UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE INC., NEST LABS, INC., and DROPCAM, INC., Petitioners,

v.

e.DIGITAL CORPORATION, Patent Owner.

> Case IPR2015-01473 Patent 8,311,523 B1

Before KEVIN F. TURNER, HYUN J. JUNG, and BARBARA A. PARVIS, *Administrative Patent Judges*.

JUNG, Administrative Patent Judge.

DECISION Institution of *Inter Partes* Review 37 C.F.R. § 42.108

I. INTRODUCTION

Google Inc., Nest Labs, Inc., and Dropcam, Inc. ("Petitioners") filed a Petition (Paper 2, "Pet."), requesting institution of an *inter partes* review of claims 1, 3, 4, 6, 8–10, 19, 21, 23, 25, and 26 ("the challenged claims") of U.S. Patent No. 8,311,523 B1 (Ex. 1001, "the '523 patent"). e.Digital Corporation ("Patent Owner") timely filed a Preliminary Response (Paper 8, "Prelim. Resp."). We have jurisdiction under 35 U.S.C. § 314, which provides that an *inter partes* review may not be instituted "unless . . . there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition."

Upon consideration of the Petition and Preliminary Response, and for the reasons explained below, we determine that Petitioners have shown that there is a reasonable likelihood that they would prevail with respect to at least one of the challenged claims, and we institute an *inter partes* review of claims 1, 3, 4, 6, 8–10, 19, 21, 23, 25, and 26 of the '523 patent.

A. Related Proceedings

The parties indicate that the '523 patent is involved in *e.Digital Corp. v. Dropcam, Inc.*, Case No. 3:14-cv-04922-JST (N.D. Cal.), *e.Digital Corp. v. Dropcam, Inc.*, Case No. 3:14-cv-01579 (S.D. Cal.), *e.Digital Corp. v. ShenZhen Gospell Smarthome Electronic Co., Ltd.*, Case No. 3:15-cv-00691-JST (N.D. Cal.), and *e.Digital Corp. v. ArcSoft, Inc.*, Case No. 3:15cv-00056-BEN-DHB (S.D. Cal.). Pet. 58; Paper 6, 2 (labeled "Paper No. 4").

B. The '523 Patent (Ex. 1001)

The '523 patent relates to "the classification of a person's current actions such that selected callers can automatically or manually gauge the intrusiveness of a communication request." Ex. 1001, 1:17–20. Figure 1 of the '524 patent is reproduced below.





<u>100</u>

Figure 1 is a block diagram of an electronic device. *Id.* at 8:66–67. Mobile device 100 includes location sensor 110, inertial sensor 120, optical sensor 130, and acoustic sensor 140. *Id.* at 9:22–27, 35–46, 11:22–26. Mobile device 100 monitors location, acceleration, orientation, audio, and optical samples using sensors 110, 120, 130, 140. *Id.* at 9:19–21. For example, acoustic sensor 140 can generate acoustic measurement data, and optical sensor 130 can generate simple light level measurement data. *Id.* at 11:52–54, 62–64.

Location sensor 110 is coupled to location processor 115; inertial sensor 120 is coupled to motion processor 125; acoustic sensor 140 is coupled to acoustic processor 145; and optical sensor 130 is coupled to optical processor 135. *Id.* at 13:33–34, 42–43, 14:3–5, 9–10. Calculating logic 150 receives data from processors 115, 125, 135, 145 and uses the data to classify a user's activity from predefined, identifiable user activities. *Id.* at 14:31–35, 55–58. Calculating logic 150 can identify the user's social activity "by monitoring for different social signatures, and applies a corresponding social template to determine how to treat an incoming communication request." *Id.* at 14:59–62. The social signature can be a combination of sensors, with each sensor detecting a certain value range. *Id.* at 15:56–66 (Table 1). "Each social signature is indicative of a different type of activity." *Id.* at 15:38–39. When enough events indicative of a particular user social activity are detected, calculating logic 150 identifies the activity as being performed by the user. *Id.* at 14:63–66.

Calculating logic 150 compares the processed data from sensors 110, 120, 130, 140 with social templates 165 stored in memory 160. *Id.* at 14:31–37. From the identified social signature, calculating logic 150 selects a social template that determines how much information is provided to others. *Id.* at 15:45–49. For example, the social template may allow specific friends to know that the user is drinking coffee, may allow co-workers to know that the user is in a personal meeting, and may allow others to know that the user is busy and not to be disturbed. *Id.* at 15:24–28.

Calculating logic 150 can provide information to a requesting caller according to a hierarchical social classification. *Id.* at 14:39–41. "Examples of hierarchical social classification that can be identified include high level

available, busy, do not disturb," and each classification can have further, more accurate classifications that can be made available to more select social groups. *Id.* at 14:44–48. "Each set of hierarchical social classifications is stored in a separate social template." *Id.* at 14:53–54.

To set up a social template, social training program 167 in memory 160 is activated, and a social signature is associated with a particular social template. *Id.* at 17:31–35. Specifically, data sensed by sensors 110, 120, 130, 140 are correlated with a new social template, and the user enters how much information is to be provided to different categories of potential callers. *Id.* at 17:35–41.

Another embodiment is shown in Figure 2 of the '523 patent, which is reproduced below. *Id.* at 18:1–5.





Figure 2 is a block diagram of a social monitoring system. *Id.* at 9:1–3. While mobile device 100 can have the social templates and perform social training, in the embodiment of Figure 2, the social templates are stored externally and social training is performed externally. *Id.* Mobile

device 200 monitors location sensor and processor 210, motion sensor and processor 220, optical sensor and processor 230, and acoustic sensor and processor 240. *Id.* at 18:5–10. Sensors and processors 210, 220, 230, 240 perform generally the same as sensors 110, 120, 130, 140 and processors 115, 125, 135, 145. *Id.* at 18. *Id.* at 18:10–20. Calculating logic 250 receives data from sensors and processors 210, 220, 230, 240 and transmits the data to server 270 via network 260. *Id.* at 18:20–25. The data received at server 270 are compared with social templates stored in memory that is included in remote calculating logic 275 of server 270. *Id.* at 18:29–31. The assignment and training of social signatures according to social signatures is performed externally at server 270, instead of within mobile device 200. *Id.* at 18:34–37.

C. Illustrative Claim

The '523 patent has 29 claims. Of the challenged claims, claims 1 and 19 are independent; claims 3, 4, 6, and 8–10 depend from claim 1; and claims 21, 23, 25, and 26 depend from claim 19. Claim 1 is reproduced below:

1. A server in communication with a communication device via a network and which automatically provides differing levels of information according to a predetermined social hierarchy, the server comprising:

a memory which stores social templates, each social template corresponding to a unique social signature comprising a first sensor value range and a second sensor value range other than the first sensor value range and each social template being selectable to provide, for each level of the predetermined social hierarchy, a corresponding differing amount of information to each member of the predetermined social hierarchy;

a processor which receives from the communication device sensor data received from a sensor set of the communication device which detects sensor data including a first detected sensor value comprising optical information detected by an optical sensor of the sensor set which detects an amount of light of an environment of the communication device and a second detected sensor value comprising acoustic information detected by an acoustic sensor of the sensor set which detects a sound level of the environment of the communication device, creates a detected social signature from the received sensor data, determines which of the social signatures of the social templates has a greatest correspondence with the created social signature through comparison of the first and second detected sensor values and the first and second sensor value ranges of each stored social template, retrieves from the memory the determined one social template having the greatest correspondence and having the detected amount of light within the first sensor value range and the detected sound level within the second sensor value range, and provides to at least one member of the predetermined social hierarchy only as much information as allowed based on the retrieved social template; and

a transceiver which receives the sensor data from the sensor set in the communication device, and provides under the control of the processor to at least one of the members of the predetermined social hierarchy only as much information as allowed based on the retrieved social template.

Claim 19 recites a "method of automatically providing differing levels of information according to a predetermined social hierarchy within a server."

D. Challenges

Petitioners challenge, under 35 U.S.C. § 103:

(1) claims 1, 3, 4, 8–10, 19, 21, 23, 25, and 26 as unpatentable over U.S. Patent Application Publication No. 2009/0300525 A1 to Jolliff, published Dec. 3, 2009 (Ex. 1005, "Jolliff") and U.S. Patent Application

Publication No. 2009/0094179 A1 to Jager, published Apr. 9, 2009 (Ex. 1006, "Jager");

(2) claim 6 as unpatentable over Jolliff, Jager, and Bo Luo and Dongwon Lee, "*On Protecting Private Information in Social Networks: A Proposal*," 2009 IEEE 25th International Conference on Data Engineering, published Apr. 3, 2009 (Ex. 1017, "Luo");

(3) claims 1, 3, 4, 8–10, 19, 21, 23, 25, and 26 as unpatentable over International Publication No. WO 2009/043020 A2 to Miluzzo, published Apr. 2, 2009 (Ex. 1007, "Miluzzo") and U.S. Patent Application Publication No. 2006/0004680 to Robarts, published Jan. 5, 2006 (Ex. 1008, "Robarts"); and

(4) claim 6 as unpatentable over Miluzzo, Robarts, and Luo. Pet. 3–4, 10–57.

II. ANALYSIS

A. Claim Construction

In an *inter partes* review, claim terms in an unexpired patent are interpreted according to their broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b); Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,766; *In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1275–79 (Fed. Cir. 2015). Only those terms in controversy need to be construed, and only to the extent necessary to resolve the controversy. *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999).

Petitioners propose interpreting "social template," "social hierarchy," and "level of [a] social hierarchy." Pet. 6–10. Patent Owner responds that claim construction is "irrelevant at this stage." Prelim. Resp. 7.

For the purposes of this Decision, we determine an express construction of any term is not necessary.

B. Obviousness of Claims 1, 3, 4, 8–10, 19, 21, 23, 25, and 26 over Miluzzo and Robarts

Petitioners contend that claims 1, 3, 4, 8–10, 19, 21, 23, 25, and 26 are rendered obvious by Miluzzo and Robarts with citations to the disclosures in these references and a Declaration of David Hilliard Williams (Ex. 1003, "the Williams Declaration"). Pet. 33–55.

1. Miluzzo (Ex. 1007)

Miluzzo teaches a "method for injecting sensed presence into social networking applications." Ex. 1007, Abstract. In particular, sensor data associated with a user are received by a computer, the computer analyzes the sensor data to infer a presence status of the user, and then the presence status stores the data in a database and sends the presence status to a social networking server to update social networking applications based upon the user's preferences. *Id.* Figure 1 is reproduced below.



FIG. 1

Figure 1 illustrates a system for injecting sensed presence into social networking applications. *Id.* \P 8. As shown in Figure 1, user 102 has cell phone 106, personal digital assistance (PDA) 108, and embedded sensor unit

110. *Id.* ¶ 13. Cell phone 106 includes a camera for sensing images around user 102 and a global positioning sensor (GPS) unit for determining the location of user 102. *Id.* PDA 108 includes a temperature sensor for sensing the temperature near user 102. *Id.* Embedded sensors 110 include one or more accelerometers for determining activity of user 102. *Id.* Embedded sensor unit 110 periodically provides sensor data to cell phone 106 via wireless link 111, which may transmit using Bluetooth technology. *Id.* ¶¶ 17, 26. Additional sensors within devices carried by user 102 include a microphone, a light sensor, and a humidity sensor. *Id.* ¶¶ 16, 81.

As also shown in Figure 1, second user 104 has network computer 112 that includes one or more sensors. *Id.* ¶ 14. Sensed data are sent from notebook computer 112 to presence server 116 via network 120, which may be the Internet or other wired or wireless networks. *Id.* ¶¶ 13, 14, 26, 69. Presence server 116 analyzes sensor data to infer activity of users 102 and 104. *Id.* ¶¶ 14, 69. The data may be processed by an analysis component within server 116, such as inference engine 212 which may include human activity-inferring algorithms. *Id.* ¶¶ 43, 45. For example, presence server 116 uses sensor data to define presence status 122 of user 102 and presence status 124 of user 104. *Id.* Characteristics of users 102 and 104, such as presence status 122 and 124, are sent to social network server 126 that supports one or more social networking applications 119, such as Facebook or MySpace. *Id.* ¶¶ 21, 69. The presence information for the associated social networking applications may be updated with presence status 122, 124. *Id.*

Certain embodiments of system 100 use the "Virtual Walls model which provides different levels of disclosure based on context, enabling

access to the complete sensed/inferred data set, a subset of it, or no access at all." *Id.* ¶ 53.

2. Robarts (Ex. 1008)

Robarts teaches techniques for using user context modeling techniques to identify and provide appropriate computer actions based on current context. Ex. 1008, Abstract. A body-mounted computer receives input and forwards it to characterization system 100. *Id.* ¶ 56. Characterization system 100 receives sensed user information via user sensors 126 and sensed environment information via environment sensors 128. *Id.* Characterization system 100 processes the information to create a current model of the user context based on multiple attributes. *Id.* ¶¶ 56, 63. Additionally, a theme is identified that matches the current context. *Id.* ¶ 157. A theme will match the current context if specified attributes have current values that are the same as the possible values for the theme. *Id.*

Robarts also teaches that selection of a current theme from multiple matching themes may be performed in a variety of ways. *Id.* ¶ 162. For example, a theme may be given an associated degree of match and then the theme with the highest degree of match is selected. *Id.*

Robarts further teaches a theme data structure that has privacy, security, and permission information. *Id.* ¶ 203. Examples of different privacy values include private, public, work, family, friends, acquaintances, people in the immediate vicinity, and everyone in my contact list. *Id.*

3. Independent Claims 1 and 19

Petitioners argue that Miluzzo teaches the limitations of claim 1, except it does not describe explicitly how its inferences are derived and how it stores, organizes, and retrieves a user's status and privacy settings. Pet.

33–34 (citing Ex. 1007 Abstract, ¶¶ 52, 53, 81), 36–37 (citing Ex. 1003 ¶¶ 137–139; Ex. 1007 Abstract, ¶¶ 21, 43, 45, 53, 69), 39–42 (citing Ex. 1003 ¶¶ 146–150; Ex. 1007 Abstract, ¶¶ 52, 53, 56, 69, 81), 45–46 (citing Ex. 1003 ¶¶ 163–165; Ex. 1007 ¶¶ 14, 26, 52, 53, 69).

Petitioners rely on Robarts for teaching themes that include attributes, which can be specified as a range and can be stored in memory, creating a current model from collected sensor data, identifying a theme based on matching attributes, and selecting a theme with the highest degree of match. Pet. 34–35 (citing Ex. 1008 Abstract, ¶¶ 40, 43, 203), 36 (citing Ex. 1008 ¶ 212), 37–38 (citing Ex. 1008 Abstract, ¶¶ 40, 92, 212, 224, Fig. 8), 39 (citing Ex. 1008 ¶ 162), 42–45 (citing Ex. 1003 ¶¶ 155–160; Ex. 1008 ¶¶ 56, 63, 92, 157, 158, 162, 203).

Petitioners assert that a person of ordinary skill would have been motivated to seek out a reference, such as Robarts, that describes how to store, organize, and retrieve a user's privacy settings, which Miluzzo does not describe explicitly and would have been motivated to seek out information for implementing an inference engine. Pet. 34–35 (citing Ex. 1008 ¶¶ 40, 43, 203), 37 (citing Ex. 1003 ¶¶ 140–144). Petitioners also assert that a person of ordinary skill would have understood that, when adapting the themes of Robarts for use in Miluzzo's inference engine, the privacy settings would correspond to Miluzzo's group member policy or social hierarchy and matching attributes would involve ranges. Pet. 39, 43 (citing Ex. 1003 ¶¶ 155–156), 45 (citing Ex. 1003 ¶ 162).

Petitioners additionally contend that it would have been obvious to modify Miluzzo so that its privacy settings can be stored with sensor attributes in the theme data structures of Robarts, which include privacy

settings, and that a person of ordinary skill would have been motivated to incorporate Robarts into Miluzzo "to organize and retrieve the user's 'group membership policies' because Robarts teaches that 'the themes each include related sets of attributes that reflect the context of the user." *Id.* at 35 (citing Ex. 1007 ¶ 53; Ex. 1008 ¶¶ 40, 203). Petitioners further contend that it would have been obvious to modify Miluzzo's inference engine to incorporate the theme and user context recognition of Robarts because both recognize a user's context based on sensor data. Pet. 38. Petitioners further argue that the themes and user context recognition of Robarts is a substitute for Miluzzo's inference engine, and the results would have been predictable. Pet. 39 (citing Ex. 1003 ¶¶ 140–144).

Petitioners note that independent claim 19 includes a step of "constructing a social signature" instead of "a processor which . . . creates a detected social signature." Pet. 47. Petitioners argue that Miluzzo and Robarts also teach the limitations of claim 19 because "[a]s used in the claim, 'constructing' is the same as 'creating,' and the art applies in the same way as described with respect to claim 1." *Id.* (citing Ex. 1003 ¶ 167). At this stage of the proceeding, Petitioners' arguments for claims 1 and 19 are reasonable and supported by record evidence.

Patent Owner responds that "Miluzzo provides no description of a data structure that can be equated with the 'social template." Prelim. Resp. 48. The argument is not persuasive because Petitioners provide citations to Robarts and arguments that the proposed combination of Miluzzo and Robarts includes a "social template." *See* Pet. 37–39 (citing Ex. 1003 ¶¶ 140–144; Ex. 1008 Abstract, ¶¶ 40, 62, 224, Fig. 8).

Patent Owner also argues that Petitioners do not "point to any portion of Robarts that specifies the collection of 'attributes' must be unique to any particular theme," and Robarts does not require attributes to be unique. Prelim. Resp. 49 (citing Pet. 37–38; Ex. 1008 ¶ 207). Patent Owner quotes a portion of paragraph 207 that states "themes can also specify other types of information, such as whether some or all of the information about the theme is available to other themes." *Id.* The quoted portion, however, does not address directly the attributes of a theme, and thus, on the current record, we are not persuaded.

Patent Owner further argues that Petitioners rely on the attributes, which are described in paragraph 92 of Robarts, as part of the "detected social signature" rather than the recited "social template." Prelim. Resp. 50 (citing Pet. 42). Petitioners, however, cite paragraph 40 of Robarts for teaching "themes' (i.e., social templates)" that include "attributes' (*i.e.*, unique social signatures)" and paragraphs 56 and 63 of Robarts for teaching the creation of "a current model' (i.e., a detected social signature) of the user based on collected sensor data." Pet. 37–38, 42. Petitioners cite paragraph 92 of Robarts for teaching that its attributes can be specified as a range. *See* Pet. 38, 43. On the current record, we are not persuaded.

With reference to Figure 13 of Robarts, Patent Owner argues that the "uncertainty value" of Robarts is not a "sensor value range" and instead, "is used to determine the accuracy of a particular attribute contained within a theme." Prelim. Resp. 50–52. Petitioners, however, cite Figure 8, not Figure 13, for teaching that the attributes of Robarts can include data from light and sound sensors, and Petitioners cite paragraph 92 of Robarts for teaching a "sensor value range." *See* Pet. 38. Paragraph 92 describes "an

uncertainty value that represents a range of values around the attribute value that the attribute is likely to have." Because Patent Owner's arguments do not address Figure 8 or paragraph 92 of Robarts, we are not persuaded.

On the present record, we are persuaded that Petitioners have a reasonable likelihood of prevailing in showing that claims 1 and 19 are unpatentable over Miluzzo and Robarts.

4. Dependent Claims 3, 4, 8–10, 21, 23, 25, and 26

Petitioners argue that Miluzzo and Robarts each teach the limitations of claim 3. Pet. 47 (citing Ex. 1007 ¶ 53; Ex. 1008 ¶ 203). Petitioners also argue that a person of ordinary skill in the art "would have recognized that, because more than one subset of the sensed data can be created, a group policy can specify even more levels of disclosure" and "that providing different levels of disclosure involves determining to which group a receiving user belongs, then providing the amount of information as specified in the group membership policy." *Id.* at 47–48 (citing Ex. 1003 ¶¶ 168–169).

For claims 4 and 21, Petitioners assert that Miluzzo and Robarts teach the limitations of these claims. Pet. 48–53 (citing Ex. 1007 ¶¶ 45, 69; Ex. 1008 Abstract, ¶¶ 20, 40, 194, 199, 214, 272–277, Figs. 12A–12H, 17). Petitioners also argue that a person of ordinary skill in the art would be motivated to seek out methods of inferring presence status and reducing incorrect inferences, as taught by Robarts and would have understood that "such 'human activity inferring algorithms' required training because they may make incorrect inferences based on sensed conditions." Pet. 48–49 (citing Ex. 1003 ¶¶ 172, 173).

Petitioners assert that it would have been obvious "to incorporate Robarts 'appropriateness verification' with Miluzzo's inference engine to improve the inference engine's ability to make better inferences regarding the sensed context" and the proposed modification is "using Robarts' known technique of verifying the appropriateness of sensed user context to improve the similar process described in Miluzzo." Pet. 50 (citing Ex. 1003 ¶¶ 171– 174). Petitioners also assert that it would have been obvious that Robarts's appropriateness verification "would involve adjusting the 'uncertainty value' (*i.e.*, the range) for at least one attribute to incorporate the detected error" and the "uncertainty value" is modifiable by Robarts's GUI. Pet. 51 (citing Ex. 1003 ¶ 173; Ex. 1008 ¶ 214). Petitioners further assert that it would have been obvious to "create a new theme based on current context information, if the wrong theme is presented" and creating a new theme is an obvious alternative. Pet. 52 (citing Ex. 1003 ¶¶ 176–178; Ex. 1005 ¶ 277).

For claims 8 and 23, Petitioners contend that Miluzzo teaches their limitations and argue that it would have been obvious that "one disclosure level in Miluzzo would correspond to one social networking service." Pet. 53 (citing Ex. 1003 ¶ 182; Ex. 1007 ¶¶ 21, 52, 69). For claims 9 and 25, Petitioners assert that Miluzzo teaches their limitations and argue that a person of ordinary skill in the art "would recognize that the social networking service 'Facebook' contains microblogging features." Pet. 53– 54 (citing Ex. 1003 ¶ 185–186; Ex. 1007 ¶¶ 52, 69, 88). For claims 10 and 26, Petitioners argue that Robarts teaches their limitations. Pet. 54–55 (citing Ex. 1008 ¶¶ 114, 118, 210).

At this stage of the proceeding, Petitioners' arguments regarding dependent claims 3, 4, 8–10, 21, 23, 25, and 26 are reasonable and supported by record evidence.

Patent Owner responds that, for claims 4 and 21, Robarts does not teach explicitly that the appropriateness verification of Robarts "is triggered by a detection of an 'error between the detected social signature and the social signature of the determined one social template having the greatest correspondence," as required by these claims. Prelim. Resp. 54 (citing Ex. 1008 ¶ 273). However, Petitioners rely on a portion of Robarts that describes, when a suggested rule is presented to the user for verification, the user can respond with "the system should ask the user for confirmation (because the suggestion was good, just not entirely appropriate)." Pet. 49 (citing Ex. 1008 ¶¶ 273–276). At this stage of the proceeding, Patent Owner's argument is not persuasive.

Patent Owner also argues that Robarts does not teach updating a social signature with the detected error, as required by claims 4 and 21. Prelim. Resp. 55–57. Patent Owner asserts that examples of feedback described in Robarts do not adjust the uncertainty value and instead add a new sensor value. *Id.* at 56–57 (citing Ex. 1008 ¶¶ 279–280, 285–309). Petitioners, however, rely on paragraph 276 of Robarts that describes "specify[ing] more information to the system to improve the appropriateness of the request" and Petitioners assert it would have been obvious that the "more information" would involve adjusting a range of an uncertainty value. *See* Pet. 51. At this stage of the proceeding, Patent Owner's argument is not persuasive.

Patent Owner also argues that Petitioners' motivation to combine Miluzzo and Robarts is unsupported (discussing Ex. 1003 ¶ 172). Prelim. Resp. 54. Paragraph 172 of the Williams Declaration cites paragraphs 278– 285 of Robarts, which reasonably support the contention of paragraph 172. On the current record, Patent Owner's argument is not persuasive.

The Preliminary Response presents no specific arguments for claims 3, 8–10, 23, 25, and 26. Thus, we are persuaded that the present record shows a reasonable likelihood of Petitioners prevailing in the challenge of claims 3, 4, 8–10, 21, 23, 25, and 26 as unpatentable over Miluzzo and Robarts.

C. Obviousness of Claim 6 over Miluzzo, Robarts, and Luo

Petitioners contend that claim 6 is rendered obvious by Miluzzo, Robarts, and Luo with citations to the disclosures in these references and the Williams Declaration (Ex. 1003). Pet. 55–57.

1. Luo (Ex. 1017)

Luo proposes "preliminary results on defining and tackling information aggregation attacks over online social networks." Ex. 1017 Abstract. It states that, "[f]or instance, people trust *LinkedIn* as a professional/business network" and "assume that their information would stay in the network." *Id.* § I. Luo states that "the information could be easily accessed from outside of the context due to wrong configuration, malfunctioning code, or user's misunderstanding" and that "users of multiple social networks may not want information from different contexts to mix up with each other." *Id.* Luo consequently "define[s] multilevel and discretionary models to manage private information." *Id.* § III. "In the multilevel model, private information is managed in hierarchically organized

categories," and "[i]nformation objects in higher levels are considered more private than objects in lower levels." *Id*.

2. *Claim* 6

Claim 6 depends from claim 1 and recites "wherein, for at least one of the social templates, each level of the social hierarchy corresponds to a corresponding different social networking service, and the processor automatically provides different updates to each of the social networking services as allowed based on the one social template."

Petitioners contend that, although Miluzzo teaches creating buddy sub-lists from different social network services, Miluzzo and Robarts do not teach explicitly "how to define access policies for each imported buddy sublist from each social networking service." Pet. 55 (citing Ex. 1007 ¶ 52). Petitioners rely on Luo to teach that different social networks are used for different purposes and contacts, that "users of multiple social networks may not want information from different contexts to mix up with each other," and that "Luo describes a private information model in which different social network corresponds to a different privacy disclosure set." *Id.* (citing Ex. 1017 §§ I, III).

Petitioners assert that a person of ordinary skill in the art "would have been motivated to seek out a teaching of how to define the access policies while protecting the private user presence information" and "would have been motivated to seek out a per-social-network based privacy protection setting because Miluzzo teaches creating buddy sub-lists in defining access policies and that the sub-lists are imported from different social networks." Pet. 55, 56.

Petitioners contend that it would have been obvious "to modify the Miluzzo-Robarts system such that each disclosure level in a theme . . . would correspond to a different social network, as taught by Luo . . . to prevent mixing up information from different social networks." Pet. 55–56 (citing Ex. 1017 § I). Petitioners also contend that incorporating Luo's private information model with each privacy disclosure set corresponding to a different social network is a simple substitution of Miluzzo-Robarts' theme with each disclosure level corresponding to a different group. *Id.* at 56. Petitioners further contend that the substitution provides the predictable result of "a theme with each disclosure level corresponding to a different social network." *Id.* At this stage of the proceeding, Petitioners' contentions regarding claim 6 are reasonable and supported by record evidence.

Patent Owner refers to its arguments against Petitioners' challenge of claim 6 based on Jolliff, Jager, and Luo. Prelim. Resp. 53, 57. In its previous arguments, Patent Owner responds that Luo does not teach "social templates," "social hierarchies," and a processor that "automatically provides different updates to each of the social networking services as allowed based on the one social template." Prelim. Resp. 35. Patent Owner argues that Luo "does not disclose a system that automatically provides differing levels of information to different social networks based on information obtained from sensors" and instead, "provides a vehicle for a user to make informed choices about what information he or she manually places on her social networks." *Id.* (citing Ex. 1017 § V). These arguments are not persuasive because Petitioners argue that Miluzzo teaches these features. *See* Pet. 36–37, 40.

Patent Owner also argues that "Petitioners' assertions amount to little more than hindsight reasoning." Prelim. Resp. 57. At this stage of the proceeding, we are not persuaded because Petitioners' arguments are supported by the evidence of record.

In view of the foregoing and on the current record, we determine that there is a reasonable likelihood that Petitioners would prevail in proving the unpatentability of claim 6 over Miluzzo, Robarts, and Luo.

D. Challenges based on Jolliff, Jager, and Luo

Petitioners also contend that claims 1, 3, 4, 8–10, 19, 21, 23, 25, and 26 are unpatentable over Jolliff and Jager, and that claim 6 is unpatentable over Jolliff, Jager, and Luo. Pet. 10–33. Under 35 U.S.C. § 314, the Director "may not" institute review unless certain circumstances are met, and thus, institution of *inter partes* review is discretionary. The Director has delegated the decision to institute *inter partes* review to the Board. *See* 37 C.F.R. § 42.4 ("[t]he Board institutes the trial on behalf of the Director."). Thus, the Board, at its discretion, may determine whether to institute an *inter partes* review. Furthermore, in determining whether to institute an *inter partes* review, "the Board may authorize the review to proceed . . . on all or some of the grounds of unpatentability asserted for each claim." 37 C.F.R. § 42.108. Accordingly, we exercise our discretion to decline institution on these additional grounds of unpatentability.

III. CONCLUSION

For the foregoing reasons, we determine that Petitioners have demonstrated that the information presented in the Petition in view of the Preliminary Response shows that there is a reasonable likelihood that

Petitioners would prevail in proving the unpatentability of claims 1, 3, 4, 6, 8–10, 19, 21, 23, 25, and 26 of the '523 patent as unpatentable over Miluzzo, Robarts, and Luo.

At this stage of the proceeding, the Board has not made a final determination as to the patentability of any challenged claim or any underlying factual and legal issues.

IV. ORDER

Accordingly, it is:

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review is hereby instituted as to claims 1, 3, 4, 6, 8–10, 19, 21, 23, 25, and 26 of U.S. Patent No. 8,311,523 B1 based on the grounds, under 35 U.S.C. § 103(a), that

claims 1, 3, 4, 8–10, 19, 21, 23, 25, and 26, are unpatentable over Miluzzo and Robarts and

claim 6 is unpatentable over Miluzzo, Robarts, and Luo; FURTHER ORDERED that *inter partes* review commences on the entry date of this Order, and pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial; and

FURTHER ORDERED that the trial is limited to the grounds of unpatentability listed above, and no other grounds of unpatentability are authorized for *inter partes* review.

PETITIONERS:

Michael V. Messinger Michelle K. Holoubek STERNE, KESSLER, GOLDSTEIN & FOX PLLC <u>mikem-PTAB@skgf.com</u> <u>mholoubek-PTAB@skgf.com</u>

PATENT OWNER:

Robert E. Purcell Jerry Kearns THE LAW OFFICE OF ROBERT E. PURCELL, PLLC <u>rpurcell@repurcelllaw.com</u>