

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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SAMSUNG ELECTRONICS CO., LTD.,  
SAMSUNG ELECTRONICS AMERICA, INC., and GOOGLE LLC,  
Petitioner,

v.

XR COMMUNICATIONS LLC,  
Patent Owner.

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IPR2022-01362  
Patent 10,715,235 B2

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

MAYBERRY, *Administrative Patent Judge*.

DECISION  
Granting Institution of *Inter Partes* Review  
35 U.S.C. § 314  
Granting Motion for Joinder  
35 U.S.C. § 315(c); 37 C.F.R. § 42.122

## I. INTRODUCTION

### A. *Background and Summary*

Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., and Google LLC (collectively, “Petitioner”), filed a Petition requesting *inter partes* review of claims 8–14 (the “Challenged Claims”) of U.S. Patent No. 10,715,235 B2 (Ex. 1001, the “’235 patent”). Paper 4 (“Pet.”), 1. Concurrently, Petitioner filed a Motion for Joinder pursuant to 35 U.S.C. § 315(c) and 37 C.F.R. §§ 42.122(b) (2022), seeking to be joined as a party to *Apple Inc. v. XR Communications LLC*, Case No. IPR2022-00367 (the “Apple/HP IPR”), which was instituted on July 14, 2022, and also challenges claims 8–14 of the ’235 patent. Paper 5 (“Motion” or “Mot.”), 1; *see also* IPR2022-00367, Paper 10 (providing the Decision on Institution)<sup>1</sup>.

XR Communications LLC (“Patent Owner”) did not file a Preliminary Response to the Petition or an opposition to the Motion.

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 that follow, we determine that institution of *inter partes* review is warranted on the same grounds instituted in the Apple/HP IPR, and we grant Petitioner’s Motion.

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<sup>1</sup> Amazon.com, Inc. and Amazon.com Services LLC were joined to IPR2022-00367 on January 26, 2023. *See* IPR2022-01352, Paper 7.

*B. Real Parties-in-Interest*

Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., and Google LLC identify themselves as the real parties-in-interest. Pet. 64. Patent Owner identifies itself as the real party-in-interest. Paper 7, 1.

*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. 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. 64; Paper 7, 1–2.

The parties also identify the following Patent Office proceedings related to the '235 patent: *Amazon.com, Inc., et al v. XR Communications LLC*, IPR2022-01353 (PTAB); *Apple Inc., et al v. XR Communications LLC*, IPR2022-01155 (PTAB); *Apple Inc., et al v. XR Communications LLC*, IPR2022-00367 (PTAB). Pet. 64–65; Paper 7, 1.

*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), (22). The '235 patent ultimately claims priority to a provisional application, US 60/423,660, filed on November 4, 2002. *Id.* at code (60).

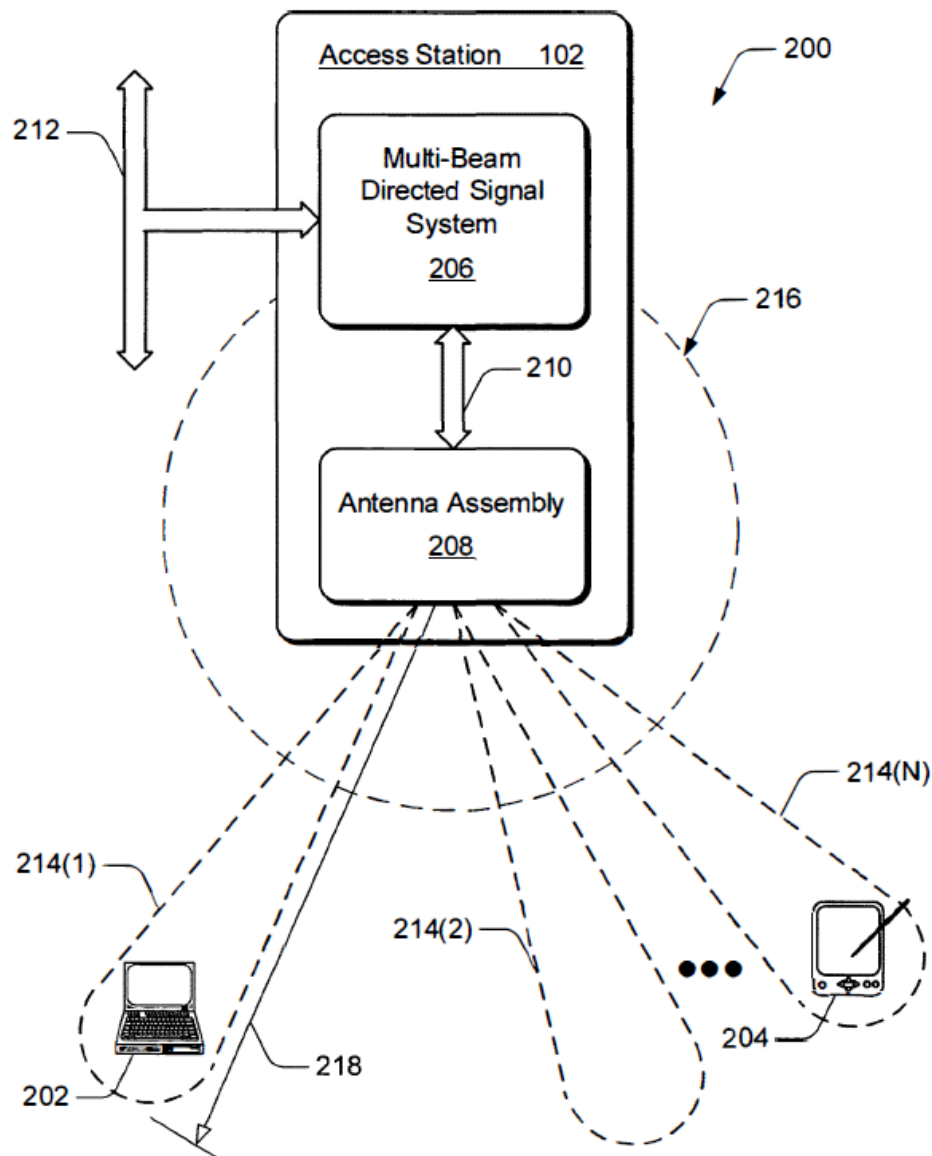
The '235 patent relates to “a multi-beam directed signal system [that] coordinates directed wireless communication with client devices.”

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.

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