

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD.,
Petitioner

v.

NETLIST, INC.,
Patent Owner

Case IPR2025-00002
U.S. Patent No. 11,880,319

**PATENT OWNER'S REQUEST FOR DIRECTOR REVIEW
OF DECISION GRANTING INSTITUTION**

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Patent Trial and Appeal Board
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I. INTRODUCTION

Netlist respectfully requests that the Director review and reverse the panel's Decision on Institution (Paper 17, "DI"). The panel misconstrued the term *signaling interface* to mean *interface signal*, leading it to incorrect determinations regarding collateral estoppel and the two obviousness grounds that the panel determined satisfy the threshold for institution. The decision is also inconsistent with important policy considerations directed to the efficient use of PTAB resources. Moving forward with trial would expend undue resources sifting through voluminous exhibits and case histories to adjudicate unclear and redundant grounds. The panel did not even decide whether four of the six grounds meet the threshold for institution, suggesting that the PTAB lacks the resources (or they are better expended elsewhere) to resolve the fact-intensive issues in dispute and that an Article III court is the appropriate forum for adjudication.

The Director should *deny* institution.

II. LEGAL STANDARD

A party may request Director Review of a panel's decision on institution on the grounds of (a) an abuse of discretion, (b) important issues of law or policy, (c) erroneous findings of material fact, or (d) erroneous conclusions of law.

III. STATEMENT OF FACTS

A. The '319 patent describes and claims distinct signaling interfaces.

The '319 patent describes systems and methods for handshaking between a

memory controller and a memory module during or after an initialization procedure. EX1001, 1:24-27, 2:59-64. Figure 3 (below) shows an example system in which memory modules (10, 26) are coupled to a system memory controller 14. EX1001, 4:24-34, 11:15-19. Relevant here, each memory module includes a notification circuit (20, 30) that communicates with the system memory controller. Each notification circuit, in turn, includes a transistor (36, 38) in an open-drain configuration, which provides output signals via output (12, 24) to the system memory controller. EX1001, 4:36-42.

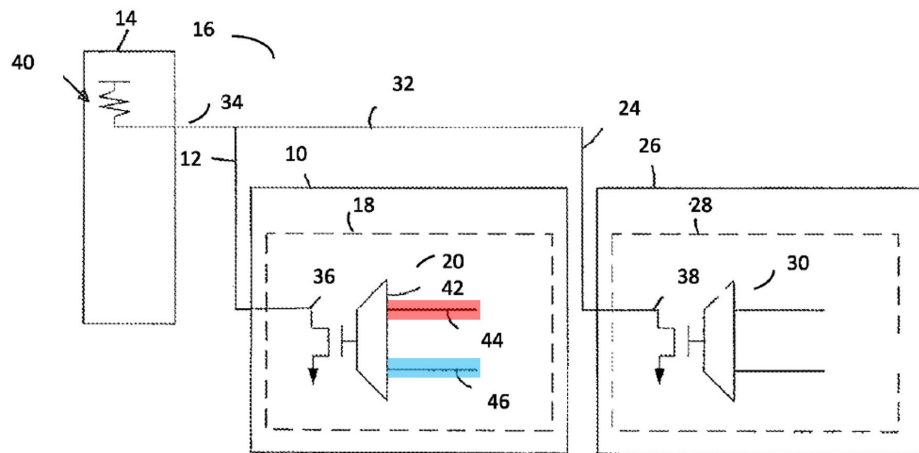


Figure 3

EX1001, FIG. 3 (annotated).

The memory module, via the notification circuit 20, provides two distinct signaling interfaces: (i) an interface that accepts input via pin 46 (blue) and provides output through the open drain of transistor 36 during normal memory operations, and (ii) an interface that accepts input via pin 44 (red) and provides output through the open drain of the transistor during an initialization mode.

EX1001, 11:15-40, FIG. 3. An error signal (e.g., a parity error signal) may traverse the first signaling interface during normal memory operations. EX1001, 11:19-23.

A task_in-progress signal may traverse the second signaling interface during an initialization mode. EX1001, 11:23-29.

The '319 patent includes two independent claims (1 and 11) that recite these distinct signaling interfaces, as well as signals that traverse the interfaces. Claim 1 is representative and recites the following elements relevant to this Request:

... the memory subsystem is configured to provide *a first signaling interface* via the open drain output during normal operations and *a second signaling interface* via the open drain output during an initialization operation including initialization operation sequences, *wherein the second signaling interface is distinct from the first signaling interface* and the initialization operation is distinct from any of the normal operations;

... the memory subsystem controller is further configured to output via the open drain output *a parity error signal in response to a parity error having occurred during the normal memory read or write operations*; and

wherein, during the initialization operation, the memory subsystem controller is configured to output via the open drain output *a signal related to one or more parts of the initialization operation sequences*.

EX1001, 14:41-15:4 (emphasis added). Like the specification, claim 1 requires two distinct signaling interfaces (a “first signaling interface” and a “second signaling

interface”) for receiving distinct signals (a “parity error response signal” and “a signal related to one or more parts of the initialization operation sequences”).

B. Samsung failed to identify distinct signaling interfaces in the art.

1. Samsung petitioned for *inter partes* review on the following six grounds of invalidity, all alleging that the claims were obvious:

Ground	Claims Challenged	35 U.S.C.	References
1	1-20	§103(a)	<u>Hazelzet+JEDEC</u>
2			<u>Hazelzet+Buchmann</u>
3			<u>Hazelzet+Wang</u>
4			Ground 1+ <u>Kim</u>
5			Ground 2+ <u>Kim</u>
6			Ground 3+ <u>Kim</u>

Pet., 4. Other than Wang (used in grounds 3 and 6), all the asserted references were considered during prosecution. POPR, 14-17; DI, 14-15. Hazelzet—the primary reference in each ground—was also the primary reference applied to reject the claims during prosecution. POPR, 14; EX1002, 60-67.

Samsung’s Petition did not expressly construe any claim terms, including the term “signaling interface.” Pet., 23; *see* 37 C.F.R. § 42.104(b)(3) (“the petition must set forth ... [h]ow the challenged claim is to be construed”). Instead, Samsung argued that “[n]o claim construction is needed because the claims are obvious under any reasonable interpretation.” Pet., 23.

Regarding grounds 2 and 5 (Hazelzet-Buchmann and Hazelzet-Buchmann-

Kim, respectively), Samsung argued that Netlist is collaterally estopped from defending against these challenges in light of adverse decisions in IPRs of related Netlist patents. Pet., 5-7. Samsung's Petition did not present any analysis or comparison of the relevant claims to support its collateral estoppel theory. In particular, Samsung did not show that the distinct signaling interfaces claimed in the '319 patent are materially identical to any terms of the invalidated claims in Netlist's related patents. Pet., 5-7; POPR, 7-10.

On the merits, Samsung argued that the "first signaling interface" was met by "interface circuitry" in Hazelzet "capable of utilizing parity error signals PERR ... to output signal UE 121 to the host indicating a parity error ... in parity mode." Pet., 63-64. Samsung argued that the "second signaling interface" was again met by Hazelzet's "interface circuitry," Pet., 67-68, as modified by Buchmann's teachings related to training in an error correcting mode. Pet., 69. In other words, Samsung pointed to the same component (Hazelzet's alleged interface circuitry) as satisfying the '319 patent's two distinct signaling interfaces.

2. Netlist's POPR described the two distinct signaling interfaces recited in claims 1 and 11. POPR, 2-3. Netlist argued that collateral estoppel does not apply to grounds 2 and 5 because these signaling interfaces distinguish the '319 patent claims from invalidated claims of related patents. POPR, 8-9.

On the merits, Netlist argued that Samsung's failure to construe "interface"

or “interface circuitry” and to explain how Hazelzet’s alleged “interface circuitry” teaches both of the claimed interfaces were fatal to its challenges. POPR, 27-30.

Samsung, Netlist explained, merely “posits what the two alleged signaling interfaces in its proposed combinations would communicate (parity errors for the first interface, training status for the second interface), but fails to demonstrate that Hazelzet’s ‘interface circuitry’ or any other combination of the alleged prior art actually includes the two, distinct signaling interfaces that are recited in the claims.” POPR, 27-28. And, in ground 5, Samsung addressed only elements of dependent claim 2, so ground 5 fails to cure the defects of ground 2. POPR, 30-31.

C. The panel construed “signaling interface” as “interface signal,” which affected its collateral-estoppel and obviousness holdings.

The panel construed the claimed *signaling interfaces* as mere *interface signals*, reasoning that “it makes no sense to ‘provide’ circuitry ‘via the open drain output.’” DI, 54. “Rather,” the panel asserted, “two distinct interface *signals*[] are provided via the open drain output.” *Id.* It cited disclosure in the ’319 patent describing signals that traverse the interfaces. *Id.* But the panel did not consider the distinct signaling interfaces shown in Figure 3 or the other limitations of the claims that recite the signals that traverse the interfaces. *Id.*

Having construed the claimed interfaces as signals, the panel found that Samsung’s mapping of the claimed first and second interfaces to signals in the Hazelzet-Buchmann combination was sufficient for institution. DI, 53-54 (“*For the*

first interface, Petitioner identifies Hazelzet’s disclosure of parity error signal

PERR 111 applied, during parity mode, to open drain output UE 121, indicating a parity error. ... *For the second interface, Petitioner identifies ... a separate status signal* applied, during initialization, to open drain output UE 121 reporting completion of TS0 and TS3 training in an SBC (error correcting) mode during initialization of a memory buffer incorporated into the Hazelzet memory module.”). The panel also determined that Netlist is collaterally estopped from defending against grounds 2 and 5. DI, 17-24.

The panel also discussed at length the parties’ fact-intensive dispute regarding whether the draft JEDEC proposal used in grounds 1 and 4 was publicly accessible as of the critical date. DI, 31-42. The panel did not find that Samsung satisfied the reasonable likelihood standard, but merely stated that “factual issues remain as to how ‘accessible’ the draft proposal in Exhibit 1015 would have been to an interested person who was not a member of JEDEC.” DI, 42.

IV. ARGUMENTS

The Director should reverse the panel’s decision to institute review because the panel misconstrued “signaling interface,” which infected its entire analysis. Additionally, moving forward with trial would be a waste of the Board’s resources because Samsung’s grounds lack particularity, present fact-intensive issues more appropriate for an Article III court, and fail to meet the threshold for institution.

A. The panel erred in construing the claim term “signaling interface” as “interface signal.”

The panel misconstrued the claim term “signaling interface” as “interface signal.” DI, 54. This error infected the panel’s holdings on collateral estoppel and obviousness of grounds 2 and 5. Netlist respectfully requests that the Director reverse the panel’s decision because collateral estoppel does not attach, and Samsung fails to demonstrate a reasonable likelihood the claims are obvious under the plain meaning of “signaling interface.”

The panel’s construction of “signaling interface” as “interface signal” is wrong for three reasons. *First*, it fails to accord the term its plain meaning in the context of the patent, contrary to *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005). The specification, including Figure 3, discloses a memory module that provides distinct signaling interfaces *and* signals that traverse those interfaces. EX1001, 11:15-40, FIG. 3. The panel erred by focusing only on the disclosure of the signals and conflating the signals with the interfaces they traverse. DI, 54.

Second, the panel impermissibly read “interface” out of the claims. *Bicon, Inc. v. The Straumann Co.*, 441 F.3d 945, 950 (Fed. Cir. 2006) (emphasizing “the principle that claim language should not [be] treated as meaningless”). Rather than construing “signaling interface,” the panel focused on “providing,” believing “it makes no sense to ‘provide’ circuitry ‘via the open drain output.’” DI, 54. But it makes sense, when read in context. The claimed “memory subsystem” provides the

distinct interfaces that, in turn, provide output through the open drain. The panel's mistaken belief about "providing" led it to impermissibly read out "interface."

Third, the claims expressly recite signals that traverse the interfaces: a "parity error signal," and "a signal related to one or more parts of the initialization operation sequences." Reciting both "signaling interface" and "signal" "in close proximity in the same claim gives rise to an inference that a different meaning should be assigned to each." *Bancorp Services, LLC v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1373 (Fed. Cir. 2004). Neither the panel nor Samsung rebutted this inference, which further demonstrates that the panel's construction is wrong.

The Director should reverse (as opposed to remand) the panel's decision and deny institution because, as the panel explained, Samsung mapped different *signals* to the claimed signaling interfaces. DI, 53-55. Samsung thus committed the same error as the panel, incorrectly construing (at least implicitly) "signaling interface" as "interface signals." Additionally, the panel's collateral-estoppel ruling hinges on the same flawed reasoning as its merits analysis, DI, 23 (accepting Samsung's argument that the "claim language require[s] the same 'open drain output' for both signaling interfaces, which is a materially identical requirement of the '595, as well as the '218 and '623, claims."), and thus cannot stand.

The panel also abused its discretion in instituting ground 5 over claims 1-20. In ground 5, Samsung addressed only elements of dependent claims. Pet., 110-115;

POPR, 30-31. Because ground 5 does not address the independent claims, it cannot cure ground 2's deficiencies—a point the panel ignored. DI, 61.

B. The panel's decision is inconsistent with important policy considerations.

Moving forward with trial would expend undue resources sifting through voluminous exhibits and case histories to adjudicate unclear and redundant grounds. Indeed, the panel did not even decide whether four of the six grounds meet the threshold for institution, suggesting that the PTAB lacks the resources (or they are better expended elsewhere) to resolve the fact-intensive issues in dispute and that an Article III court is the appropriate forum for adjudication.

1. Reviewing Samsung's voluminous record is a waste of Board resources.

When deciding whether to exercise discretion to deny institution, the Board should consider “the efficient administration of the Office [and] the ability of the Office to timely complete proceedings,” 35 U.S.C. § 316(b), as well as the requirement to “secure the just, speedy, and inexpensive resolution of every proceeding,” 37 C.F.R. § 42.1(b). Here, Samsung developed an expansive record (including voluminous expert testimony, fact witness testimony, prior case histories, and extraneous exhibits) seeking to resolve numerous fact-intensive issues, but failed to advance focused and meritorious arguments for all grounds. In such cases, the Board should deny institution to conserve resources.

Even before trial was instituted, Samsung filed 118 exhibits. It filed a 348-page expert declaration (EX1003). It filed case histories of multiple related patents (EX1005, EX1006, EX1007, EX1038, EX1096, EX1112) and petitions, expert declarations, deposition transcripts, and Board decisions from *six* prior IPRs (EX1021, EX1032-EX1035, EX1058-EX1060, EX1062, EX1091-EX1093, EX1098-EX1106, EX1108, EX1109). It submitted briefing and orders from prior district court cases involving multiple parties. EX1061; EX1064-EX1068. And it relies on this prior litigation throughout the Petition as the basis for its grounds.

With such an unusually large record, instituting trial would require the Board to dedicate a disproportionate amount of resources to this case. The Board's limited resources are better spent elsewhere—namely, cases in which petitioners present streamlined arguments and evidence demonstrating that all asserted grounds meet the threshold for institution.

Many of Samsung's exhibits and prior testimony, moreover, are proffered here to re-litigate a highly fact-intensive inquiry of whether the draft JEDEC proposal (EX1015)—a reference in grounds 1 and 4—qualifies as prior art. Pet., 33-39. In addition to the draft JEDEC proposal itself, Samsung relies on 24 other JEDEC references in its efforts to establish, among other things, public availability of the proposal (EX1024-EX1026, EX1029, EX1036, EX1037, EX1046, EX1048, EX1049, EX1051-EX1053, EX1056, EX1071-EX1075, EX1083-EX1088).

Samsung also submitted three fact-witness declarations (EX1050, EX1054, EX1055), Pet., 33-39, filed over three years ago in IPR2022-00064, which reviewed a related patent. The public availability of the JEDEC proposal was fully litigated there, yet the Board did not decide the issue. EX1103, 9 n.4.

As Netlist has explained multiple times, the reference was not publicly available. POPR, 32-54. It was presented confidentially as a proposal to a JEDEC standard and voted on by the authoring committee during an invite-only conference in Maui. *See, e.g.*, POPR, 52-54. After reviewing the parties' arguments and evidence, the panel declined to rule on whether Samsung made its threshold showing that the JEDEC proposal is prior art because "factual issues remain as to how 'accessible' the draft proposal in Exhibit 1015 would have been to an interested person who was not a member of JEDEC." DI, 42.

Litigating this fact-intensive dispute (again) will require third-party testimony and in-depth fact analysis. Such a dispute is better suited for district courts, which have broader subpoena powers and discovery procedures. *Compare* Fed. R. Civ. P. 45 (broad third-party subpoena powers) *with* 35 U.S.C. § 24 (the Board needs a district court to issue a subpoena). Parsing the relevant expert testimony is also better suited for an Article III court: "extensive reliance on expert testimony and/or reasonable disputes between experts on dispositive issues may suggest that the questions are better resolved in an Article III court." *See* FAQ 21

for Interim Processes for PTAB Workload Management.

At bottom, a district court is better suited to resolve the issues-in-dispute. Accordingly, the Director should deny institution to conserve PTAB resources.

2. Reviewing Samsung’s six grounds, which lack the requisite particularity, is a waste of Board resources.

The Director should also reverse because Samsung failed to present its six grounds with sufficient particularity. POPR, 4-6. “It is of the utmost importance that petitioners in the IPR proceedings adhere to the requirement that the initial petition identify ‘with particularity’ the ‘evidence that supports the grounds for the challenge to each claim.’” *Intelligent Bio-Sys., Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1369 (Fed. Cir. 2016) (quoting 35 U.S.C. § 312(a)(3)). A corollary to this requirement is that petitioners are prohibited from incorporating by reference arguments from other documents into the petition. 37 C.F.R. § 42.6(a)(3); *Cisco Sys., Inc. v. C-Cation Techs., LLC*, IPR2014-00454, Paper 12 at 7-10 (P.T.A.B. Aug. 29, 2014) (informative).

But that is exactly what Samsung did. It excessively incorporated by reference from other documents, enabling it to pack collateral-estoppel arguments, lengthy public-accessibility allegations, and six invalidity grounds into a single petition. POPR, 4-6, 8. Samsung’s incorporation by reference was particularly egregious in its collateral-estoppel arguments. It presented lengthy claim listings of related patents before the substance of the Petition (not included in the word

count), which the panel relied on. DI, 20-22 (citing, for example, Pet. xvii, xxxiii–xxxiv). Samsung also incorporated-by-reference more than 50 pages of claim charts from its expert’s declaration. Pet., 6 (citing EX1003, ¶¶155-158); POPR, 8. Permitting these violations, the panel attempted to cure Samsung’s deficient showing by cobbling together the various pieces. DI, 17-26.

Further demonstrating the lack of particularity, Samsung grouped its grounds together and bounced between their different secondary references at will. For example, it analyzed grounds 1-3 together under the single heading “Combinations for Grounds 1-3: Hazelzet (EX1014) and either JEDEC (EX1015), Buchmann (EX1016), or Wang (EX1090).” Pet., 40. At times, Samsung cited the secondary references collectively. *E.g., id.* at 44. But at other times, it referred to them separately. *E.g., id.* at 41-42, 103-06. In other words, Samsung picked and chose when it was convenient to cite which secondary reference and made it nearly impossible to disentangle its web of grounds.

Worse yet, Samsung haphazardly threw in many documents outside its grounds—Ellsberry, Pet., 42; Hein, Pet., 42; Micron, Pet., 44; Stone, Pet., 47-48; Talbot, Pet., 49; and various JEDEC references, which may have the same public availability issues as the JEDEC proposal itself, Pet., 66-70. Samsung’s excessive reliance on extraneous documents confirms that the Petition lacks the particularity needed to understand the grounds.

Adaptics is instructive. *Adaptics Ltd. v. Perfect Company*, IPR2018-01596, Paper 20 (P.T.A.B. Mar. 6, 2019) (informative). There, the petitioner relied on additional documents beyond the four corners of the references named in the grounds. *Id.* at 22. The Board denied institution, reasoning that the petition’s reliance on “these additional documents ... to fill gaps in the asserted references with respect to the claimed subject matter increases our concern that the Petition lacks the required particularity, and, instead, turns the Petition into an empty invitation for the Board and Patent Owner to search the record for evidence that might support the full breadth of Petitioner’s contentions.” *Id.* at 22-23. Similarly here, Samsung’s citation to many additional documents throughout the grounds further demonstrates that the Petition fails to satisfy the particularity requirement.

In sum, the Director should not allow the panel to continue down the path of considering Petitioner’s ambiguous challenges. The Director should grant review and *deny* institution, consistent with the PTAB’s rules and case law.

V. CONCLUSION

For the foregoing reasons, Netlist respectfully requests that the Director grant this request for Director Review and reverse the panel’s decision to institute review of the ’319 patent.

Respectfully submitted,

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CERTIFICATE OF SERVICE (37 C.F.R. § 42.6(e))

I certify that the above-captioned **PATENT OWNER'S REQUEST FOR
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served in its entirety on May 29, 2025, upon the following parties via electronic
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