

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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ROOFR INC.,  
Petitioner,

v.

EAGLE VIEW TECHNOLOGIES, INC.,  
Patent Owner.

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IPR2023-00437  
Patent 8,170,840 B2

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Before STACEY G. WHITE, GARTH D. BAER, and RUSSELL E. CASS,  
*Administrative Patent Judges.*

WHITE, *Administrative Patent Judge.*

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

## I. INTRODUCTION

Roofr Inc. (“Petitioner”) filed a corrected Petition requesting an *inter partes* review of claims 1–25 and 28 of U.S. Patent No. 8,170,840 B2 (Ex. 1001, “the ’840 patent”). Paper 5 (“Pet.”). Eagle View Technologies, Inc. (“Patent Owner”)<sup>1</sup> filed a Preliminary Response. Paper 11 (“Prelim. Resp.”). Thereafter with our authorization (Ex. 3001), Petitioner filed a Reply, Paper 12 (“Reply”), and Patent Owner filed a Sur-reply, Paper 13 (“Sur-reply”).

Under 35 U.S.C. § 314(a), an *inter partes* review may not be instituted unless the information presented in the petition “shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” The following findings of fact and conclusions of law are made for the sole purpose of determining whether Petitioner meets the threshold for initiating review.

For the reasons stated below, we determine that Petitioner has not established a reasonable likelihood that it would prevail with respect to at least one claim. We, therefore, deny institution of *inter partes* review.

### A. Related Matters

The parties indicate that the ’840 patent is involved in *Eagle View Technologies, Inc., and Pictometry Int’l Corp. v. Roofr Inc.*, No. 1:21-cv-01852-RGA (D. Del.) (“the Roofr Litigation”). Pet. 5, 83; Paper 3, 2. Patent Owner also identifies the following proceedings as related matters:

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<sup>1</sup> Patent Owner notes that “Petitioner incorrectly identified the Patent Owner as Pictometry International Corp. The Patent Owner is Eagle View Technologies, Inc., as demonstrated by the assignment recorded with the USPTO, Reel024479, Frame 0135.” Paper 3, 2, n.2.

- *Eagle View Technologies, Inc., and Pictometry Int'l Corp. v. GAF Materials LLC*, No. 2:22-cv-00215-TS-DAO (D. Utah);
- *Eagle View Technologies, Inc., and Pictometry Int'l Corp. v. NearMap US, Inc.*, No. 2:21-cv-00283-TS-DAO (D. Utah); and
- *Xactware Solutions, Inc., v. Eagle View Technologies, Inc.*, IPR2016-00586 (PTAB), challenging the '840 patent (Institution denied).

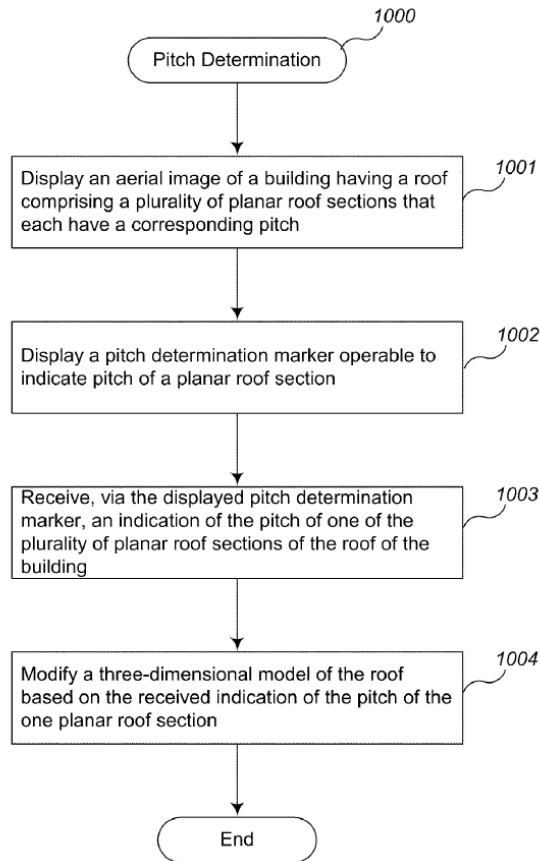
Paper 3, 2.

In its Preliminary Response, Patent Owner also notes that “[t]he '840 patent was involved in *Eagle View Technologies, Inc. v. Xactware Solutions, Inc.*, No. 1:15-cv-07025-RMB-SAK (D.N.J.) (the ‘Xactware Litigation’).” Prelim. Resp. 20 (noting the litigation is reported as, *Eagle View Techs., Inc. v. Xactware Sols., Inc.*, 485 F. Supp. 3d 505 (D.N.J. 2020)).

#### *B. The '840 Patent*

The '840 patent is titled “Pitch Determination Systems and Methods for Aerial Roof Estimation,” and “relates to systems and methods for estimating construction projects, and more particularly, to such systems and methods for determining roof measurement information based on one or more aerial images of a roof of a building.” Ex. 1001, code (54), 1:15–20. The '840 patent addresses problems with existing techniques for determining roof characteristics and providing written estimates to repair or replace roofs. *Id.* at 1:25–60.

The '840 patent determines pitches for sections of a roof using a pitch determination routine. *Id.* at 2:44–45, 3:1–5. Figure 10 of the '840 patent, reproduced below, illustrates a flow diagram of a pitch determination routine. *Id.* at 2:44–45, 21:23–25.



**Fig. 10**

Figure 10 of the '840 patent, reproduced below, illustrates a flow diagram of a pitch determination routine. *Id.* at 2:44–45, 21:23–25.

Pitch determination routine 1000 facilitates the determination of the pitch of a section of a roof, by displaying a pitch determination marker, and modifying a 3D model of the roof based on an indication of roof pitch received via the pitch determination marker. *Id.* at 21:23–31. Pitch determination routine 1000 begins at step 1001, which displays an aerial image of a building having a roof comprising a plurality of planar roof sections that each have a corresponding pitch. *Id.* at 21:31–44. The aerial image(s) of a building having the roof is displayed in a user interface screen. *Id.* At step 1002, the pitch determination routine displays a pitch determination marker operable to indicate pitch of a planar roof section.

*Id.* at 21:45–58. The pitch determination marker may be pitch determination marker 510 (“protractor tool”) or 520 (“envelope tool”), as respectively described in Figures 5B and 5C. The pitch determination routine displays the pitch determination marker by presenting it on the user interface screen displayed on a computer monitor or other display device. *Id.* The ’840 patent explains that “[t]he pitch determination marker is a direct manipulation user interface control, in that an operator may manipulate it (e.g., adjust an angle, change its shape, alter its position, etc.) in order to indicate pitch of a planar roof section.” *Id.*

### *C. Illustrative Claim*

Challenged claims 1, 10, and 16 are independent. Challenged claims 2–9 depend from claim 1, challenged claims 11–15 depend from claim 10, and challenged claims 17–25 and 28 depend from claim 16. Claim 1 is illustrative of the subject matter of the challenged claims.

1. [1a] A computer-implemented method for generating a roof estimate report, the method comprising:
  - [1b] displaying an aerial image of a building having a roof comprising a plurality of planar roof sections that each have a corresponding pitch;
  - [1c] displaying a pitch determination marker operable to indicate pitch of a planar roof section, wherein the pitch determination marker is overlaid on the aerial image of the building having the roof;
  - [1d] receiving, based on the displayed pitch determination marker, an indication of the pitch of one of the plurality of planar roof sections of the roof of the building; and
  - [1e] modifying a model of the roof based on the received indication of the pitch of the one planar roof section.

Ex. 1001, 23:66–24:13 (bracketed designations added by Petitioner (*see* Pet. xi, 26–36)).

*D. Asserted Grounds of Unpatentability*

Petitioner, supported by the declaration of Mr. Anthony Cummings (Ex. 1003), asserts the following grounds of unpatentability (Pet. x)<sup>2</sup>:

<b>Claims Challenged</b>	<b>35 U.S.C. §</b>	<b>References/Basis</b>
1–25, 28	§ 103	Kennedy, <sup>3</sup> Bailey <sup>4</sup>
1–25, 28	§ 103	Kennedy, Bailey, Pictometry <sup>5</sup>
1–25, 28	§ 103	Pershing-789, <sup>6</sup> Kennedy
1–25, 28	§ 103	Pershing-789, Kennedy, Pictometry

II. ANALYSIS

*A. Claim Construction*

In an *inter partes* review proceeding, a patent claim shall be construed using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. § 282(b). 37 C.F.R.

§ 42.100(b) (as amended Oct. 11, 2018). Our rule adopts the same claim construction standard used by Article III federal courts, which follow *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc), and its

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<sup>2</sup> We apply the pre-AIA version of 35 U.S.C. § 103 because the claims at issue have an effective filing date prior to March 16, 2013, the effective date of the Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“AIA”). See Ex. 1001, code (22).

<sup>3</sup> Kennedy et al., U.S. Pat. Appl. Pub. 2009/0304227 A1, published Dec. 10, 2009 (Ex. 1009, “Kennedy”).

<sup>4</sup> David M. Bailey, *ROOFER: Steep Roofing Inventory Procedures and Inspection and Distress Manual for Asphalt Shingle Roofs*, U.S. Army Corps of Engineers, CERL Technical Report 99/100 (Dec. 1999) (Ex. 1010, “Bailey”).

<sup>5</sup> LET (Law Enforcement Technology) Staff, *Pictometry: Aerial Photography on Steroids*, Law Enforcement Technology Vol. 29, No. 7 (July 2002) (Ex. 1008, “Pictometry”).

<sup>6</sup> Pershing et al., U.S. Pat. Appl. Pub. 2008/0262789 A1, published Oct. 23, 2008 (Ex. 1004, “Pershing-789”).

progeny. Under this standard, the words of a claim are generally given their “ordinary and customary meaning,” which is the meaning the term would have to a person of ordinary skill at the time of the invention, in the context of the entire patent including the specification. *See Phillips*, 415 F.3d at 1312–13. Neither party proposes an express construction for any claim terms. Pet. 2; *see generally* Prelim. Resp. We agree that no claim terms require express construction for purposes of this Decision.

*B. Prior Art Status of Kennedy and Pershing-789*

Patent Owner argues that the Petition should be denied because “Petitioner fails to demonstrate a reasonable likelihood that either primary reference, Kennedy or Pershing-789, is prior art to the ’840 patent.” Prelim. Resp. 34. We begin our analysis with the prior art status of Kennedy.

Petitioner asserts that “[a]ll of the references relied upon in the petition Grounds qualify as prior art if October 31, 2008<sup>7</sup> is considered the priority date for the ’840 patent.” Pet. 5 (citing Ex. 1003 ¶ 22). As to Kennedy specifically, Petitioner states that it “published on December 10, 2009 claiming priority to provisional applications filed February 1, 2008 and April 22, 2008. Accordingly, Kennedy qualifies as prior art to the ’840 patent under at least pre-AIA § 102(e).” *Id.* at 5–6. Patent Owner alleges that Kennedy is not prior art because (1) the claims of the ’840 were actually reduced to practice January 8, 2008, and (2) Petitioner has not established

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<sup>7</sup> October 31, 2008, is the filing date of the provisional application to which the ’840 patent claims priority on the face of the patent. Ex. 1001, code (22).

that Kennedy is entitled to rely on the date of its provisional applications.<sup>8</sup>  
Prelim. Resp. 34–35.

As to the first argument, Patent Owner asserts that Petitioner was aware of Patent Owner’s antedating arguments and failed to address them in the Petition. *Id.* at 39–40. Petitioner and Patent Owner are engaged in district court litigation regarding the ’840 patent. *See* Pet. 84. In the amended complaint<sup>9</sup> for that proceeding, Patent Owner cited a decision from the Xactware Litigation that discusses Patent Owner’s antedating assertions. *See* Ex. 2009 ¶ 18 (citing *Eagle View Techs., Inc. v. Xactware Sols., Inc.*, 485 F. Supp. 3d 505 (D.N.J. 2020) (Ex. 2005, “Xactware Order”). In the Xactware Litigation, the defendants argued for the invalidity of the ’840 patent over Sungevity, U.S. Patent No. 8,417,061 (Ex. 2013, “Sungevity”). Ex. 2005, 25. In the Xactware Order, the district court discusses testimony from the inventor of the ’840 patent, Mr. Chris Pershing, testimony from Patent Owner’s expert, Professor Robert Louis Stevenson, and excerpts from Mr. Pershing’s notebook that “supported a finding that Sungevity, with an earliest possible filing date of February 1, 2008[], was not prior art.” Ex. 2005, 27. The testimony before the district court was that the ’840 patent was conceived no later than December 2, 2006, and reduced to practice by January 1, 2008. *Id.*

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<sup>8</sup> Because we are persuaded that Petitioner did not make a sufficient showing rebutting Patent Owner’s arguments regarding the reduction to practice of the claims of the ’840 patent on January 1, 2008, we need not consider whether Petitioner sufficiently argued that Kennedy is not entitled to a February or an April 2008 priority date.

<sup>9</sup> The Xactware Order also was cited in the original complaint, however, the ’840 patent was not asserted in the original complaint. *See* Ex. 2008 ¶ 15.



Of interest to this proceeding is the relationship between Sungevity and Kennedy. Kennedy, at issue here, is the published application that led to Sungevity. *Compare* Ex. 2013, code (65) (Sungevity's prior publication number) *with* Ex. 1009, code (10) (Kennedy's publication number). Patent Owner argues that Petitioner relies on Kennedy as part of each asserted ground, but Petitioner fails to demonstrate a reasonable likelihood that Kennedy is prior art because Petitioner knew or should have known Patent Owner had previously antedated Kennedy and failed to address that issue. Prelim. Resp. 39.

In its Preliminary Response, Patent Owner, however, does more than just point to the prior district court decision; it provides evidence and argument to support its claim of an actual reduction to practice by at least January 2008. To establish an actual reduction to practice, an inventor must prove that he or she (1) constructed an embodiment or performed a process that meets all the claimed limitations of the invention, and (2) determined that the invention worked for its intended purpose. *Cooper v. Goldfarb*, 154 F.3d 1321, 1327 (Fed. Cir. 1998). To that end, Patent Owner provides us with trial testimony from Mr. Pershing that the '840 patent claims were reduced to practice by January 2008. Prelim. Resp. 41 (citing Ex. 2006, 552:16–554:19 (discussing claim 10 of the '840 patent and testifying that “EagleView first offered its products to consumers in January of 2008”)). Patent Owner provides what it describes as corroboration of Mr. Pershing's testimony, a claim chart comparing the elements of claim 10 to Prof. Stevenson's testimony. *Id.* at 41–45. This testimony discussed the ways in which Prof. Stevenson believed that two of Patent Owner's products, which were available in January 2008, embodied the elements of claim 10. *Id.* at

41 (citing Ex. 2007, 1277:15–1278:25, 1284:24–1288:18). For example, for the pitch determination marker of claim 10, Prof. Stevenson testifies that in the Twister product a wireframe is laid over the image of a roof and that manipulation of roof’s pitch caused visible changes to the wireframe. *Id.* at 42–43 (citing Ex. 2007, 1286:11–14). Patent Owner provides similarly specific testimony for each limitation of claim 10. *Id.* at 41–45.

After the Preliminary Response was filed, Petitioner sent an email to the Board requesting authorization to file a reply brief. Petitioner stated that “[s]pecifically, the requested briefs would respond to Patent Owner’s arguments regarding discretionary denial under Section 325(d) (in all petitions) and Patent Owner’s priority/reduction to practice arguments asserted in PR2023-00437.” Ex. 2029. Of note, in that email Petitioner stated that

it was not foreseeable that Patent Owner would argue that the challenged patent is entitled to an earlier priority date based on an alleged reduction to practice . . . as the patents are entitled to a presumption that the priority date listed on the face of the patent is correct. It was not Petitioner’s burden to address this issue in the first instance in the Petition. [Patent Owner] cites to portions of deposition transcripts and an order denying a request for a new trial in support of its priority position from a case not involving Petitioner – Petitioner respectfully submits that evidence is not relevant, but will not address that argument unless requested by the Panel.

*Id.* We authorized Petitioner’s reply and Patent Owner’s sur-reply, but we did not require Petitioner to, or restrict Petitioner from, addressing Patent Owner’s arguments and evidence regarding reduction to practice. *See* Ex. 3001.

On reply, Petitioner asserts that we should reject Patent Owner’s evidence regarding the alleged earlier priority date of the ’840 patent.

Reply 1. Petitioner argues that the asserted evidence was limited to claim 10 and it failed to address the other asserted claims. *Id.* In addition, the Xactware Order was “not a ‘final’ judgment” because the case settled after a jury trial, but prior to a decision from the Federal Circuit. *Id.* Further, Petitioner contends that the jury verdict did not address priority. *Id.* Petitioner also argues that the decisions of the district court are not binding on it as a non-party. *Id.* Finally, Petitioner asserts that it had no opportunity to test the evidence produced by Patent Owner. *Id.*

In these circumstances, Petitioner’s assertions are not persuasive. The question before us is whether Petitioner has done enough to demonstrate a reasonable likelihood of success as to its challenges. 35 U.S.C. § 314. Part of our role in determining whether Petitioner has met that threshold is looking to see whether Petitioner has made a sufficient showing that the asserted art is in fact prior art to the challenged patent.

Setting to the side the question of whether Petitioner had an affirmative duty to discuss the ’840 patent’s entitlement to a January 1, 2008 priority date in its Petition, we are presented with a proceeding in which Patent Owner placed in the record evidence that calls into question the prior art status of Kennedy. Petitioner chose not to directly challenge the sufficiency of Patent Owner’s priority assertions, but rather decided to state that the evidence was not relevant (Ex. 2029) and then to argue that the district court findings were too limited, and not binding on Petitioner (Reply 1).

As an initial matter, we are persuaded that Patent Owner’s evidence is relevant as to the prior art status of Kennedy. As the Supreme Court has stated “[r]elevant evidence’ is defined as that which has ‘any tendency to

make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence.” *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 587 (1993) (citing Fed. R. Evid. 401). Patent Owner provides us with testimonial evidence that goes to whether there was an actual reduction to practice prior to the earliest possible filing date for Kennedy. As such, we shall consider it and give it appropriate weight. *See Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1538 (Fed. Cir. 1983) (“It is jurisprudentially inappropriate to disregard any relevant evidence on any issue in any case, patent cases included.”).

While it is true that Patent Owner’s evidence specifically refers to claim 10, we are not persuaded that this undermines Patent Owner’s arguments. *See* Sur-Reply 3. Claim 10 was the only claim asserted in the Xactware litigation so witness testimony would have understandably been directed to claim 10 and not the other claims in this proceeding. *See* Ex. 2005, 6 n. 4. Petitioner, however, recognizes the substantial similarity of the independent claims in this proceeding. For example, Petitioner provides a detailed discussion of how Kennedy and Bailey are alleged to teach the limitations of independent claim 1. *See* Pet. 26–35. As to independent claims 10 and 16, Petitioner refers back to its allegations regarding claim 1 for each element of the other two independent claims. *See id.* at 48–49 (claim 10), 50–51 (claim 16). As such, Patent Owner’s evidence as to claim 10 would also apply to the other independent claims of the ’840 patent.

Petitioner’s other arguments regarding Patent Owner’s evidence misapprehend the issue at hand. *See* Reply 1; *see also* Sur-Reply 3–4

(asserting that Petitioner's arguments miss the point). The issue before us is not one of estoppel, but rather whether Petitioner has sufficiently shown a reasonable likelihood of success. The Xactware Order and prior testimony from Mr. Pershing and Prof. Stevenson need not be binding on Petitioner to be probative as to the prior art status of Kennedy. Petitioner argues that it has not yet had an opportunity to test or vet Patent Owner's evidence, but that does not prevent us from considering that evidence at this stage. For example, if Patent Owner had chosen to provide declarations from its witnesses rather than transcripts of prior testimony we still would have considered that evidence and given it appropriate weight despite the fact that Petitioner had not yet had a chance to cross examine these witnesses. At this stage in the proceeding, it is Petitioner's burden to establish that it has a reasonable likelihood of succeeding despite the arguments and evidence adduced by Patent Owner. *See* 35 U.S.C. § 314.

On the facts before us, Petitioner has provided neither argument nor evidence to outweigh Patent Owner's showing, which has raised serious questions as to the prior art status of Kennedy. Petitioner was allotted briefing to address issues raised in the Preliminary Response and chose not to address the sufficiency of evidence that it referred to as "not relevant" without sufficiently explaining why Patent Owner's evidence lacked relevance. This leaves us to decide Petitioner's likelihood of success with evidence from Patent Owner that is largely unchallenged and un rebutted. We see nothing in the record to indicate that the evidence is not credible and we find it relevant that the district court noted no issues with the evidence that was presented before it at trial. *See* Ex. 2005, 26–30. At this stage, Petitioner is required to demonstrate a reasonable likelihood that it will

prevail as to at least one challenged claim. This standard is not as high as the preponderance of the evidence standard that would have been applied at the final decision stage, but it still requires a showing by Petitioner to meet that reasonable likelihood threshold. Petitioner's bare assertion that Kennedy is prior art to the '840 patent based on a claim of priority to its provisional applications is insufficient in the face of testimony from the '840 patent inventor and Patent Owner's trial witness. Petitioner had an opportunity on reply to present us with argument to support its view that Patent Owner's evidence is unavailing. Petitioner, however, failed to do so.

For the foregoing reasons and under the facts and circumstances present in this case, we agree with Patent Owner that Petitioner has not made a sufficient showing that would demonstrate that Kennedy is prior art with respect to the '840 patent. Kennedy is an integral part of each of Patent Owner's challenges<sup>10</sup> (*see* Pet. x, 25–26, 55–57, 59, 79) and as such, all of Petitioner's challenges fail if Kennedy is not prior art.

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<sup>10</sup> To the extent that Petitioner asserts that Pershing-789 and Pictometry would have rendered the claims unpatentable without Kennedy, Patent Owner argues that its evidence of a January 2008 actual reduction to practice also antedates Pershing-789. *See* Pet. 79 (arguing that “to the extent Patent Owner argues Kennedy is missing this limitation, or that Kennedy was substantively considered by the Examiner already during prosecution (it was not), the claimed ‘pitch determination marker’ is also taught by Pictometry.”); *see also* Prelim. Resp. 47–48 (asserting that Pershing-789 is not prior art because the asserted January 2008 actual reduction practice would predate Pershing-789's earliest possible priority date of October 23, 2008). Petitioner provides no additional argument nor evidence to address the prior art status of Pershing-789 in light of Patent Owner's argument and evidence. *See* Pet. 9 (asserting Pershing-789 is prior art due to its October 23, 2008 publication date); *see also* Reply 1 (arguments discussed above in regards to Kennedy's prior art status). As such, for the same reasons

### III. CONCLUSION

For the foregoing reasons, we have determined that Petitioner has not established a reasonable likelihood of prevailing with respect to any claims. Thus, we do not institute an *inter partes* review.

### IV. ORDER

For the foregoing reasons, it is  
ORDERED that, pursuant to 35 U.S.C. § 314(a), the Petition is denied, and no *inter partes* review is instituted.

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discussed above, Petitioner also fails to demonstrate a reasonable likelihood of success for the grounds based on Pershing-789.

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