UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SYMANTEC CORP.
Petitioner

v.

THE TRUSTEES OF COLUMBIA UNIVERSITY
IN THE CITY OF NEW YORK
Patent Owner

CASE IPR2015-00375
Patent 8,074,115

COLUMBIA'S PATENT OWNER PRELIMINARY RESPONSE UNDER 37 C.F.R. § 42.107

Mail Stop "PATENT BOARD"
Patent Trial and Appeal Board
U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

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

TABLE OF CONTENTS

Page

I. INTRODUCTION 1

II. BACKGROUND 3

III. LEVEL OF ORDINARY SKILL IN THE ART 4

IV. CLAIM CONSTRUCTION 6

A. "anomalous" (all claims) 6

B. "model of function calls" (all claims) 10

C. "the model reflects attacks against the at least a part of the program" (claims 8, 18, 29, 39) and "reflects" (claims 7-8, 17-18, 28-29, 38-39) 14

V. THE PETITION FAILS TO ESTABLISH A REASONABLE LIKELIHOOD OF PREVAILING ON ANY CHALLENGED PATENT CLAIM 16

A. The Board Should Deny The Petition Because Petitioner Has Not Established The Level Of Ordinary Skill In The Art 16

B. The Petition Should Be Denied Under 35 U.S.C. § 325(d) Because The Primary Reference Khazan Has Already Been Considered During Prosecution And Found Not To Invalidate Any Claims 19

C. Institution Should Be Denied On Petitioner's Ground 1 Because Khazan Does Not Anticipate Claims 22, 25, 27-29, 32, 35-39, Or 42 19

1. Khazan does not disclose "a model of function calls" as all claims challenged in Ground 1 require 20

2. Khazan does not disclose "identifying/identifies a function call . . . as anomalous" as all claims challenged in Ground 1 require 21

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

Page

3. Khazan does not disclose "program-level function calls" as required by all claims of Ground 1 under Petitioner's apparent interpretation of the term 24

4. Khazan does not disclose "the model reflects attacks against the at least a part of the program" as recited by claims 8, 18, 29, 39 27

(a) Petitioner's argument is inconsistent with its arguments regarding independent claims 27

(b) Khazan does not disclose a model that incorporates attack data 28

(c) Khazan does not knowingly incorporate attack data 29

D. Institution Should Be Denied On Petitioner's Ground 2 Because Khazan In View Of Arnold Does Not Render Obvious Claims 1, 4-8, 11, 14-18, 21, And 26 30

1. Neither Khazan nor Arnold discloses "comparing a function call made in the emulator to a model of function calls for the at least a part of the program" as recited by independent claims 1, 11, and 21, and required by all challenged claims 31

2. Neither Khazan nor Arnold discloses "identifying the function call as anomalous based on the comparison" as recited by independent claims 1, 11, and 21, and required by all challenged claims 31

3. Neither Khazan nor Arnold discloses "upon identifying the anomalous function call, notifying an application community that includes a plurality of computers of the anomalous function call" as recited by independent claims 1, 11, and 21, and required by all challenged claims 31

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

Page

(a) Arnold does not describe notifying an "application community" 32

(b) Arnold does not disclose, "upon identifying the anomalous function call," notifying any computer "of the anomalous function call" 34

4. Neither Khazan nor Arnold discloses "the model reflects attacks against the at least a part of the program" as recited by dependent claims 8 and 18 35

5. Petitioner has failed to establish that a POSITA would have been motivated to combine Khazan with Arnold 35

E. Institution Should Be Denied On Petitioner's Ground 3 Because Khazan In View Of Arnold And Agrawal Does Not Render Obvious Claims 2-3, 9-10, 12-13, 19-20, 23-24, 30-31, 33-34, And 40-41 ("Ground 3 Claims") 40

1. Petitioner fails to establish obviousness of the independent claims upon which the claims challenged in Ground 3 depend 41

2. Petitioner fails to allege a combination of Khazan with Arnold and Agrawal that meets the claims as a whole 41

3. Khazan, Arnold, and Agrawal do not disclose or suggest "creating a combined model from at least two models created using different computers" as recited by dependent claims 2, 12, 23, and 33 43

(a) Agrawal does not disclose the limitation 43

(b) A combination of Khazan with Agrawal and Arnold would not include the limitation 45

4. Khazan, Arnold, and Agrawal do not disclose or suggest "creating a combined model from at least two models

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

Page

created at different times" as recited by dependent claims 3, 13, 24, and 34 47

(a) Agrawal does not disclose the limitation 47

(b) A combination of Khazan with Agrawal and Arnold would not include the limitation 50

5. Khazan, Arnold, and Agrawal do not disclose or suggest "randomly selecting the model as to be used in the comparison from a plurality of different models relating to the program" as recited by dependent claims 9, 19, 30 & 40 52

6. Khazan, Arnold, and Agrawal do not disclose "randomly selecting a portion of the model to be used in the comparison" as recited by dependent claims 10, 20, 31, & 41 54

7. Petitioner fails to establish that a POSITA would have had a reason to modify Khazan in view of Agrawal 55

8. Petitioner fails to establish that a POSITA would have modified Khazan in a way that would satisfy the challenged claims 58

VI. CONCLUSION 60

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.