

IPR2024-01068
U.S. Patent No. 9,118,528
Patent Owner's Preliminary Response

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NXP USA, INC.
Petitioner,

v.

PARKERVISION, INC.
Patent Owner.

U.S. Patent No. 9,118,528
Issue Date: August 25, 2015

Title: METHOD AND SYSTEM FOR DOWN-CONVERTING AN
ELECTROMAGNETIC SIGNAL, AND TRANSFORMS FOR SAME, AND
APERTURE RELATIONSHIPS

Inter Partes Review No. IPR2024-01068

**PATENT OWNER'S PRELIMINARY RESPONSE TO PETITION FOR
INTER PARTES REVIEW OF UNITED STATES PATENT NO. 9,118,528**

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PATENT OWNER'S EXHIBIT LIST

Exhibit No.	Description
2001	Complaint, <i>ParkerVision, Inc. v. NXP Semiconductors N.V., NXP B.V., NXP USA, Inc. d/b/a NXP Semiconductors USA, Inc.</i> , Case No. 6:23-cv-00389-ADA (WDTX)
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2003	Dani Kass, "Catching Up On Patent Litigation With Judge Albright," LAW360 (Mar. 14, 2023)
2004	<i>Sonrai Memory Ltd. v. Kingston Tech. Co., Inc.</i> , Case No. 6:21-cv-1284-ADA, Order Denying Kingston Tech. Co. and Kingston Tech. Corp.'s Opposed Motion to Stay Pending Resolution of Inter Partes Review, Dkt. 94 (W.D. Tex., Oct. 18, 2022)
2005	Docket Order, <i>Kerr Machine Co. d/b/a Kerr Pumps v. Vulcan Industrial Holdings, LLC</i> , No. 6:20-cv-00200 (W.D. Tex. Aug. 2, 2020)

I. INTRODUCTION

Pursuant to 35 U.S.C. § 313 and 37 C.F.R. § 42.107, ParkerVision Inc. (“ParkerVision”) submits this Preliminary Response (“Response”) and respectfully requests the Board to deny the Petition for *Inter Partes* Review (“Petition”) filed by NXP USA, Inc. (“Petitioner” or “NXP”) challenging claims 1-5, 8, 9, 11-23, 26, 27, and 29-36 of U.S. Patent No. 9,118,528 (“the ’528 patent”).

The Petition fails to demonstrate the cited combination of references render the challenged claims obvious. More specifically, NXP’s assertions regarding reasons to combine are based on creating problems in prior art references that supposedly need to be resolved where no such problems exist. The PTAB has rejected these types of vacant strawman arguments. For other holes in the prior art references, NXP argues that certain disclosures would be combined even though the references’ teachings contradict each other, change the fundamental function and nature of circuit components or are simply incompatible. In those instances, NXP looks the other way and just ignores these battling disclosures. And NXP also fails to show a reasonable expectation of success where its arguments are based on changes to numerous components where there are no reasons to modify those components and where NXP fails to explain and provide evidentiary support for whether its hindsight-based reconfigurations would actually work. For these reasons, institution should be denied.

Furthermore, ParkerVision requests the Board to exercise its discretion under 35 U.S.C. § 314(a) to deny institution of the Petition because of the advanced state of parallel litigation pending in the Western District of Texas, No. 6:23-cv-00389-ADA (“the Texas case”). The ’528 patent is one of three patents asserted in a complaint filed approximately *seventeen months* ago. (Ex. 2001). In that case, preliminary infringement and invalidity contentions have already been exchanged, a *Markman* hearing was held on June 14, 2024, and trial is set for August 18, 2025 (Ex. 2002)—nearly *five months before* a final written decision would be due if the Board were to institute. Notably, Petitioner raises the same invalidity issues in the district court as contained in its IPR Petition.

Given the current posture and schedule of the underlying Texas case, the factors set forth in *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential), which has not been overruled or abrogated by statute or any regulation, weigh in favor of *denying* institution of an IPR. The ’528 patent is but one of three patents being litigated, and the Court has already set a trial date. The Court and parties have already invested significant resources in litigating the Texas case, and despite what efficiencies Petitioner may urge, the Board’s expenditure of resources will hardly make a dent in simplifying the parallel litigation.

In addition, Petitioner conditionally moves to join another IPR proceeding involving the '528 patent: *Texas Instruments Inc. v. ParkerVision, Inc.*, IPR2024-00936 (P.T.A.B.) (filed March 18, 2024) (the "TI IPR"). Paper 3.¹ ParkerVision believes the Board should deny institution of the TI IPR, and for that reason, as well as those set forth below, the Board should likewise deny institution of the present Petition. Furthermore, NXP's *Sotera* stipulation—where it agrees not to pursue the same invalidity grounds in district court if its IPR is instituted—offers no meaningful benefit. If NXP's motion for joinder is granted, the stipulation would no longer apply, allowing NXP to circumvent the supposed efficiencies it claims to provide.

Based on the Board's precedential decisions discussed below, and for the foregoing reasons, institution of the Petition should be denied.

**II. *INTER PARTES* REVIEW SHOULD NOT BE INSTITUTED
BECAUSE THE PETITIONER CANNOT PREVAIL ON ANY
CHALLENGED CLAIM.**

NXP has failed to demonstrate a reasonable likelihood that any of the challenged claims are unpatentable. 37 C.F.R. § 42.108(c). Each ground of the

¹ Petitioner acknowledges that its "petition challenges the same claims on the same grounds, relies on the same prior art, and includes the exact same substantive arguments as the TI IPR." Paper 3 at 2.

Petition is fatally flawed because NXP has not met its burden to establish both a motivation to combine the cited references and reasonable expectation of success.

A. Ground 1A: Petitioner has not shown that a POSITA would have been motivated to combine Tayloe, TI Datasheet, and Macnally.

NXP alleges that a POSITA would have found it obvious to combine the teachings of three references, Tayloe, TI Datasheet, and Macnally, to arrive at claims 1, 5, 8, 9, 11-19, 23, 26, 27 and 29-36 of the '528 patent. *See, e.g.,* Pet., 1. In particular, NXP suggests replacing Tayloe's commutating switch with multiplexer switches described in TI Datasheet, and implementing Tayloe's differential amplifier circuits using the fully differential operational amplifier configuration in Macnally. *See id.*, at 23, 27. But NXP does not adequately explain *why* a POSITA would have been motivated or would have had a reason to combine these teachings, and no such motivation exists. *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1342, 1366-69 (Fed. Cir. 2012).

At best, NXP demonstrates that a skilled artisan, once presented with the three references, would have understood that they *could* be combined. But that cursory observation is not enough: that references *could* be combined does not articulate any reason or motivation to pick out those three references and combine them to arrive at the claimed invention and do so with a reasonable expectation of success. *See Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1073 (Fed. Cir. 2015)

("[O]bviousness concerns whether a skilled artisan not only *could have made* but *would have been motivated to make* the combinations or modifications of prior art to arrive at the claimed invention.") (emphasis in original).

1. NXP fails to establish a sufficient motivation to combine Tayloe, TI Datasheet, and Macnally.

NXP argues that "[a] POSITA would have been motivated to adapt Tayloe's system as a single-chip (i.e., integrated circuit known as IC) to meet relentless market demand for improved product size/performance, and decreased unit cost." Pet., 28. NXP further alleges that in making this adaptation, "a POSITA would have been inspired by several known advantages of using fully differential amplifiers and Macnally's topology for baseband processing on an IC." *Id.* NXP's argument, however, lacks a rational basis and is fundamentally flawed.

NXP begins by setting up a strawman—creating a problem within Tayloe's system that does not exist—in order to justify its proposed combination with Macnally. But Tayloe already explicitly describes its invention as "a *simple and inexpensive* product detector," with performance benefits such as "low conversion loss" and "substantial receiver performance gains." Ex. 1004, 1:65; 3:5-6, 9-11. Thus, these features already address the issues that NXP alleges a POSITA would seek to solve by combining Tayloe with Macnally. The Board has consistently rejected motivations to combine based on alleged deficiencies in a prior art

reference that do not exist. *See, e.g., Runway Safe LLC v. Engineered Arresting Systems*, IPR2015-01921, Paper 9 at 6-8, 10 (PTAB Feb. 29, 2016) (no motivation to combine because a POSITA would have had no reason to solve a problem that does not exist: “[b]ecause we are not persuaded that water intrusion is a problem in Gwynne’s arrester system, we are not persuaded by Petitioner’s proffered rationale[.]”); *id.* at 10-11 (rejecting another combination because “Petitioner’s stated rationale for combining Brubaker ’917 and Angley ’025 is predicated on solving a problem already addressed by Angley ’025.”).

NXP’s reliance on the supposed “advantages” of Macnally’s fully differential topology for baseband processing on an IC is similarly misguided. NXP inexplicably attempts to replace Tayloe’s amplifier with a different amplifier from Macnally, asserting that Macnally’s fully differential amplifier operates on complementary signal components, thereby reducing interference by taking the difference between them. Pet., 28. But this assertion overlooks a crucial fact: Tayloe’s summing amplifiers already employ differential inputs, and this means they too operate on complementary signal components, and address the same functional goal as Macnally’s amplifier. Therefore, a POSITA would have no logical reason to seek out an alternative amplifier configuration (Macnally’s amplifier) that performs the same function as Tayloe’s existing summing amplifiers.

NXP also misinterprets Macnally to suggest that the symmetrical layout of each fully differential amplifier on an IC inherently provides “a fully differential analog signal path [that] minimizes supply and substrate noise coupling [e.g., interference coupling from the substrate, power supply lines, and ground lines].” Pet., 28 (citation omitted). But NXP’s assertion is misleading, as the supposed advantage pertains specifically to a fully differential signal path, not merely the use of a fully differential amplifier. NXP’s interpretation of Macnally distorts the original context by implying that Macnally attributes the noise minimization advantage to the fully differential amplifier itself. In reality, Macnally clearly refers to the advantage of a fully differential analog signal path as a whole, not just the amplifier. *See* Ex. 1021, 5:64-65 (“A fully-differential analog signal path minimizes supply and substrate noise coupling.”). Instead, NXP purposefully adds language—each fully differential amplifier is laid out symmetrically on an integrated circuit (IC) to provide—before Macnally’s clear statement to change its meaning. This distinction is critical, as NXP’s argument attempts to retrofit Macnally’s statement to support its position, which is not substantiated by Macnally’s actual language.

Furthermore, NXP relies on the Langford reference (Ex. 1027 at 1388, Fig. 12) to assert “the Rauch biquad topology [of Macnally] can achieve a given power output with lower power input and reduced noise and distortion.” Pet., 28. Yet, the

cited portion of Langford actually states: “The Rauch topology *minimizes the number of opamps in the transmit chain thus* lowering the power and reducing the noise and distortion contributors.” Ex. 1027 at 1388 (emphasis added). NXP conveniently omits the fact that Langford’s discussion pertains to the transmit chain, not receiver circuitry, and that the claimed benefits arise from minimizing the number of opamps in the transmit chain. Ironically, NXP’s proposed combination would increase the number of opamps in Tayloe’s circuitry, contradicting the very advantage NXP claims. Indeed, NXP acknowledges combining Tayloe and Macnally would require additional summing amplifiers. Pet., 29. (“A POSITA would understand the subsequent on-chip components would likewise be differential as in Macnally, *e.g.*, differential inputs/outputs for I and for Q in any subsequent circuit paths, phase shifters, amplifiers, and other components, *eventually summing each differential pair with a summing amplifier*, like Tayloe’s amplifier 60.”)(emphasis added). Based on any one of the flaws and holes in NXP’s assertions above, the Board should deny institution.

In fact, NXP’s proposed combination of Tayloe, TI Datasheet and Macnally also contradicts the very motivation NXP asserts. In particular, NXP argues that combining the fully differential amplifier configuration of Macnally with Tayloe would allow for a single-chip IC implementation, where all circuit components are integrated into one chip. But NXP’s reliance on the TI Datasheet directly conflicts

with this assertion. The TI Datasheet pertains to a standalone chip—the SN74CBT3253 multiplexer/demultiplexer. A standalone chip, by definition, is not part of a single-chip IC; instead, it exists as its own discrete component. Thus, under NXP's alleged motivation to implement Macnally's fully differential amplifier (i.e., single-chip IC implementation), a POSITA would not logically also consider the teachings of the TI Datasheet (a standalone chip). This internal inconsistency undermines NXP's proposed motivation.

For at least the foregoing reasons, the Board should reject NXP's obviousness argument based on Tayloe, TI Datasheet, and Macnally and deny institution.

2. NXP fails to provide a sufficient reasonable expectation of success in combining Macnally and Tayloe.

“[W]here a party argues a skilled artisan would have been motivated to combine references, it must show the artisan ‘would have had a reasonable expectation of success from doing so.’” *Arctic Cat Inc. v. Bombardier Rec. Prods. Inc.*, 876 F.3d 1350, 1360–61 (Fed. Cir. 2017) (quoting *In re Cyclobenzaprine Hydrochloride Extended-Release Capsule Patent Litig.*, 676 F.3d 1063, 1068–69 (Fed. Cir. 2012)). NXP fails to meet this burden; therefore, institution should be denied.

NXP alleges that combining Macnally with Tayloe “would have been a simple substitution of one known element (fully differential amplifier circuit of Macnally) for another (summing amplifier circuit of Tayloe) to obtain predictable results (e.g., improved linearity and reduced power consumption for on-chip performance), and hence would have had a reasonable expectation of success.” Pet., 29-30. Not so. NXP overlooks significant structural and functional differences between Tayloe and Macnally’s amplifiers.

The proposed replacement of Tayloe’s summing amplifiers with Macnally’s fully differential amplifiers is not a mere substitution, as NXP suggests, but instead, it requires fundamental restructuring of Tayloe’s circuit. Tayloe’s summing amplifiers 50, 52 use a differential input and a single-ended output. *See* Ex. 1004, Figure 3. In contrast, Macnally’s fully differential amplifiers use differential inputs and differential outputs. *See* Ex. 1021, Figure 3. Implementing Macnally’s fully differential amplifier into Tayloe’s circuit would require a fundamental redesign to accommodate Macnally’s differential output configuration. Indeed, NXP acknowledges that a POSITA would need to adapt all subsequent on-chip components (circuitry after Macnally’s amplifier) to match Macnally’s differential configuration, including phase shifters and amplifiers. Pet., 29. Those changes to such a number of components would not necessarily lead to a reasonable expectation of success.

Moreover, “combinations that change the ‘basic principles under which the prior art was designed to operate,’ or that render the prior art ‘inoperable for its intended purpose’ may fail to support a conclusion of obviousness.” *Plas-Pak Industries v. Sulzer Mixpac AG*, 600 Fed. Appx. 755, 757-58 (Fed. Cir. 2013). But NXP’s proposed combination does just that—replacing Tayloe’s summing amplifier with Macnally’s fully differential amplifier configuration would alter the fundamental operation of Tayloe’s circuit. Tayloe’s summing amplifiers are designed to differentially sum various signals to produce baseband in-phase and quadrature signals. *See* Ex. 1004, 2:56-62. Macnally’s fully differential amplifiers, on the other hand, also perform the additional operation of low-pass filtering. Ex. 1021, 7:17-19.

NXP’s expert acknowledges the lowpass filtering functionality of Macnally’s amplifier. Ex. 1003, ¶ 143. But neither NXP nor its expert address how this lowpass filtering function would impact Tayloe’s circuit, especially since Tayloe achieves lowpass filtering through separate resistors and capacitors. Ex. 1004, 3:22-27 (“Resistor 32 and each of capacitors 72-78 form lowpass filters. The commutating effect of the four capacitors turns the lowpass response into a bandpass response centered on f_1 . The width of the bandpass is easily set by proper selection of resistor 32 and capacitors 72-78.”). NXP never even considers the

principle of operation of Tayloe in its analysis. NXP's failure to account for these operational discrepancies further undermines its argument.

Accordingly, NXP has not met its burden of showing that a POSITA would have had a reasonable expectation of success in combining Tayloe and Macnally as proposed, and for this reason, institution should be denied.

B. Ground 1B: Petitioner has not shown that a POSITA would have been motivated to combine Tayloe, TI Datasheet, Macnally, and Cahn.

Ground 1B relies on the combination of Tayloe, TI Datasheet, Macnally, and Cahn to challenge dependent claims 2-4, and 20-22. But Ground 1B suffers from the same fundamental flaws as Ground 1A, which challenges independent claim 1 and dependent claims 5, 8, 9, 11-19, 23, 26, 27 and 29-36 based on the combination of Tayloe, TI Datasheet, and Macnally. Because Ground 1B fails to cure the defects of Ground 1A or provide any substantial new argument or evidence to address these deficiencies, Ground 1B is deficient for the same reasons. Therefore, NXP's challenge to dependent claims 2-4 and 20-22 should also be rejected.

C. Ground 2A: Petitioner has not shown that a POSITA would have been motivated to combine Razavi and Macnally.

NXP alleges that a POSITA would have found it obvious to combine the teachings of Razavi and Macnally to arrive at claims 1, 5, 8-9, 11-19, 23, 26-28,

30-36 of the '528 patent. *See, e.g.,* Pet., 1. In particular, NXP contends that a POSITA would have found it obvious to incorporate Macnally's fully differential amplifier circuits in Razavi's receiver to process the down-converted signal. *See* Pet., 65. NXP is wrong.

1. Razavi teaches away from the proposed combination.

A POSITA would not have been motivated to incorporate Macnally's fully differential amplifier circuits in Razavi's receiver, as NXP proposes, because Razavi explicitly discourages the use of (teaches away from) Macnally's low-pass filtering approach in the context of its receiver design.

A reference teaches away where a POSITA "would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant." *Arctic Cat Inc. v. Bombardier Rec. Prod. Inc.*, 876 F.3d 1350, 1360 (Fed. Cir. 2017) (quoting *Allergan, Inc. v. Sandoz Inc.*, 796 F.3d 1293, 1305 (Fed. Cir. 2015)). "[E]ven if a reference is not found to teach away, its statements regarding preferences are relevant to a finding regarding whether a skilled artisan would be motivated to combine that reference with another reference." *Polaris Indus., Inc. v. Arctic Cat, Inc.*, 882 F.3d 1056, 1069 (Fed. Cir. 2018). That is the case here.

Razavi criticizes NXP's proposed use of Macnally's low-pass filtering in processing the mixer output. In particular, Razavi describes the design of a single-

chip 900-MHz CMOS direct conversion receiver (DCR) fabricated in digital 0.6- μm technology. Ex. 1017, 113. Razavi proposes modifications to general DCR architecture to create a different type of direct downconverter. Figure 4 of Razavi (below) illustrates three permutations of a baseband processing for the circuit following the mixer. Each permutation includes a channel select filter, baseband amplifier A1 and analog-to-digital converter (ADC).

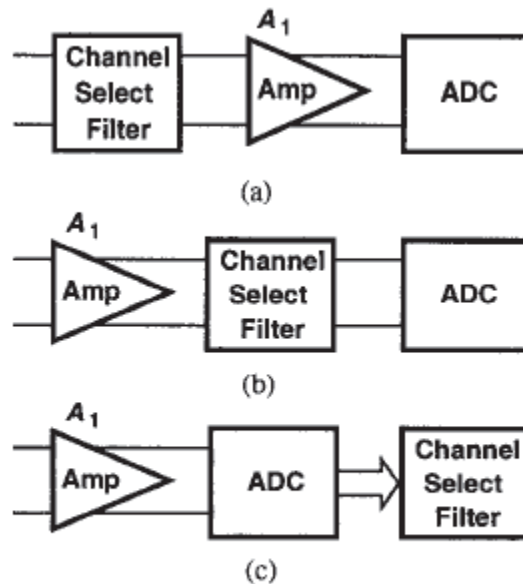


Fig. 4. Baseband processing.

NXP's proposed combination aligns with the permutation in Figure 4(a), which involves low-pass filtering using Macnally's amplifier. Indeed, NXP acknowledges that a POSITA would understand "channel-select filtering" as low-pass filtering in the context of Razavi and "using Macnally's fully differential

amplifier circuit, a known low-pass filter, [is] consistent with one design option disclosed by Razavi.” Pet., 66-67.

But Razavi specifically teaches against the use of the permutation depicted in Figure 4(a). Razavi notes that “a low-pass filter suppresses out-of-channel interferers, allowing A1, to be a nonlinear, high-gain amplifier and the analog-to-digital converter (ADC) to have a moderate dynamic range (roughly 4 to 8 bits depending on the gain control in the RF domain and the type of modulation).” Ex. 1017, 113. Razavi criticizes (and teaches away from) this permutation because “the low-pass filter design entails severe noise-linearity-power tradeoffs.” *Id.* Indeed, Razavi specifies that “[t]he present design is intended for permutations in Figs. 4(b) and (c),” thereby excluding Figure 4(a) from consideration. *Id.*

NXP fails to address the conflict between Razavi's teachings and the proposed combination, which undermines its obviousness argument. NXP cannot selectively ignore the explicit portions of Razavi that cut against its position. *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1550 (Fed. Cir. 1983) (it is error to consider references in “less than their entireties” and “disregard[] disclosures in the references that diverge from and teach away from the invention at hand”); *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 296 (Fed. Cir. 1985) (reference must be “considered for all it taught, disclosures that

diverged and taught away from the invention at hand as well as disclosures that pointed towards and taught the invention at hand”).

For at least these reasons, NXP's proposed combination of Razavi and Macnally fails, and the Board should reject NXP's obviousness argument.

2. NXP fails to provide sufficient reasonable expectation of success in combining Macnally and Tayloe.

Relatedly, NXP fails to establish a reasonable expectation of success in combining the disclosures of Razavi and Macnally to arrive at the claimed invention. NXP encapsulates its argument in a single, conclusory sentence: “The modification would have had a reasonable expectation of success because it would have been a combination of prior art elements according to known methods to yield predictable results (using Macnally's fully differential amplifier circuit, a known low-pass filter, consistent with one design option disclosed by Razavi).” Pet., 66-67. NXP's expert declaration merely parrots this same language without providing further analysis or explanation. *Compare id. with* Ex. 1003, ¶ 229. But such conclusory statements are inadequate. *See In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016) (“To satisfy its burden of proving obviousness, a petitioner cannot employ mere conclusory statements. The petitioner must instead articulate specific reasoning, based on evidence of record, to support the legal conclusion of obviousness.”).

NXP's argument falls short of the requisite evidentiary standards, particularly in light of Razavi's critique of the Figure 4(a) permutation for involving severe noise-linearity-power tradeoffs. Independent claim 1 of the '528 patent requires, among other things, transferring portions of energy distinguishable from noise. This limitation is thus included in every dependent claim as well.

Therefore, NXP has failed to meet its burden of proving that a POSITA would have had a reasonable expectation of success in the proposed combination of Razavi and Macnally.

D. Ground 2B: Petitioner has not shown that a POSITA would have been motivated to combine Razavi, Macnally, and Cahn.

Ground 2B relies on the combination of Razavi, Macnally, and Cahn to challenge dependent claims 2-4, and 20-22. But Ground 2B suffers from the same fundamental flaws as Ground 2A, which challenges independent claim 1 and dependent claims 5, 8, 9, 11-19, 23, 26-28 and 30-36 based on the combination of Razavi and Macnally. Because Ground 2B fails to cure the defects of Ground 2A or provide any substantial new argument or evidence to address these deficiencies, Ground 2B is deficient for the same reasons. Therefore, NXP's challenge to dependent claims 2-4 and 20-22 should also be rejected and institution denied.

III. THE BOARD SHOULD EXERCISE ITS DISCRETION AND DENY INSTITUTION UNDER 35 U.S.C. § 314(a) AND 37 C.F.R. § 42.108(b)

ParkerVision sued Petitioner for infringement of the '528 patent in the Western District of Texas approximately *seventeen months ago* on May 19, 2023. (*See* Ex. 2001). As such, the Texas case is in an advanced stage and a jury trial will occur more than *four months before* this Board issues a final written decision. By the January 2026 deadline for this Board's Final Written decision, Judge Albright will have entered a Claim Construction Order covering terms from the '528 patent, ruled on dispositive motions, and conducted a jury trial. (*See* Ex. 2002). In fact, as of the filing of this response, the parties have already exchanged preliminary infringement and invalidity contentions, completed claim construction briefing, are in the midst of discovery, and had a *Markman* hearing on disputed claim terms.

In the Board's precedential *Fintiv* decision, the Board set forth six factors for determining "whether efficiency, fairness, and the merits support the exercise of authority to deny institution in view of an earlier trial date in the parallel proceeding." *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 at 5-6 (PTAB Mar. 20, 2020) (precedential). When evaluating these factors, the Board takes a holistic view of whether efficiency and integrity of the system are best served by

denying or instituting review.² *Google LLC v. Personalized Media Commc'ns, LLC*, IPR2020-00720, Paper 16 at 5 (PTAB Aug. 31, 2020) (citing *Fintiv*, IPR2020-00019, Paper 11 at 5-6). Here, *all* six *Fintiv* factors weigh in favor of *denying* institution. *See NHK Spring Co. v. Intri-Plex Techs., Inc.*, IPR2018-00752, Paper 8 at 20 (PTAB Sept. 12, 2018) (precedential) (“Institution 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.’” (citation omitted)). As such, the Board should exercise its discretion and deny institution here.

A. Factor 1—The district court has not granted a stay, and there is no evidence that the district court will grant a stay even if a proceeding is instituted.

Petitioner has not asked for a stay pending *inter partes* review, and there is no evidence that Judge Albright would grant a stay even if an IPR were instituted. To the contrary, Judge Albright has made it clear that he will not stay a case where, as here, the court can resolve the case as quickly as the Board can:

² Efficient administration of matters weighs *against* institution in this case. *See* 35 U.S.C. § 316(b). There is no question that the Board has the discretion to deny institution under 35 U.S.C. § 314(a) and that the facts here fit with denial under the Board's *Fintiv* precedent and related line of decisions.

[T]here's no unfairness to either side by not staying a case for the PTAB when I can try the case as quickly as they can resolve it.... And so far, I think that's proven to be true.

(Ex. 2003). Indeed, "Judge Albright almost never stays proceedings to let the PTAB make its decision first." *Id.* at 2.

The district court has expressly stated that it considers issue simplification "the most important factor" in deciding whether to stay patent litigation³—and here, a stay would not simplify anything. Trial in the district court case against Petitioner is scheduled for August 18, 2025 (Ex. 2002). The Board's final written decision, on the other hand, would not be expected until approximately *five months after* a jury trial, in January 2026. As mentioned above, in addition to there being no efficiencies or simplification of issues in the district court that would result from institution, denial of NXP's Petition preserves the integrity of the system. In the circumstances here, there should not be two adjudications of validity of the '528 patent, particularly where the Board's decision will not come until five

³ See, e.g., Ex. 2004, *Sonrai Memory Ltd. v. Kingston Tech. Co., Inc.*, No. 6:21-cv-1284-ADA, slip op. at *4-5 (W.D. Tex. Oct. 18, 2022) (denying a stay following IPR institution because issue simplification was the "most important factor" and the Court had already held a *Markman* hearing and "expended significant resources").

months after the jury trial and the case could already be on appeal. Allowing for two decisions regarding the '528 patent's validity, not to mention two potentially conflicting decisions, actually impugns the integrity of the patent system.

Indeed, Judge Albright's prior decisions on opposed motions to stay pending IPR indicate that a stay of the Texas case would be denied. In *Multimedia Content Management LLC v. DISH Network LLC*, for example, Judge Albright denied a motion to stay with similar facts to the Texas case. There, (1) the defendant filed IPR petitions ten months after filing of the complaint, (2) the court issued a claim construction ruling before the patent owner filed a Preliminary Response, and (3) a jury trial was set three months before the statutory deadline for the Board to issue a final written decision. *Multimedia Content Mgmt. LLC v. Dish Network Corp.*, No. 6:18-cv-00207-ADA, 2019 U.S. Dist. LEXIS 198875, at *2 (W.D. Tex. Jan. 10, 2019). In denying defendant's motion to stay, Judge Albright found that a stay would prejudice the plaintiff, ignore the advanced state of the proceedings, and fail to simplify the issues. *Id.* Likewise in *Kerr Machine Co. d/b/a Kerr Pumps v. Vulcan Industrial Holdings, LLC*, 6:20-cv-00200 (W.D. Tex. Aug. 2, 2020), Judge Albright denied a stay noting, "[e]ven if the PTAB institutes, the Court anticipates that the trial date will occur before the PGR's final written decision." (Ex. 2005).

There is no reason to believe that Judge Albright would reach any different result here. Indeed, the uncontroverted facts in the district court litigation

demonstrate that a stay will not be granted. In view of this, and again, given Judge Albright's explicit statements on the record, as well as his prior rulings in *e.g.*, *Multimedia* and *Kerr Machine*, it is firmly established that the court would not grant a stay.

Additionally, even where no stay has been requested, the Board has found factor 1 weighs in favor discretionary denial where (as here), "Petitioner present[ed] no evidence that it has requested a stay [] or that a stay is likely." *Luxshare Precision Industry v. Amphenol Corp.*, IPR2022-00132, Paper 10, at 9 (PTAB May 3, 2022). And such a decision is particularly appropriate where the circumstances show that "a stay ... is unlikely." *Nintendo Co. v. Gamevice, Inc.*, IPR2020-01197, Paper 13, at 11-12 (PTAB Jan. 12, 2021).

For all of these reasons, factor 1 favors discretionary denial.

B. Factor 2—Because the Texas Case will be tried *before* the Board's projected statutory deadline for a final written decision, the Board should deny institution.

Judge Albright has set trial in the Texas case involving the '528 patent for August 18, 2025. (Ex. 2002). Given that the Board will issue an institution decision by January 16, 2025 (three months after the filing of this Preliminary Response), any final written decision, if instituted, would be entered on or around January 16, 2026. As such, the Texas case will have been tried nearly *five months before* the Board's projected statutory deadline for a final written decision.

Factor 2, therefore, favors discretionary denial. *See NetApp, Inc. v. Realtime Data LLC*, IPR2017-01195, Paper 9, at 12-13 (P.T.A.B. Oct. 12, 2017) (denying institution) (“The result would be a significant waste of the Board’s resources. There would be no offsetting conservation of the [district court’s] judicial resources because any final written decision in this proceeding would not issue until well after the scheduled trial date in the [district court] [l]itigation.”); *see also Next Caller, Inc. v. TrustID, Inc.*, IPR2019-00961, Paper 10, at 14-15 (P.T.A.B. Oct. 16, 2019) (denying institution where trial was scheduled to start about three months before expected final written decision); *E-One, Inc. v. Oshkosh Corp.*, IPR2019-00161, Paper 16, at 6 (P.T.A.B. May 15, 2019) (denying institution where trial was scheduled to start one month before expected final written decision); *Intel Corp. v. VLSI Tech. LLC*, IPR2020-00106, Paper 17, at 8 (P.T.A.B. May 5, 2020) (denying institution where trial was scheduled to start four to five months before expected final written decision).

C. Factor 3—The parties and the court have invested significant resources in the Texas case, favoring discretionary denial.

ParkerVision filed its complaint on May 19, 2023, and NXP was subsequently served on June 20, 2023. NXP waited exactly one year—until June 20, 2024—to file the Petition. Because NXP did not file the Petition expeditiously,

the Court and the parties will have completed litigation by the time the Board issues its final written decision.

Event	Date
Complaint	May 19, 2023
Preliminary infringement contentions served by ParkerVision	November 22, 2023
Preliminary invalidity contentions served by NXP	January 31, 2024
Exchange of claim terms for construction	January 31, 2024
Exchange of preliminary claim constructions	February 14, 2024
Exchange of extrinsic evidence	February 21, 2024
Meet and confer to narrow claim construction issues	March 1, 2024
NXP filed Opening claim construction brief	March 6, 2024
ParkerVision filed Responsive claim construction brief	March 29, 2024
NXP filed Reply claim construction brief	April 12, 2024
ParkerVision filed Sur-Reply claim construction brief	April 26, 2024
Parties submitted Joint Claim Construction Statement	May 1, 2024
Fact discovery opened	May 16, 2024
Petition filed ⁴	June 20, 2024
Markman Hearing	June 14, 2024
Deadline to serve final infringement and invalidity contentions	October 30, 2024
Deadline for Institution Decision	January 16, 2025
Close of fact discovery	February 17, 2025
Close of expert discovery	May 19, 2025
Dispositive motion deadline	June 2, 2025
Final Pretrial Conference	August 1, 2025
Trial	August 18, 2025
Deadline for Final Written Decision	January 16, 2026

And as this chart makes clear, the parties will be deep in fact discovery before any institution decision issues. The parties will proceed with fact depositions, followed

⁴ The green cells reflect deadlines before the PTAB.

by the exchange of expert reports and expert declarations. Specifically, fact discovery will conclude by February 17, 2025. (*See* Ex. 2002, at 3). Opening expert reports on validity are due March 10, 2025, and expert discovery will end on May 19, 2025—i.e. approximately eight months before any final written decision here. (*Id.*). Dispositive motions, such as any summary judgment motions regarding the purported invalidity of the '528 patent or Daubert Motions will be filed by June 2, 2025. And trial will occur on August 18, 2025. In sum, the totality of the litigation will be completed before this Board issues its final written decision.

Petitioner ignores *Fintiv*, where the Board specifically considered “the level of investment and effort already expended on claim construction and invalidity contentions in the District Court” in finding factor 3 weighed in favor of discretionary denial. *See Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 15 at 14 (PTAB May 13, 2020).

Indeed, the parties have made significant investments in the district court litigation, and that will only continue as the Board considers institution. Notably, the parties have already completed claim construction briefing, served lengthy infringement/invalidity contentions, and exchanged document production. This Board need look no further than *Fintiv* to see that these types of investments favor discretionary denial. *See Fintiv*, IPR2020-00019, Paper 11 at 10 (“district court

claim construction orders may indicate that the court and parties have invested sufficient time in the parallel proceeding to favor denial.”); *see also E-One, Inc. v. Oshkosh Corp.*, IPR2019-00161, Paper 16 at 13, 20 (PTAB May 15, 2019) (denying institution where “district court ha[d] already expended substantial resources” by, among other things, “receiv[ing] briefing and hear[ing] oral argument on claim construction, and issu[ing] a claim construction ruling”); *Nine Energy Service Inc. v. MCS Multistage Inc.*, IPR2020-01615, Paper 18 at 10-11 (PTAB Mar. 24 2021) (finding this factor weighed in favor of denying institution despite recognizing “discovery is in the early stages.”).

D. Factor 4—Significant overlap between issues raised in the Petition and in the Texas case supports denial.

The overlap between the issues raised in the instant IPR Petition and in the parallel district court litigation is substantial. The Petition alleges invalidity of claims asserted in the district court litigation based on common references relied upon in the Texas case.

Grounds 1 and 2 of this Petition rely on the Tayloe, TI Demux Datasheet, and Razavi references, which Petitioner also cites in the co-pending district court litigation. And as the Board previously noted, “Petitioner’s assertion of additional invalidity contentions in the District Court is not relevant to the question of the degree of overlap for this factor. Further, the fact that Petitioner has not decided

whether to pursue the art from this proceeding in its expert discovery or at trial in the District Court is not persuasive.” *Fintiv*, IPR2020-00019, Paper 15, at 14-15. Ultimately, as the Board recognized in *Supercell*, under *Fintiv*, “if the petition includes the same or substantially the same claims, grounds, arguments, and evidence as presented in the parallel proceeding, this fact has favored denial” because “concerns of inefficiency and the possibility of conflicting decisions [are] particularly strong.” *Supercell Oy v. Gree, Inc.*, IPR2020-00513, Paper 11 at 13 (PTAB June 24, 2020). That is exactly the case here—there is substantial overlap in the references and invalidity grounds in both NXP’s Petition and its invalidity arguments in the Texas case.

Relying on the USPTO Memorandum, *Interim Procedure for Discretionary Denials* (June 21, 2022), Petitioner alleges that it has “eliminated any risk of duplicated effort by voluntarily presenting a *Sotera* stipulation to Patent Owner.” Pet., 97. Not so. Petitioner stipulates that if the Board “institutes IPR for the ’528 patent *based on the petition by NXP*, and *only while any IPR from this petition* is pending, NXP will not pursue in Case No. 6-23-cv-00389 the same grounds of invalidity raised in the petition against the claims of the ’528 patent, or any grounds of invalidity that reasonably could have been raised in the petition.” Ex. 1041 (emphasis added). But Petitioner also seeks party joinder to the identical TI IPR if the TI IPR is instituted. Paper 3. If Petitioner is joined in that matter, it is

unclear whether its stipulation, which is specific to “this petition,” would effectively bar it from re-raising the same art in the district court case. Therefore, Petitioner's stipulation should not be regarded as dispositive.

For the foregoing reasons, factor 4 also supports denial of the Petition.

E. Factor 5—The Petitioner and the defendant in the parallel proceedings are the same party, supporting denial.

The parties are the same in the Petition and the Texas case. As such, Petitioner must concede that this factor favors denial of institution. *See Fintiv*, IPR2020-00019, Paper 15 at 15 (“Because the petitioner and the defendant in the parallel proceeding are the same party, this factor weighs in favor of discretionary denial.”).

F. Factor 6—Other circumstances that impact the Board's exercise of discretion show that denial is appropriate at this time.

There are additional weaknesses with the Petition that favor discretionary denial.⁵ And as explained above, institution of the present proceedings will also give rise to substantial duplication of efforts. It will not prevent fact discovery,

⁵ ParkerVision reserves the right to address, in a Patent Owner Response if required, issues of claim construction not addressed by Petitioner and the failures of the cited art to teach or render obvious the challenged claims.

expert discovery, and other disputes that occur in the Texas case, nor obviate dispositive motions, pre-trial motions or a trial.

For these additional reasons, factor 6 further supports discretionary dismissal.

IV. CONCLUSION

For all of the foregoing reasons, ParkerVision respectfully requests the Board to deny the Petition.

Dated: October 16, 2024

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24(d), the undersigned certifies that this Patent Owner's Preliminary Response complies with the type-volume limitation of 37 C.F.R. § 42.24(b) because it contains 6,204 words, as determined by the word-processing program used to prepare the brief, excluding the parts of the brief exempted by 37 C.F.R. § 42.24(a)(1).

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing **PATENT OWNER'S PRELIMINARY RESPONSE TO PETITION FOR INTER PARTES REVIEW OF UNITED STATES PATENT NO. 9,118,528**, together with all exhibits filed therewith, was served in its entirety by filing these documents through the PTAB E2E System, as well as by email on the following counsel of record for Petitioner:

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