

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

OPENSKY INDUSTRIES, LLC,
Petitioner,

v.

VLSI TECHNOLOGY LLC,
Patent Owner.

IPR2021-01056
Patent 7,523,373 B2

Before THOMAS L. GIANNETTI, BRIAN J. MCNAMARA, and
JASON W. MELVIN, *Administrative Patent Judges*.

MELVIN, *Administrative Patent Judge*.

DECISION
Denying Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

OpenSky Industries, LLC (“Petitioner”) filed a Petition (Paper 2, “Pet.”) requesting institution of *inter partes* review of claims 1–3, 5, 6, 9–11, and 13 (“the challenged claims”) of U.S. Patent No. 7,523,373 B2 (Ex. 1001, “the ’373 patent”). VLSI Technology LLC (“Patent Owner”) filed a Preliminary Response. Paper 9 (“Prelim. Resp.”). As authorized, Petitioner filed a Preliminary Reply (Paper 14 (“Prelim. Reply”)), and Patent Owner filed a Preliminary Sur-Reply (Paper 17 (“Prelim. Sur-Reply”)). As also authorized, Patent Owner filed a Supplemental Brief regarding *In re Vivint, Inc.*, 14 F.4th 1342 (Fed. Cir. 2021). Paper 12. Petitioner filed an opposition brief. Paper 16.

A. RELATED MATTERS

The parties both identify the following matter related to the ’373 patent: *VLSI Technology LLC v. Intel Corporation*, No. 6:19-cv-00254-ADA (consolidated as 1:19-cv-00977) (W.D. Tex.) (trial concluded with jury verdict). Pet. 4; Paper 5. Patent Owner identifies the following additional matters: *VLSI Tech. LLC v. Intel Corp.*, No. 6:21-cv-00057 (W.D. Tex.); *VLSI Tech. LLC v. Intel Corp.*, No. 6:21-cv-00299 (W.D. Tex.); *Intel Corp. v. VLSI Tech. LLC*, IPR2020-00158 (PTAB) (on appeal to Federal Circuit, No. 21-1616). Paper 5.

B. REAL PARTIES IN INTEREST

Petitioner identifies only itself as the real party in interest. Pet. 4. Patent Owner identifies VLSI Technology LLC and CF VLSI Holdings LLC as real parties in interest. Paper 5.

C. THE '373 PATENT

The '373 patent is titled Minimum Memory Operating Voltage Technique. Ex. 1001, code (54). It describes a method of determining the minimum operating voltage for integrated-circuit memory, storing the value of that voltage in nonvolatile memory, and using the value to determine when an alternative power-supply voltage may be switched to the memory or ensuring that the minimum operating voltage is otherwise met. *Id.*, code (57).

D. CHALLENGED CLAIMS

Challenged claim 1 is reproduced below:

1. A method, comprising:
 - providing an integrated circuit with a memory;
 - operating the memory with an operating voltage;
 - determining a value of a minimum operating voltage of the memory;
 - providing a non-volatile memory (NVM) location;
 - storing the value of the minimum operating voltage of the memory in the NVM location;
 - providing a functional circuit on the integrated circuit exclusive of the memory;
 - providing a first regulated voltage to the functional circuit;
 - providing a second regulated voltage, the second regulated voltage is greater than the first regulated voltage;
 - providing the first regulated voltage as the operating voltage of the memory when the first regulated voltage is at least the value of the minimum operating voltage;
 - and
 - providing the second regulated voltage as the operating voltage of the memory when the first regulated voltage is less than the value of the minimum operating voltage, wherein while the second regulated voltage is provided

as the operating voltage of the memory, the first regulated voltage is provided to the functional circuit.

Ex. 1001, 13:7–28. Claims 9 and 16 are independent and recite limitations similar to claim 1. *Id.* at 13:59–14:15, 14:40–62.

E. PRIOR ART AND ASSERTED GROUNDS

Petitioner asserts the following grounds of unpatentability:

Claim(s) Challenged	35 U.S.C. §	References/Basis
1, 3, 5, 6, 9–11, 13	103	Harris, ¹ Abadeer, ² Zhang ³
2, 11	103	Harris, Abadeer, Zhang, Cornwell ⁴

Pet. 6. Petitioner relies also on the Declaration of Adit Singh, Ph.D. (Ex. 1002) and the Declaration of Sylvia D. Hall-Ellis, Ph.D. (Ex. 1027).

II. ANALYSIS

Patent Owner argues that Petitioner relies on expert declarations filed by Intel in another proceeding. Accordingly, unless cross-examination is available, those declarations are hearsay in this proceeding.

Prelim. Resp. 27.⁵

The declarations of Dr. Singh (Ex. 1002) and Dr. Hall-Ellis (Ex. 1027) were prepared for and filed in a prior IPR proceeding, *Intel Corporation v. VLSI Technology LLC*, IPR2020-00158 (“the Intel IPR”). The Board denied institution in the Intel IPR. IPR2020-00158, Paper 16

¹ US 5,867,719, issued Feb. 2, 1999 (Ex. 1003).

² US Pub. 2006/0259840 A1, published Nov. 16, 2006 (Ex. 1004).

³ US Pub. 2003/0122429 A1, published July 3, 2003 (Ex. 1005).

⁴ US 7,702,935 B2, issued Apr. 20, 2010 (Ex. 1006).

⁵ Fed. R. Evid. 804(b)(1) provides a hearsay exception for former testimony offered against a party who had an “opportunity and similar motive” to develop it by cross-examination. That does not apply here.

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(denying institution), Paper 20 (denying rehearing). Petitioner filed Dr. Singh's and Dr. Hall-Ellis's declarations here without change, as reflected by the title pages indicating the Intel IPR. *See Exs. 1002, 1027.*

Patent Owner argues that Petitioner will be unable to produce its declarants for cross examination, and therefore their statements should be given little weight in this proceeding.⁶ Prelim. Resp. 27–29. In that regard, Patent Owner relies on statements in a petition challenging the '373 patent filed by another party, Patent Quality Assurance (“PQA”), in IPR2021-01229 (“the PQA IPR”), in which PQA asserts that it has “‘exclusively’ engaged Dr. Singh and Dr. Hall-Ellis.” *Id.* at 28–29 (quoting IPR2021-01229, Paper 1, 4–5).⁷ Since filing its petition, PQA has corrected itself to confirm that it has an exclusive arrangement with Dr. Singh but not with Dr. Hall-Ellis. IPR2021-01229, Paper 8, 8 n.2 (stating that the petitioner in that case “erroneously claimed exclusivity with Dr. Hall-Ellis.” (citing IPR2021-01229, Ex. 1033 ¶ 9); *id.*, Ex. 1034 (engagement agreement between PQA and Dr. Singh)). Thus, we consider only the effect of Dr. Singh's agreement with PQA.

Petitioner's Preliminary Reply addresses Patent Owner's arguments, and submits that we should not decline institution on the basis of Dr. Singh's expert declaration for a number of reasons. First Petitioner submits that expert testimony is not necessary in every case. Prelim. Reply 8–9. That argument is beside the point. Whether it is necessary or not, the Petition

⁶ Under our rules, cross examination of declaration testimony of retained experts is authorized as mandatory discovery. 37 C.F.R. § 42.51(b)(1)(ii).

⁷ The PQA IPR was filed July 7, 2021, and the institution decision in that proceeding is due by January 27, 2021.

relies on expert support,⁸ and Petitioner has not explained why such support is unnecessary. Rather than retaining an expert who would be available for cross examination, Petitioner chose to rely on Dr. Singh's declaration throughout the Petition. Having made that choice, it strains credibility for Petitioner to say that its reliance on Dr. Singh's testimony was, after all, unnecessary.

In the Preliminary Response, Patent Owner raises multiple factual disputes that may depend on more than the references themselves—Patent Owner relies on its own expert declaration to dispute Petitioner's assertions. *See* Prelim. Resp. 33–41 (disputing Harris's low-power embodiment and how it would be combined with Zhang's voltage regulators) (citing Ex. 2002 ¶¶ 23–34, 46–52, 78–82, 85–89), 42 (disputing Petitioner's support for combining Harris's low-power embodiment with Abadeer and Cornwell) (citing Ex. 2002 ¶¶ 63–66), 42–46 (discussing Harris's failure mode, including how a skilled artisan would understand the disclosures, and how it would be combined with Zhang) (citing Ex. 2002 ¶¶ 91, 92, 96, 97), 47–52 (discussing the relative voltages of Harris's supplies and how skilled artisans would read Harris in light of related disclosures) (citing Ex. 2002 ¶¶ 93, 98–100), 55–59 (asserting the Petition relies on multiple of Harris's embodiments) (citing Ex. 2002 ¶¶ 35–39, 41–43, 59–72). While some of the disputes may turn on plain disclosures in the prior art, the Petition cites to Dr. Singh's declaration in some instances as the sole support for an assertion. *See* Pet. 26–28 (justifying combining Abadeer with Harris), 30–33 (justifying combining Zhang with Harris). We do not address those disputes

⁸ Patent Owner asserts that the Petition contains “over 100 citations to Dr. Singh's declaration.” Prelim. Sur-Reply 8.

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in this decision, but they confirm the potential significance of expert testimony here.

Petitioner contends further that it will seek Dr. Singh's cooperation if trial is instituted. Prelim. Reply 9. That suggestion, however, stands at odds with Dr. Singh's agreement to work exclusively with PQA. *See* IPR2021-01229, Ex. 1033 (declaration describing PQA's engagement of Dr. Singh), Ex. 1034 (engagement agreement between PQA and Dr. Singh). Petitioner submits that because Dr. Singh submitted his declaration in the Intel IPR and in the PQA IPR, "[i]t is unfathomable that a witness who submits two declarations would refuse to testify." Prelim. Reply 10. But that argument ignores that Dr. Singh has agreed to work exclusively with PQA, which has not given any indication that it would release Dr. Singh from his agreement. Moreover, we have no evidence from Dr. Singh that he would be willing to testify here. Without some factual support to demonstrate that it reasonably expects Dr. Singh to cooperate, in light of the exclusive agreement with PQA, Petitioner's assertion is speculation and does not demonstrate sufficiently that Dr. Singh would likely participate in this proceeding.

Petitioner challenges PQA's assertion of its exclusive agreement with Dr. Singh as "vague and ethically questionable" (*id.* at 9–10). This is more speculation. As noted above, PQA has produced its agreement with Dr. Singh (IPR2021-01229, Ex. 1034) and we have no basis to question the agreement's legitimacy. Petitioner allowed this unusual situation by relying on a prior declaration by Intel's expert, rather than retaining its own expert for a new declaration. Whether the agreement with Dr. Singh complies with ethical rules and whether it permits Dr. Singh to testify here are matters not before us. Moreover, they may present issues of contract law for the courts

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to decide, which may cause delay and prevent us from meeting our statutory deadlines, were we to institute a trial with the issues unresolved.

Petitioner argues next that the Board can allow a substitute witness, citing *Corning Gilbert Inc. v. PPC Broadband, Inc.*, IPR2013-00347, Paper 18. That nonprecedential case does not support Petitioner. In *Corning Gilbert*, the panel considered an already-instituted proceeding in which a willing declarant was diagnosed with cancer and appeared unlikely to be available for a deposition. IPR2013-00347, Paper 18, 2. The panel permitted the petitioner there to secure an alternative declarant who would execute the same declaration as the original declarant. *Id.* at 3. Here, the circumstances are different. This case is also distinguished from the circumstances in *Google LLC, v. Hammond Development Int'l, Inc.*, IPR2020-00020, Paper 18 (PTAB July 2, 2020). There, prior to institution, Petitioner certified that, for reasons unrelated to the merits of the matter, it could no longer work with the expert whose declaration was filed in support of the petition (*see id.*, Paper 13). The Board permitted Petitioner to substitute another expert who executed a declaration that was in substance the same as that of the previous expert. *See id.*, Paper 18. Petitioner has not proposed such an alternative in this case.

While departing from the Board's usual procedure may be justified by unforeseen circumstances that arise with no warning and at no fault of the party, Petitioner has placed itself in this situation by relying on another party's expert declaration. There is no indication that Petitioner ever spoke to Dr. Singh or attempted to retain him for this proceeding or secure his availability for cross examination before filing his declaration. Under these circumstances we see no basis for permitting Petitioner to substitute for Dr. Singh.

We conclude that the circumstances here do not justify instituting review with the mere expectation that Petitioner will find an acceptable substitute declarant once trial is instituted.

Petitioner argues that the best approach would be to institute review first and consider Patent Owner's objections later. Prelim. Reply 11 (distinguishing cases cited by Patent Owner). We agree that, under normal circumstances, Patent Owner's objections might be addressed in a trial. However, this is not a normal situation. Other than speculation, Petitioner has not provided any showing that Dr. Singh would be released from his obligation to PQA. Here, the facts suggest that this would be unlikely, for Patent Owner has shown that Dr. Singh has agreed to work exclusively for a party other than Petitioner, and Petitioner has not provided any factual support from Dr. Singh or PQA. There is no indication in the record that Petitioner has even met Dr. Singh, much less discussed what he might do if released from his agreement with PQA.

Given the facts surrounding Dr. Singh's testimony, we do not consider him likely to be a willing participant in this proceeding. It is Petitioner's burden to show unpatentability, and in support of its case Petitioner has brought forth the testimony of an expert that Petitioner likely cannot produce for cross-examination and would likely be excluded.⁹ Under the circumstances, we determine that the Petition does not warrant institution.

⁹ Patent Owner's suggestion that the Board issue a subpoena to compel Dr. Singh's testimony has no merit. Our rules and procedures place the responsibility of producing Dr. Singh on Petitioner. Consolidated Trial Practice Guide 23 (November 2019); 37 C.F.R. § 42.53(g).

III. CONCLUSION

Having weighed the parties' arguments and the full record, we conclude that the Petition does not warrant institution. *See Consolidated Trial Practice Guide*, 58 ("There may be other reasons besides the 'follow-on' petition context where the 'effect . . . on the economy, the integrity of the patent system, the efficient administration of the Office, and the ability of the Office to timely complete proceedings,' 35 U.S.C. § 316(b), favors denying a petition even though some claims meet the threshold standards for institution under 35 U.S.C. §§ 314(a), and 324(a)."). Accordingly, we deny institution.

IV. ORDER

Accordingly, it is

ORDERED that, pursuant to § 314(a), no *inter partes* review of the '373 patent is instituted in this proceeding.

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