

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

APPLE INC.,  
Petitioner,

v.

KOSS CORPORATION,  
Patent Owner.

---

IPR2021-00255  
Patent 10,298,451 B1

---

Before DAVID C. MCKONE, GREGG I. ANDERSON,  
and NORMAN H. BEAMER, *Administrative Patent Judges*.

BEAMER, *Administrative Patent Judge*.

JUDGMENT  
Final Written Decision  
Determining All Claims Unpatentable  
*35 U.S.C. § 318(a)*

## I. INTRODUCTION

On November 25, 2020, Apple, Inc. (“Petitioner”) filed a Petition (“Pet.”) pursuant to 35 U.S.C. §§ 311–319 to institute an *inter partes* review of claims 1–21 of U.S. Patent No. 10,298,451 B1 (“the ’451 patent”).

Paper 2. On March 8, 2021, Koss Corporation (“Patent Owner”) filed a Preliminary Response. Paper 6. Pursuant to our authorization, Petitioner and Patent Owner subsequently filed reply and sur-reply briefs, respectively, further addressing discretionary denial pursuant to 35 U.S.C. § 314.

Papers 20, 21. We instituted *inter partes* review on June 3, 2021. Paper 22.

Patent Owner filed a Response on August 27, 2021 (PO Resp.) Paper 28. Petitioner filed a Reply on December 23, 2021 (Reply). Paper 42. Patent Owner filed a Sur-Reply on February 8, 2022 (Sur-Reply). Paper 50. An oral hearing took place on March 3, 2022. The Hearing Transcript (“Tr.”) is included in the record as Paper 53. After considering the parties’ arguments and supporting evidence, we determine that Petitioner has demonstrated by a preponderance of the evidence that claims 1–21 of the ’451 patent are unpatentable.

## II. BACKGROUND

### A. The ’451 Patent

The ’451 patent, titled “Configuring Wireless Devices For A Wireless Infrastructure Network,” was filed on August 7, 2018, issued on

IPR2021-00255  
Patent 10,298,451 B1

May 21, 2019, and lists related continuation applications dating to March 15, 2013.<sup>1</sup> Ex. 1001, codes (54), (22), (45), (63).

The '451 patent is directed to “permit[ing] a wireless device to receive data wirelessly via an infrastructure wireless network, without physically connecting the wireless device to a computer in order to configure it, and without having an existing infrastructure wireless network for the wireless device to connect to.” Ex. 1001, Abstr. Figure 1 of the '451 patent is reproduced below.

---

<sup>1</sup> During prosecution, Applicant asserted an invention date of May 14, 2012, and, according to Petitioner, in *Koss Corporation v. Apple Inc.*, Case No. 6:20-cv-00665 (W.D. Tex.) (the Texas litigation), Patent Owner asserts an invention date of July 12, 2010. Pet. 8–9 (citing Ex. 1002, 50–57); *see also* Ex. 1014, 4. It is unnecessary to determine the applicability of these dates for purposes of this Decision, because the effective dates of the references are sufficiently early compared to the May 14, 2012, date, and Patent Owner does not assert the July 12, 2010, date in this proceeding.

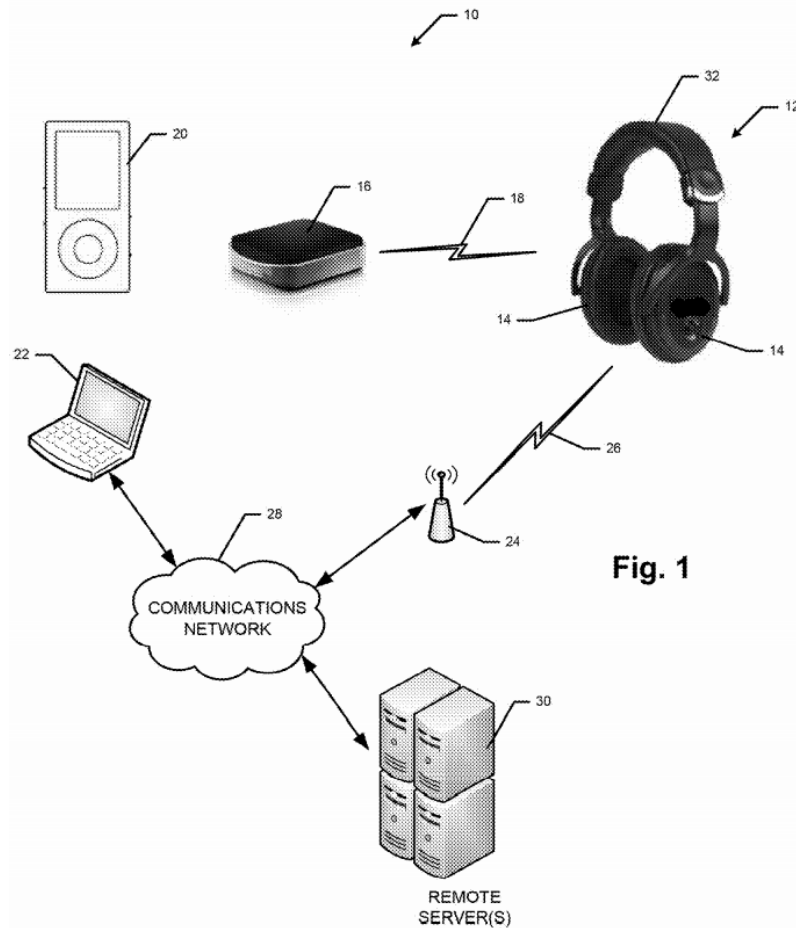


Fig. 1

Figure 1 is a block diagram depicting earphones 14 which can communicate wirelessly with content access point (CAP) 16 via ad hoc communications link 18, which can be, for example, a Wi-Fi link or Bluetooth. *Id.* at 3:1–10. The '451 patent explains that an ad hoc link is a point-to-point network that does not utilize preexisting structure such as wireless access points. *Id.* at 3:10–15. CAP 16 can be connected to digital audio player (DAP) 20, such as a personal MP3 player, or computer 22, such as a laptop, via a USB connector. *Id.* at 3:17–36. Alternatively, CAP 16 may be an integral part of DAP 20 or computer 22. *Id.* at 3:35–36. Earphones 14 can also connect to access point 24 via wireless infrastructure link 26. *Id.* at 3:36–40. The '451 patent explains that a wireless

infrastructure link is part of a network that utilizes a wireless access point and connects to an Internet service provider, such as Internet 28. *Id.* at 3:40–44. Both computer 22 and access point 24 connect to Internet 28. *Id.* at 3:45–40. Remote servers 30 are also connected to Internet 28. *Id.* at 3:49–50.

In operation, a user, via computer 22, may connect to the remote server system 30 to provision or initialize CAP 16 and earphones 14 for initial use, and to otherwise manage CAP 16 and earphones 14. *Id.* at 3:51–54. Initial operation of earphones 14 involves plugging CAP 16 into DAP 20 or computer 22 (generally, “media devices”), enabling CAP 16 to transmit media content from the media devices to be played on earphones 14. *Id.* at 4:35–44. Earphones 14 can also be set up to receive content from server 30 via Internet 28 and access point 24, which is achieved by the user logging into a website via computer 22, with CAP 16 connected to the computer. *Id.* at 4:45–5:22. While logged in, the user enters access point credentials and information identifying CAP 16 and earphones 14, which are stored in the user’s account on the server, and the access point credentials are also transferred to the earphones 14. *Id.* As stated in the ’451 patent:

This process allows the earphones 14 to be configured for infrastructure network (and Internet) access without having to physically connect the earphones 14 to the computer 22 to configure them and without having an existing different infrastructure network that the earphones 14 need to connect to.

*Id.* at 5:22–27. Patent Owner argues that requiring a wireless consumer product to be plugged into a computer can be a cumbersome process that

# 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.