

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

RESMED CORP.,
Petitioner,

v.

FRACTUS, S.A.,
Patent Owner.

Case No. IPR2026-00191
Patent 11,031,677

**PATENT OWNER'S SUR-REPLY TO PETITIONER'S AUTHORIZED
REPLY TO PATENT OWNER'S PRELIMINARY RESPONSE**

EXHIBIT LIST

Exhibit No.	Title
Ex. 2001	RESERVED
Ex. 2002	Defendants’ Preliminary Invalidity Contentions dated June 18, 2025 in 2:24-cv-01009-JRG-RSP (E.D.Tex.)
Ex. 2003	Invalidity Contentions for U.S. Patent No. 11,031,677 in 2:24-cv-01009-JRG-RSP (E.D.Tex.)
Ex. 2004	Amended Docket Control Order dated April 10, 2025 in 2:24-cv-01009-JRG-RSP (E.D.Tex.)
Ex. 2005	RESERVED
Ex. 2006	RESERVED
Ex. 2007	RESERVED
Ex. 2008	RESERVED
Ex. 2009	RESERVED
Ex. 2010	Declaration of Hossein Hashemi, Ph.D.
Ex. 2011	Jack H. Winters, “Smart Antennas for Wireless Systems,” IEEE Personal Communications, February 1998
Ex. 2012	3GPP TSG RAN Meeting #26, Document No. RP-040496, “Report of the 3GPP TSG RAN Long Term Evolution Work Shop,” 2 -3 November 2004, Toronto, Canada”
Ex. 2013	3GPP TSG-RAN meeting #28, Document No. RP-050371, “Presentation of Specification to TSG or WG,” Québec City, Quebec, 1–3 June 2005
Ex. 2014	3GPP TSG-RAN meeting #32, Document No. RP-060226, “List of CRs. Supplement to Report from RAN WG2,” Warsaw, Poland, 31 st May - June 2006

Ex. 2015	Hannes Ekstrom, et al. “Technical Solutions for the 3G long-term evolution,” IEEE Communications Magazine • March 2006
Ex. 2016	Takehiro Nakamura, et al., “Super 3G Technology Trends, Part 1: Super 3G Overview and Standardization Activities,” NTT DoCoMo Technical Journal Vol. 8, No. 1
Ex. 2017	Federal Communications Commission Report and Order FCC 97-421, “In the Matter of Reallocation of Television Channels 60-69, the 746-806 MHz Band,” Adopted December 31, 1997, Released January 6, 1998
Ex. 2018	Federal Communications Commission Report and Order FCC 01-364, “In the Matter of Reallocation and Service Rules for the 698-746 MHz Spectrum Band (Television Channels 52-59),” Adopted December 12, 2001, Released January 18, 2002
Ex. 2019	FCC Lower 700 MHz Band Auction #44 Bid Winners (September 18, 2002)
Ex. 2020	Auction 44: Lower 700 MHz Band Fact Sheet (https://www.fcc.gov/auction/44) (last accessed February 25, 2026)
Ex. 2021	FCC Lower 700 MHz Band Auction #49 Bid Winners (June 13, 2003)
Ex. 2022	Auction 49: Lower 700 MHz Band Fact Sheet (https://www.fcc.gov/auction/49) (last accessed February 25, 2026)
Ex. 2023	FCC Lower 700 MHz Service About Page (https://www.fcc.gov/wireless/bureau-divisions/mobility-

	division/lower-700-mhz-service) (last accessed February 25, 2026)
Ex. 2024	3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) radio transmission and reception; (Release 8) (December 2007)
Ex. 2025	Federal Communications Commission Second Report and Order FCC 0090, “Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission’s Rules,” Adopted March 8, 2000, Released March 9, 2000
Ex. 2026	FCC 700 MHz Band Auction #73 Bid Winners.
Ex. 2027	Auction 73: 700 MHz Band Fact Sheet (https://www.fcc.gov/auction/73) (last accessed February 25, 2026)
Ex. 2028	Letter to the Chairman of the Federal Communications Commission Regarding Auction of Licenses in the 747-762 and 777-792 MHz Bands Scheduled for September 6, 2000 (July 20, 2000)
Ex. 2029	Supplementary Declaration of Hossein Hashemi, Ph.D.
Ex. 2030	RESERVED
Ex. 2031	RESERVED
Ex. 2032	Docket Report in 2:24-cv-01009-JRG-RSP (E.D.Tex.) retrieved March 8, 2026
Ex. 2033	Complaint in Fractus, S.A. v. Resmed Inc., 3:25-cv02680-LL-JLB (S.D. Cal.)

Ex. 2034	Claim Construction Order in 2:24-cv-01009-JRG-RSP (E.D.Tex.)
Ex. 2035	Patent Owner's Objections to the Claim Construction Order in 2:24-cv-01009-JRG-RSP (E.D.Tex.)
Ex. 2036	Letter of June 21, 2021 from Ruben Bonet to David Pendarvis
Ex. 2037	Email correspondence between Fractus and ResMed sent from July 26, 2021 through March 24, 2023
Ex. 2038	Attachment to email of November 9, 2022 (Ex. 2037 at 6-7)
Ex. 2039	"ResMed's new factory brings it closer to meeting CPAP demand after Philips recall," Medical Design and Outsourcing (January 10, 2023) (https://www.medicaldesignandoutsourcing.com/resmeds-new-factory-cpap-demand/)(last accessed April 21, 2026)
Ex. 2040	"ResMed responds to 'humanitarian emergency' over demand for CPAP devices with new factory," MEDTECHDIVE (January 10, 2023) (https://www.medtechdive.com/news/resmed-RMD-ceo-mick-farrell-jp-morgan-health-sleep-apnea-devices/640036/)(last accessed April 21, 2026)

TABLE OF AUTHORITIES

Cases

Apple Inc. v. Uniloc 2017 LLC, IPR2020-00854, Paper 9 (October 28, 2020) 1, 2

BioDelivery Scis. Int'l, Inc. v. Aquestive Therapeutics, Inc., 935 F.3d 1362 (Fed. Cir. 2019) 2

Elong Int'l USA Inc. v. Feit Electric Co., Inc., IPR2025-00258, Paper 16 (June 25, 2025) 1

PacifiCorp v. Birchtech Corp., IPR2025-00687, Paper 40 (January 12, 2026) 3

Statutes

35 U.S.C. § 315(c) 2

Other Authorities

81 Fed. Reg. 18763 (April 1, 2016) 3

Patent Owner (“PO”) submits this authorized Sur-Reply to address clear errors in Petitioner’s Authorized Reply to Patent Owner’s Preliminary Response (“Reply”).

I. Petitioner’s Reply is Based on Misrepresentation

Petitioner represented that “the POPR incorrectly invites the Board to weigh conflicting expert testimony” with regard to Ground 3 (EX3001 at 3) and states that “PO’s expert reached the opposite conclusion [that] Baliarda-543 is not prior art to the ‘677 Patent” (Reply at 6 (internal quotations omitted)). PO, however, did not cite any expert testimony in its arguments directed to Ground 3 and told this to Petitioner prior to its request for a Reply. EX3102 at 14. Indeed, PO’s expert explicitly declined to offer an opinion on Ground 3 and the prior art status of Baliarda in the very paragraph of his declaration Petitioner cites: “As a technical expert, and not a legal one, I am refraining from offering an opinion on this ground at this time.” EX02010 ¶54. Accordingly, Petitioner’s Reply should be given no weight as to this issue.

II. Patent Owner Properly Addressed the Geotab ID

The Reply argues PO inappropriately “attack[ed] the Geotab ID [*Geotab Inc. v. Fractus, S.A.*, IPR2025-01026, Paper 20], which is not even of record here.” Reply at 2. PO simply addressed the merits of the Petition, a threshold question for institution of any IPR, including petitions in which joinder is sought. *Apple Inc. v. Uniloc 2017 LLC*, IPR2020-00854, Paper 9 at 3-4 (October 28, 2020); *Elong Int’l USA Inc. v. Feit Electric Co., Inc.*, IPR2025-00258, Paper 16 (June 25, 2025) (“The

Board first determines whether to institute a proceeding before considering a motion for joinder.”); 35 U.S.C. § 315(c).

PO addressed the reasoning of the Geotab ID because this is the reasoning that *Petitioner* relies upon in its Motion for Joinder. Specifically, Petitioner argues that joinder is appropriate because “these proceedings are virtually identical,” so that the Board can address “[t]he Geotab and Petitioner’s Petitions in a single proceeding,” and because Petitioner “will not ... introduce any arguments or discovery not already introduced by Geotab.” Motion for Joinder at 5-6, 8. In other words, Petitioner wants the Board to adopt the reasoning in the Geotab ID which is precisely why PO addressed the Geotab ID in its POPR.

Further, it is the Board’s practice to rely on its previous merits decision in the institution decision of a copycat petition. *Apple Inc.*, IPR2020-00854, Paper 9 at 3-4 (October 28, 2020). It would have been wasteful of the Board and parties’ resources for PO to ignore the Board’s analysis of an identical proceeding when addressing the merits of the present proceeding.

Finally, PO is not seeking appeal of a non-appealable issue. Administrative agencies possess inherent authority to reconsider their decisions. *BioDelivery Scis. Int’l, Inc. v. Aquestive Therapeutics, Inc.*, 935 F.3d 1362, 1366 (Fed. Cir. 2019). PO simply pointed out the logical reality that the Board should reconsider its decision on the identical Geotab IPR petition if this proceeding is denied on the merits.

III. The Priority Date of the ‘677 Patent is a Pre-Institution Issue

Petitioner asserts, without citation, that the question of whether the ‘429 Application was entitled to its priority date is a factual inquiry that should be resolved at the trial stage. Reply at 3. This is simply wrong. The Director recently issued a precedential decision holding that the appropriate time for the Board to determine the priority date for a patent is pre-institution. *PacifiCorp v. Birchtech Corp.*, IPR2025-00687, Paper 40 at 3 (January 12, 2026).

Further, there is no reasonable factual dispute regarding Ground 3. Petitioner and its expert assert that “no POSA would have envisioned or recognized the 698-806 MHz frequency range as part of a 4G genus.” Petition at 96. This is plainly incorrect as proven by the Government’s own orders and regulations. In 1998 the FCC ordered that the 746-806 MHz band be allocated to mobile communications to expand cellular telephone services. EX2017 at 1, 8. In 2002 the FCC ordered the same for the 698-746 MHz band. EX2018 at 2, 29. Petitioner and its expert also argue that because these bands were occupied by television broadcasters, they could not be used for cellular services. Petition at 92. The FCC’s orders, however, anticipated concurrent use of the bands by cellular and television providers. EX2017 at 1-2; EX2018 at 3. This is not a *testimonial* dispute that the Board has, at times, resolved in favor of the petitioner. *See* 81 Fed. Reg. 18763 (April 1, 2016). PO’s *documentary* evidence conclusively shows the allegations in the Petition are wrong.

Dated: May 1, 2026

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 SUR-REPLY TO PETITIONER'S AUTHORIZED REPLY TO PATENT OWNER'S PRELIMINARY RESPONSE** was served via email (as previously consented to by counsel) on May 1, 2026 to lead and backup counsel of record for Petitioners as follows:

PH-Resmed-Fractus@paulhastings.com

Dated: May 1, 2026

/Mark J. DeBoy/
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