

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MOBILEYE GLOBAL, INC., and
ZF ACTIVE SAFETY AND ELECTRONICS US LLC,

Petitioner,

v.

FACET TECHNOLOGY CORP.,
Patent Owner.

Case IPR2024-01111
Patent No. 9,671,328

**PETITIONER'S RESPONSE TO PATENT OWNER'S
DIRECTOR REVIEW REQUEST¹**

¹ This Response was authorized by e-mail dated February 24, 2026. Ex.

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I. Introduction

Patent Owner's Request for Director Review (Paper 40, "Request") is belied by the record. First, Patent Owner alleges that the Board missed purported contradictions in Dr. Thorpe's expert testimony. But the Board squarely addressed those allegations and expressly found no such contradictions. Next, the Request alleges claim-construction error, contending that the Board "ignored" requirements of the '328 patent claims and did not provide a sufficient number of paragraphs of analysis. But the Board expressly addressed those very claim construction arguments not only in the Final Written Decision but also in a lengthy analysis in the Institution Decision. Moreover, as noted in the Final Written Decision—and ignored by Patent Owner—Patent Owner already sought director review of these claim construction arguments after institution and the Director denied it. This Request thus represents Patent Owner's fourth attempt to relitigate a claim-construction issue that has already been fully considered and resolved.

Finally, Patent Owner criticizes the Final Written Decision for citing paragraphs that, while cited in the Petition for the claim, were not cited there for that specific claim element. Patent Owner overlooks that it affirmatively relied on those very paragraphs in its own discussion of the element in the Patent Owner Response. Having placed those materials squarely at issue, Patent Owner cannot now fault the Board for addressing them.

II. Legal Standard

Director Review, based on a Board’s final decision under 35 U.S.C. § 318, is limited to one of four distinct grounds: (a) an abuse of discretion, (b) important issues of law or policy, (c) erroneous findings of material fact, or (d) erroneous conclusions of law. *See* USPTO Website, *Director Review Process*, Section 5.A, <https://www.uspto.gov/patents/ptab/decisions/director-review-process> (last visited Feb. 25, 2026).

III. Argument

None of the four recognized grounds for Director Review exist here. Patent Owner’s arguments rehash arguments that the Board—and even the Director—previously rejected. Without more, Patent Owner presents no basis to disturb the Board’s conclusions in its FWD, which are supported by the record and case law before it.

A. The Board Evaluated Patent Owner’s Contradiction Argument and Properly Found Dr. Thorpe’s Testimony Credible and Not Contradictive

Patent Owner first contends that the Board abused its discretion by “crediting self-contradictory opinions of Petitioner’s expert.” Request at 3. In his original declaration, Dr. Thorpe testified how, *inter alia*, Gallagher in view of Schofield render obvious claims 1 and 9. *See generally* Ex. 1003, ¶¶ 52-126.

Patent Owner first errs by arguing that for the “determine[s] ... a [] location of the road marker” limitation in claims 1 and 9, Dr. Thorpe *only* uses Gallagher’s GPS interface and gearbox data to satisfy the location requirement. Request at 3. Patent Owner misstates the record for two reasons. First, for corresponding limitation of claim 9 (limitation [9F]), Dr. Thorpe testified that Gallagher and Schofield render obvious this limitation. *See* Ex. 1003, ¶¶75-80. As with the Parties’ briefing, Patent Owner improperly continues to read and attack the teachings of references in isolation and not as the proposed combination. *See Palo Alto Networks, Inc. v. Centripetal Networks, LLC*, 122 F.4th 1378, 1386 (Fed. Cir. 2024). As Dr. Thorpe originally testified, the combination proposes using “Schofield’s determination of a light source’s location within a field of view because doing so would have improved Gallagher’s computer by allowing it to differentiate between road markers ‘that are spaced apart on the road.’” Ex. 1003, ¶77. For claim 1 (limitation [1H], as well as for limitation [9F]), Dr. Thorpe also relied on Gallagher’s disclosure of using the vehicle’s GPS interface “to pinpoint the position of the vehicle and/or markers 2 as measurements are being taken.” Ex. 1003, ¶¶80, 117; Ex. 1005, ¶48. Second, the Request’s quote on page 3 also clips Dr. Thorpe’s testimony, which also stated that “Gallagher’s apparatus then ‘stores data measured on the ... location of each ... road marking tested.’ Gallagher, [0012], [0022].” Ex. 1003, ¶117. In other words, Dr. Thorpe pointed to Gallagher meeting the element

because it discloses storing marker locations and that it would have done so using GPS and transmission data.

Patent Owner focuses on Dr. Thorpe’s testimony for a further narrowing claim element that requires a specific way for determining the marker location. Request at 3; Ex. 1003, ¶176. There, Dr. Thorpe’s testimony was that Gallagher’s GPS position “corresponds to the location of the active sensor” and “a POSITA would have recognized that additional steps would have been necessary to also determine the location of the markers.” *Id.*, ¶176. This was explaining why a POSITA may look to references that explain how to get from Gallagher’s GPS data to the marker location information it discloses storing. In response to Patent Owner’s argument and Patent Owner’s expert, Dr. Thorpe submitted a supplemental declaration to refute certain arguments. *See generally* Ex. 1030. Consistent with his prior testimony, Dr. Thorpe’s supplemental declaration explained that “even though the GPS data [of Gallagher] is directly tied to the position of the vehicle, it would have been a simple matter of translation to convert the GPS location information to the location of the road marker.” *Id.*, ¶43. This contextualized how a POSITA would understand Gallagher’s disclosure of using the vehicle’s GPS interface “to pinpoint the position” of road markers. Ex. 1005, ¶48. Patent Owner also takes issue with Dr. Thorpe’s deposition testimony providing that determining the location of the markers “would be obvious.” Request at 8 (citing Ex. 2026 at 74:24-77:24). But Dr. Thorpe’s

deposition testimony regarding determining the location of the road marker “be[ing] obvious” is entirely consistent with his two declarations where he proposes claims 1 and 9 are rendered obvious by, *inter alia*, the disclosures in Gallagher. *Cf.* Ex. 1003; Ex. 1030. Despite Gallagher’s explicit disclosures, Patent Owner critiques Dr. Thorpe’s rationale as “plain[] admissions that Gallagher itself does not disclose determining the actual location of road markers.” Request at 7. But as the Board in its Final Written Decision correctly recognized, Dr. Thorpe never testified nor admitted “that Gallagher’s system does not perform these additional steps;” rather, Dr. Thorpe relied on other references to teach “particular manners of doing so.” FWD at 28. Patent Owner’s cited caselaw is inapposite. *See In re Spormann*, 363 F.2d 444, 448 (C.C.P.A. 1966) (distinguishing “the inherency of an advantage and its obviousness [as] entirely different questions”).

Further, and as the Board already recognized, these statements present no contradictions. FWD at 26-29, 40-41. In the context of claims 1 and 9, the Board credited this consistency and recognized that “Gallagher discloses that its gearbox revolution sensor and its GPS interface can be used as ‘[l]ocation means for determining the location of the markers.’” *Id.* at 28 (quoting Ex. 1005, ¶48); *see also id.* at 41 (finding Patent Owner’s arguments unavailing and relying on the same analysis for claim 1 in finding limitation obvious). Thus, the Board correctly decided

the evidence, taken together as the proposed combination suggested, rendered the location determination limitation of claims 1 and 9 as obvious. *Id.*

B. Patent Owner’s Reliance on *Interactive Communications* is Misplaced

Patent Owner attempts to broaden the Director’s holding of *Interactive Communications* beyond its reasonable means, and the Director should reject any invitation to so broaden. In *Interactive Communications Int’l, Inc. v. Blackhawk Networks Inc.*, the Director granted Patent Owner, Blackhawk Network Inc.’s request for Director Review and vacated the Board’s Final Written Decision after finding that the Board “abused its discretion by improperly crediting expert testimony *that has multiple material contradictions and that the Board found lacked credibility at least in certain respects.*” IPR2024-00465, Paper 40 at 3 (Director Oct. 9, 2025) (emphasis added). But as described above, Dr. Thorpe’s testimony contained no material contradictions. *See* Section III.A *supra*. But greater is the second prong from *Interactive Communications* where the Board relied on expert testimony that it held, in other respects, *lacked credibility*. *Interactive Comm’cns*, Paper 40 at 3 (citing the Board’s final written decision where it “agree[d] with Patent Owner that [Petitioner’s expert’s] explanation as to how his Declaration supports that combination ... is not credible”). The Director also found that because Petitioner’s expert was found to be not credible “as to multiple material

aspects of his testimony, it would be inappropriate ... to rely on this testimony for the other grounds.” *Id.* at 4. Here, unlike *Interactive Communications*, there was no finding that Dr. Thorpe’s testimony lacked credibility.²

**C. Patent Owner’s ‘Detect Objects of Interest’ Argument
Repackages Previously Argued Claim Construction Arguments
that were Extensively Briefed and Considered by Both the Board
and the Director**

As to its second argument, Patent Owner contends that the Board erred by “fail[ing] to make any findings as to the claims’ ‘for each’ limitation.” Request at 9-15. However, this merely attempts to repackage Patent Owner’s previous arguments made earlier in the proceedings regarding a specified order of the “detect” and “determine” steps found in claims 1 and 9. *Id.* at 9-10. This issue was extensively litigated through the Board’s Final Written Decision, including previous briefing to the Director.

Specifically, during the Patent Owner’s Preliminary Response (Paper 6), Patent Owner originally contended that it “does not contend that any claim term should receive an express construction.” Paper 6 at 4-5. Despite this, Petitioner

² While the Board disagreed with Dr. Thorpes’s position on several dependent claims, disagreeing with a position is far from a finding of lacking credibility.

requested, and the Board authorized, briefing on Patent Owner's proposed order in which recited actions must be performed as found in the claims. *See* Ex. 3001; Paper 7. Further, Patent Owner submitted a preliminary sur-reply that argued, *inter alia*, that claims 1 and 9 require "'determination' be performed on an already 'detected' 'object of interest.'" Paper 8 at 1 (cleaned up). The Board acknowledged Patent Owner's arguments in its institution decision, concurring that the step of determining....cannot occur before the object of interest is detected." *See* Paper 14 at 28-29. But the Board ultimately found that the '328 Patent's disclosure of *concurrent* processing, as supported by well-established precedent, substantiated Petitioner's position that Gallagher's system performs the associated detecting and determination steps. *Id.* at 29-30.

Despite the (already) extensive briefing, Patent Owner moved for Director Review of the Institution Decision predicated entirely upon the Board's decision regarding the sequencing of the claim steps. *See generally* Paper 18. Petitioner thus expended greater time and resources explaining how the Board's findings are predicated upon the correct interpretation of the claims and prior art. *See generally* Paper 19. Of note, Patent Owner admitted that the computer system need not "*complete* the step of detecting objects of interest *before* beginning the determining step." Paper 7 at 1-4 (emphasis in original); Paper 18 at 7 (agreeing that the claims do not require detecting "multiple objects of interest ... before any

‘determin[ation]’” is made). Petitioner further showed how Gallagher teaches a computer configured to perform both steps as claimed. Paper 19 at 3-4.

Specifically, for the detecting feature, Gallagher’s computer detects an object of interest based on “which light sensor 6 is reading the highest reflectance reading” and “provide[s] the operator with that information” to help the driver keep the vehicle properly positioned on the road while measurements are taken. Petition 21-22 (citing Ex. 1005 ¶¶[0033], [0060]-[0064]; Ex. 1003 ¶72). As Gallagher explains, the highest reflectance reading from the light sensors, each of which “covers a section” of the field of view, represents an object of interest within the field of view because “background reflectance levels on non-road marking sections of the road are low” and reflectance levels from “road markers 2 are relatively high.” Ex. 1005 ¶[0060]; Petition 21-22. The Board preliminarily found that “Gallagher supports Petitioner’s contentions” for the detecting feature. Paper 14 (“DI”) at 26, 34-35. For the determining features of claims 1 and 9, Gallagher’s computer then “determine[s] the background reflectance level on the road,” “establish[es] non-marker reflectance levels,” and selects “which reflectance levels” indicate a reflective surface of a road marker. Petition 22-23 (citing Gallagher ¶¶[0033], [0055]-[0056], [0065]-[0066]; Ex. 1003 ¶74). Stated another way, as the vehicle traverses the road, for each reflectance reading that Gallagher’s computer interprets as an object of interest, Gallagher’s computer determines whether that reflectance reading indicates a

reflective surface of a road marker. *See* Ex. 1005, ¶¶55-71 (describing Gallagher’s “computer controlled process”). This is all the claims require.

Based on this full briefing, the Director considered and denied Patent Owner’s initial request for Director Review. *See* Paper 21. The Parties further briefed the appropriate construction after Patent Owner’s Response submitted further claim construction arguments regarding the sequencing of the associated steps. *See* Paper 25; *see also* Paper 28 (Petitioner’s Reply to Patent Owner’s Response); Paper 34 (Patent Owner’s Surreply). And at the oral hearing, Petitioner demonstrated how the Petition shows, based on Gallagher’s supporting disclosures, “detect[ing] objects of interest and determine[ing] whether each object has a reflective surface.” *See* Or. Tr. at 6:11-21, 9:10-13:22. With eight (8) different briefings, oral argument, two decisions from the Board, and a previous denial by the Director, Patent Owner again contends error on repeated grounds. No error exists.

Patent Owner argues that “[d]espite being the key disputed issue between the parties, the Board’s Final Written Decision contains little analysis of this issue.” Request at 11. But as the Board concluded in its Final Written Decision, “Patent Owner’s arguments appear to be duplicative of arguments Patent Owner made in its request for rehearing by the Director of the Institution Decision (*see* Paper 18), which was denied (*see* Paper 21).” FWD at 14. *Cf. Yeda Rsch. v. Mylan Pharms. Inc.*, 906 F.3d 1031 (Fed. Cir. 2018) (holding that “the Board did not err because the

record is replete with Board findings” despite Patent Owner “fault[ing] the Board for not considering all of its arguments”).

Patent Owner also argues that the Board’s FWD improperly relies on disclosures in Gallagher (specifically, paragraphs [0067] and [0068], discussing Gallagher’s steps (h) and (i), respectively) that “the Petition did not cite.” Request at 11-12. But there was no improper reliance. First, the Board’s analysis is grounded in the very disclosure Petitioner relied upon in its Petition—namely, Gallagher paragraph [0066]. *See* Paper 1 at 22-22 (citing Ex. 1005, ¶[0066]); FWD at 25 (“Gallagher discloses that its computer analyzes the measured data to select ‘which reflectance levels indicate a road marker.’”) (citing Ex. 1005, ¶[0066]). Thus, the FWD credited the same theory and disclosure advanced in the Petition.

Second, Patent Owner “is the party that first raised the issue” by expressly using Gallagher’s paragraphs [0067] and [0068] in its Patent Owner Response in support of its apparent interpretation of the claim limitation, which Petitioner responded to “as it was entitled to do so.” *Idemitsu Kosan Co., Ltd. v. SFC Co., Ltd.*, 870 F.3d 1376, 1381 (Fed. Cir. 2017) (citing *Genzyme Therapeutic Prods. LP v. Biomarin Pharm. Inc.*, 825 F.3d 1360, 1366 (Fed. Cir. 2016) (“There is no requirement, either in the Board’s regulations, in the APA, or as a matter of due process, for the institution decision to anticipate and set forth every legal or factual issue that might arise in the course of the trial.”)). Specifically, Patent Owner

advanced its apparent interpretations of the disputed claim terms and applied those interpretations to Gallagher, using paragraphs [0067] and [0068]. *See* Paper 25 at 7, 26. Petitioner responded, as entitled, by addressing those disclosures in rebuttal without altering its obviousness theory. Consistent with that principle, Petitioner's Reply simply rebutted Patent Owner's apparent interpretation of the "determining" limitation and explained, using Gallagher paragraphs [0067] and [0068], among others, how Gallagher discloses the limitation. *See* Paper 28 at 14 (Petitioner's Reply) (citing Gallagher, ¶¶[0060]-[0071], [0074], [0079], FIG. 5; Ex. 1030, ¶32). Petitioner further addressed these disclosures at the oral hearing, *see* Or. Tr. at 6:11-21, 9:10-13:22, and Patent Owner itself acknowledged Gallagher's teachings at the consolidated oral hearing in the copending IPR (IPR2024-01110) involving the '255 patent. *Cf.* Or. Tr. at 63:19-26.

Patent Owner's reliance on *EmeraChem Holdings, LLC v. Volkswagen Grp. of Am., Inc.* is further misplaced. In *EmeraChem*, the Federal Circuit found the Board improperly relied on a reference to invalidate certain dependent claims that the parties *never* proposed or disputed as grounds of invalidation. *See* 859 F.3d 1341, 1348 (Fed. Cir. 2017). Here, however, Patent Owner takes issue with two *paragraphs* from a reference: (1) that forms the basis of Petitioner's invalidity grounds as provided in its Petition and the Board's institution decision, (2) that

Petitioner cited in rebutting theories put forward in the Patent Owner Response as part of its Reply, and (3) that Patent Owner affirmatively discussed itself.

Given these circumstances, there was more than sufficient opportunity for Patent Owner “to submit and consider facts and arguments” such that Patent Owner was provided “sufficient notice” that these paragraphs may form part of the basis for the Board’s rationale in its Final Written Decision. *Cf. EmeraChem*, 859 F.3d at 1348-1351; *see also Genzyme Therapeutic*, 825 F.3d at 1366 (affirming the Board’s final written decision where the Board relied on the same combinations of reference that were set forth in its institution decision).

In sum, the Board did not “simply disregard the claim language.” Request at 15. It had already heard and previously decided the issue following extensive briefing. That Patent Owner complains that the Board did not go through great lengths to spell out its rationale once more is of no consequence; the Board adequately addressed each limitation for claims 1 and 9 and demonstrated how Petitioner established by a preponderance of the evidence its proposed combinations render claims 1 and 9 unpatentable as obvious. Patent Owner may disagree or may not like the Board’s determination, but absent one of the narrow grounds for Director Review, such a request remains in vain.

IV. Conclusion

Having shown no error and no abuse of discretion exists, Petitioner requests that the Director deny Patent Owner's Director Review Request.

Respectfully submitted,

Dated: March 3, 2026

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing **Petitioner's Response to Patent Owner's Director Review Request** was served on March 3, 2026, via e-mail directed to counsel of record for the Patent Owner at the following:

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