

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE, INC.

Petitioner

v.

MAXELL, LTD.

Patent Owner

Case IPR2020-00202

Patent 10,212,586

Declaration of Dr. Victor Shoup

TABLE OF CONTENTS

I.	BACKGROUND AND QUALIFICATIONS	1
II.	LEGAL FRAMEWORK	4
A.	Analogous Art.....	4
B.	Obviousness	5
C.	Secondary Considerations of Non-Obviousness.....	11
D.	Claim Construction.....	12
III.	OPINIONS REGARDING THE '586 PATENT	13
A.	Opinions Regarding the Level of Skill of a Person Having Ordinary Skill in the Art.....	13
B.	Description of the Alleged Invention of the '586 Patent.....	14
C.	Background of the Technology	16
D.	Opinions Regarding the Obviousness of the Claims.....	18
1.	Opinions Regarding Analogous Art.....	19
a)	<i>Kirkup is Analogous art.....</i>	<i>19</i>
b)	<i>De la Huerga Is Analogous Art</i>	<i>21</i>
2.	The Combination of Kirkup and de la Huerga.....	22
a)	<i>Modifying Kirkup to Incorporate de la Huerga's Biometric Authentication Teachings</i>	<i>22</i>
b)	<i>Modifying Kirkup to Incorporate de la Huerga's Teachings of Unlocking Multiple Devices</i>	<i>25</i>
3.	Opinions Regarding the Claims	27
a)	<i>Opinions Regarding Independent Claim 1</i>	<i>27</i>
(1)	[1(pre)] A mobile terminal configured to switch between an unlocked state and a locked state in which a predetermined operation is limited, comprising:	27
(2)	[1(a)] a transceiver which performs short-range wireless communications;.....	30
(3)	[1(b)] a memory which previously stores information about an another mobile terminal	31
(4)	[1(c)] a controller which switches the mobile terminal between an unlocked state and a locked state based on an authentication input to the mobile terminal, wherein the locked state prevents unauthorized access to the mobile terminal.....	32

(5)	[1(d)] wherein, when conditions are met, the controller controls the mobile terminal to transmit information to the another mobile terminal for switching a state of the another mobile terminal from a locked state to an unlocked state ..	33
(6)	[1(e)] wherein the conditions include: first, the mobile terminal is in a locked state, the another mobile terminal is in a locked state, and the another mobile terminal is within communication range of the short-range wireless communications of the transceiver while in the locked state	34
(7)	[1(f)] second, after the mobile terminal is in the locked state, the another mobile terminal is in the locked state, and the another mobile terminal is within communication range of the short-range wireless communications of the transceiver while in the locked state, performing, via the transceiver, the short-range wireless communications with the another mobile terminal.....	38
(8)	[1(g)] third, after the performing, receiving, by the controller, the authentication input for switching the mobile terminal from the locked state to the unlocked state	40
b)	<i>Opinions regarding Independent Claim 9</i>	45
(1)	[9(b)] storing information about an another mobile terminal in a memory	45
(2)	[9(c)] transmitting information from the mobile terminal to the another mobile terminal which is for switching a state of the another terminal from a locked state to an unlocked state when conditions are met, wherein the locked state prevents unauthorized access to the mobile terminal.....	45
c)	<i>Opinions regarding Independent Claim 16</i>	46
(1)	[16(a)] a first mobile terminal and a second mobile terminal which are configured to switch between an unlocked state and a locked state in which a predetermined operation is limited.....	46
d)	<i>Opinions Regarding Dependent Claims 2, 10, and 17</i>	47
(1)	“wherein the operation includes a biometrics authentication”	47
e)	<i>Opinions Regarding Dependent Claims 6, 13, and 18</i>	48
(1)	[2] further configured to store information about two or more another mobile terminals; [13] storing information	

	about two or more another mobile terminals; [18] further comprising two or more second mobile terminals.....	49
f)	<i>Opinions Regarding Dependent Claims 7 and 14</i>	52
(1)	[7] wherein the short-range wireless communication is via a Bluetooth connection; [19] wherein the short-range wireless communications are performed via a Bluetooth connection	52

DECLARATION OF DR. VICTOR SHOUP

I, Victor Shoup, Ph.D., hereby declare the following:

I. BACKGROUND AND QUALIFICATIONS

1. My name is Victor Shoup, and I am over 21 years of age and otherwise competent to make this Declaration. I make this Declaration based on facts and matters within my own knowledge and on information provided to me by others, and, if called as a witness, I could and would competently testify to the matters set forth herein.

2. I have been retained as a technical expert witness in this matter by Counsel for the Petitioner, Apple Inc. (“Petitioner”) to provide my independent opinions on certain issues requested by Counsel for Petitioner relating to the accompanying Petition for *Inter Partes* Review of U.S. Patent No. 10,212,586 (“the ’586 Patent”), claims 1-2, 6-7, 9-10, 13-14, and 16-18. I am being compensated at an hourly rate of \$500. My compensation in this matter is not based on the substance of my opinions or on the outcome of this matter. I have been informed that Maxell, Ltd. is the purported owner of the ’586 Patent. I note that I have no financial interest in Maxell, Ltd. or Petitioner, and I have no other interest in the outcome of this matter.

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.