

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE INC.
Petitioner

v.

BLACKBERRY LTD.
Patent Owner

Patent No. 8,489,868

DECLARATION OF DR. PATRICK D. McDANIEL

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	QUALIFICATIONS	1
III.	SUMMARY OF OPINIONS.....	5
IV.	PERSON OF ORDINARY SKILL IN THE ART	7
V.	TECHNOLOGICAL BACKGROUND	8
A.	Secure Systems.....	8
B.	Secure Systems and Cryptography.....	9
1.	Encryption and Decryption Generally	9
2.	Cryptographic Algorithms and Keys	11
3.	Cryptographic Protocols	13
VI.	OVERVIEW OF THE '868 PATENT AND RELATED PROVISIONAL APPLICATIONS.....	21
A.	The '868 Patent Specification	22
B.	Related Provisional Applications.....	33
VII.	CLAIM CONSTRUCTION	35
VIII.	OVERVIEW OF THE PRIOR ART	36
A.	U.S. Patent No. 6,188,995 (“ <i>Garst</i> ”) (Ex. 1012)	36
B.	Li Gong, “Inside Java 2 Platform Security Architecture: Cryptography, APIs, and Implementation” (1999) (“ <i>Gong</i> ”) (Ex. 1016).....	42
C.	U.S. Patent No. 5,844,986 (“ <i>Davis</i> ”) (Ex. 1013).....	49
D.	U.S. Patent No. 5,724,425 (“ <i>Chang</i> ”) (Ex. 1014).....	50
E.	U.S. Patent No. 7,243,236 (“ <i>Sibert</i> ”) (Ex. 1015).....	52

F.	U.S. Patent No. 6,131,166 (“ <i>Wong-Insley</i> ”) (Ex. 1017)	58
G.	U.S. Patent No. 5,657,378 (“ <i>Haddock</i> ”) (Ex. 1018)	60
IX.	THE PRIOR ART DISCLOSES ALL OF THE FEATURES OF THE CHALLENGED CLAIMS OF THE ’868 PATENT	61
A.	The Combination of <i>Garst</i> and <i>Gong</i> Discloses Every Feature of Claims 1, 13, 76, 78, 81, 84, 85, 87, 88, 90-93, 95, 98, 100, 104, 108, 112, 113, 137-39, and 142-44	62
1.	Claims 1 and 76.....	62
2.	Claims 78 and 81.....	89
3.	Claim 84	89
4.	Claim 85	91
5.	Claim 87	96
6.	Claims 13 and 88.....	97
7.	Claim 90.....	98
8.	Claim 91	100
9.	Claim 92	101
10.	Claim 93	102
11.	Claim 95	105
12.	Claim 98	106
13.	Claim 100.....	107
14.	Claim 104.....	109
15.	Claim 108.....	110
16.	Claim 112.....	112
17.	Claims 113 and 137	116

18.	Claim 138.....	116
19.	Claim 139.....	117
20.	Claims 142 and 143	118
21.	Claim 144.....	118
B.	The Combination of <i>Garst, Gong, and Davis</i> Discloses Every Feature of Claims 77, 79, 80, and 82	119
1.	Claims 77, 79, 80, and 82	119
C.	The Combination of <i>Garst, Gong, and Chang</i> Discloses Every Feature of Claim 83	123
1.	Claim 83	124
D.	The Combination of <i>Garst, Gong, and Sibert</i> Discloses Every Feature of Claim 86.....	128
1.	Claim 86	128
E.	The Combination of <i>Garst, Gong, and Wong-Insley</i> Discloses Every Feature of Claim 89	133
1.	Claim 89	133
F.	The Combination of <i>Garst, Gong, and Haddock</i> Discloses Every Feature of Claim 94	136
1.	Claim 94	136
X.	CONCLUSION.....	139

I, Dr. Patrick D. McDaniel, declare as follows:

I. INTRODUCTION

1. I have been retained by Google Inc. (“Petitioner”) as an independent expert consultant in this proceeding before the United States Patent and Trademark Office (“PTO”) regarding U.S. Patent No. 8,489,868 (“the ’868 patent”) (Ex. 1001). I have been asked to consider whether certain references disclose or suggest the features recited in claims 1, 13, 76-95, 98, 100, 104, 108, 112, 113, 137-39, and 142-44 (“the challenged claims”) of the ’868 patent. My opinions are set forth below.

2. I am being compensated at my rate of \$500 per hour for the time I spend on this matter. My compensation is in no way contingent on the nature of my findings, the presentation of my findings in testimony, or the outcome of this or any other proceeding. I have no other interest in this proceeding.

II. QUALIFICATIONS

3. Below I summarize my qualifications, as set forth in more detail in my curriculum vitae, which I understand is provided as Exhibit 1003.

4. I earned a Ph.D. in Computer Science and Engineering from University of Michigan, Ann Arbor in 2001. Before that, I earned a Bachelor of Science degree in Computer Science from Ohio University in 1989 and a Master of Science degree, also in Computer Science, from Ball State University in 1991.

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.