Paper 15 Date: May 19, 2020

### UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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INTEL CORPORATION, Petitioner,

v.

VLSI TECHNOLOGY LLC, Patent Owner.

IPR2020-00112 Patent 6,366,522 B1

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Before THU A. DANG, BART A. GERSTENBLITH, and KIMBERLY McGRAW, *Administrative Patent Judges*.

DANG, Administrative Patent Judge.

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

#### I. INTRODUCTION

## A. Background

Intel Corporation ("Petitioner") filed a Petition requesting an *inter* partes review of claims 1–4, 6–8, 25, and 28 (the "challenged claims") of U.S. Patent No. 6,366,522 B1 (Ex. 1001, "the '522 patent"). Paper 4 ("Pet."). VLSI Technology LLC ("Patent Owner") filed a Preliminary Response. Paper 8 ("Prelim. Resp."). Pursuant to our authorization (Paper 9), Petitioner filed a Reply to Patent Owner's Preliminary Response (Paper 10 ("Pet. Prelim. Reply")) and Patent Owner filed a Sur-reply (Paper 12, "PO Prelim. Sur-reply"), each directed to whether we should exercise our discretion to deny institution pursuant to 35 U.S.C. § 314(a).

Under 37 C.F.R. § 42.4(a), the Board has authority to determine whether to institute an *inter partes* review. We may institute an *inter partes* review if the information presented in the petition filed under 35 U.S.C. § 311, and any response filed under § 313, shows that there is a reasonable likelihood that Petitioner would prevail with respect to at least one of the claims challenged in the petition. The Board, however, has discretion to deny a petition even when a petitioner meets that threshold. *Id.*; *see*, *e.g.*, *Cuozzo Speed Techs.*, *LLC v. Lee*, 136 S. Ct. 2131, 2140 (2016) ("[T]he agency's decision to deny a petition is a matter committed to the Patent Office's discretion."); *see also* Patent Trial and Appeal Board Consolidated Trial Practice Guide (Nov. 2019) ("Consolidated TPG"), 55–63, available at https://www.uspto.gov/sites/default/files/documents/tpgnov.pdf (identifying considerations that may warrant exercise of this discretion). In particular, 35 U.S.C. § 314(a) permits the Board to deny institution under certain circumstances. *See Gen. Plastic Indus. Co. v. Canon Kabushiki Kaisha*,

IPR2016-01357, Paper 19 (PTAB Sept. 6, 2017) (precedential as to § II.B.4.i).

Having considered the parties' submissions, we determine that it is appropriate in this case to exercise our discretion to deny institution of *inter* partes review pursuant to 35 U.S.C. § 314(a). NHK Spring Co. v. Intri-Plex Techs., Inc., IPR2018-00752, Paper 8 (PTAB Sept. 12, 2018) (precedential).

#### B. Related Matters

Petitioner identifies the '522 patent as the subject of *VLSI Tech. LLC* v. *Intel Corp.*, No. 19-cv-00977-ADA (W.D. Tex.) ("Western District of Texas litigation"). Pet. 1. According to Petitioner, the '522 patent is one of the patents asserted by Patent Owner in *VLSI Tech. LLC* v. *Intel Corp.*, Nos. 6:19-cv-00254, -255, -256 (W.D. Tex.), 18-966-CFC (D. Del.), and 5-17-cv-05671 (N.D. Cal.), wherein the '522 patent is asserted in 19-cv-0255, "one of three parallel cases consolidated until trial in the Western District of Texas litigation (1:19-cv-977-ADA)." Pet. 6. Petitioner also challenges claims of the '522 patent in IPR2020-00113 and IPR2020-00114.

## C. The '522 Patent

The '522 patent, titled "Method and Apparatus for Controlling Power Consumption of an Integrated Circuit," issued on April 2, 2002, from an application filed November 20, 2000. Ex. 1001, code (54), (45), (22).

According to the '522 patent, a need exists for a method and apparatus that "adjust the system clock and/or the supply voltage based on the processing capabilities of an integrated circuit and the application being performed to conserve power." *Id.* at 1:45–48. Accordingly, the '522 patent relates to "controlling power consumption of an integrated circuit," which includes "processing that begins by producing a system clock from a reference clock based on a system clock control signal." *Id.* at 2:7–10. The

processing further includes "producing the system clock control signal and the power supply control signal based on a processing transfer characteristic of a computational engine and processing requirements." *Id.* at 2:16–22. The processing transfer characteristics of the computational engine include "propagation delays through logic circuits, slew rates of transistors within memory, logic circuits, read/write processing speed," and the like. *Id.* at 3:50–57.

#### D. Illustrative Claim

Of the challenged claims, claim 1 is the independent claim. Claims 2–4, 6–8, 25, and 28 depend from claim 1. Claim 1 is illustrative.

1. A power efficient integrated circuit comprising:

phase lock loop operably coupled to receive a reference clock and to produce therefrom a system clock based on a system clock control signal;

on-chip power supply control module operably coupled to regulate at least one supply from a power source and an inductance based on a power supply control signal;

memory operably coupled to store at least one application; and

computational engine operably coupled to produce the system clock control signal and the power supply control signal based on a processing transfer characteristic of the computation engine and processing requirements associated with processing at least a portion of the at least one application.

Ex. 1001, 6:57–7:4.

## E. Asserted Grounds of Unpatentability

Petitioner challenges the patentability of claims 1–4, 6–8, 25, and 28 of the '522 patent on the following grounds (Pet. 5–6):

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1–4, 6, 7, 28	1031	Borkar, <sup>2</sup> Bland, <sup>3</sup> Wilcox, <sup>4</sup> Ackermann <sup>5</sup>
3	103	Borkar, Bland, Wilcox, Ackermann, Horden <sup>6</sup>
25	103	Borkar, Bland, Wilcox, Ackermann, Jones <sup>7</sup>
8	103	Borkar, Bland, Wilcox, Ackermann, Hanington <sup>8</sup>

Petitioner relies on the Declaration of Dr. David Choi (Ex. 1002) and the Declaration of Dr. James L. Mullins (Ex. 1003) in support of its unpatentability contentions.

<sup>&</sup>lt;sup>1</sup> The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) ("AIA"), amended 35 U.S.C. § 103. Because the '522 patent has an effective filing date of November 20, 2000, which is prior to the effective date of the applicable AIA amendments, we refer to the pre-AIA version of § 103. See Ex. 1001, code (22).

<sup>&</sup>lt;sup>2</sup> U.S. Patent No. 6,484,265, issued November 19, 2002, filed December 30, 1998 (Ex. 1006, "Borkar").

<sup>&</sup>lt;sup>3</sup> U.S. Patent No. 5,614,869, issued March 25, 1997, filed December 20, 1995 (Ex. 1007, "Bland").

<sup>&</sup>lt;sup>4</sup> U.S. Patent No. 5,481,178, issued January 2, 1996, filed March 23, 1993 (Ex. 1008, "Wilcox").

<sup>&</sup>lt;sup>5</sup> U.S. Patent No. 6,137,280, issued October 24, 2000, filed January 22, 1999 (Ex. 1017, "Ackermann").

<sup>&</sup>lt;sup>6</sup> U.S. Patent No. 5,812,860, issued September 22, 1998, filed February 12, 1996 ("Ex. 1009, "Horden").

<sup>&</sup>lt;sup>7</sup> U.S. Patent No. 5,764,007, issued June 9, 1998, filed April 20, 1995 (Ex. 1010, "Jones").

<sup>&</sup>lt;sup>8</sup> High-Efficiency Power Amplifier Using Dynamic Power-Supply Voltage for CDMA Applications, IEEE Transactions on Microwave Theory and

## II. ANALYSIS – 35 U.S.C. § 314(a)

Patent Owner contends inter partes reviews are "intended as a 'complete substitute' for and an 'alternative' to district court litigation for assessing §§ 102/103 validity disputes over prior art patents and printed publications." Prelim. Resp. 4–5 (citing WesternGeco LLC v. ION Geophysical Corp., 889 F.3d 1308, 1317 (Fed. Cir. 2018) (citing H. Rep. No. 112-98 at 48 (2011); S. Rep. No. 110-259 at 66-67 (2008) ("If second window proceedings are to be permitted, they should generally serve as a complete substitute for at least some phase of the litigation.")). However, according to Patent Owner, "[t]he District Court Action is already far along" with any possible Board final written decision "seven-and-a-half months later," but there is no significant difference in Petitioner's validity defenses in the inter partes and District Court forums, since "Petitioner raises the same art and arguments in both." Id. at 5. In particular, Patent Owner contends that the facts presented here are the same as those presented in NHK, where the Board denied institution pursuant to 35 U.S.C. § 314(a). Id. at 6.

Petitioner asserts that we should not exercise our discretion to deny institution pursuant to § 314(a) because *inter partes* review is a more efficient and expedient forum in which to adjudicate validity. Pet. 6–7. In particular, Petitioner contends that 1) the '522 patent involves technical subject matter "well suited to the expertise of the specialized patent judges at the PTAB"; 2) "a jury trial is necessarily a more difficult forum for presenting a detailed obviousness case"; 3) since the multiple trials have not

Techniques, Vol. 47, No. 8, at 1471–76, published August 1999 (Ex. 1015, "Hanington").

been consolidated, "it is unclear" if the trial for the '522 patent will proceed on October 5, 2020; 4) "the time required for briefing and resolution of post-trial motions could easily result in a Final Written Decision before the district court's final appealable judgment is docketed"; and 5) "Petitioner was diligent in timely filing [the] Petition." *Id*.

In determining whether to exercise our discretion, we are guided by the Board's precedential decision in *NHK*. There, the Board found that the "advanced state of the district court proceeding," in which the "same prior art and arguments" were presented by Petitioner, expert discovery was scheduled to end in less than two months, and a jury trial was scheduled to begin in six months, was a "factor that weighs in favor of denying" the petition under §314(a). *NHK*, IPR2018-00752, Paper 8 at 20. The Board determined that "[i]nstitution of an *inter partes* review under these circumstances would not be consistent with 'an objective of the AIA . . . to provide an effective and efficient alternative to district court litigation." *Id.* (citing *Gen. Plastic Indus.*, IPR2016-01357, Paper 19 at 16–17).

"[T]he Board's cases addressing earlier trial dates as a basis for denial under *NHK* have sought to balance considerations such as system efficiency, fairness, and patent quality." *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 at 5 (PTAB Mar. 20, 2020) (precedential). When applying *NHK*, the Board has balanced the following non-exclusive factors (herein "*Fintiv* factors"):

- 1. whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted;
- 2. proximity of the court's trial date to the Board's projected statutory deadline for a final written decision;

- 3. investment in the parallel proceeding by the court and the parties;
- 4. overlap between issues raised in the petition and in the parallel proceeding;
- 5. whether the petitioner and the defendant in the parallel proceeding are the same party; and
- 6. other circumstances that impact the Board's exercise of discretion, including the merits.

*Id.* at 5–6. We discuss the parties' arguments in the context of considering the above factors.

1. whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted

Petitioner contends that "[a]lthough the district court has not entered a stay, the parties could stipulate to a stay, so as not to use the court's resources to litigate validity issues—just as the parties did in the California litigation." Pet. Prelim. Reply 6. Patent Owner responds that Patent Owner will not stipulate to a stay (PO Prelim. Sur-reply 1), and notes that the Western District of Texas rarely grants stays pending the outcome of *inter partes* review proceedings. *Id.* at 2 (citations omitted).

On the present record, neither party has produced evidence that a stay has been requested or that the Western District of Texas has considered a stay in this case. A judge determines whether to grant a stay based on the facts of each specific case as presented in the briefs by the parties. We decline to infer, based on actions taken in different cases with different facts, how the District Court would rule should a stay be requested by the parties

<sup>&</sup>lt;sup>9</sup> See Pet. Prelim. Reply 3 (referring to VLSI Tech. LLC v. Intel Corp., No. 5:17-cv-05671 (N.D. Cal.)).

in the parallel case here. Thus, this factor does not weigh for or against discretionary denial in this case.

# 2. proximity of the court's trial date to the Board's projected statutory deadline for a final written decision

The parties agree that the trial in the Western District of Texas currently is scheduled to start on October 5, 2020. *See* Pet. 7; Prelim. Resp. 5 (citing Ex. 2006 (Agreed Scheduling Order)). Patent Owner contends that a final written decision in this matter would be due May 2021, if instituted, which is "seven-and-a-half months later." Prelim. Resp. 5. However, Petitioner contends that, since three Western District of Texas actions are currently set for jury trials on October 5, 2020, "it is unclear which of these trials (and patents) will proceed [on that day]," and that "the time required for briefing and resolution of post-trial motions could easily result in a Final Written Decision before the district court's final appealable judgment is docketed." Pet. 7.

There are variables contributing to the uncertainty that the jury trial will occur on October 5, 2020. First, as the parties agree, there are three actions between the parties pending in the Western District of Texas, each scheduled for trial on October 5<sup>th</sup>, yet the three actions are scheduled for separate trials and have not been consolidated. Pet. Prelim. Reply 3, 6–7; PO Prelim. Sur-reply 4–5. Thus, as of today, the evidence supports the finding that at least two of the trials will not occur on October 5<sup>th</sup>. 11

<sup>&</sup>lt;sup>10</sup> In addition to the action involving the '522 patent (i.e., 6:19-cv-00255, consolidated as 1:19-cv-977-ADA), the other two cases pending in the Western District of Texas are Nos. 6:19-cv-00254 and -00256.

<sup>11</sup> It is possible that the parties may agree to hold one trial addressing all three actions. At this point, however, that is not the plan. Pet. Prelim. Reply 6–7; PO Prelim. Sur-reply 4–5.

Patent Owner explains that its proposed trial schedule requests that the case involving the '522 patent be tried second. PO Prelim. Sur-reply 5 (citing Ex. 2031 (Proposed Scheduling Order), 4). Patent Owner further explains that Petitioner appears to seek a single trial date for all three actions (*id.* (citing Ex. 2030 (Telephonic Discovery Hearing) 10:11–15)), whereas Patent Owner proposed December 14, 2020, for the case involving the '522 patent, two months after the first trial on October 5 (Ex. 2031, 4). PO Prelim. Sur-reply 4–5. Should trial occur December 2020 in the action involving the '522 patent, it would still be five months before any final written decision likely would issue in this proceeding.

Second, there is uncertainty about what effect the Coronavirus disease 2019 ("COVID-19") pandemic will have with respect to the trial date. Pet. Prelim. Reply 8; PO Prelim. Sur-reply 6. The situation is evolving daily. Although trials currently are suspended in the Western District of Texas through June 30, 2020 (Ex. 3001 (General May 8 Order)), it is unclear what impact that suspension or any further suspension would have on trial dates scheduled later this year and early next year. Given the substantial gap between the October 5<sup>th</sup> trial date (and the other potential dates proposed by Patent Owner) and May 2021 (the likely date for any final written decision in this proceeding), even if the trial date were moved back, it is unlikely on the present record that the date would be after a final written decision in this proceeding.

Accordingly, on the record before us, this factor weighs in favor of exercising our discretion to deny institution pursuant to § 314(a).

3. investment in the parallel proceeding by the court and the parties

The Western District of Texas issued a claim construction order on

January 3, 2020, over four months ago, although neither party requested that

the court construe claim terms from the '522 patent. *See* Prelim. Resp. 8; Pet. Prelim. Reply 8 (citing Ex. 2007 (Claim Construction Order)). Additionally, final infringement and invalidity contentions were served in January 2020, and fact discovery currently is scheduled to close on May 22, 2020. PO Prelim. Sur-reply 7 (citing Ex. 2036 (First Amended Scheduling Order)).

In *Fintiv*, the Board explained that potential delay by a Petitioner "may impose unfair costs to a patent owner if the petitioner, faced with the prospect of a looming trial date, waits until the district court trial has progressed significantly before filing a petition at the Office." *Fintiv*, IPR2020-00019, Paper 11 at 11. Here, Petitioner contends that it was diligent in timely filing the Petition three months before the statutory bar date. Pet. 7.

Although we do not find that Petitioner unreasonably delayed filing the Petition, we do find that the parties already have invested significantly in the Western District of Texas litigation. As noted above, the district court claim construction order issued in January 2020, final infringement and invalidity contentions were served in January 2020, and fact discovery currently is scheduled to close on May 22, 2020. *See* PO Prelim. Sur-reply 7 (citing Ex. 2036). In light of the present posture of the district court action, we find that this factor weighs in favor of exercising our discretion to deny institution pursuant to § 314(a).

4. overlap between issues raised in the petition and in the parallel proceeding Patent Owner contends that there is a "complete" overlap between the issues raised in the Petition and those in the Western District of Texas litigation. PO Prelim. Sur-reply 7–9; see Prelim. Resp. 8–10 (contending that Petitioner relies upon the same references, in the same combinations,

and for the same disclosures). Patent Owner provides "Table 1" which shows a comparison of prior art figures relied upon in the Petition versus the "Final Invalidity Contentions." Prelim. Resp. 11–12 (citing Exs. 2003, 2005).

Petitioner does not disagree with Patent Owner's argument, contending instead that "[t]he [P]etition advances only a few of the grounds presented in Intel's invalidity contentions." Pet. Prelim. Reply 9 (citing Ex. 2013 (Defendant Intel Corporation's Final Invalidity Contentions (U.S. Patent No. 6,366,522)), 2–4, 17).

As noted above, Petitioner raises four grounds of obviousness pursuant to 35 U.S.C. § 103(a). In its first ground, Petitioner relies upon Borkar, Bland, Wilcox and Ackermann in challenging claims 1–4, 6, 7, and 28. Pet. 5. Petitioner adds Horden to the combination in challenging claim 3 in its second ground, adds Jones to the combination (of Borkar, Bland, Wilcox, and Ackermann) in challenging claim 25 in its third ground, and adds Hanington to the combination (of Borkar, Bland, Wilcox, and Ackermann) in challenging claim 8 in its fourth ground. *Id*.

In comparison, Petitioner's Final Invalidity Contentions assert that claims 1, 3–9, 11–13, 15, 16, 18–23, 25, 28–30, 35, 36, and 38 are obvious over Borkar alone or in combination with Wilcox, Bland, Horden, Clark '775, Clark '086, Erickson, Jones, Stratakos, Buck References, Ackermann, Nicol, and/or Abdesselem. Ex. 2013, 18–52.

Accordingly, we find that the issues raised in the Petition largely overlap with those currently raised in the Western District of Texas litigation. Although Petitioner's Final Invalidity Contentions include other combinations of references challenging overlapping claims, *see id.*, that difference alone does not negate that the same combinations of references

asserted in the Petition are also asserted in Petitioner's Final Invalidity Contentions.

Additionally, as noted above, Petitioner challenges other claims of the '522 patent in IPR2020-00113 and IPR2020-00114, specifically, claims 9–11, 13–15, 30, 31, and 34 in IPR2020-00113, and claims 16–18, 20–22, and 36–38 in IPR2020-00114. On the record before us, each of the independent claims challenged via petition (whether in this proceeding, IPR2020-00113, or IPR2020-00114) also is included in Petitioner's Final Invalidity

Contentions, along with many of the dependent claims. *Compare* Paper 3

(Petitioner's Explanation for Filing Multiple Petitions for *Inter Partes*Review of U.S. Patent No. 6,366,522), 2, *with* Ex. 2013, 18–52. Petitioner, however, does not raise the difference between the dependent claims at issue in each proceeding in its briefing let alone argue that the difference is a reason not to exercise our § 314(a) discretion to deny institution. Thus, on the present record, we agree with Patent Owner that there is a substantial overlap between the issues raised in the Petition and in the Western District of Texas litigation.

Accordingly, this factor weighs in favor of exercising our discretion to deny institution pursuant to § 314(a).

5. whether the petitioner and the defendant in the parallel proceeding are the same party

Petitioner and Patent Owner are the defendant and plaintiff, respectively, in the Western District of Texas litigation. Pet. Prelim. Reply 10 n.7; PO Prelim. Sur-reply 9 (citing Pet. Prelim. Reply 10 n.7). Therefore, we find that this factor weighs in favor of exercising our discretion to deny institution pursuant to § 314(a).

6. other circumstances that impact the Board's exercise of discretion, including the merits

Petitioner spends nearly half of its Preliminary Reply explaining what it refers to as Patent Owner's tactics to "evade" review of its patents. *See* Pet. Prelim. Reply 2–5 (asserting Patent Owner's request for discretionary denial is "part of a series of carefully orchestrated tactics aimed at avoiding adjudication of [Petitioner's] invalidity defenses"). Petitioner's contentions include that: (a) Patent Owner is a holding company created by Fortress Investment Group ("Fortress") to acquire and assert patents against Petitioner for the purpose of investment returns (*id.* at 2); (b) affiliates of Fortress have filed over 150 patent lawsuits supported by "a \$400M patent assertion fund" (*id.* (citing Exs. 1021, 1022)); (c) Patent Owner has asserted twenty-one patents with over 430 claims against Petitioner in three different U.S. jurisdictions and two different jurisdictions in China (*id.* at 2 & n.4); and (d) Patent Owner's filing of lawsuits in combination with voluntary dismissals and refiling of other suits reflects a pattern to evade effective judicial review of its patents (*id.* at 2–5).

Patent Owner responds, contending that Petitioner's arguments are irrelevant and an improper attempt to re-litigate positions that Petitioner already raised in an antitrust suit against, *inter alia*, Patent Owner in the Northern District of California. PO Prelim. Sur-reply 10 (citing, e.g., Ex. 2037 (Defendants' Joint Notice of Motion and Motion to Dismiss and to Strike Plaintiffs' Complaint)).

Even if Petitioner's contentions are true, Petitioner has not shown these contentions will "avoid[] adjudication of Intel's invalidity defenses." *See* Pet. Prelim. Reply 2. The validity of the '522 patent is at issue in the co-pending litigation, which is currently scheduled to go to trial well before

the deadline for a final written decision in this proceeding. Accordingly, Petitioner's arguments do not weigh against exercising our discretion to deny institution pursuant to § 314(a).

Thus, the balance of the *Fintiv* factors discussed above weighs in favor of exercising our discretion to deny institution under § 314(a).

Petitioner also asserts the "strength of the merits" of the Petition weigh in favor of institution (*see* Pet. Prelim. Reply 9 n.6), while Patent Owner asserts the merits of the Petition weigh in favor of denying institution (*see* PO Prelim. Sur-reply 9–10). We have reviewed the Petition and the Patent Owner Preliminary Response and determine that the merits of the Petition do not outweigh the other *Fintiv* factors. On balance, based on the facts presented, particularly the advanced stage of the Western District of Texas litigation, a currently scheduled trial date approximately seven months before the would-be deadline for a final written decision, and the overlap between the issues presented there and in the Petition, we find that it would be an inefficient use of Board, party, and judicial resources to institute the present proceeding. *See NHK*, IPR2018-00752, Paper 8 at 20; Consolidated TPG 58 (discussing balancing the relevant circumstances). Accordingly, we exercise our discretion pursuant to § 314(a) to deny institution.

#### III. CONCLUSION

For the foregoing reasons, we exercise our discretion pursuant to 35 U.S.C. § 314(a) to deny institution of *inter partes* review.

# IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that the Petition (Paper 4) is *denied* as to the challenged claims of the '522 patent; and

FURTHER ORDERED that no *inter partes* review is instituted.

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