UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

SITNET LLC,

Case No.: 1:23-cv-6389

Plaintiff,

v.

META PLATFORMS, INC.

Defendant.

JURY TRIAL DEMANDED

COMPLAINT

Plaintiff SitNet LLC ("SitNet"), by and through its undersigned counsel, as and for its Complaint against Defendant Meta Platforms, Inc. (f/k/a Facebook, Inc.) ("Meta"), alleges as follows:

NATURE OF THE ACTION

1. This action is for patent infringement arising under the patent laws of the United States, 35 U.S.C. §§ 1, et seq. As further stated herein, SitNet alleges that Meta infringes one or more claims of patents owned by SitNet. Accordingly, SitNet seeks monetary damages and injunctive relief in this action, in order to stop Meta's infringement of U.S. Patent Nos. 11,470,682, 9,877,345, 8,332,454, and 8,249,932 (collectively, the "Patents-in-Suit").

THE PARTIES

- 2. SitNet is a Delaware limited liability company with its principal place of business at 413 W 14th St., Suite 231, New York, NY 10014.
- 3. On information and belief, Meta is a publicly traded corporation organized and existing under the laws of the State of Delaware and is registered and authorized to do business in the State of New York, and maintains multiple places of business in New York, including at 225

Park Ave S, New York, NY 10003, 50 Hudson Yards, New York, NY 10001, and 380 W 33rd St., New York, NY 10001.

JURISDICTION AND VENUE

- 4. This is an action for patent infringement arising under the patent laws of the United States. This Court has jurisdiction over the subject matter of this action under 28 U.S.C. §§ 1331 and 1338(a), as well as 28 U.S.C. § 1367(a).
- 5. This Court has personal jurisdiction, including general and specific jurisdiction, over Meta. On information and belief, Meta conducts business in, has continuous and systematic contacts with, and has committed acts of patent infringement in this District, including its places of business at 225 Park Ave. S, New York, NY 10003, 50 Hudson Yards, New York, NY 10001, and 380 W 33rd St., New York, NY 10001, and has established minimum contacts with this forum state such that the exercise of jurisdiction over Meta would not offend traditional notions of fair play and substantial justice.
- 6. Venue is proper in this Court as to Meta under 28 U.S.C. §§ 1391 and 1400(b). Meta resides in this District because of its significant presence and activities in this District.
- 7. On information and belief, Meta markets, offers for sale, sells, and/or uses products and/or services, including those presently accused of infringement, in this District. Further on information and belief, Meta markets, offers for sale, and/or sells products and/or services, including those presently accused of infringement, to customers and potential customers in this District.
- 8. Further, on information and belief, Meta has offered and sold, and continues to offer and sell, its infringing products and services in this District. On information and belief, Meta

designs, uses, distributes, sells, and/or offers to sell the infringing products and/or services in this District as well as to consumers and businesses in this District.

9. On information and belief, Meta is a large company with global reach and billions of dollars of annual revenue. Litigating this case in this District, where Meta maintains a place of business, would be convenient to Meta and would serve the interests of justice.

PATENTS-IN-SUIT

- 10. On October 11, 2022, the United States Patent and Trademark Office (the "Patent Office") duly and legally issued U.S. Patent No. 11,470,682 (the "'682 Patent") entitled "Method and system for using a situational network." A true and correct copy of the '682 Patent is attached hereto as Exhibit 1.
- 11. On January 23, 2018, the Patent Office duly and legally issued U.S. Patent No. 9,877,345 (the "'345 Patent") entitled "Method and system for using a situational network." A true and correct copy of the '345 Patent is attached hereto as Exhibit 2.
- 12. On December 11, 2012, the Patent Office duly and legally issued U.S. Patent No. 8,332,454 (the "'454 Patent') entitled "Creating a projection of a situational network." A true and correct copy of the '454 Patent is attached hereto as Exhibit 3.
- 13. On August 21, 2012, the Patent Office duly and legally issued U.S. Patent No. 8,249,932 (the "'932 Patent") entitled "Targeted advertising in a situational network." A true and correct copy of the '932 Patent is attached hereto as Exhibit 4.
- 14. SitNet is the sole and exclusive owner of all right, title and interest to and in the Patents-in-Suit, including the right to sue for past infringement, and holds the exclusive right to take all actions necessary to enforce its rights to the Patents-in-Suit, including the filing of this patent infringement lawsuit. SitNet also has the right to recover all damages for past, present, and

future infringement of the Patents-in-Suit and to seek injunctive relief as appropriate under the law.

Meta's Knowledge of the Patents-in-Suit

- 15. On information and belief, Meta is a sophisticated company that keeps itself appraised of relevant patents filed by others.
- 16. On July 9, 2012, Meta filed a patent application that resulted in U.S. Patent No. 9.412,136, entitled Creation of Real-time Conversations Based on Social Location Information, which issued on August 9, 2016. During the prosecution of that patent, Meta was made aware of U.S. Patent 8,045,455, which is family member that shares the same priority application as the Patents-in-Suit. Therefore, Meta knew or should have known of the family of the Patents-in-Suit at least by August 9, 2016.
- 17. SitNet has at all times complied with the marking provisions of 35 U.S.C. § 287 with respect to the Patents-in-Suit. On information and belief, any prior assignees and licensees have also complied with the marking provisions of 35 U.S.C. § 287.

FACTUAL ALLEGATIONS

I. TECHNOLOGY BACKGROUND

- 18. Nearly two decades ago, the inventors, including several affiliated with The Weather Channel ("TWC") in Atlanta, Georgia, began using networking and telecommunications equipment to address issues relating to weather and safety. In particular, mobile applications were developed to enable devices capable of determining a user's location to receive highly pertinent information related to situations and events that could impact them (positively or negatively).
- 19. The inventors invented the unconventional concept of a "situational network" (sometimes abbreviated as "SitNet") in which an event or "situation" becomes the basis for the creation of a situational network through which parties can be interconnected and receive

information regarding an event or situation. The importance of this invention was immediately recognized because of its ability to identify parties that would be potentially impacted by an event or situation and interconnect them by establishing a situational network that would allow for acknowledgement that they are safe in a crisis, aware of, registered for, and able to correspond regarding an event, and to receive supplemental information items related to the event or situation. The inventive situational network was an unconventional architecture that allowed for increased efficiency and faster response times when interconnecting the parties when compared to conventional network architectures, and therefore, was an improvement on then-traditional network technology. Situational networks stand in contrast to then-conventional network architectures that were only capable of maintaining static connections of users.

- 20. This pioneering work resulted in the filing of a provisional patent application with the Patent Office on February 2, 2007, which was assigned application number 60/887,843. Based on that provisional application, regular patent applications were filed, resulting in a portfolio of patents, including the Patents-in-Suit.
- 21. The Patents-in-Suit provide for the establishment of a situational network that includes connections of links within or among a set of participants ('454 Patent, col. 3, ll. 60-64). The participants may or may not have prior knowledge of each other ('454 Patent, col. 3, l. 67 col. 4, l. 5). These interconnections are formed in the context of a social graph or social network, which in the Patents-in-Suit is referred to as a "N-dimensional social network" or "NDSN" ('454 Patent, col. 37 41). Additionally, the Patents-in-Suit incorporate the use of a Personal Information Aggregator ("PIA") which stores, organizes, and controls the personal information of a user ('454 Patent, col. 7, l. 65 col. 8, l. 7). Similar functionality is provided at the group level in the form of

a Community Information Aggregator ("CIA") which aggregates and allows for selected use of information at the group or community level.

- 22. The impact of the situational network, as articulated in the specifications of the Patents-in-Suit is clear: a set of users can be projected from the social graph or NDSN, with this projected view enabling management of a smaller portion of the entire social network ('454 Patent, col. 14, ll. 53-59) through the formation of a situational network architecture allowing for an enhanced network architecture with faster load times and reduced usage of resources. This unconventional network architecture was a critical innovation. At the time social graphs/networks were taking off, the computational difficulties with identifying and interconnecting the appropriate subset of parties in the social graph that are impacted by a situation would but for the innovation of the situational network were computationally intensive at best and computationally impossible at worst due to the limitations of conventional network architectures. The situational network inventions of the Patents-in-Suit and their unconventional network architecture allows for the development of a "projected" network that can reduce resource requirements such as CPU speed and memory size ('454 Patent, col. 16, ll. 26-47).
- 23. Of the multiple innovations the situational network of the Patents-in-Suit provides for, the disclosed and claimed architecture allows for the identification of individuals impacted by a crisis such as a hurricane, earthquake, or terrorist event, and asks them to check in if they are safe. In the context of the social graph/network this then allows individuals within their network (*e.g.*, friends and relatives) to see that they are safe ('454 Patent, col. 26, Il. 24-27). The situational network of the Patents-in-Suit also provides for projections to be made to create a subnetwork that allows individuals to connect to an event node (*e.g.*, "where the situation is a social event, such as a concert or a festival," ('454 Patent, col. 30, 1. 62 col 31, 1. 10)) to receive information about an

event ('454 Patent, col. 20, ll. 8-17). Importantly, the situational network allows for the transmission of supplemental information including targeted information or advertisements to the subset of individuals created in the projection ('454 Patent, col. 27, ll. 35-62).

- 24. The ability of the situational network of the Patents-in-Suit to form projections of impacted users, interconnect the users (amongst themselves as well as with friends and family), and provide them with information and relevant advertisements is based on the key insight the inventors had regarding how the nodes and links/edges of the social graph/network could be identified based on an event to readily select the appropriate subset of individuals and then use these relationships to establish a situational network.
- 25. At the time of the invention of the situational network disclosed and claimed in the Patents-in-Suit, Meta had only recently (in September of 2006) opened its platform (previously only available to students, academics, and select companies) to the public. By January 2007, Meta's Facebook user base was nearly 14 million. Meta announced its targeted advertising services in its announcement on November 6, 2007. Meta built their initial targeted advertising platform using conventional network technologies to reach relevant parties from the social graph/network using.
- 26. In the 2007 timeframe, Facebook Events' features were limited to web pages that provided information about an event including descriptions and photos, as well as a confirmed guest list that allowed a user to see if their friends and users were attending the event.³ Although

¹ Exhibit 15, Fred Vogelstein, *How Mark Zuckerberg Turned Facebook Into the Web's Hottest Platform*, Wired (Sept. 6, 2007), https://www.wired.com/2007/09/ff-facebook/ (retrieved July 18, 2023).

² Exhibit 16, https://about.fb.com/news/2007/11/facebook-unveils-facebook-ads/ (retrieved July 18, 2023).

³ Facebook for Dummies, 2008, pp. 205 – 210.

Facebook provided tools to locate relevant events (though searches and filters), it put the burden of locating the relevant events on the user and had no ability to project events relevant to the user from the social graph/network, nor did it provide for the features of the situational network allowing users to establish connections with the event node based on the projection, and for relevant parties to send targeted information to individuals impacted by or attending the event. It was not until the launch of the Events app on Facebook⁴ in 2016 that Facebook provided for a full set of features based in part on the projection of the relevant parties – in other words, formation of a situational network – from the larger social graph/network.

- 27. It was not until late 2014 more than 7 years after the filing of the SitNet provisional patent application that Meta launched the Safety Check feature, with its first use being the April 2015 earthquake in Nepal.⁵ In its initial launch, the Safety Check feature enabled users to let their friends and family know that they are safe during a crisis. The system was renamed/upgraded to Crisis Response⁶ in 2017.
- 28. On information and belief, Meta uses Crisis Response-related data including the projections made from the social graph/network, to enhance its database and monetize its users. Taking aside use of personal data, the financial benefits to Meta based on individuals logging on to Facebook to check Safety Check is significant. Mark Zuckerberg, META's Founder, Chairman and Chief Executive Officer, himself noted that more than seven million people used Safety Check

⁴ Exhibit 17, https://about.fb.com/news/2016/10/introducing-the-events-from-facebook-app/ (retrieved July 18, 2023).

⁵ Exhibit 18, https://about.fb.com/news/2014/10/introducing-safety-check/ (retrieved July 18, 2023).

⁶ Exhibit 19, https://about.fb.com/news/2017/09/a-new-center-for-crisis-response-on-facebook/ (retrieved July 18, 2023).

– and hence spent time on Facebook – following the Nepal earthquake.⁷ An update to Safety Check, called Community Help, was launched in 2017 to allow individuals the ability to find and give help, and message others directly to connect after a crisis, making the product available for natural and accidental incidents, according to Naomi Gleit, a Meta vice president at the time.⁸ Meta has also incorporated a Safety Check crisis response tool for Workplace, its paid application that provides social graph/network features (including situational network projections) for businesses.^{9,10}

29. In addition, Facebook's Ad Platform provides targeted advertising based on the use of a situational network. As explained in Facebook's Ad Platform documentation, targeted advertising includes the steps of creating a campaign, defining targeting, creating a plurality of ads, and scheduling delivery of the ads.¹¹ After a user follows the steps and the advertising is activated, Facebook establishes a situational network and automatically connects the devices of various individuals to the situational network.¹²

⁷ Exhibit 20, https://www.vox.com/2015/4/30/11562080/seven-million-people-used-facebooks-check-in-feature-after-nepal (retrieved July 18, 2023).

⁸ Exhibit 21, https://markets.businessinsider.com/news/stocks/facebook-expands-safety-check-to-facilitate-aid-in-emergencies-1001733741 (retrieved July 18, 2023).

⁹ Exhibit 22, https://engineering.fb.com/2018/10/09/web/safety-check-for-workplace/ (retrieved July 18, 2023).

¹⁰ Exhibit 23, https://www.facebook.com/help/work/touch/472442953088966 (retrieved July 18, 2023).

¹¹ Exhibit 24, https://developers.facebook.com/docs/marketing-apis/get-started (retrieved July 18, 2023).

¹² Exhibit 24, https://developers.facebook.com/docs/marketing-apis/get-started (retrieved July 18, 2023).

30. In order to establish the situational network, Facebook's Ad Platform includes Personalization Algorithms, Lookalike Audiences, Custom Audiences, Dynamic Audiences and other Targeting Options.¹³

II. PATENT ELIGIBILITY OF THE CLAIMED INVENTIONS

- 31. The Patents-in-Suit are enforceable, valid and claim patent-eligible subject matter.
- 32. The Patents-in-Suit each claim priority to the SitNet provisional application, U.S. Serial No. 60/887,843, filed on February 2, 2007, and are directed to systems and methods reciting a situational network (or a message board related to a situation).
- 33. The claimed inventions of the Patents-in-Suit recite the unconventional architecture of a situational network, which was a technological improvement over conventional techniques. For example, claim 22 of the '932 Patent recites, in part, "a central server, corresponding to a situation authority, configured to receive a plurality of advertisements from at least one advertising entity, obtain an indication of an occurrence of a situation, automatically connect devices corresponding to a plurality of individuals to the situational network established in response to the situation, cause an automatic redirection of a web browser application operating on each of the devices to a webpage containing information related to the situation, and provide at least one of the plurality of advertisements to each of the devices for display on the webpage based on determining an affiliation of the corresponding individual to the situation." Claim 20 of the '454 Patent recites, in part, "an event node server, corresponding to a situation authority, configured to create an event node in a multi-dimensional personal information network, the event node corresponding to a situation, form a projection of nodes of the situational network using geographic locations of a plurality of devices corresponding to nodes in the multi-dimensional personal

¹³ Exhibit 25, https://developers.facebook.com/docs/marketing-api/audiences (retrieved July 18, 2023).

information network, transmit an invitation to establish a link with the event node server to the device corresponding to each node in the projection, receive a response from at least one of the devices accepting the invitation to establish a link with the event node server, and establish a link with each device accepting the invitation." Claim 1 of the '345 Patent also recites, in part, "receiving an indication of an occurrence of a situation; forming a situational network related to the occurrence of the situation 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." Claim 1 of the '682 Patent recites, in part, "in response to the verifying, make a message board related to the situation available to a second plurality of user devices."

- 34. The "situational network" claimed by the Patents-in-Suit was an unconventional network architecture that did not exist prior to the shared priority date of the Patents-in-Suit.
- 35. As noted above, in a situational network, an event or "situation" becomes the basis for the creation of a network through which parties can be interconnected and can receive information regarding an event or situation. The situational network architecture claimed by each of the Patents-in-Suit represented a departure from conventional techniques.
- 36. Different types of networks have been invented throughout the history of computer networking. Examples of these different types of networks include local area networks, wide area networks, personal area networks, satellite networks, fiber optic networks, point-to-point networks, internet protocol networks, asynchronous transfer mode networks, frame relay networks, telephone networks, circuit-switched networks, packet-switched networks, etc. It is known in the field that each of these networks represented an unconventional departure from prior networking technologies, as they represented an improvement to the prior computer networking

technologies. Situational networks, just like each of the aforementioned networks at the time of their respective inventions, represented an unconventional departure from prior networking technologies.

- 37. Prior to the invention of the Patents-in-Suit, conventional networks were static and could not be created on the basis of an event or situation.
- 38. The Patents-in-Suit identified and solved the problem of non-participants individuals that are registered on the network, but not currently interacting with an impacted subset of users being able to communicate with users of a network during an event or situation through the creation of a situational network, as reflected in the claims of each of the Patents-in-Suit.
- 39. Conventional systems failed to include the ability for non-participants to communicate with impacted users because conventional networks were static and had no mechanism for automatically identifying impacted individuals (including non-participants) and interconnecting them within the network.
- 40. The Patent Office has confirmed that the claimed features of the Patents-in-Suit are unconventional. For instance, during prosecution of the earliest allowed patent of the Patents-in-Suit, the '932 Patent, the Patent Office reviewed conventional prior art systems and methods for connecting devices to a network to share and receive situation information and allowed the claims of the '932 Patent after reviewing the prior art. (Exhibit 10, '932 Notice of Allowance ("'932 NOA").)
- 41. In response to the first office action, the Patentee amended the claims and explained the differences between conventional systems and the unconventional claimed invention. First, the Patentee explained to the Patent Office that conventional prior art systems failed to teach "causing an automatic redirection of a web browser application operating on each of the devices

to a webpage containing information related to the situation" as claimed in the '932 Patent and that the prior art was "completely silent with respect to automatic redirection of a web browser application." (Exhibit 11, '932 Reply to Office Action of October 31, 2011 ("'932 Reply") at pp. 11-12.)

- 42. Next, the Patentee explained to the Patent Office that conventional prior art systems failed to teach a situational network in which, as claimed by the '932 Patent, "the affiliation is based at least in part on an effect of the situation on the corresponding individual or their property, failed to teach "personal information aggregators that are, 'assigned an access level according to a role of the respective individual within the situational network," failed to teach "creating two or more projections of the nodes of the multi-dimensional personal information network based at least in part on the access levels of the individuals," and failed to teach "that the access rights are in any way tied to a role of the individual in a situational network, or that the grouping of the individuals is based on their access level." (Exhibit 11 at p. 12.)
- 43. The Patentee further contrasted conventional prior art with the unconventional techniques of the claimed invention, stating that "[a]s pointed out for example in paragraph 168 of the present application, 'users in the same proximity of a situation may be affected very differently by the situation.' Thus, Applicants respectfully submit that simple grouping of individuals based on their geographic proximity does not teach or suggest that 'the affiliation is based at least in part on an effect of the situation on the corresponding individual or their property'" as claimed in the '932 Patent. (Exhibit 11 at p. 12.)
- 44. After the Patentee's Reply of October 31, 2011, on April 23, 2012, the Patent Office issued a Notice of Allowance, finding that "[t]he closest prior art ... teaches a method for processing information associated with disaster... [b]y collecting information from information

aggregators, terminals communicate through a server to keep users informed of emergency situations including how to deal with the emergency." (Exhibit 10 at p. 2.)

- 45. In addition to finding that the claims as a whole were patentable over the prior art, the Patent Office made specific findings that specific elements recited in the claims of the '932 Patent were not found in the prior art, and these elements are equivalent to elements of the claims of the other Patents-in-Suit. (Exhibit 10 at pp. 2-3.)
- 46. For instance, the Patent Office found that conventional systems failed to teach "creating two or more projections of the nodes of the multi-dimensional personal information network based at least in part on the access levels of the individuals corresponding to each of the personal information aggregators" as claimed in the '932 Patent. (Exhibit 10 at p. 3.) Based on this finding by the Patent Office, the similar recitation in claim 20 of the '454 Patent of "an event node server, corresponding to a situation authority, configured to create an event node in a multidimensional personal information network, the event node corresponding to a situation, form a projection of nodes of the situational network using geographic locations of a plurality of devices corresponding to nodes in the multi-dimensional personal information network," the similar recitation in Claim 1 of the '345 Patent of "forming a situational network related to the occurrence of the situation 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," and the similar recitation in Claim 1 of the '682 Patent of "in response to the verifying, make a message board related to the situation available to a second plurality of user devices" are not found in conventional systems.
- 47. In addition, the Patent Office found that conventional systems failed to teach "providing advertisements to each of the personal information aggregators based upon an

affiliation of the user to the situation as claimed in the '932 Patent. (Exhibit 10 at p. 3.) Based on this finding by the Patent Office, the similar recitation in claim 20 of the '454 Patent of "a plurality of devices configured to receive an invitation to establish a link with an event node server in response being included in a projection of nodes of the multidimensional personal information network," the similar recitation in Claim 1 of the '345 Patent of "presenting a roll call query to each of the plurality of participant devices soliciting a reply related to a status of a participant," and the similar recitation in Claim 1 of the '682 Patent of "in response to the verifying, make a message board related to the situation available to a second plurality of user devices" are novel elements not found in conventional systems.

- 48. Further, the Patent Office found that conventional prior art systems failed to teach "the redirection of a website to a website containing information about a disaster" as claimed in the '932 Patent. (Exhibit 10 at pp. 2-3.) Based on this finding by the Patent Office, the similar recitation in claim 20 of the '454 Patent of "transmit a response accepting the invitation to establish a link with the event node server, and receive information about the situation from the event node server," the similar recitation in Claim 1 of the '345 Patent of "presenting a roll call query to each of the plurality of participant devices soliciting a reply related to a status of a participant," and the similar recitation in Claim 1 of the '682 Patent of "in response to the verifying, make a message board related to the situation available to a second plurality of user devices" are not found in conventional systems.
- 49. The Patent Office confirmed that the situational network and its innovative architecture, as claimed in the Patents-in-Suit, is an unconventional improvement over prior art networking technologies.

- 50. Similarly, the prosecution history of the '454 Patent also confirms patent eligibility of the Patents-in-Suit. During prosecution of the '454 Patent, the Patent Office issued no prior art rejections, but initially rejected the claims for double patenting over family member U.S. Patent No. 7,812,717, which the Patent Office found not patentably distinct from the '454 Patent claims. In the prosecution of that family member, the Patent Office confirmed the unconventionality of a situational network, stating "The following is an examiner's statement of reasons for allowance: The primary reason for allowing this application is the specific recitation in claim 1 of a method of forming a situational network, and includes facilitating a second set of connections between two or more of the devices corresponding to the plurality of individuals, the first set and second set of connections used at least in part to exchange information related to the situation among at least a subset of the individuals corresponding to the devices of the second set of connections." (Exhibit 12, '717 Notice of Allowance, at p. 3.) Based on this finding by the Patent Office, the similar recitation in claim 22 of the '932 Patent of "automatically connect devices corresponding to a plurality of individuals to the situational network established in response to the situation," the similar recitation in Claim 1 of the '345 Patent of "forming a situational network related to the occurrence of the situation with a plurality of participant devices determined to be geographically proximate to the situation," and the similar recitation in Claim 1 of the '682 Patent of "in response to the verifying, make a message board related to the situation available to a second plurality of user devices" are not found in conventional systems.
- 51. The prosecution history of the '345 Patent also confirms patent eligibility of the Patents-in-Suit. The Patent Office confirmed the unconventionality of the claims, finding "[t]he examiner has found that the prior art of record does not appear to teach or suggest or render obvious the claimed limitations in combination with the specific added limitations as recited in independent

claims and subsequent dependent claims. The prior art of record fails to teach or suggest a system and a method of accessing situation related information comprising forming a situational network related to the occurrence of the situation with a plurality of participant devices determined to be geographically proximate to the situation wherein each of the participant devices corresponding to a participant in the situational network, presenting a roll call query to each of the plurality of participant devices soliciting a reply related to a status of the participant, receiving a status response from one or more of the participants, and aggregating the status responses from responsive participants into a roll call list." (Exhibit 13, '345 Notice of Allowance, at p. 2.) Based on this finding by the Patent Office, the similar recitation in claim 22 of the '932 Patent of "a central server, corresponding to a situation authority, configured to receive a plurality of advertisements from at least one advertising entity, obtain an indication of an occurrence of a situation, automatically connect devices corresponding to a plurality of individuals to the situational network established in response to the situation, cause an automatic redirection of a web browser application operating on each of the devices to a webpage containing information related to the situation, and provide at least one of the plurality of advertisements to each of the devices for display on the webpage based on determining an affiliation of the corresponding individual to the situation, wherein the affiliation is based at least in part on an effect of the situation on the corresponding individual or their property," the similar recitation in Claim 20 of the '454 Patent of "an event node server, corresponding to a situation authority, configured to create an event node in a multi-dimensional personal information network, the event node corresponding to a situation, form a projection of nodes of the situational network using geographic locations of a plurality of devices corresponding to nodes in the multi-dimensional personal information network, transmit an invitation to establish a link with the event node server to the

device corresponding to each node in the projection, receive a response from at least one of the devices accepting the invitation to establish a link with the event node server, and establish a link with each device accepting the invitation," and the similar recitation in Claim 1 of the '345 Patent of "receiving an indication of an occurrence of a situation; forming a situational network related to the occurrence of the situation 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; presenting a roll call query to each of the plurality of participant devices soliciting a reply related to a status of a participant; receiving a status response from one or more of the participants" are not found in conventional systems.

52. The prosecution history of the '682 Patent also confirms patent eligibility of the Patents-in-Suit. The Patent Office confirmed the unconventionality of the claims by rejecting the claims for double patenting over the '345 Patent, meaning that in the view of the Patent Office, the '682 Patent claims were variations of the claims of the '345 Patent. The claims were allowed based on the filing of a terminal disclaimer. Therefore, the '682 Patent claims are patent eligible for the same reasons as the '345 Patent, in that "[t]he examiner has found that the prior art of record does not appear to teach or suggest or render obvious the claimed limitations in combination with the specific added limitations as recited in independent claims and subsequent dependent claims. The prior art of record fails to teach or suggest a system and a method of accessing situation related information comprising forming a situational network related to the occurrence of the situation with a plurality of participant devices determined to be geographically proximate to the situation wherein each of the participant devices corresponding to a participant in the situational network, presenting a roll call query to each of the plurality of participant devices soliciting a reply related to a status of the participant, receiving a status response from one or more of the participants, and

aggregating the status responses from responsive participants into a roll call list." (Exhibit 13 at p. 2.) Based on this finding by the Patent Office, the similar recitation in claim 22 of the '932 Patent of "a central server, corresponding to a situation authority, configured to receive a plurality of advertisements from at least one advertising entity, obtain an indication of an occurrence of a situation, automatically connect devices corresponding to a plurality of individuals to the situational network established in response to the situation, cause an automatic redirection of a web browser application operating on each of the devices to a webpage containing information related to the situation, and provide at least one of the plurality of advertisements to each of the devices for display on the webpage based on determining an affiliation of the corresponding individual to the situation, wherein the affiliation is based at least in part on an effect of the situation on the corresponding individual or their property," the similar recitation in Claim 20 of the '454 Patent of "an event node server, corresponding to a situation authority, configured to create an event node in a multi-dimensional personal information network, the event node corresponding to a situation, form a projection of nodes of the situational network using geographic locations of a plurality of devices corresponding to nodes in the multi-dimensional personal information network, transmit an invitation to establish a link with the event node server to the device corresponding to each node in the projection, receive a response from at least one of the devices accepting the invitation to establish a link with the event node server, and establish a link with each device accepting the invitation," and the similar recitation in Claim 1 of the '345 Patent of "receiving an indication of an occurrence of a situation; forming a situational network related to the occurrence of the situation 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; presenting a roll call query to each of the plurality of participant devices soliciting a reply related to a status of a participant; receiving a status response from one or more of the participants" are not found in conventional systems.

53. Meta's own documentation confirms that situational network architecture is an improvement over conventional network architectures. For instance, Meta posted an article online on June 2, 2016, entitled "Safety Check: Streamlining deployment around the world." In this article, Meta described the goals of its Safety Check product, stating that "[o]ne of Safety Check's strengths is its ability to identify people who are likely in an affected area, collect their safety status, and quickly send that information out to friends and family. We want to reach people and spread the good news as quickly as possible." ¹⁵ Meta admitted that "[t[his goal immediately presented new challenges. Most products at [Meta] are 'pull' models, meaning we present some kind of experience when you open the Facebook app. Safety Check is a 'push' model, meaning we proactively send everyone in the affected area a notification asking if they are safe." ¹⁶ Meta further explained the problem as follows: "[t]he push model presents a difficult problem when launching Safety Check: How do we quickly find all the people likely to be in the affected area? Previous activations have ranged from a small city in Canada with only 60,000 residents to more than 20 million people in Ecuador after an earthquake. We needed an approach that could handle this range of population sizes with both accuracy and speed, but also remain stable and ready to launch at a

¹⁴ Exhibit 26, https://engineering.fb.com/2016/06/02/web/safety-check-streamlining-deployment-around-the-world/ (retrieved July 18, 2023).

¹⁵ Exhibit 26, https://engineering.fb.com/2016/06/02/web/safety-check-streamlining-deployment-around-the-world/ (retrieved July 18, 2023).

¹⁶ Exhibit 26, https://engineering.fb.com/2016/06/02/web/safety-check-streamlining-deployment-around-the-world/ (retrieved July 18, 2023).

moment's notice." ¹⁷ Thus Meta's own documentation demonstrates that the design goals of Safety Check presented technological challenges when using conventional network technologies.

- 54. Meta further admitted that they considered and rejected multiple conventional approaches to the problem because those approaches "require[d] a large amount of storage and computing power to maintain" and were "less efficient." 18
- 55. After rejecting conventional approaches to the problem, Meta ended up using situational network technology, describing their solution as follows:

The high-level overview of the process is as follows:

When a crisis is activated, we instantly run a small piece of code, or "hook," that executes after every News Feed load.

Once someone in the affected area of the crisis (Person A) loads his or her News Feed, we immediately invite that person to mark himself or herself safe with a feed prompt and a notification.

Now that we have prompted Person A, we know it's fairly likely that he or she is friends with others in the affected area (because friendships are often geographically based). We want to find these people and invite them, but doing that all in the context of a single web request would be too resource intensive. Instead, we schedule a job in our generalized worker pool of machines, called the "async tier," to asynchronously iterate through all of Person A's friends.

When we find a friend in the area during this check (Person B), we send Person B a push notification that invites him or her to Safety Check. We then recursively schedule the same job on Person B to check on Person B's friends. This gives us a parallel and distributed version of breadth-first search across the social graph, where we continue iterating as long as the current person being examined is in the affected area.

Since we remember which people have been invited, we don't perform recursive searches if we revisit those profiles. In practice we can exhaust a small graph of

¹⁷ Exhibit 26, https://engineering.fb.com/2016/06/02/web/safety-check-streamlining-deployment-around-the-world/ (retrieved July 18, 2023).

¹⁸ Exhibit 26, https://engineering.fb.com/2016/06/02/web/safety-check-streamlining-deployment-around-the-world/ (retrieved July 18, 2023).

 \sim 100,000 people in just minutes, with larger areas of millions of people taking only 10 to 15 minutes at full capacity. ¹⁹

56. The unconventional process used by Meta for their Safety Check feature involves the creation of a situational network. Meta's own documentation admits that conventional networking architectures are less efficient, more computationally intensive, and more storage intensive than using SitNet's patented situational network architecture. Therefore, SitNet's patented situational network technology represents an improvement to the computer and computer network technology itself and is patent eligible.

III. META'S INFRINGEMENT

Facebook Crisis Response / Safety Check Infringes the Patents-in-Suit

- 57. Facebook Crisis Response and Safety Check infringe the Patents-in-Suit because they practice the claimed inventions, including by using the inventive situational network technology.²⁰
- 58. Facebook Crisis Response, formerly known as Safety Check, is automatically activated in response to a situation, establishes a situational network, connects users to a situational network, and allows the users to communicate via the situational network, including to offer or request help.²¹
- 59. Facebook Crisis Response establishes a situational network when "an incident such as an earthquake, hurricane, mass shooting or building collapse occurs where people might be in danger."²² Facebook connects users to the situational network that was established in response to

¹⁹ Exhibit 26, https://engineering.fb.com/2016/06/02/web/safety-check-streamlining-deployment-around-the-world/ (retrieved July 18, 2023).

²⁰ Exhibit 27, https://www.facebook.com/help/141874516227713 (retrieved July 18, 2023).

²¹ Exhibit 27, https://www.facebook.com/help/141874516227713 (retrieved July 18, 2023).

²² Exhibit 28, https://www.facebook.com/help/1761941604022087 (retrieved July 18, 2023).

the incident or situation: "Safety Check will be activated when people in the affected area post about the incident. Once Safety Check is activated, people in the area may receive a notification from Facebook to mark themselves safe. People who click the Safety Check notification will also be able to see if any of their friends are in the affected area or have marked themselves safe."²³

- 60. Facebook Crisis Response uses location information and other information in establishing a situational network and allows connected users to communicate about the situation with other users that are part of the situational network: "We look at a number of factors to determine if you're in an affected area. These may include: The city you've listed in your profile. Your current location, if you've given Facebook access to your phone or tablet's location. Other signals that point to your location (example: the city where you use the Internet). If a lot of people in your area are talking about an incident, you may be invited to mark yourself safe using Safety Check. If you're not in the affected area or you don't want to share, you can click Doesn't Apply To Me."²⁴
- 61. After establishing a situational network, Facebook Crisis Response connects users that were previously not connected to the situational network, allowing the users to communicate via the situational network: "What are some things I can do to stay safe on Facebook when requesting and offering help in Crisis Response? ... Before messaging someone through Crisis Response, look to see if you and the person have mutual friends on Facebook. If you do share any mutual friends, you can then check in with your friend before meeting someone you don't know personally."²⁵

²³ Exhibit 28, https://www.facebook.com/help/1761941604022087 (retrieved July 18, 2023).

²⁴ Exhibit 29, https://www.facebook.com/help/778112215545209 (retrieved July 18, 2023).

²⁵ Exhibit 30, https://www.facebook.com/help/1406473979385011 (retrieved July 18, 2023).

62. Crisis Response / Safety Check has been activated in this District numerous times. For example, Safety Check was activated after an explosion on September 17, 2016 that caused 25 injuries.²⁶



- 63. In addition, Safety Check was activated in this District after a motorist drove on a Lower Manhattan bike path on October 31, 2017²⁷ with the underlying crime related to this activation of Safety Check subsequently tried in this Court.²⁸
- 64. Facebook Crisis Response documentation demonstrates that Facebook Crisis Reponse infringes the Patents-in-Suit.

²⁶ Exhibit 31, https://www.fastcompany.com/4019400/facebook-activates-safety-check-for-nyc-explosion (retrieved July 18, 2023).

²⁷ Exhibit 32, https://time.com/5004510/facebook-safety-check-new-york/ (retrieved July 18, 2023).

Exhibit 33, https://www.nytimes.com/2023/05/17/nyregion/saipov-sentencing-bike-path-killer.html?smid=nytcore-ios-share&referringSource=articleShare (retrieved July 18, 2023).

Facebook Ad Platform Infringes the Patents-in-Suit

- 65. Facebook Ad Platform/Meta's Marketing API, infringes the Patents-in-Suit because it practices the claimed inventions, including by using the inventive situational network technology. As explained in Facebook Ad Platform documentation, targeted advertising includes the steps of creating a campaign, defining targeting, creating a plurality of ads, and scheduling delivery of the ads.²⁹ After a user follows the steps and the advertising is activated, Facebook establishes a situational network and automatically connects the devices of various individuals to the situational network.³⁰
- 66. In order to establish the situational network, Facebook Ad Platform includes Personalization Algorithms, Lookalike Audiences, Custom Audiences, Dynamic Audiences and other Targeting Options.³¹
- 67. Further evidence that Facebook Ad Platform establishes and connects users to a situational network is found in a civil complaint filed in this Court by the United States of America against Meta. In that complaint, the United States Department of Justice ("DOJ") alleged that the Facebook Ad Platform discriminated against its users on the basis of Fair Housing Act protected characteristics. (Exhibit 14, United States v. Meta Platforms, Inc., Case No. 1:22-CV-05187 (July 21, 2022) ("DOJ Complaint"), Dkt. No. 1.) These allegations were supported by the results of testing of Facebook Ad platform conducted by the DOJ.

²⁹ Exhibit 24, https://developers.facebook.com/docs/marketing-apis/get-started (retrieved July 18, 2023).

³⁰ Exhibit 24, https://developers.facebook.com/docs/marketing-apis/get-started (retrieved July 18, 2023).

³¹ Exhibit 25, https://developers.facebook.com/docs/marketing-api/audiences (retrieved July 18, 2023).

- 68. In that complaint, the DOJ explained that "researchers who conducted testing of Facebook Personalization Algorithms found, in the course of their testing, that as a general matter, housing ads featuring an image of a Black family were less likely to be delivered to White users than were identical ads featuring an image of a White family. That disparity occurred even though the researchers did not try to target the ads by race or any other characteristics." (Ex. 14 at ¶86.) The DOJ further explained that its "testing showed that Facebook's Personalization Algorithms steer certain housing ads disproportionately away from Black users and toward similarly situated White users." (Ex. 14 at ¶87.)
- 69. The research cited by the DOJ shows that Facebook Ad Platform, including Facebook Personalization Algorithms, establishes and connects "similarly situated" users to a situational network without any action taken by the creator of the advertisements.
- 70. Facebook Ad Platform documentation and the research conducted by the DOJ demonstrates that Facebook Ad Platform infringes the Patents-in-Suit.

Meta's Software Architecture Infringes the Patents-in-Suit

71. In additional to documenting its products, Meta has published documentation of its overall software architecture that, upon information and belief, is used to implement Facebook Crisis Response and Ad Platform. This documentation of Meta's software architecture also demonstrates that Facebook Crisis Response and Ad Platform infringe the patented situational network technology. Based on Meta's own publication, "TAO: Facebook's Distributed Data Store for the Social Graph" ³² the system Meta relies on, TAO, ³³ short for The Associations and Objects,

³² Exhibit 33, TAO: Facebook's Distributed Data Store for the Social Graph, available at https://research.facebook.com/publications/tao-facebooks-distributed-data-store-for-the-social-graph/ (retrieved July 18, 2023).

Exhibit 34, The Tao of Facebook: 'Social Graph' Takes New Path, *Wired Magazine, June 25, 2013*, available at https://www.wired.com/2013/06/facebook-tao (retrieved July 18, 2023).

to access the underlying databases that store both the nodes and connections (edges) between the nodes. Accordingly, through the use of these technologies, a network will be established as the result of a query of the underlying social graph in response to a situation. That is, a network will not actually come into being until the underlying databases are queried and the results of the queries combined. This situational network is therefore created via Meta's Tao Application Programming Interface ("API"), which is utilized by Meta's Pixel and Conversion APIs (collectively, "Meta's Marketing API") to create targeted ads.

72. Thus Meta's software architecture further demonstrates that Facebook Crisis Response system and Ad Platform both infringe the Patents-in-Suit.

COUNT I

Infringement of the '682 Patent

- 73. SitNet repeats and realleges all preceding paragraphs, as if fully set forth herein.
- 74. SitNet has not licensed or otherwise authorized Meta to make, use, offer for sale, sell, or import any products that embody the inventions of the '682 Patent.
- 75. Meta infringes at least claims 1-4 and 11-14 of the '682 Patent in violation of 35 U.S.C. § 271 at least with respect to Facebook Safety Check/Crisis Response.
- 76. SitNet contends each limitation is met literally, and, to the extent a limitation is not met literally, it is met under the doctrine of equivalents.
- 77. For example, Meta directly infringes at least claim 1 of the '682 Patent by making, using (e.g., performing/executing), selling, and/or offering to sell within the United States, Facebook Safety Check/Crisis Response.
 - 78. Claim 1 of the '682 Patent recites:

A server for providing roll call based information, the server comprising: a network controller configured to:

receive an information item from a user device, wherein the information item identifies a situation; and

make the information item available to a first plurality of user devices;

a central processing unit, coupled to the network controller, configured to verify that the information item is related to the situation; and

in response to the verifying, make a message board related to the situation available to a second plurality of user devices;

wherein the second plurality of user devices was identified based on the second plurality of user devices being geographically proximate to the situation; and

wherein the message board comprises a roll call list that includes status responses to roll call queries that were provided to the second plurality of user devices in order to solicit the status responses.

- 79. Facebook Safety Check/Crisis Response embodies every element of Claim 1 of the '682 Patent, literally or under the doctrine of equivalents.
- 80. When Facebook receives notice from a global crisis reporting agency that an incident occurs and there are many people in the vicinity of the incident, Safety Check, a feature on Meta's Facebook platform, is activated.³⁴
- 81. According to Facebook's documentation, Facebook looks at several factors in determining who qualifies as being in the vicinity of the incident; such as: 1) the city listed in your user profile, 2) your current location, using GPS, and 3) other internet signals that indicate location.³⁵

³⁴ Exhibit 28, https://www.facebook.com/help/1761941604022087 (retrieved July 18, 2023).

³⁵ Exhibit 29, https://www.facebook.com/help/778112215545209 (retrieved July 18, 2023).

- 82. Safety Check will send to those individuals who are nearby the situation a notification to devices such as Android, iOS, other feature phones and desktop³⁶, requesting the individual mark themselves as safe.
- 83. By sending a notification to multiple individuals via their devices and soliciting responses, Facebook creates a database of individuals whose are marked as "safe."
- 84. This database of individuals can be accessed from the Crisis Response page generated for the situation.
- 85. In addition, on the Crisis Response page, individuals may "request or offer help, see if their friends are marked safe, get updates and more."³⁷
- 86. A claim chart explaining in further detail the manner in which Meta's Crisis Response / Safety Check infringes at least claims 1-4 and 11-14 of the '682 Patent is attached as Exhibit 5 and incorporated by reference.
- 87. On information and belief, Meta has been an active inducer of infringement of the '682 Patent under 35 U.S.C. § 271(b), because Meta aided, instructed, or otherwise acted with the intent to cause acts by its customers and/or users of Facebook Safety Check/Crisis Response that would constitute direct infringement of the patent, including by instructing the users how to use Facebook Safety Check/Crisis Response features via user devices, Meta knew of the patent or showed willful blindness to the existence of the patent, and Meta's customers and/or users thereby directly infringed at least claim 1 of the '682 Patent.

³⁶ Exhibit 18, https://about.fb.com/news/2014/10/introducing-safety-check/ (retrieved July 18, 2023).

³⁷ Exhibit 35, https://www.facebook.com/crisisresponse/178160644571736/friends (retrieved July 21, 2023).

- 88. On information and belief, Meta has been a contributory infringer of the '682 Patent under 35 U.S.C. § 271(b), because Meta's customers and/or users have directly infringed at least claim 1 of the '682 Patent, Meta sold, offered for sale, or imported within the United States a component of the Facebook Safety Check/Crisis Response for use in the infringing systems and methods, the Facebook Safety Check/Crisis Response are not a staple article or commodity of commerce capable of substantial non-infringing use at least because the Facebook Safety Check/Crisis Response must be used with a user device, the Facebook Safety Check/Crisis Response constitutes a material part of the claimed invention, Meta knew that the component was especially made or adapted for use as an infringement of one or more claims of the '682 Patent, and Meta's customers and/or users use the Facebook Safety Check/Crisis Response in combination with user devices to directly infringe one or more claims of the '682 Patent.
- 89. SitNet has been injured and seeks damages to adequately compensate it for Meta's infringement of the '682 Patent. Such damages should be no less than a reasonable royalty under 35 U.S.C. § 284.
- 90. Upon information and belief, Meta will continue to infringe the '682 Patent unless permanently enjoined by this Court. Pursuant to 35 U.S.C. § 283, SitNet is entitled to a permanent injunction against further infringement of the '682 Patent by Meta.

COUNT II

Infringement of the '345 Patent

- 91. SitNet repeats and realleges all preceding paragraphs, as if fully set forth herein.
- 92. SitNet has not licensed or otherwise authorized Meta to make, use, offer for sale, sell, or import any products that embody the inventions of the '345 Patent.

- 93. Meta infringes at least claims 1, 3, 5, 6 and 13-15 of the '345 Patent in violation of 35 U.S.C. § 271 at least with respect to Facebook Safety Check/Crisis Response.
- 94. SitNet contends each limitation is met literally, and, to the extent a limitation is not met literally, it is met under the doctrine of equivalents.
- 95. For example, Meta directly infringes at least claim 1 of the '345 Patent by making, using (*e.g.*, performing/executing), selling, and/or offering to sell within the United States Facebook Safety Check/Crisis Response.
 - 96. Claim 1 of the '345 Patent recites:

A method of accessing situation related information, the method comprising:

receiving an indication of an occurrence of a situation;

forming a situational network related to the occurrence of the situation 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;

presenting a roll call query to each of the plurality of participant devices soliciting a reply related to a status of a participant;

receiving a status response from one or more of the participants; and

aggregating the status from responsive participants into a roll call list.

- 97. Facebook Safety Check/Crisis Response embodies every element of Claim 1 of the '345 Patent, literally or under the doctrine of equivalents.
- 98. When Facebook receives notice from a global crisis reporting agency that an incident occurs and there are many people in the vicinity of the incident, or when user posts indicate the occurrence of a crisis event, Safety Check, a feature on Meta's Facebook platform, is activated.³⁸

³⁸ Exhibit 28, https://www.facebook.com/help/1761941604022087 (retrieved July 18, 2023).

- 99. According to Facebook's documentation, Facebook looks at several factors in determining who qualifies as being in the vicinity of the incident; such as: 1) the city listed in your user profile, 2) your current location, using GPS, and 3) other internet signals that indicate location.³⁹
- 100. Safety Check will send to those individuals who are nearby the situation a notification to devices such as Android, iOS, other feature phones and desktop⁴⁰, requesting the individual mark themselves as safe.
- 101. By sending a notification to several individuals on different devices and soliciting responses, Facebook creates a database of individuals whose are marked as "safe."
- 102. This database of individuals can be accessed from the Crisis Response page generated for the situation.
- 103. In addition, on the Crisis Response page, individuals may "request or offer help, see if their friends are marked safe, get updates and more."
- 104. A claim chart explaining in further detail the manner in which Meta's Safety Check/Crisis Response infringes claims 1, 3, 5, 6 and 13-15 of the '345 Patent is attached as Exhibit 6 and incorporated by reference.
- 105. On information and belief, Meta has been an active inducer of infringement of the '345 Patent under 35 U.S.C. § 271(b), because Meta aided, instructed, or otherwise acted with the intent to cause acts by its customers and/or users of Facebook Safety Check/Crisis Response that would constitute direct infringement of the patent, including by instructing the users how to use

³⁹ Exhibit 29, https://www.facebook.com/help/778112215545209 (retrieved July 18, 2023).

⁴⁰ Exhibit 18, https://about.fb.com/news/2014/10/introducing-safety-check/ (retrieved July 18, 2023).

⁴¹ Exhibit 35, https://www.facebook.com/crisisresponse/178160644571736/friends (retrieved July 18, 2023).

Facebook Safety Check/Crisis Response features via user devices, Meta knew of the patent or showed willful blindness to the existence of the patent, and Meta's customers and/or users thereby directly infringed at least claim 1 of the '345 Patent.

106. On information and belief, Meta has been a contributory infringer of the '345 Patent under 35 U.S.C. § 271(b), because Meta's customers and/or users have directly infringed at least claim 1 of the '345 Patent, Meta sold, offered for sale, or imported within the United States a component of the Facebook Safety Check/Crisis Response for use in the infringing systems and methods, the Facebook Safety Check/Crisis Response are not a staple article or commodity of commerce capable of substantial non-infringing use at least because the Facebook Safety Check/Crisis Response must be used with a user device, the Facebook Safety Check/Crisis Response constitutes a material part of the claimed invention, Meta knew that the component was especially made or adapted for use as an infringement of one or more claims of the '345 Patent, and Meta's customers and/or users use the Facebook Safety Check/Crisis Response in combination with user devices to directly infringe one or more claims of the '345 Patent.

- 107. SitNet has been injured and seeks damages to adequately compensate it for Meta's infringement of the '345 Patent. Such damages should be no less than a reasonable royalty under 35 U.S.C. § 284.
- 108. Upon information and belief, Meta will continue to infringe the '345 Patent unless permanently enjoined by this Court. Pursuant to 35 U.S.C. § 283, SitNet is entitled to a permanent injunction against further infringement of the '345 Patent by Meta.

COUNT III

Infringement of the '454 Patent

109. SitNet repeats and realleges all preceding paragraphs, as if fully set forth herein.

- 110. SitNet has not licensed or otherwise authorized Meta to make, use, offer for sale, sell, or import any products that embody the inventions of the '454 Patent.
- 111. Meta infringes at least claims 1, 2, 4-6, 10, 12-13 and 20 of the '454 Patent in violation of 35 U.S.C. § 271 at least with respect to Facebook Safety Check/Crisis Response.
- 112. SitNet contends each limitation is met literally, and, to the extent a limitation is not met literally, it is met under the doctrine of equivalents.
- 113. For example, Meta directly infringes at least claim 20 of the '454 Patent by making, using (*e.g.*, performing/executing), selling, and/or offering to sell within the United States Facebook Safety Check/Crisis Response.

114. Claim 20 of the '454 Patent recites:

A system for creating a projection of a situational network, the system comprising:

an event node server, corresponding to a situation authority, configured to create an event node in a multi-dimensional personal information network, the event node corresponding to a situation, form a projection of nodes of the situational network using geographic locations of a plurality of devices corresponding to nodes in the multi-dimensional personal information network, transmit an invitation to establish a link with the event node server to the device corresponding to each node in the projection, receive a response from at least one of the devices accepting the invitation to establish a link with the event node server, and establish a link with each device accepting the invitation; and

a plurality of devices configured to receive an invitation to establish a link with an event node server in response being included in a projection of nodes of the multidimensional personal information network, transmit a response accepting the invitation to establish a link with the event node server, and receive information about the situation from the event node server.

- 115. Facebook Safety Check/Crisis Response embodies every element of Claim 20 of the '454 Patent, literally or under the doctrine of equivalents.
- 116. For instance, when Facebook receives notice from a global crisis reporting agency that an incident occurs and there are many people in the vicinity of the incident, or when user posts

indicate the occurrence of a crisis event, Safety Check, a feature on Meta's Facebook platform, is activated.⁴²

- 117. According to Facebook's documentation, Facebook looks at several factors in determining who qualifies as being in the vicinity of the incident; such as: 1) the city listed in your user profile, 2) your current location, using GPS, and 3) other internet signals that indicate location.⁴³
- 118. Safety Check will send to those individuals who are nearby the situation a notification to devices such as Android, iOS, other feature phones and desktop⁴⁴, requesting the individual mark themselves as safe.
- 119. By sending a notification to several individuals on different devices and soliciting responses, Facebook creates a database of individuals whose are marked as "safe."
- 120. This database of individuals can be accessed from the Crisis Response page generated for the situation.
- 121. In addition, on the Crisis Response page, individuals may "request or offer help, see if their friends are marked safe, get updates and more."⁴⁵
- 122. A claim chart explaining in further detail the manner in which Meta's Crisis Response / Safety Check infringes claims 1, 2, 4, 6, 10, 12-13 and 20 of the '454 Patent is attached as Exhibit 7 and incorporated by reference.

⁴² Exhibit 28, https://www.facebook.com/help/1761941604022087 (retrieved July 18, 2023).

⁴³ Exhibit 29, https://www.facebook.com/help/778112215545209 (retrieved July 18, 2023).

⁴⁴ Exhibit 18, https://about.fb.com/news/2014/10/introducing-safety-check/ (retrieved July 18, 2023).

⁴⁵ Exhibit 35, https://www.facebook.com/crisisresponse/178160644571736/friends (retrieved July 18, 2023).

- 123. In addition, Meta directly infringes at claim 20 of the '454 Patent by making, using (e.g., performing/executing), selling, and/or offering to sell within the United States, Facebook Ad Platform/Meta's Marketing API in conjunction with Meta's family of applications. Facebook Ad Platform/Meta's Marketing API in conjunction with Meta's family of applications performs, executes, and provides a system presenting targeted advertising within a situational network.
- 124. Meta's Marketing API is built on top of Facebook's Graph API, which "is named after the idea of a 'social graph' a representation of the information on Facebook. It's composed of nodes, edges, and fields."⁴⁶
- 125. One of the nodes within the 'social graph' is a user node, which collects information without direct input from a user to create a user profile, such as demographic information etc., and may be hosted on a remote server.
- 126. The '454 Patent details the same for a situational network built on multidimensional personal information network framework.
- 127. Event nodes are present within the Facebook "social graph" and are hosted by Meta's server.
 - 128. Event nodes are also encompassed within Ad Campaign nodes.⁴⁷
- 129. Currently, there are six (6) Ads Manager campaign objective choices: Awareness, Traffic, Engagement, Leads, App Promotion, and Sales, which correlate with an event or situation.
- 130. Meta's own documentation provides examples of how Ad Campaign "objectives" correspond to situations and events.⁴⁸

⁴⁶ Exhibit 36, https://developers.facebook.com/docs/graph-api/overview (retrieved July 18, 2023).

⁴⁷ Exhibit 37, https://developers.facebook.com/docs/marketing-api/campaign-structure (retrieved July 18, 2023).

Exhibit 38, https://www.facebook.com/business/help/1438417719786914 (retrieved July 18, 2023).

- 131. The Ad Campaign node, which includes ad sets⁴⁹ and targeting attribute specifying a target audience⁵⁰, indicates Meta's server is configured to receive a plurality of advertisements from at least one advertising entity as to create ad sets from a collection of ads and ad campaigns which form a collection of ad sets.
- 132. Meta's server is configured to obtain an indication of an occurrence of a situation through the setting the status of an ad campaign and/or the object (*i.e.*, ad sets and ad) below it, because Ad Campaign objectives correspond to situations and events,
- 133. The very creation of an active Ad Campaign demonstrates Meta's servers are configured to obtain an indication of an occurrence of a situation.
- 134. Ad Campaign may be created with a "paused" status, which would not give an indication of an occurrence of a situation. This can be changed, according to Meta's documentation.⁵¹
- 135. By being configured to permit changing the status of an Ad Campaign to "active," Meta's server is configured to obtain an indication of an occurrence of a situation.
- 136. The "targeting" attribute of an Ad Set, specifies the individuals to add to the situational network established in response to the situation corresponding to the "objective" and the Ad Campaign including the Ad Set, specifying who may see the Ads.
- 137. Meta distributes a family of applications that allow Ads within an Ad Campaign to be shown. These applications include Facebook, Instagram, Messenger and WhatsApp, with each

⁴⁹ Exhibit 39, https://developers.facebook.com/docs/marketing-api/reference/v16.0 (retrieved July 18, 2023).

⁵⁰ Exhibit 24, https://developers.facebook.com/docs/marketing-apis/get-started (retrieved July 18, 2023).

⁵¹ Exhibit 40, https://developers.facebook.com/docs/marketing-apis/guides/manage-your-ad-object-status (retrieved July 18, 2023).

one being user specific. ⁵² As such, when these apps are downloaded and installed a plurality of devices is created wherein each device: a) corresponds to an individual connected to the situational network, b) becomes configured to connect to the central server, c) receives at least one of the advertisements based on the affiliation of the respective individual to the situation and d) are linked to the Internet and e) have been granted permissions to receive data from the internet.

- 138. Meta's server is configured to automatically connect devices to the situational network established in response to the situation.
- 139. The Ads within an Ad Set of an Ad Campaign will contain information related to the situation corresponding to the "objective" of the Ad Campaign. Otherwise, the Ad would not elicit the desired action of visiting a new store or website, signing up for newsletter, attending an event, purchasing a newly available product, etc.
- 140. Individuals that share attributes, such as certain demographic information, contained in the individual's user profile, are grouped together to create Lookalike Audiences⁵³.
- 141. Meta then uses these lookalike audiences to generate relevant advertisements that would allow for individual engagement.
- 142. A claim chart explaining in further detail the manner in which the Facebook Ad Platform/Meta's Marketing API infringes claims 1, 4, 5 and 20 of the '454 Patent is attached as Exhibit 8 and incorporated by reference. Exhibit 8 illustrates the use of the claimed technology for both Events advertising, where targeted advertisements are presented to users via a situational network established with respect to the planned (and advertised event) and for the general case of

⁵² Exhibit 41, https://developers.facebook.com/docs/marketing-apis (retrieved July 18, 2023).

Exhibit 42, https://developers.facebook.com/docs/marketing-api/audiences/guides/lookalike-audiences#custom-audience (retrieved July 18, 2023).

targeted advertising where the situational network is established with respect to the marketing opportunity (situation) established by a user with a product or service to sell.

143. On information and belief, Meta has been an active inducer of infringement of the '454 Patent under 35 U.S.C. § 271(b), because Meta aided, instructed, or otherwise acted with the intent to cause acts by its customers and/or users of Facebook Safety Check/Crisis Response and Facebook Ad Platform/Meta's Marketing API that would constitute direct infringement of the patent, including by instructing the users how to use Facebook Safety Check/Crisis Response and Facebook Ad Platform/Meta's Marketing API features via user devices, Meta knew of the patent or showed willful blindness to the existence of the patent, and Meta's customers and/or users thereby directly infringed at least claim 1 of the '454 Patent.

144. On information and belief, Meta has been a contributory infringer of the '454 Patent under 35 U.S.C. § 271(b), because Meta's customers and/or users have directly infringed at least claim 1 of the '454 Patent, Meta sold, offered for sale, or imported within the United States a component of the Facebook Safety Check/Crisis Response and Facebook Ad Platform/Meta's Marketing API for use in the infringing systems and methods, the Facebook Safety Check/Crisis Response and Facebook Ad Platform/Meta's Marketing API are not a staple article or commodity of commerce capable of substantial non-infringing use at least because the Facebook Safety Check/Crisis Response and Facebook Ad Platform/Meta's Marketing API must be used with a user device, the Facebook Safety Check/Crisis Response and Facebook Ad Platform/Meta's Marketing API constitutes a material part of the claimed invention, Meta knew that the component was especially made or adapted for use as an infringement of one or more claims of the '454 Patent, and Meta's customers and/or users use the Facebook Safety Check/Crisis Response and Facebook

Ad Platform/Meta's Marketing API in combination with user devices to directly infringe one or more claims of the '454 Patent.

- 145. SitNet has been injured and seeks damages to adequately compensate it for Meta's infringement of the '454 Patent. Such damages should be no less than a reasonable royalty under 35 U.S.C. § 284.
- 146. Upon information and belief, Meta will continue to infringe the '454 Patent unless permanently enjoined by this Court. Pursuant to 35 U.S.C. § 283, SitNet is entitled to a permanent injunction against further infringement of the '454 Patent by Meta.

COUNT IV

Infringement of the '932 Patent

- 147. SitNet repeats and realleges all preceding paragraphs, as if fully set forth herein.
- 148. SitNet has not licensed or otherwise authorized Meta to make, use, offer for sale, sell, or import any products that embody the inventions of the '932 Patent.
- 149. Meta infringes at least claims 1-7 and 22 of the '932 Patent in violation of 35 U.S.C. § 271. SitNet contends each limitation is met literally, and, to the extent a limitation is not met literally, it is met under the doctrine of equivalents.
- 150. For example, Meta directly infringes at least claim 22 of the '932 Patent by making, using (e.g., performing/executing), selling, and/or offering to sell within the United States at least Facebook Ad Platform/Meta's Marketing API in conjunction with Meta's family of applications. Facebook Ad Platform/Meta's Marketing API in conjunction with Meta's family of applications performs, executes, and provides a system presenting targeted advertising within a situational network.
 - 151. Claim 22 of the '932 Patent recites:

A system for presenting targeted advertising in a situational network, the system comprising:

a central server, corresponding to a situation authority, configured to receive a plurality of advertisements from at least one advertising entity, obtain an indication of an occurrence of a situation, automatically connect devices corresponding to a plurality of individuals to the situational network established in response to the situation, cause an automatic redirection of a web browser application operating on each of the devices to a webpage containing information related to the situation, and provide at least one of the plurality of advertisements to each of the devices for display on the webpage based on determining an affiliation of the corresponding individual to the situation, wherein the affiliation is based at least in part on an effect of the situation on the corresponding individual or their property; and

- a database associated with the central server for storing information related to availability of a service at a plurality of service locations affected by the situation; and
- a plurality of devices, each device corresponding to an individual connected via the situational network, configured to connect to the central server, and receive at least one of the advertisements based on the affiliation of the respective individual to the situation.
- 152. Facebook Ad Platform/Meta's Marketing API embodies every element of Claim 22 of the '932 Patent, literally or under the doctrine of equivalents.
- 153. Meta's Marketing API is built on top of Facebook's Graph API, which is named after the idea of a "social graph" a representation of the information on Facebook. It's composed of nodes, edges, and fields."⁵⁴
- 154. One of the nodes within the "social graph" is a user node, which collects information without direct input from a user to create a user profile, such as demographic information etc., and may be hosted on a remote server.
- 155. The '932 Patent states that a central server corresponding to a situational authority, therefore, is a server hosting an event node within a situational network. Furthermore the '932 Patent states that advertisement may be the situation forming the bases of a situational network.

⁵⁴ Exhibit 36, https://developers.facebook.com/docs/graph-api/overview (retrieved July 18, 2023).

- 156. Event nodes are present within the Facebook "social graph" and are hosted by Meta's server.
 - 157. Event nodes are also encompassed within Ad Campaign nodes.⁵⁵
- 158. Currently, there are six (6) Ads Manager campaign objective choices: Awareness, Traffic, Engagement, Leads, App Promotion, and Sales, which correlate with an event or situation.
- 159. Meta's documentation provides examples of how Ad Campaign "objectives" correspond to situations and events.⁵⁶
- 160. The Ad Campaign node, which includes ad sets⁵⁷ and targeting attribute specifying a target audience⁵⁸, indicates Meta's server is configured to receive a plurality of advertisements from at least one advertising entity as to create ad sets from a collection of ads and ad campaigns which form a collection of ad sets.
- 161. Meta's server is configured to obtain an indication of an occurrence of a situation through the setting the status of an ad campaign and/or the object (*i.e.*, ad sets and ad) below it, because Ad Campaign objectives correspond to situations and events,
- 162. The very creation of an active Ad Campaign demonstrates Meta's servers are configured to obtain an indication of an occurrence of a situation.

⁵⁵ Exhibit 37, https://developers.facebook.com/docs/marketing-api/campaign-structure (retrieved July 18, 2023).

⁵⁶ Exhibit 38, https://www.facebook.com/business/help/1438417719786914 (retrieved July 18, 2023).

⁵⁷ Exhibit 39, https://developers.facebook.com/docs/marketing-api/reference/v16.0 (retrieved July 18, 2023).

⁵⁸ Exhibit 24, https://developers.facebook.com/docs/marketing-apis/get-started (retrieved July 18, 2023).

- 163. An Ad Campaign may be created with a "paused" status, which would not give an indication of an occurrence of a situation. This can be changed according to Meta's documentation.⁵⁹
- 164. By being configured to permit changing the status of an Ad Campaign to "active," Meta's server is configured to obtain an indication of an occurrence of a situation.
- 165. The "targeting" attribute of an Ad Set, specifies the individuals to add to the situational network established in response to the situation corresponding to the "objective" and the Ad Campaign including the Ad Set, specifying who may see the Ads.
- be shown. These applications include Facebook, Instagram, Messenger and WhatsApp, with each one being user specific. As such, when these apps are downloaded and installed a plurality of devices is created wherein each device: a) corresponds to an individual connected to the situational network, b) becomes configured to connect to the central server, c) receives at least one of the advertisements based on the affiliation of the respective individual to the situation and d) are linked to the Internet and e) have been granted permissions to receive data from the internet.
- 167. Meta's server is configured to automatically connect devices to the situational network established in response to the situation.
- 168. The Ads within an Ad Set of an Ad Campaign will contain information related to the situation corresponding to the "objective" of the Ad Campaign. Otherwise, the Ad would not elicit the desired action of visiting a new store or website, signing up for newsletter, attending an event, purchasing a newly available product, etc.

Exhibit 40, https://developers.facebook.com/docs/marketing-apis/guides/manage-your-ad-object-status (retrieved July 18, 2023).

⁶⁰ Exhibit 41, https://developers.facebook.com/docs/marketing-apis (retrieved July 18, 2023).

- 169. Individuals that share attributes, such as certain demographic information, contained in the individual's user profile, are grouped together to create Lookalike Audiences.⁶¹
- 170. Meta then uses these lookalike audiences to generate relevant advertisements that would allow for individual engagement.
- 171. Additionally, Facebook business pages permit users to add services as well as service areas.
- 172. By maintaining a list of service areas for each business, Meta creates a database, associated with the central server for storing information related to location and availability of a service listed within an advertisement.
- 173. A claim chart explaining in further detail the manner in which Facebook Ad Platform/Meta's Marketing API infringes claims 1-7 and 22 of the '932 Patent is attached as Exhibit 9 and incorporated by reference. Exhibit 9 illustrates the use of the claimed technology for both Events advertising, where targeted advertisements are presented to users via a situational network established with respect to the planned (and advertised event) and for the general case of targeted advertising where the situational network is established with respect to the marketing opportunity (situation) established by a user with a product or service to sell.
- 174. On information and belief, Meta has been an active inducer of infringement of the '932 Patent under 35 U.S.C. § 271(b), because Meta aided, instructed, or otherwise acted with the intent to cause acts by its customers and/or users of Facebook Ad Platform/Meta's Marketing API that would constitute direct infringement of the patent, including by instructing the users how to use Facebook Ad Platform/Meta's Marketing API features via user devices, Meta knew of the

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⁶¹ Exhibit 42, https://developers.facebook.com/docs/marketing-api/audiences/guides/lookalike-audiences#custom-audience (retrieved July 18, 2023).

patent or showed willful blindness to the existence of the patent, and Meta's customers and/or users thereby directly infringed at least claim 1 of the '932 Patent.

175. On information and belief, Meta has been a contributory infringer of the '932 Patent under 35 U.S.C. § 271(b), because Meta's customers and/or users have directly infringed at least claim 1 of the '932 Patent, Meta sold, offered for sale, or imported within the United States a component of the Facebook Ad Platform/Meta's Marketing API for use in the infringing systems and methods, the Facebook Ad Platform/Meta's Marketing API are not a staple article or commodity of commerce capable of substantial non-infringing use at least because Facebook Ad Platform/Meta's Marketing API must be used with a user device, the Facebook Ad Platform/Meta's Marketing API constitutes a material part of the claimed invention, Meta knew that the component was especially made or adapted for use as an infringement of one or more claims of the '932 Patent, and Meta's customers and/or users use Facebook Ad Platform/Meta's Marketing API in combination with user devices to directly infringe one or more claims of the '932 Patent.

176. SitNet has been injured and seeks damages to adequately compensate it for Meta's infringement of the '932 Patent. Such damages should be no less than a reasonable royalty under 35 U.S.C. § 284.

177. Upon information and belief, Meta will continue to infringe the '932 Patent unless permanently enjoined by this Court. Pursuant to 35 U.S.C. § 283, SitNet is entitled to a permanent injunction against further infringement of the '932 Patent by Meta.

DEMAND FOR JURY TRIAL

SitNet hereby requests a jury trial for all issues so triable.

PRAYER FOR RELIEF

WHEREFORE, SitNet prays for judgment as follows:

- a) That Meta directly and/or indirectly infringes one or more of the claims of each of the Patents-in-Suit;
- b) That Meta and its respective officers, directors, agents, partners, servants, employees, attorneys, licensees, successors, and assigns, and those in active concert or participation with any of them, be permanently enjoined from engaging in infringing activities with respect to the Patents-in-Suit;
- In the alternative, in the event injunctive relief is not granted as requested by SitNet, an award of a mandatory future royalty payable on each future product sold by Meta on all future products which are not colorably different from products found to infringe;
- d) That Meta be required to pay SitNet's damages in an amount adequate to compensate SitNet for their infringement, but in no event less than a reasonable royalty under 35 U.S.C. § 284, including supplemental damages for any continuing post-verdict infringement up until entry of judgment and beyond, with accounting, as needed;
- e) An accounting for acts of infringement;
- f) That SitNet be awarded all statutory and actual damages to which it is entitled, including the profits reaped by Meta through its illegal conduct, and prejudgment and post-judgment interest;
- g) That SitNet be awarded recovery of the costs of this suit, including reasonable attorneys' fees pursuant to 35 U.S.C. § 285;

- h) Such other equitable relief which may be requested and to which the Plaintiff is entitled; and
- That SitNet be awarded such other and further relief as this Court deems just and proper.

Dated: July 24, 2023

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