

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

META PLATFORMS, INC.,
Petitioner

v.

SITNET, LLC,
Patent Owner

Case IPR2024-00530
U.S. Patent No. 9,877,345

**PETITIONER'S OPPOSITION TO
PATENT OWNER'S CONTINGENT MOTION TO AMEND**

Mail Stop "PATENT BOARD"

Patent Trial and Appeal Board
U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Meta EX1030
Meta v. SitNet
IPR2026-00100

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	CLAIM CONSTRUCTION – EVENT NODE.....	1
III.	PATENT INELIGIBILITY UNDER 35 U.S.C. § 101	2
	A. <u>Alice Step One</u> : The substitute claims are directed to the abstract idea of obtaining and aggregating status responses.	3
	B. <u>Alice Step Two</u> : The substitute claims implement the abstract idea using conventional networking technology and thus lack an inventive concept.	8
IV.	UNPATENTABILITY UNDER 35 U.S.C. § 103	11
	A. <u>Ground 1</u> : Proposed substitute claims 17, 19-24, 26-29, and 31- 32 are obvious over Gage in view of Issa.....	11
	1. Independent Claim 17	11
	2. Independent Claims 24 and 29	17
	3. Dependent Claims 19-23, 26-28, and 31-32	17
	B. <u>Ground 2</u> : Proposed substitute claims 18, 25, and 30 are obvious over Gage in view of Issa and Mitchell.....	17
	C. <u>Ground 3</u> : Proposed substitute claims 17, 19-20, 22-24, 26-29, and 31 are obvious over Shida in view of Kraft.	18
	1. Independent Claim 17	18
	2. Independent Claims 24 and 29	24
	3. Dependent Claims 19-20, 22-23, 26-28, and 31	24
	D. <u>Ground 4</u> : Proposed substitute claims 18, 21, 25, 30, and 32 are obvious over Shida in view of Kraft and Sinha.	24
V.	CONCLUSION	24

PETITIONER'S EXHIBIT LIST

Exhibit No.	Description
1001	U.S. Patent No. 9,877,345 to Cona et al. (“’345 patent”)
1002	Prosecution History of U.S. Patent No. 9,877,345 (“’345 File History”)
1003	Declaration of Dr. Jeremy Cooperstock
1004	<i>Curriculum Vitae</i> of Dr. Jeremy Cooperstock
1005	U.S. Publication No. 2008/0139165 to Gage et al. (“Gage”)
1006	U.S. Publication No. 2003/0162557 to Shida (“Shida”)
1007	U.S. Publication No. 2008/0208605 to Sinha et al. (“Sinha”)
1008	U.S. Provisional Application No. 60/862,365 to Sinha et al. (“Sinha Provisional”)
1009	U.S. Publication No. 2003/0197615 to Roche et al. (“Roche”)
1010	U.S. Patent No. 9,143,535 to Cona et al. (“Cona”)
1011	U.S. Patent No. 8,045,455 to Agronow et al. (“Agronow”)
1012	U.S. Publication No. 2007/0276908 to Asthana et al. (“Asthana”)
1013	U.S. Publication No. 2007/0194938 to Mitchell (“Mitchell”)
1014	Japanese Patent Application Publication 2005-80211 to Ikeda (with certified English translation) (“Ikeda”)
1015	U.S. Patent No. 7,817,982 to Chu et al. (“Chu”)
1016	U.S. Patent No. 8,024,330 to Franco et al. (“Franco”)
1017	U.S. Publication No. 2005/0197775 to Smith (“Smith”)
1018	U.S. Publication No. 2007/0233635 to Burfeind et al. (“Burfeind”)
1019	U.S. Publication No. 2006/0270419 to Crowley et al. (“Crowley”)
1020	U.S. Publication No. 2006/0047825 to Steenstra et al. (Steenstra”)
1021	U.S. Publication No. 2006/0155809 to Arav (“Arav”)
1022	U.S. Publication No. 2006/0117051 to Chin (“Chin”)
1023	Prosecution History of U.S. Patent No. 8,249,932 (’932 File History”)

Exhibit No.	Description
1024	Civil Case Management Plan and Scheduling Order, 1:23-cv-06389 (S.D.N.Y.), Document 35 (10/20/2023)
1025	Joint Claim Construction Statement, <i>SitNet, LLC v. Meta Platforms, Inc.</i> , Case No. 1:23-cv-06389 (S.D.N.Y.) (Feb. 21, 2024)
1026	Declaration of Dr. Jeremy Cooperstock in Support of Petitioner's Reply to Patent Owner's Preliminary Response
1027	Transcript of the Deposition of Aviel D. Rubin, Ph.D. (February 7, 2025)
1028	Declaration Dr. Jeremy Cooperstock in Support of Petitioner's Opposition to Patent Owner's Contingent Motion to Amend
1029	U.S. Patent No. 7,730,216 to Issa et al. ("Issa")
1030	U.S. Patent No. 7,747,648 to Kraft et al. ("Kraft")
1031	<i>Intentionally left blank</i>
1032	Order on Motion to Dismiss, SDNY-1-23-cv-06389-51 (March 19, 2024)
1033	Declaration Dr. Jeremy Cooperstock in Support of Petitioner's Reply to Patent Owner's Response

I. INTRODUCTION

The Petition shows that all claims of the '345 patent would have been obvious. Recognizing the deficiencies in those claims, SitNet seeks to amend the independent claims by adding the concepts of “establishing an event node” and connecting the event node to other nodes in a “social network.”

But these additional concepts cannot salvage the '345 patent for two main reasons. *First*, the substitute claims merely recite conventional networking components that do nothing more than receive, manipulate, and present data. These claims are therefore patent ineligible under 35 U.S.C. § 101 as the Federal Circuit has held in a long line of cases. *Second*, the newly recited “event node” and “social network” were well known in the art as demonstrated by the Issa and Kraft references discussed further below. In view of these references and the explanations provided in the Petition, the substitute claims are also obvious under 35 U.S.C. § 103 based on the Gage-Issa and Shida-Kraft combinations.

Thus, as explained in more detail below, SitNet’s motion to amend the '345 patent should be denied.

II. CLAIM CONSTRUCTION – EVENT NODE

The District Court determined that the term “event node” needs no construction. EX2007, 5-6. But SitNet argues that an “event node” additionally requires a correspondence with a situation and must be a “node within an NDSN

providing up-to-date information regarding an event or situation via peer-to-peer communication with other nodes.” MTA, 18. First, the District Court has already indicated that such limitations are not required. EX2007, 5-6. Second, these additional limitations are not present in the amendments and therefore should not be interpreted to be required by the claims. And third, even SitNet’s declarant has rejected such limitations, indicating instead that an event node is simply a data structure or “object with attributes that defines [an] event.” EX1027, Rubin Tr., 33:2-7, 41:17-20. Thus, the Board should reject these additional limitations. EX1028, ¶¶10-16.

Regardless, even under SitNet’s narrow construction, SitNet’s motion to amend should be denied because, as explained below, the proposed amended claims are patent ineligible under 35 U.S.C. § 101 and obvious under § 103.

III. PATENT INELIGIBILITY UNDER 35 U.S.C. § 101

The substitute claims recite nothing but patent-ineligible subject matter. Determining patent eligibility is a two-step test. *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014). The first step examines whether the claims are directed to an abstract idea. *Id.* at 220. If so, the second step “examine[s] the elements of the claim to determine whether it contains an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Id.* at 221 (quoting *Mayo Collaborative Services v. Prometheus Labs.*,

Inc., 566 U.S. 66, 72, 80 (2012)). As explained below, the substitute claims fail both steps of *Alice* and are therefore unpatentable under § 101.¹

A. Alice Step One: The substitute claims are directed to the abstract idea of obtaining and aggregating status responses.

Substitute claim 17 is representative.² It is directed to *collecting* data (“receiving an indication” and “receiving . . . a status response”), *manipulating* data (“forming a situational network” and “aggregating the status responses”), and *presenting* certain results (“presenting a roll call query” and providing “a roll call

¹ In the parallel district-court case, Meta raised patent ineligibility of the ’345 patent in a motion to dismiss. EX1032, 1. The court concluded that the claims of the ’345 patent “might” be directed to an abstract idea under *Alice* step one. *Id.* at 7. But the court declined to hold those claims unpatentable under *Alice* step two because “plausible factual disputes” precluded such a determination at the motion-to-dismiss stage. *Id.* at 8-9. No such factual disputes are present here. Thus, as explained below, the substitute claims are unpatentable under § 101.

² “Courts may treat a claim as representative in certain situations, such as if the patentee does not present any meaningful argument for the distinctive significance of any claim limitations not found in the representative claim or if the parties agree to treat a claim as representative.” *Berkheimer v. HP, Inc.*, 881 F.3d 1360, 1365 (Fed. Cir. 2018).

list”). MTA, App’x A. Each of these steps comprises nothing more than routine data manipulation.

The Federal Circuit has consistently held such data manipulation to be abstract. For example, in *Trinity Info Media, LLC v. Covalent, Inc.*, 72 F.4th 1355 (Fed. Cir. 2023), claims for “creating a polling network” were “focused on ‘collecting information, analyzing it, and displaying certain results,’ which place[d] them in the ‘familiar class of claims “directed to” a patent-ineligible concept.’” 72 F.4th at 1362 (quoting *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016)). Similarly, in *Sanderling Mgmt. Ltd. v. Snap Inc.*, 65 F.4th 698 (Fed. Cir. 2023), claims for “distributing a digital image processing function” were directed to the “distribution of information,” which “is an abstract idea.” *Sanderling*, 65 F.4th at 703. And, finally, in *Chamberlain Grp., Inc. v. Techtronic Inds. Co.*, 935 F.3d 1341, 1345, 1348 (Fed. Cir. 2019), claims for operating a “movable barrier,” e.g., a garage door, were directed to an abstract idea of “wirelessly communicating status information.” 935 F.3d at 1348.

The same conclusion is appropriate here. Like the claims in *Trinity*, *Sanderling*, and *Chamberlain*, substitute claim 17 merely recites the manipulation of data—i.e., establishing a network with a participant devices that are geographically proximate to a “situation.” In fact, substitute claim 17 is even more abstract than the claims in *Trinity*, *Sanderling*, and *Chamberlain*. At least those

claims culminated in the display or transmission of useful information. *Trinity*, 72 F.4th at 1359 (“displaying to the user the user profiles”); *Sanderling*, 65 F.4th at (“automatically forwarding . . . at least one digital image processing function”); *Chamberlain*, 935 F.3d at 1345 (“transmit[ting] a status condition signal”). Here, in contrast, substitute claim 17 merely receives a “status response” and then aggregates it into a list, which SitNet’s expert admits is merely the manipulation of data. EX1027, 58:22-59:8.

In fact, SitNet’s expert admitted that every single step of claim 1 merely receives, manipulates, or presents data. EX1027, 57:7-59:15. He also conceded that the “event node” and “event node server”—which SitNet seeks to add into substitute claim 17—amounts to nothing more than “manipulating data somehow to make [the] attributes” that define the event node. EX1027, 59:9-15; *see also id.*, 41:17-20 (conceding that an “event node server would be a thing that could define objects with attributes that define the node”). “In a long line of cases, the Federal Circuit has held that ‘collecting information, analyzing it, and displaying certain results’” —like substitute claim 17 here—“is a patent-ineligible abstract idea.” EX1032, 4 (citing *Trinity*, 72 F.4th at 1362).

To be sure, a computer-related invention could be non-abstract if it were accomplished by “a specific technique that departs from earlier approaches to solve a specific computer problem.” *Ancora Techs., Inc. v. HTC Am., Inc.*, 908 F.3d

1343, 1348 (Fed. Cir. 2018) (cleaned up). For example, in *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016), claims to “a *self-referential* table for a computer database” were patent eligible because those claims were “directed to an improvement in the functioning of a computer.” 822 F.3d at 1337, 1338.

Substitute claim 17, in contrast, provides no technological improvement to the claimed network. Instead, the specification of the ’345 patent confirms that its situational network architecture and hardware were all “known to those skilled in the art.” *See, e.g.*, EX1001 4:35-40, 6:1-7, 6:60-62, 7:38-43; EX1028, ¶¶17-26. It also states that the “N-dimensional social network” uses well-known and conventional technology and “may be implemented using a wide variety of available hardware and technologies generally known in the art.” EX1001, 15:42-50, 16:32-36; EX1027, 43:18-44:3 (SitNet’s expert identifying no difference between a “social network” and an “N-dimensional social network”). Merely claiming the formation of a situational network “in general terms, without limiting” the situational network to “technical means” that “are arguably an advance, does not make a claim eligible at step one.” *Ericsson Inc. v. TCL Commc’ns Tech. Holdings Ltd.*, 955 F.3d 1317, 1328 (Fed. Cir. 2020) (cleaned up).

Substitute claim 17’s recitation of “an event node server” in a social network, moreover, does not nudge it from the abstract to the concrete. For

example, in *ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759 (Fed. Cir. 2019), the Federal Circuit held that claims directed to remote server communications through a wide area network were directed to an abstract idea. *Id.* at 766-69. Such claims were abstract even though they were associated with a physical device, such as an electric vehicle charging station. *Id.* at 770, 772-73. Like the claims in *ChargePoint*, the “event node server” in substitute claim 17 merely comprises generic “networking capabilities” that amounts to nothing more than the “abstract idea of communication over a network.” *Id.* at 767-71.

Thus, substitute claim 17 is directed to an abstract idea under *Alice* step one.

Additionally, under the USPTO’s Section 101 Guidance, the substitute claims recite a judicial exception that is not integrated into a practical application of that exception. 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) (“2019 Revised Guidance”); *ProFrac Holding Corp. v. Halliburton Energy Servs., Inc.*, PGR2023-00023, Paper 26 (October 29, 2024).

Under Step 2A, Prong One, the substitute claims describe a mental process as well as a method of organizing human activity. Presenting a “roll call query” to geographically proximate participants and then receiving and aggregating status responses from those participants are operations that can be performed in the human mind. Further, under Step 2A, Prong Two, this judicial exception is not integrated into a practical application. For example, forming a network to gather

status responses from a social network may link the judicial exception to a technical field but does not add any “meaningful limitation to the claim,” and therefore does not integrate the exception into a practical application. *ProFrac*, PGR2023-00023, Paper 26 at 12, 15; 2019 Revised Guidance, 84 Fed. Reg. at 54–55; MPEP, 2106.04(d), 2106.05(e). Thus, under the USPTO’s Step 1, Prong One and Prong Two analysis, the claims are directed to an abstract idea (i.e., obtaining status responses from social network participants and compiling those responses into a list).

B. Alice Step Two: The substitute claims implement the abstract idea using conventional networking technology and thus lack an inventive concept.

Substitute claim 17 also fails *Alice* step two because it provides no inventive concept beyond the abstract idea itself. EX1028, ¶¶17-26.

The claimed “receiving an indication of an occurrence of a situation,” “presenting a roll call query,” and “receiving a status response” steps are not inventive. The ’345 patent does not describe any unusual or unconventional manner for receiving and transmitting the claimed data, and, in any event, “sending” and “receiving” data over a network is “not even arguably inventive.” *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014). The ’345 patent further explains that the entities receiving the roll call query and sending a status response can use “devices generally known to those skilled in the art,” such

as “cell phones, PDA’s, personal computers, network servers, PVR’s,” or “in-vehicle and portable navigation systems.” EX1001, 4:35-40. Such devices are “indisputably generic computer components.” *Prism Techs. LLC v. T-Mobile USA, Inc.*, 696 F. App’x 1014, 1017 (Fed. Cir. 2017); *Universal Secure Registry LLC v. Apple Inc.*, 10 F.4th 1342, 1355 (Fed. Cir. 2021).

The claimed “forming a situation network” step is likewise not inventive. The specification explains that its situational network and “N-dimensional social network” are all implemented using “available hardware and technologies generally known in the art.” EX1001, 4:35-40, 6:1-7, 6:60-62, 7:38-43, 10:7-10, 15:42-50; EX1027, 43:18-44:3, 60:21-61:4. The “invocation[] of computers and networks that are not even arguably inventive” is “insufficient to pass the test of an inventive concept.” *Trinity*, 72 F.4th at 1366-67 (quoting *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1170 (Fed. Cir. 2018)).

The claim limitations also do not provide an inventive concept when considered as an ordered combination because the claim steps represent an intuitive and conventional process. Claim 17 simply recites receiving an indication of a situation, identifying the participant devices geographically proximate to the situation, presenting those participant devices with a roll call query, receiving a status response, and then aggregating those status responses into a list. *See Boom! Payments, Inc. v. Stripe, Inc.*, 839 F. App’x 528, 533 (Fed. Cir. 2021) (“[T]he

order and timing of the claim elements are merely the necessary steps of executing payment escrow and so do not constitute an inventive concept.”). The components for performing these functions, moreover, are arranged in a conventional architecture—the patents do not suggest otherwise.

The district court concluded that the formation of a situational network created “‘plausible factual disputes’ over inventiveness,” which precluded a finding of patent ineligibility at the motion-to-dismiss stage. EX1032, 7-9. But no such factual disputes exist here. Indeed, SitNet’s expert admitted (i) that “forming a situational network” is merely manipulating data to create logical connections and (ii) that the ’345 patent “did not invent the concept of a social network” or “any type of new technology” that “would be needed for two users to communicate over a social network.” EX1027, 25:14-18, 27:14-17, 57:22-58:5. Using conventional components to send information to a generic “participant device” does not provide an inventive concept. *Elec. Power*, 830 F.3d at 1355.

In sum, representative substitute claim 17 performs routine data manipulation without requiring “a new source or type of information,” “new techniques for analyzing it,” or “any nonconventional computer[.]” *Elec. Power*, 830 F.3d at 1355 (cleaned up). Accordingly, the substitute claims do not provide an inventive concept under *Alice* step two and are thus unpatentable under § 101. EX1028, ¶¶17-26.

IV. UNPATENTABILITY UNDER 35 U.S.C. § 103

A. Ground 1: Proposed substitute claims 17, 19-24, 26-29, and 31-32 are obvious over Gage in view of Issa.

The substitute claims only add the concepts of (1) establishing an event node and (2) connecting the event node to “N-dimensional social network” nodes. MTA, Appendix A. Both concepts, however, were well-known in the art and are described in Issa (EX1029). EX1028, ¶¶27-31. A POSA would have been motivated to combine Issa with Gage to provide an efficient process for obtaining and aggregating status indicator responses and to provide status responses to “concerned parties” like friends and family. For the reasons presented below and in the Petition, the combination of Gage and Issa render obvious substitute claims 17, 19-24, 26-29, and 31-32. EX1028, ¶¶34-54; Pet., 22-44.

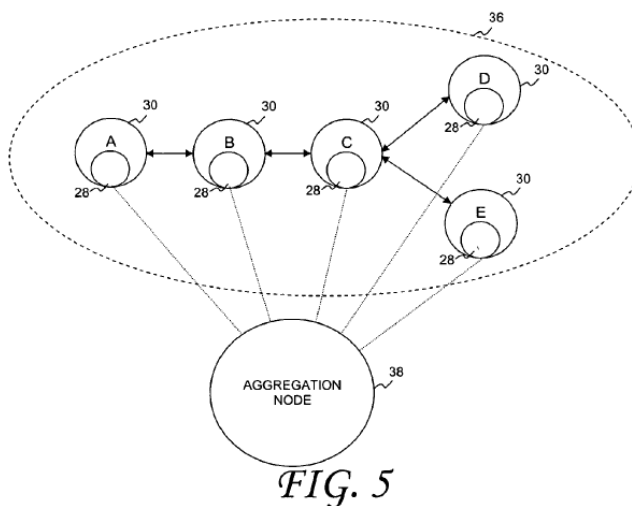
1. Independent Claim 17

Substitute claim 17 only amends claim 1 to introduce the concept of forming a situational network by establishing an event node and connecting the event node to other nodes in an N-dimensional social network. MTA, Appendix A. But the Gage-Issa combination renders these concepts obvious. EX1028, ¶¶38-52.

As explained in the Petition, Gage describes forming a situational network related to the occurrence of a situation for the reasons presented with reference to claim element [1.2] in the Petition. Pet., 25-29. Namely, Gage’s disaster response system forms a situational network when connecting with subscribers 132-134 that

are geographically proximate to a disaster region 110. EX1005, ¶¶9-10, 19, 26, 36, 38, FIG. 1, FIG. 3. For example, Gage explains that “ad hoc networks can be dynamically established ... to enable subscribers 130-134 to convey status and location.” EX1005, ¶25. The disaster response system also establishes connections with “one or more disaster relief systems” or “agencies.” EX1005, ¶¶21, 31; EX1003, ¶¶84-85. While Gage describes forming the situational network within a network of existing nodes, Gage does not explicitly disclose an event node connecting an “N-dimensional social network.” EX1005, ¶¶9-10, 19, 25-26, 30-32, 35-39. Such a configuration, however, was well-known in the art and is explicitly disclosed in Issa. EX1028, ¶¶43-48.

Issa discloses connecting “multiple social network nodes using an aggregation node.” EX1029, Title, Abstract, 12:33-49. The aggregation node facilitates the aggregation and sharing of content including “instant messaging, web-based communications, file and content sharing, [and] audio communications.” EX1029, 2:57-66; *see also id.*, 4:1-8, 13:60-14:15. Figure 5 depicts an example of the aggregation node and its connection to social network nodes. *See* EX1029, 12:33-13:58, FIG. 5.

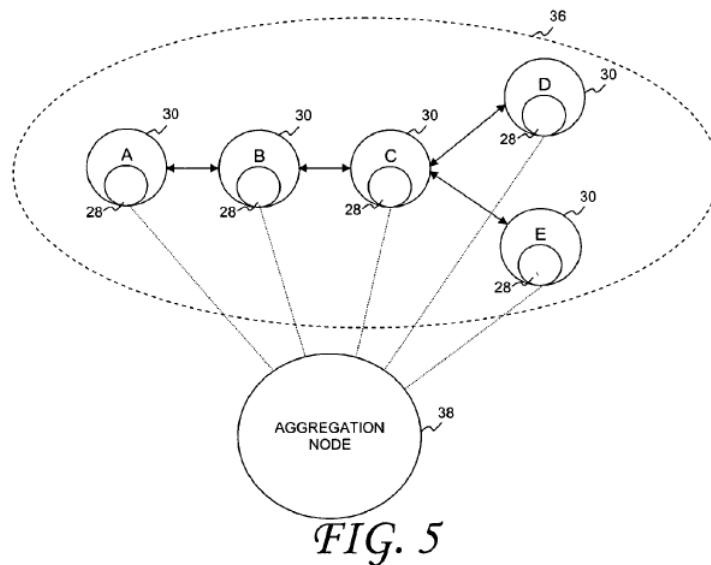


EX1029, FIG. 5.

“[A]ggregation node 38 may comprise a centralized server and/or a proxy server.” EX1029, 13:7-20. To “provide efficient content sharing,” aggregation node 38 obtains “digital content and/or metadata” from the nodes participating in the social network. EX1029, 13:40-59. To do this, Issa uses a “virtual peer” to receive content from social media participants and to “efficiently serve content requests” to “[m]ember and/or non-member peers.” EX1029, 2:66-3:39, 12:50-13:6, 13:40-59, 14:27-15:23, 15:55-16:23. The virtual peer allows “multiple social network nodes communicatively connected to the aggregation node to be addressed with a single request.” EX1029, 3:20-24; *see also id.*, 2:66-3:4, 12:50-13:6, 13:40-59, 14:27-15:23, 15:55-16:23. Issa explains that its virtual peer and aggregation node framework may be implemented with “pre-existing or dynamically created social network technologies include Friend-Of-A-Friend

(FOAF) social networks.” EX1029, 2:55-66; *see also id.*, 1:28-53, 8:60-9:20.

These may be “a hybrid peer-to-peer (P2P) network.” EX1029, Abstract, 8:4-6, 14:27-36, FIG. 5, FIG. 6. Issa therefore discloses the connection of a particular node to a plurality of nodes in an N-dimensional social network as recited in claim element [17.2]. EX1028, ¶¶45-48; EX1029, FIG. 5, 12:16-13:59; *see also id.*, 1:28-53, 2:55-66, 8:60-9:20; EX1027, 43:18-44:3.



EX1029, FIG. 5.

Issa’s aggregation node and virtual peer functionality as implemented with Gage’s disaster response system renders obvious establishing an “*event node hosted by an event node server.*” EX1028, ¶¶44-52. In response to the occurrence of a disaster, the combined system would have formed a situational network using the functionality described in Gage by establishing an aggregation node and virtual peer as described in Issa. EX1028, ¶49. This teaches an *event node* associated with

the disaster. EX1005, ¶¶9, 19 40-45, Abstract; EX1028, ¶¶44-52. The combined Gage-Issa disaster response system connects to other nodes of an N-dimensional social network as described in Issa. *See* EX1029, FIG. 5, 12:16-13:59; *see also id.*, 1:28-53, 2:55-66, 8:60-9:20. These social network nodes would have corresponded to the geographically proximate subscriber devices described in Gage. EX1028, ¶¶49-50; Pet., 28-29. Thus, the combination of Gage and Issa renders obvious the amended portions of claim 17. And Gage discloses the non-amended elements of claim 1 for the reasons provided in the Petition. Pet., 22-33.

A POSA would have been motivated to combine Gage and Issa to provide a more-efficient process for obtaining and aggregating status indicator responses and providing those aggregated responses to better inform relief workers. EX1028, ¶34; EX1005, ¶¶7, 11, 21. A POSA looking to implement Gage’s system would have sought an efficient way to aggregate disaster data, which would have led to a reference like Issa. EX1028, ¶34. Issa’s framework of using an “aggregation node” and “virtual peer” to efficiently gather messages from nodes of a network, “provide efficient content sharing,” and efficiently respond to content requests would have furthered Gage’s goal of identifying the “greatest need of relief based upon subscriber status indicators and subscriber locations.” EX1029, 13:40-59; EX1005, ¶¶7, 11; EX1028, ¶34. Thus, a POSA would have been motivated to combine Issa with Gage.

Further, Gage describes a second goal of providing status responses to “concerned parties.” EX1005, Abstract, ¶¶2, 6-9, 19-20, 23, 37-38. “Concerned parties, such as family members, can be granted access to the Web site, through which they can look-up the last known location and situational status of the subscriber.” EX1005, ¶37. A POSA would have recognized that a simple and efficient way of connecting to friends and family via a Web site would have been through a social network as described in Issa. EX1028, ¶35; EX1029, 1:28-53, 8:60-9:20; EX1005, ¶¶4, 46. A POSA would have been motivated to implement Issa’s aggregation node and social-network interactions with Gage’s disaster response system to quickly and efficiently notify friends and family. EX1028, ¶35; EX1029, 13:40-59; EX1005, Abstract, ¶¶2, 6-8, 19-20, 23, 37-38. Additionally, Gage provides “media” and “textual” content to concerned parties, and Issa provides an efficient way of distributing such content via a social network. EX1005, Claims 8-9; EX1029, 13:40-59 (Issa providing the benefits of “efficient content sharing” and “distributing digital content within a social network”), 16:17-23; EX1028, ¶36.

A POSA would have also known how to combine Gage and Issa and would have recognized that implementing Issa would have amounted to a predictable variation of Gage. EX1028, ¶37. Both references describe using a common server/client infrastructure to aggregate messages received from participant nodes

and to host web pages that display user statuses and messages. EX1029, 1:44-53, 3:60-4:8, 5:12-21, 13:7-20; EX1005, ¶¶37-38; *see also* EX1029, 2:57-66, 13:60-14:15, 16:5-23; EX1005, ¶11. This implementation therefore amounts to nothing more than combining prior-art elements according to known methods to yield predictable results (using an aggregation node to obtain and aggregate disaster response statuses from participants of a social network). EX1028, ¶37.

2. Independent Claims 24 and 29

Independent claims 24 and 29 recite substantially the same content as claim 17. Gage and Issa therefore render claims 24 and 29 obvious for similar reasons. *See* Section IV.A; Pet., 34-39. Additionally, as explained in the Petition, Gage teaches the remaining elements of claims 24 and 29. Pet., 34-39; EX1028, ¶53.

3. Dependent Claims 19-23, 26-28, and 31-32

There are no substantive amendments to these claims. Gage therefore discloses these claims for the reasons explained in the Petition with respect to their original claims. Pet., 39-44; EX1003, ¶¶118-138; EX1028, ¶54.

B. Ground 2: Proposed substitute claims 18, 25, and 30 are obvious over Gage in view of Issa and Mitchell.

There are no substantive amendments to claims 18, 25, and 30. The Gage-Issa-Mitchell combination therefore discloses these claims for the same reasons presented in the Petition. Pet., 48-49; EX1003, ¶¶151-153. A POSA would have been motivated to combine Mitchell with the combined Gage-Issa system for

reasons similar to those presented in the Petition as well. Pet., 44-48; EX1003, ¶¶139-150; EX1028, ¶¶55-56.

C. Ground 3: Proposed substitute claims 17, 19-20, 22-24, 26-29, and 31 are obvious over Shida in view of Kraft.

Like Issa, Kraft (EX1030) discloses (1) establishing an event node and (2) connecting the event node to “N-dimensional social network” nodes. MTA, Appendix A; EX1028, ¶¶32-33. A POSA would have been motivated to combine Kraft with Shida to provide an efficient way of gathering, organizing, and updating responses along with media content from individuals impacted by a disaster. For the reasons presented below and in the Petition, the Shida-Kraft combination renders obvious substitute claims 17, 19-20, 22-24, 26-29, and 31. EX1028, ¶¶57-72; Pet., 49-78.

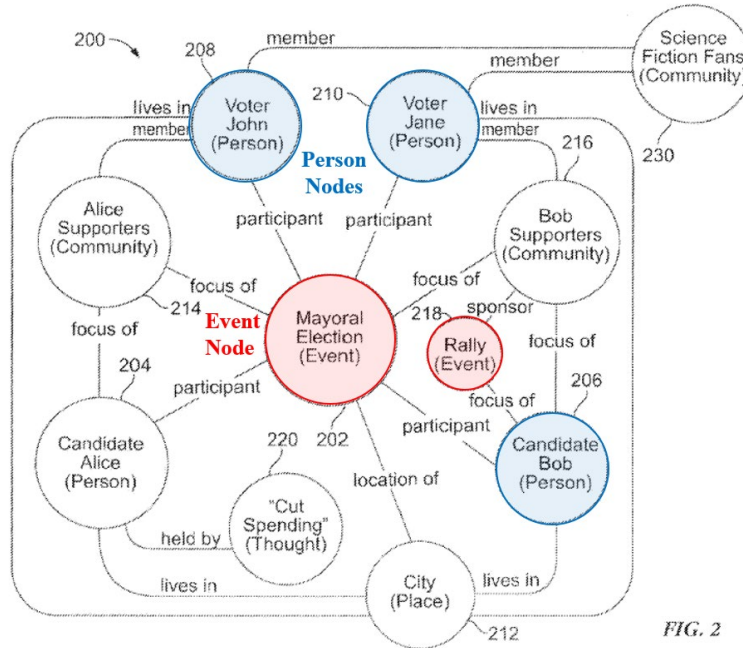
1. Independent Claim 17

Substitute claim 17 amends only claim 1 to introduce the concept of forming a situational network by establishing an event node and connecting the event node to other nodes in an N-dimensional social network. MTA, Appendix A. But the Shida-Kraft combination renders these concepts obvious. EX1028, ¶¶61-70.

As explained in the Petition, Shida describes forming a situational network related to the occurrence of a situation for the reasons presented with reference to claim element [1.2] in the Petition. Pet., 52-55. Shida’s center server forms a situational network when establishing connections with subscribers who are

geographically proximate to a disaster and “should be informed of the occurred disaster.” EX1006, ¶¶8, 39, 46, 56, FIG. 1; *see also id.*, ¶¶27, 30, 38. The users of the subscriber terminals then input a “safety confirmation response,” which is transmitted to the center server via a “mobile communication network system.” EX1006, ¶50. Thus, the center server forms a situational network with subscribers who are located in the “disaster occurring region.” EX1006, ¶46, FIG. 1. While Shida describes node functionality, it does not explicitly disclose a node framework. A POSA interested in implementing Shida’s system would have sought the disclosure of a node framework. Such a configuration was well known in the art and is explicitly disclosed in Kraft. EX1028, ¶¶61-70.

Kraft is directed to “systems and methods for information retrieval and communication using a world model.” EX1030, Kraft, 2:35-37. The world model includes “entity models” that can correspond to a “person, place, ... , *event*, or thought.” *Id.*, 2:37-41, 8:28-31. Kraft’s “world model can include features of a *conventional social network*.” *Id.*, 10:25-30 (emphasis added). An example “world model” is illustrated in Figure 2 of Kraft. *Id.*, 8:35-38; EX1028, ¶¶64-65.



EX1030, FIG. 2 (annotated).

As seen from FIG. 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).” EX1030, 8:39-44; *see also id.*, 8:26-28. Event nodes can also represent “**natural disasters**” and can contain “*text or media content*.” EX1030, 3:18-24, 9:65-66; EX1028, ¶65. This event node or event model is “advantageously implemented as a data structure that provides access to information about a real-world entity that the node represents.” EX1030, 8:26-28. Each node or entity model represents a “real-world entity” and can be modified to maintain up-to-date information related to the entity (e.g., the event). EX1030, 2:37-41, 6:54-57, 8:28-31; EX1028, ¶65.

Kraft's node framework as implemented with Shida renders obvious the claimed forming of a situational network by establishing an event node. EX1028, ¶¶66-68. Kraft's creation of an "event node" that corresponds to a "natural disaster" teaches the claimed "establishing an event node." EX1030, 8:26-44, 8:57-62, 9:42-49, 9:65-66; EX1028, ¶66. The Shida-Kraft combination would host such an event node on a server, such as Shida's center server as implemented with Kraft's functionality. EX1006, ¶¶27, 38, 47; EX1030, 4:64-5:12, 7:39-58. Shida describes forming a situational network as explained in the Petition. Pet., 52-55.

The combined system would be implemented in a "conventional social network," as taught by Kraft. EX1030, 10:22-30. Kraft's event node connects to other "person" nodes or "person entity models" that would operate in a conventional social network. EX1030, 10:22-41. For example, Kraft describes connecting participant nodes to an event node, where the participant nodes correspond to individuals experiencing the event that corresponds to the event node. EX1030, FIG. 2, 8:39-48. The Shida-Kraft combination therefore teaches connecting an event node to a plurality of existing nodes in an N-dimensional social network. EX1028, ¶67; EX1027, 43:18-44:3.

The Shida-Kraft combination further teaches connecting the event node to existing nodes corresponding to a plurality of participant devices determined to be geographically proximate to a situation with the participant devices corresponding

to participants in the situational network. EX1028, ¶68. Kraft describes connecting an event node to person nodes, which may additionally correspond to “client systems.” EX1030, 5:13-33, 6:61-65. The client systems allow users to retrieve information from nodes in a world model and “enables authorized users to update the world model.” EX1030, 6:54-57. The combined Shida-Kraft system therefore teaches the claimed configuration of nodes and participant devices and the claimed communications between such nodes based on how Shida establishes a situational network with subscriber terminals that are geographically proximate to disaster regions to provide notice information and to obtain safety confirmation responses. EX1006, ¶¶33, 37, 46, 50, 57-58; EX1028, ¶68. Thus, the Shida-Kraft combination renders obvious the amended portions of claim 17. And Shida discloses the non-amended elements of claim 1 for the reasons provided in the Petition. Pet., 49-59.

A POSA would have been motivated to combine Shida and Kraft to provide an efficient way to continuously gather and update information related to the disaster to further aid in confirming the safety of affected individuals. EX1028, ¶¶57-60, 69-70. For example, Shida describes a subscriber that reports a disaster, who may provide “voice” data or an “image file.” EX1006, ¶¶33, 38. A POSA looking to implement Shida’s system would have sought references describing an efficient way to manage this media content. EX1028, ¶57. Kraft provides an

efficient way to manage and update social network media content or statuses related to an event like a “natural disaster.” EX1030, FIG. 2, 8:39-44, 9:65-66, 10:25-30. Specifically, Kraft’s node framework allows users to link content such as images, audio, or video related to a “real-world entity” “to easily share their experiences and opinions.” EX1030, 2:29-31, 2:43-46, 6:61-65, 11:58-63.

A POSA would have recognized that Kraft’s node framework and entity models—including an entity model corresponding to a “natural disaster” event node—would have provided an efficient way of gathering, organizing, and updating received responses along with media content from individuals impacted by a disaster. EX1030, 2:29-31, 2:43-46, 9:65-66, 11:58-63; EX1028, ¶58-59. Thus, a POSA would have been motivated to combine Kraft with Shida. EX1028, ¶¶58-59.

A POSA would have also known how to combine Shida and Kraft and would have recognized that implementing Kraft would have amounted to a predictable variation of Shida. EX1028, ¶60. Both references describe using a common server/client infrastructure to aggregate messages and media content received from participant subscribers. EX1006, ¶¶27, 38, 47; EX1030, 4:64-5:12, 7:39-58. This implementation therefore amounts to nothing more than combining prior-art elements according to known methods to yield predictable results (using

an event node to obtain and manage disaster response statuses and media content from participants of a social network). EX1028, ¶60.

2. Independent Claims 24 and 29

Independent claims 24 and 29 recite substantially the same content as claim 17. Shida and Kraft therefore render claims 24 and 29 obvious for similar reasons. *See* Sections VI.A; Pet., 59-62. Additionally, as explained in the Petition, Shida teaches the remaining elements of claims 24 and 29. Pet., 59-62; EX1028, ¶71.

3. Dependent Claims 19-20, 22-23, 26-28, and 31

There are no substantive amendments to these claims. Shida therefore discloses these claims for the reasons explained in the Petition with respect to their original claims. Pet., 63-69; EX1003, ¶¶191-212; EX1028, ¶72.

D. Ground 4: Proposed substitute claims 18, 21, 25, 30, and 32 are obvious over Shida in view of Kraft and Sinha.

There are no substantive amendments to claims 18, 21, 25, 30, and 32. The Shida-Kraft-Sinha combination therefore discloses these claims for the same reasons presented in the Petition. Pet., 73-78; EX1003, ¶¶227-237. A POSA would have been motivated to combine Sinha with the combined Shida-Kraft system for reasons similar to those presented in the Petition as well. Pet., 68-73; EX1003, ¶¶213-226; EX1028, ¶¶73-74.

V. CONCLUSION

Thus, the substitute claims 17-32 are also unpatentable.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX PLLC

/Jonathan Tuminaro/

Jonathan Tuminaro (Reg. No. 61,327)
Michael D. Specht (Reg. No. 54,463)
Jennifer Meyer Chagnon (Reg. No. 55,440)
Steven M. Pappas (Reg. No. 73,904)
Timothy L. Tang (Reg. No. 75,187)
Counsel for Petitioner Meta Platforms, Inc.

Date: February 25, 2025

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

CLAIM APPENDIX FOR PROPOSED SUBSTITUTE CLAIMS

Claim 17

Element	
[17.P]	A method of accessing situation related information, the method comprising:
[17.1]	receiving an indication of an occurrence of a situation;
[17.2]	forming a situational network related to the occurrence of the situation <u>by establishing an event node hosted by an event node server within a N-dimensional social network and connecting the event node to a plurality of existing nodes within the N-dimensional social network, said plurality of existing nodes corresponding with a plurality of participant devices determined to be geographically proximate to the situation, each of the participant devices corresponding to a participant in the situational network;</u>
[17.3]	presenting a roll call query <u>by the event node</u> to each of the plurality of <u>existing nodes corresponding with the plurality</u> participant devices, <u>said roll call query</u> soliciting a reply related to a status of the participant;
[17.4]	receiving <u>at the event node</u> a status response from one or more of the participants; and
[17.5]	aggregating the status responses from responsive participants into a roll call list.

Claim 18

Element	
[18]	The method of claim 17, further comprising: receiving a request from a responsive participant to view the roll call list; presenting the roll call list to the responsive participant; and receiving from the participant an indication of the status of non-responsive participant.

Claim 19

Element	
[19]	The method of claim 17, wherein the situation includes at least one of an emergency event, a weather phenomenon, or a natural disaster.

Claim 20

Element	
[20]	The method of claim 17, wherein the situational network is formed by a situation authority.

Claim 21

Element	
[21]	The method of claim 17, further comprising: establishing an electronic message board for providing access to the roll call information related to the situation for individuals not participating in the situational network.

Claim 22

Element	
[22]	The method of claim 17, wherein the status response includes a request for assistance and a location of the participant.

Claim 23

Element	
[23]	The method of claim 17, wherein non-responding devices are reported to an emergency management organization.

Claim 24

Element	
[24.P]	A method of providing situation related information to a situation authority via a situational network, the method comprising:
[24.1]	receiving, by a participant device, a roll call query <u>sent by an event node established within an N-dimensional social network by an event node server of the situation authority</u> , said roll call query soliciting a reply related to a status of a participant based on the participant being determined, by the situation authority, to be geographically proximate to the situation;
[24.2]	receiving, by the participant device, a selection of a status response from the participant; and
[24.3]	sending the status response to <u>the event node of the [[central]] situation authority</u> , wherein the status response is included in a roll call list.

Claim 25

Element	
[25]	The method of claim [[8]] 24, further comprising: requesting, by the participant device, the roll call list; receiving, by the participant device, an indication of a status of non-responsive participant included on the roll call list; and sending the status of the non-responsive participant to the situation authority.

Claim 26

Element	
[26]	The method of claim [[8]] 24, wherein the situation includes at least one of an emergency event, a weather phenomenon, or a natural disaster.

Claim 27

Element	
[27]	The method of claim [[8]] 24, wherein the status response includes a request for assistance and a location of the participant.

Claim 28

Element	
[28]	The method of claim [[8]] 24, wherein the roll call list includes aggregated status responses from responsive participants of the situational network.

Claim 29

Element	
[29.P]	A system for accessing situation related information, the system comprising:
[29.1]	a central server, corresponding to a situation authority,
[29.2]	configured to receive an indication of an occurrence of a situation,
[29.3]	[[form]] <u>from a situational network related to the occurrence of the situation by establishing an event node hosted by the central server within a N-dimensional social network and connecting the event node to a plurality of existing nodes within the N-dimensional social network, said plurality of existing nodes corresponding with a plurality of participant devices determined to be geographically proximate to the situation, each of the participant devices corresponding to a participant in the situational network,</u>
[29.4]	<u>present by the event node</u> a roll call query to each of the plurality of participant devices soliciting a reply related to a status of the participant,
[29.5]	<u>receive at the event node</u> a status response from one or more of the participants, and aggregate the status responses from responsive participants into a roll call list; and
[29.6]	a database corresponding to the central server for storing the responses and the roll call list.

Claim 30

Element	
[30]	The system of claim [[13]] 29, wherein the central server is further configured to receive a request from a responsive participant to view the roll call list, present the roll call list to the responsive participant, and receive from the participant an indication of the status of non-responsive participant.

Claim 31

Element	
[31]	The system of claim [[13]] 29, wherein the situation includes at least one of an emergency event, a weather phenomenon, or a natural disaster.

Claim 32

Element	
[32]	The system of claim [[13]] 29, wherein the central server is further configured to establish an electronic message board for providing access to the roll call information related to the situation for individuals not participating in the situational network.

CERTIFICATION OF SERVICE (37 C.F.R. § 42.6(e))

I certify that the above-captioned **PETITIONER'S OPPOSITION TO
PATENT OWNER'S CONTINGENT MOTION TO AMEND** was served in its
entirety on February 25, 2025 upon the following parties via electronic mail:

David L. Hecht (Lead Counsel) dhecht@hechtpartners.com
James Zak (Back-up Counsel) jzak@hechtpartners.com
hp-sitnet@hechtpartners.com
HECHT PARTNERS LLP

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX PLLC

/Jonathan Tuminaro/

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

Date: February 25, 2025

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