UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD.,
Petitioner,

v.

NETLIST, INC.,
Patent Owner.

Case No. IPR2022-00615
Patent No. 7,619,912

PATENT OWNER PRELIMINARY SUR-REPLY

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EXHIBIT LIST

Exhibit No.	Document
EX2001	Complaint for Patent Infringement and Summons in *Netlist, Inc., v. Google, Inc.*, Case No. 4:09-cv-05718 ("Google Action"), filed December 4, 2009.
EX2002	Complaint for Patent Infringement and Summons in *Netlist Inc. v. Inphi Corp.*, Case No. 2:09-cv-06900, filed September 22, 2009.
EX2003	Google's Reply In Support of Its Motion to Strike Netlist, Inc.'s New Assertion of Claim 16 (Redacted), Google Action, filed August 27, 2021.
EX2004	Google's Notice of Motion and Motion to Stay (Redacted), Google Action, filed June 3, 2022.
EX2005	Samsung's Answering Brief in Opposition to Netlist's Motion to Dismiss Plaintiff's First Amended Complaint, Case No. 1:21-cv-01453-RGA ("Delaware Action") filed March 2, 2022.
EX2006	Samsung's Reply Brief In Support of Its Motion for Leave To File Second Amended Complaint, Delaware Action, filed February 14, 2022.
EX2007	Declaration of Michael C. Brogioli, Ph.D.
EX2008	Sumit Adhikari, *[Update: Video] Samsung & Google Launch Ad Campaign Highlighting Their Partnership*, Android Headlines (July 5, 2022).
EX2009	David Curry, *Android Statistics (2022)*, Business of Apps (Updated: May 4, 2022).
EX2010	Dieter Bohn, *Sundar Pichai And Rick Osterloh Think The Pixel 6 Is Google's Breakout Phone*, The Verge (October 19, 2021).
EX2011	*A Decade in the Making: How Samsung Foldables Are Defining the Future of Smartphone Innovation*, Samsung Newsroom (December 31, 2021).
EX2012	*Samsung Galaxy Watches to Incorporate Wear OS*, Business Korea Daily News (May 20, 2021).

Exhibit No.	Document
EX2013	*Samsung And Google Introduce The World's First Chromebook - Samsung Series 5 Samsung Creates Another*, Business Wire (May 11, 2021).
EX2014	*Samsung and Google Sign Global Patent License Agreement*, Samsung Global Newsroom (January 27, 2014).
EX2015	Netlist Inc.'s Amended Disclosure of Asserted Claims and Infringement Contentions, Google Action, as filed August 20, 2021.
EX2016	Inphi's Corrected Request for Reexamination, filed May 7, 2010, Reexamination Control No. 95/001,339.
EX2017	Netlist Inc.'s First Amended Complaint for Patent Infringement, Case No. 09-cv-6900, filed December 23, 2009.
EX2018	Samsung DDR3 SDRAM Memory Product Guide (October 2016).
EX2019	Samsung DDR4 SDRAM Memory Product Guide (May 2018).
EX2020	Inphi Corporation, 2010 Form 10-K (March 4, 2011).
EX2021	*Inphi to Partner With Samsung Semiconductor to Showcase LRDIMM Technology at VMworld 2012*, GlobeNewswire (August 21, 2012).
EX2022	Inphi Corporation, 2015 Form 10-K (February 29, 2016).
EX2023	ORDER Re: Motions for Summary Judgement and Related Applications, in *Netlist Inc. v. Samsung Electronics Co., Ltd.*, Case No. 8:20-cv-00993, filed October 14, 2021.
EX2024	Samsung's Reply In Support of Its Motion for Leave to File Sur-Reply Brief (D.I. 29), Delaware Action, filed April 13, 2022.
EX2025	Redline Comparison of EX1035 (U.S. Patent No. 7,363,422 to Perego) With Related U.S. Patent No. 7,356,639.
EX2026	Joint Claim Construction and Prehearing Statement Under Patent Local Rule 4-3, Google Action, filed June 25, 2010.
EX2027	*Why Samsung Needs To Move Beyond Android – And Google*, ComputerWorld (July 11, 2014).

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Exhibit No.	Document
EX2028	Smart Global Holdings, Inc. 2020 Form 10-K (October 22, 2020).
EX2029	Inphi's Feb. 13, 2012 Comments in Reexamination, Reexamination Control No. 95/001,339.
EX2030	Samsung Electronics Co., Ltd. 2021 Half-year Business Report.
EX2031	Xilinx, Programmable Logic Design Quick Start Handbook, (August 2003).
EX2032	*Samsung Electronics Co., Ltd. v. Netlist, Inc.*, IPR2022-00063, Paper 13 (P.T.A.B. May 5, 2022).
EX2033	*High-Speed Samsung LRDIMMs with Inphi Isolation Memory Buffer*, Principled Technologies (August 2012)
EX2034	Smart Modular Technologies (WWH), Inc., 2010 Form 10-K (November 3, 2010).
EX2035	Declaration of Jason G. Sheasby ISO Unopposed Motion for PHV Admission
EX2036	Emails Between Netlist's Counsel and Samsung's IPR Counsel (Aug. 26 – 29, 2022).
EX2037	Emails Between Netlist's Counsel and Samsung's Litigation Counsel (Aug. 24 – 29, 2022).
EX2038	U.S. Patent No. 9,858,215.
EX2039	Unopposed Application for Extension of Time to Answer Complaint by Samsung Electronics America, Inc., in *Netlist, Inc. v. Samsung Electronics Co. Ltd. et al*, No. 2:22-cv-293-JRG, Dkt. 17 (E.D. Tex. Aug. 31, 2022).
EX2040	Unopposed Application for Extension of Time to Answer Complaint by Samsung Semiconductor Inc., in *Netlist, Inc. v. Samsung Electronics Co. Ltd. et al*, No. 2:22-cv-293-JRG, Dkt. 18 (E.D. Tex. Aug. 31, 2022).
EX2041	Waiver of the Service of Summons by Samsung Electronics Co., Ltd. in *Netlist, Inc. v. Samsung Electronics Co. Ltd. et al*, No. 2:22-cv-293-JRG, Dkt. 19 (E.D. Tex. Aug. 31, 2022).

I. Samsung Has Not Met Its Burden of Persuasion Re: The § 315(b) Bar

Samsung bears "the burden of proving its petitions were not time-barred under § 315(b)," which in this case requires it to show that Google is not an RPI. *Applications in Internet Time, LLC v. RPX Corp.*, 897 F.3d 1336, 1356 (Fed. Cir. 2018) ("*AIT*"). Netlist met its burden of producing evidence showing that Google is an RPI; and it is now Samsung's burden to "prov[e] that [Samsung] was not the only real party in interest" in this action. *Id.* at 1358. Samsung has not presented a single declaration or written document contravening the facts presented in the POPR.

First, Samsung does not deny that Google benefits from this IPR because of Google's exposure to infringement risk and time bar. POPR 8-9. Claim 16—the sole claim at issue here—survived reexamination and multiple appeals without amendment. *Id.*; Reply 1-2. Samsung's own evidence confirms that, with its intervening rights argument against claim 16 rejected, Google had an infringement risk at the time of Samsung's IPR filing and continues to have one. EX1053, 44:5-6, 44:11-12 (denying Google's motion re: intervening rights "as to claim 16" and granting "Netlist's motion … that Google is not entitled to intervening rights as to claim 16"). That Samsung might have its own interest does not mean Google had ***no*** interest or that the IPR was filed with ***no*** intent to benefit Google. *AIT*, 897 F.3d at 1347 ("Congress did not speak of there being only one interested party in each case; instead, it chose language that bars petitions where proxies or privies would benefit

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from an instituted IPR, even where the petitioning party might separately have its own interest in initiating an IPR.”).[1] Regarding the critical issue of whether Google benefits (*id.* at 1353), Samsung insinuates that Netlist’s infringement theory is weak. Reply 2. But if infringement were not a concern, Samsung would have had no reason to have filed its DJ action. Judge Seeborg in N.D. Cal. stayed the Google Action only after concluding that the two actions involve the same key issues and that there may be efficiencies in allowing Samsung’s ’912 suit to take precedence. EX1054, 16; EX2039-41 (Samsung to proceed with ’912 suit in EDTX, not N.D. Cal.).

Second, Netlist showed why Samsung’s and Google’s legal filings demonstrate Samsung was acting in Google’s interest. POPR 9-12. Samsung does not deny it filed this IPR because of Google’s indemnification request or that Google’s interest played a role in its IPR filing. Reply 1-4. Instead, it makes the bare assertion that “Google did not pay Samsung to ‘reduce’ its ‘exposure’….” Reply 2. The Federal Circuit has expressed concern over “reli[ance] on attorney argument as evidence that [alleged RPI] was not controlling or funding … IPRs.” *Worlds Inc. v.*

[1] Netlist’s EDTX action on the ’912 patent made clear that Samsung was acting on behalf of Google, alleging “Samsung has stated that it is responsible for making, using, selling, offering to sell, and/or importing, …, infringing DDR4 LRDIMMs and DDR4 RDIMMs … to at least Google.” EX1056, ¶ 28.

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Bungie, Inc., 903 F.3d 1237, 1246 (Fed. Cir. 2018). It is not an accident that no witness from Samsung or Google is able or willing to verify Samsung's attorney argument. Google pays immense sums to Samsung as part of product supply agreements, and Samsung does not deny that it has an indemnification obligation to Google. Reply 1-4; POPR 5-6, 9-12.

Nor has Samsung produced any agreement or correspondence with Google to prove that Google had no interest in the IPR filing.[2] This contrasts with the cases Samsung cites, where petitioners did submit such evidence. *Global Equity Mgmt. (SA) Pty. Ltd. v. eBay Inc.*, 798 Fed. App'x. 616, 620-21 (Fed. Cir. 2020) ("referencing a declaration of an Expedia attorney" and indemnity agreements); *WesternGeco LLC v. ION Geophyscial Corp.*, 889 F.3d 1308, 1321-22, 1322 n.9 (Fed. Cir. 2018) (PGS/ION submitted purchase agreements and correspondences). "The fact that [Samsung] has not produced its agreement with [Google] may suggest that the agreement does not support [Samsung] in meeting its burden regarding the identification of all real parties in interest." *Volkswagen Grp. of Am., Inc. v. Arigna Tech. Ltd.*, IPR2021-01263, Paper 16, at 10 n. 4 (P.T.A.B., Jan. 21, 2022).

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[2] If the Board has any doubt on Google's RPI status, it should order Samsung to produce all its communications with Google as related to the '912 patent, including all relevant agreements and written and oral correspondences, as in *ION*.

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Third, Samsung does not deny that Google and Samsung's expansive and symbiotic pre-existing relationship permeates all aspects of their businesses, as Samsung is one of Google's two main memory suppliers. POPR 12-14, EX2004, 14, Reply 1-4. Samsung only argues that such allegedly "arms-length" commercial relationship is insufficient. Yet, Samsung (1) has produced no evidence to support its claim of an "arms-length" relationship, (2) has refused discovery on the RPI issue (EX2036, 1), and (3) would not answer simple questions on this issue (EX2037, 1):

> (a) Does Samsung have an indemnification contract with Google that relates to the products that were the subject of its dismissed DJ on the '912 patent?
> (b) Is Google taking the position that it has an obligation to defend or indemnify?
> (c) Does Samsung offer to sell in the United States the Google products that are the subject of the dismissed DJ on the 912 patent?
> (d) Why is Samsung not seeking to intervene in the Google case?

Regarding privity, "[a]nalysis under ***any one of*** the [*Taylor*] factors can support a finding of privity." *Ventex Co. Ltd. v. Columbia Sportswear N.A., Inc.* IPR2017-00651, Paper 148, at 8 (P.T.A.B. Jan. 24, 2019) (Precedential). Netlist presented evidence on the "pre-existing substantive legal relationships between the parties," *i.e.*, the business and indemnity relationship between Samsung and Google that support a finding of privity—evidence that Samsung does not dispute. POPR 15-16; *contra* Reply 3. That is sufficient.

II. The *General Plastics* Factors Favor Denial

General Plastics applies because the need to prevent IPR petitions from "be[ing] used as tools for harassment" applies regardless of whether the prior proceeding was a reexamination or IPR. IPR2016-01357, Paper 19, at 16-17

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(P.T.A.B. Sept. 6, 2017). This is especially true where, as here, claim 16 was repeatedly affirmed during the decade-long reexamination, in contrast to *Toshiba Memory Corp. v. Anza Tech., Inc.*, IPR2018-01597, Paper 12, at 45-46 (P.T.A.B. Mar. 12, 2018), where the prior reexamination terminated due to settlement.

Samsung does not deny the facts laid out in POPR 16-25. It asserts only that "Samsung had no involvement in the prior Inphi litigation." Reply 4. But Samsung does not deny that it used the prior reexamination as a roadmap to buttress deficiencies in the Requesters' invalidity theories. POPR 22-23; Reply 4-5. Samsung also does not deny that it was aware of the allegations of infringement of claim 16 against Inphi and that it used Inphi's accused product during the relevant period (even if the products had not been added to the litigations due to the stay). That Netlist dismissed without prejudice the Inphi case in 2021 (EX1060) is irrelevant as to whether Samsung had an interest and an opportunity in the relevant period. Hence, under *In re Vivint* and the AIA's policy goal of preventing serial harassment to patent owners, Samsung's petition should be denied.

III. Netlist's Construction of "Rank" Is Correct

Samsung urges the Board to reject the agreed construction of "rank" in the district court, arguing that claim 16 was not at issue at the time of the agreement. Reply 6-7. But the same term in the same patent is generally accorded the same meaning. *In re Varma*, 816 F.3d 1352, 1363 (Fed. Cir. 2016). Samsung gives no

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reason for why the Board should deviate from this bedrock principle.

Netlist explained why its proposal is consistent with and does not exclude what Samsung claims is the only embodiment covering claim 16. POPR 32-33 (7:56-8:10 and Table 1 describes a logic diagram "for the selection among ranks of memory device***s*** [] using chip-select signals," *i.e.*, multi-device ranks); EX2007 ("Brogioli Decl."), ¶¶ 71-73. Samsung's assertion to the contrary rests on how prior art DIMMs would operate, as evidenced by its citation to prior art. Reply 6. That is why claim 16 was affirmed: no prior art disclosed the feature. Samsung fails to show, however, how the invention would work as relevant to claim construction.

Samsung also suggests that because the Board "found that 'when there is a plurality of memory devices in a rank,' that does not satisfy [16.e]," the Board would have adopted Samsung's construction. Reply 6. Not so. During reexamination, SM—who shared the same counsel as Google—argued that "'one memory device' encompasses a rank of memory" and claim 16 was therefore invalid in light of Amidi. EX1010, 4442. The Board rejected that contention. EX1011, 78-80. Indeed, the Board did not find either that a rank could include a single device or that it would have been obvious to modify a rank to include only a single device. *See id*.

Samsung argues that the '215 patent (EX2038) describes a "rank" as requiring "at least one … memory integrated circuit." Reply 5. This is a trick. The portion of the '215 patent Samsung relies on does not come from the specification of the '912

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patent or its parent ’386 patent. Instead, the ’215 patent added new disclosure to its specification not present in the ’912 patent to propose an expanded series of embodiments. *Compare* EX1058, 187 (3:33-35), 204 (37:35-38) *with* EX1001. The portion of the ’215 disclosure Samsung relies on is thus not probative of the meaning of “rank” in the ’912 patent. The portion of EX1033 cited by Samsung is inapposite as it concerns the traditional understanding of a “bank.” EX1033, 413. The reference’s definition of “rank” is modified from that of the traditional “bank” and requires devices in the rank to “operate in lockstep,” which indisputably makes no sense for a single-device rank. *Id.*; Brogioli Decl., ¶ 74.

IV. The ’244 Provisional/’436 Patent Have Adequate Written Description

Netlist’s priority argument does not rely on obviousness, but what the disclosure would convey to a POSITA “to inform what is actually in the specification.” *Rivera v. ITC*, 857 F.3d 1315, 1322 (Fed. Cir. 2017); POPR 43-62. The Reply now concedes that ’244 discloses receiving bank address, but argues for the first time that the disclosure does not disclose “how ‘bank address’ signals could be used to practice claim 16.” Reply 7. That is not true: as explained in the POPR, the ASIC Decoder (“logic element”) receives a command (e.g., a read) that a POSITA would understand necessarily include bank address signals for determining which rank/bank is operated on. POPR 45-50. EX1010 does not show otherwise. There, Amidi was differentiated based on Amidi’s simple registers that could not

perform the claimed function, in contrast to the CPLD disclosed in the patent. EX1010, 1503-04, 1646-50. Indeed, the citation shows how non-Verilog disclosures explained the use of bank address. *Id.*, 4003, ¶12 (referencing Table 4).

Figs. 10A-11B of the '436 disclose "register" and rank multiplication. POPR 50-58; EX1009, 17:41-45 (in Fig. 11A, the logic element "uses sequential and combinatorial logic to produce four gated chip-select signals (e.g., CS0a, CS0b, CS1a, and CS1b)"); 7:22-28, 16:12-20, 17:46-52 (embodiments featuring "registered DIMMs" and why a POSITA would understand disclosed logic elements would include registers); Brogioli Decl., ¶¶ 47-60. As to BBARX, it is not part of the claim, and Dr. Brogioli explains without rebuttal why a POSITA would not have viewed it as an issue in response to Petitioner's non-enablement argument. POPR 61-62; EX2007, ¶¶62-64.

V. Consideration of Perego-639 Warrants § 325(d) Denial of Grounds 1/2

Samsung does not dispute that Perego-422's disclosure is substantially the same as Perego-639 that was before the Examiner. POPR 71-73. Under *Advanced Bionics*, the marked IDS is sufficient to show that the Office had considered Perego. IPR2019-01469, Paper 6, at 7-8 (P.T.A.B. Feb. 13, 2020) ("Previously presented art includes … art provided … on an … (IDS)."). Samsung's bare disagreement with the Examiner does not establish that the Examiner made a material error. *Id.* at 9.

Dated: September 9, 2022

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CERTIFICATE OF SERVICE

I hereby certify, pursuant to 37 C.F.R. section 42.6, that on September 9, 2022, a complete copy of the **PATENT OWNER'S PRELIMINARY SUR-REPLY and EXHIBITS 2036-2041** were served upon the following, by ELECTRONIC MAIL:

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