UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.
Petitioner,

v.

SMITH INTERFACE TECHNOLOGIES, LLC
Patent Owner.

Case IPR2024-01085
Patent 10,649,580

PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

TABLE OF CONTENTS

LIST OF EXHIBITS iv

UPDATED LISTING OF CHALLENGED CLAIMS viii

CONVENTIONS OF THIS REPLY BRIEF xxi

I. Introduction 1

II. The RROD Renders Obvious Claims 1-4, 6-10, 17, 19, 22-26, 28-30, 32-33, 36, 41, 58-62, 64-65, 67, 69-70, 73, 77, and 82 1

- **A.** Smith's contention of failure to motivate is belied by record evidence of the benefits of implementing partially transparent widgets and the commonplace nature of doing so 1
- **B.** The RROD's second virtual display layer—including all Zlider components—appears to have a lesser depth than the first virtual display layer at least because the Zlider's pressure cursor is partially translucent, as Smith and Dr. Mahon admit 13
- **C.** At least a portion of the RROD's second virtual display layer is at least partially translucent due to the Zlider pressure cursor's translucency and Ording's teachings 20
- **D.** Smith's arguments concerning "perform[ing] a zoom operation on … the first virtual display layer" "without performing the zoom operation on the plurality of markings" misinterpret the claims ([1l](i)-(iii)/[1.k], [22h](i)-(iii)/[22.g], [58g(i)-(iii)]/[58.f], [82]) 21
- **E.** Smith's argument that a hover cannot satisfy the claims is belied by record evidence of a "touch" includes proximity ([1.h], [22.d], [58.c]). 24
- **F.** Smith's professed confusion as to Petitioner's mapping is refuted by the Board's understanding of the mapping and Smith's ability to respond to the mapping 28
- **G.** Smith's argument that the Petition's mapping does not show "a single continuous gesture in constant contact" relies on a mischaracterization of the Petition's "first touch" and "second touch" (claims 29, 65) 31
- **H.** Record evidence refutes Smith's contention that a POSITA would not have been motivated to use duration (claims 9, 32, 69) 32
- **I.** Smith Offers No Independent Arguments Against the Obviousness of Claims 2, 4, 6-10, 23, 25-26, 28-30, 32-33, 59, 61-62, 64-65, 67, 69-70, or 73 33

III. The RROHD Renders Obvious Claim 48 33

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

A. The Petition Argues that a POSITA Would Have Been Motivated to Modify RROD with Hayward, Not the Other Way Around, as Smith Alleges 33

IV. Conclusion 34

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

LIST OF EXHIBITS

APPLE-1001	U.S. Patent No. 10,649,580
APPLE-1002	U.S. Patent No. 10,649,580 File History
APPLE-1003	Declaration of Dr. Andrew Cockburn
APPLE-1004	Ramos et al., "Zliding: Fluid Zooming and Sliding for High Precision Parameter Manipulation," *UIST: Proceedings of the ACM Symposium on User Interface Software and Technology*, 2005.
APPLE-1005	Zooming & Zliding (Gonzalo Ramos), December 28, 2007, *available at* https://www.youtube.com/watch?v=EcE3XBytN-U ("Ramos Video")
APPLE-1006	US 2008/0094356 to Ording et al. ("Ording")
APPLE-1007	Declaration of Kathryn Talbot
APPLE-1008	Gonzalo Alberto Ramos, *Press-Sensitive Pen Interactions* (2008) (Ph.D. thesis, University of Toronto) ("Ramos Thesis")
APPLE-1009	Declaration of June Ann Munford
APPLE-1010	Webpage version of the Ramos Video, *available at* https://www.youtube.com/watch?v=EcE3XBytN-U
APPLE-1011	*Dictionary of Computing*, Sixth Edition (2010)
APPLE-1012	*Telecom Dictionary*, First Edition (2007)
APPLE-1013	*Wiley Electronical and Electronics Engineering Dictionary*, First Edition (2004)
APPLE-1014	*A Dictionary of Computing*, Sixth Edition (2008)

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

APPLE-1015	*The Facts on File Dictionary of Computer Science*, Revised Edition (2006)
APPLE-1016	U.S. Patent Pub. No. 2012/0176401 to Hayward et al. ("Hayward")
APPLE-1017	U.S. Patent No. 7,479,949 to Jobs et al. ("Jobs")
APPLE-1018	Bezerianos & Balakrishnan, "The Vacuum: Facilitating the Manipulation of Distant Objects," PAPERS: Smart Interaction Techniques 2, April 2-7, 2005
APPLE-1019	Fitzmaurice et al., "Tracking Menus," *UIST*, 2003
APPLE-1020	U.S. Patent Pub. No. 2012/0319959 to Saponas et al. ("Saponas")
APPLE-1021	U.S. Patent No. 2012/0046071 to Brandis et al. ("Brandis")
APPLE-1022	Declaration of Gonzalo Ramos
APPLE-1023	U.S. Patent Publication No. 2008/0316183 to Westerman et al. ("Westerman")
APPLE-1024	U.S. Patent No. 8,164,573 to da Costa ("da Costa")
APPLE-1025	U.S. Patent Publication No. 2012/0046071 to Brandis et al. ("Brandis")
APPLE-1026	U.S. Patent Publication No. 2006/0026535 to Hotelling et al. ("Hotelling")
APPLE-1027	U.S. Patent Publication No. 2006/0132457 to Rimas-Ribikauskas et al. ("Rimas-Ribikauskas")
APPLE-1028	U.S. Patent Publication No. 2008/0024459 to Poupyrev et al ("Poupyrev")

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

DOCKET ALARM

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.