

UNITED STATES PATENT AND TRADEMARK OFFICE

---

**BEFORE THE PATENT TRIAL AND APPEAL BOARD**

---

SAMSUNG ELECTRONICS CO., LTD.,  
SAMSUNG ELECTRONICS AMERICA, INC.,  
APPLE INC.

Petitioners

v.

NEONODE SMARTPHONE LLC  
Patent Owner.

Case IPR2021-00145  
U.S. Patent No. 8,812,993

**SUPPLEMENTAL DECLARATION OF DR. BENJAMIN B. BEDERSON  
IN SUPPORT OF PETITION FOR *INTER PARTES* REVIEW OF  
U.S. PATENT NO. 8,812,993**

EXHIBIT 1051

*Samsung et al. v. Neonode*

## TABLE OF CONTENTS

Contents	
I.	INTRODUCTION.....4
II.	BACKGROUND AND QUALIFICATIONS.....4
III.	INFORMATION CONSIDERED .....5
IV.	RELEVANT LEGAL STANDARDS.....9
V.	SUMMARY OF MY OPINIONS .....9
VI.	THE '993 PATENT .....10
A.	Priority Date.....10
B.	Level of Ordinary Skill in the Art.....10
C.	Claim Construction .....10
1.	“An electronic device” (Claim 1, Preamble) .....12
2.	“tap-activatable” (Claim 1, limitation [1.b]) .....14
3.	“system function(s)” (Claim 1, limitation [1.b]) .....16
VII.	DETAILED EXPLANATION OF UNPATENTABILITY.....21
A.	Claims 1-8 are rendered obvious by combinations based on Hisatomi (EX1005) in view of POSA Knowledge and/or Ren (EX1006).....21
1.	Ren Teaches a POSA to Try <i>Direct Off</i> (“tap”). .....21
2.	A POSA, Given Hisatomi, Would Have Used Their Design Knowledge to Implement “tap-activatable” Icons. ....29
3.	Hisatomi discloses “icons for a respective plurality of pre-designated system functions.” .....37
B.	Claim 4 is Obvious over Hisatomi, Ren/POSA Knowledge, and Allard. ....42

EXHIBIT 1051

*Samsung et al. v. Neonode*

1.	Allard is Analogous Art.....	42
2.	A POSA Would Have Been Motivated to Make Hisatomi’s Icon a Help Function in View of Allard. ....	44
C.	Claims 1-8 are rendered obvious by combinations based on Hansen (EX1029) in view of Gillespie (EX1030).....	45
1.	Hansen Discloses an “Electronic Device,” Under That Term’s Plain and Ordinary Meaning .....	46
2.	Hansen discloses “icons for a respective plurality of pre- designated system functions.” .....	49
3.	A POSA Would Have Ample Motivation to Combine Hansen and Gillespie.....	50
VIII.	SECONDARY CONSIDERATIONS OF NON-OBVIOUSNES .....	53
A.	Alleged Commercial Success .....	55
B.	Industry Praise .....	56
C.	Skepticism by Experts.....	57
D.	Industry Respect.....	58
IX.	CONCLUSION .....	58

1. I, Dr. Benjamin B. Bederson, declare as follows:

## **I. INTRODUCTION**

2. I have been retained by Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., and Apple Inc. (collectively, "Petitioners") as an independent expert consultant in this *inter partes* review ("IPR") proceeding before the United States Patent and Trademark Office ("patent office").

3. I have been asked by Petitioners' counsel ("Counsel") to consider whether certain references teach or suggest the features recited in Claims 1-8 of U.S. Patent No. 8,812,993 ("the '993 Patent") (EX1001).

4. I previously submitted a Declaration in this proceeding that I signed on November 5, 2020, and I understand that Declaration was marked as Exhibit 1002. That Declaration contained my opinions and the bases for them. Since submitting my Declaration (EX1002) I have considered the Board's institution decision (Paper 24), Patent Owner's Response (Paper 29), and the Declaration of Dr. Craig Rosenberg (EX2013) in support of Patent Owner's Response. My opinions from my previous declaration have not changed.

## **II. BACKGROUND AND QUALIFICATIONS**

5. My background and qualifications are set forth in my November 5, 2020 declaration. I incorporate that section of my previous declaration here by reference.

EXHIBIT 1051

*Samsung et al. v. Neonode*

### III. INFORMATION CONSIDERED

6. In preparing this declaration, I have considered the materials discussed in this declaration, including, for example, the '993 Patent, the references cited by the '993 Patent, the prosecution histories of the '993 Patent and the application from which it derives (including the references cited therein), various background articles and materials referenced in this declaration, and the prior art references identified in this declaration. In addition, my opinions are further based on my education, training, experience, and knowledge in the relevant field.

<b><u>Exhibit No.</u></b>	<b><u>Description</u></b>
1001	U.S. Patent No. 8,812,993 (“the '993 patent”)
1002	Declaration of Benjamin B. Bederson
1003	File History for U.S. Patent No. 8,812,993
1004	Benjamin B. Bederson CV
1005	Certified translation of JP Published Patent Application No. 2002-55750 (“Hisatomi”), published February 20, 2002
1006	Xiangshi Ren & Shinji Moriyama, “Improving Selection on Pen-Based Systems: A Study of Pen-Based Interaction for Selection Tasks,” ACM Transactions on Computer-Human Interaction, Vol. 7, No. 3, September 2000, pp. 384-416 (“Ren”)
1007	U.S. Patent No. 5,422,656 to Allard et al. (“Allard-656”)
1008	U.S. Patent No. 5,249,296 to Tanaka (“Tanaka”)
1009	U.S. Patent No. 5,615,384 to Allard et al. (“Allard-384”)
1010	U.S. Patent No. 5,537,608 to Beatty et al. (“Beatty”)
1011	U.S. Patent No. 5,903,268 to Hirayama (“Hirayama”)

EXHIBIT 1051

*Samsung et al. v. Neonode*

# 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.