

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC. AND HP INC.,
Petitioners

v.

XR COMMUNICATIONS, LLC, D/B/A VIVATO TECHNOLOGIES,
Patent Owner

IPR2022-00367
Patent No. 10,715,235

PATENT OWNER'S SUR-REPLY TO PETITIONER'S REPLY

Table of Contents

I. The *Fintiv* Factors Continue to Support Discretionary Denial 1

II. The Claims Are Entitled To a February 1, 2002 Priority Date 3

III. Conclusion 5

Exhibits

Exhibit No.	Description
2009	Judge Albright's April 14, 2022, Standing Order Governing Proceedings in Patent Cases
2010	Joint Claim Construction Statement, <i>XR Communications v. HP Inc.</i> , W.D. Tex. Case No. 21-cv-00694-ADA, Dkt. No. 48
2011	Joint Claim Construction Statement, <i>XR Communications v. Apple Inc.</i> , W.D. Tex. Case No. 21-cv-00620-ADA, Dkt. No. 49

I. The *Fintiv* Factors Continue to Support Discretionary Denial

Petitioners' Reply fails to present new information on the *Fintiv* factors, much less show that the factors favor institution. Reply at 1. Instead, Petitioners rely on speculation while disregarding the district court's schedule. But as explained in the POPR, the *Fintiv* factors continue to support discretionary denial here.

***Fintiv* Factors 2 and 3:** Substantial investment in the parallel proceedings continues even though the *Markman* hearing was postponed by two weeks. POPR at 25-27. For example, the hearing date has no effect on the opening of fact discovery, still on June 17, 2022. Ex. 2009 (ordering that "Fact Discovery will begin one day after the originally scheduled Markman hearing date"). Nor does the modest adjustment on the *Markman* hearing affect any subsequent dates in the previously entered scheduling orders. See EX-1039; EX-1040. And importantly, there is no evidence of any change to the district court's June 2023 trial date.

Petitioners' contrary arguments amount to speculation. Because the Board consistently rejects such arguments, Factors 2 and 3 weigh against institution. See *Canon Inc. v. Optimum Imaging Tech. LLC*, IPR2020-01322, Paper 9 at 5-6 (Mar. 2, 2021) (denying institution and declining to "speculate about whether there may be further delays"); *Cellco Partnership v. Huawei Tech. Co.*, IPR2020-01352 (Mar. 5, 2021), Paper 13 at 9-11 (denying institution because "apart from speculation, we have no reason to believe that the scheduled trial date will be postponed").

***Fintiv* Factor 4:** Petitioners stipulate that if the IPR is instituted, “the same invalidity issues and grounds will not be litigated in the district court.” Reply at 2-3; EX-1033; EX-1044. But overlapping issues remain. Petitioners assert Burke and Shull on obviousness grounds in this IPR. Pet. at 1-2. But Petitioners assert Burke as an anticipatory reference in district court. EX-2007 at 1. Thus, regardless of this IPR, the Burke reference—and whether that reference discloses all limitations of the asserted claims—will continue to be litigated in district court. Further, Petitioners’ stipulation fails to alleviate the overlap between the challenged limitations at issue here that are also at issue in the district court litigation.

Petitioners also fail to address the potential for conflicts arising from their district court claim construction positions. *See* POPR at 27-29. While apparently maintaining their position that “no formal claim constructions are necessary for this petition,” Petitioners have now fully briefed five separate terms in the district court litigation involving the same claim terms at issue here. POPR at 30; Ex. 2010; Ex. 2011. Petitioners’ inconsistent approach to claim construction will allow Petitioners to shift positions, obtain multiple bites at the same apple, and lead the Board and the district court into potentially conflicting decisions. This implicates concerns under Factors 4 and 6 and thus weighs against institution.

***Fintiv* Factors 1, 5, and 6:** Petitioners fail to address Factors 1, 5, and 6, and so they weigh against institution for reasons explained. *See* POPR at 23-24, 29-30.

II. The Claims Are Entitled To a February 1, 2002 Priority Date

Despite the Examiner's well-supported finding that the challenged claims were entitled to a February 1, 2002 priority date, Petitioners charge ahead, continuing to ignore evidence contrary to their positions. Petitioners' arguments fail.

First, Petitioner argues that "App. C has no author or publication information." Reply at 3. But Doc. C ("Beamforming for *Little Joe*", Ex-1009 at 134) itself confirms it was authored by Ed Casas and dated February 1, 2002—just as the Examiner found. POPR at 4-6 (citing Ex-1009 at 148 (C-15), indicating "AUTHOR/DATE: Ed Casas 2002/2/1"). Doc. A corroborates that Doc. C is a "Vivato Technical Report" entitled "Beamforming for Little Joe" by "Ed Cases" dated February 1, 2002. Ex-1009 at 77 (A-71) ("[2] Ed Cases, "Beamforming for LittleJoe", ViVATO Technical Report, Feb. 1, 2002"). Petitioners fail to distinguish Patent Owner's cited cases, including *REG Synthetic Fuels*, 841 F.3d 954, 962 (Fed. Cir. 2016), establishing that documentary evidence *alone* corroborates that an inventor (here, Ed Cases) "disclosed to others his completed thought expressed in such clear terms as to enable those skilled in the art to make the invention."

Second, Petitioners argue that "claim feature [8a]" requires multiple signals "from two *antenna elements of the same remote station*." Reply at 4 (emphasis added). This misreads the plain language of the claims, which do not recite *two* antenna elements *belonging to a remote station*. Rather, the claims are directed to a

receiver's antenna elements which “receiv[e] a [first/second] signal transmission... via a [first/second] antenna element.” EX-1001, cl. 8. This is disclosed in Doc. C, which describes a “16-element linear antenna array” with sixteen antenna elements that each receive signals. Ex-1009 at 134-36 (“The signal received by the array elements will be the vector sum of signals arriving by many paths...performance [] will depend on the direction of arrival of signals from the desired and undesired users . . . [and] the ability of the *Little Joe* beamforming receivers to distinguish the desired signal from the interference and noise”).

Third, Petitioners dispute Doc. C discloses “simultaneous” reception. Reply at 4-5. But Doc. C discloses a “16-element linear antenna array” (Ex-1009 at 134) with “a Butler matrix to support the beamforming function” and “independent vector modulators on each array element to generate the receive and transmit beams” (Ex-1009 at 137). “Each beam points in a different direction.” Ex-1009 at 137. Sixteen “searcher” receivers each simultaneously measure the “received signal strength” on the different beams. Ex-1009 at 134-137. This is depicted visually in Figure 3. Ex-1009 at 146. Appendix B discloses how to “compute signals received on each array element (1 by N)” and describes “signals received at the array elements from a number of sources.” Ex-1009 at 150, 155-156.

Petitioners dispute the Examiner’s understanding that sixteen antenna elements coupled to sixteen “searcher” receivers (*i.e.*, WLAN radios) will receive

signals *simultaneously*. But an ordinary artisan would recognize that each WLAN radio on each Butler matrix port will “listen simultaneously,” as confirmed by EX-1009, 51-52 (“all of the radios listen simultaneously”). POPR at 16-17. It would be clear to an ordinary artisan from Document C alone that *Little Joe*’s sixteen antenna elements with sixteen receivers results in simultaneous reception. Doc. A simply confirms that this is how an ordinary artisan would understand Doc. C.

Fourth, Petitioners admit that Doc. C discloses multiple “receive beams” formed with “weighting values” that are configured to be used by the remote stations to communicate with *Little Joe*. Reply at 5 (“the cited portions explain that the Little Joe access point stores ***different weights for each individual client with which it communicates***”); EX-1009 at 137 (“the system uses two independent beamformers: a Butler matrix to support the beamforming function and independent vector modulators on each array element to ***generate the receive and transmit beams***...The beamforming algorithm ***computes the beamforming weights for a particular client***”); EX-1009 at 139 (“using the Butler matrix for ***both transmit and receive***”). Element 8[e] requires that the “set of weighting values is ***configured to be used*** by the remote station,” and Petitioners’ Reply admits that this limitation is disclosed by Document C. Reply at 5.

III. Conclusion

For the foregoing reasons, institution should be denied.

Respectfully submitted,

Dated: June 16, 2022

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CERTIFICATE OF SERVICE (37 C.F.R. § 42.6(e)(1))

The undersigned hereby certifies that the above document was served on June 16, 2022, by filing this document through the Patent Trial and Appeal Board End to End system as well as delivering a copy via electronic mail upon the following attorneys of record for the Petitioner:

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