



(43) International Publication Date
29 January 2015 (29.01.2015)

- (51) **International Patent Classification:**
H04L 29/06 (2006.01)
- (21) **International Application Number:**
PCT/US20 14/047826
- (22) **International Filing Date:**
23 July 2014 (23.07.2014)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
13/95 1,689 26 July 2013 (26.07.2013) US
- (71) **Applicant: OPTIO LABS, INC.** [US/US]; 33 Arch Street, Suite 3201, Boston, MA 021 10 (US).
- (72) **Inventors: THOMPSON, Christopher, Michael;** 1410 Rosa L Parks Blvd Apt 70, Nashville, TN 37208 (US). **WHITE, Christopher, Jules;** 2130 Blair Boulevard, Nashville, TN 37212 (US).
- (74) **Agents: STEINBERG, Donald, R.** et al; Wilmer Cutler Pickering Hale and Dorr LLP, 60 State Street, Boston, MA 02109 (US).
- (81) **Designated States** (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM,

DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

- (84) **Designated States** (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

- (88) **Date of publication of the international search report:**
28 May 2015

(54) **Title: SYSTEMS AND METHODS FOR ENHANCING MOBILE SECURITY VIA ASPECT ORIENTED PROGRAMMING**

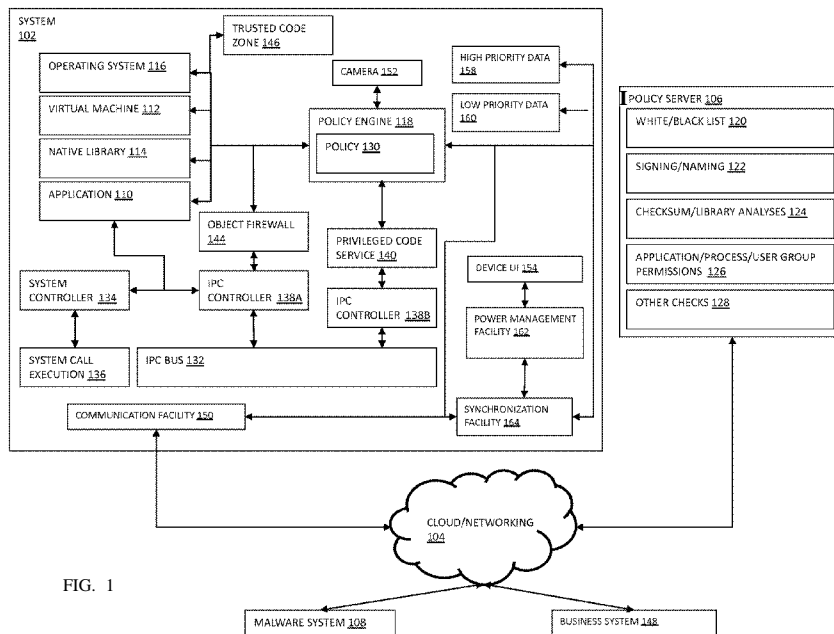


FIG. 1

(57) **Abstract:** Methods and systems described herein relate to enhancing security on a mobile device. A method for enhancing mobile device security includes applying a security policy to process code by an aspect-oriented program.



INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 14/47826

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - H04L 29/06 (2015.01)

CPC - H04L 63/20

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC (8) - H04L 29/06 (2015.01)

CPC - H04L 63/20

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

CPC - H04L 63/102; G06F 21/6218 (See Keywords Below)

USPC - 726/1, 713/189, 726/26, 726/29

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Thomsoninnovation.com; Patbase; Google Scholar; Google Patents; Gogole.com; Freepatentonline; ProQuest Dialog

Search Terms: Secure, security, protect, policy, rule, enhance, improve, aspect oriented, object, context, policy engine, code, instruction, modify, alter, edit, processor, process code, API, operating system, system libraries, access con

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2013/0179991 A1 (WHITE et al.), 11 July 2013 (11.07.2013), entire document especially Abstract; para [0047], [0061], [0067], [0065], [0077], [0137]-[0138], [0146]	1-19
P,A	US 2013/0312058 A1 (THOMPSON et al.), 21 November 2013 (21.11.2013), entire document	1-19
A	US 2012/0304310 A1 (BLAISDELL), 29 November 2012 (29.11.2012), entire document	1-19
A	US 2013/0091543 A1 (WADE et al.), 11 April 2013 (11.04.2013), entire document	1-19

Further documents are listed in the continuation of Box C.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent but published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search
14 March 2015 (14.03.2015)

Date of mailing of the international search report
01 APR 2015

Name and mailing address of the ISA/US
Mail Stop PCT, Attn: ISA/US, Commissioner for Patents
P.O. Box 1450, Alexandria, Virginia 22313-1450
Facsimile No. 571-273-3201

Authorized officer:
Lee W. Young
PCT Helpdesk: 571-272-4300
PCT OSP: 571-272-7774