

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ZHUHAI COSMX BATTERY CO., LTD.,
Petitioner

v.

NINGDE AMPEREX TECHNOLOGY LTD.,
Patent Owner

IPR2025-00389
Patent 11,923,498

**REQUEST FOR DIRECTOR REVIEW OF DECISION GRANTING
INSTITUTION OF *INTER PARTES* REVIEW**

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	LEGAL STANDARD	6
III.	ARGUMENT.....	7
	A. The Petition relies exclusively on expert testimony to supply a missing claim limitation, and so Section 311(b) and Rule 104(b)(4) require reversal because the Petition admits claim limitations [1.I], [9.I.2], and [17.I] are not found in the prior art	7
	B. The Institution Decision erred when it ignored Takemura’s express teaching away from doing exactly what Petitioner’s expert concluded would be obvious to do	9
	C. The Board’s denial of another IPR petition directed to a different patent in the same underlying district court litigation further supports discretionary denial.....	11
IV.	CONCLUSION	15

TABLE OF AUTHORITIES

	Page(s)
CASES	
<i>Arendi S.A.R.L. v. Apply, Inc.</i> , 832 F.3d 1355 (Fed. Cir. 2016)	2
<i>Force MOS Tech. Co., Ltd. v. ASUSTeK Computer, Inc.</i> , Case No. 2:22-cv-00460, 2024 WL 1586266 (E.D. Tex. April 10, 2024)	12
<i>Galderma Labs., L.P. v. Tolman, Inc.</i> , 737 F.3d 731 (Fed. Cir. 2013)	10
<i>Motorola Sol’ns, Inc. v. Stellar LLC</i> , IPR2024-01205, Paper 19 (PTAB March 28, 2025) (Stewart, Dir.)	6, 15
<i>Qualcomm Inc. v. Apple Inc.</i> , 134 F.4th 1355 (Fed. Cir. 2025)	1, 8
<i>Redline Detection, LLC v. Star Envirotech, Inc.</i> , 811 F.3d 435 (Fed. Cir. 2015)	7
<i>Samsung Elecs. Co., Ltd. v. Icashe, Inc.</i> , IPR2025-00639, Paper 11 (PTAB Aug. 14, 2025) (Stewart, Dir.)	5, 15
<i>Uniloc 2017 LLC v. Samsung Elecs. Am., Inc.</i> , Case No. 2:19-cv00259-JRG-RSP, 2020 WL 1433960 (E.D. Tex. Mar. 24, 2020)	12
RULES	
37 C.F.R. § 42.104(b)(4)	passim
37 C.F.R. § 42.75	6
STATUTES	
35 U.S.C. § 311(b)	passim

OTHER AUTHORITIES

July 31, 2025 Memorandum by Coke Morgan Stewart, “Enforcement and
Non-Waiver of 37 C.F.R. § 42.104(b)(4) and Permissible Uses of
General Knowledge in Inter Partes Review” 1, 2, 9

I. INTRODUCTION

Ningde Amperex Technology Ltd. (“ATL” or “Patent Owner”) respectfully submits this Request for Director Review of the Board’s Decision Granting Institution of *Inter Partes* Review (Paper 15, “Institution Decision”). Three grounds independently support reversal of the Board’s Institution Decision.

First, the Institution Decision should be vacated and reversed because the Board erred when it relied exclusively on expert testimony to supply specific claim elements that were admittedly not present in the prior art. 35 U.S.C. § 311(b) requires that the grounds for a petition may be based “only on the basis of prior art consisting of patents or printed publications,” and 37 C.F.R. § 42.104(b)(4) states that the petition “must specify where each element of the claim is found in the prior art patents or printed publications relied upon.” Section 311(b)’s requirements mean that other sources—such as “common sense,” applicant-admitted prior art, and expert testimony—may not be used to supply missing claim limitations that are not found in the prior art forming the grounds for *inter partes* review.¹ *Qualcomm Inc.*

¹ See also July 31, 2025 Memorandum by Coke Morgan Stewart, “Enforcement and Non-Waiver of 37 C.F.R. § 42.104(b)(4) and Permissible Uses of General Knowledge in Inter Partes Review,” (“2025 Memorandum”), available at

v. Apple Inc., 134 F.4th 1355, 1364-65 (Fed. Cir. 2025) (“‘the basis’ of an IPR ground asserting unpatentability can ‘only’ include ‘prior art consisting of patents or printed publications’” and cannot include AAPA); *Arendi S.A.R.L. v. Apply, Inc.*, 832 F.3d 1355, 1361–62 (Fed. Cir. 2016) (holding that reliance on common sense in an obviousness analysis is “typically invoked to provide a known motivation to combine, not to supply a missing claim limitation”). The Board, however, relied exclusively on expert testimony to supply a claim limitation that Petitioner admitted was literally missing from all of the prior art when granting institution. Though Section 311(b) and Rule 104(b)(4) require reliance exclusively on prior art patents and publications to form its grounds, the Petition ***admitted*** that both the Sato and Takemura prior art references it relied on to supply independent claim limitations [1.I], [9.I.2], and [17.I] for every ground were both silent with respect to the claimed length of the “second insulating glue layer.” Based only on expert testimony, the Petition argued it would have been obvious to a POSITA to so size the dimensions of Sato or Takemura’s second insulating glue layer. Pet. at 36-38, 102-103.

The Board gave Dr. von Sacken’s expert testimony regarding the alleged

https://www.uspto.gov/sites/default/files/documents/aapa_memo_final_signed.pdf

f. While this updated guidance applies to petitions for *inter partes* review filed on or after September 1, 2025, the concerns identified in the guidance also apply here.

obviousness of this claim limitation “substantial weight” when instituting review, even though the Petition admits the limitation is not literally present in Sato or Takemura. Institution Decision at 25-26. This was error. The Petition admits that “Sato is silent about the adhesive tape having a width larger than a width of the second recess and a length larger than a length of the second recess.” Pet. at 36. The Petition further admits that “Takemura *does not illustrate* that the insulating tape has a length larger than the length of the exposed metal on the negative electrode current collector . . .” Pet. at 38, 103.² The Petition therefore relies exclusively on uncorroborated expert testimony to supply this missing limitation for every ground, claiming that a POSITA would have sized Sato’s tape longer than a length of the second recess even though that is not disclosed in either Sato or Takemura (and Takemura expressly disparages using tape). Pet. at 36-38, 71, 102-103. This requires reversal of the Board’s decision. 35 U.S.C. § 311(b) (“A petitioner in an inter partes review may request to cancel as unpatentable 1 or more claims of a patent . . . only on the basis of prior art consisting of patents or printed publications.”); 37 C.F.R. § 42.104(b)(4) (“The petition must specify where each element of the claim is found in the prior art patents or printed publications relied upon.”).

Second, the Board incorrectly credited the testimony of Dr. von Sacken

² All emphasis to cited quotations in this Request is added.

despite Takemura expressly teaching away from using the only arrangements relied on in Petitioner's proposed combinations (which still don't teach the claim limitations, as discussed above). The Board's Institution asserted that the Petition "relies on Takemura for teaching how the tape disclosed in Sato would be *sized* and placed." Institution Decision at 24; *see also id.* ("Here, Petitioner only relies on Takemura for teaching how the tape disclosed in Sato would be *sized* and placed." But Takemura undercuts any suggestion that the amount of tape should be sized larger than disclosed because it teaches to either *minimize* or *eliminate* the use of tape entirely. The Board erred by considering only the (disparaged) prior art uses of tape Takemura describes as background art, and ignoring the other teachings of Takemura instructing a POSITA to minimize or eliminate the use of that tape. The Petition relies only on arrangements of tape that Takemura teaches are background art and undesirable. Stated differently, Takemura teaches to use *less tape* or *no tape* at all, but the Petition relies on Takemura as allegedly teaching a POSITA to use *longer tape*. Though a reference may be relied on by the Board "for everything it teaches," the Board erred here by relying only on Takemura's background section and myopically ignoring Takemura's explicit teachings to either use less tape or no tape at all, disparaging the tape shown in Figures 8 and 9.

Third, the Director should revisit the use of discretionary denial in this IPR because circumstances have changed after the Acting Director's decision on

discretionary denial (Paper 9) on July 2, 2025, and those changes further support applying discretionary denial to avoid further strain on the Office's limited resources. Jury selection remains set for July 6, 2026 in the underlying district court case, which is over two months before the scheduled FWD in this proceeding (and roughly four months before the scheduled FWD in IPR2025-00524, if instituted). But now the Board has *denied* institution on two of the six IPRs (so far) relating to patents asserted in the underlying district court proceeding, including denial of every challenge to asserted U.S. Pat. No. 10,964,927, and has also stated that Petitioner failed to demonstrate a reasonable likelihood of success for a third of the challenged claims of U.S. Pat. No. 11,759,910 in IPR2025-00405 (which was instituted). Those decisions make it even less likely the district court will grant CosMX's newly requested stay and make a jury trial even more likely to proceed before the FWD—further reinforcing the case for discretionary denial. *See* IPR2025-00389, Paper 6 (May 12, 2025); *see Samsung Elecs. Co., Ltd. v. Icashe, Inc.*, IPR2025-00639, Paper 11 at 2 (PTAB Aug. 14, 2025) (Stewart, Dir.) (explaining that it would be an inefficient use of Board resources to refer a subset of patents to the Board when other patents had already been denied institution).

Altogether, these new facts underscore that it would not be an efficient use of resources for the Office to continue with IPR in this proceeding, and Patent Owner respectfully requests the Director reconsider the earlier Decision declining to apply

discretionary denial, including where Petitioner intends to raise against the '498 Patent the *same art* at issue in this proceeding together with unpublished system prior art in the district court. Paper 6 at 24-26 (explaining Petitioner's reliance on each of Sato, Takemura, Nakamura, Oh-539, Oh-144, and Kobayashi in combination with unpublished system prior art in the underlying district court litigation); *Motorola Sol'ns, Inc. v. Stellar LLC*, IPR2024-01205, Paper 19 at 3-4 (PTAB March 28, 2025) (Stewart, Dir.) (finding that a *Sotera* stipulation was unlikely to moot petitioner's combination of IPR art with unpublished system art in district court). The certainty of duplicative effort between tribunals without any chance of the Board fully invalidating all patents at issue in the district court case strongly favors denying institution, in addition to the other reasons detailed in Paper 6.

II. LEGAL STANDARD

The Director may review institution decisions “presenting (a) an abuse of discretion, (b) important issues of law or policy, (c) erroneous findings of material fact, or (d) erroneous conclusions of law.” Director Review Process § 2(B); 37 C.F.R. § 42.75. “Both discretionary and merits-based issues may be raised, subject to limitations (a)–(d) above.” Director Review Process § 2(B). “The Director Review process provides a mechanism to correct errors at the institution stage, for example, to avoid unnecessary trials for patent owners.” *Id.*

“An abuse of discretion is found if [a] decision: (1) is clearly unreasonable,

arbitrary, or fanciful; (2) is based on an erroneous conclusion of law; (3) rests on clearly erroneous fact finding; or (4) involves a record that contains no evidence on which the Board could rationally base its decision.” *Redline Detection, LLC v. Star Envirotech, Inc.*, 811 F.3d 435, 442 (Fed. Cir. 2015).

III. ARGUMENT

A. The Petition relies exclusively on expert testimony to supply a missing claim limitation, and so Section 311(b) and Rule 104(b)(4) require reversal because the Petition admits claim limitations [1.I], [9.I.2], and [17.I] are not found in the prior art

Every independent claim challenged by the Petition requires a “second insulating glue layer” that “has a length larger than a length of the second recess.” Every piece of prior art asserted in the Petition lacks *any* disclosure of this claim limitation—and Petitioner admits as much. Paper 8 (“POPR”) at 22-28.

The Petition admits that Takemura and Sato (the only references relied upon for this limitation) are both silent about the claimed length of the “second insulating glue layer.” Pet. at 36 (“*Sato is silent* about the adhesive tape having a width larger than a width of the second recess and a length larger than a length of the second recess.”), 38 (“. . . *Takemura does not illustrate* that the insulating tape has a length larger than the length of the exposed metal, . . .”), 102-103 (“*Takemura does not explicitly disclose* that the insulating tape has a length larger than the length of the exposed metal . . .”); *see also* Pet. at 71 (Ground 4).

Since Petitioner admits that no reference actually discloses a second insulating

glue layer where the length is larger than a length of a second recess, the Petition relies on exclusively on expert opinion from Dr. von Sacken to supply this missing claim limitation. *See* Pet. at 36, 38 (“Although Takemura does not illustrate that the insulating tape has a length larger than the length of the exposed metal . . . a POSA would have done so (or at least found it obvious) to minimize exposing the negative electrode metal to lithium ions”) (citing EX1003), 71, 102-103 (“But a POSA **would have made the length of Takemura’s tape . . . larger** than the length of the current collector’s exposes surface . . . to avoid exposing negative electrode metal to lithium plating (or at least, found this obvious).” (citing EX1003)). This approach is not allowed under current Director guidance.

Section 311(b) and Rule 104(b)(4) require that each challenged claim element in a petition must be shown only in prior art patents and printed publications. Other sources, like applicant-admitted prior art, “common sense,” or expert testimony, cannot be used to supply a missing claim limitation or form the basis for an IPR ground. *See Qualcomm Inc. v. Apple Inc.*, 134 F.4th 1355, 1364-65 (Fed. Cir. 2025) (“‘the basis’ of an IPR ground asserting unpatentability can ‘only’ include ‘prior art consisting of patents or printed publications’”). That is exactly what Petitioner has done here, and this requires reversal under Section 311(b) and Rule 104(b)(4).

It is undisputed that no prior art reference teaches claim limitations [1.I], [9.I.2], or [17.I]. The Petition relies **exclusively** on expert testimony—not a prior art

patent or printed publication—to satisfy this missing claim limitation that is admittedly absent from the art itself. Pet. at 36-38, 71, 102-103. Because that is not permissible under Section 311(b), Rule 104(b)(4), and the latest Federal Circuit guidance (as the Director’s July 31, 2025 memorandum acknowledges), Patent Owner respectfully requests reversal of the Institution Decision.

B. The Institution Decision erred when it ignored Takemura’s express teaching away from doing exactly what Petitioner’s expert concluded would be obvious to do

The Institution Decision correctly determined that Sato “does not provide details regarding [its alleged tape’s] precise size and placement.” Institution Decision at 24. Instead, the Institution Decision claims the Petition “relies on Takemura for teaching how such tape would be *sized* and placed.” *Id.* But it is undisputed that Takemura disparages the use of tape that is disclosed in its Figures 8 and 9 (the only figures relied on by Petitioner) and that Takemura directs a POSITA to minimize or eliminate the use of tape altogether. This is the opposite of what the Petition and Institution Decision concluded, and this requires reversal.

Petitioner, its expert, and the Institution Decision err because they rely only on the background of Takemura as well as expert testimony but ignore Takemura’s complete disclosure, which teaches the size and placement of tape shown in Figs. 8 and 9 are problems to be avoided, not desirable features. Ex. 2015 ¶ 62; Ex.1003 ¶¶ 150-151; Pet. 36-37. Takemura disparages using the tape shown in Figs. 8 and 9

and therefore undercuts Petitioner’s proposed combination by explicitly teaching that a POSITA should *minimize* or *eliminate* the use of tape, but the Petition and Institution Decision rely on Takemura and expert testimony to allegedly teach Sato *to use* and *lengthen* the tape depicted in Figs. 8 and 9.³ See *Galderma Labs., L.P. v. Tolman, Inc.*, 737 F.3d 731, 738 (Fed. Cir. 2013) (prior art teaches away “when a person of ordinary skill, upon reading the reference, 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” in the claim); Ex. 2015 ¶ 62.

Takemura’s disclosure is clear: the presence of extra active material and masking tape, as shown in its Figures 8 and 9, leads to an undesirable decrease in energy density and an undesirable increase in the overall thickness of the battery. Takemura identifies these issues as technical *problems* and sets out to solve them by minimizing or eliminating the use of tape, not increase its coverage. Ex. 1006 ¶¶ [0010], [0035]. In direct conflict with the expert testimony credited by the Board, Takemura solves these problems by instructing a POSITA to *minimize* or *eliminate* the use of tape. Ex. 1006 ¶ [0035]. Instead of using tape to prevent lithium deposition, Takemura teaches removing the active layer, thereby avoiding the

³ These relied-upon structures are still admitted to not disclose claim elements [1.I], [9.I.2], and [17.I], at least for the reasons stated above.

undesirable “extra space” caused by the tape shown in Figs. 8 and 9 and that the uncoated portion “prevents lithium metal deposition”. Ex. 1006 ¶¶ [0035], [0019]. Takemura explicitly disfavors its Comparative Example 1 (which corresponds to Figs. 8 and 9), explaining through its testing results how its invention achieves advantageous increases in discharge capacity and the rate of deterioration of discharge capacity after cycling by comparison. *Id.* ¶¶ [0033]–[0037], [0035], Tables 1, 2. No advantages are suggested for the disfavored design in Figs. 8 and 9.

A POSITA reading Takemura would therefore be expressly taught to minimize the dimensions of its tape or eliminate tape completely, but the Petition and Institution Decision conclude that a POSITA could rely on only Takemura’s background section to allegedly teach the opposite—increasing the length of Sato’s tape. Because Takemura teaches a POSITA to do the opposite of what is claimed, Patent Owner respectfully requests reversal of the Institution Decision.

C. The Board’s denial of another IPR petition directed to a different patent in the same underlying district court litigation further supports discretionary denial

Patent Owner previously submitted a request for discretionary denial, which the Director denied together with four other requests on July 2, 2025. (Paper 9.) Since that denial, however, the Board or the Director have denied institution in at least two other petitions involving patents at issue in the same underlying district court case, and also found (in a third petition) that Petitioner failed to demonstrate a

reasonable likelihood of success for a third of the challenged claims. These denials, taken together with the certainty with which a trial at the district court will proceed before any FWD—involving evaluation of the *very same prior art* at issue in this IPR—means that IPR proceedings in this forum are unlikely to offer the efficiencies envisioned by the AIA and instead only multiply costs for Patent Owner. This counsels against using the Board’s limited resources to consider this Petition.

On August 20, 2025, the Board denied institution of U.S. Pat. No. 10,964,927 in IPR2025-00385 (Paper 10). No other petition was filed directed to this patent. Therefore, trial at the district court is even more likely to proceed as scheduled on July 6, 2026, over two months before the scheduled FWD in this IPR (and roughly four months before the FWD in IPR2025-00524, if instituted).⁴

⁴ See, e.g., *Force MOS Tech. Co., Ltd. v. ASUSTeK Computer, Inc.*, Case No. 2:22-cv-00460, 2024 WL 1586266, at *10 (E.D. Tex. April 10, 2024) (stating the Court “has a consistent practice of denying motions to stay when the PTAB has yet to institute post-grant proceedings” and, where *one* patent was not subject to IPR review, stating “the IPRs cannot simplify the issues to the extent necessary to justify a stay” and “the Court still has a case to try regardless of the outcome of the IPRs.”) (citing *Uniloc 2017 LLC v. Samsung Elecs. Am., Inc.*, Case No. 2:19-cv00259-JRG-RSP, 2020 WL 1433960, at *6 (E.D. Tex. Mar. 24, 2020) (denying stay request

On September 9, 2025, the Director denied institution of U.S. Pat. No. 11,799,131 in IPR2025-00722 (Paper 11). Petitioner also filed a separate petition directed to this patent in IPR2025-00431, which was instituted, but Petitioner expressly disagrees with its interpretation of challenged claims 14-17 in that petition. *See* IPR2025-00431, Paper 19 (Request for Director Review) at 9-12 (Sept. 2, 2025).

On August 12, 2025, the Board instituted review of IPR2025-00405 (Paper 12), however, the Board found that Petitioner *failed* to prove a reasonable likelihood of success with respect to any challenge to claims 20-26 (with respect to grounds 1A, 1B, 1C[1], 1C[2], 4A, and 4C), and failed to present a reasonable likelihood of success with respect to grounds 4C, 5C[1], 5C[2], 6C[1], and 6C[2]. *See* IPR2025-00405, Paper 16 (Request for Director Review) at 5-11 (Aug, 26, 2025).

One other petition directed to another patent at issue in the same underlying district court proceeding still remains pending, in IPR2025-00524. If instituted, that proceeding will not reach FWD until roughly four months *after* jury selection in the underlying district court case, and so the district court remains unlikely to stay the case. If denied institution, that decision would only further support denial to avoid wasting the Board's limited resources to evaluate only a subset of the patents

because even if all remaining IPRs succeeded, at least some asserted claims “would remain live in this case”)).

asserted in the same district court proceeding.

The justification for denial of institution of the instant Petition therefore only increases in light of these other denials and institution decisions. Patent Owner therefore respectfully requests that the Director revisit the Decision denying discretionary denial, including in view of these changed circumstances.⁵

First, the Board has now denied institution of two of the other petitions directed to patents asserted in the same district court case (with one institution decision still pending) and also agreed that Petitioner failed to raise a *prima facie* case of unpatentability for claims 20-26 of the '910 Patent, ensuring that a district court trial (together with its duplicated effort) is certain to occur. *See* IPR2025-00405, Request for Director Review, Paper 16 (Aug. 26, 2025); *see supra* footnote 6. Jury selection in the underlying district court case is set for July 6, 2026, over two months *before* the scheduled FWD in this IPR, and roughly four months before the hypothetical FWD in IPR2025-00524. The increased likelihood of proceeding to trial on Petitioner's claims as to all asserted patents counsels against using the Board's limited resources for review of this Petition. *Samsung Elecs. Co., Ltd. v.*

⁵ Interim Director Discretionary Process § V.C ("If the Director issues a decision determining that discretionary denial is not appropriate, a party should file a single request for . . . Director Review after the Board panel issues its decision.").

Icashe, Inc., IPR2025-00639, Paper 11 at 2 (PTAB Aug. 14, 2025) (Stewart, Dir.)

(explaining that it would be an inefficient use of Board resources to refer a subset of patents to the Board when other patents had already been denied institution).

Second, Petitioner's *Sotera* stipulation cannot outweigh the multiple other grounds favoring denial where Petitioner continues to assert the primary prior art references (and most of the secondary references) in *combination* with unpublished system prior art references against the '498 Patent in the underlying district court litigation, which is likely to reach a verdict before any FWD. Paper 6 at 24-26 (explaining Petitioner's reliance on each of Sato, Takemura, Nakamura, Oh-539, Oh-144, and Kobayashi in combination with unpublished system prior art in the underlying district court litigation); *Motorola Sol'ns, Inc. v. Stellar LLC*, IPR2024-01205, Paper 19 at 3-4 (PTAB March 28, 2025) (Stewart, Dir.) (finding a *Sotera* stipulation unlikely to moot petitioner's combination of IPR art with unpublished system prior art in district court proceedings).

IV. CONCLUSION

Patent Owner respectfully requests that the Director vacate and reverse the Board's Decision Granting Institution and instead deny institution.

Dated: September 23, 2025

Respectfully submitted,

By: / Christopher TL Douglas /
Christopher TL Douglas

CERTIFICATION UNDER 37 C.F.R. §42.24

Pursuant to 37 C.F.R. §42.24(d), I certify that this motion complies with the page limits of 37 C.F.R. §42.24(a)(1)(v) because it contains 15 pages.

Dated: September 23, 2025

Respectfully submitted,

By: / Christopher TL Douglas /
Christopher TL Douglas

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. §42.6(e), the undersigned hereby certifies that a true and correct copy of the above-captioned **REQUEST FOR DIRECTOR REVIEW OF DECISION GRANTING INSTITUTION OF *INTER PARTES* REVIEW** was served in its entirety on September 23, 2025 via filing through the Patent Trial and Appeal Case Tracking System (P-TACTS) and electronic mail on the following counsel of record for Petitioner:

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