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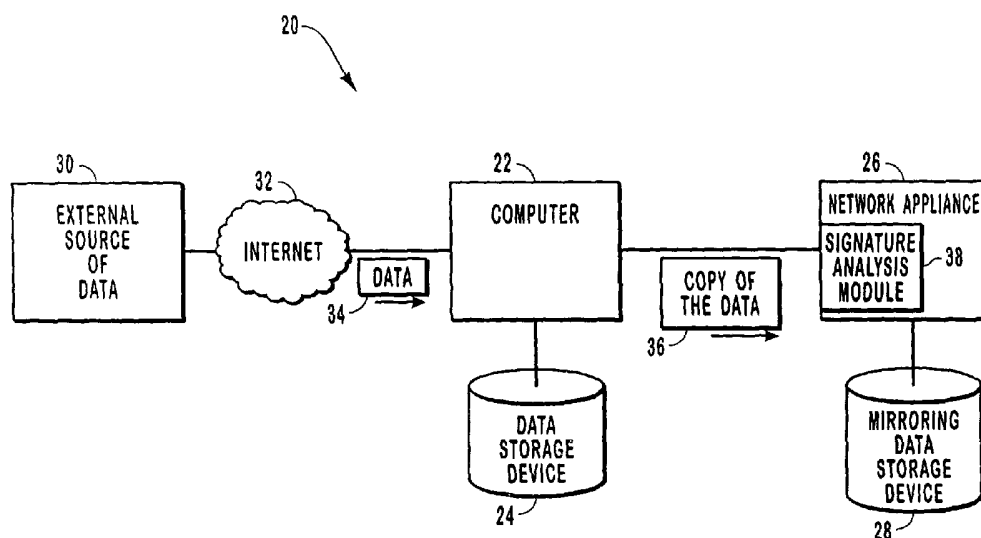
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(54) Title: RESTORATION OF DATA CORRUPTED BY VIRUSES USING PRE-INFECTED COPY OF DATA



(57) Abstract: Post-infection virus protection through data restoration using mirrored data that has been obtained prior to the virus infection. A network appliance in a network mirrors the data of a number of computers in an ongoing manner. An anti-virus module of the network appliance scans data received from a computer to determine whether the computer is infected by a virus. If no virus is identified, the network appliance uses the received data to update a mirrored copy of the computer's data. If, however, the network appliance identifies a virus, the mirrored copy is not updated. Instead, the previous mirrored copy, which represents a pre-infection state of the data, is used to restore the infected computer to its pre-infection state. In this manner, a single copy of an anti-virus utility executed at the network appliance can protect an arbitrary number of computers, which do not require their own anti-virus software.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06F 11/30, 12/16
 US CL : 726/22, 23, 24

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)
 U.S. : 726/22, 23, 24

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

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2002/0038296 A1 (MARGOLOUS et al) 28 March 2002 (28.03.2002).	1,11,17
A	US 2002/0095317 A1 (MCCABE) 18 July 2002 (18.07.2002).	1,11,17



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See patent family annex.

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"O"	document referring to an oral disclosure, use, exhibition or other means		
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