

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner,

v.

OPTIS CELLULAR TECHNOLOGY, LLC,
Patent Owner.

IPR2020-00465
Patent 8,102,833 B2

Before KALYAN K. DESHPANDE, MICHAEL R. ZECHER, and
JOHN P. PINKERTON, *Administrative Patent Judges*.

PINKERTON, *Administrative Patent Judge*.

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

I. INTRODUCTION

Apple Inc. (“Petitioner”) filed a Petition requesting an *inter partes* review of claims 1–14 of U.S. Patent No. 8,102,833 B2 (Ex. 1001, “the ’833 patent”). Paper 3 (“Pet.”). Optis Cellular Technology, LLC (“Patent Owner”) filed a Preliminary Response. Paper 7 (“Prelim. Resp.”). Pursuant to our authorization, Petitioner filed a Reply to Patent Owner’s Preliminary Response (Paper 8 (“Pet. Reply”)), and Patent Owner filed a Sur-reply (Paper 9 (“PO Sur-reply”)), each directed to whether we should exercise our discretion to deny institution pursuant to 35 U.S.C. § 314(a). Ex. 1073, 1; Ex. 2036, 1, 3. Pursuant to our direction, Petitioner also filed a Notice of Invalidity Grounds (Paper 10 (“Pet. Notice”), and Patent Owner filed Updated Mandatory Notice (Paper 11 (“PO Updated Notice”). Ex. 2040. Each of these notices is directed to the claims of the ’833 patent asserted to be invalid, and the ground(s) of invalidity, at the trial in the U.S. District Court for the Eastern District of Texas, Marshall Division, in *Optis Wireless Technology, LLC v. Apple Inc.*, Case No. 2:19-cv-00066-JRG (E.D. Tex.) (“the underlying litigation”).¹

Under 35 U.S.C. § 314 and 37 C.F.R. § 42.4(a), we have authority to institute an *inter partes* review if “the information presented in the petition . . . and any response . . . shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in

¹ As further discussed below, between August 3 and 11, 2020, a jury trial was held in the underlying litigation in the U.S. District Court for the Eastern District of Texas, Marshall Division, in which the jury rendered its verdict on August 11, 2020. See PO Updated Notice 1–2 (citing Ex. 2041 (Verdict Form)).

the petition.” 35 U.S.C. § 314(a). Institution of an *inter partes* review is discretionary, not mandatory. See *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2140 (2016) (“[T]he agency's decision to deny a petition is a matter committed to the Patent Office’s discretion.”); *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) (“[T]he PTO is permitted, but never compelled, to institute an IPR proceeding.”).

Having considered the parties submissions, and for the reasons discussed below, we exercise discretion under 35 U.S.C. § 314(a) to deny institution of *inter partes* review.

II. BACKGROUND

A. Related Matters

Patent Owner has asserted the ’833 patent against Petitioner in *Optis Wireless Technology, LLC v. Apple Inc.*, No. 2:19-cv-00066-JRG (E.D. Tex.). Pet. 2; Paper 11, 1.

Patent Owner also asserted the ’833 patent against Huawei Device Co. Ltd. in *Optis Wireless Tech., LLC, v. Huawei Techs. Co.*, No. 2:17-cv-00123-JRG-RSP (E.D. Tex.) (“the Huawei litigation”). Pet. 10 n.7.

Huawei Device Co., Ltd. filed a petition for *inter partes* review of claims 1–14 of the ’833 patent in *Huawei Device Co., Ltd. v. Optis Cellular Technology, LLC*, IPR2018-00807 (PTAB) (“IPR 807”). Pet. 2 (citing Ex. 1010); Paper 6, 1. On November 5, 2018, we denied institution in IPR 807. Paper 6, 1; Ex. 1011.

B. Overview of the ’833 Patent

The ’833 patent, titled “Method for Transmitting Uplink Signals,” issued on January 24, 2012, and claims priority to Korean application 10-

2008-0068634, filed on July 15, 2008, and U.S. Provisional Applications, Nos. (1) 60/972,244, filed on September 13, 2007; (2) 60/987,427, filed on November 13, 2007; and (3) 60/988,433, filed on November 16, 2007.
Ex. 1001, codes (30), (60), 1:7–15.

The '833 patent relates generally to user equipment (UE) of a mobile communication system transmitting uplink signals, including ACK/NACK signals, control signals other than ACK/NACK signals, and data signals. Ex. 1001, code (57), 1:21–24. The '833 patent describes that control signals transmitted to the uplink “include uplink ACK/NACK² signals for HARQ communication, channel quality indicator (CQI) information, and preceding matrix index (PMI).” *Id.* at. 1:29–32. The '833 patent specifically distinguishes ACK/NACK signals from control signals other than ACK/NACK signals and states “‘control signals’ will mean those other than the ACK/NACK signals.” *Id.* at 5:15–16; *see also id.* at 1:43–45 (stating “the control signals will mean those except for ACK/NACK signals”).

The '833 patent explains that the 3GPP LTE system uses a single carrier frequency division multiplexing access (SC-FDMA) scheme for uplink signal transmission. *Id.* at 1:33–35. According to the '833 patent, the 3GPP LTE system prescribes that data signals and control signals among the uplink signals are first multiplexed and ACK/NACK signals are transmitted to the multiplexed signals by puncturing the data or control signals when

² Petitioner’s expert, Dr. Jonathan Wells, opines that ACK/NACK signals are a type of control information or signals “sent from a UE that signifies the acknowledgment (‘ACK’) of receipt or a negative acknowledgment (‘NACK’) indicating a problem with receiving downlink data.” Ex. 1002 ¶ 35 (citing Ex. 1001, 5:3–6).

uplink ACK/NACK signal transmission is required for downlink data. *Id.* at 1:35–40. As the '833 patent also describes, it was determined that, in 3GPP LTE systems, when the control information is multiplexed with the data information, “the control information is transmitted near a reference signal.” *Id.* at 1:45–49. The '833 patent explains that “control signals generally require higher reliability than the data signals,” and “the ACK/NACK signals require higher reliability than other types of control signals.” *Id.* at 1:51–57. Accordingly, the '833 patent describes that, when uplink ACK/NACK signal transmission is required while all the control signals are transmitted by approximating to the reference signal, “problems occur in that the ACK/NACK signals can neither be transmitted by puncturing the control signals arranged near the reference signal nor be transmitted near the reference signal.” *Id.* at 1:54–62. Thus, the '833 patent describes a method for transmitting uplink signals by efficiently arranging ACK/NACK signals and other control signals in a resource region considering priority among them. *Id.* at 2:7–10; *see also id.* at 2:25–27 (stating that “arranging the ACK/NACK signals at both symbols near to symbols through which a reference signal is transmitted”).

The '833 patent describes transmitting information in accordance with the SC-FDMA scheme in which information sequences are transmitted using one “resource block” and one “sub-frame.” *Id.* at 5:31–40. Each sub-frame includes two slots, and each slot includes 7 SC-FDMA symbols. *Id.* at 5:40–45, cl. 3. Two of the 14 SC-FDMA symbols in each sub-frame are used as reference signals that are pilot signals. *Id.* at 5:40–43. Each resource block includes 12 OFDM (orthogonal frequency division multiple access)

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.