

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC. and HP INC.,
Petitioner,

v.

XR COMMUNICATIONS LLC,
Patent Owner.

IPR2022-01155
Patent 10,715,235 B2

Before MIRIAM L. QUINN, BARBARA A. PARVIS, and
JAMES J. MAYBERRY, *Administrative Patent Judges*.

MAYBERRY, *Administrative Patent Judge*.

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

I. INTRODUCTION

A. *Background and Summary*

Apple Inc. and HP Inc. (collectively, “Petitioner”), filed a Petition requesting *inter partes* review of claims 1–7, 15, and 16 (the “Challenged Claims”) of U.S. Patent No. 10,715,235 B2 (Ex. 1001, the “’235 patent”). Paper 3 (“Pet.”), 7. XR Communications LLC (“Patent Owner”) filed a Preliminary Response to the Petition. Paper 7 (“Prelim. Resp.”). With our authorization, Petitioner filed a Preliminary Reply (“Prelim. Reply,” Paper 8) and Patent Owner filed a Preliminary Sur-reply (“Prelim. Sur-Reply,” Paper 9), each addressing discretionary denial.

We have authority to determine whether to institute an *inter partes* review. 35 U.S.C. § 314 (2018); 37 C.F.R. § 42.4(a) (2022) (permitting the Board to institute trial on behalf of the Director). To institute an *inter partes* review, we must determine that the information presented in the Petition shows “a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a). For the reasons set forth below, upon considering the record, we deny the Petition and do not institute an *inter partes* review.

B. *Real Parties-in-Interest*

Petitioner identifies Apple Inc. and HP Inc. as the real parties-in-interest. Pet. 71. Patent Owner identifies itself as the real party-in-interest. Paper 5, 2.

C. *Related Matters*

The parties each identify the following litigations as matters related to the ’235 patent: *XR Communications, LLC, dba Vivato Technologies. v. Amazon.com, Inc., Amazon.com Services LLC, and Eero LLC*, No.

IPR2022-01155
Patent 10,715,235 B2

6:21-cv-0619-ADA (W.D. Tex.); *XR Communications, LLC, dba Vivato Technologies. v. Apple Inc.*, No. 6:21-cv-0620-ADA (W.D. Tex.); *XR Communications, LLC, dba Vivato Technologies. v. ASUSTek Computer Inc.*, No. 6:21-cv-0622-ADA (W.D. Tex.); *XR Communications, LLC, dba Vivato Technologies. v. Google LLC*, No. 6:21-cv-0625-ADA (W.D. Tex.); *XR Communications, LLC, dba Vivato Technologies. v. Samsung Electronics Co. Ltd. and Samsung Electronics America, Inc.*, No. 6:21-cv-0626-ADA (W.D. Tex.); *XR Communications, LLC, dba Vivato Technologies. v. Dell Technologies Inc.*, No. 6:21-cv-0646-ADA (W.D. Tex.); *XR Communications, LLC, dba Vivato Technologies. v. HP Inc.*, No. 6:21-cv-0694-ADA (W.D. Tex.); and *XR Communications, LLC, dba Vivato Technologies. v. Microsoft Corporation*, No. 6:21-cv-0695-ADA (W.D. Tex.). Pet. 71; Paper 5, 2–3.

Petitioner has also challenged claims 8–14 of the '235 patent in IPR2022–00367, which was instituted. Pet. 60, 71; Paper 5, 2.

D. The '235 Patent

The '235 patent, titled “Directed Wireless Communication,” issued July 14, 2020, from application US 15/495,539. Ex. 1001, codes (54), (45), (21). The '235 patent ultimately claims priority to a provisional application, US 60/423,660, filed on November 4, 2002. *Id.* at code (60).

The '235 patent relates to “a multi-beam directed signal system [that] coordinates directed wireless communication with client devices.”

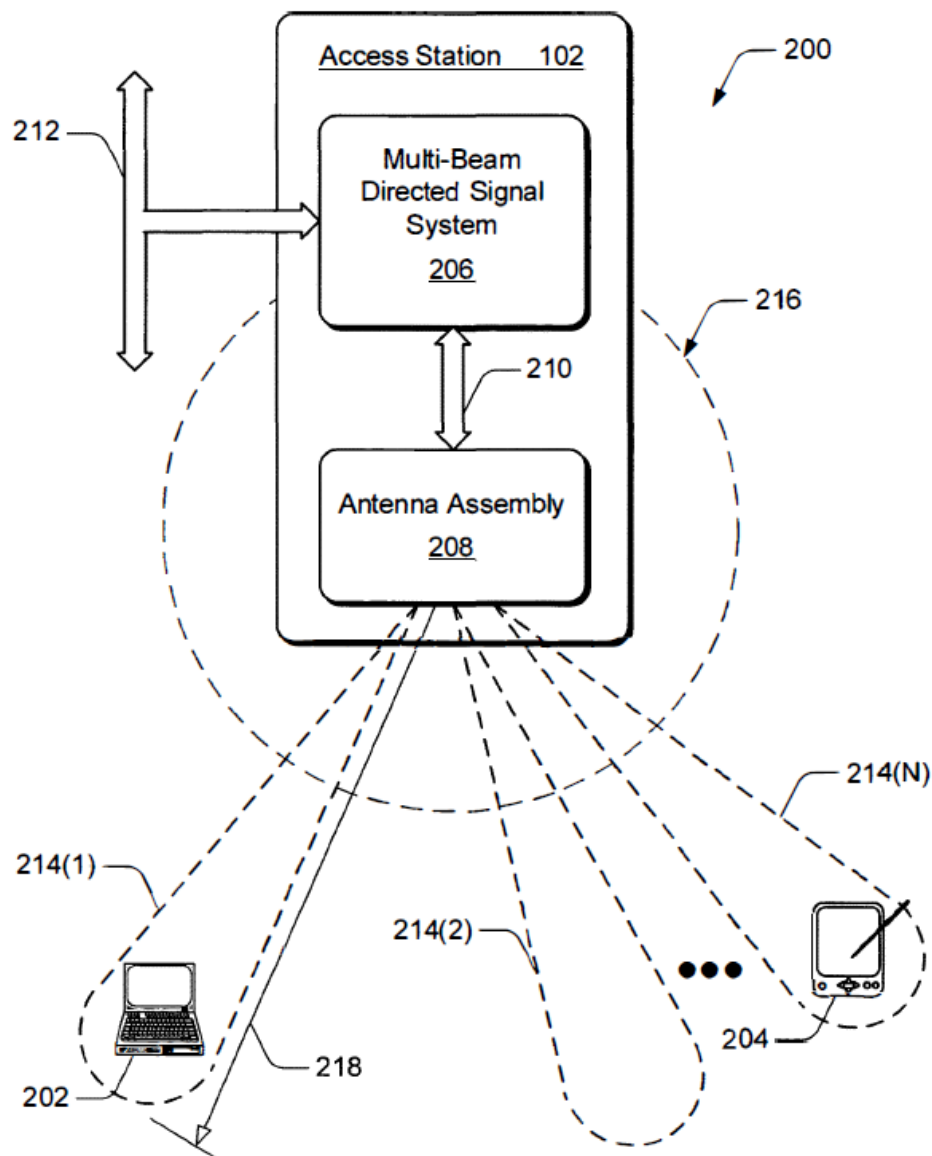
Ex. 1001, 2:8–10. “In a described implementation, a multi-beam directed signal system (e.g., also referred to as an access point or Wi-Fi switch) is a long-range packet switch . . . in accordance with an 802.11 standard.”

Id. at 3:43–47. “[S]imultaneous transmission and reception may occur at a

wireless routing device by applying multi-channel techniques.”

Id. at 3:41–43. Further, “[a]n increase in communication range is achieved by beamforming directed communication beams which simultaneously transmit directed signals and receive communication signals from different directions.” *Id.* at 3:47–51.

Figure 2, reproduced below, “illustrates an exemplary directed wireless communication system 200.” Ex. 1001, 4:44–45.



As shown, “antenna assembly 208 can be implemented as two or more antennas . . . to emanate multiple directed communication beams 214(1), 214(2), . . . , 214(N).” Ex. 1001, 4:54–57. “[C]lient device 202 can communicate via directed communication beam 214(1) with a first channel of the multi-beam directed signal system 206, and client device 204 can communicate via directed communication beam[] 214(N) with a second channel of the multi-beam directed signal system 206.” *Id.* at 5:16–21.

“Communication and/or data transfer signals . . . are considered desired signals [if] they are from nodes within the wireless routing network.” Ex. 1001, 24:27–31. “[S]ignals such as noise and WLAN interference associated with another external wireless system 1204 are not desired.” *Id.* at 24:31–33. “These signals, both desired and undesired, are received via antenna array 302 [of antenna assembly 208] and are provided to the signal control and coordination logic 304.” *Id.* at 24:34–36; *see also id.* at Fig. 3. Using logic 304, “multi-beam directed signal system 206 is configured to control the transmission amplitude frequency band and directionality of data packets to other nodes[,] and [thereby] assist in reducing the effects associated with received noise and interference.” *Id.* at 25:22–29.

“[S]canning receiver 822 [of system 206] . . . is configured to update routing information 1206 with regard to the received signals[and, for example,] . . . may identify information about different classes of interferers . . . within the routing information 1206.” Ex. 1001, 24:41–44; *see also id.* at Fig. 8B. “[R]outing information 1206 includes connection indexed routing table(s) based on identification information, such as . . . identifiers of the desired sources and other identifiers for the desired sources and other identifiers for the interferers.” *Id.* at 24:44–49. “Further, the

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.