UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICROSOFT CORPORATION,
Petitioner

v.

INTERDIGITAL PATENT HOLDINGS, INC.
Patent Owner

Case No. IPR2024-00538
U.S. Patent No. 9,173,054

PATENT OWNER'S RESPONSE

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Exhibit	Description
2001	Declaration of George Edwards
2002	June 21, 2022 Memorandum from Director Vidal to the Members of the Patent Trial and Appeal Board regarding Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation
2003	Case Management Order, *InterDigital, Inc. et al. v. Lenovo Group Limited et al.*, Case No. 5:23-CV-493-FL, Dkt. No. 33 (E.D.N.C. Nov. 30, 2023)
2004	Respondents' Invalidity Contentions in *Certain Electronic Devices, Including Smartphones, Computers, Tablet Computers, and Components Thereof*, Investigation No. 337-TA-1373 (ITC Nov. 28, 2023)
2005	Defendants' Preliminary Invalidity Contentions, *InterDigital, Inc. et al. v. Lenovo Group Limited et al.*, Case No. 5:23-CV-493-FL (E.D.N.C. Jan. 18, 2024)
2006	Transcript of the March 14, 2024 deposition of Dr. Alexander Reznik in *Certain Electronic Devices, Including Smartphones, Computers, Tablet Computers, and Components Thereof*, Investigation No. 337-TA-1373 (ITC)
2007	Shor, Godi, *How Bluetooth, UWB, and 802.11 stack up on power consumption*, EETimes April 15, 2008, available at https://www.eetimes.com/how-bluetooth-uwb-and-802-11-stack-up-on-power-consumption/.
2008	Jani, Jay and Mahendra Maheta, *Wireless Computing with Bluetooth & Wi-Fi*, 4th International Convention CALIBER-2006, Gulbarga, February 2-4, 2006, available at https://ir.inflibnet.ac.in/bitstream/1944/1103/1/59.pdf.
2009	Kuo, Cynthia, Jesse Walker, and Adrian Perrig, *Low-cost Manufacturing, Usability, and Security: An Analysis of Bluetooth*

	Simple Pairing and Wi-Fi Protected Setup, NetSec 2007, available at https://netsec.ethz.ch/publications/papers/kuo_walker_perrig_simple.pdf.
2010	Tabona, Andrew, *802.11b vs. Bluetooth*, Techgenix April 19, 2005, available at https://techgenix.com/80211b-bluetooth/.
2011	Paulus, Wolf, *Data Transfer Speeds Compared*, July 4, 2006, available at https://web.archive.org/web/20200919150247/https://wolfpaulus.com/dts/.
2012	Foley, Michael, *How Bluetooth and 802.11 will team up to deliver high speed wireless connections*, EETimes May 13, 2008, available at https://www.eetimes.com/how-bluetooth-and-802-11-will-team-up-to-deliver-high-speed-wireless-connections/.
2013	June 6, 2024 Email from the Board to Counsel
2014	Updated Declaration of George Edwards
2015	Updated Transcript of the March 14, 2024 deposition of Dr. Alexander Reznik in *Certain Electronic Devices, Including Smartphones, Computers, Tablet Computers, and Components Thereof*, Investigation No. 337-TA-1373 (ITC)

InterDigital Patent Holdings, Inc. ("Patent Owner" or "InterDigital") submits this response in accordance with 35 U.S.C. § 313 and 37 C.F.R. § 42.107, responding to the Petition for *Inter Partes* Review ("Petition") of claims 1, 3-10, 12, 14-15, 21, 23, 25-32, 34, 36-37, 43, 46-47, and 49-50of U.S. Patent No. 9,173,054 ("the '054 Patent") filed by Microsoft Corporation ("Petitioner" or "Microsoft"). The Board should find all Challenged Claims patentable for the following reasons.

I. INTRODUCTION

The Petition fails because the Challenged Claims of the '054 Patent are entitled to a priority date of at least December 22, 2009, and the lead reference cited by Petitioner in each of its Grounds (Forutanpour) is not prior art. Microsoft's Petition rests on the unsupported premise that the specification of the '054 Patent, as well as all parent applications to which the '054 Patent claims priority, lack written description support for two limitations recited in Claims 1 and 23:

- using Bluetooth to detect nearby devices and then
- using WiFi to transfer a media element to one of the detected devices.

Petition, 20. However, as shown in detail below, the claims of the '054 Patent, including Claims 1 and 23, are entitled to a priority date at least as early as December 22, 2009, the filing date of the first utility application (the '948 Application, Ex-1282) in the application history. The '948 Application explicitly teaches that

communication peripherals, which are a part of each WTRU, "may include technologies such as a third generation partnership (3GPP) second or third generation (2G/3G) modem, Bluetooth® or WiFi®." Ex-1282, [0024]; Ex-1201, 2:60-63. The specification of the '948 Application shows that the inventors disclosed using both Bluetooth and WiFi in a single embodiment, where "[a]ny combination of or all of these communication technologies may be implemented in a single component design." Ex-1282, [0024]; Ex-1201, 2:63-65. As shown below, this is all that is required to satisfy the Federal Circuit's standard for written description in a patent application. Moreover, as discussed below, there is no requirement that the specification describe every claimed embodiment verbatim so long as the substance of the limitations in the claimed embodiments are disclosed in the specification.

Finally, the embodiment in question, with Bluetooth used for detecting nearby WTRUs and WiFi for transferring media elements from the sending WTRU to a Bluetooth-detected WTRU, was clearly disclosed by the named inventors at the time of the invention. That fact was confirmed through the testimony of inventor Dr. Alexander Reznik when he was deposed in the co-pending ITC investigation and questioned regarding the scope of the '054 and '933 patents as well as the technologies expressly disclosed by the inventors when filing the '948 Application.

Thus, the '054 Patent and its Challenged Claims are entitled to a priority date of at least as early as December 22, 2009. For this reason, the primary reference on

which Microsoft relies for each Ground in the Petition, Forutanpour, is not prior art to the ’054 Patent and the Challenged Claims are patentable.

II. BACKGROUND

A. The ’054 Patent

The ’054 Patent includes two independent claims, Claims 1 and 23, and each of these claims, along with numerous claims that depend from Claims 1 and 23, have been challenged in the Petition. Petition, 2. Specifically, Petitioner has challenged the patentability of claims 1, 3-10, 12, 14-15, 21, 23, 25-32, 34, 36-37, 43, 46-47, and 49-50 (collectively, the “Challenged Claims”).

The ’054 Patent describes, among other things, a device and method for wirelessly transferring data from a touchscreen device. According to the method of the patent, a user may select a file to transfer from a touchscreen device. The processor of the touchscreen device uses Bluetooth to detect nearby devices, from which the user can select a target device. After sending a message to the target device to transfer the selected file, and receiving an acceptance, the touchscreen device transfers the file to the target device using WiFi. Claim 1 of the ’054 Patent is representative and is shown 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

a media element;

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. As specifically recited in Claim 1, the wireless transmit/receive unit ("WTRU") is a touchscreen device capable of receiving touchscreen inputs. *Id*., Figure 1; 2:42-45 ("In general, WTRU 101, and WTRU 103 are each minimally comprised of an application processor 105, a communication peripheral 107, and a touchscreen/display peripheral 109.").

The WTRU is capable of processing a touchscreen input from a user indicating that a media element is desired to be transmitted to a second device. *Id*., 8:6-45. When such an input is detected, the transmitting WTRU relies on a communication technology to detect another WTRU (*e.g.*, a target WTRU) in proximity to the transmitting WTRU. These communications technologies can "include technologies such as a third generation partnership (3GPP) second or third generation standards (2G/3G) modem, Bluetooth© or WiFi©." Ex-1201, 2:61-63.

Furthermore, the specification of the ’054 Patent makes clear that “[a]ny combination or all of these communication technologies may be implemented in a single component design.” *Id*., 2:63-65.

In a specific embodiment, the ’054 Patent discloses that environment information can be gathered by the transmitting WTRU about target WTRUs, and the information gathering process can be “gathered via a service discovery protocol (SDP) such as currently available protocols such as Bluetooth® ….” *Id*., 5:38-40. This same protocol enables the transmitting WTRU to discover other information about target WTRUs. *Id*., 5:38-6:17. The information collected by the transmitting WTRU enables the transmitting WTRU to understand the capabilities of the target WTRU and generate configuration information and transmission instructions that can be used to prepare “instructions for implementing the transfer process through specific components in the communication peripheral.” Ex-1201, 5:38-6:17; 6:50-7:6; Figure 3.

Once a desired target WTRU has been identified, a user can select that specific target WTRU from among other available WTRUs. Ex-1201, 7:7-22. The transmitting WTRU can then send a message to the target WTRU to determine whether the user of the target WTRU is willing to receive the transfer of information (which may be media element such as a digital photograph, video file, word processing document, or other media element (Ex-1201, 8:28-32). Ex-1201,

Abstract; Claim 1; Claim 23. If the user accepts the request to transfer the media element, the media element can be transferred to the target WTRU. *Id*., Abstract; 8:60-63; Claim 1; Claim 23. The transfer may be based on the aforementioned configuration information, which accounts for "settings for attributes such as power level, antenna orientation, security parameters, and the like." *Id*., 6:50-7:6. Thus, in different embodiments, the transfer of the media element data may be completed using one of the communication technologies disclosed in the '054 Patent, including Bluetooth and WiFi. Ex-1201, 2:46-49; 2:55-65; 4:53-65; 6:50-7:6; Claim 1; Claim 23; Ex-2014, ¶¶2-3.

B. Claim Construction

For the sake of this Response only, Patent Owner adopts Petitioner's position that no constructions are required.

C. Person of Skill in the Art

For the purposes of this Response, Patent Owner adopts the Institution Decision's definition of a POSITA, which is "someone that would have had 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" and further "more education experience would compensate for less work experience and vice versa."

Institution Decision at 13 (cleaned up).

Patent Owner reserves the right to argue for a different definition at a later date.

III. ARGUMENT

A. Forutanpour is not Prior Art to the ’054 Patent

Microsoft argues that a “lack of § 112 support means the challenged claims are not entitled to the filing dates of either the 2012 parent application (EX1281) or the 2009 grandparent application (EX1282) or the 2008 provisional application (EX1266). The earliest possible effective filing date of the challenged claims is thus April 11, 2014.” Petition, 20. Microsoft then concludes that “Forutanpour (EX1204) is prior art under at least AIA Sections 102(a)(1) and 102(b)(1) because it published April 7, 2011, more than one year before the ’054 patent’s filing date of April 11, 2014.” *Id.*, 33. Microsoft is incorrect.

The Challenged Claims are entitled to a priority date of at least as early as December 22, 2009. The earliest priority date for Forutanpour is April 7, 2011. Petition, 33. For this reason Forutanpour is not prior art to the ’054 Patent, and all of Petitioner’s Grounds—which rely on Forutanpour as the primary reference—fail.

The original utility application to which the ’054 Patent Claims priority, U.S. Patent Application No. 12/644,948 (“the ’948 Application”) (Ex-1282) was filed on December 22, 2009. The ’054 Patent is a continuation of the ’948 Application, and

thus shares a common specification. Ex-1201 (Related U.S. Application Data). As shown in detail below, the ’948 Application provides written description support for each and every element of the Challenged Claims, and the Board should find that Forutanpour is not prior art because the specification of the ’948 Application provides written description support for each challenged element.

At the outset, it is undisputed that the specification discloses both Bluetooth and WiFi functionality. Petition, 20, 24-25, 27. The dispute is whether the description of Bluetooth and WiFi in the specification supports the language of independent Claims 1 and 23 to the extent those claims recite, for example, “detecting, by the WTRU using Bluetooth, a plurality of WTRUs in proximity to the WTRU” and “transferring, by the WTRU using a WiFi communication, the selected media elements to the selected WTRU.” Ex-1201, Claim 1; Petition, 25-26. But the specification is clear that “[a]ny combination or all of these communication technologies,” including Bluetooth and WiFi, “may be implemented in a single component design.” Ex-1201, 2:60-65.

According to 35 U.S.C. § 112, “[t]he specification shall contain a written description of the invention, and of the manner and process of making and using it . . . as to enable any person skilled in the art to . . . make and use the same.” The Federal Circuit’s “test for sufficiency” of an application’s written description “is whether the disclosure of the application relied upon reasonably conveys to those

skilled in the art that the inventor had possession of the claimed subject matter as of the filing date." *Ariad Pharms., Inc. v. Eli Lilly& Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (quoting *Ralston Purina Co. v. Far-Mar-Co, Inc.*, 772 F.2d 1570, 1575 (Fed. Cir. 1985) (citing *In re Kalsow*, 707 F.2d 1366, 1375 (Fed. Cir. 1983)). The test for "possession of the claimed subject matter" requires "an objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art." *Id*. This is a factual inquiry, and the court has "recognized that determining whether a patent complies with the written description requirement will necessarily vary depending on the context." *Id*. For example, "the 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." *Id*. (citing *Capon v. Eshhar*, 418 F.3d 1349, 1357-58 (Fed. Cir. 2005)).

Microsoft suggests that the '948 Application (and thus the '054 Patent specification) fail to disclose two specific elements of the Challenged Claims:

> Here, the ancestor applications do not show possession of the claimed method that requires using Bluetooth to detect nearby devices and then using WiFi to transfer a media element to one of the detected devices (or, as in claim 23 and its dependent claims, a processor and/or circuitry configured to carry out such a method).

Petition, 20 (color added). However, as shown below, a POSITA would recognize that the four corners of the ’948 Application support both Bluetooth detection of proximate WTRUs and WiFi transfer of data between a sending WTRU and a detected WTRU. Ex-2014, ¶¶71, 72-74.

1. The ’948 Application discloses the use of both Bluetooth and WiFi in a single WTRU

As described above, the ’054 Patent relates to a system and method for sharing media elements (*e.g.*, digital photographs) between two nearby wireless transmit/receive units (WTRUs). Ex-1201, Claims 1, 23; 8:28-32. The ’948 Application, whose specification is identical to the specification of the ’054 Patent, discloses that “Figure 1 is an illustration of a sending WTRU 101 and a receiving WTRU 103 whereby data is transferred between the WTRUs … [that] are similarly equipped.” Ex-1282, [0024]. Each of the WTRUs include a “communication peripheral 107, and a touchscreen/display peripheral 109,” and” the communication peripheral 107 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*. “An application 123 (hereinafter referred to as ‘TapAPP’) may include application software configured to implement a method of data transfer between [the sending] WTRU 101 and [the receiving] WTRU 103.” *Id*.

Each WTRU includes a communication peripheral, and "[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*." Ex-1282, [0024] (emphasis added); Figure 1. The emphasized language shows that the '948 Application enables a POSITA to make and use the invention claimed in the '054 Patent, a single WTRU that utilizes Bluetooth for proximity detection and WiFi for data transfer in a single embodiment. *See* Ex-2014, ¶¶74 ("This disclosure illustrates that the inventors of the '948 Application disclosed and were in possession of the use of a 3GPP modem, Bluetooth, and WiFi to detect nearby WTRUs and transfer data between sending WTRU and a detected WTRU, and that any combination or all of these communication technologies may be implemented in a single component design." (cleaned up)). According to Dr. Edwards, "[i]n my opinion, the disclosure of the '948 Application informs a POSITA that the inventors had possession of the claimed subject matter, including Bluetooth detection of a nearby WTRU and the transfer of data to the detected WTRU using WiFi, at least as early as the filing date of the '948 Application, which is December 22, 2009." *Id.*

The '948 Application discloses a WTRU that comprises a communication peripheral that can consist of technologies such as Bluetooth or WiFi. Ex-1282,

[0024]. The '948 Application also discloses a WTRU that comprises multiple communication peripherals that can consist of any combination of the listed communication technologies (e.g., a combination of Bluetooth for proximity detection and subsequently WiFi for data transfer). *Id*. As discussed above, the '948 Application clearly discloses sending and receiving WTRUs that may be equipped with 3GPP functionality, Bluetooth, WiFi, or any combination of those communications technologies "to implement a method of data transfer between [the sending] WTRU 101 and [the receiving] WTRU 103." *Id*.

The Board is correct that the '948 Application discloses a communication peripheral that uses Bluetooth to discover nearby devices. However, the Board states that the '948 Application limits the communication peripherals within the WTRU to either Bluetooth or WiFi.

> [O]ur preliminary understanding of paragraphs 24, 34, and 39 of the grandparent application is that they disclose a WTRU having a communication peripheral that can (a) *operate in Bluetooth or WiFi mode*, (b) use Bluetooth to discover nearby devices and services, (c) transfer data to nearby devices, and (d) use discovered environmental information to determine which components are needed to effect data transfer. But they do not expressly disclose using Bluetooth to discover a nearby WTRU and WiFi to transfer data to that WTRU.

Institution Decision at 21 (emphasis added). But this is an impermissibly narrow reading of the specification. The '948 Application does not limit the communication peripherals to either Bluetooth or WiFi, but rather the '948 Application discloses that the communication peripherals can include both Bluetooth and/or WiFi. Ex-1282, [0024] ("Any combination or all of these communication technologies [(e.g., Bluetooth and WiFi)] may be implemented in a single component design."). A POSITA would understand that the '948 Application disclosed an embodiment where Bluetooth is used for proximity detection and WiFi is used for data transfer since Bluetooth is understood to be useful for proximity detection and WiFi is understood to be useful for data transfer. Ex-2014, ¶¶71 ("However, to a POSITA, the '948 Application teaches the usage of Bluetooth detection of proximate WTRUs and WiFi transmission of data between a sending WTRU and a detected WTRU.").

Furthermore, while the Board and Petitioner correctly cite *Lockwood v. American Airlines, Inc.*, 107 F.3d 165 (Fed. Cir. 1997), *Lockwood* actually supports Patent Owner's arguments. Institution Decision at 17, 21, 22; Petition at 19, 21-23. *Lockwood* states the standard for disclosure required in the specification of the '948 Application: "[w]hile the meaning of terms, phrases, or diagrams in a disclosure is to be explained or interpreted from the vantage point of one skilled in the art, all the limitations must appear in the specification." 107 F.3d at 1572. But contrary to Petitioner's suggestion and the Board's initial analysis, the '948 Application

expressly discloses each and every element of the Challenged Claims. "The 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." Ex-1282, [0024]. The language "[a]ny combination" or "all" indicates a disclosure that using Bluetooth for proximity detection and WiFi for data transmission can be present in a "single component design." *Id*.; *See* Ex-2014, ¶¶73 ("The specification discloses the usage of multiple communication technologies being used in a single embodiment").

In addition to *Lockwood*, both the Board and Petitioner rely on *Hyatt v. Boone*, 146 F.3d 1348 (Fed. Cir. 1998). Institution Decision at 21; Petition at 23. According to *Hyatt*, one way to show written description support is "the applicant must show that any absent text is necessarily comprehended in the description provided and would have been so understood at the time the patent application was filed." 146 F.3d at 1354-55. This is exactly what the '948 Application does. The '948 Application discloses communication peripherals including technologies such as "third generation partnership (3GPP) second or third generation standards (2G/3G) modem, Bluetooth® or WiFi®." Ex-1282, [0024]. The '948 Application continues by disclosing that a single WTRU may include multiple communication peripherals including "all" or "any combination" of the previously disclosed technologies. *Id*.

While the exact claim language of the '054 Patent is not written in the '948 Application, a POSITA at the time that the '948 Application was filed would have necessarily comprehended in the description provided that the Challenged Claim elements were disclosed. *See* Ex-2014, ¶¶74 ("A POSITA reading the specification would conclude that the '948 Application discloses using a combination of Bluetooth and WiFi in a single component design.").

Moreover, as noted below, not every embodiment need be claimed, or recited in a specification in its exact words, in order to meet the written description requirement. The disclosure must be read from the perspective of a person of skill in the art—as well as precedent stating that the disclosure need not describe a limitation *in haec verba*." *Novartis Pharms. Corp. v. Accord Healthcare, Inc.*, 21 F.4th 1362, 1373 (Fed. Cir. 2022) (citing *All Dental Prodx, LLC v. Advantage Dental Prods., Inc.*, 309 F.3d 774, 779 (Fed Cir. 2002) ("[T]he failure of the specification to specifically mention a limitation that later appears in the claims is not fatal when one skilled in the art would recognize upon reading the specification that the new language reflects what the specification shows has been invented."); *LizardTech, Inc. v. Earth Res. Mapping, Inc.*, 424 F.3d 1336, 1345 (Fed. Cir. 2005) ("A claim will not be invalidated on section 112 grounds simply because the embodiments of the specification do not contain examples explicitly covering the full scope of the claim language.") (citing *Union Oil Co. v. Atlantic Richfield Co.*, 208 F.3d 989, 997

(Fed. Cir. 2000) ("The written description requirement does not require the applicant 'to describe exactly the subject matter claimed, [instead] the description must clearly allow persons of ordinary skill in the art to recognize that [he or she] invented what is claimed.'").

Thus, it is without dispute that the '948 Application discloses a system and method for sending data between WTRUs. Moreover, this same disclosure shows that the inventors of the '948 Application, as well as the later issued '054 Patent, clearly were in possession of and disclosed the concept of detecting nearby WTRUs and transferring data between a sending WTRU and a detected WTRU using a 3GPP modem, Bluetooth, and WiFi, and that "[a]ny combination or all of these communication technologies may be implemented in a single component design." Ex-1282, [0024]; Ex-2014, ¶¶72-74. This disclosure alone satisfies the written description requirement of § 112 and shows that the inventors were in possession of the Challenged Claim elements at least as early as December 22, 2009. Moreover, a POSITA reading within "the four corners of the specification" demonstrates that the inventors were in possession of the claimed subject matter—namely, Bluetooth detection of a nearby WTRU and WiFi transfer of data to that WTRU—because the '948 Application discloses using a combination of Bluetooth and WiFi in a "single component design." *Ariad*, 598 F.3d at 1351; *Novartis*, 21 F.4th at 1368-69 ; *Hologic, Inc. v. Smith & Nephew, Inc.*, 884 F.3d 1357, 1361 (Fed. Cir. 2018); Ex-

2014, ¶¶72-74. This portion of the specification shows that "the disclosure of the application relied upon [for priority] reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date." *Id*.; *Crown Packaging Tech., Inc. v. Ball Metal Bev. Container Corp.*, 635 F.3d 1373, 1380 (Fed. Cir. 2011).

2. The '948 Application discloses using Bluetooth for detecting nearby WTRUs using Bluetooth

The '948 Application teaches that the sending "WTRU 101 includes a processor 105 that is configurable to process information from the UI 109 and the communication peripheral 107." Ex-1282, [0030]. The "[p]rocessor 105 is also configured to receive environment information stored by the communication peripheral 107" that can be used "to identify a target WTRU $101_{c,t}$." *Id*. "The environment information 301 may be gathered via a service discovery protocol (SDP) such as currently available in protocols such as Bluetooth®, for example" and "[t]his protocol allows the WTRU 101 to discover the services (e.g. TapAPP as described herein) that are supported by other WTRUs operating in the local environment," including target $WTRU_{c,t}$. Ex-1282, [0034] ("Information 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 $WTRU_c$ or set of candidate WTRUs 101c in a local proximity."). Thus, the '948 Application explicitly discloses

detecting candidate receiving WTRUs in proximity to a sending (transmitting) WTRU using a Bluetooth SDP. Ex-1282, [0034]-[0036]; Ex-2014, ¶¶77-79.

3. The ’948 Application discloses using WiFi to transfer data between a sending WTRU and a nearby WTRU

The ’948 Application discloses that the sending WTRU can use the detected environment information “to discover the services … supported by [the] other [detected] WTRUs operating in the local environment,” (Ex-1282, [0034]) and this 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, [0039]. For example, the ’948 Application teaches that “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.” Ex-1282, [0032]. The target discrimination algorithm relies on, for example, environment information collected by the sending WTRU as part of the service discovery protocol (Ex-1282, [0034]) to generate configuration information 309 and transmission instructions 311 for use in transmitting information to a target $WTRU_{c,t}$. *Id*., Figure 3; [0039]-[0042].

> Configuration information 309 may include settings for attributes such as power level, antenna orientation, security parameters and the like. Transmission instructions 311 may include information regarding the data to be communicated and

> the identity of the target WTRU $101_{c,t}$ ***as well as instructions for implementing the transfer through specific components in the communication peripheral***. The configuration information 309 and transmission instructions 311 may be delivered to the communication peripheral 107.

Id., [0039] (emphasis added); [0042] ("Transmission instructions 517 are generated to facilitate the data transfer to the target WTRUs $101_{c,t}$."); Claim 14 ("generating configuration information and target transmission instructions based on the selected media element; and instructing a communication peripheral to transmit the selected media element to the selected target WTRU based on the generated configuration information and transmission instructions.").

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," (Ex-1282, [0024]) transmission instructions can indicate that WiFi should be used to transfer data to the target WTRU. Ex-2014, ¶¶80-81. The configuration information, described above, specifically includes factors like power level. *Id*. A POSITA would understand that the gathering of environment information towards detection of target WTRUs would benefit from a low-power communication protocol like Bluetooth without requiring high bandwidth, as discussed in Section 7.1.2. As such, a POSITA would consider various factors such as available services

and transmission speed of those services. Ex-2014, ¶82. It was well-known that WiFi offered better transmission speeds as an advantage over Bluetooth, while Bluetooth on the other hand offered low power consumption. Ex-2014, ¶83. Further, a POSITA at the time the ’948 Application was filed would have understood the benefits of using WiFi for data transfer when sending media between devices (WTRUs). Ex-2014, ¶¶81-84.

For these reasons, a POSITA would understand that the ’948 Application, and the child ’054 Patent that ultimately issued from that Application as a continuation, disclose both Bluetooth detection of proximate WTRUs and WiFi data transfer of media elements from a sending WTRU to the target WTRU. A POSITA would have understood the benefits and tradeoffs between customer and carrier demand and would have understood that the inventors, identifying these tradeoffs, likewise understood the benefits of using Bluetooth for WTRU detection and WiFi for data transfer. Ex-2014, ¶¶84-85.

4. A named inventor of the ’948 Application and ’054 Patent confirmed that the Application discloses Bluetooth detection and WiFi data transmission between WTRUs

Microsoft RPI Lenovo deposed one of the named inventors, Dr. Alexander Reznik, in connection with the underlying ITC investigation on March 14, 2024. Ex-2015. In that deposition, Lenovo questioned Dr. Reznik extensively concerning the disclosure in the patent specification, the claims of the ’054 Patent and the related

’933 Patent, and the inventions disclosed at the time the ’948 Application was filed. Dr. Reznik’s testimony is helpful because it explains the inventions claimed in the ’054 and ’933 Patents and identifies the manner in which the inventors decided to solve the problem of detecting nearby WTRUs and transferring data to the detected WTRUs. Ex-2014, ¶¶86-87.

The Federal Circuit held that “[a]n inventor is a competent witness to explain the invention and what was intended to be conveyed by the specification and covered by the claims.” *Bradium Techs. LLC v. Iancu*, 923 F.3d 1032, 1044 (Fed. Cir. 2019) (citing *Voice Techs. Grp., Inc. v. VMC Sys.*, 164 F.3d 605, 615 (Fed. Cir. 1999)). Moreover, “[t]he testimony of the inventor may also provide background information, including explanation of the problems that existed at the time the invention was made and the inventor's solution to these problems.” *Voice Techs.*, 164 F.3d at 615 (citing *Hoechst Celanese Corp. v. BP Chems. Ltd.*, 78 F.3d 1575, 1580 (Fed. Cir. 1996)). Dr. Reznik explained the scope of the invention at the time the provisional application (Ex-1266) and the ’948 Application (Ex-1282) were filed, and his testimony is compelling in view of Microsoft’s unpersuasive written description arguments.

Dr. Reznik was questioned about the state of the art at the time of the invention, and he responded that “by 2007 we had cell phones with Bluetooth and WiFi capabilities, which would have meant that within a single device there was a –

in the language of this particular patent, a peripheral was 3GPP capability. One was WiFi and one was Bluetooth." Ex-2015, 146:8-23. When questioned as to whether the patent discloses WiFi data transfer, Dr. Reznik testified:

> Q. Let's back that up a little bit then. ***What were the known ways to transfer data that he refers to***?
>
> A. So any kind of wireless transfer technology. ***So WiFi for sure***. You know, mobile. Because, by that time, mobile phones were data transfer devices, right. So those were the connectivity options. And then somehow they all involved having an application server somewhere, like a Dropbox or something, right, that would facilitate it or something like that. I'm sure there may have been some other ones that we had in mind.
>
> Q. ***So those were WiFi and cellular data transfer; is that right***?
>
> A. Right. So you're asking me today that were reasonable technologies back then for data transfer. ***WiFi and cellular definitely come to mind***.

Ex-2015, 58:14-59:9 (emphasis added). When questioned as to what technology in the '948 Application would work best for proximity detection, Dr. Reznik testified:

> Q. ***What were the solutions back in 2008, when you're working on this with Mr. Carlton, in terms of figuring out devices that are nearby each other?***

A. ***So technologies like Bluetooth***, right, so – and I mentioned before the 802.15 family of standards. There's a couple of other ones in there. ***They tend to be pretty good at figuring out what devices are nearby, right. That's why we use Bluetooth for wireless phones and stuff like that.***

Ex-2015, 60:18-61:3 (emphasis added). Furthermore, when asked what solution the '948 Application was trying to provide, Dr. Reznik testified:

Q. What was the ***solution you had in mind*** when you were having this discussion with Mr. Carlton?

A. So as I recall, right, once we kind of realized that, hey, ***the reason this is hard is because you don't have the technology that can do both proximity and transfer in a natural way***, the solution became, you know, ***we've got one set of technologies that can do the proximity,*** right, that can figure out the two devices are next to each other. ***We have another set of technologies that could effectively [sic] do data communication***.

Let's figure out how we take advantage of both to actually achieve this result that we wanted to achieve, which is digital equivalent of handing a piece of paper over to something that's right next to you.

Ex-2015, 61:12-62:4 (emphasis added). When pressed as to whether the invention discloses a communication peripheral 107 (in a WTRU) that must be limited to "a Bluetooth device or a WiFi device but not both," Dr. Reznik testified:

> Q. Did you have any specific technology in mind for those two things that had to be done?
>
> A. So we were looking at families of technologies, right. ***So I mentioned cellular and WiFi as two good families for data transfer***.
>
> ***I mentioned, you know, 802.15-type stuff -- Bluetooth, Zigbee, for example -- as things that would have been good for proximity detection***.
>
> Whether we stopped at that point and we said, "Hey, this is the best one in this family or this is the best one in that family," I don't remember, right. We kind of said there's options on both sides.

Ex-2015, 64:2-17 (emphasis added). Finally, when questioned as to whether the invention discloses using Bluetooth for detecting target WTRUs and WiFi for transferring data from the sending WTRU to the target WTRU, Dr. Reznik responded with the following testimony.

> Q. Okay. And would Bluetooth also be a technology you had in mind when referring to these layer 2, layer 3, and baseband?

> THE WITNESS: Actually, although if -- ***the way I am looking at the problem we're trying to solve here, right, Bluetooth is usually more of a proximity technology***.
> ***This paragraph refers to a data transmission technology. I think, for that, we would be leaning towards WiFi and cellular as more typical uses as opposed to Bluetooth***.

Ex-2015, 155:18-156:6 (emphasis added).

Dr. Reznik is without question a POSITA, and his testimony explains how the inventors disclosed using the communication technologies disclosed in the ’948 Application, including Bluetooth and WiFi. Ex-2014, ¶¶88-91. Moreover, Dr. Reznik’s testimony “explain[s] the invention and what was intended to be conveyed by the specification and covered by the claims.” *Bradium Techs.*, 923 F.3d at 1044; *Voice Techs.*, 164 F.3d at 615. As supported by the specification of the ’948 Application, and explained by Dr. Reznik in the deposition taken by Lenovo, the inventors of the ’948 Application and ’054 Patent clearly disclosed Bluetooth detection of nearby WTRUs, WiFi data transfer (of a media element) between a sending WTRU and a receiving (target) WTRU, and the use of both Bluetooth detection and WiFi trasnfer within a single method or device. Ex-1282, [0024] (“The 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.") (emphasis added).

For this reason, Microsoft's priority challenge fails, the '054 Patent is entitled to at least the priority date of the earlier-filed '948 Application (December 22, 2009), and institution should be denied because Forutanpour is not prior art.

5. This is a predictable technology and the cases cited by Microsoft are inapposite

For the reasons identified above, the elements of the '054 Patent Claims challenged by Microsoft, namely Bluetooth detection of nearby devices and WiFi transfer of media elements from a sending WTRU to a nearby, detected device, are supported by the '948 Application and the specification of the '054 Patent (which is identical to that of the '948 Application). Accordingly, the inventors were in possession of these inventive concepts at least as early as the filing date of the '948 Application (December 22, 2009).

a. The technology described in the '948 Application is neither complex nor unpredictable

As stated above, the Federal Circuit has held that the concept of "possession" of the claimed invention is "an objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art." *Ariad*, 598 F.3d at 1351. Moreover, "the 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." *Id.*; *Hologic*, 884 F.3d at 1361 ("We agree with the Board's finding that the field of this invention is a predictable art, such that a lower level of detail is required to satisfy the written description requirement than for unpredictable arts.").

The technology disclosed in the '948 Application is easily understandable, and the specific technologies disclosed by the inventors for detection of nearby devices and the transfer of data to the detected devices are clearly delineated within the four corners of the specification. Ex-2014, ¶¶82, 87. For example, the '948 Application clearly identifies detection and/or transmission using 3GPP (2G/3G) cellular, Bluetooth, WiFi, and Wireless USB. Ex-1282, [0024]. This is far from the "long, open-ended list of other technologies" of which Microsoft complains in its Petition. Petition, 20; *Novartis*, 21 F.4th at 1370 ("The [patent-in-suit] does not contain the laundry-list-type disclosures that we have found require guidance to direct a skilled artisan to the claimed species …."); *Hologic*, 884 F.3d at 1361. Moreover, this case is a far cry from cases like *Ariad*, which relates to biotechnology and the "regulation of gene expression" and necessarily requires a more detailed description of a claimed, specific species of a diverse genus. *Ariad*, 598 F.3d at 1340; *Novartis*, 21 F.4th at 1370.

b. "Blaze marks" are not required when a claimed species is expressly described in the specification

Further, this case is much different from *Purdue Pharma L.P. v. Faulding Inc.*, cited by Microsoft in support of its argument that "blaze marks" are required to direct a skilled artisan to a claimed method when "a forest [is disclosed] in the original application, and then later [an applicant] pick[s] a tree out of the forest and say[s] here is my invention." 230 F.3d 1320, 1326 (Fed. Cir. 2000); Petition, 26. Here there is no "forest," only a limited number of detection and transfer technologies that are explicitly disclosed in the specification and confirmed by Dr. Reznik. Ex-2014, ¶¶82-87.

In fact, the Federal Circuit held that "'[b]laze marks' are not necessary where the claimed species is expressly described in the specification …." *Novartis*, 21 F.4th at 1370 (noting that "'[b]laze marks' directing an investigator of ordinary skill in the art to the claimed species from among a forest of disclosed options are not necessary in this case. In cases where the specification describes a broad genus and the claims are directed to a single species or narrow subgenus" blaze marks may be necessary to "lead an ordinarily skilled investigator toward such a species among a slew of competing possibilities."). That is not the case here because each of the claimed "species" of WTRU detection (Bluetooth) and transmission (WiFi) are expressly described in the '948 Application, and the field of the invention "is a predictable art,

such that a lower level of detail is required to satisfy the written description requirement than for unpredictable arts." *Novartis*, 21 F.4th at 1370; *Hologic*, 884 F.3d at 1361.

c. The disclosure in the '948 Application explicitly discloses the claimed detection (Bluetooth) and data transfer (WiFi) technologies

LizardTech is equally inapplicable to the present facts. Petition, 29; *LizardTech*, 424 F.3d at 1345-46. The hypothetical proposed in *LizardTech*, and on which Microsoft relies, is not analogous to the present case. The patent at issue in *LizardTech* unambiguously limited the scope of the invention to a ***single method*** of creating a discrete wavelet transform (DWT), while the Applicant sought to extend the scope of that disclosure "to cover ***all ways*** of performing DWT-based compression processes that lead to seamless DWT," and "there [was] no support for such a broad claim in the specification." *LizardTech*, 424 F.3d at 1344 (emphasis added). Here, the Challenged Claims, rather than reciting simply "detecting" and "transmitting," recite detecting and transmitting using specific technologies disclosed in the specification—including Bluetooth and WiFi. Ex-1201, Claims 1, 23. *See also Crown Packaging*, 635 F.3d at 1382 (distinguishing *LizardTech* and two other cases because "in each of those cases, the specification unambiguously limited the scope of the invention.").

Flash-Control is likewise inapposite. *Flash-Control, LLC v. Intel Corp.*, No.

2020-2141, 2021 WL 2944592 (Fed. Cir. July 14, 2021) (non-precedential). In *Flash Control* the Federal Circuit upheld a summary judgment finding because Flash-Control could not "identify any disclosure that 'shows a second buffer that can store a write request, as required by step 3, or 'the writing of a portion of a page to volatile memory,' as required by step 2." *Id.*at 4. This case relates to whether certain species of technology for "detecting" and "transferring"—Bluetooth and WiFi—are disclosed in the specification rather than, for example, whether an entire claim limitation is missing from the disclosure in the specification. For the reasons discussed above, both "detecting" using Bluetooth and "transferring" using WiFi are clearly disclosed in the specification and were in possession of the named inventors at least as early as December 22, 2009.

Hyatt and *Taylor* fare no better. *Hyatt v. Dudas*, 492 F.3d 1365 (Fed. Cir. 2007); *Taylor v. Iancu*, 809 F. App'x 821 (Fed. Cir. 2020). Microsoft cites these cases to suggest that the '054 Patent fails to disclose the combination of Bluetooth detection and WiFi transfer, but the foregoing discussion in Sections III.B.1-4 shows that premise is incorrect. Moreover, the facts of *Hyatt* (adjudicating the propriety of the details included in an Examiner's rejection of pending claims in decades-long prosecution) and *Taylor* (failure to disclose how two different versions of GPS Explorer software would work in combination to enable Internet implementation) are far afield from the present dispute where a limited set of well understood

technologies are disclosed and claimed in connection with the detection of nearby WTRUs and transfer of media elements to those detected WTRUs. *Hyatt*, 492 F.3d at 1369 (holding that "we are asked to address ***not whether Hyatt's proposed claims are actually supported by an adequate written description in these applications***, but rather whether the PTO must do more than what MPEP § 2163.04(I)(B) provides to establish a prima facie case of lack of written description in this and every other such case.") (emphasis added); *Taylor*, 809 F. App'x at 824 (noting that the inventor's "experience thus shows that the specification did not demonstrate possession of the claimed invention but was instead a mere wish or plan for obtaining the claimed invention.") (internal quotations omitted).

d. There is no requirement that the specification disclose a claimed limitation verbatim

Microsoft criticizes Patent Owner because "[t]he grandparent application does not disclose any method using different protocols to perform different functions, much less the specific claimed method of using Bluetooth to detect nearby devices and WiFi to transfer data to one of the detected devices." Petition, 29-30. But this argument likewise falls short because Microsoft "ignores a central tenet of our written description jurisprudence—that the disclosure must be read from the perspective of a person of skill in the art—as well as precedent stating that the disclosure need not describe a limitation *in haec verba*." *Novartis*, 21 F.4th at 1373

(citing *All Dental Prodx, LLC v. Advantage Dental Prods., Inc.*, 309 F.3d 774, 779 (Fed Cir. 2002) ("[T]he failure of the specification to specifically mention a limitation that later appears in the claims is not fatal when one skilled in the art would recognize upon reading the specification that the new language reflects what the specification shows has been invented."); *LizardTech*, 424 F.3d at 1345 ("A claim will not be invalidated on section 112 grounds simply because the embodiments of the specification do not contain examples explicitly covering the full scope of the claim language.") (citing *Union Oil Co. v. Atlantic Richfield Co.*, 208 F.3d 989, 997 (Fed. Cir. 2000) ("The written description requirement does not require the applicant 'to describe exactly the subject matter claimed, [instead] the description must clearly allow persons of ordinary skill in the art to recognize that [he or she] invented what is claimed.'").

A POSITA reading the '948 Application, which is identical to the specification of the '054 Patent, would understand that Bluetooth, WiFi, and other identified technologies could be used to detect nearby devices and transfer media elements to those devices. Ex-2014, ¶¶82-84. Thus, just because the specification doesn't provide, *verbatim*, a specific example of using Bluetooth for detection and WiFi for data transfer, a POSITA would understand that such a method or system was disclosed, particularly in view of the language in the specification noting that "[a]ny combination or all of these communication technologies may be implemented

in a single component design." Ex-1282, [0024]; Ex-2014, ¶¶82-84.

It is important to remember that the principal function of patent claims "is to provide notice of the boundaries of the right to exclude" and that "[c]laims define and circumscribe, the written description discloses and teaches." *Ariad*, 598 F.3d at 1347. In this case Claims 1 and 23 recite specific technologies used for detection (Bluetooth) and transfer (WiFi), and both of those technologies are explicitly disclosed and taught in the written description included in the specification. Ex-2014, ¶87.

B. The Challenged Claims are supported by the disclosure in the '948 Application

Petitioner Microsoft has suggested that two specific limitations recited in Claims 1 and 23 of the '054 Patent are not entitled to a priority date earlier than April 11, 2014:

1. using Bluetooth to detect nearby devices; and then
2. using WiFi to transfer a media element to one of the detected devices (or, as in claim 23 and its dependent claims, a processor and/or circuitry configured to carry out such a method).

Petition, 20. Patent Owner provides the following charts, in addition to the evidence cited above in Section III.B, to show that Claims 1 and 23 are entitled to a priority date of at least as early as December 22, 2009—the filing date of the '948

Application, the first utility application in the priority chain of the ’054 Patent. Ex-1201 (Related U.S. Application Data). Moreover, consistent with *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316 (Fed. Cir. 2008), Patent Owner also shows written description support for each element of Claims 1 and 23.

1. Disclosure in the ’948 Application supporting each and every limitation in independent Claim 1 of the ’054 Patent

The following table shows written description support in the ’948 Application for every element of Challenged Claim 1. Ex-2014, ¶¶95-96.

Claim Element	Disclosure of the Claim Element in the ’948 Application
1[pre] A method performed by a wireless transmit/receive unit (WTRU), the method comprising:	The ’948 Application (Ex-1282), filed on December 22, 2009, discloses a WTRU and a method by which a WTRU, operating in a wireless environment, can communicate with other WTRUs operating in that environment. Ex-1282, [0023]-[0024].
1[a] processing, by the WTRU from a touch display, an input to select media in an application;	The ’948 Application discloses a WTRU with a touchscreen display. Ex-1282, [0024]. The touchscreen display may be used to provide a user interface (UI) that can be used to select a media element shown as a visual depiction on the touchscreen. *Id*., [0029]. “For example, the visual depiction may identify a selected media element stored in the WTRU 101.” *Id*. Thus, the user input, via the user interface (UI), can be used to select a media element.
1[b] detecting, by the WTRU over Bluetooth, another WTRU;	The ’948 Application discloses that a WTRU may use Bluetooth to detect a plurality of WTRUs in proximity to the WTRU. For example, “[t]he communication peripheral 107 receives and maintains the environment information relating to

	the WTRUs 101_c operating within the local areas 211, 213." Ex-1282, [0027]; Figure 2. "The environment information and the user input are then used as inputs to the processor 105 and are processed to identify a target WTRU $101_{c,t}$." *Id*., [0030]. "The 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 (e.g., TapAPP as described herein) that are supported by other WTRUs operating in the local environment." *Id*., [0034]. Accordingly the 2009 Application explicitly discloses that Bluetooth can be used to detect other (e.g., a plurality of other) candidate WTRUs ($WTRU_c$) in proximity to the WTRU. Furthermore, one of the inventors of the '054 Patent, Dr. Alexander Reznik, was deposed in a co-pending ITC investigation, and he testified as follows: Q. Did you have any specific technology in mind for those two things that had to be done? A. So we were looking at families of technologies, right. So I mentioned cellular and WiFi as two good families for data transfer. I mentioned, you know, 802.15-type stuff -- Bluetooth, Zigbee, for example -- as things that would have been good for proximity detection. Whether we stopped at that point and we said, "Hey, this is the best one in this family or this is the best one in that family," I don't remember, right. We kind of said there's options on both sides. Ex-2015, 64:2-17.

	Q. Okay. And would Bluetooth also be a technology you had in mind when referring to these layer 2, layer 3, and baseband? THE WITNESS: Actually, although if -- the way I am looking at the problem we're trying to solve here, right, Bluetooth is usually more of a proximity technology. This paragraph refers to a data transmission technology. I think, for that, we would be leaning towards WiFi and cellular as more typical uses as opposed to Bluetooth. Ex-2015, 155:18-156:6.
1[c] processing, by the WTRU, another input from the touch display to select the another WTRU;	The ’948 Application discloses that the WTRU can process another touchscreen input to select a WTRU from the plurality of detected WTRUs to, for example, receive a media element from the WTRU. “A user input received from the UI 109, for example a touchscreen/display, may be translated into application signals by the touchscreen/display 109 or processor 105. This touchscreen information 305 is input to the target discrimination algorithm 313 to identify a target WTRU $101_{c,t}$ from the plurality of other WTRUs.” Ex-1282, [0036]. Moreover, “[d]irectional inputs provided by the user via the touchscreen/display 109 may be synthesized to … select a target $WTRU_{c,t}$ from the identified [detected] group of candidate WTRUs 101_c to establish a one-to-one communication between the transmitting WTRU 101 and the target $WTRU_{c,t}$ ….” *Id*., [0037].

1[d] sending, by the WTRU to the selected another WTRU, a message to transfer the selected media;	The ’948 Application discloses that the sending/transmitting WTRU can send a message to the selected/receiving WTRU indicating that a media element is ready to be transferred to the receiving WTRU. Ex-1282, [0044]. For example, “***[t]he TapAPP 123 provides an indication 603b or a prompt that a data transfer is ready for receiving***. To receive a file, the user may touch 710 the touchscreen 109 to initiate reception of the data transfer.” *Id*.; Figure 7A (emphasis added).
1[e] receiving, by the WTRU, an acceptance to transfer the selected media; and	The ’948 Application discloses that the selected/receiving WTRU can send an acceptance to the sending/transmitting WTRU indicating that the media element has been accepted for transfer. Ex-1282, [0044]. For example, “[t]he TapAPP 123 provides an indication 603b or a prompt that a data transfer is ready for receiving. ***To receive a file, the user may touch 710 the touchscreen 109 to initiate reception of the data transfer***.” *Id*.; Figure 7A (emphasis added).
1[f] transferring, by the WTRU to the selected another WTRU over WiFi, the selected media.	The ’948 Application discloses that the selected media element can be transferred to the receiving WTRU using WiFi. The specification of the 2009 Application discloses a variety of communication protocols. For example, the specification states that “[t]he communication peripheral 107 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.” Ex-1282, [0024]. “The communication peripheral 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*. This disclosure is clear. The specification explicitly discloses Bluetooth and WiFi, and likewise explicitly discloses that any

	combination of these aforementioned communication technologies, including Bluetooth and WiFi, can be used in a single component design. Furthermore, one of the inventors of the ’054 Patent, Dr. Alexander Reznik, was deposed in a co-pending ITC investigation, and he testified as follows: Q. Let's back that up a little bit then. What were the known ways to transfer data that he refers to? A. So any kind of wireless transfer technology. So WiFi for sure. You know, mobile. Because, by that time, mobile phones were data transfer devices, right. So those were the connectivity options. And then somehow they all involved having an application server somewhere, like a Dropbox or something, right, that would facilitate it or something like that. I'm sure there may have been some other ones that we had in mind. Q. So those were WiFi and cellular data transfer; is that right? A. Right. So you're asking me today that were reasonable technologies back then for data transfer. WiFi and cellular definitely come to mind. Ex-2015, 58:14-59:9.

	Q. Okay. And would Bluetooth also be a technology you had in mind when referring to these layer 2, layer 3, and baseband? THE WITNESS: Actually, although if -- the way I am looking at the problem we're trying to solve here, right, Bluetooth is usually more of a proximity technology. This paragraph refers to a data transmission technology. I think, for that, we would be leaning towards WiFi and cellular as more typical uses as opposed to Bluetooth. Ex-2015, 155:18-156:6.

2. Disclosure in the ’948 Application supporting each and every limitation in independent Claim 23 of the ’054 Patent

The following table shows written description support in the ’948 Application for each element of Challenged Claim 23. Ex-2014, ¶97.

Claim Element	Disclosure of the Claim Element in the ’948 Application
23[pre] A wireless transmit/receive unit (WTRU) comprising:	The ’948 Application (Ex-1282), filed on December 22, 2009, discloses a WTRU and a method by which a WTRU, operating in a wireless environment, can communicate with other WTRUs operating in that environment. Ex-1282, [0023]-[0024].
23[a] circuitry configured to process, from a	The ’948 Application discloses a WTRU with a touchscreen display. Ex-1282, [0024]. The “WTRU 101 includes a processor 105 that is configurable to process information from

touch display, an input to select media in an application;	the UI 109 and the communication peripheral 107." *Id*., [0030]. The touchscreen display may be used to provide a user interface (UI) that can be used to select a media element shown as a visual depiction on the touchscreen. *Id*., [0029]. "For example, the visual depiction may identify a selected media element stored in the WTRU 101." *Id*. Thus, the user input, via the user interface (UI), can be used to select a media element. *See also* Figure 1; Figure 3; Figure 6.
23[b] circuitry configured to detect, by the WTRU over Bluetooth, another WTRU;	The '948 Application discloses circuitry that enables a WTRU to use Bluetooth to detect a plurality of WTRUs in proximity to the WTRU. Figure 1; Figure 2; Figure 3. For example, Figures 1 and 2 show system level diagrams that include circuitry for enabling communication peripherals 107 disposed in nearby WTRUs to communicate via the communication environment 115. For example, "[t]he communication peripheral 107 receives and maintains the environment information relating to the WTRUs 101_c operating within the local areas 211, 213." Ex-1282, [0027]; Figure 2. "The environment information and the user input are then used as inputs to the processor 105 and are processed to identify a target WTRU $101_{c,t}$." *Id*., [0030]. "The 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 (e.g., TapAPP as described herein) that are supported by other WTRUs operating in the local environment." *Id*., [0034]. Accordingly the 2009 Application explicitly discloses that Bluetooth can be used to detect other (e.g., a plurality of other) candidate WTRUs ($WTRU_c$) in proximity to the WTRU. Furthermore, one of the inventors of the '054 Patent, Dr. Alexander Reznik, was deposed in a co-pending ITC investigation, and he testified as follows:

	Q. Did you have any specific technology in mind for those two things that had to be done? A. So we were looking at families of technologies, right. So I mentioned cellular and WiFi as two good families for data transfer. I mentioned, you know, 802.15-type stuff -- Bluetooth, Zigbee, for example -- as things that would have been good for proximity detection. Whether we stopped at that point and we said, "Hey, this is the best one in this family or this is the best one in that family," I don't remember, right. We kind of said there's options on both sides. Ex-2015, 64:2-17. Q. Okay. And would Bluetooth also be a technology you had in mind when referring to these layer 2, layer 3, and baseband? THE WITNESS: Actually, although if -- the way I am looking at the problem we're trying to solve here, right, Bluetooth is usually more of a proximity technology. This paragraph refers to a data transmission technology. I think, for that, we would be leaning towards WiFi and cellular as more typical uses as opposed to Bluetooth. Ex-2015, 155:18-156:6.

23[c] the circuitry further configured to process another input from the touch display to select the another WTRU;	The ’948 Application discloses that the processor enables the WTRU to process another touchscreen input to select a WTRU from the plurality of detected WTRUs to, for example, receive a media element from the WTRU. “A user input received from the UI 109, for example a touchscreen/display, may be translated into application signals by the touchscreen/display 109 or processor 105. This touchscreen information 305 is input to the target discrimination algorithm 313 to identify a target WTRU $101_{c,t}$ from the plurality of other WTRUs.” Ex-1282, [0036]. Moreover, “[d]irectional inputs provided by the user via the touchscreen/display 109 may be synthesized to … select a target $WTRU_{c,t}$ from the identified [detected] group of candidate WTRUs 101_c to establish a one-to-one communication between the transmitting WTRU 101 and the target $WTRU_{c,t}$ ….” *Id*., [0037].
23[d] circuitry configured to send, by the WTRU to the selected another WTRU, a message to transfer the selected media;	The ’948 Application discloses circuitry enabling the sending/transmitting WTRU to send a message to the selected/receiving WTRU indicating that a media element is ready to be transferred to the receiving WTRU. Ex-1282, [0044]. For example, “***[t]he TapAPP 123 provides an indication 603b or a prompt that a data transfer is ready for receiving***. To receive a file, the user may touch 710 the touchscreen 109 to initiate reception of the data transfer.” *Id*. (emphasis added); Figure 7A; Figure 1; Figure 3.
23[e] circuitry configured to receive, by the WTRU, an acceptance to transfer the	The ’948 Application discloses circuitry that enables the selected/receiving WTRU to send an acceptance to the sending/transmitting WTRU indicating that the media element has been accepted for transfer. Ex-1282, [0044]. For example, “[t]he TapAPP 123 provides an indication 603b or a prompt that a data transfer is ready for receiving. ***To***

selected media; and	***receive a file, the user may touch 710 the touchscreen 109 to initiate reception of the data transfer***." *Id*. (emphasis added); Figure 7A; Figure 1; Figure 3.
23[f] circuitry configured to transfer, by the WTRU to the selected another WTRU over WiFi, the selected media.	The '948 Application discloses circuitry that enables the selected media element to be transferred to the receiving WTRU using WiFi. Figure 1; Figure 2; Figure 3. For example, Figures 1 and 2 show system level diagrams that include circuitry for enabling communication peripherals 107 disposed in nearby WTRUs to communicate via the communication environment 115. The specification of the 2009 Application discloses a variety of communication protocols. For example, the specification states that "[t]he communication peripheral 107 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." Ex-1282, [0024]. "The communication peripheral 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). This disclosure is clear. The specification explicitly discloses Bluetooth and WiFi, and likewise explicitly discloses that any combination of these aforementioned communication technologies, including Bluetooth and WiFi, can be used in a single component design. Furthermore, one of the inventors of the '054 Patent, Dr. Alexander Reznik, was deposed in a co-pending ITC investigation, and he testified as follows: Q. Let's back that up a little bit then. What were the known ways to transfer data that he refers to?

	A. So any kind of wireless transfer technology. So WiFi for sure. You know, mobile. Because, by that time, mobile phones were data transfer devices, right. So those were the connectivity options. And then somehow they all involved having an application server somewhere, like a Dropbox or something, right, that would facilitate it or something like that. I'm sure there may have been some other ones that we had in mind. Q. So those were WiFi and cellular data transfer; is that right? A. Right. So you're asking me today that were reasonable technologies back then for data transfer. WiFi and cellular definitely come to mind. Ex-2015, 58:14-59:9. Q. Okay. And would Bluetooth also be a technology you had in mind when referring to these layer 2, layer 3, and baseband? THE WITNESS: Actually, although if -- the way I am looking at the problem we're trying to solve here, right, Bluetooth is usually more of a proximity technology. This paragraph refers to a data transmission technology. I think, for that, we would be leaning towards WiFi and cellular as more typical uses as opposed to Bluetooth. Ex-2015, 155:18-156:6.

These tables, and the discussion provided above in Sections III.A.1, III.A.2, III.A.3, and III.A.4 provide definitive proof that the inventors were in possession of each and every element of the claims challenged by Microsoft in its priority challenge (Claims 1 and 23 of the ’054 Patent). For this reason, the Challenged Claims are entitled to a priority date of at least as early as the filing date of the ’948 Application (December 22, 2009), Forutanpour is not prior art, and the Board should find that Forutanpour is not prior art such that the Challenged Claims are patentable over all of the Grounds in the Petition. Ex-2014, ¶¶98-99.

IV. CONCLUSION

As demonstrated above, the ’054 Patent is entitled to a priority date of at least as early as December 22, 2009, the filing date of the ’948 Application, and Forutanpour is not prior art. Specifically, the ’948 Application explicitly discloses both Bluetooth and WiFi, describes using Bluetooth as a detection protocol, describes WiFi as a data transfer protocol, and shows that the inventors disclosed using both Bluetooth and WiFi “in a single component design.” Ex-1282, [0024]. Testimony from Dr. Reznik confirms that the inventors were in possession of the substance of the Challenged Claims as of the filing date of the ’948 Application and that the specification supports the alleged “missing elements” of Claims 1 and 23

challenged by Microsoft.

For these reasons, Petitioner has failed to show that Challenged Claims 1 and 23 of the ’054 Patent are unpatentable. Challenged dependent claims 3-10, 12, 14-15, 21, 25-32, 34, 36-37, 43, 46-47, and 49-50, which depend from Claims 1 and 23, are patentable for the same reasons.

For any or all of the above-described reasons, Patent Owner respectfully requests that the Board find all of the Challenged Claims patentable.

Dated: October 7, 2024

Respectfully submitted,

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CERTIFICATION OF WORD COUNT

The undersigned hereby certifies that the portions of the above-captioned **PATENT OWNER'S RESPONSE** specified in 37 C.F.R. § 42.24 have 10,513 words, in compliance with the 14,000 word limit set forth in 37 C.F.R. § 42.24(b)(1). This word count was prepared using Microsoft Word 2010.

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CERTIFICATION OF SERVICE

The undersigned hereby certifies that the above-captioned **PATENT OWNER'S RESPONSE** is being served on counsel for petitioner via electronic mail on, in its entirety on the following counsel of record for Petitioner:

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