IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of:	David F. Sorrells, et al
U.S. Patent No.:	7,865,177
Issue Date:	January 4, 2011
Appl. Serial No.:	12/349,802
Filing Date:	January 7, 2009
Title:	METHOD AND SYSTEM FOR DOWN-CONVERTING AN ELECTROMAGNETIC SIGNAL, AND TRANSFORMS FOR SAME, AND APERTURE RELATIONSHIPS

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PETITIONER'S BRIEF IN OPPOSITION OF A DISCRETIONARY DENIAL

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EXHIBITS

Exhibit No.	Description
TI-1001	U.S. Patent No. 7,865,177 ("the '177 patent")
TI-1002	Excerpts from the Prosecution History of the '177 Patent ("the Prosecution History")
TI-1003	Declaration and Curriculum Vitae of Dr. Ian Galton
TI-1004	U.S. Patent No. 6,230,000 ("Tayloe")
TI-1005	SN74CBT3253 Dual 1-of-4 FET Multiplexer/Demultiplexer Datasheet
TI-1006-1007	Reserved
TI-1008	Complaint, *ParkerVision, Inc. v. Texas Instruments Incorporated*, 6:23-cv-00384, W.D. Tex., filed May 18, 2023
TI-1009	ParkerVision, Inc.'s Proposed Claim Constructions, *ParkerV/s/on, Inc. v. Texas Instruments Incorporated*, 6:23-cv-00384, W.D. Tex., filed February 14, 2024
TI-1010	ParkerVision Inc.'s Responsive Claim Construction Brief, *ParkerVision, Inc. v. Texas Instruments Incorporated*, 6:23-cv-00384, W.D. Tex., filed March 27, 2024
TI-1011	Claim Chart For Infringement of U.S. Patent No. 7,865,177 by TI Chips, *ParkerV/s/on, Inc. v. Texas Instruments Incorporated*, 6:23-cv-00384, W.D. Tex., submitted December 6, 2023
TI-1012-1013	Reserved
TI-1014	Declaration of June Ann Munford
TI-1015	Declaration of Rickea McLeod
TI-1016	Reserved

TI-1017	Razavi, *A 900-MHz CMOS Direct Conversion Receiver*, IEEE Symposium on VLSI Circuits, Kyoto, Japan, 1997, pp. 113-114, doi: 10.1109/VLSIC.1997.623833.
TI-1018	Declaration of Maureen Honeycutt
TI-1019	Ziemer Tranter, *Principles of Communications, Systems, Modulation, and Noise*, Fourth Edition, Published 1995
TI-1020	Thomas H. Lee, *The Design of CMOS Radio-Frequency Integrated Circuits*, Cambridge University Press, 1998 (Excerpts)
TI-1021-1025	Reserved
TI-1026	Uzunoglu, "The Synchronous Oscillator: A Synchronization and Tracking Network" , IEEE Journal of Solid-State Circuits, Vol. SC-20, No. 6, September 1985 pp. 1214-1226
TI-1027-1032	Reserved
TI-1033	Qualcomm's Motion for Summary Judgment of Noninfringement and Invalidity, *ParkerVision, Inc. v. Qualcomm Inc*., 6:14-cv-00687, dkt 494 (MDFL Feb. 16, 2021).
TI-1034	Parkervision, Inc.'s response to Qualcomm's Motion for Summary Judgement of Noninfringement and Invalidity, *ParkerVision, Inc. v. Qualcomm Inc*., 6:14-cv-00687, dkt 523 (MDFL Mar. 2, 2021)
TI-1035	Defendant's Reply in Support of Their Motion for Summary Judgment of Noninfringement and Invalidity, *ParkerVision, Inc. v. Qualcomm Inc*., 6:14-cv-00687, dkt 559 (MDFL Mar. 16, 2021)

TI-1036	Endorsed Order Granting Qualcomm's Motion for Summary Judgment of Noninfringement and Invalidity, *ParkerVision, Inc. v. Qualcomm Inc*., 6:14-cv-00687, dkt 686 (MDFL Mar. 22, 2022).
TI-1037	Claim Construction Order, *ParkerV/s/on Inc. v. Qualcomm Inc*., 6:14-cv-00687, dkt 381, (MDFL April 29, 2020)
TI-1038-1040	Reserved
TI-1041	Stipulation
TI-1042	Order Granting Defendants' Motion to Stay Pending Inter Partes Review, *ParkerVision, Inc. v. NXP Semiconductors N.V. et al.*, Case No. 6:23-cv-00389-ADA, ECF No. 110 (W.D. Tex. May 27, 2025)

LISTING OF THE CLAIM

Claim No.	Claim Element
14.P	A method for down-converting an electromagnetic signal, comprising:
14.1	receiving an input signal at a first matched filtering/correlating module;
14.2	down converting said input signal at said first matched filtering/corre-lating module according to a first control signal and outputting a first down-converted signal;
14.3	receiving said input signal at a second matched filtering/correlating module;
14.4	down-converting said input signal at said second matched filter-ing/correlating module according to a second control signal and outputting a second down-converted signal; and
14.5	combining said second down-converted signal and said first down-converted signal to output a first channel down-converted signal.

I. INTRODUCTION

Petitioner Realtek Semiconductor Corp. ("Realtek") respectfully submits this brief in opposition to Patent Owner ParkerVision, Inc.'s ("PO") request for discretionary denial of Realtek's Petition for Inter Partes Review of U.S. Patent No. 7,865,177 (the "'177 Patent"), IPR2025-00324. Realtek also respectfully requests that its accompanying Motion for Joinder to IPR2024-00935 (the "TI IPR")—an already-instituted review of the '177 Patent on identical grounds—be granted. Discretionary denial is particularly unwarranted in light of compelling recent developments and the procedural posture of this case.

The same district court presiding over Realtek's parallel litigation recently granted a stay pending *inter partes* review in a case involving the same Patent Owner and the same '177 Patent. *See* Memorandum Opinion and Order Granting Defendants' Motion to Stay Pending Inter Partes Review, *ParkerVision, Inc. v. NXP Semiconductors N.V. et al.*, Case No. 6:23-cv-00389-ADA, ECF No. 110 (W.D. Tex. May 27, 2025) (the "*NXP Stay Order*"). This action underscores the district court's willingness to defer to the Patent Trial and Appeal Board (the "Board") for an initial determination of validity concerning the '177 Patent, thereby promoting judicial economy and consistency.

Coupled with the Board's own prior determination that the invalidity grounds presented in the TI IPR (which are identical to those in Realtek's petition) are

sufficiently meritorious to warrant institution, *see* IPR2024-00935, Paper 9 (Institution Decision, Nov. 26, 2024), these factors present a dispositive case against discretionary denial. ParkerVision's arguments for denial disregard this crucial context and the overwhelming efficiency gained by permitting Realtek, an accused infringer, to join this already instituted, meritorious challenge as an understudy petitioner. Such joinder would create little, if any, additional workload for the Board and would instead preserve the significant work already undertaken.

Accordingly, and as further supported by a holistic application of the *Fintiv* factors and the principles outlined in the *Stewart Memo*, Petitioner respectfully requests that the Director deny ParkerVision's request for discretionary denial.

II. THE FINTIV FACTORS SUPPORT INSTITUTION

The Board's discretionary analysis under *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (P.T.A.B. Mar. 20, 2020) (precedential), requires a holistic weighing of several factors to determine whether to deny institution of an IPR in view of a parallel district court proceeding. As demonstrated below, a review of these factors reveals that discretionary denial is not warranted. To the contrary, the Fintiv factors, particularly when considering Petitioner's *Sotera* stipulation and the efficiencies gained by joinder to an already-instituted IPR, strongly support institution.

A. Factor 1 (Stay in Parallel Litigation) Counsels Against Denial in Light of New Evidence Indicating a Stay is Likely

PO's arguments regarding *Fintiv* Factor 1 are unavailing and rest on speculation now refuted by a recent court order. This factor considers "whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted." *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 at 5-6 (P.T.A.B. Mar. 20, 2020) (precedential). While no party has yet moved for a stay in Realtek's specific parallel district court proceeding, compelling new evidence from that very court, involving the same PO and the same patent, demonstrates that a stay is likely if this IPR is instituted.

PO's assertion that "No Stay Has Been Entered In The District Court and There Is No Evidence A Stay Will Be Granted" (PO Br. 7) is directly contradicted by recent events. On May 27, 2025, the Court granted a motion to stay litigation pending inter partes review in *ParkerVision, Inc. v. NXP Semiconductors N.V. et al.*, Case No. 6:23-cv-00389-ADA (W.D. Tex.) ("*NXP Stay Order*"). *See* Order Granting Defendants' Motion to Stay Pending Inter Partes Review, *ParkerVision, Inc. v. NXP Semiconductors N.V. et al.*, Case No. 6:23-cv-00389-ADA, ECF No. 110 (W.D. Tex. May 27, 2025) (TI-1042). This order, involving the same PO and the same '177 Patent at issue here, provides the concrete "evidence that one may be granted" that PO claims is absent, and indeed, indicates such a grant is likely.

The *NXP Stay Order* undermines PO's core argument that a stay is "unlikely" because the court purportedly disfavors them (EX 2004; PO Br. 7-9). It is a judicial

act by the court, demonstrating its willingness to stay cases involving this PO and this patent post-IPR institution, primarily due to simplification of the issues. In *NXP*, the court found the "simplification-of-issues factor overwhelms the other two factors," leading it to conclude that "continuing litigation in this case would be wasteful." *NXP Stay Order* at 7-8. Tellingly, the court reached this conclusion and granted the stay even after acknowledging significant investment in the NXP litigation—noting that "[t]he early stages of this case are long behind us. The Markman hearing occurred… and all the disputed terms were finally construed… And fact discovery closes in about a month"—and explicitly finding that this 'Stage of the Proceedings' factor itself "favors denying a stay." *Id.* at 6. That Judge Albright granted the NXP stay despite the advanced stage of that case underscores the weight he gives to potential IPR simplification for the '177 Patent. Given that the same judge will preside over Realtek's case involving the same patent and PO, and given the Board has already instituted review on identical grounds in the TI IPR, the reasoning and outcome in the *NXP Stay Order* point strongly toward a likely stay in Realtek's action.

This recent development reinforces the principle that, contrary to PO's generalizations, Judge Albright does grant stays pending IPR under appropriate circumstances. *See also Halliburton Energy Servs., Inc. v. U.S. Well Servs., LLC*, IPR2021-01032, Paper 12 at 8 (P.T.A.B. Jan. 11, 2022) (noting a prior Albright

stay). Petitioner Realtek intends to seek a stay of the co-pending district court litigation if the present Petition is instituted and its motion for joinder is granted. The *NXP Stay Order* now provides substantial support for the likelihood of such a motion being granted, thereby promoting efficiency and avoiding duplication.

Therefore, because no stay has been denied in Realtek's case, and the *NXP Stay Order* provides compelling affirmative evidence that a stay is likely if this IPR is instituted—even overcoming factors that might otherwise weigh against a stay—Factor 1 does not merely remain neutral but now actively counsels against discretionary denial.

B. Factor 2 (Proximity of Trial Date) Does Not Favor Denial in the Context of this Joinder Request and Stipulation

PO's reliance on the current district court trial schedule to argue for denial under *Fintiv* Factor 2 is entirely misplaced. Prior to PO filing its brief, the court had already delayed the trial date for the related district court litigation to a date *six months* after the FWD is due in the TI IPR. *ParkerVision, Inc. v. Realtek Semi. Corp.*, No. 6:23-cv-00374-ADA ("PVII"), Dkt. 94, at 2 (Apr. 3, 2025). In its April 3 order, the Court in PVII moved the trial date from November 14 to April 27, 2026, which is long after the expected November 26, 2025 FWD date in the TI IPR.

Even if the Board did not join this IPR to the pending TI IPR, this factor *would still* weigh against a discretionary denial, as the latest a FWD would issue in this IPR would be July 30, 2026, a mere three months after the once-delayed currently

scheduled trial date. This factor considers "the proximity of the court's trial date to the Board's projected statutory deadline for a final written decision." *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 at 9 (P.T.A.B. Mar. 20, 2020) (precedential). The Board gives diminished weight to scheduled trial dates that are speculative or subject to change, *see, e.g.*, *Apple Inc. v. Seven Networks, LLC*, IPR2020-00707, Paper 11 at 15-16 (P.T.A.B. Oct. 22, 2020) (finding trial date unreliable and diminishing weight of Factor 2); *Sand Revolution II, LLC v. Continental Intermodal Group–Trucking LLC*, IPR2019-01393, Paper 24 at 10-11 (P.T.A.B. June 16, 2020) (informative) (noting multiple trial extensions undermined reliance on the scheduled date), and considers the significant benefits an IPR can provide even if its Final Written Decision (FWD) issues near or shortly after a trial.

First, district court trial dates, particularly in busy dockets, are notoriously fluid, as the underlying district court case has already shown. The Board has consistently recognized that such dates are often "speculative" and has cautioned against giving them dispositive weight when they are far from guaranteed. *See, e.g.*, *Apple Inc. v. Seven Networks, LLC*, IPR2020-00707, Paper 11 at 15-16 (P.T.A.B. Oct. 22, 2020) (finding trial date unreliable and diminishing weight of Factor 2); *Sand Revolution II, LLC v. Continental Intermodal Group–Trucking LLC*, IPR2019-01393, Paper 24 at 10-11 (P.T.A.B. June 16, 2020) (informative) (noting multiple trial extensions undermined reliance on the scheduled date). PO's assertion that the

November 14, 2025 trial date (PO Br. 9; Ex. 2005) is a firm deadline overlooks this reality. Indeed, PO's assertion was incorrect *when filed*, as the Court had already moved the trial date back to April 27, 2026. PVII, Dkt. 94, at 2. Petitioner does not expect that the current, already-delayed trial date is any more definite than the prior date in November 2025.

Second, even if the FWD in this IPR were to issue after the currently scheduled trial, the IPR can still provide substantial efficiencies. An FWD can simplify issues for post-trial motions or appeal, or even moot the need for further litigation if claims are cancelled. The Board has instituted IPRs and granted joinder even post-verdict where the IPR could still add value, for example, by addressing validity on grounds not adjudicated by the jury. *See ecobee Techs. ULC v. Ollnova Techs. Ltd.*, IPR2024-00131, Paper 11 (P.T.A.B. May 21, 2024).

Third, PO's concern about a potential six-month extension of the FWD due to Realtek's joinder (PO Br. 9-10) is overstated. Realtek seeks to join an existing IPR as an understudy, presenting an identical petition that raises no new issues. Realtek is prepared to accept the schedule in the currently-pending TI IPR without change, and agrees not to seek any extensions. In such circumstances, any schedule adjustment is typically minimal, and the Board has often maintained the original IPR's schedule or allowed only a modest extension. Given Realtek's understudy role, a significant delay to the FWD of the IPR joined (IPR2024-00935) is unlikely.

Considering that the current trial date is already beyond the prospective FWD in the TI IPR to which Petitioner seeks to join this IPR, and that even if joinder were not granted, this factor would still not favor denial, Factor 2 does not favor denial of institution or joinder.

C. Factor 3 (Investment in Parallel Proceeding) Does Not Outweigh the Benefits of Institution and Joinder

PO's arguments regarding investment in the parallel district court proceeding (PO Br. 10-11) do not warrant denial of Petitioner's request for institution and joinder. Factor 3 considers "the investment in the parallel proceeding by the court and the parties," which is assessed "at the time of the institution decision." *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 at 9-10 (P.T.A.B. Mar. 20, 2020) (precedential).

Here, Petitioner Realtek seeks to join an already instituted IPR, IPR2024-00935 (the "TI IPR"). For the purposes of evaluating Factor 3 in a joinder context like this one—where Petitioner is an understudy presenting an identical petition—Petitioner respectfully submits the relevant investment should be viewed primarily from the perspective of the IPR sought to be joined, as of its institution date. The TI IPR was instituted on November 26, 2024. (PO Br. 5).

PO points to the Markman order in *ParkerVision, Inc. v. Realtek Semi. Corp.*, Case No. 6:23-cv-00374-ADA (W.D. Tex.), which issued on October 21, 2024 (PO Br. 11; Ex. 2007). While this order preceded the TI IPR institution by approximately

one month, the initial petition in the TI IPR was filed well before this Markman order, and the Board made its decision to institute the TI IPR based on the record and circumstances at that time. The purpose of joinder is to allow for efficient resolution of common validity challenges, and Realtek's joinder will not require re-litigating issues already decided in the TI IPR or significantly add to the burden.

The Board considers the petitioner's diligence in filing the IPR under Factor 3. Realtek filed its petition and motion for joinder on December 24, 2024, promptly after the TI IPR (November 26, 2024) and the NXP IPR (December 19, 2024) were instituted and joined, respectively. (PO Br. 5). This timing reflects diligence in seeking joinder to an existing proceeding that was already deemed worthy of institution.

Furthermore, the overriding goal of the *Fintiv* analysis is to assess the "efficiency and integrity of the system." *Fintiv*, Paper 11 at 6. Denying Realtek's joinder based on investments that largely predate or are contemporaneous with the lead TI IPR's institution would not serve these goals, especially when Realtek's participation as an understudy ensures no new issues are introduced and minimizes any additional burden. The benefits of allowing a co-defendant to join an existing meritorious challenge outweigh concerns about the level of investment in Realtek's specific parallel proceeding prior to the TI IPR's institution.

Thus, when viewed in the proper context of a motion for joinder to an already instituted IPR, Factor 3 does not weigh significantly in favor of denial and is overcome by the efficiencies and benefits of granting institution and joinder.

D. Factor 4 (Overlap of Issues) Is Mitigated by Petitioner's Stipulation and Does Not Favor Denial

PO's arguments concerning Fintiv Factor 4, which assesses the "overlap between issues raised in the petition and in the parallel proceeding" (*Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 at 11 (P.T.A.B. Mar. 20, 2020) (precedential)), are unpersuasive in light of Petitioner Realtek's *Sotera* stipulation. Realtek has stipulated that, if this IPR is instituted, it "will not pursue in Case No. 6:23-cv-00374 the same grounds of invalidity raised in the petition against the claims of the '177 patent, or any grounds of invalidity that reasonably could have been raised in the petition." (PO Br. 13, citing Ex. 1041). Such a broad stipulation effectively neutralizes Factor 4 concerns.

The Board has consistently held that a *Sotera* stipulation, which precludes a petitioner from pursuing in district court any patent or printed publication-based invalidity grounds that were or reasonably could have been raised in the IPR, "mitigates any concerns of duplicative efforts between the district court and the Board, as well as concerns of potentially conflicting decisions." *Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12 at 18-19 (P.T.A.B. Dec. 1, 2020) (precedential). This ensures the IPR is a "true alternative" to the district court

proceeding for those issues, causing Factor 4 to weigh strongly against discretionary denial.

PO's attempts to undermine Realtek's stipulation (PO Br. 13) are unfounded. First, while the June 2022 USPTO guidance making *Sotera* stipulations nearly dispositive has been rescinded, such stipulations remain "highly relevant" under current PTAB policy (Stewart Memo, Mar. 26, 2025) and continue to weigh heavily in favor of institution by addressing overlap. Second, PO's concern about the stipulation's effect in a joinder scenario is misplaced. (PO Br. 13). Realtek seeks to join an existing IPR with an identical petition. Its stipulation applies to the grounds raised or reasonably raisable *in this petition*. If joined, Realtek's petition effectively merges with the TI IPR, and the stipulation prevents Realtek from pursuing those common grounds in the district court. This very argument regarding a stipulation's effect in a joinder was rejected by the Board concerning NXP's joinder. *See NXP USA, Inc. v. ParkerVision, Inc.*, IPR2024-01066, Paper 10, at 5-7 (P.T.A.B. Dec. 19, 2024).

PO's speculation about the stipulation's effect on "invalidity arguments that do not expressly overlap" (PO Br. 13), such as those combining IPR prior art with system art ineligible for IPR, misses the point. A *Sotera* stipulation properly addresses overlap concerning grounds that *can* be raised in an IPR (i.e., those based on patents or printed publications under §§ 102/103). To the extent Realtek might

pursue distinct invalidity theories in district court that are not cognizable in an IPR (e.g., system-based prior art, § 101 or § 112 defenses), those arguments *by definition* do not overlap with the IPR proceedings in a manner that Factor 4 aims to prevent. The stipulation effectively carves out the IPR-eligible grounds from the district court case.

Finally, the trial court in the related district court action appears to be expecting that the Board will decide issues related to validity for this patent, all but eliminating the risk of any overlap in the issues. In another district court action between Petitioner and PO involving other patents, the Court noted in a footnote to the Fifth Amended Scheduling Order that the schedule is subject to change "If more than one (1) patent remains in [PVII] after FWD issues for the IPRs." *ParkerVision, Inc. v. Realtek Semi. Corp.*, No. 6:22-cv-01162-ADA ("PVI"), Dkt. 184, at 3 (W.D. Tex. May 7, 2025). The IPRs to which the Court is referring are the TI IPRs to which this IPR and IPR2025-00325 seek to join.

By presenting an identical petition for joinder and offering a broad *Sotera* stipulation, Realtek has ensured that there will be no inefficient duplication of efforts or risk of conflicting decisions on the issues presented in this IPR. This aligns with the Board's goals of efficiency and promoting the IPR as a true alternative for resolving patentability challenges based on patents and printed publications.

Accordingly, Factor 4, as mitigated by Petitioner's stipulation, weighs strongly against discretionary denial of institution and joinder.

E. Factor 5 (Identity of Parties) Is Not Dispositive and Carries Little Weight Here

Factor 5 considers "whether the petitioner and the defendant in the parallel proceeding are the same party." *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 at 14 (P.T.A.B. Mar. 20, 2020) (precedential). Petitioner Realtek acknowledges that it is a defendant in the parallel district court proceeding initiated by PO. (PO Br. 14).

While this identity of parties means Factor 5 technically weighs in favor of discretionary denial, as noted in *Fintiv II* (IPR2020-00019, Paper 15 at 15), this factor is not dispositive and must be considered in conjunction with all other *Fintiv* factors. *See Fintiv*, Paper 11 at 5-6 (emphasizing a holistic approach where no single factor is determinative).

In the context of this case, particularly Petitioner's motion for joinder to an already instituted IPR and its comprehensive *Sotera* stipulation, the weight of Factor 5 is minimal. The primary concerns of the *Fintiv* analysis—efficiency, avoiding duplicative efforts, and the risk of inconsistent outcomes—are substantially addressed by Realtek's understudy joinder posture and its stipulation. The mere identity of parties does not negate these overriding considerations that favor institution and joinder.

Therefore, while Factor 5 nominally favors denial, it carries little substantive weight in the overall *Fintiv* analysis here and is significantly outweighed by other factors supporting institution.

F. Factor 6 (Merits of the Petition) Strongly Favors Institution of this Meritorious Challenge

Factor 6 considers "other circumstances that impact the Board's exercise of discretion, including the merits of the petition." *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 at 15 (P.T.A.B. Mar. 20, 2020) (precedential). The merits of Realtek's petition, which is identical to the already-instituted petition in IPR2024-00935 (the "TI IPR"), strongly favor institution and joinder.

The Board has already determined that the invalidity grounds presented in the TI IPR—which are the same grounds presented by Realtek—demonstrate a reasonable likelihood that Petitioner will prevail in showing the unpatentability of at least one challenged claim. *See* TI IPR, IPR2024-00935, Paper 9 (Institution Decision, Nov. 26, 2024) (referenced by PO Br. 5). This prior institution decision on identical grounds is a strong indicator of compelling merits that weighs heavily in favor of granting institution for Realtek's identical follow-on petition seeking joinder.

PO's attempts to re-litigate the merits of the TI IPR in this discretionary denial briefing are improper and unavailing. (PO Br. 14-15). PO points to its own Response in the TI IPR (IPR2024-00935, Paper 21) and alleged "new information" supposedly

undermining the petition's merits. (PO Br. 14). However, Factor 6, particularly at the institution stage for a joinder petition, focuses on whether *this petition* presents compelling evidence. The Board has already made that threshold determination for the identical grounds in the TI IPR. To inspect the specifics of the PO's Response or alleged new evidence—much of which PO admits is from ongoing discovery in the TI IPR, including expert depositions and potentially redacted information (PO Br. 14-15)—would essentially require the Board to pre-judge the ultimate outcome of the instituted TI IPR. This is not the purpose of the *Fintiv* analysis.

The arguments PO raises (PO Br. 14-15)—such as its contentions about the Tayloe reference, claim construction, or Dr. Galton's testimony—are substantive merits arguments that belong in the instituted TI IPR itself, not as a basis to deny joinder to an otherwise meritorious petition. PO will have a full opportunity to present these arguments to the Board during the trial phase of the TI IPR, which Realtek seeks to join.

While PO correctly notes that compelling merits alone are not dispositive under current guidance (PO Br. 15, citing Ex. 2008), strong merits remain a critical factor that weighs heavily in favor of institution, especially when other *Fintiv* factors are neutral or also favor institution. Here, the Board's prior institution of the identical TI petition establishes the requisite compelling merits. Therefore, Factor 6 strongly supports institution of Realtek's petition and granting its motion for joinder.

G. The *Fintiv* Factors Show That This Petition Should Not Be Discretionarily Denied.

Under any reasonable assessment of the *Fintiv* factors, this petition should not be discretionarily denied. Factor 1 actively counsels against denial due to the recent *NXP Stay Order* providing compelling evidence a stay is likely. Factor 2 does not weigh in favor of denial because trial dates are often subject to change, and even if any final written decision were to issue after the trial date, such a decision would still serve to simplify post-trial and appellate issues. Factor 3 does not favor a discretionary denial because the relevant consideration for the investment in the parallel proceeding should be viewed from the perspective of the petition to be joined – which was instituted even after the issuance of a claim construction order. Factor 4 does not favor denial because Petitioner's *Sotera* stipulation effectively prevents any overlap between the issues in this petition and the parallel district court litigation. Factor 5 nominally favors denial due to the identity of the parties, but carries little weight. Factor 6 clearly weighs against denial as the Board has already assessed the merits of this Petition and determined that they show a reasonable likelihood of success, and granted institution. Thus, all factors – aside from the identity of the parties – weigh against a discretionary denial. Petitioner therefore respectfully submits that under any holistic assessment of these factors, this Petition should not be denied.

III. THE PRINCIPLES OF THE STEWART MEMO DO NOT SUPPORT DISCRETIONARY DENIAL IN THIS CASE

PO's invocation of the Stewart Memo to support discretionary denial is unavailing. (PO Br. 16-20). The Stewart Memo emphasizes PTAB workload management, fairness, and the efficient adjudication of disputes. Realtek's petition for institution and joinder aligns with these principles and does not present circumstances warranting denial under the Stewart Memo's framework.

A. Considerations Regarding Patent Expiration and Efficient Resource Allocation Do Not Warrant Denial of Joinder

PO argues that because the '177 patent is expired, instituting an IPR would be an inefficient use of Board and party resources. (PO Br. 16). This argument lacks merit. First, the PTAB routinely institutes and adjudicates IPRs on expired patents where, as here, those patents are the subject of ongoing district court litigation seeking damages for past infringement. Resolving the validity of the '177 patent remains highly relevant to the pending litigation and can lead to significant judicial efficiencies by potentially obviating the need for a trial on an invalid patent.

Second, Realtek seeks to join an already instituted IPR on the '177 patent. This approach promotes efficient resource allocation. By seeking joinder, Realtek avoids imposing the burden of an entirely new proceeding on the Board and instead consolidates its challenge within an existing framework, minimizing duplicative efforts. This is consistent with the Stewart Memo's focus on managing PTAB

workload. The Board is already expending resources on the instituted TI IPR for the ’177 patent; Realtek’s joinder as an understudy adds marginal burden.

Third, Petitioner’s *Sotera* stipulation further enhances efficiency by ensuring that the IPR will be a true alternative to district court litigation on the challenged patent claims, preventing duplicative adjudication of the same validity issues.

Thus, considerations of patent expiration and efficient resource allocation under the Stewart Memo do not support denial; rather, they favor institution and joinder in this instance.

B. Allegations of Petitioner Gamesmanship and Undue Delay Are Unfounded, and Joinder Is Appropriate and Fair Under 35 U.S.C. § 315(c)

PO incorrectly characterizes Realtek’s petition and joinder motion as “gamesmanship” and undue delay. (PO Br. 16-20). Realtek’s petition is not improperly time-barred. While filed after the one-year period under 35 U.S.C. § 315(b), Realtek properly seeks joinder under 35 U.S.C. § 315(c), which explicitly states the § 315(b) time limit “shall not apply to a request for joinder.” Realtek filed its motion for joinder on December 24, 2024, well within one month of the November 26, 2024 institution of the TI IPR for the ’177 patent, complying with PTAB rules. *See* 37 C.F.R. § 42.122(b).

PO’s reliance on *Proppant Express Investments, LLC v. Oren Technologies, LLC*, IPR2018-00914, Paper 38 (P.T.A.B. Mar. 13, 2019) and *Micro Motion, Inc. v.*

Invensys Sys., IPR2014-01409, Paper 14 (P.T.A.B. Feb. 18, 2015) (PO Br. 17, 19-20) is distinguishable. Realtek is not seeking joinder due to its own prior failed petition or inexplicable delay, but rather is availing itself of a statutory mechanism to join an existing, meritorious challenge initiated by another party. This is a common and accepted practice, particularly for co-defendants, and promotes judicial economy by consolidating challenges. *See, e.g.*, *Samsung Elecs. Co. v. Summit 6 LLC*, IPR2016-00029, Paper 9 (P.T.A.B. Apr. 4, 2016) (granting joinder for a "me-too" petition). Realtek's decision to seek joinder after the TI IPR was instituted, rather than filing a potentially duplicative standalone petition earlier, reflects a strategic choice that conserves both party and Board resources.

PO's complaint about the timing of a conference call (PO Br. 19) is a minor procedural point, not evidence of gamesmanship warranting denial. Petitioner understands that such calls are typically arranged post-institution to discuss the trial schedule if joinder is granted, and is prepared to coordinate with the Board and PO as appropriate.

Realtek's actions are consistent with the statutory framework for IPRs and joinder, and are aimed at achieving an efficient and fair resolution of the validity of the asserted patent claims. The allegations of gamesmanship are unfounded.

C. Granting This Petition Would Serve to Improve PTAB Efficiency.

The Stewart Memo underscores that discretionary institution decisions must prioritize "improv[ing] PTAB efficiency, maintain[ing] PTAB capacity […] and other workload needs." Institution—a "me-too" filing that mirrors the already instituted IPR2024-00935 (the "TI IPR")—directly serves these objectives by leveraging substantial prior Board work and minimizing new burdens.

The Board has already dedicated significant resources to the TI IPR, which involves the same '177 patent and substantially the same prior art and invalidity arguments as presented in Realtek's "copycat" petition. Denying this "me-too" petition, which seeks joinder to the TI IPR, would mean the Board's prior investment in assessing this challenge could be wasted, potentially forcing duplicative efforts elsewhere. Conversely, instituting this petition allows the Board to capitalize on its existing familiarity and investment. The incremental workload of reviewing a petition that largely duplicates the arguments of an already-instituted proceeding is minimal compared to a brand-new IPR with different art or theories. This efficiency gain, derived from leveraging the Board's own ongoing work, aligns with the Stewart Memo's aims and is distinct from Fintiv concerns about duplicative efforts in parallel district court litigation.

Furthermore, the Stewart Memo calls for the "consistent application of discretionary considerations." Given that the grounds in the TI IPR were deemed sufficiently strong for institution, and Realtek's "me-too" petition presents these

same established grounds, then instituting Realtek's petition promotes such consistency. The Memo also permits considering "any other considerations bearing on the Director's discretion." The fact that institution here avoids the inefficiency of discarded prior Board effort and promotes a consolidated resolution of the '177 patent's validity by an expert body is precisely such a relevant consideration.

While PO argues Realtek's petition is untimely gamesmanship, Realtek's approach as a "me-too" petitioner seeking joinder is a statutorily permitted mechanism (35 U.S.C. § 315(c)) that, in this instance, supports the Stewart Memo's efficiency goals. It facilitates consolidation of challenges rather than constituting an abuse that burdens the system. Realtek's *Sotera* stipulation further mitigates concerns about duplicative efforts in the district court, ensuring that the PTAB remains the central forum for these invalidity contentions. Thus, efficiency and fairness, as articulated in the Stewart Memo, weigh in favor of instituting IPR2025-00324.

IV. THE GENERAL PLASTIC FACTORS ARE INAPPLICABLE

PO's attempt to apply the *General Plastic* factors to deny Realtek's initial petition seeking joinder is improper. (PO Br. 20-23). These factors are designed to address potential abuse from serial challenges by the *same* petitioner or closely related entities, not a first-time petition for joinder by a distinct party like Realtek. *See General Plastic Indus. Co. v. Canon Kabushiki Kaisha*, IPR2016-01357, Paper

19 at 16 (P.T.A.B. Sept. 6, 2017) (precedential). As a result, the *General Plastic* factors simply do not apply in this case.

The *General Plastic* framework targets the unfairness and inefficiency of a single party harassing a PO with repetitive petitions, particularly after an initial failed attempt. This is Realtek's first IPR petition challenging the '177 patent. Realtek, Texas Instruments, and NXP are distinct commercial competitors, not the same entity, nor do they possess the type of "significant relationship" (such as privity or proxy status) that would trigger a *General Plastic* analysis as if they were a single serial filer.

Indeed, recent guidance from the Director of the USPTO in *Videndum Prod. Sol'ns, Inc. v. Rotolight Ltd.*, IPR2023-01218, Paper 12 at 5-6 (P.T.A.B. Apr. 19, 2024) (Director Review), confirms that the *General Plastic* factors are not applicable where, as here, "the first and second petitioners are neither the same party, nor possess a significant relationship." The Director clarified that in such circumstances, *General Plastic* Factor 1—whether the *same petitioner* previously filed a petition—"necessarily outweighs the other General Plastic factors and weighs in favor of not exercising discretion to deny institution." Because Realtek has not previously filed a petition against the '177 patent, the *General Plastic* factors do not support denial of this initial petition.

PO's specific arguments invoking *General Plastic* are therefore misplaced. For instance, contentions regarding *General Plastic* Factors 5, 6, and 7 (PO Br. 21-22) presuppose serial petitioning by the same party, a situation not present here. Realtek's single petition for joinder, filed timely after the TI IPR institution, represents an efficient, not abusive, approach to participating in an already existing review. Similarly, PO's reliance on a purported "eighth factor" from *Shenzhen Silver Star Intelligent Tech. Co., Ltd. v. iRobot Corp.*, IPR2018-00898, Paper 9 (P.T.A.B. Oct. 1, 2018) concerning similarly situated defendants (PO Br. 22-23) is inapposite. While Realtek, TI, and NXP may be co-defendants in related litigations, this status alone does not consolidate them into a single entity for *General Plastic* purposes, especially when they are commercial competitors. Realtek's joinder seeks to consolidate challenges for efficiency, not to duplicate them.

Realtek's petition is a permissible first-time request for joinder to an existing IPR, a statutory mechanism that promotes efficiency. Applying the *General Plastic* factors to this scenario would be an unwarranted expansion of their intended scope and would contradict recent Director guidance. Consequently, the *General Plastic* factors are inapplicable and provide no basis for denying Realtek's petition for institution and joinder.

V. CONCLUSION

For the foregoing reasons, Petitioner Realtek respectfully requests that the Director decline from discretionarily denying this Petition.

Respectfully submitted,

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CERTIFICATION UNDER 37 CFR § 42.24

Under the provisions of 37 CFR § 42.24(d), the undersigned hereby certifies that the word count for the foregoing Petition for *Inter Partes* Review totals 5,356 words, which is less than the 14,000 allowed under 37 CFR § 42.24.

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CERTIFICATE OF SERVICE

Pursuant to 37 CFR §§ 42.6(e)(4)(i) *et seq.* and 42.105(b), the undersigned certifies that on May 28, 2025, a complete and entire copy of this Brief and all supporting exhibits were provided by Federal Express, to the Patent Owner, by serving the correspondence address of record as follows:

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