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Paper 8
Date: June 7, 2023

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner,

v.

MULLEN INDUSTRIES LLC,
Patent Owner.

IPR2023-00098
Patent 9,635,540 B2

Before JEFFREY S. SMITH, JAMES J. MAYBERRY, and NATHAN A. ENGELS, *Administrative Patent Judges*.

ENGELS, *Administrative Patent Judge*.

DECISION
Denying Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

Apple Inc. ("Petitioner") filed a Petition (Paper 1, "Pet.") requesting *inter partes* review of claims 1–35 of U.S. Patent No. 9,635,540 B2 (Ex. 1003, "the '540 patent"). Patent Owner Mullen Industries LLC filed a Preliminary Response. Paper 7 ("Prelim. Resp.").

Under 35 U.S.C. § 314(a), an *inter partes* review may not be instituted unless the information presented in the Petition and any response thereto shows "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 the evidence of record, we determine Petitioner has not demonstrated a reasonable likelihood of prevailing in establishing unpatentability of at least one claim of the '540 patent. Accordingly, we do not institute *inter partes* review.

A. Real Parties-in-Interest

Petitioner identifies itself, Apple Inc., as the real party-in-interest. Pet. 82. Patent Owner identifies itself, Mullen Industries LLC, as the real party-in-interest. Paper 3, 1.

B. Related Matters

The parties indicate that the '540 patent is involved in the following district court case: *Mullen Industries LLC v. Apple Inc.*, Case No. 6:22-cv-00145-ADA (W.D. Tex., filed Feb. 9, 2022). Pet. 82; Paper 3, 1. Petitioner further indicates that this case was transferred and assigned as Case No. 3:23-cv-00437 (N.D. Cal., filed Jan. 31, 2023). Paper 6, 2.

Patent Owner identifies the following *inter partes* review proceedings for patents related to the '540 patent: IPR2023-00087, IPR2023-00090, IPR2023-00091, IPR2023-00096, IPR2023-00097, IPR2023-00115,

IPR2023-00116, IPR2023-00117, IPR2023-00148, IPR2023-00149. Paper 3, 1–2.

C. The Challenged Patent

The ’540 patent “relates to systems and methods for remotely determining a device’s location.” Ex. 1003, 1:17–18. More specifically, the ’540 patent describes “systems and methods for allowing a user of a cellular phone (e.g., a requesting user or a requester) to locate the position of a different user’s cellular phone (e.g., a requested user) based upon requestor-assigned access rights.” *Id.* at 1:38–42.

Figure 2 of the ’540 patent, reproduced below, shows “a flow chart of the locating feature in accordance with the principles of the present invention.” *Id.* at 3:43–44.

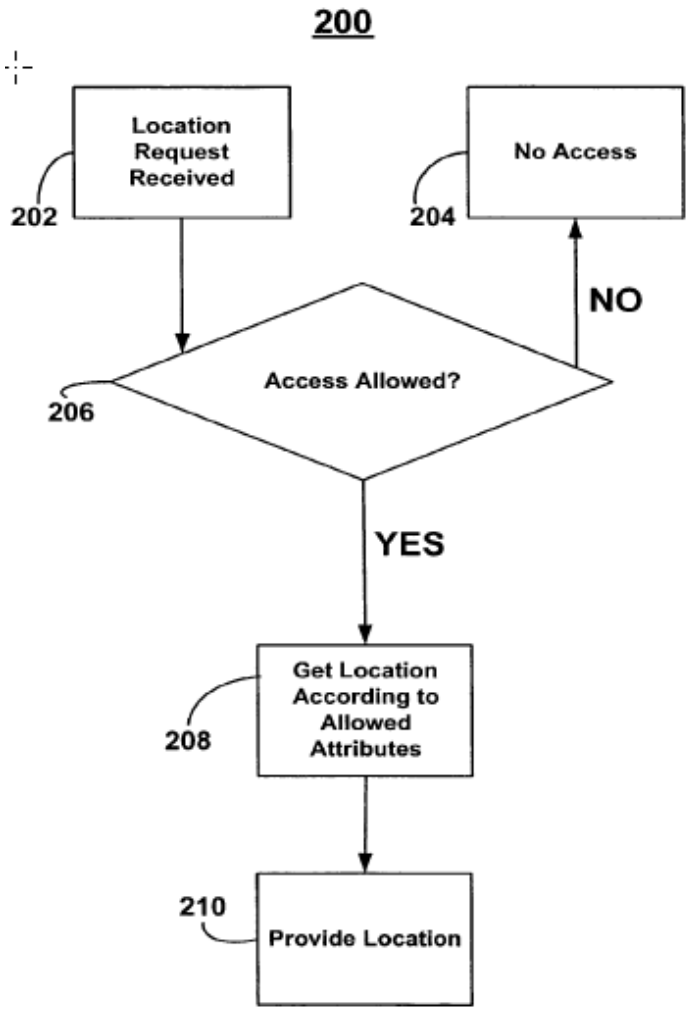
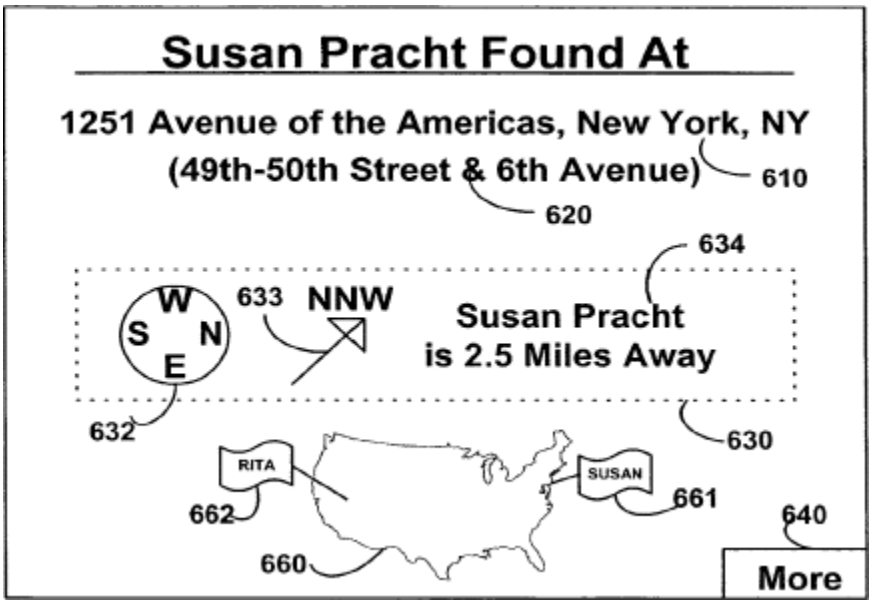


FIG. 2

Figure 2 of the ’540 patent depicts a flow chart for locating another user’s cell phone according to an embodiment. *See id.* at 4:52–55. As shown, a request may be received from a requesting user for the location of a requested user’s cell phone (step 202). *Id.* at 4:54–55. After receiving the request, an evaluation determines whether the requesting user is allowed to access the location of the requested user (step 206). *Id.* at 4:55–57. If access is not allowed, the user will be informed to this effect (step 204). *Id.* at 4:57–60. The requested user, however, “may update, add, manipulate, or

remove access at any time." *Id.* at 5:20–21. If access is allowed, the location of the requested user's cell phone may be retrieved "from a remote database, facility, distribution center, or any other system" (step 208). *Id.* at 4:66–5:2, 5:11–14. The allowed location information of the requested user may then be provided to the requesting user (step 210). *Id.* at 4:66–5:2.

According to the '540 patent, additional information about the location of the requested user may also be provided. For example, a map with a marker identifying the requested user's location may be provided to the requesting user on their cell phone's display screen. *Id.* at 2:22–30; *see id.* at 8:11–20. Figure 6 of the '540 patent, reproduced below, shows "a display screen for a displaying location feature." *Id.* at 3:52–53.



As shown in Figure 6, a display screen may include various location information according to an embodiment. *Id.* at 7:31–33; Fig. 6. The '540 patent describes that "[w]hen a location is retrieved for the requested user, the location may be displayed on Display Screen 600 through primary location information 610," which may be, "for example, the country, state,

city, exact location, or any combination thereof." *Id.* at 7:33–39, Fig. 6. The primary location information 610 provided depends on the scope of the requesting user's access rights. *Id.* at 7:36–37. Display screen 600 may also include secondary location information 620, such as the cross street or name of a building, that supplements the requested user's exact location. *Id.* at 7:43–50; Fig. 6. In addition, display screen 600 may include directional information 630, such as digital compass 632 indicating the direction the requesting user is facing, a directional arrow 633 indicating the requested user's location relative to the requesting user's location, and distance information 634 indicating the distance between the locations of the requested and requesting users. *Id.* at 7:51–61, 8:6–9.

D. Illustrative Claim

Claim 1 is the only independent claim of the challenged claims, and is reproduced below.

1. A method of mobile-to-mobile locating, said method comprising:

requesting a location of a first wireless device by a second wireless device from a server located remotely from said first and second wireless devices;

determining that said second wireless device does not have location access rights for said first wireless device;

asking said second wireless device if said location access rights are to be requested from said first wireless device after determining that said second wireless device does not have said location access rights for said first wireless device;

requesting that said location access rights be assigned for said second wireless device by said first wireless device;

assigning said location access rights on said server to said second wireless device by said first wireless device;

storing said location access rights on said server;

determining said access rights assigned by said first wireless device to said second wireless device on said server; and

providing said location from said server to said second wireless device dependent upon said access rights.

Ex. 1003, 17:17–17:40.

E. Alleged Grounds of Unpatentability

Petitioner asserts that claims 1–35 would have been unpatentable on the following grounds:

Claims Challenged	35 U.S.C. §	Reference(s)/Basis
1–35	103(a)[1]	Sheha[2], Ganesh[3], Ryden[4], Obradovich[5], Smith[6], Degnbol[7]
1–35	103(a)	Enzmann[8], Ganesh, Ryden, Obradovich, Smith, Degnbol

Pet. 3. Petitioner also supports its challenge with a Declaration of David H. Williams. Ex. 1021.

[1] The Leahy-Smith America Invents Act ("AIA") included revisions to 35 U.S.C. § 103 that became effective on March 16, 2013. The '540 patent was filed prior to the effective date of the AIA. Therefore, we apply the pre-AIA version of § 103; however, our analysis would be the same under the current version of the statute.
[2] US 7,333,820 B2; issued Feb. 19, 2008. Ex. 1041.
[3] US 7,013,148 B1; issued Mar. 14, 2006. Ex. 1049.
[4] US 7,233,795 B1; issued June 19, 2007. Ex. 1057.
[5] US 6,133,853; issued Oct. 17, 2000. Ex. 1055.
[6] US 6,084,951; issued July 4, 2000. Ex. 1059.
[7] WO 00/22860 A1; published Apr. 20, 2000. Ex. 1047.
[8] US 7,130,630 B1; issued Oct. 31, 2006. Ex. 1040.

II. ANALYSIS

A. Level of Ordinary Skill in the Art

In determining the level of skill in the art, we consider the type of problems encountered in the art, the prior art solutions to those problems, the rapidity with which innovations are made, the sophistication of the technology, and the educational level of active workers in the field. *Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc.*, 807 F.2d 955, 962 (Fed. Cir. 1986); *Orthopedic Equip. Co. v. U.S.*, 702 F.2d 1005, 1011 (Fed. Cir. 1983).

Petitioner contends a person of ordinary skill in the art at the time of the invention

> would have had at least a bachelor of science degree in computer science, computer engineering, electrical engineering or a similar degree with one or two years of experience with wireless networks and devices, as well as with GPS or location-related technology/services, as well as familiarity with devices such as cell phones and personal digital assistants ("PDAs") as well as wireless positioning technologies such as GPS, triangulation, or trilateration.

Pet. 7 (citing Ex. 1021 ¶ 43). Patent Owner does not dispute Petitioner's proposed level of ordinary skill in the art. *See* Prelim. Resp.

For the purposes of this Decision, we apply Petitioner's level of ordinary skill.

B. Claim Construction

We construe claims using the principles set forth in *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–17 (Fed. Cir. 2005) (en banc) and related cases. *See* 37 C.F.R. § 42.100(b) (2021). Under that precedent, the words of a claim are generally given their "ordinary and customary meaning," which is the meaning the term would have to a person of ordinary skill at the time of the invention, in the context of the entire patent including the specification. *Phillips*, 415 F.3d at 1312–13.

Neither party proposes any explicit claim constructions. Pet. 8; *see generally* Prelim. Resp. At this stage, we determine it is unnecessary to construe any terms. *See Realtime Data, LLC v. Iancu*, 912 F.3d 1368 (Fed. Cir. 2019) ("The Board is required to construe 'only those terms . . . that are in controversy, and only to the extent necessary to resolve the controversy.'" (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

C. Asserted References

1. *Sheha*

Sheha is titled "System and Method for Providing Routing, Mapping, and Relative Position Information to Users of a Communication Network." Ex. 1041, code (54). Sheha relates "to a system and method for providing real-time position information of one party to another party." *Id.* at code (57).

Figure 3, reproduced below, illustrates telephone and computing devices for establishing a mobile-to-mobile connection. *Id.* at 6:45–47.

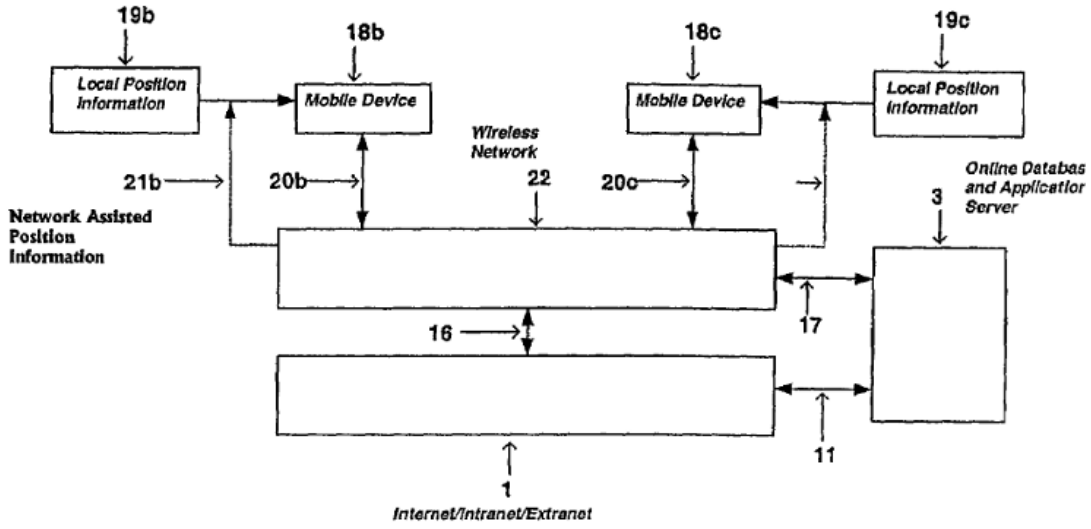


FIG. 3

Figure 3 depicts mobile devices 18b and 18c, wireless network 22, and online database and application server (ODAS) 3 for establishing mobile-to-mobile connections. *Id.* at 10:66–11:15. In an embodiment, "the position information of each device can be updated in the ODAS 3 prior to establishing [a] telephone call, depending on each mobile device's 18*b* and 18*c* privacy settings." *Id.* at 11:5–8. Then, still "prior to the destination mobile device 18*c* receiving the telephone call from the originating mobile device 18*b*, the wireless network sends the position information, obtained from the ODAS 3, in the form of a Map Caller-ID." *Id.* at 11:37–42. The mobile devices may continually send updated position information to the ODAS, and the ODAS may periodically update the mobile devices with each other's position information, "thus providing real-time driving directions and route information." *Id.* at 11:44–51.

2. *Ganesh*

Ganesh is titled "Method for Providing a Current Location of a Wireless Communication Device." Ex. 1049, code (54). Ganesh relates to using "Automatic Location Identification (ALI) technologies to determine a current location of [a] wireless device," particularly with "safeguards in place to prevent unauthorized individuals from receiving the current location information." *Id.* at 2:49–60. In an embodiment, Ganesh provides an access denial web page explaining why access to a location was denied for a requesting party. *Id.* at 6:33–39.

3. *Enzmann*

Enzmann is titled "Location Query Service for Wireless Networks." Ex. 1040, code (54). Enzmann relates "to wireless networks that track the location of wireless network devices." *Id.* at 1:7–9.

Figure 1, reproduced below, shows "a schematic diagram of a system architecture that provides the location query service." *Id.* at 3:34–35.

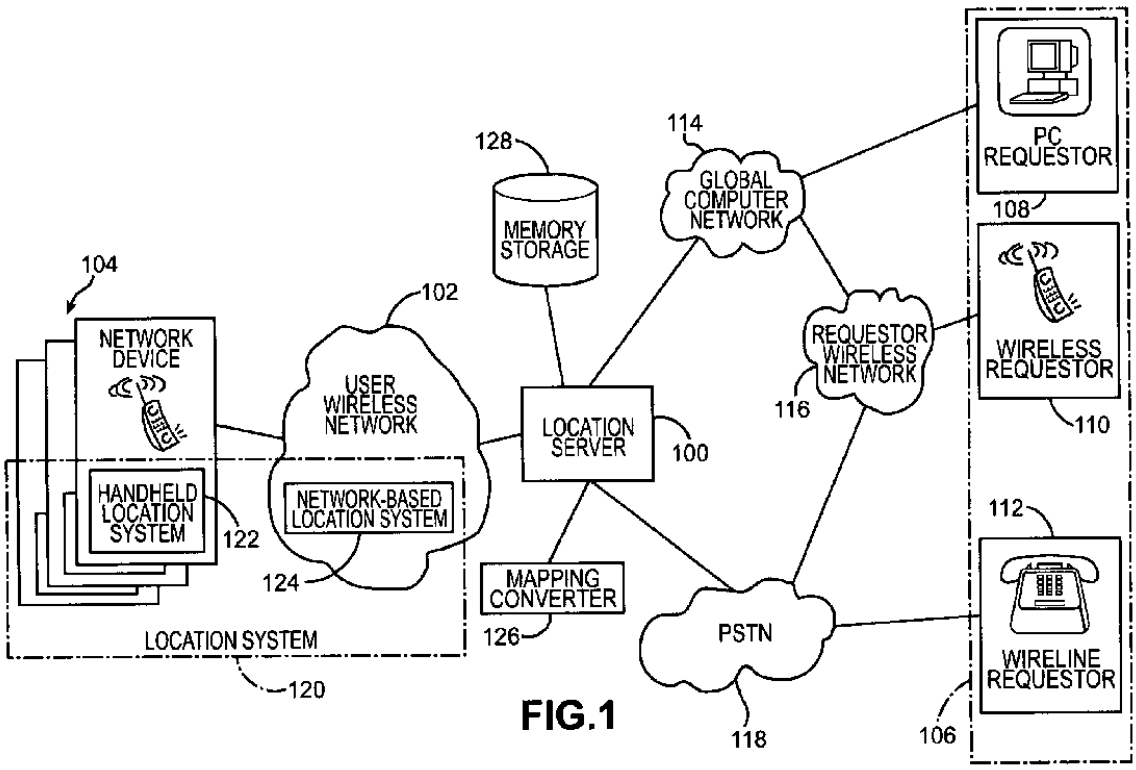


FIG.1

Figure 1 shows location server 100 in communication with multiple network devices 104 over user wireless network 102, as well as with multiple requestors 106 over a variety of other networks 114, 116, and 118. *Id.* at 3:62–4:14. In operation, Enzmann's location server 100 receives location queries from requestors 106, confirms access levels, obtains location information for wireless network devices 104, and returns this information to the requestors. *Id.* at 5:3–8.

D. Independent Claim 1

Petitioner contends claim 1 is obvious in view of Sheha and Ganesh (Pet. 22) or in view of Enzmann and Ganesh (Pet. 52). We limit our discussion to the following limitations, which we determine are dispositive.

> *[1a]: "requesting a location of a first wireless device by a second wireless device from a server located remotely from said first and second wireless devices"*

[1c]: "asking said second wireless device if said location access rights are to be requested from said first wireless device after determining that said second wireless device does not have said location access rights for said first wireless device"

1. *Ground 1 – Sheha and Ganesh*

For limitation 1a of Ground 1, Petitioner cites Sheha as disclosing that a requesting wireless device can request the location of a target wireless devices from ODAS. Pet. 23–24 (citing Ex. 1041, 11:20–37). For limitation 1c, Petitioner states that "Sheha discloses that after determining that the requesting device lacks location access rights, the server can present the request for location access rights to the target device." Pet. 25 (citing Ex. 1041, 5:21–32). Petitioner also states that "Ganesh discloses the intermediary step of asking the requesting device if location access rights are to be requested for the target device as required by claim 1c." Pet. 25 (citing Ex. 1021–3 ¶¶ 19–21.

Contrary to Petitioner's arguments, though, neither Sheha nor Ganesh discloses or suggests asking the requesting device if location access rights are to be requested from the target device. Sheha teaches that "a [requesting] user can initiate a position request" and "[t]he server queries the [target user] for permission on whether the position request can be granted." Ex. 1041, 5:24–31. Sheha does not teach asking the requesting user if location access rights are to be requested.

Ganesh also does not teach asking the requesting user if location access rights are to be requested. Contrary to Petitioner's statement that "Ganesh discloses the intermediary step of asking the requesting device if location access rights are to be requested for the target device" (Pet. 25) and Mr. Williams's statement that "Figure 6 of Ganesh asks the requesting device in query 90 if location access rights are to be received from the target

device at a later time" (Ex. 1021-3 ¶ 20), Figure 6 of Ganesh discloses asking the requesting user if it "wishes to receive the *location information* at a later time" (Ex. 1049, Fig. 6 (emphasis added)). Mr. Williams further states that "[q]uery 90 to receive the location of the target device at a later time necessarily requires requesting location access rights to obtain the location of the target device" (Ex. 1021-3 ¶ 20), but it does not necessarily follow that Ganesh teaches or reasonably suggests asking the requesting user whether it would like to request location access rights at least because Ganesh discloses asking the requesting user if it wishes to receive the location information without addressing any "intermediary step" of asking the requesting user if it would like to request location access rights.

In sum, we determine Petitioner has not shown that Sheha and Ganesh teach or suggest asking a requesting user if location access rights are to be requested, as claimed. Thus, based on the evidence of record, we determine the Petitioner has not adequately shown that a person of ordinary skill would have combined Sheha and Ganesh to arrive at the claimed invention without improper hindsight.

2. *Ground 2 – Enzmann and Ganesh*

For limitation 1a, Petitioner states that Enzmann discloses that a wireless requestor can request the location of a target wireless device from a remote server. Pet. 53 (citing Ex. 1040, 3:63–4:12, 5:39–50, Fig. 1; Ex. 1021-3 ¶ 90). For limitation 1c, Petitioner states "Enzmann discloses that after determining that the requesting device does not have location access rights, the server can present the request for location access rights to the target device." Pet. 54 (citing Ex. 1040, 2:42–51, 7:39–58; Ex. 1021-3 ¶ 93). For the same reasons discussed above, Enzmann does not teach

asking the requesting device if location access rights are to be requested from the target device.

Petitioner also cites Ganesh similarly to the arguments addressed above, arguing "Ganesh teaches asking the requesting device if location access rights are to be requested from the target device if the requesting device lacks location access rights." Pet. 54–55 (citing Ex. 1049, 1:14–18, 6:33–44, 8:43–50, Fig. 6; Ex. 1021–3 ¶¶ 19–21, 94–95). For the same reasons explained above, Ganesh does not teach asking the requesting device if location access rights are to be requested from the target device.

We determine Petitioner has not shown that Enzmann and Ganesh teach or suggest asking a requesting user if location access rights are to be requested, as claimed. Thus, based on the evidence of record, we determine the Petitioner has not adequately shown that a person of ordinary skill would have combined Enzmann and Ganesh to arrive at the claimed invention without improper hindsight.

3. *Conclusion Regarding Claim 1*

We determine Petitioner has not shown a reasonable likelihood that it would prevail in its challenge to independent claim 1.

E. Dependent Claims 2–35

Because we determine Petitioner has not shown a reasonable likelihood that it would prevail in its challenges to independent claim 1, we determine Petitioner has not shown a reasonable likelihood that it would prevail in its challenges to claims 2–35 based on their dependency from independent claim 1.

III. CONCLUSION

For the reasons set forth above, we determine that Petitioner has not demonstrated a reasonable likelihood that it will prevail with respect to at least one claim of the '540 patent. Accordingly, we do not institute an *inter partes* review.

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that the Petition is denied; and

FURTHER ORDERED that no *inter partes* review is instituted.

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