

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

BOSE CORPORATION,  
Petitioner,

v.

KOSS CORPORATION,  
Patent Owner.

---

Case No. TBD  
Patent No. 10,368,155

---

**DECLARATION OF TIM A. WILLIAMS, Ph.D.**

Bose Exhibit 1003 Bose v. Koss
-----------------------------------

## TABLE OF CONTENTS

I.	PERSONAL AND PROFESSIONAL BACKGROUND .....	1
II.	MATERIALS REVIEWED AND CONSIDERED .....	4
III.	MY UNDERSTANDING OF PATENT LAW .....	7
	A. Anticipation .....	9
	B. Obviousness.....	10
IV.	PERSON OF ORDINARY SKILL IN THE ART (“POSA”).....	12
V.	THE ’155 PATENT AND RELATED PATENTS .....	18
	A. Described Embodiments.....	25
	B. Prosecution History of the ’155 Patent.....	34
	C. Prosecution History of Earlier, Related Patent Applications .....	36
	1. The PCT Application to which the ’155 Patent Claims Priority Only Claimed and Described the Ability to “Transition Automatically” (a) From an Ad Hoc Network to an Infrastructure Network (b) When Out of Range of the Ad Hoc Network .....	36
	2. The European National Phase: The EPO Found, and Koss Conceded, that Rezvani (Ex. 1016) Discloses the “Transition Automatically” Limitation .....	39
	D. Summary of the Challenged Claims.....	42
	E. Claim Interpretation.....	46
VI.	THE CHALLENGED CLAIMS ARE UNPATENTABLE IN LIGHT OF THE PRIOR ART IDENTIFIED IN THE PETITION .....	47
	A. Ground 1: Pelland Anticipates All Challenged Claims.....	47
	1. Pelland Is Prior Art to the Challenged Claims .....	48
	2. The Priority Applications’ Specifications Fail to Support the Broadened “Transition Automatically” Limitation.....	50
	a. The Specifications Only Disclose Transition Due to Lost Connection, Which Is the “Present Invention” .....	51
	b. The Specifications Only Disclose Transitions Between Ad Hoc and Infrastructure Networks.....	54

c.	All Challenged Claims Lack Priority Because They Are Not Limited to the Transition Disclosed in the Specifications of the Priority Applications.....	58
3.	Pelland Anticipates All Challenged Claims.....	59
B.	Grounds 2A-2E: All Challenged Claims Would Have Been Obvious Over Rezvani in View of Other Prior Art.....	73
1.	Ground 2A: Claims 1-4, 6-8, and 14 Would Have Been Obvious Over Rezvani in View of Skulley.....	74
a.	Claim 1: The Independent Claim.....	74
(1)	Rezvani (Ex. 1016): U.S. Patent Application Publication No. 2007/0165875 .....	74
(2)	Skulley (Ex. 1017): U.S. Patent No. 6,856,690.....	82
(3)	The Rezvani-Skulley Combination .....	84
(4)	Claim 1.....	87
(i)	[1.a] A wireless headphone assembly comprising: .....	87
(ii)	[1.b] first and second earphones, wherein each of the first and second earphones comprises an acoustic transducer; .....	88
(iii)	[1.c] an antenna for receiving wireless signals; .....	90
(iv)	[1.d] 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;.....	91
(v)	[1.e] a processor in communication with the wireless communication circuit; and.....	93
(vi)	[1.f] a rechargeable battery for powering the wireless headphone assembly,.....	95
(vii)	[1.g] wherein the headphone assembly is configured, with the processor, to transition automatically from playing digital audio content received wirelessly by the headphone assembly via a first wireless network to playing digital	

audio content received wirelessly by the headphone assembly via a second wireless network. ....	96
b. Claim 2: The wireless headphone assembly of claim 1, wherein the processor is further configured to, upon activation of a user-control of the headphone assembly, initiate transmission of a request to a remote network server. ....	99
c. Claim 3: .....	102
(1) [3.a] The wireless headphone assembly of claim 2, wherein: .....	102
(2) [3.b] the headphone assembly further comprises a microphone; and .....	102
(3) [3.c] the processor is further configured to: process audible utterances by a user of the headphone assembly picked up by the microphone in response to activation of the microphone by the user; and.....	103
(4) [3.d] transmit a communication based on the audible utterances via the first or second wireless networks. ....	104
d. Claims 4 and 6-8: The Headphone Design Claims.....	105
(1) Claim 4: The wireless headphone assembly of claim 1, wherein: the first earphone comprises a first earbud; and the second earphone comprises a second earbud.....	108
(2) Claims 6-8.....	109
(i) Claim 6: The wireless headphone assembly of claim 1, further comprising a headband connected between the first and second earphones. ....	109
(ii) Claim 7: The wireless headphone assembly of claim 6, wherein the first and second earphones comprise speaker elements housed in on-ear headphones. ....	110
(iii) Claim 8: The wireless headphone assembly of claim 6, wherein the first and second earphones	

comprise speaker elements housed in over-ear headphones. ....	111
e. Claim 14: Claim 14: The wireless headphone assembly of claim 1, further comprising a memory unit that stores network identifiers for the first and second wireless networks. ....	112
2. Ground 2B: Claims 11-12 Would Have Been Obvious Over Rezvani-Skulley in View of Feder .....	113
a. Feder (Ex. 1018): U.S. Patent Application Publication No. 2004/0142693 .....	114
b. The Rezvani-Skulley-Feder combination .....	118
c. Claims 11-12 .....	120
(1) Claim 11: The wireless headphone assembly of claim 1, wherein the processor is configured to transition automatically from playing digital audio content received wirelessly by the headphone assembly via the first wireless network to playing digital audio content received wirelessly by the headphone assembly via the second wireless network based on a signal strength level for the second wireless network. ....	121
(2) Claim 12: The wireless headphone assembly of claim 11, wherein the processor is configured to transition automatically from playing digital audio content received wirelessly by the headphone assembly via the first wireless network to playing digital audio content received wirelessly by the headphone assembly via the second wireless network based on whether the signal strength level for the second wireless network is above a threshold level. ....	122
3. Ground 2C: Claim 13 Would Have Been Obvious Over Rezvani-Skulley-Hind .....	122
a. Hind (Ex. 1019): U.S. Patent No. 7,069,452 .....	123
b. The Rezvani-Skulley-Hind combination .....	126
c. Claim 13: The wireless headphone assembly of claim 1, wherein the processor is further configured to receive firmware updates from a remote computer device. ....	129

# 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.