

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICROSOFT CORPORATION,
Petitioner,

v.

INTERDIGITAL PATENT HOLDINGS, INC.,
Patent Owner.

IPR2024-00538
Patent 9,173,054 B2

Before JAMESON LEE, JOHN F. HORVATH, and LISA A. MURRAY,
Administrative Patent Judges.

MURRAY, *Administrative Patent Judge.*

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

I. INTRODUCTION

Microsoft Corporation (“Microsoft” or “Petitioner”) filed a Petition for *inter partes* review of claims 1, 3–10, 12, 14–15, 21, 23, 25–32, 34, 36–37, 43, 46–47, and 49–50 (the “challenged claims”) of U.S. Patent 9,173,054 B2. Paper 3 (“Pet.”); *see* Ex. 1201 (“the ’054 patent”). InterDigital Patent Holdings, Inc. (“InterDigital” or “Patent Owner”) timely filed a Preliminary Response. Paper 7 (“Prelim. Resp.”). With the permission of the Board,

Petitioner filed a Preliminary Reply (Paper 8) and Patent Owner filed a Preliminary Sur-Reply (Paper 9). *See* Ex. 2013 (email from Board to counsel).

The standard for instituting an *inter partes* review is set forth in 35 U.S.C. § 314(a):

(a) *Threshold*.—The Director may not authorize an *inter partes* review to be instituted unless the Director determines that the information presented in the petition filed under section 311 and any response filed under section 313 shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.

35 U.S.C. § 314(a). InterDigital contends that the Board should deny institution. Prelim. Resp. 1.

Based on our review of the current record, we conclude that Petitioner is reasonably likely to prevail with respect to at least one of the challenged claims of the '054 patent. We thus institute an *inter partes* review of all the challenged claims of the '054 patent on all grounds asserted in the Petition. *See* 37 C.F.R. § 42.108(a) (2024).

A. Real Parties in Interest

Petitioner Microsoft identifies itself as a real party in interest. Pet. xiii. Microsoft additionally identifies its customers Lenovo (United States), Inc., Lenovo PC HK Limited, Lenovo Group Limited, and Motorola Mobility LLC—all of which have been named as defendants in related District Court and/or International Trade Commission (“ITC”) proceedings—as other real parties in interest. *Id.*

Patent Owner InterDigital identifies itself (InterDigital Patent Holdings, Inc.); InterDigital, Inc.; InterDigital VC Holdings, Inc.; and

InterDigital Madison Patent Holdings SAS as real parties in interest. Paper 5 at 2 (Patent Owner’s Mandatory Notice).

B. Related Matters

The parties identify the following as matters that may affect, or be affected by, a decision in this proceeding:

Certain Electronic Devices, Including Smartphones, Computers, Tablet Computers, and Components Thereof, Inv. No. 337-TA-1373 (ITC), filed Sept. 1, 2023;

InterDigital, Inc. et al. v. Lenovo Group Limited et al., No. 5:23-cv-00493-FL (E.D.N.C.), filed Sept. 1, 2023;

Microsoft Corp. v. InterDigital Patent Holdings, Inc., IPR2024-00306 (PTAB), filed Dec. 20, 2023.

Pet. xiii–xiv; Paper 5 at 2 (Patent Owner’s Mandatory Notice). In addition, Microsoft has filed two petitions challenging certain claims of U.S. Patent No. 8,737,933, to which the ’054 patent alleges priority and which shares common claims of priority to the same earlier applications. *See Microsoft Corp. v. InterDigital Patent Holdings, Inc.*, IPR2024-00305, Paper 2 (filed Dec. 20, 2023); *Microsoft Corp. v. InterDigital Patent Holdings, Inc.*, IPR2024-00537, Paper 3 (filed Feb. 9, 2024); *see also* Pet. xiv.

C. The Challenged Patent

The ’054 patent discloses a method for controlling communication of data in wireless communications, implemented in a wireless transmit/receive unit (“WTRU”). Ex. 1201, 1:45–61 (’054 patent). Specifically, the challenged claims describe a WTRU that detects another nearby WTRU using Bluetooth. On receiving user input through a touch display to select a media file and a second WTRU to receive that file, a first WTRU sends a message to transfer the selected media to the selected second WTRU. On receiving an acceptance message from the second WTRU, the first WTRU

uses Wi-Fi rather than Bluetooth to transfer the selected media to the second WTRU. *See, e.g., id.* at 10:53–65.

Petitioner challenges claims 1, 3–10, 12, 14–15, 21, 23, 25–32, 34, 36–37, 43, 46–47, and 49–50 of the '054 patent. Claims 1 and 23 are independent claims. Claim 1 is illustrative of the challenged claims and is reproduced below:

1. A method performed by a wireless transmit/receive unit (WTRU), the method comprising:
 - processing, by the WTRU from a touch display, an input to select media in an application;
 - detecting, by the WTRU over bluetooth, another WTRU;
 - processing, by the WTRU, another input from the touch display to select the another WTRU;
 - sending, by the WTRU to the selected another WTRU, a message to transfer the selected media;
 - receiving, by the WTRU, an acceptance to transfer the selected media; and
 - transferring, by the WTRU to the selected another WTRU over WiFi, the selected media.

Ex. 1201, 10:53–65 ('054 patent).

D. Asserted Grounds of Unpatentability

Microsoft contends that the challenged claims are unpatentable under 35 U.S.C. § 102 and/or 35 U.S.C. § 103 based on the following combinations of references:

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1, 4–9, 12, 14–15, 21, 23, 26–31, 34, 36–37, 43, 46–47, 49–50	102	Forutanpour ¹

¹ US 2011/0083111 A1 (Ex. 1204).

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1, 3–10, 12, 14–15, 21, 23, 25–32, 34, 36–37, 43, 46–47, 49–50	103	Forutanpour
3, 25	103	Forutanpour, Hinckley ²
12, 34	103	Forutanpour, Hoddie ³
10, 32	103	Forutanpour, Heinonen ⁴

Pet. 2. Microsoft also relies upon the Declaration of Peter Rysavy. Ex. 1203 (“Rysavy Decl.”).

II. DISCRETIONARY DENIAL UNDER § 314(a)

We first consider whether we should exercise our discretion under 35 U.S.C. § 314(a) to deny institution on the grounds that a trial would be duplicative of other proceedings. Patent Owner argues that we should exercise our discretion to deny institution because the issues presented by this Petition and Petitioner’s other petitions will be resolved in the underlying district court case. Prelim. Resp. 7–14.

Institution of *inter partes* review is discretionary. *See Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) (“[T]he PTO is permitted, but never compelled, to institute an IPR proceeding.”); 35 U.S.C. § 314(a). The Board decides on the Director’s behalf whether to institute an *inter partes* review. 37 C.F.R. § 42.4(a). The Board considers six factors to determine whether system efficiency, fairness, and the merits support denial of a petition for *inter partes* review based on the status of a related litigation:

1. whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted;

² US 2007/0191028 A1 (Ex. 1207).

³ WO 2005/107285 A1 (Ex. 1206).

⁴ US 2005/0281237 A1 (Ex. 1274).

2. proximity of the court's trial date to the Board's projected statutory deadline for a final written decision;
3. investment in the parallel proceeding by the court and the parties;
4. overlap between issues raised in the petition and in the parallel proceeding;
5. whether the petitioner and the defendant in the parallel proceeding are the same party; and
6. other circumstances that impact the Board's exercise of discretion, including the merits.

Apple v. Fintiv, IPR2020-00019, Paper 11 at 5–6 (PTAB Mar. 20, 2020) (precedential). The Director has issued additional guidance on the application of *Fintiv*, which the Board also considers. Ex. 2002 (USPTO Memorandum, Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation (June 21, 2022))⁵ (“Vidal Memo”).

Factor 1: The first *Fintiv* factor considers whether the parallel proceedings have been, or may be, stayed pending the outcome of an *inter partes* review. *Fintiv*, Paper 11 at 6. The District Court for the Eastern District of North Carolina has not granted a stay in the related district court proceeding, nor has any party asked it to do so. *See* Prelim. Resp. 10. Patent Owner suggests that a stay likely would not be granted, even if requested, because not all of the patents at issue in the district court litigation are subject to petitions for *inter partes* review. *Id.* This assumption, while not unreasonable, is speculation at this point. As the only certainty is that there

⁵ Available at https://www.uspto.gov/sites/default/files/documents/interim_proc_discretionary_denials_aia_parallel_district_court_litigation_memo_20220621_.pdf.

is currently no stay in place, we find this factor to be neutral, weighing neither for nor against discretionary denial.

Factor 2: The second factor compares the court’s trial date to the Board’s projected statutory deadline for a final written decision. *Fintiv*, Paper 11 at 6. Here, no trial date has been set in the related district court proceeding.⁶ Pet. 3; Prelim. Resp. 10. However, “when considering the proximity of the district court’s trial date to the date when the PTAB final written decision will be due, the PTAB will consider the median time from filing to disposition of the civil trial for the district in which the parallel litigation resides.” Ex. 2002, 3 (Vidal Memo). The most recent statistics show a median time-to-trial for completed civil trials in the Eastern District of North Carolina of 31.2 months. *See* Ex. 1287, 21 (U.S. District Courts—Judicial Caseload Profile). Thus, a projected trial date for the related district court proceeding, which was filed on September 1, 2023, would be in mid-April of 2026. *See* Pet. xiv (providing filing date for district court litigation). This would be about eight months after the projected statutory deadline for a final written decision in this proceeding. Accordingly, this factor weighs heavily against discretionary denial.

⁶ While there may be an evidentiary hearing in the related ITC proceeding at some point, the Board does not consider the status of a parallel ITC proceeding in a *Fintiv* analysis, regardless of whether that proceeding is likely to conclude before the Board issues a final written decision. “The plain language of the *Fintiv* factors is directed to district court litigation and does not apply to parallel U.S. International Trade Commission (ITC) proceedings, as the ITC lacks authority to invalidate a patent and the ITC’s invalidity rulings are not binding on the Office or on district courts.” Ex. 2002, 2–3 (Vidal Memo).

Factor 3: The third *Fintiv* factor considers the amount of time and resources already invested in the parallel proceeding by the court and the parties. *Fintiv*, Paper 11 at 6. Patent Owner represents that the parties in the district court proceeding “have prepared and exchanged infringement and invalidity contentions, presented initial disclosures, and are in the midst of fact discovery and motion practice.” Prelim. Resp. 11. The parties were to have completed claim construction briefing by May 23, 2024. *See id.*

While resources have been invested in the related district court litigation, nevertheless there is still a substantial amount of work to be completed by both the parties and the district court as to issues of unpatentability. There may, in the court’s discretion, be a hearing before entry of a claim construction order. Ex. 2003, 15 (E.D.N.C. Case Management Order). Fact discovery is not expected to close until ninety days after entry of the claim construction order, with the close of expert discovery to follow 111 days later. *Id.* at 16. The deadline for filing dispositive motions will be thirty days after the close of expert discovery. *Id.* Thus, the resources invested in the related litigation thus far are a relatively small portion of the overall investment required to pursue district court litigation through trial and disposition. That overall investment may potentially be reduced if an *inter partes* proceeding ultimately simplifies or streamlines the issues to be decided by the district court. Accordingly, this factor weighs against discretionary denial.

Factor 4: The fourth factor weighs the degree of overlap between issues raised in the petition and in the parallel proceeding. *Fintiv*, Paper 11 at 6. If a petition includes the same, or substantially the same, claims, grounds, arguments, and evidence as those presented in the parallel proceeding,

“concerns of inefficiency and the possibility of conflicting decisions [are] particularly strong.” *Fintiv*, Paper 11 at 12. All of the claims challenged in the Petition have now been asserted in the district court litigation. *See* Pet. 3 (While the district court complaint named only the independent claims of the ’054 patent, “[t]he dependent claims challenged in this petition were first asserted by Patent Owner in its infringement contentions served December 4, 2023, barely two months before the filing of this petition.”).

Patent Owner argues that there is significant overlap between the issues raised in the Petition and those raised in the parallel district court proceeding. Prelim. Resp. 12–13. The Defendants in the district court, however, have filed a stipulation that would eliminate overlap between the issues identified in the Petition and those that will be litigated in district court. Ex. 1286, 2 (Lenovo stipulation) (“[S]hould the PTAB institute IPR in IPR2024-00538, then Lenovo will not pursue the same grounds in district court litigation for the ’054 patent as are presented in IPR2024-00538.”).

Patent Owner is correct that stipulations using this wording “do not eliminate the concerns regarding duplicative proceedings and may be insufficient to merit institution.” Prelim. Resp. 12 (citing *Samsung Electronics Co., Ltd. v. Mojo Mobility Inc.*, IPR2023-01092, Paper 11 at 15–17 (PTAB Jan. 8, 2024)). Nevertheless, such stipulations do “mitigate to some degree” the concerns that factor 4 is intended to address. *Sand Revolution II, LLC v. Continental Intermodal Group-Trucking LLC*, IPR2019-01393, Paper 24 at 12 (PTAB June 16, 2020) (informative). Accordingly, this factor weighs against discretionary denial.

Factor 5: The fifth factor determines whether the petitioner and the defendant in the parallel proceeding are the same party. *Fintiv*, Paper 11 at 6.

Here, they are not. The Petitioner here is Microsoft Corp., while the defendants in the parallel district court litigation are Lenovo Group Limited, Lenovo (United States) Inc., and Motorola Mobility LLC. *See, e.g.*, Ex. 2005, 1 (Defendant's Preliminary Invalidity Contentions). Nevertheless, the Petition identifies each of these defendants as a real party in interest. Pet. xiii.

Although Petitioner is not a named defendant in the parallel district court litigation and Patent Owner has not presented any evidence that Petitioner is directly involved in that litigation, there are admittedly real parties-in-interest in this proceeding that are Defendants in the district court case. Pet. xiii. In this circumstance, *Fintiv* factor 5 weighs marginally in favor of discretionary denial of the Petition. *See, e.g., Global Tel*Link Corp. v. HLFIP Holding, Inc.*, IPR2021-00444, Paper 14 at 27–28 (PTAB July 22, 2021) (denying institution) (where petitioner identified defendants as real parties-in-interest and offered to indemnify defendants in the district court litigation, *Fintiv* factor 5 weighed in favor of denial of the petition).

Factor 6: The sixth factor considers whether there are other circumstances that impact the Board's exercise of discretion, including the merits of the Petition. *Fintiv*, Paper 11 at 6. Here, for the reasons discussed below, there is a reasonable likelihood that Petitioner may prevail with respect to at least one of the claims challenged in the Petition. Moreover, the Board recognizes that “a dispute about priority date requiring arguments under multiple prior art references” may warrant institution on multiple petitions. Patent Trial and Appeal Board Consolidated Trial Practice Guide at 59 (Nov. 2019), *available at* <https://www.uspto.gov/TrialPracticeGuideConsolidated>; *see also Apple Inc. v. Sonrai Mem. Ltd.*,

IPR2023-00975, Paper 9 at 14 (PTAB Dec. 14, 2023) (finding a “potential priority dispute between the two parties justifies institution of . . . two petitions”). No other circumstances that might affect the Board’s exercise of discretion have been brought to the Board’s attention. Accordingly, this factor weighs against discretionary denial.

We have considered the circumstances and facts before us in view of *Fintiv* factors 1–6. As discussed above, factor 1 is neutral and factors 2–4 and 6 weigh against discretionary denial, while factor 5 weighs marginally in favor of discretionary denial. Because our analysis is fact-driven, no single factor determines whether we exercise our discretion to deny institution under 35 U.S.C. § 314(a). In the circumstances of this case, considering each *Fintiv* factor as part of a holistic analysis, we are persuaded that the efficiency and integrity of the system would be best served by granting the Petition to institute an *inter partes* review. Accordingly, we decline to exercise discretion to deny institution under § 314(a).

III. EFFECTIVE FILING DATE OF THE CHALLENGED CLAIMS

We next consider whether the evidence is likely to show that the effective filing date for the challenged claims is April 11, 2014, as Petitioner asserts; December 22, 2009, as Patent Owner contends; or December 23, 2008, the effective filing date that Petitioner assumed in its earlier petition regarding the ’054 patent. Pet. 19–21; Prelim. Resp. 2; *Microsoft Corp. v. InterDigital Patent Holdings, Inc.*, IPR2024-00306, Paper 2 at 15 n.6.

The ’054 patent issued on October 27, 2015 from Application No. 14/251,383, filed April 11, 2014 (“the ’383 application”), and alleges priority to non-provisional Application Nos. 13/930,743, filed June 28, 2013 (“the parent application”) (Ex. 1285); 13/493,650, filed June 11, 2012 (“the

grandparent application”) (Ex. 1281); and 12/644,948, filed December 22, 2009 (“the great-grandparent application”) (Ex. 1282),⁷ as well as to Provisional Application No. 61/140,126, filed December 23, 2008 (Ex. 1266). *See* Ex. 1202, 8 (file history for the ’054 patent). Petitioner argues that Patent Owner cannot show entitlement to an effective filing date earlier than April 11, 2014, the filing date of the ’383 application, because according to Petitioner, the ancestor applications do not provide written description support for the claims at issue. Pet. 19.

We note that Patent Owner has the initial burden of producing evidence that rebuts Petitioner’s anticipation argument by demonstrating entitlement to an earlier priority date, and that until Patent Owner does so, the burden of production does not shift to Petitioner to demonstrate that the ’054 patent is not entitled to the earlier filing dates of its ancestral applications. *See Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1327–28 (Fed. Cir. 2008); *see also PowerOasis v. T-Mobile USA, Inc.*, 522 F.3d 1299, 1304–1305 (Fed. Cir. 2008) (once a challenger has introduced sufficient evidence to put at issue whether there is anticipatory prior art dated earlier than the apparent effective date of the asserted patent claim, the patentee has the burden of going forward with evidence and argument to the contrary). The ultimate burden of persuasion to show a reasonable likelihood that at least one challenged claim is unpatentable, of course, always remains with Petitioner. *Tech. Licensing*, 545 F.3d at 1329 (“[I]t is a long-standing rule of patent law that, because an issued patent is by statute presumed valid, a challenger has the burden of persuasion to show by clear and convincing

⁷ Now Patent Nos. 8,737,933 (Ex. 1271); 8,478,207 (Ex. 1251); and 8,200,265 (Ex. 1249), respectively.

evidence that the contrary is true. That ultimate burden never shifts, however much the burden of going forward may jump from one party to another as the issues in the case are raised and developed.”)

The claims challenged in the Petition are only entitled to an effective filing date earlier than April 11, 2014 if the substance of those claims was adequately disclosed in an ancestor application. “In order to gain the benefit of the filing date of an earlier application under 35 U.S.C. § 120, each application in the chain leading back to the earlier application must comply with the written description requirement of 35 U.S.C. § 112.” *Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1571 (Fed. Cir. 1997). “Each application in the chain must therefore reasonably convey to those skilled in the art that the inventor had possession of the later-claimed subject matter as of the filing date.” *Parus Holdings, Inc. v. Google LLC*, 70 F.4th 1365, 1373 (Fed. Cir. 2023) (quotation and alteration marks omitted) (quoting *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc)).

“[T]he level of detail required to satisfy the written description requirement varies depending on the nature and scope of the claims and on the complexity and predictability of the relevant technology.” *Ariad*, 598 F.3d at 1351. The specification “need not describe the claimed subject matter in exactly the same terms as used in the claims.” *Eiselstein v. Frank*, 52 F.3d 1035, 1038 (Fed. Cir. 1995). It must, however, demonstrate possession of the claimed invention. *Ariad*, 598 F.3d at 1352; *see also PowerOasis, Inc. v. T-Mobile USA, Inc.*, 522 F.3d 1299, 1306–07 (Fed. Cir. 2008) (explaining that § 112, first paragraph, “requires that the written description actually or inherently disclose the claim element”). “A

description which [merely] renders obvious the invention for which an earlier filing date is sought is not sufficient.” *Lockwood*, 107 F.3d at 1572.

For Patent Owner to show that the effective filing date for the challenged claims is December 22, 2009, *see* Prelim. Resp. 2, it has the burden of demonstrating that the great-grandparent application, as well as every later application in the chain of priority, satisfies the written description requirement with respect to each challenged claim. *See Lockwood*, 107 F.3d at 1571 (“each application in the chain leading back to the earlier application must comply with the written description requirement”). Because the relevant language is identical in all three non-provisional ancestor applications, for conciseness we cite only to the great-grandparent application in the discussion that follows.⁸

A. Effective Filing Date for Claim 1 and Its Dependent Claims

As discussed above, independent claim 1 includes the steps of “detecting, by the WTRU over bluetooth, another WTRU” and “transferring, by the WTRU to the selected another WTRU over WiFi, the selected media.” Ex. 1201, 10:53–65 (’054 patent). Thus, in method claim 1 one of the key features of the claimed invention is that Bluetooth detection and Wi-Fi transfer both occur during the same performance of the claimed method. Petitioner and Patent Owner dispute whether this aspect of claim 1 is present in the ancestor applications. Pet. 20; Prelim. Resp. 15. According to Petitioner, “[a]t best, the ancestor applications disclose only devices that may support Bluetooth and WiFi They do not expressly disclose how

⁸ Petitioner and Patent Owner appear to agree that there are no material differences among the ancestor applications and the Specification of the ’054 patent. *See* Pet. 21 n.7; Prelim. Resp. 17.

the devices utilize WiFi, and they do not even hint at a method that uses Bluetooth and WiFi in separate operations, as later claimed.” Pet. 20.

Patent Owner disagrees. Paragraph 24 of the great-grandparent application contains the following passages, which, according to Patent Owner, disclose the use of both Bluetooth and WiFi in a single WTRU. Prelim. Resp. 17–19. First, paragraph 24 discloses that “Figure 1 is an illustration of a sending WTRU 101 and a receiving WTRU 103 whereby data is transferred between the WTRUs.” Ex. 1282 ¶ 24 (’948 application). It further provides that a communication peripheral 107 in each WTRU “may be implemented as a wireless personal area network (WPAN) device, for example Bluetooth®, Wireless Universal Serial Bus (W-USB) or WiFi® in ad-hoc mode.” *Id.* It also provides that “[t]he communication peripherals 107 may include technologies such as a third generation partnership (3GPP) second or third generation standards (2G/3G) modem, Bluetooth® or WiFi®. *Any combination or all of these communication technologies may be implemented in a single component design.*” *Id.* (emphasis added). According to Patent Owner, “[t]his disclosure alone satisfies the written description requirement of § 112.” Prelim. Resp. 18.

Patent Owner also argues that there is written description support for the step of “detecting, by the WTRU over bluetooth, another WTRU” in paragraphs 34–36 of the great-grandparent application. Prelim. Resp. 19–20. Paragraph 34 states, in part, that “environment information 301 may be gathered via a service discovery protocol (SDP) such as currently available in protocols such as Bluetooth®, for example. This protocol allows the WTRU 101 to discover the services . . . that are supported by other WTRUs operating in the local environment.” Ex. 1282 ¶ 34 (’948 application) (“For

example, a Bluetooth[®] connection may be used to implement a SDP for this purpose.”). Paragraph 34 continues, “[i]nformation received in the radio dialog may be analyzed and filtered (e.g. power level, or quality of a received signal) to determine the individual candidate WTRUs 101_c or set of candidate WTRUs 101_c in a local proximity.” *Id.*

Finally, Patent Owner argues that the great-grandparent application discloses using Wi-Fi to transfer data between a sending WTRU and a nearby WTRU. Prelim. Resp. 20–22. Paragraph 39 provides that the environment information is used to develop configuration information and transmission instructions “for implementing the transfer of data through specific components in the communication peripheral.” Ex. 1282 ¶ 39 (’948 application). Paragraph 32 states, “Figure 3 shows inputs that may be used to drive a target discrimination algorithm 313 that uniquely identifies a target WTRU for transfer of data.” *Id.* ¶ 32. Patent Owner further notes that paragraph 42 states “[t]ransmission instructions 517 are generated to facilitate the data transfer to the target WTRUs 101_{c,t}.” *Id.* ¶ 42; *see* Prelim. Resp. 21. Patent Owner does not, however, identify any portion of the great-grandparent application stating that the data transfer takes place over Wi-Fi.

Section 112 of the statute “requires that the written description actually or inherently disclose the claim element.” *PowerOasis, Inc. v. T-Mobile USA, Inc.*, 522 F.3d 1299, 1306–07 (Fed. Cir. 2008). The passages that Patent Owner cites from the great-grandparent application describe a WTRU that may be capable of both Bluetooth and Wi-Fi communications. Ex. 1282 ¶ 24 (’948 application). They describe detecting another WTRU using Bluetooth. *Id.* ¶ 34. They also describe transferring data to that target WTRU. *Id.* ¶¶ 32, 39, 42. None of the passages cited, however, describe

using Bluetooth for detection and then switching to Wi-Fi for data transfer within the same transaction. This element of claim 1 is neither expressly nor inherently disclosed in the great-grandparent application.⁹ It therefore does not have written description support in the ancestor application and cannot benefit from its effective filing date.

Patent Owner's arguments to the contrary are essentially obviousness arguments. Patent Owner argues, for example:

A POSITA would understand that, based on the '948 Application's disclosure that '[a]ny combination or all of these communication technologies,' including a 3GPP (2G/3G) modem, Bluetooth, or WiFi can be used 'in a single component design,' . . . transmission instructions can indicate that WiFi should be used to transfer data to the target WTRU.

Prelim. Resp. 21 (first alteration in original); Ex. 2001 ¶¶ 80–81 (Edwards decl.). Patent Owner continues, “[i]t was well-known that WiFi offered better transmission speeds as an advantage over Bluetooth, while Bluetooth on the other hand offered low power consumption.” Prelim. Resp. 21–22; Ex. 2001 ¶ 83 (Edwards decl.). Patent Owner concludes that “[a] POSITA would have understood the benefits and tradeoffs between customer and carrier demand and would have understood that the inventors, contemplating these tradeoffs, likewise understood the benefits of using Bluetooth for

⁹ The limitation is not “inherently” present because the WTRU described in the great-grandparent application does not “necessarily” detect a target WTRU using Bluetooth and transfer data over Wi-Fi. The application's written description equally encompasses WTRUs that perform both target detection and data transfer using a single communications protocol, either Bluetooth or Wi-Fi. *Cf. Schering Corp. v. Geneva Pharms.*, 339 F.3d 1373, 1377 (Fed. Cir. 2003) (claim element is inherently disclosed “if that missing characteristic is *necessarily* present, or inherent, in the single anticipating reference” (emphasis added)).

WTRU detection and WiFi for data transfer.” Prelim. Resp. 22; Ex. 2001 ¶¶ 84–85 (Edwards decl.).

One cannot satisfy the written description argument by showing that a claimed invention would have been obvious in light of the disclosure found in an ancestor application. *Lockwood*, 107 F.3d at 1572 (“A description which renders obvious the invention for which an earlier filing date is sought is not sufficient.”). Nor can a deficient written description be cured by showing that the inventor intended for that description to have a particular meaning. *See* Prelim. Resp. 22–26 (quoting inventor deposition testimony that purportedly supports Patent Owner’s arguments). The operative test is whether the text found within the four corners of a written description “reasonably conveys to those skilled in the art that the inventor had possession of the subject matter as of the filing date.” *Ariad*, 598 F.3d at 1351; *see also Parus Holdings*, 70 F.4th at 1373. We are persuaded, based on the current record, that the written description found in the great-grandparent application does not meet this test. Consequently, we find that Petitioner is reasonably likely to establish that claim 1 and its dependent claims 3–10, 12, 14–15, 21, and 46–47 are only entitled to an effective filing date of April 11, 2014.

B. Effective Filing Date for Claim 23 and Its Dependent Claims

Independent claim 23 is an apparatus claim that includes the limitations: “[a] wireless transmit/receive unit (WTRU) comprising: circuitry configured to . . . detect, by the WTRU over bluetooth, another WTRU; . . . and circuitry configured to transfer, by the WTRU to the selected another WTRU over WiFi, the selected media.” Ex. 1201, 11:61–12:7. Based on our review of the record, we conclude that claim 23, like

claim 1, does not have sufficient written description support in the great-grandparent application and therefore cannot benefit from the earlier effective filing date.

The written description in the great-grandparent application does not describe an apparatus that is already configured to operate as described in claim 23, without further programming or modification, by detecting another WTRU using Bluetooth technology and then transferring data to that target WTRU via Wi-Fi. While it is possible that the “circuitry” described in the written description could be modified to perform according to the claim language, there is no indication that the circuitry is already so configured. Thus, for the reasons discussed above in connection with claim 1, the written description does not “reasonably convey[] to those skilled in the art that the inventor had possession of the subject matter as of the filing date.” *Ariad*, 598 F.3d at 1351; *see also Parus Holdings*, 70 F.4th at 1373. Based on this record, we find that Petitioner is reasonably likely to establish that claim 23 and its dependent claims 25–32, 34, 36–37, 43, and 49–50 are also only entitled to an effective filing date of April 11, 2014.

IV. UNPATENTABILITY UNDER 35 U.S.C. § 102 OR § 103

Finally, we turn to the question of whether there is “a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a).

A. Level of Ordinary Skill in The Art

To determine whether an invention would have been obvious at the time it was made, we consider the level of ordinary skill in the pertinent art at the time of the invention. *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966). Various factors may be considered, including the “type of problems

encountered in the art; prior art solutions to those problems; rapidity with which innovations are made; sophistication of the technology; and educational level of active workers in the field.” *In re GPAC, Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995) (citing *Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc.*, 807 F.2d 955, 962–63 (Fed. Cir. 1986)). “[O]ne or more factors may predominate.” *Id.*

Microsoft asserts that the definition of a person of ordinary skill in the art would not differ materially between December 2008 and April 2014, the earliest and latest potential effective filing dates for the ’054 patent. Pet. 18. Microsoft proposes that on either of those dates, one of ordinary skill in the art “would have held a bachelor’s degree in computer science, electrical engineering, computer engineering, or a closely related field, and one to three years of experience working with wirelessly connected mobile devices that used common wireless communications protocols such as Bluetooth and 802.11/Wi-Fi. More education, e.g., a Master’s or Ph.D., would compensate for less work experience and vice versa.” *Id.*

InterDigital states that for the purposes of its Preliminary Response, it does not challenge Petitioner’s definition of a person of ordinary skill in the art, but “reserves the right to argue for a different definition should the Board institute trial in this proceeding.” Prelim. Resp. 7.

For purposes of this Decision, we adopt Petitioner’s definition of the level of skill for one of ordinary skill in the art, which we view as consistent with the ’054 patent and the asserted prior art, and we apply that definition in our analysis below.

B. Claim Interpretation

Because the Petition was filed after November 13, 2018, we apply the same claim construction standard that would be used in a civil action under 35 U.S.C. § 282(b), following the standard articulated in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). 37 C.F.R. § 42.100(b). Microsoft represents that it applies the plain and ordinary meaning of all claim terms and that no terms in the challenged claims require a means-plus-function analysis. Pet. 18–19. For the purposes of its Preliminary Response, InterDigital “adopts Microsoft’s position that no constructions are required.” Prelim. Resp. 7.

We determine that no express constructions are needed for us to render our Decision on Institution. *See, e.g., Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (“[W]e need only construe 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. Principles of Law

Anticipation of a claim under 35 U.S.C. § 102 occurs when each claimed element, and the claimed arrangement or combination of those elements, is disclosed inherently or expressly by a single prior art reference. *Therasense, Inc. v. Becton, Dickinson & Co.*, 593 F.3d 1325, 1332 (Fed. Cir. 2010). A reference inherently discloses an element of a claim “if that missing characteristic is *necessarily* present, or inherent, in the single anticipating reference.” *Schering*, 339 F.3d at 1377 (citation omitted) (emphasis added). “Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result

from a given set of circumstances is not sufficient.” *Therasense*, 593 F.3d at 1332 (citing *Cont’l Can Co. USA, Inc. v. Monsanto Co.*, 948 F.2d 1264,1269 (Fed. Cir. 1991)).

A claim is unpatentable under 35 U.S.C. § 103 if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious at the time of the invention to a person having ordinary skill in the art. *KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations, including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) objective evidence of non-obviousness, if present. *See Graham*, 383 U.S. at 17–18. When evaluating a claim for obviousness, we also must “determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *KSR*, 550 U.S. at 418 (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

D. Anticipation by Forutanpour Under 35 U.S.C. § 102

Petitioner argues that U.S. Patent Application Pub. No. 2011/0083111 to Forutanpour et al. (Ex. 1204, “Forutanpour”) anticipates claims 1, 4–9, 12, 14–15, 21, 23, 26–31, 34, 36–37, 43, 46–47, and 49–50. Pet. 33–57. The Preliminary Response does not identify any limitation of the challenged claims that is not present in Forutanpour. Prelim. Resp. 7–46. We have conducted our own review of the evidence and argument presented, and we determine that Petitioner has established a reasonable likelihood of showing that Forutanpour anticipates at least claim 1 of the ’054 patent, for the reasons discussed below.

The Forutanpour application was published on April 7, 2011. Ex. 1204, code (43). It thus qualifies as prior art under 35 U.S.C. § 102(a)(1) for any challenged claim found to have an effective filing date of April 11, 2014. Entitled “User Interface Gestures and Methods for Providing File Sharing Functionality,” Forutanpour “relates generally to computer user interface systems and more particularly to a gesture based user interface for activating a file sharing function.” *Id.* ¶ 2. Specifically, Forutanpour discloses “methods and devices that provide a gesture activated file sharing functionality enabling users to share files with other nearby computing devices.” *Id.* at Abstr.

On the current record, we agree with Petitioner that each limitation of claim 1 is present in Forutanpour. First, claim 1 recites a method performed by a WTRU that includes the WTRU processing a touchscreen input to select media in an application. Ex. 1201, 10:54–56 (’054 patent). According to the Specification, the term “WTRUs” refers to any devices “capable of operating in a wireless environment” (such as the “computing devices” referenced in Forutanpour). *Id.* at 2:26–32; *see* Ex. 1204 ¶ 4 (Forutanpour).

Second, claim 1 requires the WTRU to detect, using Bluetooth, another WTRU. Ex. 1201, 10:57. Forutanpour discloses that by accessing a file, a user can trigger a computing device to detect and establish wireless links with neighboring devices “by using, for example, Bluetooth®.” Ex. 1204 ¶¶ 70–72, 86. The files accessed may consist of, for example, “documents, photographs, videos, and music.” *Id.* ¶ 3.

Third, claim 1 requires the WTRU to process another touchscreen input to select the another WTRU. Ex. 1201, 10:58–59. Forutanpour discloses that the device may be configured to recognize that a touch on the

touchscreen tracing a gesture towards a second nearby device indicates the user's desire to share the selected file with the second device. Ex. 1204 ¶ 98, Figs. 9–18.

Claim 1 further requires the WTRU to send a message to transfer the selected media element to the another WTRU, and to wait to receive an acceptance to transfer the selected media. Ex. 1201, 10:60–63. In the same manner, Forutanpour discloses that the sending device “may send a query . . . to the targeted computing device . . . requesting permission to transmit the file,” and the targeted computing device “may respond by transmitting the requested access data.” Ex. 1204 ¶ 86.

Finally, claim 1 requires the WTRU to transfer, using a Wi-Fi communication, the selected media. Ex. 1201, 10:64–65. Forutanpour discloses that the user's device may transfer the selected file to the intended recipient “using a wireless technology different from the wireless technology used to establish the wireless link.” Ex. 1204 ¶¶ 4–5. That wireless technology may be WiFi. *Id.* ¶¶ 81–84 (“messages may similarly be transmitted via another type of wireless communication network, such as a WiFi . . . network”); *see also id.* at claim 2 (“establishing the wireless link is accomplished using a wireless technology selected from Bluetooth[®], ZigBee[®], Near Field Communication (NFC), wide-area-wireless IEEE 802.11 (WiFi), infrared (IrDA), and ultrasound”), claim 3 (“The method of claim 2, wherein: . . . transmitting the file sharing message to the targeted computing device is accomplished using a wireless technology different from the wireless technology used to establish the wireless link.”).

Thus, on this record, we find that Petitioner is reasonably likely to establish that claim 1 is unpatentable in light of Forutanpour. While this

alone is sufficient for institution purposes, we also find that Petitioner is reasonably likely to show that Forutanpour anticipates independent claim 23, which is commensurate in scope with claim 1.

In addition, we have reviewed Petitioner's contentions regarding the unpatentability of claims 4–9, 12, 14–15, 21, and 46–47, which depend from claim 1, as well as commensurate claims 26–31, 34, 36–37, 43, and 49–50, which depend from claim 23. Patent Owner does not challenge these contentions at this stage. We are persuaded, based on the evidence and argument presented, that Petitioner has demonstrated a reasonable likelihood of showing that these dependent claims are anticipated by Forutanpour.

E. Obviousness Under 35 U.S.C. § 103 Over Forutanpour, Alone or in Combination with Hinckley, Hoddie, or Heinonen

Petitioner argues that to the extent the Board finds that Forutanpour does not anticipate one or more of claims 1, 4–9, 12, 14–15, 21, 23, 26–31, 34, 36–37, 43, 46–47, and 49–50, Forutanpour still renders them unpatentable for obviousness. Pet. 33. We are persuaded, based on the evidence and argument discussed above, that Petitioner has demonstrated a reasonable likelihood of showing that these claims are unpatentable over Forutanpour.¹⁰

¹⁰ Petitioner's Ground 4 contends that at a minimum, claims 12 and 34 are obvious in light of the combination of Forutanpour with Hoddie. Pet. 59–60. Hoddie discloses “detecting nearby wireless devices using Bluetooth and then determining whether the device is compatible to receive a media element over a different, higher bandwidth interface (e.g., Wi-Fi) to expedite the transfer.” Pet. 60; Ex. 1206, 3:2–4:26, 7:16–33, 9:9–11:7, 12:10–13:33 (Hoddie). We are persuaded that Petitioner is reasonably likely to prevail in showing that claims 12 and 34 are unpatentable over either Forutanpour alone or the combination of Forutanpour and Hoddie.

Petitioner further contends that the remaining challenged claims, claims 3, 10, 25, and 32, are obvious in view of Forutanpour, alone or in combination with Hinckley (claims 3 and 25) or Heinonen (claims 10 and 32). *Id.* For the reasons that follow, we determine that Petitioner has established a reasonable likelihood that it would prevail in establishing that these claims are unpatentable as obvious.

Claim 3 reads: “The method of claim 1 further comprising: displaying, by the WTRU, a progress of the transfer to the selected another WTRU.” Ex. 1201, 11:1–3 (’054 patent). Claim 25 is similar in scope. *Id.* at 12:10–12. Petitioner contends that it was well known to display the progress of a data transfer to inform the user of the status of the transfer. Pet. 44; *see* Ex. 1203 ¶ 90 (Rysavy decl.). Hinckley, for example, discloses that “[w]hen the user presses a soft key associated with the Send icon 1022, a progress bar gives feedback on the transfer.” Ex. 1207 ¶ 58 (Hinckley); *see* Pet. 44. Petitioner contends that a person of ordinary skill in the art “would have been motivated to program the Forutanpour devices to display the progress of the transfer to indicate the time remaining for the transfer so that, for example, users know when they may move their devices out of Wi-Fi range of each other,” and would have had a reasonable expectation of success in doing so. Pet. 45–46; *see* Ex. 1203 ¶¶ 94–95 (Rysavy decl.). Moreover, even if it were not generally known to display the transfer progress, Petitioner expressly relies on Hinckley to confirm the obviousness of this feature. Pet. 58–59. We are persuaded that Petitioner is reasonably likely to establish a motivation “to program the Forutanpour devices to display the progress of the transfer, as taught by Hinckley, so that the user

could ‘estimate how much of the task has been completed and when the task will be finished,’ as was well known in the art.” *Id.* at 59.

Claim 10 reads: “The method of claim 9, wherein the detection of the plurality of WTRUs utilizes a service discovery protocol.” Ex. 1201, 11:17–18. Claim 32 is similar in scope. *Id.* at 12:26–27. Petitioner contends that persons of ordinary skill knew, as detailed in the Bluetooth specification, that Bluetooth’s service discovery protocol is used “to discover the presence of like-equipped computing devices.” Pet. 49–50; *see* Ex. 1204 ¶ 72 (Forutanpour); Ex. 1203 ¶ 103 (Rysavy decl.). The ’054 patent itself explains that “a service discovery protocol (SDP) such as currently available in protocols such as Bluetooth®” may be invoked “to discover all of the TapAPP enabled WTRUs operating in a particular location.” Ex. 1201, 5:38–46 (’054 patent). Petitioner further relies on Heinonen to confirm the obviousness of this feature. Pet. 61–62; Ex. 1274 ¶¶ 3, 6, 13–15 (Heinonen). We are persuaded by Petitioner’s argument and evidence showing that “[g]iven Forutanpour’s instruction to discover like-equipped devices using Bluetooth . . . , a POSITA would have been motivated with a reasonable expectation of success to use SDP to discover these like-equipped devices at least because this is how it was ubiquitously done in the art, as confirmed by Heinonen and others.” Pet. 62; *see* Ex. 1203 ¶¶ 103–104 (Rysavy decl.).

We have reviewed all of the arguments and evidence presented by both Petitioner and Patent Owner. In sum, we are persuaded that Petitioner has demonstrated, for purposes of this institution decision, that it is reasonably likely that Petitioner will be able to show that: (1) Forutanpour discloses, teaches, or suggests each element of claims 1, 4–9, 14–15, 21, 23, 26–31, 36–37, 43, 46–47, and 49–50; (2) Forutanpour, either alone or in

combination with Hinckley, would render obvious claims 3 and 25;
(3) Forutanpour, either alone or in combination with Hoddie, would render obvious claims 12 and 34; and (4) Forutanpour, either alone or in combination with Heinonen, would render obvious claims 10 and 32.

V. CONCLUSION

For the foregoing reasons, we determine that Petitioner has demonstrated that there is a reasonable likelihood that it would prevail in proving the unpatentability of at least one of the challenged claims of the '054 patent. We thus institute an *inter partes* review of all of the challenged claims of the '054 patent on all grounds asserted in the Petition. *See* 37 C.F.R. § 42.108(a).

Any findings or conclusions in this Decision are made only for the purposes of institution and are not dispositive of any issue. We have not made a final determination with respect to the patentability of any challenged claim. Our final determination will be based on the record as fully developed during trial, including any evidence or argument timely presented by the parties under our Rules.

VI. ORDER

For the reasons given, it is:

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review of the '054 patent is instituted on all of the challenged claims and all grounds asserted in the Petition; and

FURTHER ORDERED that 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; the trial commences on the entry date of this Decision.

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FOR PETITIONER:

Andrew M. Mason
Sarah Jelsema
Samuel B. Thacker
Frank Morton-Park
KLARQUIST SPARKMAN, LLP
andrew.mason@klarquist.com
sarah.jelsema@klarquist.com
samuel.thacker@klarquist.com
frank.morton-park@klarquist.com

FOR PATENT OWNER:

Scott W. Hejny
Richard A. Kamprath
George T. Fishback, Jr.
MCKOOL SMITH, P.C.
shejny@McKoolSmith.com
rkamprath@mckoolsmith.com
gfishback@mckoolsmith.com