

United States Patent and Trademark Office
Before the Patent Trial and Appeal Board

Bose Corporation

(Petitioner)

v.

Koss Corporation

(Patent Owner)

Inter Partes Review

No. IPR2021-00297 | **U.S. Patent No. 10,368,155**

Petitioner's Demonstrative Exhibits

Challenged U.S. Patent No. 10,368,155

(12) United States Patent Koss et al.

(10) Patent No.: US 10,368,155 B2
(45) Date of Patent: Jul. 30, 2019

(54) SYSTEM WITH WIRELESS EARPHONES

(58) Field of Classification Search
CPC H04R 1/1016
(Continued)

(71) Applicant: **Koss Corporation**, Milwaukee, WI (US)

(72) Inventors: **Michael J. Koss**, Milwaukee, WI (US);
Michael J. Pelland, Princeton, WI (US);
Michael Sagan, Fairfield, CA (US);
Steven R. Reckamp, Crystal Lake, IL (US);
Gregory J. Hallingstad, Deforest, WI (US);
Jeffery K. Bovee, Sterling, IL (US);
Morgan J. Lowery, Deforest, WI (US)

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(73) Assignee: **Koss Corporation**, Milwaukee, WI (US)

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

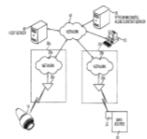
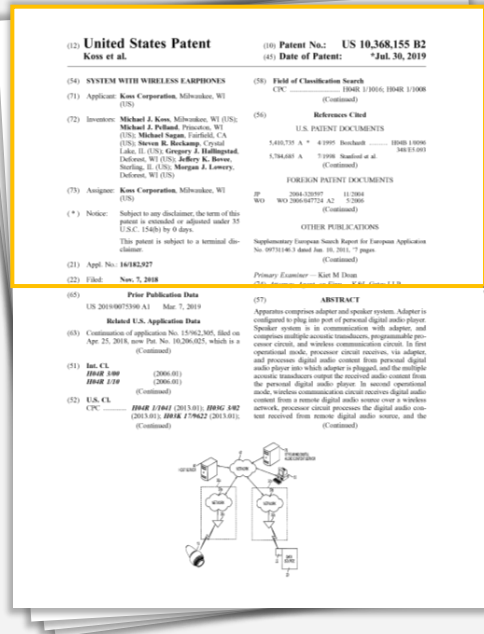
This patent is subject to a terminal disclaimer.

(21) Appl. No.: **16/182,927**

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(22) Filed: **Nov. 7, 2018**

Primary Examiner — Kiet M Doan
(74) Attorney, Agent, or Firm — K&L Gates



Wireless Headphones Predated the '155 Patent

BACKGROUND

Digital audio players, such as MP3 players and iPod store and play digital audio files, are very popular. These devices typically comprise a data storage unit for storing and playing the digital audio, and a headphone set that connects to the data storage unit, usually with a 1/4" or a 3.5 mm jack and associated cord. Often the headphones are in-ear headphones. The cord, however, between the headphones and the data storage unit can be cumbersome and annoying to users, and the length of the cord limits the physical distance between the data storage unit and the headphones. Accordingly, some cordless headphones have been proposed, such as the Monster iFreePlay cordless headphones from Apple Inc., which include a docking port on one earphone that can connect directly to an iPod. Similarly, the iFreePlay cordless headphones from Apple are quite large and are not in-ear type phones. Recently, cordless headphones that connect wirelessly via IEEE 802.11 to a wireless ready laptop or personal computer (PC) have been proposed, but such headphones are also quite large and not in-ear type phones.

(12) United States Patent (13) Patent No.: US 10,368,155 B2
 (14) Inventor: Koss et al. (15) Date of Patent: Jul. 30, 2019

(54) SYSTEM WITH WIRELESS EARPHONES (55) Field of Classification Search (56) References Cited

(71) Applicant: Koss Corporation, Milwaukee, WI (57) (Continued)

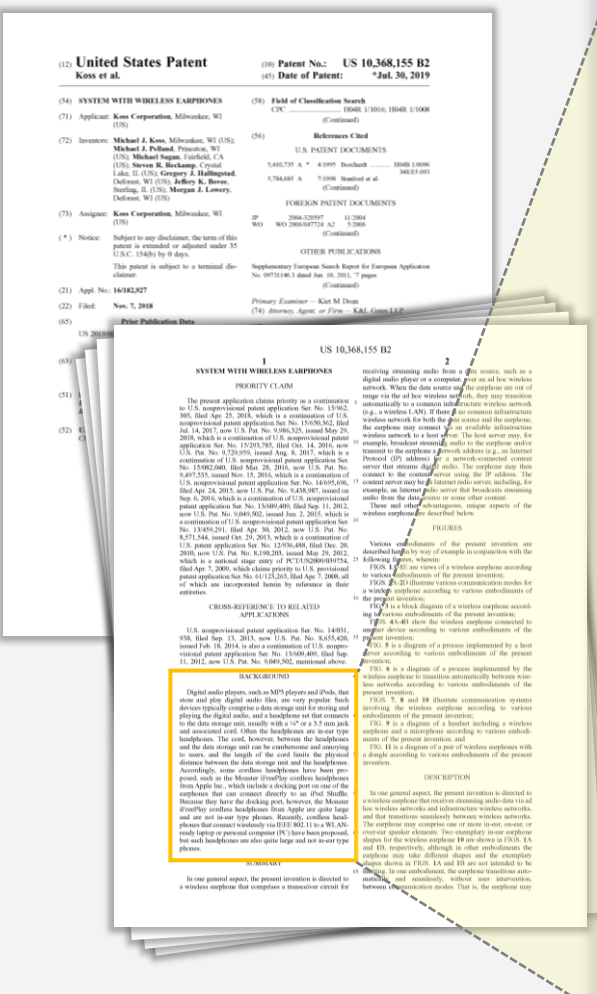
(72) Inventors: Michael J. Koss, Milwaukee, WI (US); Michael J. Pollard, Princeton, WI (US); Steven R. Rockcamp, Crystal Lake, IL (US); Gregory J. Hoffmann, Delton, WI (US); Jeffrey R. Brown, Sterling, IL (US); Morgan A. Lowery, Delton, WI (US) (58) U.S. PATENT DOCUMENTS

(73) Assignee: Koss Corporation, Milwaukee, WI (59) FOREIGN PATENT DOCUMENTS

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No. 1618297 (22) Filed: Nov. 7, 2019 (74) Attorney, Agent, or Firm: KAL, Gross LLP

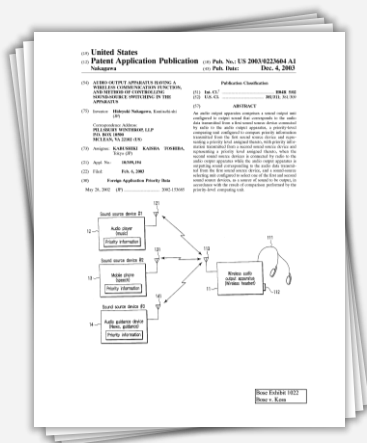
(65) Prior Publication Data



Wireless Headphones Predated the '155 Patent

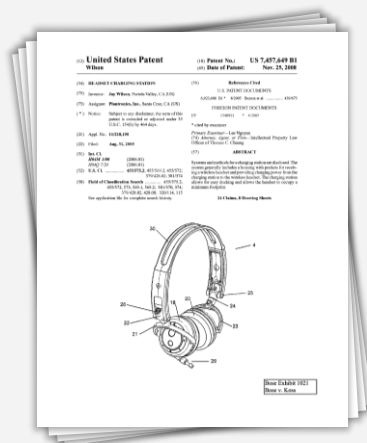
Petition

2003



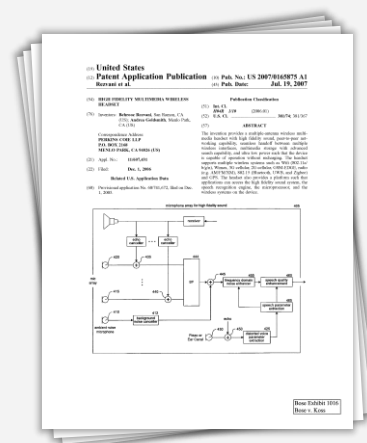
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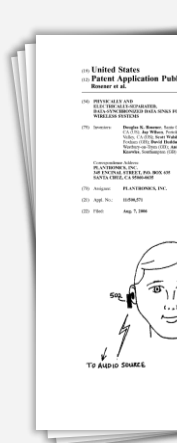
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20



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Challenged Independent Claim 1: Transition Automatically Between Networks

What is claimed is:

1. A wireless headphone assembly comprising:
first and second earphones, wherein each of the first and
second earphones comprises an acoustic transducer;
5 an antenna for receiving wireless signals;
a wireless communication circuit connected to the
antenna, wherein the wireless communication circuit is
for receiving and transmitting wireless signals to and
from the wireless headphone assembly;
10 a processor in communication with the wireless commu-
nication circuit; and
a rechargeable battery for powering the wireless head-
phone assembly,

15 wherein the headphone assembly is configured, with the
processor, to transition automatically from playing
digital audio content received wirelessly by the head-
phone assembly via a first wireless network to playing
digital audio content received wirelessly by the head-
phone assembly via a second wireless network.

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