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(12) United States Patent

Gryaznov et al.

(54) SYSTEM AND METHOD FOR IDENTIFYING A MACRO VIRUS FAMILY USING A MACRO VIRUS DEFINITIONS DATABASE

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(51) Int. Cl.

G06F 11/00 (2006.01) **G06F 17/30** (2006.01)

713/200

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(45) **Date of Patent:** Apr. 24, 2007

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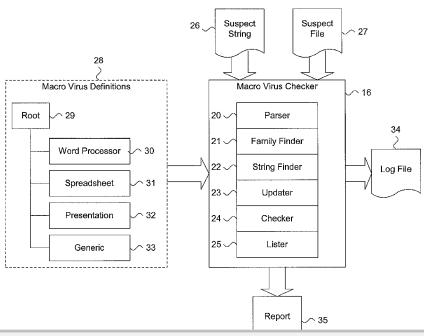
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(57) ABSTRACT

A macro virus definitions database is maintained and includes a set of indices and associated macro virus definition data files. One or more of the macro virus definition data files are referenced by the associated index. Each macro virus definition data file defines macro virus attributes for known macro viruses. The sets of the indices and the macro virus definition data files are organized according to macro virus families. One or more strings stored in a suspect file are compared to the macro virus attributes defined in the one or more macro virus definition data files for each macro virus family in the macro virus definitions database. The macro virus family to which the suspect file belongs is determined from the indices for each of the macro virus definition data files at least partially containing the suspect file.

16 Claims, 21 Drawing Sheets



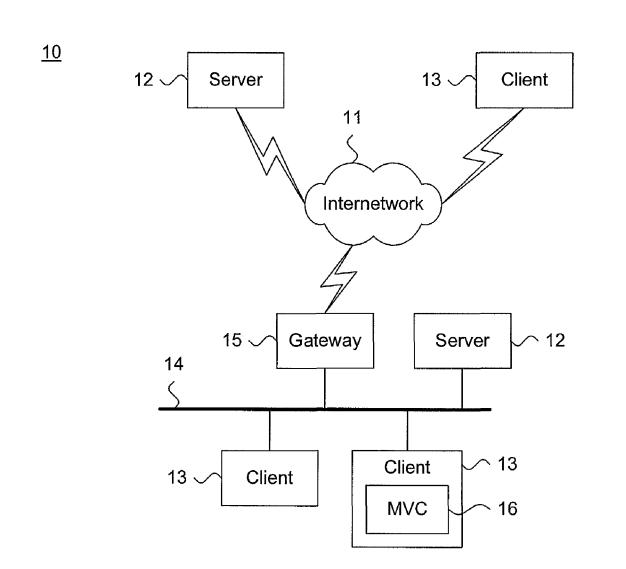


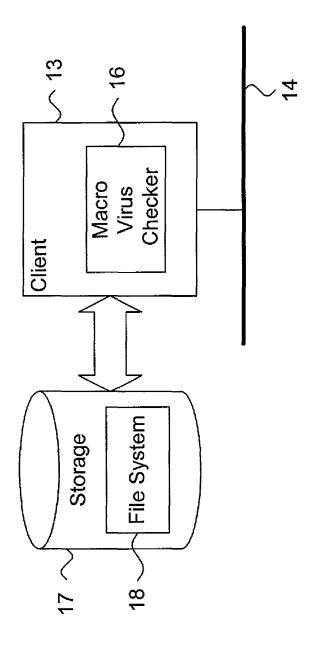
U.S. Patent

Apr. 24, 2007

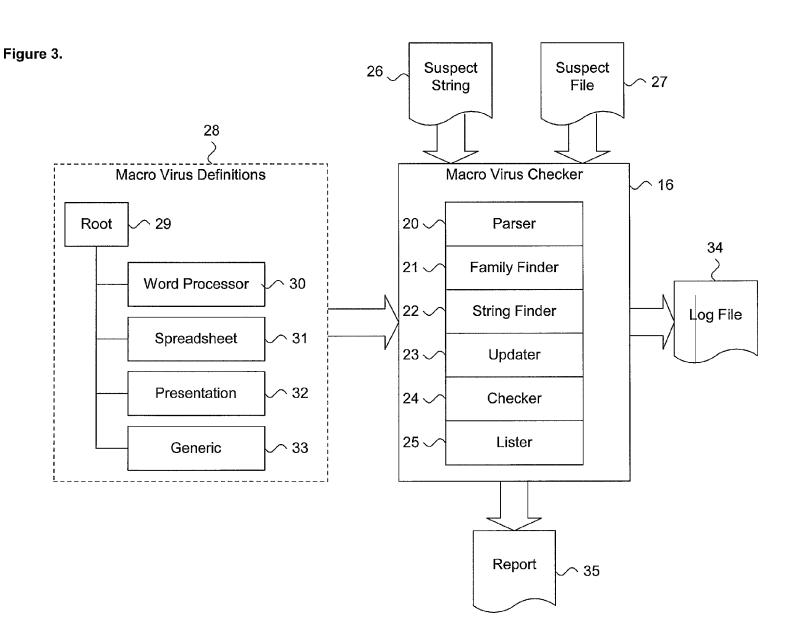
Sheet 1 of 21

Figure 1.







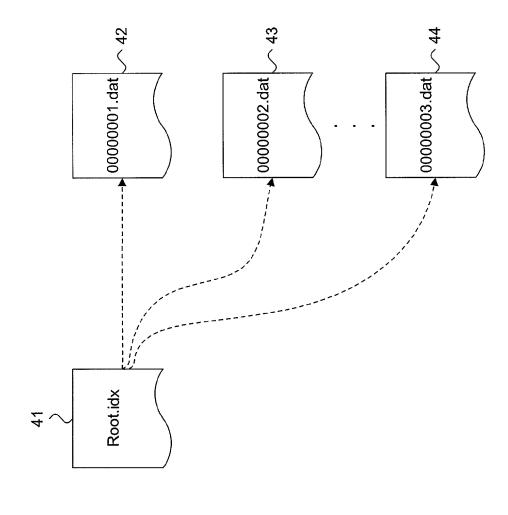


Patent

Apr. 24, 2007

Sheet 3 of 21

US 7,210,041 B1



9

Figure 4.



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