

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

META PLATFORMS, INC.,
Petitioner

v.

SITNET, LLC,
Patent Owner

Case IPR2024-00529
U.S. Patent No. 8,332,454

**DECLARATION OF DR. JEREMY COOPERSTOCK
IN SUPPORT OF PETITIONER’S REPLY TO PATENT OWNER’S
RESPONSE AND IN SUPPORT OF PETITIONER’S OPPOSITION TO
PATENT OWNER’S CONTINGENT MOTION TO AMEND**

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U.S. Patent No. 8,332,454

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	LIST OF DOCUMENTS CONSIDERED	1
III.	LEGAL UNDERSTANDING	2
IV.	CLAIM CONSTRUCTION	2
A.	“event node”	2
V.	ORIGINAL CLAIMS 1-20 ARE UNPATENTABLE.	5
A.	<u>Ground 1</u> : Amidon renders obvious claims 1-7, 10-17, 19, and 20.	5
1.	Amidon teaches the claimed “event node” (claims 1 and 20) and “event node server” (claims 1, 10, and 20).	5
2.	Dependent Claims	10
a.	Claim 2	10
b.	Claim 5	12
c.	Claims 3-4, 6-7, 11-17, and 19	13
B.	<u>Ground 2</u> : The Wong-Gogic combination renders obvious claims 1-4, 6, 8-18, and 20.	13
VI.	PATENT OWNER’S PROPOSED SUBSTITUTE CLAIMS 21-30 ARE UNPATENTABLE.	13
A.	Patent Owner’s substitute claims 10-19 recite well-known and routine techniques implemented using conventional components	14
B.	<u>Ground 1</u> : Proposed claims 21-28 and 30 would have been obvious in view of Amidon.	19
1.	Independent Claim 21 (Substitute for Claim 10)	19
a)	Element [21.P]: “A method of creating a set of nodes forming a projection of a situational network”	19
b)	Element [21.1]: “(a) receiving, by a first device corresponding to a node in a multi-dimensional personal information network, an invitation to establish a link with an event node in the multi-dimensional personal information network, said event node hosted by an event	

	node server in response to the first device being included in a projection of nodes of the multi-dimensional personal information network”	20
c)	Element [21.2]: “(b) transmitting a response accepting the invitation to establish a link with the event node hosted by the event node server”	20
d)	Element [21.3]: “(c) establishing a link with the event node hosted by the event node server; and”	21
e)	Element [21.4]: “(d) receiving information about the situation from the event node hosted by the event node server.”.....	21
2.	Claim 22 (Substitute for Claim 11)	21
3.	Claim 23 (Substitute for Claim 12)	22
4.	Claim 24 (Substitute for Claim 13)	22
5.	Claim 25 (Substitute for Claim 14)	22
6.	Claim 26 (Substitute for Claim 15)	23
7.	Claim 27 (Substitute for Claim 16)	23
8.	Claim 28 (Substitute for Claim 17)	23
9.	Claim 30 (Substitute for Claim 19)	23
C.	<u>Ground 2</u> : Proposed claims 21-28 and 30 would have been obvious in view of Amidon and Kraft.	23
D.	<u>Ground 3</u> : Proposed claims 21-29 would have been obvious over the Wong-Gogic combination.....	29
1.	Overview of the Motivation to Combine Wong and Gogic	29
2.	Independent Claim 21 (Substitute for Claim 10)	29
a)	Element [21.P]: “A method of creating a set of nodes forming a projection of a situational network”.....	29
b)	Element [21.1]: “(a) receiving, by a first device corresponding to a node in a multi-dimensional personal information network, an invitation to establish a link with an event node in the multi-dimensional personal information network, said event node hosted by an event	

node server in response to the first device being included in a projection of nodes of the multi-dimensional personal information network”	30
c) Element [21.2]: “(b) transmitting a response accepting the invitation to establish a link with the event node hosted by the event node server”	30
d) Element [21.3]: “(c) establishing a link with the event node hosted by the event node server; and”	31
e) Element [21.4]: “(d) receiving information about the situation from the event node hosted by the event node server.”.....	31
3. Claim 22 (Substitute for Claim 11)	31
4. Claim 23 (Substitute for Claim 12)	31
5. Claim 24 (Substitute for Claim 13)	32
6. Claim 25 (Substitute for Claim 14)	32
7. Claim 26 (Substitute for Claim 15)	32
8. Claim 27 (Substitute for Claim 16)	33
9. Claim 28 (Substitute for Claim 17)	33
10. Claim 29 (Substitute for Claim 18)	33
E. <u>Ground 4</u> : Proposed claims 21-29 would have been obvious over the Wong-Gogic combination in view of Kraft.	33
VII. CONCLUSION	35

I, Jeremy Cooperstock, hereby declare as follows.

I. INTRODUCTION

1. I have been retained as an expert witness on behalf of Meta Platforms, Inc. (“Petitioner”) for the above-captioned IPR. I previously submitted declarations in this proceeding in support of the Petition (EX1003) and in support of Petitioner’s Reply to Patent Owner’s Preliminary Response (EX1018). I am being compensated for my time in connection with this IPR at my standard consulting rate as of the time I was retained to work on this litigation in 2023.

2. I maintain all of my earlier analysis and continue to hold the opinions expressed in my prior declarations.

3. This declaration is in further support of Petitioner’s Reply to Patent Owner’s Response and in support of Petitioner’s Opposition to Patent Owner’s Contingent Motion to Amend.

II. LIST OF DOCUMENTS CONSIDERED

4. In formulating my opinions, I have relied upon my training, knowledge, and experience that are relevant to the ’454 patent. I have also reviewed and considered the documents listed in my original declaration (EX1003, ¶15), as well as the additional documents listed below and any other documents cited in this declaration or my prior declarations.

Paper No.	Description
9	Institution Decision
13	Patent Owner's Motion to Amend
14	Patent Owner's Response

Exhibit No.	Description
1020	Transcript of the Deposition of Aviel D. Rubin, Ph.D. (February 7, 2025)
1022	U.S. Patent No. 7,747,648 to Kraft et al. ("Kraft")
2007	Claim Construction Order in <i>SitNet LLC v. Meta Platforms, Inc.</i> , No. 1:23-cv-06389
2009	Supplemental Expert Report of Dr. Aviel D. Rubin

III. LEGAL UNDERSTANDING

5. My understanding of claim construction, obviousness, and a person of ordinary skill in the art ("POSA") is set forth in my original declaration. See EX1003, ¶¶17-31.

IV. CLAIM CONSTRUCTION

6. It remains my opinion that each claim term should be given its ordinary and customary meaning. EX1003, ¶47; EX1018, ¶2.

A. "event node"

7. I understand that SitNet ("Patent Owner") proposes a construction for "event node." Patent Owner's Response ("POR"), 6. I disagree with this construction for the following reasons.

8. I understand that the District Court determined that the term “event node” needs no construction. EX2007, 5-6. I also understand, however, that Patent Owner proposes that an “event node” should be construed as “a node within an NDSN providing up-to-date information regarding an event or situation via peer-to-peer communication with other nodes.” POR, 6.

9. Patent Owner argues that an “event node is defined in the specification as a type of node that communicates, or propagates, up-to-date information in a NDSN.” POR, 5 (citing EX1001, 7:42-51). The disclosure that Patent Owner cites, however, does not provide a definition of an “event node.” Instead, this disclosure is exemplary, described as an example within an embodiment. First, the passage cited by Patent Owner is discussed within the context of “one embodiment.” EX1001, 7:37-42. Second, the patent describes, “[i]n the context of the NDSN, ... **[f]or example**, an entity ... establishes an event node in an NDSN that propagates up-to-date information on the situation.” EX1001, 7:42-51 (emphasis added). Therefore, the specification describes “propagat[ing] up-to-date information on the situation” only as an example functionality within a particular embodiment. EX1001, 7:37-51.

10. Contrary to Patent Owner’s proposed construction, the embodiments described in the ’454 specification do not require the information about the situation to be communicated *by the event node*. For example, in the context of the

NDSN, the '454 patent also describes that users may share information related to the situation directly with other users, even when an event node is present.

EX1001, 19:52-20:19 (“A user 250 may also share information related to the situation with another user in the NDSN using a connection established between the user’s PIA 404 and another PIA 406. PIA 406 may or may not be connected to the event node server 3011.”), 21:53-64 (describing establishing a “new link” between users “[u]pon discovering that they are [both] connected to the event node”), 30:36-38 (“Notifications may be distributed in the SitNet 300 using [] peer to peer connections, or through connections to a centralize[d] service, such as one that includes the situation authority.”). Based on the embodiments described in the '454 patent, a POSA would have understood that the claimed event node may, but *is not required to*, provide peer-to-peer communication with users.

11. Patent Owner further cites a supposed “general definition of a node provided in the specification”—that “[e]ach node is capable of communicating in a peer-to-peer fashion with other nodes in the NDSN.” POR, 5 (citing EX1001, 15:1-4). In my opinion, this disclosure does not provide a definition of an “event node.” Again, the cited disclosure is part of “**one embodiment**” in which “individual users, members, entities, communities, or other aggregations of entities within the NDSN are associated with the nodes.” EX1001, 14:59-62 (emphasis added). Additionally, the sentence cited by Patent Owner refers to “user” nodes, rather than

an “event node,” stating: “Each node is capable of communicating in a peer-to-peer fashion with other nodes in the NDSN, and thus is a **user’s** point of connection to the NDSN, providing **a user** with access to information that can be obtained **from other users** of the NDSN with whom the user has a relationship.” EX1001, 15:1-5 (emphasis added).

12. I also understand that Patent Owner’s expert, Dr. Rubin opines that a “node” in the context of the ’454 patent is “an object that has attributes defining the node.” EX2009, ¶34. I generally agree with this opinion, which is consistent with the plain and ordinary meaning of a node.

13. For at least these reasons, I disagree with Patent Owner’s proposed construction of “event node.”

V. ORIGINAL CLAIMS 1-20 ARE UNPATENTABLE.

A. Ground 1: Amidon renders obvious claims 1-7, 10-17, 19, and 20.

14. In my opinion, Amidon renders claims 1-7, 10-17, 19, and 20 obvious for the reasons discussed in my previous declarations. EX1003, ¶¶48-56, 63-161; EX1018, ¶¶12-19.

1. Amidon teaches the claimed “event node” (claims 1 and 20) and “event node server” (claims 1, 10, and 20).

15. Patent Owner argues that “a conference cannot be a node, let alone an event node.” POR, 7. In support of this argument, Patent Owner relies on a generic dictionary definition of “conference” as a “meeting.” POR, 7. Patent Owner

contends that a conference is, thus, “a group of individuals communicating with one another.” POR, 7. I disagree that Amidon’s “conference” is simply a meeting, in the generic sense. As Amidon describes, the “conference” is implemented on a computer and is based on the underlying social network. *See, e.g.*, EX1005, 3:16-39, 7:56-61, 9:9-22, 16:65-19:3. Furthermore, the data defining the conference, which includes a participant list, a conference ID, and message information, is stored in, for example, the database of Figure 3. EX1005, 3:37-39, 15:6-26, FIG. 3. Thus, in my opinion, Amidon’s conference is not simply a group of individuals communicating with one another. Rather, as I explained in my prior declaration, EX1018, ¶17, Amidon’s conference, like the ’454 patent’s event node, connects the users in communication about the event or situation. *See, e.g.*, EX1001, 30:39-61; EX1005, 16:65-18:50, FIG. 4.

16. Patent Owner also argues that “Amidon’s conference is [] merely group of individual members in communication,” and contends that a “group of individuals cannot be a node, let alone an event node.” POR, 10. Contrary to Patent Owner’s argument, it is not the group of individuals participating in Amidon’s conference that teaches the event node. Rather, as I explained in my original declaration, EX1003, ¶¶77-78, Amidon’s conference itself (as defined by the stored data and accessible via window 200) teaches the claimed event node.

17. Dr. Rubin provided the following definition for node:

Node - A node within a social network is an object that has attributes defining the node. A node can be various types of objects. For example, Meta defines in their Graph API documentation that “a node is an individual object with a unique ID. For example, there are many User node objects, each with a unique ID representing a person on Facebook. Pages, Groups, Posts, Photos, and Comments are just some of the nodes of the Facebook Social Graph.” Thus, in addition to the connections (i.e., edges) of the graph, a node has attributes that contain unique properties about the node.

EX2009, ¶34 (citations omitted). In my opinion, Dr. Rubin’s understanding of a “node” is consistent with the ’454 patent’s description of a node as “provid[ing] an associated entity with the ability to store and manage [its] profile and relationships with other users of the [social network].” EX1001, 14:62-64. According to Dr. Rubin, a node is simply a logical as opposed to a physical construct—i.e., a collection of attributes that define an “object.” EX1020, 27:18-28:19. I agree with this characterization of a “node.” Dr. Rubin confirmed that a “node” is “a data structure that includes attributes that define it.” EX1020, 61:5-8. In my opinion, Amidon’s social network conference meets Dr. Rubin’s interpretation of a “node,” because it “store[s] and manage[s] [its] profile and relationships with other users of the [social network],” as broadly described in the ’454 patent. EX1001, 14:62-64.

18. Patent Owner further argues that “an event node could be an element ***within*** a conference, but ***not*** the conference itself.” POR, 10 (emphasis Patent Owner’s). I disagree with this assertion. As I have explained above, peer-to-peer communication between the event node and other nodes is not a requirement of the claims. See Section IV.

19. Patent Owner further contends that Amidon’s “conferences do not include as a participant the situation or event underlying the conference,” and therefore do not include an event node corresponding to a situation. POR, 11. Again, I disagree with this assertion. As I have explained in my prior declaration, Amidon’s conference need not include a node corresponding to the situation because Amidon’s conference *is* the event node. EX1018, ¶17.

20. Amidon-971, which I understand was incorporated by reference into Amidon,¹ confirms that users in the conference are connected to social network circuit server (i.e., the event node server). For example, Amidon-971 explains that Amidon’s server “may be implemented as more or fewer physical or logical units [than a single server]” or the functionality thereof “may be distributed across a

¹ U.S. Patent No. 7,801,971 (EX1008, “Amidon-971”) issued from 11/526,955, which is “incorporated by reference for all purposes” into Amidon. EX1005, 7:27-34.

plurality of networked servers or even to supernodes within the social network.”

EX1008, 8:47-52, 12:46-63, FIG. 5.

21. Patent Owner further argues that Amidon’s Figure 3 disclosure of the architecture of a relational database is not the claimed “event node” because it does not “communicate[] information regarding a situation in a peer-to-peer fashion with other nodes,” and because it “fails to include a database record for the situation underlying the conference.” POR, 11-13. Patent Owner’s arguments here are premised on its narrow construction of event node, which as I have explained above is inconsistent with the specification and the understanding of a POSA. Further, as I have explained above, the situation or event need not be a participant in the conference, so thus, contrary to Patent Owner’s assertion, a “database record defining the situation” is not required. POR, 13. The plain language of the claims is clear that the event node simply “correspond[s] to a situation.” EX1001, 33:21-23. In my opinion, this also is consistent with the district court’s discussion of the claim term. EX2007, 5-6. And as I explained in my original declaration, Amidon’s conference (i.e., the event node) “corresponds to the situation” because it is created in response to the detection thereof. EX1003, ¶¶84-85.

22. Even if a database record is required (it is not), Amidon’s “conference ID” identifies the conference and a POSA would have understood that this information must be stored in the database record, as I have previously explained.

EX1018, ¶18; EX1005, 15:6-17, 16:65-17:7; *see also* EX1008, 10:42-51 (expressly teaching that “a record may be maintained for each social network circuit based on a unique identifier, the record further including a name for the circuit...”). It need not be labeled as an “event” or “situation” in Amidon to teach the limitation.

23. Dr. Rubin contends that Amidon’s relational database disclosure does not define “peer-to-peer connections between nodes [as] required for nodes within NDSN by [the] ‘454 Patent.” EX2009, ¶73. But, the ’454 patent says that its embodiments “may be implemented with a database package such as Microsoft Access™ or a database management system (DBMS) such as Microsoft SQL Server™ Microsoft SQL Server CE™, IBM DB2™, mySQL or postgresQL.” EX1001, 32:8-16. Thus, in my opinion, a POSA would have understood that using relational databases to store the data associated with the event node is within the scope of the ’454 patent.

2. Dependent Claims

24. I understand that Patent Owner presents separate arguments only for dependent claims 2 and 5.

a. Claim 2

25. In my opinion, Amidon renders obvious claim 2 for the reasons discussed in my original declaration. EX1003, ¶¶104-107.

26. Patent Owner argues that Amidon's user does not provide information about the situation. POR, 14. In Amidon, the user (i.e., the situation authority) identifies the set of parameters (i.e., a situation) in response to which the conference (i.e., the event node) is created. A POSA would have understood that each parameter—identified and provided by the user—is information concerning a situation because the particular set of parameters is the situation. *See* EX1003, ¶105. For example, in the case of a conference to be automatically created upon detecting users sharing content on a particular topic, the user identifies that topic—e.g., the user specifies that the “particular topic” is identified as “Vacation,” EX1005, 21:18-26. The fact that the conference topic is “Vacation” is itself information concerning the situation. And it is Amidon's user that identifies and provides the specific value for this parameter. Amidon's user thus provides information concerning the situation when it specifies the parameters for conference formation, i.e., users listening to the same music, a certain number of users in the social network are involved in a conversation (e.g., related to a game), or users sharing content on a particular topic. EX1005, 13:57-14:28; *also* 2:57-60 (a “user can specify the nature and extent of a conference amongst members of a social network based on various parameters, including social network parameters.”).

27. As I explained in my original declaration with respect to claim 1, a POSA would have understood that, regardless of the situation to which the event node corresponds, the same social network architecture would be used to implement the system and methods of the challenged claims. EX1003, ¶85. Similarly, as directly applicable to claim 2, a POSA would have likewise understood that, regardless of where the identification of the situation originates, the same social network architecture would be used to implement the system and methods of the challenged claims.

b. Claim 5

28. In my opinion, Amidon renders obvious claim 5 for the reasons discussed in my original declaration. EX1003, ¶¶118-119.

29. Patent Owner argues that Amidon’s disclosure regarding targeted advertisements is merely in the Background section, and “is not made in connection with the [] disclosed invention in Amidon.” POR, 15. It would have been readily apparent to a POSA that this teaching would apply to the social network-based communication tools of Amidon’s disclosed embodiments, because it applies to communication tools utilizing data from social network systems more generally. *See* EX1005, 2:29-37.

30. Patent Owner also argues that Amidon does not disclose that the targeted advertisement itself includes information “about the situation.” POR, 15. I

have been informed by counsel that this is not a requirement of the claim. In any event, as I explained in my original declaration with respect to claim 4, the claimed method would be performed in the same manner irrespective of the particular content of information that is provided. EX1003, ¶116. The method of claim 5, likewise, can be performed irrespective of the particular content of information that is provided.

c. Claims 3-4, 6-7, 11-17, and 19

31. In my opinion, Amidon renders obvious claims 3-4, 6-7, 11-17, and 19 for the reasons discussed above for claims 1, 10, and 20, as well as those reasons discussed in my original declaration. EX1003, ¶¶108-117, 120-129, 135-157.

B. Ground 2: The Wong-Gogic combination renders obvious claims 1-4, 6, 8-18, and 20.

32. In my opinion, Amidon renders obvious claims 1-4, 6, 8-18, and 20 for the reasons discussed in my previous declarations. EX1003, ¶¶57-62, 162-251; EX1018, ¶¶12-13, 20-22.

VI. PATENT OWNER'S PROPOSED SUBSTITUTE CLAIMS 21-30 ARE UNPATENTABLE.

33. I understand that Patent Owner submitted a Contingent Motion to Amend ("MTA"). In the MTA, Patent Owner proposed to substitute claims 21-30 in place of issued claims 10-19 of the '454 patent. MTA, App'x A. I have been asked to provide my technical review, analysis, insights, and opinions about the

proposed substitute claims.

A. Patent Owner's substitute claims 10-19 recite well-known and routine techniques implemented using conventional components

34. I have been asked to provide an opinion on whether the substitute claims recite any inventive concepts or any improvements to computer technology. Based on my analysis of the claims, the specification of the '454 patent, and my knowledge of the state of the art before February 2, 2007, it is my opinion that they do not. I have provided my analysis with respect to substitute claim 21, which is representative of the other claims, but note that my analysis is also applicable to the other substitute claims as well.

35. First, I note that claim 21 recites conventionally receiving and manipulating data. I agree with Dr. Rubin's analysis of claim 10 of the '454 patent as explained during his deposition. Dr. Rubin's analysis directly applies to substitute claim 21, which maintains these same claim elements and still effectively recites receiving, manipulating, and presenting data.

36. In analyzing claim 10, Dr. Rubin acknowledged that receiving an invitation amounts to "receiving some form of data." EX1020, 60:2-20. Dr. Rubin then confirmed that "everything that's described in the claim [element (a) (i.e., Element [21.1])] and the information would be data." EX1020, 61:9-12. Dr. Rubin further acknowledged that the response transmitted in claim element (b) (i.e., Element [21.2]) would also be data. EX1020, 61:13-31. Dr. Rubin also

acknowledged that the “link” of claim element (c) (i.e., Element [21.3]) would be a “logical connection” and that creating logical connections requires “manipulat[ing] the data to form that logical connection.” EX1020, 61:22-62:7. Finally, Dr. Rubin acknowledged that the “information about the situation” that is received in claim element (d) (i.e., Element [21.4]) would be “in the form of data.” EX1020, 62:8-17. Dr. Rubin also indicated that establishing an event node would also amount to manipulating data. EX1020, 59:9-15.

37. Based on Dr. Rubin’s aforementioned acknowledgments regarding the elements of claim 10, the claim elements recite conventional networking techniques that do not reflect an inventive concept. The specification of the ’454 patent also confirms this understanding. Specifically, the ’454 patent confirms that its situational network architecture and hardware were well known to those skilled in the art, teaching for example:

Furthermore, those skilled in the art will recognize that any of the available architectures (e.g., centralized, peer-to-peer, or combination thereof) may be used to form and sustain the various embodiments of the situational network described above, including the event relative (dynamic) SitNet or the proximity based SitNet.

EX1001, 7:23-29.

Referring to FIG. 44, the situational network may also be formed using a decentralized architecture, such as a peer-to-peer network understood by one skilled in the art.

EX1001, 6:47-49.

Users 250 are connected via the situational network 3000 using devices 402 such as cell phones, PDA's, personal computers, network servers, PVR's, in-vehicle and portable navigation systems, or other devices generally known to those skilled in the art that enable connection to, from and through the computer network 900.

EX1001, 4:25-30.

User devices, such as Personal Information Aggregators (PIAs), discussed in greater detail below, containing a GPS or other geographic positioning devices generally understood by those skilled in the art, can share location coordinates to determine if they are within a proximity limit that has either been preset within the device or predetermined by the user.

EX1001, 5:55-61.

38. The '454 patent also explains that an “N-dimensional social network” or “multi-dimensional personal information network” was also well-known and relied on conventional technology:

Those skilled in the art will recognize that there are numerous well-known software and hardware technologies that may be utilized to implement the attributes of the users of the NDSN 100 and the attributes of the associations between the users.

EX1001, 16:6-10.

Those skilled in the art will recognize that a node of the NDSN 100 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. In addition, those skilled in the art will recognize that the nodes of the NDSN 100 may be interconnected and may communicate with each other using a wide variety of available hardware and technologies generally known in the art, such as TCP/IP over an Ethernet or a wireless network.

EX1001, 15:17-25.

39. I understand that Dr. Rubin confirmed this understanding during his deposition and could not recall any difference between a “social network” and an “N-dimensional social network”:

Q. Are you aware of any social networks that are not multidimensional?

A. I haven’t considered that before. Sitting here, I can't think of any.

Q. You can’t think of any social network that existed that was not multidimensional?

A. Like I said, it’s not something I’ve thought about before, but I can’t think of any right now.

EX1020, 43:18-44:3

40. In view of the ’454 patent’s clear statements relying on hardware and networking techniques generally known to those in the art, the claims clearly rely on well-understood, routine, and conventional components and techniques. As

discussed above, Dr. Rubin also agreed throughout his deposition.

41. Additionally, the claims do not recite anything inventive, unusual, or unconventional. For example, the claimed “receiving ... an invitation to establish a link with an event node,” “transmitting a response,” and “receiving information about the situation,” amount to simply sending and receiving data over a network, and the claimed “establishing a link” amounts to simply manipulating data. The ’454 patent relies on conventional hardware and networking techniques well-known in the art when forming the situational network. *E.g.*, EX1001, 13:45-55 (describing known computer networking hardware and protocols), 15:17-27 (describing known hardware and software for forming nodes and interconnections).

42. As Dr. Rubin acknowledged, “forming a situational network” merely amounts to manipulating data to create logical connections. EX1020, 57:22-58:5. Dr. Rubin also acknowledged that the ’454 patent “did not invent the concept of a social network” or “any new type of technology for saving the information that would be needed for two users to communicate over a social network.” EX1020, 25:14-18, 27:14-17. This similarly extends to the recitation of an “event node” or “event node server,” which was also known in the art. *See* Sections VI.B-E. A POSA would not have viewed the forming of the situational network as reciting an inventive concept.

43. I have also been asked to consider whether the claim limitations when considered as an ordered combination recite any inventive concept. For the reasons that I have previously presented, a POSA would not have found anything inventive in the ordering of the claim elements of substitute claim 21. Claim 21 describes receiving an invitation to establish a link with an event node, transmit a response to the invitation, establish a link with the event node, and receive information about the situation. A POSA would have found this sequence of steps to be intuitive—especially in view of the prior art grounds that I have analyzed below. *See* Sections VI.B-E. Therefore, there is also no inventive concept found in the particular ordering of the claim steps either.

B. Ground 1: Proposed claims 21-28 and 30 would have been obvious in view of Amidon.

44. For the reasons discussed below, it is my opinion that Amidon renders obvious Patent Owner’s proposed substitute claims 21-28 and 30.

1. Independent Claim 21 (Substitute for Claim 10)

a) Element [21.P]: “A method of creating a set of nodes forming a projection of a situational network”

45. In my opinion, Amidon renders obvious this element for the reasons discussed in my previous declarations. EX1003, ¶130; EX1018, ¶¶12-13.

- b) **Element [21.1]: “(a) receiving, by a first device corresponding to a node in a multi-dimensional personal information network, an invitation to establish a link with an event node in the multi-dimensional personal information network, said event node hosted by an event node server in response to the first device being included in a projection of nodes of the multi-dimensional personal information network”**

46. In my opinion, Amidon renders obvious this element for the reasons discussed in my previous declarations. EX1003, ¶131; EX1018, ¶¶14-19.

47. It is my understanding that Patent Owner acknowledges that “[t]he inclusion of an ‘event node’ brings claim 21 in line with independent claims 1 and 20.” MTA, 12; *see also id.*, 5 (“This limitation [of claim 10] is similar to independent claim 1.”). I agree with this characterization of the scope of proposed claim 21.

48. The arguments in Patent Owner’s Motion to Amend in support of proposed claim 21 correspond to the arguments in Patent Owner’s Response in support of claims 1, 10, and 20.

49. In addition to all the reasons discussed in my previous declarations, Amidon renders obvious this element for the reasons discussed above with respect to claims 1, 10, and 20. Section V.A.1.

- c) **Element [21.2]: “(b) transmitting a response accepting the invitation to establish a link with the event node hosted by the event node server”**

50. In my opinion, Amidon renders obvious this element for the reasons

discussed in my original declaration. EX1003, ¶132.

d) Element [21.3]: “(c) establishing a link with the event node hosted by the event node server; and”

51. In my opinion, Amidon renders obvious this element for the reasons discussed in my original declaration. EX1003, ¶133.

52. Additionally, as I explained in my original declaration, it would have been obvious to establish a link between Amidon’s user devices and the social network server (the claimed event node server). EX1003, ¶¶99-102. It would have further been obvious that this link is to the conference in particular rather than simply the social network server more generally, such that the user may participate in the conference.

e) Element [21.4]: “(d) receiving information about the situation from the event node hosted by the event node server.”

53. In my opinion, Amidon renders obvious this element for the reasons discussed in my original declaration. EX1003, ¶134.

2. Claim 22 (Substitute for Claim 11)

54. Substitute claim 22 recites, “*wherein the invitation is received based on a geographic proximity of the first device with other devices in the multi-dimensional personal information network.*” In my opinion, Amidon teaches this claim for the reasons discussed in my original declaration. EX1003, ¶¶135-137.

3. Claim 23 (Substitute for Claim 12)

55. Substitute claim 23 recites, “*wherein the event node server corresponds to an event node of the situational network created in response to identification of the situation by a situation authority.*” In my opinion, Amidon teaches this claim for the reasons discussed in my original declaration, EX1003, ¶138, and as further discussed above for claim 2.

4. Claim 24 (Substitute for Claim 13)

56. Substitute claim 24 recites, “*(e) receiving the projection of the nodes of the situational network from step (a) from the event node server.*” In my opinion, Amidon teaches this claim for the reasons discussed in my original declaration. EX1003, ¶¶139-141.

5. Claim 25 (Substitute for Claim 14)

57. Substitute claim 25 recites, “*(f) inviting at least one other device included in the projection to establish a link with the first device;*” “*(g) connecting to the at least one other device from step (e)^[2] accepting the invitation;*” and “*(h) sharing information related to the situation with the at least one other device.*” In my opinion, Amidon teaches this claim for the reasons discussed in my original

² As I explained in my original declaration for claim 14, I understand this to be a typographical error, referring to “step (f)” of claim 25, in which the “at least one other device” is first recited. See EX1003, ¶142 n.3.

declaration. EX1003, ¶¶142-145.

6. Claim 26 (Substitute for Claim 15)

58. Substitute claim 26 recites, “*wherein the connections established in step (g) have an order of separation of one.*” In my opinion, Amidon teaches this claim for the reasons discussed in my original declaration. EX1003, ¶¶146-148.

7. Claim 27 (Substitute for Claim 16)

59. Substitute claim 27 recites, “*wherein the connections established in step (g) are multi-dimensional.*” In my opinion, Amidon teaches this claim for the reasons discussed in my original declaration. EX1003, ¶¶149-151.

8. Claim 28 (Substitute for Claim 17)

60. Substitute claim 28 recites, “*wherein at least one of the dimensions corresponds to the situation.*” In my opinion, Amidon teaches this claim for the reasons discussed in my original declaration. EX1003, ¶¶152-154.

9. Claim 30 (Substitute for Claim 19)

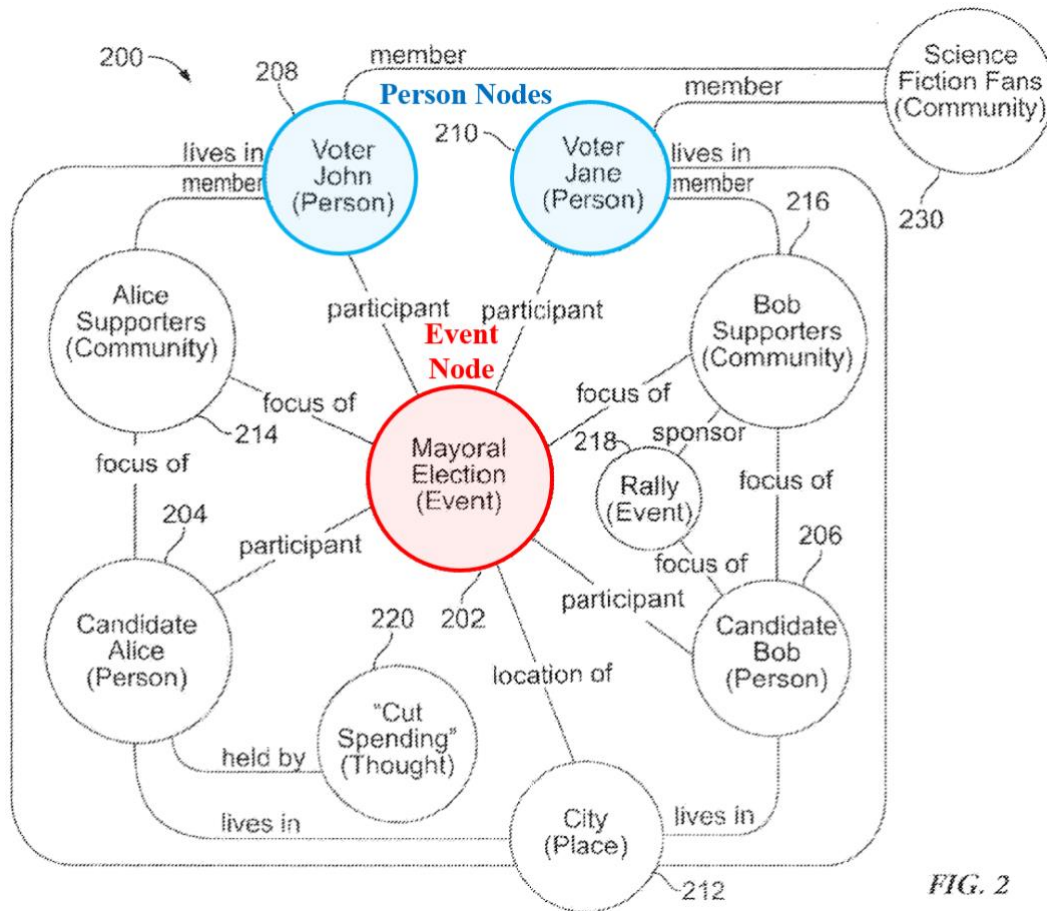
61. Substitute claim 30 recites, “*(e) providing information about the situation to the event node server.*” In my opinion, Amidon teaches this claim for the reasons discussed in my original declaration. EX1003, ¶¶155-157.

C. Ground 2: Proposed claims 21-28 and 30 would have been obvious in view of Amidon and Kraft.

62. To the extent Patent Owner argues that Amidon does not expressly disclose the proposed amendments presented in substitute claim 21, it is my

opinion that the combination of Amidon and Kraft (EX1022) also renders obvious these proposed amendments. I understand that Patent Owner argues in its Motion that “an event node is [a] node communicating information regarding a situation in a peer-to-peer fashion,” and, therefore, “an event node would be an element **within** a conference, but **not** a conference.” MTA, 16 (emphasis in original). Even under this interpretation of “event node” (with which I disagree), the combination of Amidon and Kraft renders obvious Patent Owner’s proposed amendments to claim 21.

63. Kraft is directed to “systems and methods for information retrieval and communication using a world model.” EX1022, Kraft, 2:35-37. Kraft explains that “[t]he 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.” EX1022, 2:37-41, 8:28-31 (emphasis added). Kraft’s “world model can include features of a conventional social network” but “allows other types of entities, not just users, to be included as full participants in the network.” EX1022, 10:25-30. An example “world model” is illustrated in Figure 2 of Kraft. EX1022, 8:35-38.



EX1022, FIG. 2 (annotated).

64. As illustrated in Kraft’s Figure 2, “**Node 202 represents the event**, in this example a mayoral election,” and “[o]ther participants in the election include voter Joe (node 208) and voter Jane (node 210).” EX1022, 8:39-44 (emphasis added). Kraft explains that “[e]ach entity model is advantageously implemented as a data structure that **provides access to information about a real-world entity that the node represents.**” EX1022, 8:26-28 (emphasis added). And the “types of information that may be contained in an entity model include ... references to content related to the corresponding entity; **text or media content related to the**

corresponding entity; and so on.” EX1022, 3:18-24 (emphasis added). In other words, Kraft discloses nodes representing events, with each node defined by a data structure storing information (e.g., “text or media content”) related to the event. EX1022, 3:18-24, 8:26-28, 8:39-44.

65. Kraft also explains that a “user request may include a search query specifying a property **for the information contained in the entity models.**” EX1022, 2:67-3:2 (emphasis added), 9:33-36 (a “user can also send a message to a non-person entity; for example, the user might send a message to the election (node 202).”) Kraft discloses that “[a] world server receives a request from a querying user for an entity model,” and “[t]he world server **returns the information contained in the requested entity model.**” EX1022, 3:52-55 (emphasis added). That is, Kraft teaches that a user may query an event node, which, in response to the query, returns information (e.g., “text or media content,” *Id.*, 3:18-24) related to the event. Kraft further discloses that its system “enables authorized users to update the world model,” for example, by “modifying entity models.” EX1022, 6:54-57.

66. In this manner, Kraft teaches “establishing an event node” (e.g., Kraft’s mayoral election node 202) “in the multi-dimensional personal information network” and “establish[ing] a link” between a “first device corresponding to a node in [the] multi-dimensional personal information network” (e.g., Kraft’s

person nodes 208 and 210) and “the event node.” A POSA would have also understood that Kraft’s “world server” provides an “event node server,” as recited in substitute claim 21, because it allows users to connect to Kraft’s entity models. For example, Kraft’s “world server” receives queries for the event node and “returns the information contained in the requested entity model,” i.e., the event node. EX1022, 3:52-55.

67. In my opinion, a POSA would have been motivated to combine Kraft’s techniques with Amidon to allow users to obtain up-to-date information regarding an event from within a conference. Amidon provides “systems and methods for users to conduct online conferences based on underlying social network structures.” EX1005, 2:54-56. Amidon, however, explains that “[t]he term ‘user’ is meant to broadly include not only an individual, but **also other entities**, such as groups of individuals and organizations when treatable as a single unit.” EX1005, 5:3-8 (emphasis added). Therefore, like Kraft, Amidon envisions nodes within a conference representing not only individuals, but also “other entities.” EX1005, 5:3-8. Amidon does not explicitly provide implementation details about those other entities. Kraft does.

68. In the combined system of Amidon-Kraft, a POSA would have been motivated to establish and include an “event node” as a participant within a conference, in addition to traditional users. In Kraft’s example of a mayoral

election, for instance, a conference amongst users would include an entity representing the election. This would allow information contained within the election entity (e.g., “text or media content,” EX1022, 3:18-24) to be queried by and returned to users within the conference, just as messages between individuals would be exchanged, i.e., using direct links 106, 108 or routed via Amidon’s messaging server 14 using links 114, EX1005, 8:49-55, 22:41-47, FIG. 2. And because the information contained within the election entity can be modified by “authorized users,” a POSA would have recognized that the election entity would propagate up-to-date information regarding the event (e.g., the mayoral election) to users within the conference, consistent with Patent Owner’s narrow construction of “event node.”

69. A POSA would have also understood that Kraft’s “event node” would be established within the context of Amidon’s social network, i.e., “within the multi-dimensional personal information network.” For example, Kraft discloses that its “world model” entities are stored in a “world model data store,” and that the “world model can include features of a conventional social network.” EX1022, 6:33-35, 10:25-30. Amidon similarly discloses storing “social network data in one or more stores,” including “social network users, characteristics for each user (profile information, etc.), relationships between each user, and privacy, informational, and system parameter settings for each user.” EX1005, 9:23-30.

Therefore, a POSA would have had a reasonable expectation of success, encountering no technical hurdles, in storing entities representing events in Amidon's social network data stores. Amidon's messaging server would then have access to the information associated with event entities included in a conference via Amidon's social network server, as shown in Amidon's Figure 2, for distribution to querying users.

70. For these reasons, it is my opinion that the combination of Amidon and Kraft renders obvious "an event node in the multi-dimensional personal information network, said event node hosted by an event node server," as recited in substitute claim 21, even under Patent Owner's overly narrow interpretation of the term "event node."

D. Ground 3: Proposed claims 21-29 would have been obvious over the Wong-Gogic combination.

71. For the reasons discussed below, it is my opinion that the combination of Wong and Gogic renders obvious Patent Owner's proposed substitute claims.

1. Overview of the Motivation to Combine Wong and Gogic

72. As I explained in my original declaration, a POSA would have been motivated to combine Wong and Gogic. EX1003, ¶¶163-168.

2. Independent Claim 21 (Substitute for Claim 10)

a) Element [21.P]: "A method of creating a set of nodes forming a projection of a situational network"

73. In my opinion, the Wong-Gogic combination renders obvious this

element for the reasons discussed in my previous declarations. EX1003, ¶220;
EX1018, ¶¶12-13.

- b) Element [21.1]: “(a) receiving, by a first device corresponding to a node in a multi-dimensional personal information network, an invitation to establish a link with an event node in the multi-dimensional personal information network, said event node hosted by an event node server in response to the first device being included in a projection of nodes of the multi-dimensional personal information network”**

74. It is my understanding that Patent Owner acknowledges that “[t]he inclusion of an ‘event node’ brings claim 21 in line with independent claims 1 and 20.” MTA, 12; *see also id.*, 5 (“This limitation [of claim 10] is similar to independent claim 1”). I agree with this characterization of the scope of proposed claim 21.

75. The arguments in Patent Owner’s Motion to Amend in support of proposed claim 21 correspond to the arguments in Patent Owner’s Response in support of claims 1, 10, and 20.

76. Thus, in my opinion, the Wong-Gogic combination renders obvious this element for the reasons discussed in my previous declarations. EX1003, ¶221; EX1018, ¶¶20-22.

- c) Element [21.2]: “(b) transmitting a response accepting the invitation to establish a link with the event node hosted by the event node server”**

77. In my opinion, the Wong-Gogic combination renders obvious this

element for the reasons discussed in my original declaration. EX1003, ¶222.

d) Element [21.3]: “(c) establishing a link with the event node hosted by the event node server; and”

78. In my opinion, the Wong-Gogic combination renders obvious this element for the reasons discussed in my original declaration. EX1003, ¶223.

e) Element [21.4]: “(d) receiving information about the situation from the event node hosted by the event node server.”

79. In my opinion, the Wong-Gogic combination renders obvious this element for the reasons discussed in my original declaration. EX1003, ¶224.

3. Claim 22 (Substitute for Claim 11)

80. Substitute claim 22 recites, “*wherein the invitation is received based on a geographic proximity of the first device with other devices in the multi-dimensional personal information network.*” In my opinion, the Wong-Gogic combination teaches this claim for the reasons discussed in my original declaration. EX1003, ¶¶225-227.

4. Claim 23 (Substitute for Claim 12)

81. Substitute claim 23 recites, “*wherein the event node server corresponds to an event node of the situational network created in response to identification of the situation by a situation authority.*” In my opinion, the Wong-Gogic combination teaches this claim for the reasons discussed in my original declaration. EX1003, ¶228.

5. Claim 24 (Substitute for Claim 13)

82. Substitute claim 24 recites, “*(e) receiving the projection of the nodes of the situational network from step (a) from the event node server.*” In my opinion, the Wong-Gogic combination teaches this claim for the reasons discussed in my original declaration. EX1003, ¶¶229-231.

6. Claim 25 (Substitute for Claim 14)

83. Substitute claim 25 recites, “*(f) inviting at least one other device included in the projection to establish a link with the first device;*” “*(g) connecting to the at least one other device from step (e)^[3] accepting the invitation;*” and “*(h) sharing information related to the situation with the at least one other device.*” In my opinion, the Wong-Gogic combination teaches this claim for the reasons discussed in my original declaration. EX1003, ¶¶232-235.

7. Claim 26 (Substitute for Claim 15)

84. Substitute claim 26 recites, “*wherein the connections established in step (g) have an order of separation of one.*” In my opinion, the Wong-Gogic combination teaches this claim for the reasons discussed in my original declaration. EX1003, ¶¶236-238.

³ As I explained in my original declaration for claim 14, I understand this to be a typographical error, referring to “step (f)” of claim 25, in which the “at least one other device” is first recited. See EX1003, ¶142 n.3.

8. Claim 27 (Substitute for Claim 16)

85. Substitute claim 27 recites, “*wherein the connections established in step (g) are multi-dimensional.*” In my opinion, the Wong-Gogic combination teaches this claim for the reasons discussed in my original declaration. EX1003, ¶¶239-241.

9. Claim 28 (Substitute for Claim 17)

86. Substitute claim 28 recites, “*wherein at least one of the dimensions corresponds to the situation.*” In my opinion, the Wong-Gogic combination teaches this claim for the reasons discussed in my original declaration. EX1003, ¶¶242-244.

10. Claim 29 (Substitute for Claim 18)

87. Substitute claim 29 recites, “*wherein the dimension corresponding to the situation includes an affinity greater than affinity included along the other dimensions.*” In my opinion, the Wong-Gogic combination teaches this claim for the reasons discussed in my original declaration. EX1003, ¶¶245-247.

E. Ground 4: Proposed claims 21-29 would have been obvious over the Wong-Gogic combination in view of Kraft.

88. Patent Owner argues that there is no express disclosure of an event node in Wong or Gogic. MTA, 19-22. I have been informed by counsel that this is not required under the law. In any event, as I have explained above, Kraft includes such an express teaching of an “event node,” in the form of the specific node of the

world model representing the event. EX1022, 2:37-41, 2:67-3:2, 3:18-24, 3:52-55, 6:54-57, 8:26-62, 9:33-36, 10:25-30, FIG. 2; Section VI.C.

89. As I previously explained in my original declaration, Wong teaches that there may be additional node types beyond the specific types expressly disclosed therein, and also discloses creating new nodes. EX1006, ¶¶21-22, 26-27, FIGs. 5, 6; EX1003, ¶¶177-179. Wong, however, does not provide implementation details about these additional node types. But, Kraft does.

90. A POSA would have been motivated to include Kraft's event node in Wong based on Wong's express suggestion to include additional types of nodes. Kraft also expressly teaches the "event" may be a "natural disaster," similar to Gogic's teachings that an ad-hoc communication group is formed "[d]uring emergency situations." EX1022, 9:65-66; EX1007, 4:20-24. Kraft's teachings confirm my prior opinion that a POSA would have recognized a new node (i.e., an event node) related to the identified event or condition (i.e., a situation) would be useful in Wong's social network to facilitate communication amongst an ad-hoc communication group related to the event or condition, and would have further been motivated to include such an event node in the Wong system, as taught by Kraft. EX1003, ¶¶177-178.

VII. CONCLUSION

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

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

Executed on this 25th day of February 2025, in Bonaire, Kingdom of the Netherlands.


Jeremy Cooperstock, Ph.D.