

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC,
Petitioner,

v.

HEADWATER RESEARCH LLC,
Patent Owner.

Case No. IPR2026-00271
Patent No. 9,491,564

**NOTICE OF INTENT TO DESIGNATE TURHAN F. SARWAR,
A PROVISIONALLY RECOGNIZED PATENT TRIAL
AND APPEAL BOARD ATTORNEY, AS BACK-UP COUNSEL**

LISTING OF EXHIBITS

Exhibit	Description
1001	U.S. Patent No. 9,491,564 (“the ’564 Patent”)
1002	Prosecution History of U.S. Patent No. 9,491,564 (“the ’564 FH”)
1003	Declaration and Curriculum Vitae of Patrick Traynor
1004	3GPP TS 23.140 v6.9.0 (2005-03); 3rd Generation Partnership Project; Technical Specification Group Terminals; Multimedia Messaging Service (MMS); Functional Description; Stage 2 (“TS-23.140”)
1005	U.S. Patent No. 8,195,961 (“Ogawa”)
1006	U.S. Patent App. Pub. No. 2008/0080458 (“Cole”)
1007	U.S. Patent App. Pub. No. 2009/0282256 (“Rakic”)
1008	PCT Pub. No. 2008/048075 (“Lee”)
1009	U.S. Patent No. 7,975,147 (“Qumei”)
1010	U.S. Patent No. 9,032,192 (“Frank”)
1011	Open Mobile Alliance; OMA-ERELD-MMS-v1_2-20030923-C, Enabler Release Definition for MMS Version 1.2,” available at https://www.openmobilealliance.org/release/MMS/V1_2-20030923-C/OMA-ERELD-MMS-V1_2-20030923-C.pdf
1012	“Open Mobile Alliance; Multimedia Messaging Service Architecture Overview” (MMSARCH) specification, available at https://www.openmobilealliance.org/release/MMS/V1_2-20030923-C/OMA-MMS-ARCH-V1_2-20030920-C.pdf
1013	The Secure Sockets Layer (“SSL”) Protocol, V. 3.0, available at https://web.archive.org/web/19970614041044/http://home.netscape.com/eng/ssl3/ssl-toc.html and https://web.archive.org/web/19970617034012/http://home.netscape.com/eng/ssl3/3-SPEC.HTM#1
1014	The Transport Layer Security (“TLS”) Protocol, V. 1.1, available at https://www.ietf.org/rfc/rfc4346.txt
1015	U.S. Patent App. Pub. No. 2003/0096625 (“Mi-Su Lee”)
1016	RESERVED
1017	RESERVED
1018	Liaison Statement, European Telecommunications Standards Institute AT-F Rapporteur Meeting, 4 to 6 February 2003 (ETSI / AT-F TD18), available at https://www.3gpp.org/ftp/tsg_sa/TSG_SA/TSGS_19/Docs/PDF/SP-030167.pdf

1019	U.S. Patent No. 7,082,615 (“Ellison”)
1020	3GPP TS-26.140 v6.2.0 (2005-03); 3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Multimedia Messaging Service(MMS); Media formats and codecs
1021	Multimedia Messaging Service Encapsulation Protocol, available at www.openmobilealliance.org/release/MMS/V1_2-20050301-A/OMA-MMS-ENC-V1_2-20050301-A.pdf
1022	<i>Samsung Elecs. et al. v. Headwater Research LLC</i> , IPR2024-00341, Paper 28 (July 23, 2025)
1023	Stewart, C.M., Memorandum Re: PTAB Consideration of Prior Findings of Fact and Conclusions of Law (September 16, 2025), https://www.uspto.gov/sites/default/files/documents/Memo_re_prior_findings_of_fact_and_conclusions_of_law_9_16_25.pdf .
1024	Declaration of Friedhelm Rodermund
1025	RESERVED
1026	U.S. Patent App. Pub. No. 2005/0108571 (“Lu”)
1027	U.S. Patent App. Pub. No. 2005/0207379 (“Shen”)
1028	Transporting data between wireless applications using a messaging system—MMS, Miraj E Mostafa, Wireless Communications and Mobile Computing (2007) (“Mostafa”)
1029	Dictionary of Computer Science, Engineering, and Technology, CRC Press LLC, 2001
1030	Needham et al., “Using Encryption for Authentication in Large Networks of Computers” (ACM, Vol. 21, No. 12, Dec. 1978) (“Needham”)
1031	U.S. Patent No. 8,010,669 (“Sathish”)
1032	Saltzer et al., “The Protection of Information in Computer Systems” (IEEE Proceedings, Vol. 63, No. 9, Sept. 1975) (“Saltzer”)
1033	Li et al., “Symbian OS platform security model,” available at https://www.usenix.org/system/files/login/articles/73507-li.pdf (Login Magazine, Aug. 2010)
1034	RESERVED
1035	RESERVED
1036	Schroeder et al., “A Hardware Architecture for Implementing Protection Rings” (ACM, Vol. 15, No. 3, Mar. 1972) (“Schroeder”)
1037	Nokia E71 review: Nokia E71, available at https://www.cnet.com/reviews/nokia-e71-review/
1038	<i>Samsung Elecs. et al. v. Headwater Research LLC</i> , IPR2024-00341, Paper 4 (January 23, 2024)

1039	U.S. Patent App. Pub. No. 2007/0283170 (“Yami”)
1040	U.S. Patent App. Pub. No. 2006/0077940 (“Ganji”)
1041	U.S. Patent App. Pub. No. 2005/0282531 (“Andreasson”)
1042	U.S. Patent App. Pub. No. 2003/0193967 (“Fenton”)
1043	U.S. Patent App. Pub. No. 2004/0085894 (“Wang”)
1044	U.S. Patent No. 6,094,424 (“Kalmanek”)
1045	Dictionary of Computing, S.M.H. Collin, Fifth Edition, Bloomsbury (2004)
1046	IEEE 100 The Authoritative Dictionary of IEEE Standards Terms, Seventh Edition (2000)
1047	U.S. Patent No. 7,962,798 (“Locasto”)
1048	U.S. Patent App. Pub. No. 2004/0002974 (“Kravitz”)
1049	Computer Desktop Encyclopedia, Alan Freedman, Ninth Edition, Osborne/McGraw-Hill (2001)
1050	U.S. Patent No. 5,612,866 (“Savanyo”)
1051	3GPP TS 25.321 v6.5.0 (2005-06); 3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Medium Access Control (MAC) protocol specification; (“TS-25.321”)
1052	3GPP TS 25.322 v6.4.0 (2005-06); 3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Radio Link Control (RLC) protocol specification; (“TS-25.322”)
1053	3GPP TS 25.323 v5.4.0 (2005-06); 3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Packet Data Convergence Protocol (PDCP) specification; (“TS-25.323”)
1054	Lu et al., Heading for Multimedia Message Service in 3G, 6th IEE International Conference on 3G and Beyond, Washington, D.C., USA, Nov. 7-9, 2005
1055	RFC 4355, IANA Registration for Enumservices Email, Fax, MMS, EMS, and SMS (Jan. 2006)
1056	Rodermund, A Picture Speaks a Thousand Words – From SMS to MMS, in Business Briefing: Wireless Technology (2003)
1057	U.S. Patent App. Pub. No. 2005/0091380 (“Gonen”)
1058	U.S. Patent App. Pub. No. 2004/0258063 (“Raith”)
1059	U.S. Patent App. Pub. No. 2004/0111476 (“Trossen”)
1060	Prosecution History of U.S. Patent No. 9,232,403 (“the ’403 FH”)
1061	U.S. Patent App. Pub. No. 2007/0239898 (“Friend”)
1062	U.S. Patent No. 7,269,433 (“Vargas”)

1063	<i>Samsung Elecs. et al. v. Headwater Research LLC</i> , IPR2024-00341, Paper 12, Institution Decision (July 26, 2024)
1064	<i>Samsung Elecs. v. Headwater Research LLC</i> , IPR2024-00010, Paper 2, Petition for <i>Inter Partes</i> Review (Nov. 17, 2023)
1065	<i>Samsung Elecs. v. Headwater Research LLC</i> , IPR2024-00010, Paper 7, Institution Decision (May 23, 2024)
1066	<i>Samsung Elecs. v. Headwater Research LLC</i> , IPR2024-00010, Paper 25, Joint Motion to Terminate (May 8, 2025)
1067	<i>Samsung Elecs. v. Headwater Research LLC</i> , IPR2024-00010, Paper 27, Termination Order (May 13, 2025)
1068	<i>Amazon v. Headwater Research LLC</i> , IPR2026-00088, Paper 1, Petition for <i>Inter Partes</i> Review (Nov. 10, 2025)
1069	Definition of CPC class H04W, available at https://www.uspto.gov/web/patents/classification/cpc/pdf/cpc-definition-H04W.pdf
1070	MMS Architecture - Wikipedia, the free encyclopedia (Wayback Machine 9-9-2016), available at https://web.archive.org/web/20160909010104/https://en.wikipedia.org/wiki/MMS_Architecture
1071	U.S. Patent No. 8,406,733 (“the ’733 Patent”)
1072	U.S. Patent No. 9,615,192 (“the ’192 Patent”)
1073	<i>Amazon v. Headwater Research LLC</i> , IPR2026-00088, Paper 11, Notice of Decisions on Institution (April 6, 2026)
1074	Headwater IPR Search (PTACTS results)
1075	<i>Headwater Research LLC v. Google LLC</i> , NO. 7:25-cv-00231-DC-DTG, Western District of Texas, Dkt. 38, Google’s Motion to Transfer Venue
1076	Definition of USPC class 713, available at https://www.uspto.gov/web/patents/classification/uspc713/defs713.pdf
1077	<i>Google v. Headwater Research LLC</i> , IPR2024-00942, -943, Paper 20, Final Written Decision (Oct. 1, 2025)
1078	<i>Verizon v. Headwater Research LLC</i> , IPR2024-00809, Paper 21, Final Written Decision (Oct. 14, 2025)
1079	Federal Court Management Statistics, U.S. District Courts, December 2025
1080	<i>Amazon v. Headwater Research LLC</i> , IPR2026-00106, Paper 1, Petition for <i>Inter Partes</i> Review (Nov. 10, 2025)

1081	<i>Headwater Research LLC v. Google LLC</i> , NO. 7:25-cv-00231-DC-DTG, Western District of Texas, Dkt. 86, Order Granting Google’s Motion to Transfer Venue
1082	<i>Headwater Research LLC v. Google LLC</i> , NO. 3:26-cv-01460-AMO, Northern District of California, Dkt. 99, Google’s Motion for Leave to Amend
1083	<i>Headwater Research LLC v. Google LLC</i> , NO. 3:26-cv-01460-AMO, Northern District of California, Dkt. 112, Joint Case Management Statement
1084	<i>Headwater Research LLC v. Google LLC</i> , NO. 5:26-cv-01460-NW, Northern District of California, Dkt. 118, Clerk’s Notice Setting Case Management Conference Deadlines
1085	<i>Amazon v. Headwater Research LLC</i> , IPR2026-00106, Paper 10, Notice of Decisions on Institution (Mar. 10, 2026)
1086	<i>Amazon v. Headwater Research LLC</i> , IPR2026-00088, Paper 10, Notice of Decisions on Institution (March 10, 2026)
1087	<i>Google v. Headwater Research LLC</i> , IPR2026-00203, Paper 10, Notice of Decisions on Institution (May 15, 2026)
1088	Headwater patent assertion search (DocketNavigator results)
1089	Headwater active patent assertions search (DocketNavigator results)
1090	<i>Amazon v. Headwater Research LLC</i> , IPR2026-00106, Paper 12, Notice of Decisions on Institution (April 28, 2026)
1091	March 11, 2026, Memorandum titled “Additional Discretionary Institution Considerations—U.S. Manufacturing and Small Business Use of AIA Proceedings.” See https://www.uspto.gov/sites/default/files/documents/Additional_Discretionary_Institution_Considerations_US_Manufacturing_and_Small_Business_Use_of_AIA_Proceedings.pdf .
1092	<i>Headwater Research LLC v. Amazon Services LLC</i> , NO. 2-26-cv-00304-JRG-RSP, Eastern District of Texas, Dkt. 1, Complaint
1093	<i>Headwater Research LLC v. Amazon Services LLC</i> , NO. 2-26-cv-00304-JRG-RSP, Eastern District of Texas, Dkt. 20, Order Setting Scheduling Conference
1094	July 29, 2015 Information Disclosure Statement, Prosecution History of U.S. Patent App. No. 14/736,134
1095	U.S. Patent No. 10,321,320 (“the ’320 Patent”)
1096	<i>Google v. Headwater Research LLC</i> , IPR2026-00203, Paper 8, Petitioner’s Opposition to Patent Owner’s Discretionary Denial Brief (April 27, 2026)

1097	<i>Headwater Research LLC v. AT&T Services, Inc. et al.</i> , NO. 2:25-cv-00711-JRG-RSP, Eastern District of Texas, Dkt. 7, Notice of Voluntary Dismissal
1098	Declaration of Turhan F. Sarwar in Support of Admission <i>Pro Hac Vice</i>

Pursuant to 37 C.F.R. § 42.10(c)(2), and the Board's authorization given in Paper 3, Petitioner Google LLC hereby submits this Notice of Intent to Designate Turhan F. Sarwar, a Provisionally Recognized PTAB Attorney, as Back-up Counsel.

Registered practitioner Anant Saraswat, Reg. No. 76,050 is serving as Lead Counsel for Petitioner in this proceeding. *See* Paper 2. The most recent prior proceeding in which Mr. Sarwar was recognized *pro hac vice* by order of the Board, pursuant to a motion of the type described in 37 C.F.R. §42.10(c)(1), was IPR2024-00341 (Paper 11, July 25, 2024). Filed herewith is a certification in the form of a declaration in which Mr. Sarwar attests to satisfying all requirements set forth by the Board in Paper 3. *See* Ex. 1098. A power of attorney from the Petitioner appointing Mr. Sarwar was previously filed in this proceeding on March 27, 2026. *See* Paper 1.

Respectfully submitted,
Google LLC

Date: September 23, 2026

/Anant Saraswat/

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CERTIFICATE OF SERVICE UNDER 37 C.F.R. § 42.6 (E)(4)

I certify that on September 23, 2026, a copy of the foregoing document, including any exhibits filed therewith, is being served via electronic mail, as previously consented to by Patent Owner, upon the following:

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