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(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, 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, IS, JP, KE, KG, KM, 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, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, 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.

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[Continued on nextpage]

(54) **Title:** SYSTEM AND METHOD FOR NON-SIGNATURE BASED DETECTION OF MALICIOUS PROCESSES

(57) **Abstract:** Systems and methods for detecting malicious processes in a non-signature based manner are disclosed. The system and method may include gathering features of processes running on an electronic device, applying a set of rules to the features, and applying a statistical analysis to the results of the rules application to determine whether a process should be classified into one or more of a plurality of process categories.

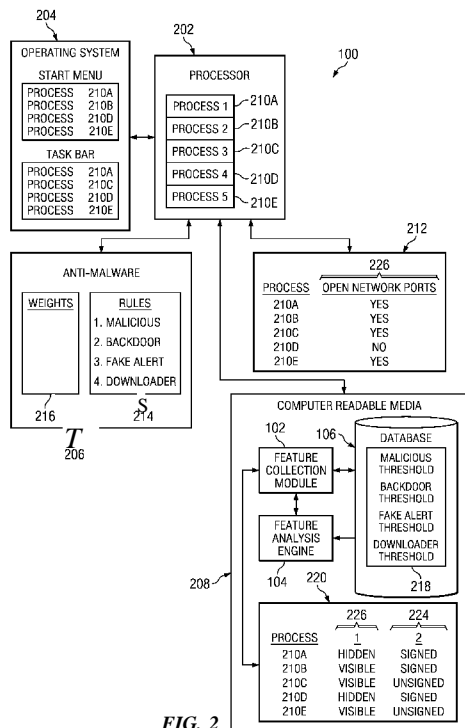


FIG. 2



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, ML, MR, NE, SN, TD, TG).

**Declarations under Rule 4.17:**

- *as to the identity of the inventor (Rule 4.17(i))*
- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(H))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

**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:**

2 8 February 201 3

## INTERNATIONAL SEARCH REPORT

International application No.  
**PCT/US2012/040428****A. CLASSIFICATION OF SUBJECT MATTER****G06F 21/00(2006.01)i, G06F 11/30(2006.01)i**

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)

G06F 21/00; G06F 11/30; H04L 9/00; G06F 15/18; G06F 11/00

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

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) &amp; Keywords: score, compare, threshold, classify, malicious, program

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US 2004-0054917 A1 (MARK OBRECHT et al.) 18 March 2004 See the abstract; paragraphs 16-30; claims 1,8; and figure 2.	1,3-11,13-20 2,12
A	US 2010-0153316 A1 (DUFFIELD NICHOLAS et al.) 17 June 2010 See the abstract; paragraphs 10-19; claim 1; and figure 2.	1-20
A	US 2005-0283837 A1 (MICHAEL OLIVIER et al.) 22 December 2005 See the abstract; paragraphs 112-130; and figures 1-5.	1-20
A	US 2008-0016339 A1 (JAYANT SHUKLA) 17 January 2008 See the abstract; paragraphs 121-132; and figures 1-12.	1-20

 Further documents are listed in the continuation of Box C. See patent family annex.

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"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

"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

"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

"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

"&amp;" document member of the same patent family

Date of the actual completion of the international search

20 DECEMBER 2012 (20.12.2012)

Date of mailing of the international search report

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189 Cheongsa-ro, Seo-gu, Daejeon Metropolitan  
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# INTERNATIONAL SEARCH REPORT

Information on patent family members

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