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[Continued on nextpage]

(54) **Title:** SYSTEMS AND METHODS FOR MALWARE DETECTION AND MITIGATION

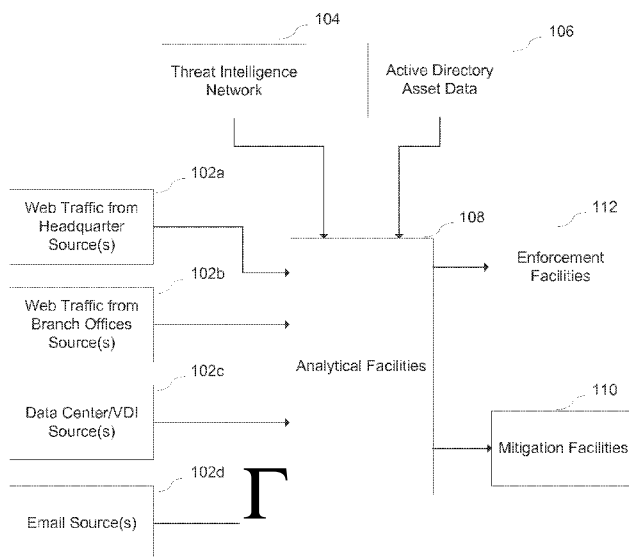


Figure 1

(57) **Abstract:** Systems and methods for monitoring malware events in a computer networking environment are described. The systems and methods including the steps of identifying a plurality of suspect objects comprising data about network transactions or computer operations suspected of being linked to a security risk; transmitting the suspect objects to an inspection service operating on one or more general purpose digital computers; transmitting said digital information to an analytical service operating on one or more general purpose digital computers; transmitting said one or more scores to a correlation facility which aggregates a plurality of scores, optionally with other information about each suspect objects, into the form of aggregate data representing one or more aggregate features of a plurality of suspect objects; and generating an infection verification pack comprising routines which, when run on an end-point machine within the computer networking environment, will mitigate a suspected security threat.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER  
IPC(8) - G06F 12/14, G06F 11/00 (2015.01)  
CPC - G06F 21/56  
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)  
CPC: G06F21/56; IPC(8): G06F 12/14, G06F 11/00 (2015.01); USPC: 726/24

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
CPC: H04L63/145, G06F21/56, G06F21/566, G06F21/564, G06F21/562; USPC: 726/22, 726/23, 726/24, 726/25, 726/26, 709/224 (keyword limited; terms below)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
PatBase; Google Scholar  
Search Terms: monitor, malware, network, suspect, security, risk, inspect, threat, score, mitigate

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X - Y	US 2013/0097706 A1 (TITONIS et al.) 18 April 2013 (18.04.2013), entire document, especially abstract and para [0013], [0015], [0023]-[0026], [0030], [0102], [0110]-[0124], [0135], [0150]-[0151], [0210]-[0211], [0223], [0228]-[0230], [0232]-[0233], [0262]-[0263], [0282]-[0309], [0317], [0344], [0353], [0395]-[0398], [0422]-[0424], [0427], [0432].	1, 3-7 ----- 2
Y	US 2013/0318568 A1 (MAHAFFEY et al.) 28 November 2013 (28.11.2013), entire document, especially abstract and para [0078], [0091], [0095].	2
A	US 2013/0298244 A1 (KUMAR et al.) 07 November 2013 (07.11.2013), entire document.	1-7

Further documents are listed in the continuation of Box C.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance	"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
"E" earlier application or patent but published on or after the international filing date	"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
"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)	"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
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
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