

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

JinkoSolar Co., Ltd.

Petitioner,

v.

LONGi Green Energy Technology Co., Ltd.,

Patent Owner.

Case No. IPR2025-00859

Patent No. 9,515,214

**PATENT OWNER'S REQUEST FOR
DISCRETIONARY DENIAL OF INSTITUTION**

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I. INTRODUCTION

Patent Owner, LONGi Green Energy Technology Co. Ltd. (“LONGi”), respectfully requests the Director to exercise discretion and deny institution of the *inter partes* review (“IPR”) Petition for U.S. Patent No. 9,515,214 (the “’214 Patent” or the “Challenged Patent”) filed by Petitioner, Jinko Solar Co. Ltd. (“Petitioner”).

The *Fintiv* factors strongly favor denial. The parallel district court action asserting the ’214 Patent against Petitioner and its affiliates (*LONGi Green Energy Technology Co. Ltd. et al. v. Jinko Solar Co., Ltd. et al.* No. 2:25-cv-00048-JRG-RSP (E.D. Tex.) (“Parallel Litigation”)) is scheduled for a jury trial nearly three months *before* the expected date of the Final Written Decision in this IPR. Petitioner has not submitted a *Sotera* stipulation and has instead incorporated by reference all of its arguments in this IPR into its district court invalidity contentions, thus ensuring that the parties will litigate the *same issues* in both forums. The Parallel Litigation is also unlikely to be stayed and maintaining this proceeding when the district court will have already decided the validity of the ’214 Patent is an inefficient use of the Board’s time and resources.

Further, the Petition is weak on the merits. The eight grounds in the Petition can be divided into three groups based on the references relied upon. Grounds 1-4 are based on the combination of Boretz, a reference that Petitioner has failed to

establish was publicly available before the priority date of the Challenged Patent, and Maehane, a reference that was expressly considered and all claims were allowed over it during prosecution.¹ Grounds 5-8 are based on the combination of Zhang and Ravi328. However, neither Zhang nor Ravi328 discloses the limitation “the n in the number of columns of the cell strings connected in parallel being equal to the n in the ratio of the long side length to the short side length,” in independent claim 1 of the Challenged Patent. This missing limitation is the *same limitation* the Examiner also found missing during prosecution. Petitioner relies on impermissible hindsight, using the invention as an instruction manual, to piece together the disparate teachings of Zhang and Ravi328 in an attempt to arrive at the claimed inventions of the ’214 Patent. With respect to independent claim 10, Grounds 4 and 8 additionally rely on Krishnamurthy, a Master’s Thesis from Lulea University of Technology that Petitioner has also failed to establish was publicly available before the priority date of the Challenged Patent.

¹ The Director has discretion to not institute trial when the challenge to the patent is based on prior art already considered and overcome during prosecution under 35 U.S.C. § 325(d). *Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper 6 at 7 (P.T.A.B. Feb. 13, 2020) (precedential).

Finally, the Director should exercise discretion given strong settled expectations with respect to the '214 Patent. In particular, the '214 Patent has been in force for over 8.5 years, and the evidence confirms that Petitioner has been aware of the patent *since its issuance date* yet has never challenged the patent's validity.

Accordingly, LONGi respectfully requests the Director exercise discretion and deny the Petition.

II. THE DIRECTOR SHOULD EXERCISE DISCRETION UNDER SECTIONS 314 AND 325(d) AND DENY INSTITUTION

The Director should exercise discretion and deny institution under 35 U.S.C. §§314 and 325(d) because the *Fintiv* factors favor discretionary denial, the Petition is particularly weak on the merits, and Petitioner has been aware of the Challenged Patent for years but has failed to challenge its validity until now.

A. Factor 1 – The Parallel Litigation Has Not Been Stayed And Is Unlikely To Be Stayed

The first *Fintiv* factor weighs strongly in favor of denial because a stay of the Parallel Litigation is highly unlikely. Petitioner has not sought a stay, and the Board's decision on institution is not expected until November 21, 2025. By that time, the parties will have (and indeed have already) invested substantially in the district court proceedings, including through motion practice, discovery, and claim construction exchanges.

If Petitioner moves to stay pre-institution, its motion will almost certainly be denied because the district court has a “consistent practice of denying motions to stay when the PTAB has yet to institute post-grant proceedings.” *Luminati Networks Ltd. v. Teso LT, UAB*, No. 2:19-CV-00395-JRG, 2020 WL 6803255, at *1 (E.D. Tex. Oct. 30, 2020); *Trover Group, Inc., v. Dedicated Micros USA*, No. 2:13-CV-1047-WCB, 2015 WL 1069179, at *6 (E.D. Tex. Mar. 11, 2015) (Bryson, J.) (“This Court’s survey of cases from the Eastern District of Texas shows that when the PTAB has not yet acted on a petition for inter partes review, the courts have uniformly denied motions for a stay.”). *See* Ex. 2001 (showing that Judge Gilstrap has denied all motions to stay pending *Inter Partes* Review that were filed pre-institution).

Even after institution, the district court judge is unlikely to stay the case. Since 2020, Judge Gilstrap has only granted 8 out of 44 post-institution motions to stay pending IPR. *See* Ex. 2002 (showing success rates for motions filed post-institution). In several of those cases, Judge Gilstrap indicated that the timeliness of the motion, “where timely means a final written decision is expected in the ordinary course before the trial in this case would otherwise take place,” played a key role in granting the motion. *Vill. Green Techs., LLC v. Samsung Elecs. Co.*, 2023 WL 416419, at *3 (E.D. Tex. Jan. 25, 2023) (IPR instituted more than 14 months before trial); *see also Maxeon Solar PTE. LTD., v. Canadian Solar Inc.*,

No. 2:24-CV-210-JRG, 2025 WL 1811321, at *1 (E.D. Tex. July 1, 2025) (FWD expected 12 days before trial); *Foras Techs. Ltd. v. Aptiv PLC*, No. 2:23-CV-00314-JRG, 2024 WL 5348631, at *2 (E.D. Tex. July 25, 2024) (FWD expected over 4 months before trial). The other cases where a stay was granted involved circumstances that are not present here. *See Commc'n Techs., Inc. v. Samsung Elecs. Am., Inc.*, No. 2:21-CV-00444-JRG, 2023 WL 1478447, at *2 (E.D. Tex. Feb. 2, 2023) (patent expired and parties were not competitors); *Netlist, Inc. v. Micron Tech., Inc.*, No. 2:22-CV-00203-JRG, 2024 WL 4381164, at *1 (E.D. Tex. Feb. 10, 2024) (noting the case “risks an inefficient consumption of limited judicial resources” because of the 6 involved patents, 4 had already been invalidated and were on appeal and the remaining 2 had recently been instituted); *Resonant Sys., Inc. v. Samsung Elecs. Co.*, No. 2:22-CV-00423-JRG, 2024 WL 1021023, at *2, *4 (E.D. Tex. Mar. 8, 2024) (parties not competitors so plaintiff would not be unduly prejudiced); *BoxCast Inc. v. Resi Media LLC*, No. 2:21-CV-00217-JRG (E.D. Tex. May 25, 2022) (unopposed motion to stay pending IPR); *Varta Microbattery GMBH v. Guangdong Mic-Power New Energy Co.*, No. 2:21-CV-00036-JRG (E.D. Tex. Jan. 26, 2022) (severing and staying four out of six patents for which the PTAB had allowed plaintiff to amend claims).

Here, Petitioner and Patent Owner are direct competitors in the solar industry. Courts in the Eastern District of Texas have stated they are “generally

reluctant to stay proceedings when the parties are direct competitors,” given the substantial prejudice that results from delaying proceedings in such circumstances. *See, e.g., Peloton Interactive, Inc. v. Flywheel Sports, Inc.*, No. 2:18-cv-00390-RWS-RSP, 2019 WL 3826051, at *3 (E.D. Tex. Aug. 14, 2019) (collecting cases). Thus, any stay of the Parallel Litigation is highly unlikely.

Thus, Factor 1 weighs strongly in favor of discretionary denial.

B. Factor 2 – The Trial In the Parallel Litigation Will Occur Before The Final Written Decision

The second *Fintiv* factor also weighs strongly in favor of discretionary denial. Trial in the Parallel Litigation will occur nearly *three months before* the projected date for the Final Written Decision in this IPR. The Notice of Filing Date Accorded in this IPR was mailed on May 21, 2025, Paper No. 5. The Patent Owner’s Preliminary Response is due August 21, 2025. *See* Paper No. 5; 37 C.F.R. § 42.107(b). The expected date for the Board’s Institution Decision would therefore be November 21, 2025. *See* 35 U.S.C. § 314(b). If the proceeding is instituted, the expected date for the Board’s Final Written Decision is one year later on November 21, 2026. *See* 35 U.S.C. § 316(a)(11).

The district court has already scheduled jury selection and trial to start on August 31, 2026, which is nearly three months before the expected date of the Final Written Decision. Ex. 2003, 1 (First Amended Docket Control Order). A trial date that precedes a final written decision strongly favors discretionary denial.

See Apple Inc. v Fintiv, Inc., IPR2020-00019, Paper 11, 9 (PTAB Mar. 20, 2020) (Precedential) (“If the court’s trial date is earlier than the projected statutory deadline, the Board generally has weighed this fact in favor of exercising authority to deny institution under *NHK*.”); *Apple Inc. v Fintiv, Inc.*, IPR2020-00019, Paper 15, 13 (PTAB May 13, 2020) (favoring discretionary denial when the “District Court trial is scheduled to begin two months before our deadline to reach a final decision.”); *NXP USA, Inc. v. Impinj, Inc.*, PGR2022-00005, Paper 18, 8-9 (PTAB May 2, 2022) (favoring discretionary denial when the final written decision would issue “over two months after the currently scheduled trial date.”); *see, e.g., Coretronic Corp. v. Maxell, Ltd.*, IPR2025-00474, Paper 11, 2 (PTAB July 10, 2025) (the Director exercising discretionary denial where, as here, trial in the district court was expected to be held approximately 4 months before the due date for a final written decision in the IPR, and where the asserted patent had been in force for approximately eight years).

Even when considering the median time from filing to trial of the Parallel Litigation in the Eastern District of Texas, rather than the scheduled trial date, the trial will still occur before the Final Written Decision. According to Docket Navigator, the median time to jury trial before Judge Gilstrap for cases filed on or after January 1, 2020, is 21.7 months. Ex. 2004, 2. Since the Parallel Litigation was filed on January 17, 2025, according to this statistic, trial would be expected to

occur on November 7, 2026, two weeks before the expected date of the final written decision. *ARM Ltd., v. Daedalus Prime LLC*, IPR2025-00207, Paper 10, 2 (PTAB May 16, 2025) (favoring discretionary denial when “it is unlikely that a final written decision in this proceeding will issue before the district court trial occurs.”).

Thus, *Fintiv* factor 2 weighs strongly in favor of discretionary denial.

C. Factor 3 – The Amount Of Investment In The Parallel Proceeding Favors Denial

The third *Fintiv* factor also weighs strongly in favor of denial because the parties and the district court already have and will continue to make significant investments in the Parallel Litigation.

First, the parties have fully briefed the court, and the court has denied Petitioner’s motion to dismiss for insufficient service of process. Ex. 2005 (April 27, 2025 Report and Recommendation); Ex. 2006 (June 25, 2025 Order Denying Defendants Motion to Dismiss). Petitioner also filed and the parties briefed a second motion to dismiss Patent Owner’s First Amended Complaint, which the court has also denied. Ex. 2007 (June 27, 2025 Report and Recommendation); Ex. 2008 (July 15, 2025 Order Adopting Report and Recommendation).

Second, by the time of the institution decision in late November 2025, the district court litigation will be well past its early stages, discovery will be under

way, and the district court and the parties will have completed a significant amount of work.

The parties have already completed their Local Patent Rule 3-1 and 3-2 disclosures of infringement contentions and their Local Patent Rule 3-3 and 3-4 disclosures of invalidity contentions and accompanying document productions. Ex. 2003, 5. Patent Owner has already served interrogatories. And Petitioner has issued document and deposition subpoenas to six different third parties. (Notices of document and deposition subpoenas to Northrop Grumman Corp.; BP Corporation North America, Inc.; Spectrolab, Inc.; REC Americas, LLC, Panasonic Corporation North America, Inc.; and Mitsubishi Electric U.S., Inc.).

Before the date for institution, claim construction will also be well under way with the parties having exchanged claim terms on October 24, 2025, and proposed constructions on November 14, 2025. Ex. 2003, 4. The Markman hearing is currently set for February 27, 2026, just 3 months after the expected date of the institution decision. *Id.*, 3. Accordingly, *Fintiv* factor 3 weighs strongly in favor of discretionarily denying institution.

D. Factor 4 – The Significant Overlap Between Issues Raised In This Proceeding And The Parallel Litigation Favors Denial

The fourth *Fintiv* factor also weighs strongly in favor of denial because of the significant overlap between issues raised in the Petition and in the Parallel Litigation, which involves the same '214 Patent challenged in this proceeding. Ex.

2009, 1 (First Amended Complaint). The concerns for duplication of work and potentially conflicting decisions are particularly high here. Petitioner has *not* submitted a *Sotera*-type stipulation, and it has affirmatively incorporated the *entirety* of this IPR Petition into its district court invalidity contentions, including “the arguments in [Defendants’] petition, the expert testimony in the supporting declaration of Dr. Hamid Toliyat, and the references cited in, and attached to, the petition and declaration.” Ex. 2010, 23 (“Defendants incorporates by reference their petition for *inter partes* review of the ’214 patent (IPR2025-00850 [sic])”). While Petitioner has articulated additional invalidity theories in the Parallel Litigation, most of those contentions also expressly rely on at least one of the references used to challenge the ’214 Patent in the Petition. *Id.*, 20-22 (relying on at least one of Boretz, Maehane, Zhang, Ravi328, Ravi260, and Fujii for 40 out of 43 combinations of references).

Thus, if this Petition is instituted, the validity issues to be addressed will be highly duplicative of the Parallel Litigation, and the Board’s resources will be used to decide substantially the same invalidity grounds that the district court would have already decided in the Parallel Litigation. *See NXP USA*, PGR2022-00005, Paper 18, 11-12 (favoring discretionary denial when “Petitioner does not offer a stipulation” and “substantially identical prior art is submitted” in both proceedings). And even if Petitioner were to submit a *Sotera* stipulation, such

stipulation “will not be dispositive by itself.” *Guidance on USPTO’s rescission of “Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation,”* 2-3 (March 24, 2025).

Accordingly, *Fintiv* factor 4 weighs strongly in favor of discretionary denial.

E. Factor 5 – The Parties Are the Same in Both Proceedings

The fifth *Fintiv* factor—whether the Petitioner and defendant in the parallel proceeding are the same party—weighs in favor of denial. Although Jinko Solar Co., Ltd. is the only named Petitioner, the real parties-in-interest in this Petition are Jinko Solar Co., Ltd., JinkoSolar Holding Co., Ltd., Jinko Solar (Vietnam) Industries Co., Ltd. and Jinko Solar Technology Sdn. Bdn., all of whom are named defendants in the Parallel Litigation. Pet., 2; Ex. 2009, 1 (First Amended Complaint). Thus, this factor weighs in favor of discretionary denial. *Fintiv*, IPR2020-00019, Paper 15, 15 (PTAB May 13, 2020) (“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 Favor Discretionary Denial

The sixth *Fintiv* factor also strongly favors denial. The Acting Director’s March 26, 2025 Memorandum provides a number of additional factors that are properly considered under the *Fintiv* factor 6 analysis, including the strength of the unpatentability challenge, the extent of the Petition’s reliance on expert testimony,

and the settled expectations of the parties, such as the length of time the claims have been in force. Memorandum from U.S. Patent & Trademark Office Acting Director, *Interim Processes for PTAB Workload Management*, 2-3 (Mar. 26, 2025). These considerations all strongly weigh in favor of discretionary denial.

1. The Merits Of The Petition Are Weak and Favor Denial²

The Petition asserts the following grounds for invalidating the claims of the '214 Patent:

Ground	Claims	Basis	References
1	1-5, 8, 11	§ 103	Boretz and Maehane
2	6	§ 103	Boretz, Maehane, and Ravi328
3	7	§ 103	Boretz, Maehane, and Ravi260
4	9-10	§ 103	Boretz, Maehane, and Krishnamurthy
5	1-4, 6, 8, 11	§ 103	Zhang and Ravi328
6	5	§ 103	Zhang, Ravi328, and Fujii
7	7	§ 103	Zhang, Ravi328, and Ravi260
8	9-10	§ 103	Zhang, Ravi328, and Krishnamurthy

² Patent Owner will file a “Patent Owner Preliminary Response” by August 21, 2025, which will provide a more detailed technical explanation of the Petition’s weaknesses.

Pet., 3-4. Claims 1 and 10 are the independent claims.

As shown in the table above, the eight grounds in the Petition can be divided into three groups based on the references relied upon: Grounds 1-4, which each rely on at least the combination of Boretz and Maehane, Grounds 5-8, which rely on at least the combination of Zhang and Ravi328, and Grounds 4 and 8 which additionally rely on Krishnamurthy. As explained below, each of these grounds rely on art that has not been shown to have been available before the priority date of the '214 Patent, and/or raise substantially the same art or arguments that were previously presented to and considered by the Examiner during prosecution, and Petitioner has not demonstrated any material error in the Examiner's decision to allow the claims. *See Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper 6, 7–11 (P.T.A.B. Feb. 13, 2020).

a. Petitioners Have Failed To Show Boretz Was Publicly Available Before The Priority Date Of the '214 Patent

Grounds 1-4 are based on at least the combination of Boretz and Maehane. Pet., 3-4. However, Petitioner has failed to show that Boretz was publicly available before July 2, 2010, the priority date of the Challenged Patent, and that the copy of Boretz relied on in the Grounds is an authentic copy that was available before that date. Boretz purports to be the fourth phase of a set of technical reports

prepared for the National Aeronautics and Space Administration (NASA) by TRW Systems Group between 1968 and 1971. Ex. 1004, Ex. 2011 (NTRS bibliography for phase 1, dated 1968, acquired by NTRS on August 4, 2013), Ex. 2012 (NTRS bibliography for phase 4, dated 1971, acquired by NTRS on August 6, 2013).

Although the Boretz report purports to have a date of September 15, 1971 on its cover, there is no indication that it was intended for distribution to the public. Indeed, the report itself indicates that “Distribution of this document is established by the Contracting Officer, Lawrence Garrison,” another indication that it was not meant for public dissemination. Ex. 1004, 4. Petitioner has provided no evidence that Boretz was “published” and accessible by the public on September 15, 1971, or at any point thereafter before the priority date of the ’214 Patent. Contrary evidence strongly suggests it was *not* publicly available before that date. NTRS, the NASA Technical Reports Server, indicates that it did not even acquire Boretz (which it refers to as a “Contractor Report”) until August 6, 2013, over three years *after* the July 2010 priority date of the Challenged Patent. Ex. 2012. Thus, Petitioners have failed to show that Boretz (Ex. 1004) was available to the public before the priority date of the Challenged Patent.

**b. The Challenged Claims Were Issued Over
Maehane**

Petitioner’s reliance on Maehane warrants discretionary denial because this reference was already expressly considered by the examiner during prosecution of

the '214 Patent and in the stated Reasons for Allowance of all claims. The Applicants submitted Maehane to the Patent Office in an Information Disclosure Statement filed concurrently with the filing of the application. Ex. 1002, 111 (disclosing JP 7-106619A). During prosecution, the Examiner repeatedly rejected the claims based on various combinations of Maehane (JP 07-106619) and other references.³

Office Action	Prior Art References Relied in Rejecting Claim 1
May 9, 2014 Non-Final	Maehane in view of U.S. 2010/0295377 to Sok and U.S. 5,994,641 to Kardauskas
Nov. 20, 2014 Final	Maehane in view of U.S. 2010/0126550 to Foss
July 2, 2015 Non-Final	Maehane in view of U.S. 2007/0175509 to Yagiura
Dec. 17, 2015 Final	Maehane in view of U.S. 2007/0175509 to Yagiura

After applicants filed a Pre-Appeal Brief Request for Review, the rejection was withdrawn on April 13, 2016, and the Examiner issued a Notice of Allowance on August 29, 2016. *Id.*, 543-545. The Examiner's explained in his reasons for allowance that "[t]he prior art of record, whether alone or in combination, fails to teach or fairly suggest the limitation '*the n in the number of columns of the cell*

³ Patent Owner will file a "Patent Owner Preliminary Response" by August 21, 2025, which will provide a more detailed exposition of the prosecution history.

strings connected in parallel being equal to the n in the ratio of the long side to the short side length’ in the context of other limitations in the claim.” *Id.*, 550 (emphasis added). The Petition has similarly failed to overcome this deficiency in the prior art articulated by the Examiner.⁴

c. The Combination Of Zhang And Ravi328 Fails To Disclose The Claimed Limitations

Grounds 5-8 are based on the combination of Zhang and Ravi328. Pet., 4. Like the combination of Maehane and Yagiura that was expressly considered by the Examiner during prosecution, as discussed above, neither Zhang nor Ravi328 discloses the claimed limitation the Examiner found missing in the prior art, i.e., “*a ratio of a short side length and a long side length of the substantial rectangle being*

⁴ The Examiner also expressly allowed independent claim 10 (then pending-claim 12) over Maehane, finding that neither it nor other prior art of record taught or fairly suggested the limitation “the first one of the solar battery cells and the second one of the solar battery cells are arranged in the module such that the first long side and the second long side of the first one and the second one of the solar battery cells do not face each other.” Ex. 1002, 552. In any event, claim 10 is not asserted by LONGi in the Parallel Litigation and therefore is not significant in resolving the parties’ dispute.

$1/n:1$ (n is an integer equal to or larger than 2), wherein a predetermined number of the solar battery cells are serially connected to each other, thereby configuring a cell string, n columns of the cell strings are connected in parallel by a first string connector at one end of the n columns, ***the n in the number of columns of the cell strings connected in parallel being equal to the n in the ratio of the long side length to the short side length***” as recited in claim 1.

Zhang discloses square (un-divided) 125×125 mm cells “connected in series to form a series group, endpoints of two series groups are connected in parallel to form a parallel-series combination, and then the parallel-series combinations are connected in series.” Ex. 1007, 4. In Zhang, the ratio of a first side length and a second side length is $1/1:1$, such that $n=1$. However, Zhang discloses that there are two series groups connected in parallel. Thus, “the n in the number of columns of the cell strings connected in parallel” is 2, and is not equal to “the n in the ratio of the long side length to the short side length” as required by claim 1 (and hence all dependent claims, as well).

The Petition asserts that Ravi328 discloses “108 half-cut, 125-mm mono-crystalline silicon solar cells, arranged into two sub-sets of cells, each comprising ***two parallel strings*** of 18 half-cells each” Pet., 14-15 (emphasis added). However, this is a misinterpretation of Ravi328. Ravi328 actually discloses that the half-cut cells are arranged such that “***3 strings*** each of 18 half-cut cells ***are***

paralleled and then connected in series with another set of 18*3 strings.” Ex.

1009, 5; Ex. 1003, ¶61. Thus, in Ravi328, the ratio of the short side length and the long side length of the substantial rectangle is 1/2:1, such that $n=2$. However, Ravi328 discloses that there are three strings connected in parallel. Thus, “the n in the number of columns of the cell strings connected in parallel” is 3, and is not equal to “the n in the ratio of the long side length to the short side length” as required by claim 1 and all dependent claims.

Because neither Zhang nor Ravi328 discloses the limitation “the n in the number of columns of the cell strings connected in parallel being equal to the n in the ratio of the long side length to the short side length” (which is the same limitation the Examiner found missing in the prior art during prosecution), Petitioner impermissibly picks the half-cut cells of Ravi328, ignoring that Ravi328 teaches these *half-cut cells* as being connected in *3 parallel strings* of 18 cells each, and baselessly inserts them into Zhang’s configuration of *two series groups connected in parallel*. Pet., 62. The use of half-cut cells in two parallel groups such that “the n in the number of columns of the cell strings connected in parallel being equal to the n in the ratio of the long side length to the short side length,” is something only taught in and suggested by the Challenged Patent itself. Thus, it is only because the Challenged Patent demonstrated this improvement that Petitioner is able to (through the improper use of hindsight) use the Challenged Claims as a

template to piece together the half-cut cells of Ravi328 with the two parallel groups of Zhang to arrive at the claimed invention. *See In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992) (“It is impermissible to use the claimed invention as an instruction manual or ‘template’ to piece together the teachings of the prior art so that the claimed invention is obvious.”), *In re Wesslau*, 353 F.2d 238, 241 (C.C.P.A. 1965) (“It is impermissible... to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art.”).

**d. Petitioners Have Failed To Show Krishnamurth
Was Publicly Available Before The Priority
Date Of the '214 Patent**

Petitioner challenges independent claim 10 in Grounds 4 and 8. Ground 4 is based on the combination of Boretz, Maehane, and Krishnamurthy. Ground 8 is based on the combination of Zhang, Ravi328, and Krishnamurthy. As with Boretz, Petitioner has failed to show that Krishnamurthy was publicly available before July 2, 2010, the priority date of the Challenged Patent. Krishnamurthy is alleged to be a Master’s Thesis entitled “Dynamic Modelling of CubeSat Project MOVE.” However, several factors cast doubt on whether the version attached as Exhibit 1012 was actually available to the public before the priority date of the Challenged Patent. Notably while the first title page identifies the author as a student in the

Department of Space Science in Kiruna, Sweden, the acknowledgement page states that the student was enrolled in a Space Master Course Study on Space Technology at Lulea University of Technology. Ex. 1012, 1, 4. Further, the second title page lists the student's supervisor as being from the Institute of Astronautics at the Technical University of Munich. *Id.*, 2. Additionally, the declaration on page 3 is unsigned. *Id.*, 3. Thus, it is unclear whether this specific version of the thesis was ever published, and if so, which institution published it, when it was issued, and when it was indexed and accessible to the public. *Apple Inc. v. Saint Lawrence Comms LLC*, IPR2017-01075, Paper 8, 6-7 (insufficient showing that a Master's thesis is prior art where Petitioner does not "provide an approximation of *when* ... the thesis issued," "an approximation of *how long* it typically took to add a thesis to the searchable index after it was submitted to the Engineering Library.") (emphasis in original). Here, the Petition does not provide any evidence of publication, claiming only that the thesis "was published in 2008." Pet., 18.

2. The Parties Settled Expectations Favor Denial

The claims of the '214 Patent have been in force for over eight years. Ex. 1001, Face. Since their issuance on December 6, 2016, the validity of the '214 Patent claims has not been questioned. Until this Petition, no party has sought to invalidate the '214 patent either in the Patent Office by filing an *ex parte* reexamination, or in the district court by filing a declaratory judgment action.

Petitioner has been aware of the '214 Patent since at least May 4, 2016, but has failed to challenge the validity of the '214 Patent until now. Petitioner's Chinese patent CN104716225A, was filed on Dec. 17, 2013, as application number 201310692569.4. Ex. 2013, Face; Ex. 2014 (Espacenet bibliographic data for CN104716225A identifying applicants as Jinko Solar Co. Ltd., and Jinko Solar Holding Co. Ltd.). The first search report during prosecution of that application, dated May 4, 2016, cited to US 2013/098423, the publication number of the '214 Patent. Ex. 2015 (EPO Global Dossier for CN201310692569 identifying First search on May 4, 2016); Ex. 2016 (Search Report for Application Number 2013106925694 citing to US 2013/098423 published April 25, 2013); Ex. 1001, Face. Thus, Petitioner Jinko Solar Co., Ltd. has been aware of the published application for the Challenged Patent since at least May 2016. The Challenged Patent was allowed on August 29, 2016, issued on December 6, 2016, and has been in force with no questions to its patentability ever since. Petitioner could have challenged the '214 Patent shortly after it issued, but chose not to do so.

Further, Patent Owner LONGi Green has and continues to manufacture solar modules that practice the '214 Patent, relying on the long-settled expectation that the '214 Patent is valid. Patent Owner LONGi Green has exclusively licensed LONGi Solar Technology (U.S.) Inc., the sole dealer of LONGi photovoltaic products in the United States, to make and sell photovoltaic products in the United

States under the '214 Patent. Ex. 2009, ¶5. Thus, there are settled expectations that the '214 Patent is valid and enforceable, and this factor weighs in favor of denying institution.

3. Petitioner's Extensive Reliance on Expert Testimony

Finally, discretionary denial is warranted given the Petition's extensive reliance on expert testimony. As the Office explained in its "FAQs for Interim Processes for PTAB Workload Management," "as a matter of efficiency, extensive reliance on expert testimony... may suggest that the questions are better resolved in an Article III court" and "[t]he failure to provide focused expert testimony may weigh against institution."⁵ This factor plainly favors denial of institution here. Petitioner has submitted with its Petition the *130 page* declaration of Dr. Hamid Toliyat. Ex. 1003. Petitioner's asserted motivation to combine Ravi328 with Zhang by impermissibly picking the half-cell of Ravi328 and combining it with the two parallel strings of Zhang, instead of the three parallel strings already disclosed in Ravi328, relies entirely on expert testimony. Pet., 61-62, citing to Ex. 1003, ¶¶201-202, 204. There is nothing in Ravi328 that suggests that it needed to be

⁵ See https://www.uspto.gov/patents/ptab/faqs/interim-processes-workload-management?utm_campaign=subscriptioncenter&utm_content=&utm_medium=email&utm_name=&utm_source=govdelivery&utm_term= (FAQ 21).

improved by using the series-parallel layout of Zhang. Indeed, Ravi328 already discloses a layout of parallel strings, but using three parallel strings instead of two. Ex. 1003, ¶61 (citing Ravi328, 5). Such heavy reliance on expert testimony strongly weighs in favor of resolving issues concerning the patentability of the '214 Patent in the district court proceedings.

III. CONCLUSION

For the reasons provided above, in the interest of efficiency the Director should exercise discretion to deny this Petition.

Dated: July 18, 2025,

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE

I hereby certify that this brief complies with the type-volume limitations of 37 C.F.R. § 42.24, because it contains 5,239 words (as determined by the Microsoft Word word-processing system used to prepare the brief), excluding the parts of the brief exempted by 37 C.F.R. § 42.24.

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EXHIBIT LIST

Exhibit	Description
2001	Motion Success for Judge Rodney Gilstrap's Motion for Stay Pending IPR (Pre-Institution)
2002	Motion Success for Judge Rodney Gilstrap's Motion for Stay Pending IPR (Post-Institution)
2003	First Amended Docket Control Order, <i>LONGi Green Energy Tech. Co. Ltd., v. Jinko Solar Co., Ltd.</i> , No. 2:25-CV-00048-JRG-RSP (E.D. Tex. June 16, 2025), Dkt. 48
2004	Judge Rodney Gilstrap's Time to Milestones including Jury Trial for cases filed on or after Jan. 1, 2020
2005	Report and Recommendation Denying Motion to Dismiss, <i>LONGi Green Energy Tech. Co. Ltd., v. Jinko Solar Co., Ltd.</i> , No. 2:25-CV-00048-JRG-RSP (E.D. Tex. Apr. 27, 2025), Dkt. 35
2006	Order Denying Motion to Dismiss, <i>LONGi Green Energy Tech. Co. Ltd., v. Jinko Solar Co., Ltd.</i> , No. 2:25-CV-00048-JRG-RSP (E.D. Tex. June 25, 2025), Dkt. 54
2007	Report and Recommendation Denying Renewed Motion to Dismiss, <i>LONGi Green Energy Tech. Co. Ltd., v. Jinko Solar Co., Ltd.</i> , No. 2:25-CV-00048-JRG-RSP (E.D. Tex. June 27, 2025), Dkt. 55
2008	Order Adopting Report and Recommendation, <i>LONGi Green Energy Tech. Co. Ltd., v. Jinko Solar Co., Ltd.</i> , No. 2:25-CV-00048-JRG-RSP (E.D. Tex. July 15, 2025), Dkt. 57
2009	Plaintiffs' First Amended Complaint for Patent Infringement, <i>LONGi Green Energy Tech. Co. Ltd., v. Jinko Solar Co., Ltd.</i> , No. 2:25-CV-00048-JRG-RSP (E.D. Tex. May 7, 2025), Dkt. 36
2010	Defendants' P.R..3-3 and 3-4 Invalidity Contentions and Disclosures, <i>LONGi Green Energy Tech. Co. Ltd. v. Jinko Solar Co., Ltd.</i> , No. 2:25-CV-00048-JRG-RSP (E.D. Tex. July 9, 2025)
2011	Study to Establish Criteria for a Solar Cell Array for Use as a Primary Power Source for a Lunar-Based Water Electrolysis

Petition for *Inter Partes* Review of U.S. Patent No. 9,722,104

	System, Phase 1 Final Technical Report – NASA Technical Reports Server
2012	Study to Establish Criteria for a Solar Cell Array for Use as a Primary Power Source for a Lunar-Based Water Electrolysis System, Phase 4 – NASA Technical Reports Server
2013	CN 104716225A
2014	Espacenet – CN104716225A
2015	European Patent Register Global Dossier – CN201310692569 (application of CN104716225A)
2016	CN2013106925694 2016.05.04 First Search from register.epo.org

CERTIFICATE OF SERVICE

I hereby certify that on this July 18, 2025, a copy of the foregoing was served in its entirety via electronic mail, upon the following attorneys of record for the Petitioners:

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