

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GEOTAB INC. AND GEOTAB USA, INC.
Petitioners,

v.

FRACTUS, S.A.,
Patent Owner.

Case No. IPR2025-01026
Patent 11,031,677

PATENT OWNER'S REQUEST FOR DIRECTOR REVIEW

I. Introduction

U.S. Patent No. 11,031,677 (“the ‘677 Patent”) was challenged under three invalidity grounds: Ground 1 challenging claims 1-9 over Dou in view of Ciais-Quadband; Ground 2 challenging claims 1-20 over Dou in view of Ciais-Quadband and Nakano; and Ground 3 challenging claims 1-5 and 12-20 over Baliarda-543 (EX1040).

In the Institution Decision (IPR2025-01026, Paper 20, “ID”), the Panel correctly determined Grounds 1 and 2 failed to meet the standard for institution. ID at 50, 52. The Panel also, however, determined that Ground 3 based on Baliard-543 met the required standard. This determination is an error.

Baliarda-543, U.S. Patent Publication No. 2008/0018543 to Baliarda et al., is the pre-grant publication of U.S. Patent Application No. 11/614,429 (“the ‘429 Application”), a patent application within the ‘677 Patent’s priority chain. It is not contested that Baliard-543 and the ‘677 Patent share a substantially identical disclosure, both of which describe “4G features,” “4G services,” and “4G standards” using multiple examples. E.g., EX1001 at 25:1-12; *e.g.*, EX1040 at ¶ [0212]. In spite of these substantial and identical disclosures of 4G standards, the Panel determined that independent claims 1 and 12 of the ‘677 Patent were not entitled to their priority claim to the ‘429 Application due to their recitations directed to an antenna

“configured to support ... [a frequency band] being associated with a 4G communication standard.” ID at 66.

As explained below, the Panel reached this conclusion by reaching an erroneous conclusion of law by applying an incorrect written description analysis. Specifically, the Panel looked for disclosure of a specific embodiment of the claimed invention instead of evaluating the support for the invention as claimed. In relying on this novel analysis, the decision, if left undisturbed, will open the floodgates to post grant challenges every time litigants disagree on the claim construction of a claim in an asserted continuation patent. Finally, the decision is based on a misunderstanding of Petitioners’ construction of “4G communication standard.”

Patent Owner also requests rehearing of the Discretionary Denial Decision in this proceeding (IPR2025-01026, Paper 14, “DD”). Since the issuance of the DD, circumstances have changed such that it does not make sense for the Board to waste resources on this proceeding. The ‘677 Patent is one of five patents being asserted against Petitioners in *Fractus, S.A. v. Geotab Inc.*, No. 2:24-cv-01008 (E.D. Tex. filed December 6, 2024)(“the Litigation”). *Inter partes* reviews of U.S. Patent Nos. 8,456,365 and 8,810,458 were discretionarily denied. IPR2025-00928, Paper 11; IPR2025-00929, Paper 11. Post grant review of U.S. Patent No. 12,095,149 was denied on the merits. PGR2025-00056, Paper 11. Accordingly, regardless of the outcome in this proceeding, the conflict will continue between the Parties with

respect to these patents. Further, this proceeding likely will not even resolve the conflict between the parties with respect to the '677 Patent. As discussed above, the Panel determined that Grounds 1 and 2 failed to meet the institution standard, a lower standard than that required to invalidate a claim in an instituted trial. 35 U.S.C. §§ 314(a), 316(e). Ground 3, however, does not address all of claims 1-20. Accordingly, the trial is unlikely to invalidate all claims in the '677 Patent, leaving unresolved conflicts between the parties that will be resolved in the Litigation. Finally, in a case like this, where the Panel has already determined that two-thirds of Petitioners' invalidity grounds are insufficient, it is a waste of Board resources to pursue a full trial on the merits of the Petition, particularly because the instituted trial will not resolve all the issues between the parties while a parallel forum, the Litigation, will fully resolve the Parties' disagreements.

II. The Sole Invalidity Ground Supporting Institution is in Error

The Panel determined that the '677 Patent is not entitled to its priority date because:

Petitioner demonstrates a reasonable likelihood that as of the '429 application's December 21, 2006, filing date, the '429 application did not "reasonably convey[] to those skilled in the art that the inventor had possession" of **"an antenna configured to send or receive signals in the 698-806 MHz spectrum," including LTE band 12 that Patent Owner relies on in the Geotab litigation,** for "communication with

any ‘4G communication standard’ **because those frequencies were not usable for any mobile device communications at the time of filing.**”

ID at 65-66 (emphasis added).

The most glaring of the problems with this determination is the Panel’s analysis being focused on a specific embodiment instead of the claim language. “[A]n antenna configured to send or receive signals in the 698-806 MHz spectrum” is not recited in the claims. The Panel overlooked or misapprehended that the correct written description analysis looks for sufficient description of the *claimed invention*.¹ The ID should have looked for written description support for the claimed antenna “configured to support ... [a frequency band] being associated with a *4G communication standard*.” Further, the Panel’s decision to deny the ‘677 Patent its priority claim is unprecedented. As noted by Patent Owner on pages 29-31 of the POPR, the Board denies a patent its priority claim only when the child application has a different specification from the parent or claims subject matter not disclosed or described in the parent. Here, the parent application and child patent share an identical specification that provides clear support for the claim language. Third, the decision is in error as it is based on a misunderstanding of Petitioner’s construction

¹ The correct analysis is on pages 30-31 of the Patent Owner Preliminary Response, Paper 12 (“POPR”).

of “4G communication standard” – Petitioners do *not* believe that “4G communication standard” encompasses *at least* LTE frequency band 12.

A. The Panel Performed the Wrong Analysis

The ID finds that “the ’429 application did not ‘reasonably convey[] to those skilled in the art that the inventor had possession’ of **‘an antenna configured to send or receive signals in the 698-806 MHz spectrum,’ including LTE band 12.**”

ID at 65. “[A]n antenna configured to send or receive signals in the 698-806 MHz spectrum,’ including LTE band 12” is not recited in the claims of the ’677 Patent. The correct written description analysis determines whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of **the claimed subject matter** as of the filing date. *Mentor Graphics Corp. v. EVE-USA, Inc.*, 851 F.3d 1275, 1296 (Fed. Cir. 2017). The panel should have analyzed whether the ’429 application reasonably conveyed to those skilled in the art that the inventors had possession of what is recited in the claims: an antenna “configured to support ... [a frequency band] being associated with a 4G communication standard.” The ’429 Application clearly conveyed to the skilled artisan that the inventors were in possession of such an antenna.

The parties agree that multiple examples of “4G Communication standards” and their associated frequencies were disclosed in the ’429 Application. In fact, Petitioners described these examples in the Petition:

Thus, “4G communication standard” is met by a “wireless standard” for “4G services” and “antenna... configured to... receive signals from a 4G communication standard” (or “receive signals employing a 4G communication standard”) is met by an antenna that is operable in a frequency range used by a “4G service,” where the “i.e.” signal means that the patent defines a “4G service” as “comprising 3G and other advanced services such as for instance HSDPA, WiBro, WiFi, WiMAX, UWB or other high-speed wireless standards[.]

Petition at 29-30.

Patent Owner similarly described these examples in the POPR:

A "first antenna ... configured to support at least three frequency bands ... at least one of the three frequency bands being associated with a 4G communication standard" would be an antenna configured to support a frequency band associated with a technical specification related to the Fourth Generation (4G) of broadband cellular network technology.

The Specification of the '677 Patent explains that “4G standards” (which it sometimes calls “4G services”) include “HSDPA, WiBro, WiFi, WiMax, UWB, or other high-speed wireless standards.” EX1001 at 25:1-12. Thus, examples of the claimed “frequency bands being associated with a 4G communication standard" may include 1900-2170 MHz, 810-960 MHz, 1710-1990 MHz, or 2-11 GHz (including some of its subregions such as 3-10 GHz, 2.4-2.5 GHz, and 5-6 GHz), as well as “additional frequency bands corresponding to said 4G standards.”

POPR at 14-15.

In other words, the Parties agree that the '429 Application disclosed multiple species of the genus "4G communication standard."

A genus can be sufficiently disclosed by "either a representative number of species falling within the scope of the genus or structural features common to the members of the genus so that one of skill in the art can visualize or recognize the members of the genus." *Brita LP v. Int'l Trade Comm'n*, 156 F.4th 1326, 1335 (Fed. Cir. 2025). The '429 Application clearly provides such disclosure through multiple representative species ("HSDPA, WiBro, WiFi, WiMax, UWB, or other high-speed wireless standards" and their associated frequencies) and by describing structural features of the genus in the form of multiple example frequencies at which the antennas operate, as well as their highspeed operation. *See, e.g.*, POPR at 15 *citing* EX1001 at 25:1-12.

In fact, in many instances, disclosure of just a single species is sufficient to provide written description support for a claim directed to a genus where the field is predictable and the person skilled in the art would readily discern that other members of the genus would perform similarly. *Bilstad v. Wakalopulos*, 386 F.3d 1116, 1125 (Fed. Cir. 2004). Petitioners do not allege that the field of antennas is unpredictable, nor have they alleged that the operation of an antenna at one particular frequency would perform substantially differently than others. Petitioners instead take the opposite position, relying on predictability of the antenna arts in alleging

obviousness of the claimed inventions. *E.g.*, Petition at 35-36; EX1007 at ¶¶ 124-127.

The ID erred because, instead of looking for support for “4G communication standard” in the ‘429 Application, of which there is plenty, the Panel looked for explicit support for a specific species or embodiment of the claimed invention. *E.g.*, ID at 67 (“[T]hose disclosures do not show possession of LTE band 12 with 698-716 MHz for uplink and 728-746 MHz for downlink.”). This is not the correct analysis:

[T]he specification need not feature a written description of every specific variant within the scope of the claim. Indeed, it would make little sense for a written description requirement explicitly to include every possible iteration of the broader invention. To do so would encourage patentholders to write out potentially infinite possibilities.

ABS Glob., Inc. v. Inguran, LLC, 914 F.3d 1054, 1075 (7th Cir. 2019).

Because the Panel incorrectly sought disclosure of a specific embodiment of the claimed invention, instead of looking to the clear support for the invention as claimed, the Panel incorrectly determined that the ‘429 Application failed to provide written description support for independent claims 1 and 12. Under the correct analysis, the claims of the ‘677 Patent are fully supported by the ‘429 Application, entitling the ‘677 Patent to the ‘429 Application’s priority date, and eliminating Baliarda-543 as prior art. As Ground 3 based on Baliarda-543 was the sole invalidity

ground that met the standard for institution, the ID is in error, institution should be reconsidered, and the present proceeding should be denied.

B. The ID is Based on a Novel Legal Theory that Will Open the Door to a Flood of New Post Grant Challenges

The Panel's decision to strip the '677 Patent of its priority claim is unprecedented and opens the floodgates to a new set of post grant validity challenges. Patent Owner is not aware of any case in which a continuation with an identical specification to its parent, which uses language in the claims derived directly from the specification of both applications, and in which the applicant provided ample support for the claim recitation in the parent application, was denied priority in an *inter partes* or post grant review. This is, however, what the Panel has done in this proceeding.

Patent Owner does not contest that the Board has previously allowed a priority application to serve as prior art to a child patent, but this has only been done when there is a clear difference between the scope of the priority application's disclosure and the subject matter claimed in the child. Consider, for example, *Reddy's Labs. S.A. v. Invidior UK Ltd.*, IPR2019-00329, Paper 21, at 19 (P.T.A.B. June 3, 2019), where the child claims recited a range lower bound not disclosed in either specification. In *AP America, Inc. v. Pi-Net Int'l, Inc.*, No. IPR2014-00414, Paper 11, at 13 (P.T.A.B. Aug. 18, 2014), a claim feature did not appear in any disclosure

until the filing of the child. In *Butamax Advanced Biofuels LLC v. Gevo, Inc.*, IPR2013-00539, Paper 33, at 11 (P.T.A.B. Mar. 3, 2015), a provisional application disclosed only nucleotide deletions but the child claimed deletions and insertions. In *Propel Orthodontics, LLC v. OrthoAccel Techs., Inc.*, IPR2018-00296, Paper 36, at 20 (P.T.A.B. June 10, 2019), the parent application broadly disclosed “any other suitable duration of time,” where the child recited a specific range. In *Arthrex, Inc. v. Smith & Nephew, Inc.*, 35 F.4th 1328, 1342 (Fed. Cir. 2022) the child was a continuation-in-part that claimed embodiments not disclosed in the parent application. In *ICU Medical v. Alaris Med. Sys.*, 558 F.3d 1368, 1378-79 (Fed. Cir. 2009), every embodiment in the parent application included a “spike” which was omitted in broader claims in the child application. In *Google LLC v. Valtrus Innovations Ltd.*, IPR2022-01406, Paper 40 (Apr. 3, 2024), the child claimed “virtual machines,” but the priority application provided no disclosure of virtual machines. In *Regents of the Univ. of Minnesota v. Gilead Scis., Inc.*, 61 F.4th 1350, 1356 (Fed. Cir. 2023), the child’s claims included subject matter explicitly more specific than the general disclosures in the parent. In all of these cases, the parent and children specifications were different or the child claims included recitations that were clearly distinct from the disclosures in the priority application. That is not the case here.

Claims 1 and 12 of the ‘677 Patent recite an antenna “configured to support ... [a frequency band] being associated with a 4G communication standard.” The

‘429 Patent provides all but *in haec verba* support for “4G communication standard,” discussing and describing multiple examples of “4G features,” “4G services,” and “4G standards” and their associated frequencies. *E.g.*, EX1040 at ¶ [0212]. To Patent Owner’s knowledge, the Board has never invalidated a claim under these facts.

The real disagreement between the parties is not one of support for “4G communication standard,” but of claim construction – how would the skilled artisan have understood “4G communication standard” at the time of invention? Patent Owner believes that the scope of “4G communication standard” is broad enough to include LTE technologies, and the Petitioners disagree. Petitioners recast this “run-of-the-mill” claim construction disagreement as a support issue – because Petitioners were able to find daylight between the Parties’ claim constructions, Petitioners allege that the full scope of the claims is unsupported. If the Board allows this approach, any time a patent owner believes that a claim is broader than the petitioner does, a petitioner will be able to argue that the term lacks written description support and the claim is invalid over the parent. Such an approach would open the door to such a challenge in almost every case where the patent owner asserts a continuation.

As the institution decision based on Ground 3 relies on an invalidity theory unsupported by law, the institution decision is in error, institution should be reconsidered, and the present proceeding should be denied.

C. The Institution Decision is Based on a Misunderstanding of Petitioners' Construction of "4G Communication Standard"

The ID is in error because the decision is based, at least in part, on a misunderstanding that "Petitioner asserts that an ordinarily skilled artisan would have understood that '4G communication standard' recited in claims 1 and 12 encompasses LTE frequency bands," including LTE band 12, 13 and 14. ID at 57. Quite the opposite is true, as the record plainly shows.

Instead, Petitioners assert "The Board should hold Fractus to its litigation position that an LTE band is a 'frequency band associated with a 4G communication standard,'" but Petitioners themselves do not hold to this position. Petition at 91. Petitioners are quite clear in the Petition that they do not think that "4G communication standard" covers this range. Petitioners argued in the Petition, that the disclosures in the Specification of Baliarda-543 and the '677 Patent "*expressly excluded*" an antenna receiving signals at 698-806 MHz from the claimed 'antenna system' because on December 21, 2006, the 698-806 MHz frequency range was allocated to television and could not be used for cellular communication." Petition at 97 (emphasis original). Petitioners clearly believe that the 698-806 MHz frequency range has been excluded from the scope of a "frequency associated with a 4G communication standard."

This misunderstanding by the Panel highlights that the issue between the Parties is about how the skilled artisan would have understood “4G communication standard” at the time of filing of the ‘677 Patent’s priority application. If Petitioners are correct that the ‘677 Patent’s disclosure “*expressly excluded* an antenna receiving signals at 698-806 MHz,” then the argument that “the ’429 application did not ‘reasonably convey[] to those skilled in the art that the inventor had possession’ of ‘an antenna configured to send or receive signals in the 698-806 MHz spectrum,’” is a *non sequitur*. If 698-806 MHz was expressly excluded by the ‘429 Application disclosure, there is no need for the ‘429 Application to provide written description for subject matter outside the scope of the claims. On the other hand, if Patent Owner is correct that the skilled artisan would have understood “4G communication standard” as encompassing these frequencies, then this scope was supported by the ‘429 Application’s multiple examples of “4G features,” “4G services,” and “4G standards” and their accompanying frequencies. In other words, regardless of who is correct about the scope of “4G communication standard,” the alleged written description problem falls away.

As the ID’s determination regarding Ground 3 was based on the Panel’s misunderstanding of Petitioners’ construction of “4G communication standard,” the decision is in error, the institution decision should be reconsidered, and the Petition should be denied.

III. Discretionary Denial Is Warranted

A. This Proceedings Will Not Resolve All Invalidity Issues With Respect to the '677 Patent

The Petition presented three invalidity grounds. The ID determined that Petitioner failed to show a likelihood of success under either Grounds 1 or 2, with only Ground 3, seeking invalidation of claims 1-5 and 12-20 over Baliarda-543, purportedly meeting the standard for institution. ID at 50, 52, 70. The standard to invalidate a claim in an instituted proceeding, however, requires a higher showing than that required for institution. 35 U.S.C. §§ 314(a), 316(e). As the Board has already determined that Petitioner is unlikely to meet the lower “likelihood of success” standard for institution, it is highly likely that Petitioner will fail to meet the higher “preponderance of the evidence” standard for invalidation under Grounds 1 and 2. Therefore, even assuming *arguendo* that Petitioners succeed with respect to Ground 3, claims 6-11 will likely be confirmed as valid as these claims have only been challenged under Grounds 1 and 2. As claim 6-11 are likely to survive an instituted trial, this proceeding will not resolve all the issues between the Parties. The Litigation, however, will. Therefore, the Litigation is the more appropriate forum to address the Parties’ conflict and discretionarily denying this proceeding is appropriate.

B. Institution will Not Resolve All Invalidity Issues Between the Parties

The District Court will address and resolve all the issues in this proceeding, likely in advance of a final written decision in this case, regardless of whether or not this proceeding is instituted. Paper 9 at 11. The '677 Patent is one of many patents asserted against Petitioners in the Litigation. The Board has discretionarily denied *inter partes* review of two of the asserted patents, and denied post grant review of another on the merits. Accordingly, regardless of the outcome in this proceeding, the conflict between the Parties will continue. The Litigation, which will resolve all the issues between the Parties and which is already proceeding in parallel with this proceeding, is the more appropriate forum to address the Parties' conflict and discretionarily denying this proceeding is appropriate.

C. The District Court Litigation is the Better Forum to Address Petitioners' Novel Argument

As discussed in section II.B, *supra*, the invalidity theory set forth in Ground 3 is novel and unsupported by case law. It would be a waste of Board resources to institute a trial to address such a novel issue. As there are numerous issues between the Parties to be addressed in the Litigation, it will provide the better forum to adjudicate Petitioners' novel invalidity theory.

Dated: December 17, 2025

Respectfully submitted,
/Mark J. DeBoy/
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CERTIFICATE OF SERVICE

The undersigned certifies that pursuant to 37 C.F.R. § 42.6(e), a copy of the foregoing **PATENT OWNER'S REQUEST FOR DIRECTOR REVIEW** was served via email (as previously consented to by counsel) on December 17, 2025 to lead and backup counsel of record for Petitioners as follows:

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