend or acquaintance. EX1009, ¶¶6, 64-65, 78. In this case, the advertisement may include, for example, a coupon or other promotion as taught by Crowley. EX1009, ¶¶110-111; EX1003, ¶¶282-283.

Thus, Wong-Burfeind-Crowley teaches *identifying* users to which presenting advertising is desired (users associated with *a third subset of the plurality of user nodes*). Further, as discussed, these users (*third subset of ... user nodes*) include (1) the affirmative respondents (*the second subset of ... user nodes*) which are identified *based ... on the data representing the joining*, and (2) “direct friends, ... friends of friends and other further relations” of the *second subset of ... user nodes*. EX1003, ¶284.

11. [1.I]

Wong-Burfeind-Crowley teaches this element. EX1003, ¶¶286-289.

In the combination, once the advertising targets (users associated with *the*

third subset of ... user nodes) are identified, it would have been obvious to deliver[] the advertisements (*additional/supplemental information*) to them. The advertisements (*information*) would come from advertisers. EX1009, ¶¶110-111. Wong teaches its network (*the multi-dimensional information network*) facilitates communication between nodes, including the “sharing of information, contributing information, and storage of information.” EX1007, claim 7; *also* ¶44 (describing, e.g., the sharing of data between nodes). A POSA would have, thus, been motivated to include an additional node (*information node*) associated with the advertiser in the network to store and provide the advertisements (*information*). EX1003, ¶288; *see also* EX1008, ¶182 (“advertisements are stored in a server ... coupled to the organization device.”).

F. Independent Claim 7

Wong-Burfeind-Crowley renders obvious claim 11. EX1003, ¶¶290-296. Claim 7 recites elements that are substantially the same as claim 1 and are thus rendered obvious by Wong-Burfeind-Crowley for the same reasons as claim 1.

Wong-Burfeind-Crowley also renders obvious the additional generic server components (*network controller* and *central processing units*) recited in claim 7. Wong’s “[s]erver 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.” EX1007, ¶17, *also* ¶16 (“well known elements may not have

been shown or described in detail”); *also* EX1008, ¶¶58-77, FIGS. 4-6 (Burfeind’s teachings of “example hardware and operating environments”). A POSA would have recognized that Wong’s database is stored in “data storage” of social network server 20 (the claimed *networking server*). EX1007, ¶17; EX1003, ¶291. A POSA would have further recognized *network controller(s)* of server 20 are *configured to* perform the *provide*, *transmit*, and *deliver* limitations because Wong’s server 20 communicates with user terminals 14 over via a network, such as the Internet. EX1007, ¶17, FIG. 1; EX1003, ¶292. Finally, a POSA would have recognized that *one or more central processing units* of server 20 and of the organization device 310 (*event node server*) perform their respective recited functions because a CPU is a conventional component that executes instructions to perform server functions. EX1003, ¶¶292-295.

G. Claims 2 and 8

Wong-Burfeind-Crowley teaches these claims. EX1003, ¶¶297-299. As explained in element [1.H], the advertising targets (users associated with *the third subset of ... user nodes*) include both (1) the affirmative respondees (*the second subset of ... user nodes*) and (2) “direct friends, ... friends of friends and other further relations” thereof. *See* Section V.E.10. At least a portion of second subset of ... user nodes as claimed can include *all* of the *second subset of ... user nodes*.

H. Claims 3 and 9

Wong-Burfeind-Crowley teaches these claims. EX1003, ¶¶300-303.

As explained for element [1.H], Wong-Burfeind-Crowley teaches *identifying* advertising targets (users associated with the *third subset of ... user nodes*) includes the affirmative respondees *based on: identifying the data representing the joining of the second subset of the plurality of user devices to the event node*. See Section V.E.10.

Wong-Burfeind-Crowley further teaches using this data *in conjunction with identifying a set of data stored in the multi-dimensional information network representing at least one of: demographics, interests or behaviors*. For example, Crowley teaches that advertisers further identify advertising targets by “select[ing] criteria ... that match” a “demographic/ psychographic profile” (*data stored in the multi-dimensional information network representing at least one of: demographics, interests or behaviors*). EX1009, ¶111, also ¶101. EX1003, ¶¶301-302.

I. Claims 4 and 10

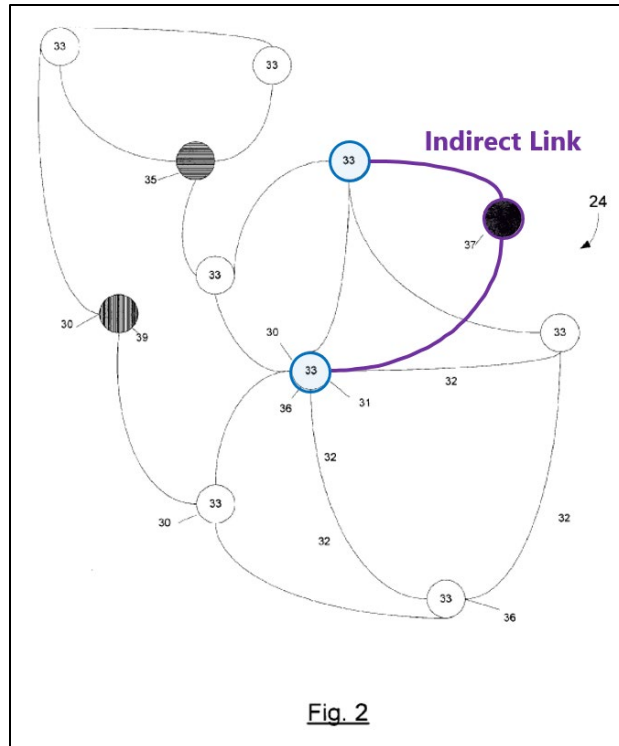
Wong-Burfeind-Crowley teaches these claims. EX1003, ¶¶304-307. As explained in element [1.A] links between user nodes are maintained in the database. See Section V.E.2. As explained for element [1.H], a POSA would have been motivated to send advertisements to “**direct friends**, ... friends of friends and other further relations” of the affirmative respondees (*the second subset of ... user*

nodes). See Section V.E.10. A POSA would have understood that identifying these “direct friends” would require *analyzing the database to identify[] a direct link between the friend (a user node of the third subset) and an affirmative respondee (a user node of the second subset)*. EX1003, ¶¶305-306.

J. Claims 5 and 11

Wong-Burfeind-Crowley teaches these claims. EX1003, ¶¶308-312. As explained in element [1.A] links between user nodes are maintained in the database. See Section V.E.2. As explained for element [1.H], a POSA would have been motivated to send advertisements to “direct friends, ... **friends of friends** and other further relations” of the affirmative respondees (*the second subset of ... user nodes*). See Section V.E.10.

A POSA would have understood that identifying these “friends of friends” would require *analyzing the database to identify[] an indirect link between the friend-of-friend user (a user node of the third subset) and an affirmative respondee (a user node of the second subset)*. EX1003, ¶310. Indeed, Wong specifically teaches that “nodes can be linked by more than one linkage type,” and a linkage may be “*an indirect link between*” nodes—“the chain of links and nodes between non-adjacent nodes.” EX1007, ¶21.



K. Claims 6 and 12

Wong-Burfeind-Crowley teaches these claims. EX1003, ¶¶313-316. As explained above for claim 3, Crowley teaches that advertisers further identify advertising targets by “select[ing] criteria ... that match” a “demographic/psychographic profile.” EX1009, ¶111, *also* ¶101; *see* Section V.H. Based on this teaching, when identifying friends-of-friends (as explained in claim 5, Section V.J) as potential advertising targets, a POSA would have been further motivated to narrow this friends-of-friends group by limiting it to users matching a certain profile, e.g., having a particular interest or *preference* associated with the event. This would result in advertising to users more likely to attend the event because they have a relevant common interest (*preference*) with the affirmative respondee

(*the user node of the second subset*). EX1003, ¶314.

Wong teaches that user nodes may be “*connected by a preference dimension to an additional node*,” such as being a “customer,” “fan,” “admirer,” or “member”) of particular “groups, organizations, products, businesses, books, songs, etc.” EX1007, ¶¶22, 24; EX1003, ¶315. For example, Wong discloses, “a linkage of a person node to an object node can be, for example, customer, fan, owner, admirer, member and the like.” EX1007, ¶24. Thus, when *the user node of the third subset* and *the user node of the second subset* have a common preference, they are *connected by a preference dimension to an additional node*—an “[o]bject” node representing the group, organization, product, business, book, or song. EX1007, ¶¶21-22; EX1003, ¶315.

VI. GROUNDS FOR STANDING (37 C.F.R. § 42.104(A))

Petitioner certifies that the ’052 patent is available for IPR and Petitioner is not barred or estopped from requesting IPR of any ’052 patent claim.

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

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

RELATED MATTERS: The ’052 patent is at issue in *SitNet LLC v. Meta Platforms, Inc. f/k/a Facebook, Inc.*, Civil Action No. 1:25-cv-06185 (S.D.N.Y.), filed July 28, 2025.

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

U.S. Patent No.	Proceeding No.
10,117,290	IPR2026-00100
12,120,769	IPR2026-00110
12,238,815	IPR2026-00111
12,245,325	IPR2026-00101
12,256,463	IPR2026-00112

The '052 patent claims the benefit of U.S. Patent Nos. 12,245,325; 12,120,769; 11,470,682; 10,524,307; 10,375,759; 10,117,290; 9,877,345; 9,143,535; 8,332,454; and 8,069,202.

Pending U.S. Patent Application No. 19/205,541 claims the benefit of the '052 patent.

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

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

LEAD AND BACK-UP COUNSEL: Under 37 C.F.R. §§ 42.8(b)(3) and 42.10(a), Petitioner appoints **Michael D. Specht** (Reg. No. 54,463) as lead counsel, and

Jonathan Tuminaro (Reg. No. 61,327), **Jennifer Meyer Chagnon** (Reg. No. 55,440), **Steven M. Pappas** (Reg. No. 73,904), and **Timothy L. Tang** (Reg. No. 75,187) as back-up counsel, all at the address: STERNE, KESSLER, GOLDSTEIN & FOX PLLC, 1101 K Street, NW, Washington, DC, 20005, phone (202) 371-2600, and facsimile (202) 371-2540.

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

VIII. CONCLUSION

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

Respectfully submitted,

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CLAIMS APPENDIX – U.S. PATENT NO. 12,336,052

Claim 1

Element	Claim Language
[1.P]	A method for creating a situational network as a subset of a larger multi-dimensional information network comprising a plurality of nodes, wherein the situational network is formed in response to an event in a particular geographical area, and wherein the situational network is created for delivering information to selected user nodes based in at least part on the situational network, the method comprising:
[1.A]	a) maintaining, by a networking server configured to maintain data defining the multi-dimensional information network, a database comprising: (i) a plurality of user nodes, and (ii) a plurality of multi-dimensional node-to-node links characterizing relationships between the plurality of user nodes via dimensions in the multi-dimensional information network, wherein at least some respective user nodes of the plurality of user nodes are associated with respectively user data;
[1.B]	b) providing, by the networking server, to each user device of a plurality of user devices associated with the plurality of user nodes, a respective composite data feed that based on the database;
[1.C]	c) establishing, by an event node server, an event node associated with the event in the particular geographical area, wherein the event node is discoverable by each user device of the plurality of user devices by browsing the respective composite data feed;
[1.D]	d) creating, by the networking server, based on the database, a projection of the plurality of user nodes, the projection comprising a first subset of the plurality of user nodes associated with a first subset of the plurality of user devices, wherein the projection is created based on respective distances of devices of the first subset of the plurality of user devices from the event;
[1.E]	e) transmitting, by the networking server, a respective request in a form of a roll call to connect to the event node to each respective device of the first subset of the plurality of user devices;
[1.F.1]	f) joining, based on responses to each of the respective requests, a second subset of the plurality of user nodes to a centralized architecture for the event node,

[1.F.2]	wherein the event node is configured as a central node in the centralized architecture for accessing information associated with the event from a location in the multi-dimensional information network, and wherein the second subset of the plurality of user nodes is associated with a second subset of the plurality of user devices;
[1.G]	g) storing, as node-to-node links in the database, data representing the joining of the second subset of the plurality of user nodes to the event node;
[1.H]	h) analyzing the database to identify a third subset of the plurality of user nodes in the database based at least in part on the data representing the joining of the second subset of the plurality of user devices to the event node; and
[1.I]	i) delivering additional information to a third subset of user devices associated with the third subset of the plurality of user nodes, wherein the supplemental information was received from an information node configured to store and provide supplemental information via the multi-dimensional information network.

Claim 2

Element	Claim Language
[2]	The method of claim 1, wherein the third subset of the plurality of user nodes includes at least a portion of second subset of the plurality of user nodes.

Claim 3

Element	Claim Language
[3]	The method of claim 1, wherein the identifying the third subset of the plurality of user nodes is based on: identifying the data representing the joining of the second subset of the plurality of user devices to the event node in conjunction with identifying a set of data stored in the multi-dimensional information network representing at least one of: demographics, interests or behaviors.

Claim 4

Element	Claim Language
[4]	The method of claim 1, wherein the analyzing the database to identify the third subset of the plurality of user nodes comprises: identifying a direct link between a user node of the third subset of the plurality of user nodes and a user node of the second subset of the plurality of user nodes.

Claim 5

Element	Claim Language
[5]	The method of claim 1, wherein the analyzing the database to identify the third subset of the plurality of user nodes comprises: identifying an indirect link between a user node of the third subset of the plurality of user nodes and a user node of the second subset of the plurality of user nodes.

Claim 6

Element	Claim Language
[6]	The method of claim 5 wherein the user node of the third subset of the plurality of user nodes and the user node of the second subset of the plurality of user nodes are connected by a preference dimension to an additional node.

Claim 7

Element	Claim Language
[7.P]	A system for creating a situational network as a subset of a larger multi-dimensional information network comprising a plurality of nodes, wherein the situational network is formed in response to an event in a particular geographical area, and wherein the situational network is created for delivering information to selected user nodes based in at least part on the situational network, the system comprising:

[7.A]	one or more central processing units of one or more networking servers, that maintain data defining the multi-dimensional information network, configured to: maintain a database comprising: (i) a plurality of user nodes, and (ii) a plurality of multi-dimensional node-to-node links characterizing relationships between the plurality of user nodes via dimensions in the multi-dimensional information network, wherein at least some respective user nodes of the plurality of user nodes are associated with respectively user data;
[7.B]	one or more network controllers of the one or more networking servers configured to: provide to each user device of a plurality of user devices associated with the plurality of user nodes, a respective composite data feed that based on the database;
[7.C]	one or more central processing units of one or more event node servers configured to: establishing an event node associated with the event in the particular geographical area, wherein the event node is discoverable by each user device of the plurality of user devices by browsing the respective composite data feed;
[7.D]	wherein the one or more central processing units of the one or more networking servers are configured to: create based on the database, a projection of the plurality of user nodes, the projection comprising a first subset of the plurality of user nodes associated with a first subset of the plurality of user devices, wherein the projection is created based on respective distances of devices of the first subset of the plurality of user devices from the event;
[7.E]	wherein the one or more network controllers of the one or more networking servers are configured to: transmit a respective request in a form of a roll call to connect to the event node to each respective device of the first subset of the plurality of user devices;
[7.F.1]	wherein the one or more central processing units of the one or more networking servers are configured to: join, based on responses to each of the respective requests, a second subset of the plurality of user nodes to a centralized architecture for the event node,
[7.F.2]	wherein the event node is configured as a central node in the centralized architecture for accessing information associated with the event from a location in the multidimensional information network, and wherein the second subset of the plurality of user nodes is associated with a second subset of the plurality of user devices;

[7.G]	store, as node-to-node links in the database, data representing the joining of the second subset of the plurality of user nodes to the event node;
[7.H]	h) analyze the database to identify a third subset of the plurality of user nodes in the database based at least in part on the data representing the joining of the second subset of the plurality of user devices to the event node; and
[7.I]	wherein the one or more network controllers of the one or more networking servers are configured to: deliver additional information to a third subset of user devices associated with the third subset of the plurality of user nodes, wherein the supplemental information was received from an information node configured to store and provide supplemental information via the multi-dimensional information network.

Claim 8

Element	Claim Language
[8]	The system of claim 7, wherein the third subset of the plurality of user nodes includes at least a portion of second subset of the plurality of user nodes.

Claim 9

Element	Claim Language
[9]	The system of claim 7, wherein the one or more central processing units of the one or more networking servers are configured to identify the third subset of the plurality of user nodes is based on: identifying the data representing the joining of the second subset of the plurality of user devices to the event node in conjunction with identifying a set of data stored in the multi-dimensional information network representing at least one of: demographics, interests or behaviors.

Claim 10

Element	Claim Language
[10]	The system of claim 7, wherein the one or more central processing units of the one or more networking servers are configured to analyze the database to identify the third subset of the plurality of user nodes by: identifying a direct link between a user node of the third subset of the plurality of user nodes and a user node of the second subset of the plurality of user nodes.

Claim 11

Element	Claim Language
[11]	The system of claim 7, wherein the one or more central processing units of the one or more networking servers are configured to analyze the database to identify the third subset of the plurality of user nodes by: identifying an indirect link between a user node of the third subset of the plurality of user nodes and a user node of the second subset of the plurality of user nodes.

Claim 12

Element	Claim Language
[12]	The system of claim 11 wherein the user node of the third subset of the plurality of user nodes and the user node of the second subset of the plurality of user nodes are connected by a preference dimension to an additional node.

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

1. This Petition for *Inter Partes* Review complies with the type-volume limitation of 14,000 words, comprising 12,616 words, excluding the parts exempted by 37 C.F.R. § 42.24(a)(1).

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

Respectfully submitted,

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

I certify that the above-captioned **PETITION FOR *INTER PARTES***
REVIEW FOR U.S. PATENT NO. 12,336,052 and associated Exhibits 1001-
1036 were served in their entireties upon the Patent Owner on November 12, 2025,
via FedEx® Express at the following addresses:

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