

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CANADIAN SOLAR INC. AND
CANADIAN SOLAR (USA) INC.,
Petitioner,

v.

THE SOLARIA CORPORATION,
Patent Owner.

IPR2021-00095
Patent 10,522,707 B2

Before TERRENCE W. McMILLIN, JON M. JURGOVAN, and
MONICA S. ULLAGADDI, *Administrative Patent Judges*.

McMILLIN, *Administrative Patent Judge*.

DECISION
Denying Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

Canadian Solar Inc. and Canadian Solar (USA) Inc. (“Petitioner”)¹ filed a Petition to institute an *inter partes* review of claims 1, 2, 6, 8–10, and 12–20 (the “challenged claims”) of U.S. Patent No. 10,522,707 B2 (Ex. 1001, the “707 patent”) pursuant to 35 U.S.C. § 311 *et seq.* Paper 1 (“Petition” or “Pet.”). The Solaria Corporation (“Patent Owner”)² filed a Preliminary Response. Paper 7 (“Preliminary Response” or “Prelim. Resp.”). With our authorization, Petitioner thereafter filed a Reply (Paper 9 (“Reply”)) and Patent Owner filed a Sur-reply (Paper 10 (“Sur-reply”)). The Preliminary Response, Reply, and Sur-reply address only the issue of discretionary denial. After considering the Petition, the Preliminary Response, the Reply, the Sur-reply, and the evidence of record, we exercise our discretion under 35 U.S.C. § 314(a) to deny institution of *inter partes* review.

A. Related Proceedings

The parties identify the following related proceedings:

Certain Shingled Solar Modules, Components Thereof, and Methods for Manufacturing the Same, Inv. No. 337-TA-1223 (US International Trade Commission) (the “ITC investigation”); and

The Solaria Corporation v. Canadian Solar Inc., Case No. 4:20-cv-02169 (N.D. Cal.) (the “District Court litigation”). Pet. 2–3; Paper 6, 2.

¹ Petitioner identifies Canadian Solar Inc. and Canadian Solar (USA) Inc. as the real parties-in-interest to this proceeding. Pet. 2.

² Patent Owner identifies The Solaria Corporation as the real party-in-interest. Paper 6, 2.

B. The '707 Patent

The '707 patent is titled “Tiled Solar Cell Laser Process.” Ex. 1001, code (54). The patent is “directed to photovoltaic systems and manufacturing processes and apparatuses thereof.” *Id.* at 1:13–14. The patent describes that “[c]onventionally, solar cells are mechanically cut with a saw. However, this technique has numerous disadvantages.” *Id.* at 2:19–20.

The '707 patent describes providing “a solar cell comprising either a single crystalline silicon material or a polycrystalline solar cell, the solar cell having a backside and a front side and a thickness, the backside having a metal material,” and placing “the front side of the solar cell on a platen such that the backside is facing a laser source.” *Id.* at 2:37–53. The laser source is then “initiated” “to output a laser beam having a wavelength from 200 to 600 nanometers and a spot size of 18 to 30 microns,” thus “subjecting a portion of the backside to the laser beam at a power level ranging from about 20 Watts to about 35 Watts to cause an ablation to form a scribe region having a depth, width, and a length.” *Id.* The scribe region is then cut to a “depth being from 40% to 60% of a thickness of the solar cell, the width being between 16 and 35 microns, and the length being equivalent to a length of the solar cell.” *Id.* The patent also discloses “delivering a jet of fluid within a vicinity of the ablation to carry away particulate material, and capturing the particulate material using a vacuum.” *Id.* at 3:10–13.

Figure 29, reproduced below, shows an isometric view of a scribe region of a solar cell.

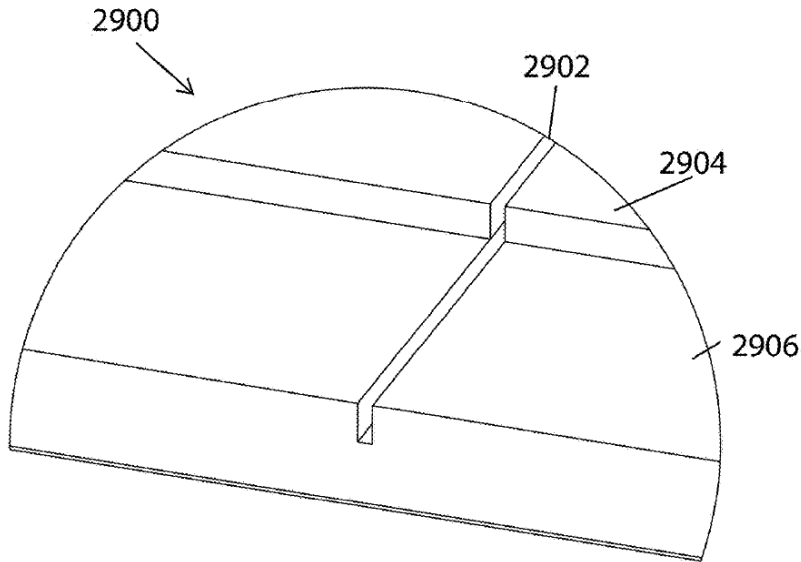


Figure 29 depicts scribe region 2900, kerf 2902, backing material 2904, and photovoltaic material 2906. *Id.* at 8:10–15.

C. Challenged Claims

Petitioner challenges claims 1, 2, 6, 8–10, and 12–20 of the '707 patent. Pet. 1. Claim 1, the sole independent claim, is reproduced below.

1. A method comprising:

providing a solar cell comprising either a single crystalline silicon material or a polycrystalline solar cell, the solar cell having a backside and a front side and a thickness, the backside having a metal material;

placing the front side of the solar cell on a platen such that the backside is facing a laser source;

initiating a laser source to output a laser beam;

subjecting a portion of the backside to the laser beam to cause an ablation to form a scribe region having a depth, width, and a length, the depth being from 40% to 60% of the thickness of the solar cell, and the length being equivalent to a length of the solar cell;

removing a vaporized material from a vicinity of the ablation;
and

capturing the vaporized material using a vacuum.

D. The Asserted Grounds

Petitioner challenges claims 1, 2, 6, 8–10, and 12–20 of the '707 patent based on the grounds set forth in the table below.

Claim(s) Challenged	35 U.S.C. §	References
1, 2, 6, 8, 9, 12–16	103	Jinno ^{3,4} , Suutarinen ⁵
10	103	Jinno, Suutarinen, Liu ⁶
13	103	Jinno, Suutarinen, Morad ⁷
17, 18	103	Jinno, Suutarinen, Spectra-Physics ⁸
19	103	Jinno, Suutarinen, Shamoun ⁹
20	103	Jinno, Suutarinen, Shamoun, Daly ¹⁰

Petitioner also relies on the Declaration of Dr. Stephen P. Shea (Ex. 1003, “Shea Decl.”), which provides evidence in support of the contentions in the Petition. Patent Owner has not submitted a declaration or other testimonial

³ JP 2008-60205 A, published Mar. 13, 2008 (Ex. 1005). Petitioner contends this reference is prior art under 35 U.S.C. § 102(a). Pet. 15.

⁴ Petitioner refers to this reference as “Jinno-205,” to distinguish it from Jinno '604.

⁵ US 2008/0067160 A1, published Mar. 20, 2008 (Ex. 1006). Petitioner contends this reference is prior art under 35 U.S.C. § 102(a). Pet. 17.

⁶ US 6,580,054 B1, issued June 17, 2003 (Ex. 1028). Petitioner contends this reference is prior art under 35 U.S.C. § 102. Pet. 54.

⁷ US 2015/0349167 A1, published Dec. 3, 2015 (Ex. 1048). Petitioner contends this reference is prior art under 35 U.S.C. § 102. Pet. 59 n.4.

⁸ “Laser Edge Isolation Scribing for Crystalline Silicon Solar Cell Production,” published Oct. 25, 2012 (retrieved from https://web.archive.org/web/20121025174411/http://assets.newport.com/webDocuments-EN/images/Laser_Edge_Isolation_Scribing_SP.pdf) (Ex. 1011). Petitioner contends this reference is prior art under 35 U.S.C. § 102. Pet. 67.

⁹ US 2010/0155379 A1, published June 24, 2010 (Ex. 1017). Petitioner contends this reference is prior art under 35 U.S.C. § 102. Pet. 71.

¹⁰ US 3,626,141, issued Dec. 7, 1971 (Ex. 1030). Petitioner contends this reference is prior art under 35 U.S.C. § 102. Pet. 73.

evidence of an expert and has not argued that any of the cited references do not qualify as prior art. *See generally* Prelim. Resp.

II. ANALYSIS

A. *Patent Owner's Argument under 35 U.S.C. § 314(a) Based on Parallel Proceeding*

Institution of *inter partes* review is discretionary. *See Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) (“[T]he PTO is permitted, but never compelled, to institute an IPR proceeding.”); 35 U.S.C. § 314(a). The Board has held that the advanced state of a parallel district court action is a factor that may weigh in favor of denying a petition under § 314(a). *See NHK Spring Co. v. Intri-Plex Techs., Inc.*, IPR2018-00752, Paper 8 at 20 (PTAB Sept. 12, 2018) (precedential); Patent Trial and Appeal Board, Consolidated Trial Practice Guide, 58 & n.2 (Nov. 2019) (“Trial Practice Guide”), available at <https://www.uspto.gov/sites/default/files/documents/tpgnov.pdf>. We consider the following factors to assess “whether efficiency, fairness, and the merits support the exercise of authority to deny institution in view of an earlier trial date in the parallel proceeding”:

1. whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted;
2. proximity of the court’s trial date to the Board’s projected statutory deadline for a final written decision;
3. investment in the parallel proceeding by the court and the parties;
4. overlap between issues raised in the petition and in the parallel proceeding;
5. whether the petitioner and the defendant in the parallel proceeding are the same party; and
6. other circumstances that impact the Board’s exercise of discretion, including the merits.

Apple Inc. v. Fintiv, Inc., IPR2020-00019, Paper 11 at 5–6 (PTAB Mar. 20, 2020) (precedential) (“*Fintiv*”). In evaluating these factors, we “take[] a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review.” *Id.* at 6. The *Fintiv* factors have been applied where there was a parallel proceeding before the ITC. *See, e.g., Apple Inc. v. Neodron Ltd.*, IPR2020-00778, Paper 10 at 18 (Sept. 14, 2020); *see also Fintiv*, 8 (stating that “even though the Office and the district court would not be bound by the ITC’s decision, an earlier ITC trial date may favor exercising authority to deny institution . . . if the ITC is going to decide the same or substantially similar issues to those presented in the petition.”).

Here, there are two parallel proceedings, the District Court litigation and the ITC investigation. *See* Section I.A. The District Court litigation was filed on March 31, 2020. Although it is over a year old, the District Court litigation is not very far along or moving very quickly. There is no trial date. There has been no *Markman* hearing or order. The District Court agreed with the proposal of the parties to take the *Markman* hearing off the calendar in favor of claim construction proceedings in ITC. Ex. 2002.

The ITC investigation was filed on September 15, 2020. The target date for completion of the ITC investigation is February 22, 2022. Ex. 2001, 4. The evidentiary hearing is set for August 9–13, 2021, and the final initial determination is due on October 22, 2021. *Id.* The *Markman* hearing was held on February 11, 2021. *Id.* at 2.

Patent Owner contends we should exercise our discretion to deny the Petition under § 314(a), “because the invalidity arguments [Petitioner] raises here will be resolved in a pending ITC Investigation before this proceeding

will conclude.” Prelim. Resp. 1. Petitioner contends “the [*Fintiv*] factors applicable in the context of a co-pending ITC investigation strongly support institution.” Reply 2.

1. *Whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted*

Fintiv indicated that, in previous Board decisions, the existence of a district court stay pending Board resolution of an *inter partes* review has weighed strongly against discretionary denial, while a denial of such a stay request sometimes weighs in favor of discretionary denial. *Fintiv*, Paper 11 at 6–8. With regard to this factor, the Petition states:

Judge Tigar, who is presiding over the district court case, routinely grants stays pending resolution of *inter partes* review after institution. *See, e.g., Symantec Corp. v. Zscaler, Inc.*, No. 17-CV-04426-JST, 2018 WL 3539267, at *1 (N.D. Cal. July 23, 2018); *E. Digital Corp. v. Dropcam, Inc.*, No. 14-CV-04922-JST, 2016 WL 658033, at *5 (N.D. Cal. Feb. 18, 2016); *Cypress Semiconductor Corp. v. GSI Tech., Inc.*, No. 13-CV-02013-JST, 2014 WL 5021100, at *5 (N.D. Cal. Oct. 7, 2014).

Pet. 8–9. Patent Owner does not argue to the contrary. *See* Prelim. Resp. 5 (“claim construction-related proceedings have been postponed [in the District Court litigation] pending claim construction proceedings in the [ITC] Investigation”); Sur-reply 2 (“the district court case could be stayed”).

Petitioner concedes that a stay of the ITC investigation is unlikely. Reply 2 (“The assumption that the ITC will not stay its investigation merely makes this factor neutral.”). Patent Owner argues that “[i]t is undisputed that the [ITC] Investigation will not be stayed” and “[a]s the [ITC] Investigation will finish before the district court case and any IPR, if instituted, Factor 1 weighs in favor of denying institution.” Sur-reply 2–3.

We will not speculate as to whether the District Court litigation will be stayed. Although Petitioner provides examples of stayed proceedings, we are not persuaded that those examples impact this proceeding. On the other hand, the parties agree that the ITC will not stay its investigation. *See* Reply 2; Sur-reply 2–3. Accordingly, we weigh this factor in favor of exercising our discretion to deny institution.

2. *Proximity of the court’s trial date to the Board’s projected statutory deadline for a final written decision*

The proximity factor in *Fintiv*, on its face, asks us to evaluate our discretion in light of a trial date that has been set in a parallel litigation. *See Fintiv*, Paper 11 at 3, 5 (“*NHK* applies to the situation where the district court has set a trial date to occur earlier than the Board’s deadline to issue a final written decision in an instituted proceeding.”; “When the patent owner raises an argument for discretionary denial under *NHK* due to an earlier trial date, the Board’s decisions have balanced the following factors”) (citing *NHK*, Paper 8 (footnote omitted)). As noted above in the discussion of a stay, *Fintiv* has expressed concern regarding “inefficiency and duplication of efforts.” *Id.* at 6. In its analysis of the proximity factor, *Fintiv* echoes that concern in its guidance that “[i]f the court’s trial date is at or around the same time as the projected statutory deadline or even significantly after the projected statutory deadline, the decision whether to institute will likely implicate other factors discussed herein, such as the resources that have been invested in the parallel proceeding.” *Id.* at 9. Similarly, in *NHK*, the Board expressed the concern that a trial before the deadline for a final written decision addressing the same prior art and arguments would have undermined the Board’s objectives of providing an

effective and efficient alternative to district court litigation. *NHK*, Paper 8 at 20 (citing *Gen. Plastic*, Paper 19 at 16–17).

The statutory deadline for the issuance of the final written decision in this proceeding will be one year from the date of institution. 35 U.S.C. § 316 (a)(11). With regard to the District Court litigation, in the Joint Case Management Statement, the parties jointly proposed that trial take place in October, 2022. Ex. 1043, 7. And, “the district court trial remains unscheduled.” Reply 6. Accordingly, it is likely that this proceeding will be concluded prior to trial in the District Court.

The evidentiary hearing in the ITC investigation is scheduled for August 9–13, 2021, and the target date for completion of the ITC investigation is February 22, 2022. Ex. 2001, 4. Accordingly, it is likely that this proceeding will be concluded prior to trial in the District Court, but after the ITC investigation is completed. Because the ITC is scheduled to complete its investigation approximately three months before the due date for the final written decision, this factor weighs in favor of exercising our discretion to deny institution.

3. *Investment in the parallel proceeding by the court and the parties*

If, at the time of the institution decision, the district court has issued substantive orders related to the challenged patent, such as a claim construction order, this fact weighs in favor of denial. *See Fintiv*, Paper 11 at 9–10. On the other hand, if the district court has not issued such orders, this fact weighs against discretionary denial. *Id.* at 10.

There have been no substantive orders issued in the District Court litigation and, as previously indicated, the *Markman* hearing was taken off calendar in favor of claim construction proceedings in the ITC. Ex. 2002. It

appears that there has been little or no investment in the District Court litigation by either the parties or the court.

It does appear that there has been a substantial investment in the ITC investigation by the ITC and the parties. The Preliminary Response states:

The ITC instituted the [ITC] Investigation on October 15, 2020. . . . In the [ITC] Investigation, claim construction briefing is complete, and a Markman hearing was held on February 11, 2020. The parties have also exchanged their identifications of experts, [Petitioner] has filed its Notice of Prior Art, and the parties are exchanging lists of tentative witnesses to call at the hearing concurrently with the filing of this Response. *See* EX2001 at 1-2. Fact discovery is set to close . . . on April 16, 2021, and expert discovery is set to close on June 4, 2021. *Id.* at 3. Additionally, the evidentiary hearing is set for August 9-13, 2021, the final initial determination is due on October 22, 2021, and the target date for completion of the [ITC] Investigation is February 22, 2022. *Id.* at 4.

Prelim. Resp. 4; *see also id.* at 9–10 (detailing the substantial discovery that has occurred in the ITC investigation). We agree with Patent Owner that “[i]t is undisputed that the parties have made significant investments in the [ITC] Investigation.” Sur-reply 3.

While there does appear to be a significant investment in discovery in the ITC investigation, nothing of substantial significance has occurred in the District Court litigation. Because of the significant investment in the ITC investigation, this factor weighs in favor of exercising our discretion to deny institution.

4. *Overlap between issues raised in the petition and in the parallel proceeding*

“[I]f the petition includes the same or substantially the same claims, grounds, arguments, and evidence as presented in the parallel proceeding,

this fact has favored denial.” *Fintiv*, Paper 11 at 12. “Conversely, if the petition includes materially different grounds, arguments, and/or evidence than those presented in the district court, this fact has tended to weigh against exercising discretion to deny institution under *NHK*.” *Id.* at 12–13.

With regard to overlap with the District Court litigation, Petitioner argues, “*Fintiv* factor (4) also weighs against denying institution, because a broader set of claims is at issue in this Petition (claims 1, 2, 6, 8-10, 12–20) than in the district court case (where only claims 1, 8, 9, 13, and 14 are asserted.)” Pet. 9. And, Petitioner argues, “if and when the Board issues a final written decision, standard IPR estoppel will apply to the district court trial, so there will be no overlap there either.” Reply 9; *see also* 35 U.S.C. § 315(e)(2).¹¹ Patent Owner does not address the overlap between the issues in this proceeding and the District Court. *See generally* Prelim. Resp.

With regard to overlap with the ITC investigation, in the Petition, Petitioner argues:

Factor (4) weighs in favor of institution. Precedent casts doubt on the preclusive effect of ITC invalidity decisions. *See Texas Instruments v. Cypress Semiconductor Corp.*, 90 F.3d 1558, 1569 (Fed. Cir. 1996). Because the relief available from the ITC and the PTAB differs, the disputes before the ITC will not resolve all or substantially all of the patentability disputes between the parties. *See 3Shape [A/s v. Align Tech.]*, IPR2020-00223], Paper 12 at 33-34. Moreover, the ITC’s clear and

¹¹ 35 U.S.C. § 315(e)(2) provides: “The petitioner in an inter partes review of a claim in a patent under this chapter that results in a final written decision under section 318(a), or the real party in interest or privy of the petitioner, may not assert either in a civil action arising in whole or in part under section 1338 of title 28 or in a proceeding before the International Trade Commission under section 337 of the Tariff Act of 1930 that the claim is invalid on any ground that the petitioner raised or reasonably could have raised during that inter partes review.”

convincing evidentiary standard for invalidity differs from the PTAB's, further demonstrating the difference in issues presented by the two proceedings. *Id.* Still further, the instant Petition presents grounds of unpatentability for claims that are not at issue in the proposed ITC investigation (specifically, claims 2, 6, and 10). *Id.*; *Samsung [Elects. Co. v. Dynamics Inc.]*, IPR2020-00505], Paper 11 at 13. All of these points weigh in favor of institution. *Samsung*, Paper 11 at 13; *3Shape*, Paper 12 at 34.

Pet. 10–11. Petitioner argues that discovery in the ITC investigation has been directed to issues (“infringement, domestic industry, standing, and the on-sale bar”) that are outside the scope of this proceeding. Reply 6. And, Petitioner argues that the invalidity issues from this proceeding may never be reached in the ITC investigation:

The Commission has no obligation to rule on an issue, such as invalidity, if it can dispose of the investigation on some other basis. Thus, for example, if [Patent Owner] is found not to meet the domestic industry requirement, the Commission could “review” but “take no position on” the ALJ’s ruling on invalidity. The upshot is to effectively vacate the ruling and place it outside the scope of appeal. *Beloit Corp. v. Valmet Oy*, 742 F.2d 1421, 1422-24 (Fed. Cir. 1984). Put simply, even if the ALJ conducts a hearing and issues a ruling on a ground of invalidity, there is a meaningful chance that the Commission’s final position on the matter in April 2022 will be no ruling.

Id. at 7. And, Petitioner agrees that, “if trial is instituted in this proceeding, then Petitioners will not assert the Petition’s listed grounds of invalidity against the 707 Patent at the evidentiary hearing in the [ITC] investigation.” *Id.* at 9 (citing *Sand Revolution II LLC v. Continental Intermodal Group-Trucking LLC*, IPR2019-01393, Paper 24, 12 (informative) (“Petitioner’s stipulation . . . mitigates to some degree the concerns of duplicative efforts

between the district court and the Board, as well as concerns of potentially conflicting decisions”)).

Patent Owner argues, “certain findings in the [ITC] investigation will likely be instructive, and may be dispositive, of certain issues that would arise if an IPR were instituted, including issues related to claim construction and invalidity.” Prelim. Resp. 5.

We determine that this factor weighs marginally against exercising our discretion to deny institution. There are claims at issue in this proceeding (claims 2, 6, and 10) that are not at issue in the District Court litigation or the ITC investigation. And, Petitioner has agreed not to assert the grounds set forth in the Petition at the hearing in the ITC investigation.

5. Whether the petitioner and the defendant in the parallel proceeding are the same party

The parties in the District Court litigation and the ITC investigation and this proceeding are the same. For this reason, and because the ITC’s investigation will likely conclude before issuance of a final written decision in the present proceeding, we determine this factor weighs in favor of exercising our discretion to deny institution. *Fintiv*, Paper 11 at 6.

6. Other circumstances that impact the Board's exercise of discretion, including the merits.

As to the sixth factor, Petitioner contends that this factor favors institution because “the instant Petition presents a focused and detailed showing of how and why the 707 Patent claims are obvious.” Pet. 11; *see Fintiv*, Paper 11 at 14–15 (noting that the merits of a petitioner’s ground may be considered). And, “Patent Owner does not even deny that the Petition is strong on the merits.” Reply 9–10.

We are cognizant that Patent Owner was not compelled to challenge the Petition on the merits in its Preliminary Response and we do not have the benefit of Patent Owner's views on the merits. However, we agree with Petitioner that the Petition in this case appears to be strong on the merits.

We determine that this factor weighs against exercising discretion to deny institution.

B. Holistic Assessment of Factors and Conclusion

We consider the above factors and take “a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review.” *Fintiv*, Paper 11 at 6. The fact that there is not a likelihood of a stay in the ITC investigation, the ITC investigation is scheduled to be completed substantially before our final written decision, and the high level of investment in the ITC investigation outweigh the facts that support declining to exercise discretion. After considering the factors outlined in the precedential order in *Fintiv*, we exercise our discretion to deny institution under § 314(a).

III. CONCLUSION

We exercise discretion under 35 U.S.C. § 314(a) to deny institution of *inter partes* review.

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that the Petition is *denied* as to all challenged claims, and no trial is instituted.

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