

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner

v.

IMMERSION CORPORATION,
Patent Owner

U.S. Patent No. 8,659,571

Filing Date: February 21, 2013

Issue Date: February 25, 2014

Title: Interactivity Model for Shared Feedback on Mobile Devices

Inter Partes Review No.: (Unassigned)

**DECLARATION OF DR. V. MICHAEL BOVE IN SUPPORT OF
APPLE INC.'S PETITION FOR *INTER PARTES* REVIEW OF
U.S. PATENT NO. 8,659,571**

I, Dr. V. Michael Bove, Jr., do hereby declare and state, that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Dated: Feb. 12, 2017

A handwritten signature in black ink that reads "V. Michael Bove, Jr." in a cursive script.

Dr. V. Michael Bove , Jr.

TABLE OF CONTENTS

	Page
I. INTRODUCTION	1
II. QUALIFICATIONS	2
III. INFORMATION CONSIDERED IN FORMING OPINION	4
IV. LEGAL STANDARDS	5
A. Legal Standards for Prior Art.....	5
B. Legal Standards for Priority Date	6
C. Legal Standards for Inventorship.....	7
D. Legal Standards for Anticipation	8
E. Legal Standards for Obviousness.....	9
V. TECHNOLOGY BACKGROUND / STATE OF THE ART.....	13
VI. OVERVIEW OF THE '571 PATENT.....	14
A. Challenged Claims	15
B. The '571 Patent Prosecution History	17
C. IPR2016-01372.....	19
D. Priority Date.....	20
E. Person Having Ordinary Skill in the Art.....	21
VII. CLAIM CONSTRUCTION.....	23
VIII. SUMMARY OF OPINIONS	26
IX. ANALYSIS OF THE PRIOR ART	26
A. U.S. Patent No. 5,734,373 to Rosenberg (“Rosenberg ’373”).....	26
B. Rosenberg ’373 in Combination with U.S. Patent No. 6,429,846 to Rosenberg et al. (“Rosenberg ’846”)	62
C. U.S. Patent No. 7,952,566 to Poupyrev et al. (“Poupyrev”).....	66
D. Poupyrev in Combination with A Force Feedback Programming Primer, by Louis Rosenberg (1997) (“Primer”).....	97
E. Poupyrev in Combination with Canadian Patent App. No. 2,059,893 A1 (“Tecot”)	100
X. CONCLUSION.....	106

EXHIBIT LIST

Exhibit No.	Description
1001	U.S. Patent No. 8,659,571.
1002	Declaration of expert Dr. V. Michael Bove Jr. (“Bove Decl.”).
1003	File history of U.S. Patent No. 8,659,571.
1004	U.S. Patent No. 5,734,373 to Rosenberg et al. (“Rosenberg ’373”).
1005	Reserved.
1006	U.S. Patent No. 6,429,846 to Rosenberg et al. (“Rosenberg ’846”).
1007	File history of U.S. Patent App. No. 13/472,698 (the “’698 application”).
1008	Excerpts from Barron’s Dictionary of Mathematics Terms, 3 rd ed. (2009).
1009	Excerpts from The American Heritage Dictionary of the English Language, 5 th ed. (2011).
1010	Reserved.
1011	Reserved.
1012	Reserved.
1013	U.S. Patent No. 7,952,566 to Poupyrev et al. (“Poupyrev”).
1014	U.S. Patent No. 6,281,651 to Hanpaa et al.
1015	Canadian Pat. App. 2,059,893 to Tecot (“Tecot”).
1016	Excerpt from Canadian Patent Office Record (Vol. 127, No. 18, May 1999).

1017	A FORCE FEEDBACK PROGRAMMING PRIMER, Louis Rosenberg (1997).
1018	“Synaptics TouchPad Interfacing Guide” (Document No. 510-000080-A; Rev. 2.5) (“Synaptics”)
1019	Internet Archive Affidavit for Synaptics Web Page http://www.synaptics.com/support/dev_support.cfm

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.