

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD.,
Petitioner,

v.

CALIFORNIA INSTITUTE OF TECHNOLOGY,
Patent Owner.

IPR2023-00133
Patent 7,421,032 B2

Before KEN B. BARRETT, JOHN A. HUDALLA, and
AMBER L. HAGY, *Administrative Patent Judges*.

BARRETT, *Administrative Patent Judge*.

DECISION

Denying Petitioner's Request on Rehearing of Decision Denying
Institution of *Inter Partes* Review
37 C.F.R. § 42.71(d)

I. INTRODUCTION

Samsung Electronics Co., Ltd. (“Petitioner”) filed a Petition requesting *inter partes* review of claims 1–8 and 10–22 of U.S. Patent No. 7,421,032 B2 (“the ’032 patent,” Ex. 1001). Paper 1 (“Pet.”). California Institute of Technology (“Patent Owner”) filed a preliminary response to the Petition. Paper 7 (“Prelim. Resp.”). With our authorization, Petitioner filed a Preliminary Reply (Paper 8, “Pet. Reply”) and Patent Owner filed a Preliminary Sur-reply (Paper 9, “PO Sur reply”) directed to the issue of discretionary denial under 35 U.S.C. § 314.

On May 4, 2023, we entered a Decision (Paper 10, “Dec.”) denying institution of *inter partes* review. As part of the Decision, we considered Patent Owner’s arguments (Prelim. Resp. 47–62; PO Sur-reply 1–3) that we should exercise our discretion to deny institution under 35 U.S.C. § 314(a) based on the advanced posture of the related case styled *California Institute of Technology v. Samsung Electronics Co.*, No. 2-21-cv-00446 (E.D. Tex. filed Dec. 3, 2021) (“the underlying litigation”). Dec. 3, 11–20. We based our discretionary denial analysis on the Board’s precedential decision in *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential) (“*Fintiv*”) and the USPTO Director’s Memorandum issued on June 21, 2022, titled “Interim Procedure for Discretionary Denials in AIA Post Grant Proceedings with Parallel District Court Litigation” (“Interim Procedure”).¹ After weighing the factors identified in *Fintiv*, we exercised

¹ Available at https://www.uspto.gov/sites/default/files/documents/interim_proc_discretionary_denials_aia_parallel_district_court_litigation_memo_20220621_.pdf

our discretion under 35 U.S.C. § 314(a) to deny institution of *inter partes* review. Dec. 33.

Petitioner filed a Request for Rehearing (Paper 11, “Req. Reh’g”) asking us to reconsider our analysis of the sixth *Fintiv* factor and our decision to exercise discretion to deny institution.² For the reasons stated below, we deny the Request for Rehearing.

II. ANALYSIS

When reconsidering a decision on institution, we review the decision for an abuse of discretion. *See* 37 C.F.R. § 42.71(c) (2022). An abuse of discretion may be determined if a decision is based on an erroneous interpretation of law, if a factual finding is not supported by substantial evidence, or if the decision represents an unreasonable judgment in weighing relevant factors. *See Star Fruits S.N.C. v. United States*, 393 F.3d 1277, 1281 (Fed. Cir. 2005); *Arnold P’ship v. Dudas*, 362 F.3d 1338, 1340 (Fed. Cir. 2004); *In re Gartside*, 203 F.3d 1305, 1315–16 (Fed. Cir. 2000). The party requesting rehearing has the burden of showing the decision should be modified, which includes specifically identifying all matters the party believes we misapprehended or overlooked. *See* 37 C.F.R. § 42.71(d) (2022).

² Petitioner also requested rehearing by the Precedential Opinion Panel (“POP”) to clarify “[w]hether *Fintiv*’s multi-factor balancing analysis and Director Vidal’s *Interim Procedure* . . . require a compelling merits showing under *Fintiv*’s sixth factor where an unpatentability challenge may be strong even if found not to reach the compelling standard.” Ex. 3001. POP denied Petitioner’s request for review. Paper 13. Notwithstanding, we consider Petitioner’s arguments regarding *Fintiv* Factor 6 below.

Petitioner contends that we “erred in [our] overall balancing of the *Fintiv* factors” insofar as we interpreted the Interim Procedure for the sixth *Fintiv* factor “to mean that if a finding of compelling merits is not reached, then factor six cannot weigh against discretionary denial.” Req. Reh’g 1–2. According to Petitioner, our “erroneous analysis under *Fintiv*’s sixth factor . . . infected the overall multi-factor balancing assessment.” *Id.* at 2. Petitioner also asks us to hold its Request for Rehearing in abeyance “until the resolution of a pending Administrative Procedure Act (‘APA’) challenge to the validity of the *Fintiv* rule.” *Id.* We address Petitioner’s arguments in turn below.

A. Petitioner’s Arguments Regarding the Sixth Fintiv Factor

Petitioner contests the manner in which we evaluated the merits of its unpatentability challenges as part of our consideration of the sixth *Fintiv* factor. *See* Dec. 20–32. In particular, Petitioner contends that we wrongly considered only whether the merits were “compelling” as prescribed by certain guidance in the Interim Procedure. Req. Reh’g 4 (citing Interim Procedure 4–5). Petitioner further contends that we did not properly consider whether the merits “seem[ed] particularly strong” in accordance with *Fintiv* factor 6. *Id.* at 5 (quoting *Fintiv*, Paper 11 at 14–15). Petitioner also argues that we did not properly consider the testimony of its declarant, Dr. Valenti, which Petitioner notes is unrebutted in the preliminary record. *Id.* at 9–10.

We do not agree with Petitioner’s arguments. As recognized by Petitioner (Req. Reh’g 5–6), our analysis of the merits for *Fintiv* factor 6 may consider “strengths or weaknesses regarding the merits . . . as part of [our] balanced assessment.” *Fintiv*, Paper 11 at 15–16. For example, *Fintiv*

discusses merits that “seem particularly strong” and merits that might be “a closer call.” *Id.* at 14–15. Further, we do not understand the Interim Procedure to have changed this calculus. The Director herself notes that the Interim Procedure “affirms the PTAB’s current approach of declining to deny institution under *Fintiv* where the evidence of record so far in the case would plainly lead to a conclusion that one or more claims are unpatentable.” Interim Procedure 5 n.6. The Director also acknowledges a potential range of merits, from those that are “merely sufficient to meet the statutory institution threshold” to merits that “present a compelling unpatentability challenge.” *Id.* at 4–5. Thus, regardless of the descriptors employed to characterize the relative merits, the *Fintiv* factor 6 analysis ultimately involves an assessment of the merits along a spectrum of outcomes.

Accordingly, our Decision addressed certain weaknesses in Petitioner’s unpatentability challenges. In particular, with regard to Petitioner’s showing regarding the component of the formula in the “generating a sequence of parity bits” step that “is the value of a sum of ‘a’ randomly chosen *irregular repeats of the message bits*,” as recited in independent claim 1, and, according to Petitioner, as represented in the Tanner graphs of independent claims 11 and 18, we determined that Petitioner’s arguments and evidence rested “tenuously upon apparent logical leaps.” Dec. 26–27, 29 (emphasis added). As we noted, central to Petitioner’s argument was the contention that “any type of linear code using a non-zero generator matrix will ‘repeat’ input bits because the process of multiplying a vector of message bits by the generator matrix will necessarily involve multiplying input bits by ‘1’ bits.” *Id.* at 28 (quoting Pet. 15).

Petitioner relied on that premise to argue that Kobayashi's Hamming encoder repeated bits "because the process of multiplying each 4-bit block by generator matrix **G** involves multiplying each input bits by at least one '1' bit (*i.e.*, repeating the input bits) and then summing the repeated bits to generate the codeword." Pet. 16. Patent Owner pointed out, however, that Petitioner's premise rested on shaky footing because it relied on a misinterpretation of the Federal Circuit's construction and application of the term "repeat" in the *Broadcom* case. See Prelim. Resp. 20–21. We agreed with Patent Owner that Petitioner did not "justify its logical leap from a finding of infringement by a particular device that duplicated bits by passing them through a specific configuration of AND gates, as in *Broadcom*, to a conclusion that every implementation of a transformation that could be performed using binary multiplication must repeat bits." Dec. 29. We further explained:

In *Broadcom*, the expert testimony emphasized that certain bits were "repeated" because they were allowed to "flow through" an AND gate to an output gate. *Broadcom*, 25 F.4th at 987. Petitioner's showing here is different—it is premised on multiplying certain data bits by 1 as an intermediate step in matrix multiplication. See Pet. 16–18 (purporting to depict Kobayashi's generation of sequence I_3). Petitioner's general assertion that "[m]ultiplying a binary message bit by a '1' bit is equivalent to passing the message bit through an AND gate with a '1' bit" (*id.* at 15) does not fully account for the differences in these operations—information bits flowing through an AND gate to an output gate, as in *Broadcom*, versus message bits being subjected to matrix multiplication to generate an expanded sequence, as here.

Id. at 29–30.

We additionally noted other potential deficiencies in Petitioner's showing, as raised by Patent Owner. See *id.* at 30–32. In particular, even

assuming Petitioner’s premise were correct—that multiplying bits by “1” constitutes repetition—we deemed Petitioner’s showing based on Kobayashi to be weak, as Kobayashi does not expressly disclose such multiplication for its outer encoder. *Id.* at 30–31 (citing Prelim. Resp. 22).

We ultimately concluded that, on the record before us, Petitioner’s evidence did not “plainly lead[] to a conclusion that one or more claims are unpatentable by a preponderance of the evidence.” *Id.* at 32 (quoting Interim Procedure 4). We, therefore, found Petitioner’s showing as to the independent claims was not compelling. *Id.*

Petitioner now suggests that we only considered whether the merits were “compelling” and did not consider whether they were “strong.” Req. Reh’g 9 (“[E]ven though the Board did not find the merits to be compelling, they are nevertheless strong.”). We disagree. Although we did consider the question of “compelling” merits in conjunction with the Director’s Interim Procedure, this question was based on our underlying assessment of Petitioner’s unpatentability contentions and Patent Owner’s arguments. *See* Dec. 24–32. And, as discussed therein, our analysis can scarcely be read to support “strong” merits.

As Petitioner acknowledges (Req. Reh’g 5), situations such as this—where the merits are a “closer call” and other factors support discretionary denial—favor exercising discretion to deny institution. *Fintiv*, Paper 11 at 15. We did not go that far in our Decision, and we instead (and somewhat generously for Petitioner) considered the merits to be neutral in our analysis. Dec. 19. Under these circumstances, we reasonably weighed the merits as part of our consideration of *Fintiv* factor 6 and our holistic view of whether

efficiency and integrity of the system are best served by denying or instituting review. *See Fintiv*, Paper 11 at 6.

Petitioner also argues that we did not properly consider the testimony of its declarant, Matthew C. Valenti, Ph.D. Req. Reh’g 9–10. In particular, Petitioner asserts that the opinions of its expert were “unrebutted,” and urges that we should have credited this unrebutted testimony because it was only countered by Patent Owner’s attorney argument. *Id.* Petitioner further contends that the strength of Petitioner’s merits is buttressed by Patent Owner’s failure to dispute Petitioner’s construction of the term “repeat.” *Id.* at 10. Petitioner acknowledges the parties’ dispute over whether Kobayashi’s matrix generator discloses matrix multiplication to generate bits, but asserts that “those are issues better suited for trial given the claim construction is undisputed and [Petitioner’s] unrebutted evidence regarding unpatentability.” *Id.* at 11. Finally, Petitioner makes arguments in footnotes regarding our consideration for *Fintiv* factor 6 of past *inter partes* review challenges to the ’032 patent. *Id.* at 10–11 nn.4–5.

In essence, Petitioner recapitulates the same factual circumstances that we considered in our Decision and argues that we should have weighed them differently. *See id.*; Dec. 19–20. As such, Petitioner’s arguments merely amount to rehashing our merits analysis and expressing disagreement with how we weighed Petitioner’s arguments and evidence, which is not a sufficient basis for rehearing.

*B. Petitioner’s Suggestion to Hold the Instant
Request for Rehearing in Abeyance*

Petitioner argues that we should hold the instant Request for Rehearing in abeyance pending resolution of a case styled *Apple Inc. v. Vidal*, No. 5:20-cv-06128-EJD (N.D. Cal. filed Aug. 31, 2020). *See* Req.

Reh’g 2–3, 11–15. That case is an APA challenge to instructions the Director has issued to the Board to inform it how to exercise, under delegation by the Director, the Director’s discretion whether to institute a requested *inter partes* review. *See Apple Inc. v. Vidal*, 63 F.4th 1, 6 (Fed. Cir. 2023). The precedential *Fintiv* decision is within the ambit of the *Apple Inc. v. Vidal* case. *See id.* at 8–9. Petitioner contends that “the Board should hold [Petitioner’s] rehearing request until this procedural challenge to *Fintiv* is resolved.” Req. Reh’g 12. Petitioner also presents certain arguments of its own under the APA regarding the propriety of the Director designating the *Fintiv* decision as precedential. *See id.* at 12–14.

Petitioner has not previously presented arguments related to the *Apple Inc. v. Vidal* case. Nor has Petitioner previously challenged under the APA the Director’s decision to designate the *Fintiv* decision as precedential. As such, we could not have misapprehended or overlooked such arguments. Furthermore, to the extent Petitioner suggests that we should hold the instant Request for Rehearing in abeyance pending resolution of the *Apple Inc. v. Vidal* case, we decline to do so.

III. CONCLUSION

For the reasons above, we conclude that Petitioner has not met its burden of showing that we abused our discretion in evaluating and weighing the *Fintiv* factors as part of our decision to exercise discretion under 35 U.S.C. § 314(a) to deny institution of *inter partes* review. Therefore, we *deny* Petitioner’s Request for Rehearing.

IV. ORDER

Accordingly, it is

ORDERED that Petitioner’s Request for Rehearing is *denied*.

IPR2023-00133
Patent 7,421,032 B2

PETITIONER:

Robert A. Appleby
Greg S. Arovas, P.C
KIRLAND & ELLIS, LLP
robert.appleby@kirkland.com
greg.arovas@kirkland.com

PATENT OWNER:

Michael T. Rosato
Matthew A. Argenti
Patrick M. Medley
WILSON SONSINI GOODRICH & ROSATI
mrosato@wsgr.com
margenti@wsgr.com
pmedley@wsgr.com