UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICROSOFT CORPORATION,
Petitioner,

v.

INTERDIGITAL PATENT HOLDINGS, INC.,
Patent Owner.

Case IPR2024-00537
U.S. Patent No. 8,737,933

Title: DATA TRANSFER BETWEEN WIRELESS DEVICES

PETITIONER'S REPLY TO THE
PATENT OWNER PRELIMINARY RESPONSE

EXHIBIT LIST

LIST OF NEWLY-FILED EXHIBITS

Exhibits concurrently filed with Petitioner's Reply To The Patent Owner Preliminary Response:

No.	Description
1283	Defendant Lenovo's Supplemental Notice Regarding Prior Art Invalidity Grounds, Document No. 96, Case No. 5:23-cv-00493 (E.D.N.C.)
1284	United States District Courts Judicial Caseload Profile

LIST OF PREVIOUSLY FILED EXHIBITS

No.	Description
1201	U.S. Patent No. 8,737,933 ("**the '933 patent**")
1202	File History of U.S. Patent No. 8,737,933
1203	Declaration of Peter Rysavy, dated February 5, 2024 ("**Rysavy Decl.**")
1204	U.S. Patent Application Pub. No. 2011/0083111 to Forutanpour et al. ("**Forutanpour**")
1205	U.S. Patent Application Pub. No. 2008/0166967 to Christopher D. McKillop ("**McKillop**")
1206	International Patent Application Pub. No. WO 2005/1072895 to Peter Hoddie ("**Hoddie**")
1207	U.S. Patent Application Pub. No. 2007/0191028 to Hinckley et al. ("**Hinckley**")
1208	Sidhu et al., *Emerging Wireless Standards – WiFi, ZigBee and WiMAX*, International Journal of Electronics and Communication Engineering Vol. 1 No. 1 (2007)

No.	Description
1209	Harry Newton, Newton's Telecom Dictionary, 20th Updated and Expanded Edition (excerpted) (2004)
1210	U.S. Patent Application Pub. No. 2009/0034498 to Banerjea et al. ("**Banerjea**")
1211	N/A
1212	U.S. Patent Application Pub. No. 2007/0135046 to Kapur et al. ("**Kapur**")
1213	U.S. Patent Application Pub. No. 2009/0215398 to Adler et al. ("**Adler**")
1214	Bluetooth Specification Version 1.1, Vol. 2, "Profiles" (Feb. 22, 2001)
1215	Megowan et al., Infrared Data Association® (IrDA®) Object Exchange Protocol OBEX™ Version 1.3 (Jan. 3, 2003)
1216	Postel et al., RFC 959, File Transfer Protocol (FTP) (Oct. 1985)
1217	K. Sollins, RFC 1350, The TFTP Protocol (Revision 2) (Jul. 1992)
1218	Frodigh et al., *Wireless ad hoc Networking - The Art of Networking Without a Network*, Ericsson Review No. 4 (2000)
1219	U.S. Patent Application Pub. No. 2007/0146347 to Louis B. Rosenberg ("**Rosenberg**")
1220	Cheverst et al., *Exploring Bluetooth Based Mobile Phone Interaction with the Hermes Photo Display*, Proceedings of the 7th International Conference on Human Computer Interaction with Mobile Devices and Services (Sept. 2005)
1221	User's Guide for Nokia N72 (2006)
1222	U.S. Patent No. 7,356,347 to David Kammer ("**Kammer**")
1223	Phil Karn, *MACA - A New Channel Access Method for Packet Radio*, The Proceedings of the 9th ARRL Computer Networking Conference (1990)

No.	Description
1224	Chatzimisios et al., *Optimisation of RTS/CTS Handshake in IEEE 802.11 Wireless LANs for Maximum Performance*, IEEE Communications Society Globecom 2004 Workshops (2004)
1225	Nokia 9500 Communicator User Guide (2004-2005)
1226	User's Guide for Nokia N95 (2007)
1227	U.S. Patent Application Pub. No. 2005/0113079 to Hui Guo ("**Guo**")
1228	U.K. Patent Application Pub. No. GB 2,439,364 to Turner et al. ("**Turner**")
1229	U.S. Patent Application Pub. No. 2004/0242216 to Demetrios Boutsikakis ("**Boutsikakis**")
1230	U.S. Patent No. 7,043,548 to Stephane Bouet ("**Bouet**")
1231	Brad A. Myers, *The Importance of Percent-Done Progress Indicators for Computer-Human Interfaces*, Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (Apr. 1985)
1232	U.S. Patent Application Pub. No. 2009/0140986 to Karkkainen et al. ("**Karkkainen**")
1233	U.S. Patent Application Pub. No. 2007/0124503 to Ramos et al. ("**Ramos**")
1234	U.S. Patent No. 8,059,111 to Phil Harrison ("**Harrison**")
1235	U.S. Patent Application Pub. No. 2006/0026521 to Hotelling et al. ("**Hotelling '521**")
1236	Westerman et al., *Multi-Touch: A New Tactile 2-D Gesture Interface For Human-Computer Interaction*, Proceedings of the Human Factor and Ergonomic Society 45th Annual Meeting (2001)
1237	Jun Rekimoto, *Pick-and-Drop: A Direct Manipulation Technique for Multiple Computer Environments*, Proceedings of the 10th

No.	Description
	Annual ACM Symposium on User Interface Software and Technology (1997)
1238	U.S. Patent Application Pub. No. 2008/0009309 to Hwang-hyeon Gha ("**Gha**")
1239	Pravin Bhagwat, *Bluetooth: Technology for Short-Range Wireless Apps*, IEEE Internet Computing, Vol. 5, Issue 3 (May-Jun. 2001)
1240	N/A
1241	N/A
1242	U.S. Patent Application Pub. No. 2003/0134629 to Ollis et al. ("**Ollis**")
1243	N/A
1244	U.S. Patent Application Pub. No. 2006/0097991 to Hotelling et al., ("**Hotelling '991**")
1245	U.S. Patent Application Pub. No. 2008/0168384 to Platzer et al. ("**Platzer**")
1246	U.S. Patent No. 7,479,949 to Jobs et al., ("**Jobs**")
1247	U.S. Patent Application Pub. No. 2008/0143685 to Lee et al. ("**Lee**")
1248	File History of U.S. Patent No. 8,200,265
1249	U.S. Patent No. 8,200,265 to Carlton et al. ("**the '265 patent**")
1250	File History of U.S. Patent No. 8,478,207
1251	U.S. Patent No. 8,478,207 to Carlton et al. ("**the '207 patent**")
1252	N/A
1253	Bluetooth Specification Version 1.1, Vol. 1, "Core" (Feb. 22, 2001)
1254	European Patent Application Pub. No. 1,489,783 to Anders Angelhag ("**Angelhag**")

No.	Description
1255	U.S. Patent Application Pub. No. 2005/0289195 to Lehtola et al. ("**Lehtola**")
1256	N/A
1257	Information Disclosure Statement for Lehtola to U.S. Patent Application No. 10/875,079, filed June 23, 2004
1258	Affidavit of Nathaniel E. Frank-White, Records Request Processor at the Internet Archive ("Frank-White") Authenticating Exhibits 1214-1215, 1253, and 1260-1262
1259	Affidavit of Scott Delman, Director of Publication at the Association for Computing Machinery Authenticating Exhibit 1220
1260	User Guide for Nokia N91 (2006)
1261	User Guide for Nokia N75 (2006)
1262	User Guide for Nokia 9300 (2005)
1263	N/A
1264	N/A
1265	David Pogue, iPhone The Missing Manual (1st ed. Aug. 2007)
1266	U.S. Provisional Patent Application No. 61/140,126 to Carlton et al. ("**the '126 provisional**" or "**the provisional application**")
1267	U.S. Patent Application Pub. No. 2007/0011335 to Burns et al. ("**Burns**")
1268	Yardena Arar, *Bluetooth to Work with Wi-Fi*, NetworkWorld (Feb. 12, 2008)
1269	Staff's Proposed Claim Constructions, *Certain Electronic Devices, Including Smartphones, Computers, Tablet Computers, And Components Thereof*, Inv. No. 337-TA-1373 (Dec. 4, 2023)
1270	InterDigital's Proposed Claim Constructions, *Certain Electronic Devices, Including Smartphones, Computers, Tablet Computers, And Components Thereof*, Inv. No. 337-TA-1373 (Nov. 30, 2023)

No.	Description
1271	U.S. Patent No. 7,102,640 to Aholainen et al. ("**Aholainen**")
1272	N/A
1273	Full Claims Listing (1-9, 11, 13-14, 20-31, 33, 35-36, 42-44)
1274	U.S. Patent Application Pub. No. 2005/0281237 to Heinonen et al. ("**Heinonen**")
1275	N/A
1276	N/A
1277	*Bluetooth Technology to Harness the Speed of 802.11*, Bluetooth SIG Press Release (Feb. 11, 2008) (Archived by Internet Archive's Wayback Machine on Feb. 14, 2008)
1278	Megowan et al., Infrared Data Association® (IrDA®) Object Exchange Protocol OBEX™ Version 1.5 (Aug. 14, 2009)
1279	U.S. Patent No. 7,333,514 to Anehem et al. ("**Anehem**")
1280	N/A
1281	U.S. Patent Application No. 13/493,650 to Carlton et al. ("**parent application**" or "**650 application**)
1282	U.S. Patent Application No. 12/644,948 to Carlton et al. ("**grandparent application**" or "**948 application**")

Pursuant to the Board email of June 6, 2024, Petitioner submits this Reply to the POPR (Paper 7). For at least the same reasons as in IPR2024-00305, involving the same patent, the sum of factors weighs against discretionary denial under *Fintiv* and the Board should institute this IPR.

Factor 1 (stay) is neutral at best. Contrary to the POPR's assertions (Paper 7, 10), the district court has granted stays when a case is in its early stages and a trial date has not yet been set. *E.g.*, *Edge-Works Mfg. Co. v. HSG, LLC*, No. 7:17-CV-223-FL, 2018 WL 10604745, at *3 (E.D.N.C. Apr. 30, 2018). While the district court case includes other patents (Paper 7 at 10), that is not dispositive as to the stay issue. *E.g.*, *HP Co. v. ServiceNow, Inc.*, No. 14-00570-BLF, 2015 WL 5935368, at *2 (N.D. Cal. Oct. 13, 2015) (staying case as to only two of many patents); *cf. TeleSign Corp. v. Twilio, Inc.*, No. 15-3240, 2016 WL 6821111, at *3 (C.D. Cal. Mar. 9, 2016) (granting stay despite "the fact that all claims are not challenged in IPR").

Factor 2 (trial date) strongly favors institution because no trial date has been set and any trial would take place months after the projected final written decision date. *E.g.*, *Apple Inc.*, *v. Fintiv*, *Inc.*, IPR2022-00976, Paper 9 at 10-11 (Nov. 15, 2022); USPTO Memo., Interim Procedure for Discretionary Denials (June 21, 2022) ("Vidal Memo," filed as EX2002), 9. The most recent median time-to-trial in the Eastern District of North Carolina is 31.2 months, putting trial in April 2026, roughly eight months after an FWD, assuming an August 28, 2024 institution. EX1284, 21.

Factor 3 (investment in the district court) favors institution, given the limited investment in this patent in the district court. Though the district court has set a *Markman* hearing for July 25, 2024, it has not issued a *Markman* order and thus no set dates exist for the close of fact or expert discovery or the filing of dispositive motions. *See* EX2003, 8, 15–16 (scheduling order specifying that dispositive motions "shall be filed 30 days after the close of expert discovery," which begins "30 days after the close of fact discovery," which ends "90 days after entry of [a] claim construction order"); *Fintiv*, *Inc*., IPR2020-00019, Paper 11 at 10 (PTAB Mar. 20, 2020). Patent Owner does not allege that depositions have taken place or that significant document production has occurred. Paper 7 at 11-12.

Factor 4 (overlap of issues) favors institution because district court defendant Lenovo filed a stipulation agreeing not to raise the same prior art grounds in district court if IPR is instituted. EX1283; *Sand Rev. II*, *LLC v. Cont'l Intermodal Group-Trucking LLC*, IPR2019-01393, Paper 24 at 12 (Jun. 16, 2020) (informative).

Factor 6 (other factors) need not be evaluated since Factors 1-5 weigh against discretionary denial. *CommScope Techs*. *LLC*. *v*. *Dali Wireless*, *Inc*., IPR2022-01242, Paper 23 at 4-5 (Feb. 27, 2023) (precedential). If considered, Factor 6 favors institution because the petition presents compelling merits. The POPR does not dispute that the asserted prior art (Forutanpour) satisfies all claim elements. It wrongly argues only that Forutanpour is not prior art because the challenged claims

are entitled to the ’948 application’s earlier filing date. Paper 7 at 2-3, 14-47. As explained by the petition, however, the ’948 application does not disclose a method that involves switching between different protocols for different functions, much less the specific protocols and functions recited in the claims. Paper 3 at 20-29.

The POPR urges that the ’948 application provides written description support because it discloses devices that support both Bluetooth and WiFi. Paper 7 at 2-3, 17-19. But disclosure of a device’s mere capability to support two protocols is insufficient to provide written description support for the claimed *method* of using one protocol (Bluetooth) for device detection and a different protocol (WiFi) for transfer of a media element to one of the detected devices. Paper 3 at 24-25.

Without using the word “obvious,” the POPR essentially argues that the ’948 application provides written description support for the challenged claims because it renders them obvious in view of a POSITA’s knowledge of the advantages of Bluetooth and WiFi. Paper 7 at 22 (“It was well-known that WiFi offered better transmission speeds … while Bluetooth … offered low power consumption. … For these reasons, a POSITA would understand that the ’948 application … contemplate[s] both Bluetooth detection of proximate WTRUs and WiFi data transfer of media elements ….”). As explained in the Petition, however, what a POSITA would have found to be obvious (e.g., based on what was well known) is insufficient for written description support. Paper 3 at 22-23.

The POPR also makes the legally incorrect argument that the ’948 application provides written description support for the challenged claims because a named inventor’s recent recollection is that he contemplated using Bluetooth for detection and WiFi for data transfer. This flawed argument relies on self-interested testimony from the challenged patent’s named inventor, Dr. Reznik, on “what was intended to be conveyed by the specification” (Paper 7 at 26) and what he had “in mind” when developing his technology (Paper 7 at 25). *See generally* Paper 7 at 3, 22-26. The test for written description, however, is not what the inventors “contemplated” or had “in mind” but failed to write down. Rather, it is whether “‘the four corners’” of the ’948 application reasonably convey to POSITAs that the inventors possessed the claimed subject matter. Paper 3, 22 (quoting *Ariad Pharms*., *Inc*. *v*. *Eli Lilly and Co*., 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc)). Moreover, Dr. Reznik admitted that he and his co-inventor had not contemplated which protocol was best for each of the claimed functions at issue (device detection and media element transfer), instead stating that there were “options on both sides.” Paper 7 at 25 (quoting EX2006, 64:2-17).

Respectfully submitted,

Dated: June 14, 2024

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CERTIFICATE OF SERVICE
IN COMPLIANCE WITH 37 C.F.R. § 42.6 (e)(4)

The undersigned certifies that on June 14, 2024, a complete copy of **PETITIONER'S REPLY TO THE PATENT OWNER PRELIMINARY RESPONSE** was served on counsel for the Patent Owner via electronic mail as follows:

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