# United States Court of Appeals for the Federal Circuit

QUALCOMM INCORPORATED,

Appellant

 $\mathbf{v}$ .

APPLE INC.,

Appellee

ANDREW HIRSHFELD, PERFORMING THE FUNCTIONS AND DUTIES OF THE UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE,

Intervenor

2020-1558, 2020-1559

Appeals from the United States Patent and Trademark Office, Patent Trial and Appeal Board in Nos. IPR2018-01315, IPR2018-01316.

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Decided: February 1, 2022

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JENNIFER L. SWIZE, Jones Day, Washington, DC, argued for appellant. Also represented by ROBERT BREETZ, DAVID B. COCHRAN, DAVID MICHAEL MAIORANA, JOSEPH M. SAUER, Cleveland, OH; MATTHEW JOHNSON, JOSHUA R.

NIGHTINGALE, Pittsburgh, PA; ISRAEL SASHA MAYERGOYZ, Chicago, IL.

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MAUREEN DONOVAN QUELER, Office of the Solicitor, United States Patent and Trademark Office, Alexandria, VA, argued for intervenor. Also represented by Thomas W. Krause, Robert J. McManus, Farheena Yasmeen Rasheed.

Before Taranto, Bryson, and Chen, *Circuit Judges*. Chen, *Circuit Judge*.

Qualcomm Inc. (Qualcomm) appeals from two related *inter partes* review (IPR) decisions of the Patent Trial and Appeal Board (Board) finding several claims of Qualcomm's U.S. Patent No. 8,063,674 ('674 patent) unpatentable under 35 U.S.C. § 103.<sup>1</sup> To reach its unpatentability finding, the Board relied on a ground raised by Apple Inc. (Apple) that relied in part on applicant admitted prior art (AAPA)—here, statements in the challenged patent

Congress amended §§ 102 and 103 when it passed the Leahy-Smith America Invents Act (AIA). Pub. L. No 112-29, §§ 3(b), 3(c), 125 Stat. 284, 287 (2011). Because the application that led to the '674 patent has never contained a claim having an effective filing date on or after March 16, 2013 (the effective date of the statutory changes enacted in 2011), or a reference under 35 U.S.C. §§ 120, 121, or 365(c) to any patent or patent application that ever contained such a claim, the pre-AIA §§ 102 and 103 apply. *Id.* § 3(n)(1), 125 Stat. at 293.

acknowledging that most of the limitations of the patent's claims were already known—and a prior art patent. Qualcomm argues the Board's reliance on AAPA runs afoul of 35 U.S.C. § 311(b), which limits an inter partes review petitioner to challenge claims as unpatentable "only on a ground that could be raised under section 102 or 103 and only on the basis of prior art consisting of patents or printed publications." § 311(b) (emphasis added). Because we agree with Qualcomm that the Board erred in concluding that AAPA constitutes "prior art consisting of patents or printed publications" under § 311(b), we vacate the Board's decision. We remand for the Board to determine whether Apple's petition nonetheless raises its § 103 challenge "on the basis of prior art consisting of patents or printed publications." § 311(b) (emphasis added).

### BACKGROUND

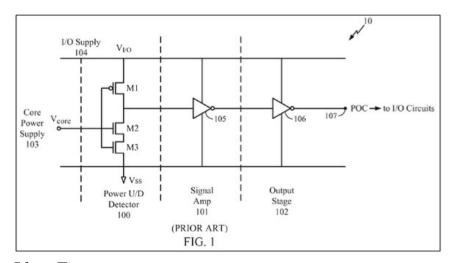
## A

Qualcomm owns the '674 patent, which is directed to integrated circuit devices with power detection circuits for systems with multiple supply voltages. See '674 patent at Abstract, col. 1 ll. 6–8. According to the '674 patent, modern integrated circuits often contain multiple networks operating at different supply voltages. See id. at col. 1 ll. 22–25. For example, a core logic network may operate at a lower voltage, and an input/output network may simultaneously operate at a higher voltage. See id. Such a system can save power by allowing the broader circuit to power down a network, like the core logic network, when it is not needed. See id. at col. 1 ll. 26–40.

The patent describes "level shifters" that communicate between the input/output devices and the core devices. *See id.* at col. 1 ll. 28–29. When the core devices are powered down, the connection between the core and input/output network through the level shifters can lead to problems. One such problem is stray currents causing the level shifters to trigger the input/output devices for transmission

resulting in erroneous output signals from the circuit. See id. at col. 1 ll. 29–40.

The '674 patent describes a prior art method to remedy the stray current problem. The Background states that power-up/down detectors can be used to generate a power-on/off-control (POC) signal internally that instructs the input/output devices when the core devices are shut down. *See id.* at col. 1 ll. 55–58. Figure 1 of the patent depicts a "prior art" "standard POC system" with a power-up/down detector 100:



*Id.* at Figure 1.

The patent asserts that there are problems with the prior art solution in Figure 1. For example, when the input/output power supply 104 is on and the core power is off, powering up the core results in "a period in which all three transistors [M1-M3] within power up/down detector 100 are on," causing "a significant amount of current to flow from [input/output] power supply 104 to ground." *Id.* at col. 2 ll. 21–29. The '674 patent recognizes that "decreas[ing] the sizes of the transistors M1-M3" can physically limit this "glitch current" or leakage but notes that smaller transistors may reduce detection sensitivity or result in "longer

processing time for power-up/down events." *Id.* at col. 2 ll. 31–39; *see also id.* at col. 2 l. 63–col. 3 l. 11.

The '674 patent avoids these problems by adding a feedback network to increase detection speed. See id. at col. 6 ll. 25–28. Specifically, as depicted in Figure 4, the '674 patent includes power-up transistor M8. Transistor M8 transitions from on to off during power-up and from off to on during power-down. See id. at col. 6 ll. 12–18, 21–28. When M8 is off, the current capacity of the power-up/down detector is reduced. When M8 is on, the power-up/down detector has increased current capacity resulting in quicker detection of the core powering down. See id.

Claims 1, 2, 5–9, 12, 13, and 16–22 of the '674 patent are at issue on appeal. Claim 1, reproduced below, is illustrative of the claimed invention:

1. A multiple supply voltage device comprising:

a core network operative at a first supply voltage; and

a control network coupled to said core network wherein said control network is configured to transmit a control signal, said control network comprising: an up/down (up/down) detector configured to detect a power state of said core network; processing circuitry coupled to said up/down detector and configured to generate said control signal based on said power state;

one or more feedback circuits coupled to said up/down detector, said one or more feedback circuits configured to provide feedback signals to adjust a current capacity of said up/down detector;

at least one first transistor coupled to a second supply voltage, the at least one more first transistor being configured to switch on when said first

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supply voltage is powered down and to switch off when said first supply voltage is powered on;

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at least one second transistor coupled in series with the at least one first transistor and coupled to said first supply voltage, the at least one second transistor being configured to switch on when said first supply voltage is powered on and to switch off when said first supply voltage is powered down;

at least one third transistor coupled in series between the at least one first transistor and the at least one second transistor.

'674 patent at claim 1.

В

Apple filed two petitions for *inter partes* review<sup>2</sup> based on the same two grounds but each challenging different sets of claims in the '674 patent. In ground 1, Apple challenged the claims as unpatentable under § 103 in view of Steinacker<sup>3</sup>, Doyle,<sup>4</sup> and Park.<sup>5</sup> In its final written decision, the Board found that Apple had not proven with this ground the unpatentability of the challenged claims.

Apple's second ground relied on AAPA—Figure 1 and its accompanying description in the '674 patent—in view of Majcherczak.<sup>6</sup> Like the '674 patent, Majcherczak relates to "integrated circuit[s] using at least two power supply

<sup>&</sup>lt;sup>2</sup> IPR2018-01315 and IPR2018-01316.

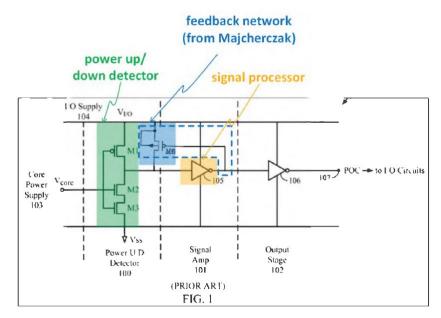
<sup>&</sup>lt;sup>3</sup> U.S. Patent No. 7,279,943.

<sup>&</sup>lt;sup>4</sup> U.S. Patent No. 4,717,836.

<sup>&</sup>lt;sup>5</sup> J. C. Park and V. J. Mooney III, Sleepy Stack Leakage Reduction, 14 IEEE Transactions on Very Large Scale Integration (VLSI) Systems 11, 1250–63 (2006) (J.A. 1247–60).

<sup>&</sup>lt;sup>6</sup> U.S. Patent Application Publication No. 2002/0163364.

voltages." Majcherczak ¶ 1. Majcherczak discloses a voltage detection device that detects, among other things, when the core voltage is powered down. Apple argued that a skilled artisan would have found it obvious to integrate Majcherczak's feedback transistor into the POC system described as prior art by the '674 patent, as shown below:



AAPA + Majcherczak POC System

Qualcomm conceded that the combination of AAPA and Majcherczak teaches each element of the challenged claims, see Apple Inc. v. Qualcomm Inc., IPR2018-01315, -01316, 2020 Pat. App. LEXIS 5250, \*28 (P.T.A.B. Jan. 3, 2020) (Board Op.); J.A. 385–86, but challenged Apple's use of AAPA. Qualcomm argued that such patent owner admissions cannot be used to challenge the validity of a patent in inter partes review. See Board Op. at \*15–17; J.A.

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403.7 The Board disagreed. See Board Op. at \*18–19 ("Because AAPA is admitted to be prior art and is found in the '674 patent, it can be used to challenge the claims in an inter partes review."). Underpinning the Board's analysis was its conclusion that, under 35 U.S.C. § 311(b), "prior art consisting of patents or printed publications" includes AAPA because it is prior art contained in a patent. See id. at \*19. Having decided that Apple's use of AAPA was proper under the statute, the Board found that the AAPA with Majcherczak rendered the challenged claims unpatentable as obvious.

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Qualcomm timely appeals. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

#### DISCUSSION

This appeal concerns the use of AAPA in *inter partes* review.<sup>8</sup> Qualcomm, Apple, and the United States Patent and Trademark Office (PTO) each offer competing views of the propriety of AAPA's role in *inter partes* review and differing interpretations of the phrase "prior art consisting of patents or printed publications" in § 311(b).

Qualcomm initially argued that AAPA may not be considered in *inter partes* review. See Appellant's Br. 20 ("[A] purported admission in the patent that is the subject [of] an *inter partes* review cannot be used to challenge claims in the IPR."). Qualcomm explained that § 311(b)

<sup>&</sup>lt;sup>7</sup> Qualcomm also challenged Apple's alleged motivation to combine Majcherczak with AAPA. *See Board Op.* at \*33. Qualcomm does not raise this challenge on appeal.

<sup>&</sup>lt;sup>8</sup> Qualcomm initially raised a challenge to the constitutionality of the Board, see Appellant's Br. 34–35, but after the Supreme Court issued its decision in *United States v. Arthrex, Inc.*, 141 S. Ct. 1970 (2021), Qualcomm withdrew its request for relief on that basis, see ECF No. 70.

requires any ground in an *inter partes* review to be based only on prior art patents or prior art printed publications. See id. at 24. Finding no support in § 311(b) for the use of AAPA, Qualcomm posited that the statute precludes any and all use of a patent owner's admissions in *inter partes* review. See id. at 24–25. Qualcomm, however, softened its position in reply, acknowledging that "general knowledge and non-Section 311(b) art [e.g., AAPA] may have a role to play in IPR proceedings," Appellant's Reply Br. 15, but Qualcomm maintained its position that AAPA may not form "the basis" of a ground in an *inter partes* review. See id. at 14–15.

According to Apple, Qualcomm's theory impermissibly rewrites "prior art consisting of patents or printed publications" as "prior-art patents" or "prior-art publications." See Appellee's Br. at 27. Apple read § 311(b) to permit the use of any "prior art" "consisting of patents or printed publications." See id. at 24–25. In other words, Apple argued that any "prior art"—including AAPA—that is contained in any patent or printed publication, regardless of whether the document itself is prior art, can be used as a basis for a challenge in inter partes review.

The PTO, for its part, asked us to remand so the Board may apply the Director's guidance on the "Treatment of Statements of the Applicant in the Challenged Patent in Inter Partes Reviews Under § 311(b)" (Guidance). See PTO Br. 8–9; see also J.A. 4530–38 (Guidance) The Guidance agrees with Qualcomm that AAPA does not fall within "prior art consisting of patents or printed publications" under § 311(b). See Guidance at 3–4. Yet the Guidance reads our caselaw to permit the use of AAPA in inter partes review as evidence of the general knowledge of a skilled artisan. See id. at 4–5. As the Guidance

<sup>9</sup> The Director issued the Guidance on August 18, 2020, after the Board's final written decisions in this case.

understands permissible uses of that knowledge to include supplying a missing claim limitation or supporting a motivation to combine, it concludes that AAPA may likewise be used for these purposes. See id. at 6–7. The PTO, however, stops short of taking a position as to whether Apple's reliance on AAPA in this case is impermissible, because, as argued by Qualcomm, the AAPA in this case plays such a large role in the validity challenge that it forms "the basis" of the ground. The PTO urges us to remand that inquiry to allow Board to address that question in the first instance.

## A

The parties' main argument on appeal focuses on whether AAPA constitutes "prior art consisting of patents or printed publications" under § 311(b) such that it may form "the basis" of a ground in *inter partes* review. We hold that it does not.

Our analysis begins with Section 311(b) of the Patent Act:

Scope.—

A petitioner in an inter partes review may request to cancel as unpatentable 1 or more claims of a patent only on a ground that could be raised under section 102 or 103 and only on the basis of prior art consisting of patents or printed publications.

The language of § 311(b) limits "the basis" of any "ground" in an *inter partes* review to "prior art consisting of patents or printed publications."

We agree with Qualcomm and the PTO that the "patents or printed publications" that form the "basis" of a ground for *inter partes* review must themselves be prior art to the challenged patent. That conclusion excludes any descriptions of the prior art contained in the challenged patent. This interpretation is consistent with prior judicial

interpretations of the statute and represents a more natural reading of § 311(b).

Both the Supreme Court and this court have previously understood the "patents and printed publications" referenced in § 311(b) to themselves be prior art. Return Mail, Inc. v. U.S. Postal Serv., 139 S. Ct. 1853, 1860 (2019) ("First, the 'inter partes review' provision permits 'a person' other than the patent owner to petition for the review and cancellation of a patent on the grounds that the invention lacks novelty or nonobviousness in light of 'patents or printed publications' existing at the time of the patent application." (emphasis added) (quoting § 311(b)); Regents of the Univ. of Minn. v. LSI Corp., 926 F.3d 1327, 1335 (Fed. Cir. 2019) ("Before IPR can be instituted, a person must file a petition challenging the validity of one or more patent claims under § 102 or § 103 on the basis of prior art patents or printed publications." (emphasis added)), cert. denied, 140 S. Ct. 908 (2020).

understanding aligns with prior judicial interpretations of identical language—"prior art consisting of patents or printed publications"—in a similar statute, 35 U.S.C. § 301(a), as excluding patents which themselves are not prior art. See In re Lonardo, 119 F.3d 960, 966 (Fed. In Lonardo, the parties disputed whether obviousness-type double patenting based on a non-prior art patent was available as a challenge in ex parte reexamination. See id. at 965. Lonardo held that it was permissible for the challenger to rely on a non-prior art patent in ex parte reexamination under § 303(a), not § 301(a), because § 303(a) permits the Director to institute a reexamination after "consideration of other patents or printed publications." See id. at 966 (quoting § 303(a)) (emphasis added). While *Lonardo* did not directly address AAPA, it distinguished § 303(a) from § 301(a) by noting that the former "is not specifically limited to prior art patents or printed publications," and referred to the latter as describing "prior art submitted by a third party." See id.

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at 966 (emphasis added). Other cases reflect Lonardo's understanding of the meaning of "prior art consisting of patents or printed publications" in § 301(a) as referring to prior art documents. See e.g., Return Mail, 139 S. Ct. at 1859 (noting that § 301(a) permits any person at any time to cite to the Patent Office certain prior art that may "bea[r] on the patentability of any claim of a particular patent"); Mikkelsen Graphic Eng'g, Inc. v. Zund Am., Inc., 541 F. App'x 964, 973–74 (Fed. Cir. 2013) (stating that § 301(a) limits "reexamination requests to arguments based on prior art patents or printed publications"); In re NTP, Inc., (Fed. Cir. F.3d 1268,12762011) ("During reexamination, the examiner reviews the claims in view of various prior art patents and printed publications."); In re Swanson, 540 F.3d 1368, 1375 (Fed. Cir. 2008) ("Any person may file a request for an exparte reexamination of an issued patent based on prior art patents or printed publications."); In re Freeman, 30 F.3d 1459, 1468 (Fed. Cir. 1994) ("The reexamination statute provides that anyone at any time may request reexamination of any claim of a patent based upon prior art patents and printed publications." (citing 35 U.S.C. § 301)).

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Neither party argues that Congress, in enacting the America Invents Act, <sup>10</sup> intended a different meaning of "prior art consisting of patents or printed publications" in § 311(b) than that of § 301(a). We agree with Apple that, "[w]hen Congress enacted the 'prior art consisting of patents or printed publications' proviso for IPRs in section 311(b), it is presumed to have done so with reference to the same specialized provision in the reexamination statute." Appellee's Br. 38 (citing *Reno v. Koray*, 515 U.S. 50, 57 (1995)). Congress is also presumed to be aware of judicial decisions interpreting statutory language. *See Guerrero-*

The AIA created *inter partes* reviews and enacted the language codified at § 311(b). AIA § 6(a).

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Lasprilla v. Barr, 140 S. Ct. 1062, 1072 (2020). Given Congress's use of language identical to § 301(a), and the judicial interpretations of that statute at the time the AIA was enacted, the logical extension is that the patents and printed publications referenced in § 311(b) must themselves be prior art to the challenged patent. In other words, § 311(b) does not permit AAPA in this case to be the basis of a ground in an *inter partes* review, because it is not contained in a document that is a prior art patent or prior art printed publication.

В

While, under § 311(b), AAPA contained in the challenged patent is not "prior art consisting of patents or printed publications," it does not follow that AAPA is categorically excluded from an *inter partes* review. Indeed, Qualcomm concedes that our precedent permits consideration of AAPA, at least to some extent, to challenge patent claims in an *inter partes* review. *See* Appellant's Reply Br. 15.

We have held that "it is appropriate to rely on admissions in a patent's specification when assessing whether that patent's claims would have been obvious" in an *inter partes* review proceeding. *Koninklijke Philips N.V. v. Google LLC*, 948 F.3d 1330, 1339 (Fed. Cir. 2020) (citing *PharmaStem Therapeutics, Inc. v. ViaCell, Inc.*, 491 F.3d 1342, 1362 (Fed. Cir. 2007) ("Admissions in the specification regarding the prior art are binding on the patentee for purposes of a later inquiry into obviousness.")).<sup>11</sup>

<sup>11</sup> As recognized in *PharmaStem*, our precedent treats AAPA as binding on the patentee. *See Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1570 (Fed. Cir. 1998) ("A statement in a patent that something is in the prior art is binding on the applicant and patentee for

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That is because a petitioner may rely on evidence beyond prior art documents in an *inter partes* review, even if such evidence itself may not qualify as the "basis" for a ground set forth in a petition. See 35 U.S.C. § 312(a)(3)(B) (permitting the use of "affidavits or declarations of supporting evidence and opinions, if the petitioner relies on expert opinions"); § 314(a) (requiring the Director to consider "the information presented in the petition" when determining whether to institute *inter partes* review) (emphasis added); § 316(a)(3) (requiring the Director "establish∏ procedures for the submission of supplemental information after the petition is filed."); Yeda Rsch. v. Mylan Pharms. Inc., 906 F.3d 1031, 1041 (Fed. Cir. 2018) (affirming PTO's reliance on a non-prior art document in inter partes review for limited purposes). Indeed, Koninklijke Philips specifically rejected an argument that the general knowledge of a skilled artisan may not be relied on in an *inter partes* review because it does not constitute "prior art consisting of patents or printed publications" under § 311(b). See 948 F.3d at 1337 ("Regardless of the tribunal, the inquiry into whether any 'differences' between the invention and the prior art would have rendered the invention obvious to a skilled artisan necessarily depends on such artisan's

determinations of anticipation and obviousness."); *In re Fout*, 675 F.2d 297, 300 (CCPA 1982) ("Valid prior art may be created by the admissions of the parties."); *In re Nomiya*, 509 F.2d 566, 571 (CCPA 1975) ("By filing an application containing Figs. 1 and 2, labeled prior art, ipsissimis verbis, and statements explanatory thereof appellants have conceded what is to be considered as prior art in determining obviousness of their improvement."); *In re Rishoi*, 197 F.2d 342, 343–44 (CCPA 1952) (affirming the "refusal to allow [a] claim [] based upon an unequivocal admission in appellants' specification of what was old and well known in the art").

knowledge."). In other words, the assessment of a claim's patentability is inextricably tied to a skilled artisan's knowledge and skill level.

As a patentee's admissions about the scope and content of the prior art provide a factual foundation as to what a skilled artisan would have known at the time of invention, Randal Manufacturing v. Rea, 733 F.3d 1355, 1362–63 (Fed. Cir. 2013), it follows that AAPA may be used in similar ways in an *inter partes* review, see McCoy v. Heal Sys., LLC, 850 F. App'x 785, 789 (Fed. Cir. 2021) ("The Board did not err by accepting the specification's own assertions of what is well known in the art . . . . By characterizing certain parts as conventional in the specification, the patentee effectively admits that such things would be known to a POSA."). Such uses include, for example, furnishing a motivation to combine, see Randal Manufacturing, 733 F.3d at 1363, or supplying a missing claim limitation, Koninklijke Philips, 948 F.3d at 1337-38. Thus, even though evidence such as expert testimony and party admissions are not themselves prior art references, they are permissible evidence in an *inter* partes review for establishing the background knowledge possessed by a person of ordinary skill in the art.

Moreover, the use of AAPA in an *inter partes* review proceeding is consistent with our understanding that Congress sought to create a streamlined administrative proceeding that avoided some of the more challenging types of prior art identified in 35 U.S.C. § 102, such as commercial sales and public uses, by restricting the "prior art" which may form a basis of a ground to prior art documents. In *OddzOn Prods., Inc. v. Just Toys, Inc.*, 122 F.3d 1396, 1401–02 (Fed. Cir. 1997), we held that "prior art," as referenced in 35 U.S.C. § 103, includes § 102(f), in addition to subsections (a), (b), (e), and (g), which "are clearly prior art provisions." We observed that § 102(a) and (b) identify, among other things, "prior patents and publications" as prior art. *Id.* As for other types of prior

art identified in § 102, we have explained, in the context of the reexamination statute, that "questions of public use and on sale were explicitly excluded by statute from those issues on which reexamination could be obtained." *Quad Envtl. Techs. Corp. v. Union Sanitary Dist.*, 946 F.2d 870, 875 (Fed. Cir. 1991). That is so because "[t]he congressional purpose in restricting reexamination to printed documents, 35 U.S.C. § 301, was to provide a cheaper and less time-consuming alternative to challenge patent validity on certain issues." *Id.* at n.7 (citing H.R. Rep. No. 1307 at 4). Holding a patentee to descriptions of the prior art made in its specification does not implicate the type of fact-intensive inquiries Congress was seeking to avoid.

C

Having determined that (i) the Board incorrectly interpreted § 311(b)'s "prior art consisting of patents or printed publications" to encompass AAPA contained in the challenged patent, but (ii) the use of AAPA can be permissible in an *inter partes* review, the next contested issue is whether AAPA improperly formed the "basis" of Apple's challenge. Because the Board did not address this question in its final written decision, we remand to allow the Board to address this issue in the first instance.

\* \* \*

At bottom, Section 311 provides a limit on what prior art can be the basis for an *inter partes* review challenge and both the courts and the PTO must adhere to that limit. As explained above, AAPA may not form the "basis" of a ground in an *inter partes* review, and it is therefore impermissible for a petition to challenge a patent relying on solely AAPA without also relying on a prior art patent or printed publication. Here, we remand to the Board to determine whether Majcherczak forms the basis of Apple's challenge, or whether the validity challenge impermissibly violated the statutory limit in Section 311.

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Finally, we reject Apple's alternative ground for affirmance (which the Board likewise rejected) asserting the challenged claims are unpatentable based on the combination of Steinacker and Doyle or the combination of Steinacker, Doyle, and Park. Apple failed to show that the Board abused its discretion in determining that Apple's proposed motivation to combine Steinacker and Doyle based on "hysteresis" was untimely raised for the first time See Intelligent Bio-Sys., Inc. v. Illumina on reply. Cambridge Ltd., 821 F.3d 1359, 1369 (Fed. Cir. 2016) ("It is of the utmost importance that petitioners in 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."). As the Board correctly noted, Apple's petition contained a single paragraph discussing the motivation to combine Doyle with Steinacker, focusing on Doyle's relatively stable trip point. See Board Op. at \*66 (citing J.A. 224). Absent from that paragraph, and the entire petition, is any mention or argument related to hysteresis as a motivation to combine these references. See J.A. 214–240. Apple has failed to show that the Board's decision to not consider its hysteresis theory was legal error. See Henny Penny Corp. v. Frymaster LLC, 938 F.3d 1324, 1330 (Fed. Cir. 2019) ("Board did not abuse its discretion in holding [Petitioner] to its word and disregarding its new theory first raised in reply.").

Moreover, the Board's finding that Apple's timely raised motivations to combine Doyle with Steinacker were insufficient to support an obviousness determination are supported by substantial evidence. We see no reversible error in the Board's finding that Apple failed to explain why a skilled artisan at the time of the invention would have considered a relatively stable trip point important enough to combine Doyle with Steinacker. *See Board Op.* at \*71–74.

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As we hold there was no error in the Board's finding that Apple made an insufficient showing of a motivation to combine Doyle with Steinacker—a prerequisite to its proposed three-way combination of Doyle with Steinacker and with Park—we do not reach the Board's determination that Apple failed to sufficiently show that a skilled artisan would be motivated to use the forced stack technique described in Park with Doyle.

## CONCLUSION

We have considered the parties remaining arguments and find them unpersuasive. For the reasons set forth above, we vacate the Board's decisions finding the challenged claims of the '674 patent unpatentable and remand for further proceedings consistent with this opinion.

# VACATED AND REMANDED

Costs

Costs to Qualcomm.

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