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(54) **SYSTEM AND METHOD FOR PROTECTING A COMPUTER SYSTEM FROM MALICIOUS SOFTWARE**

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(58) **Field of Classification Search** 726/22–24; 713/152, 151; 709/225
See application file for complete search history.

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(57) **ABSTRACT**

In a computer system, a first electronic data processor is communicatively coupled to a first memory space and a second memory space. A second electronic data processor is communicatively coupled the second memory space and to a network interface device. The second electronic data processor is capable of exchanging data across a network of one or more computers via the network interface device. A video processor is adapted to combine video data from the first and second electronic data processors and transmit the combined video data to a display terminal for displaying the combined video data in a windowed format. The computer system is configured such that a malware program downloaded from the network and executing on the second electronic data processor is incapable of initiating access to the first memory space.

73 Claims, 11 Drawing Sheets
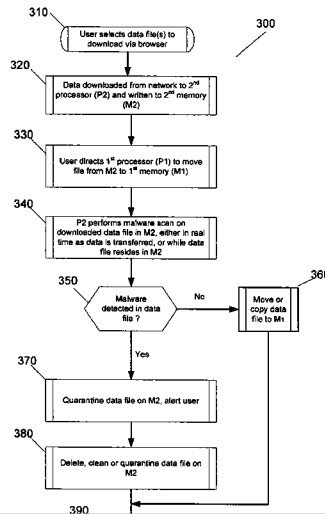
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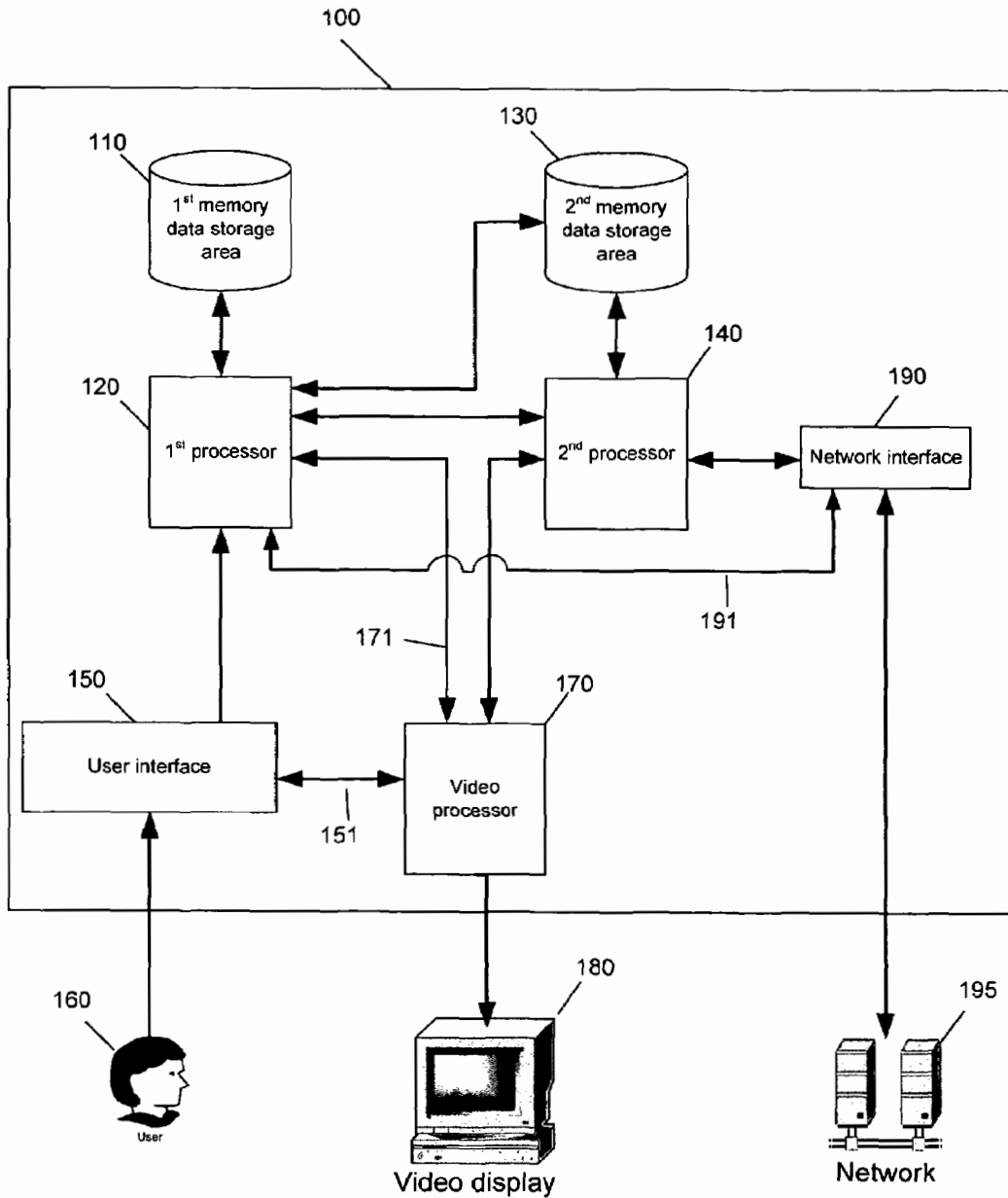100

130

110

1st memory data storage area

2nd memory data storage area

140

120

190

1st processor

2nd processor

Network interface

191

171

150

170

User interface

Video processor

151

160

180

195

User

Video display

Network

Fig. 1

200

210

User opens protected process

220

1st processor (P1) instructs 2nd processor (P2) to initiate protected process and open process window

230

P1 passes user interface data to P2 when P2 window is selected or active

240

P2 generates video data for P2 process window(s) and passes video data to video processor

250

Video processor interleaves video data from all P1 and P2 processes
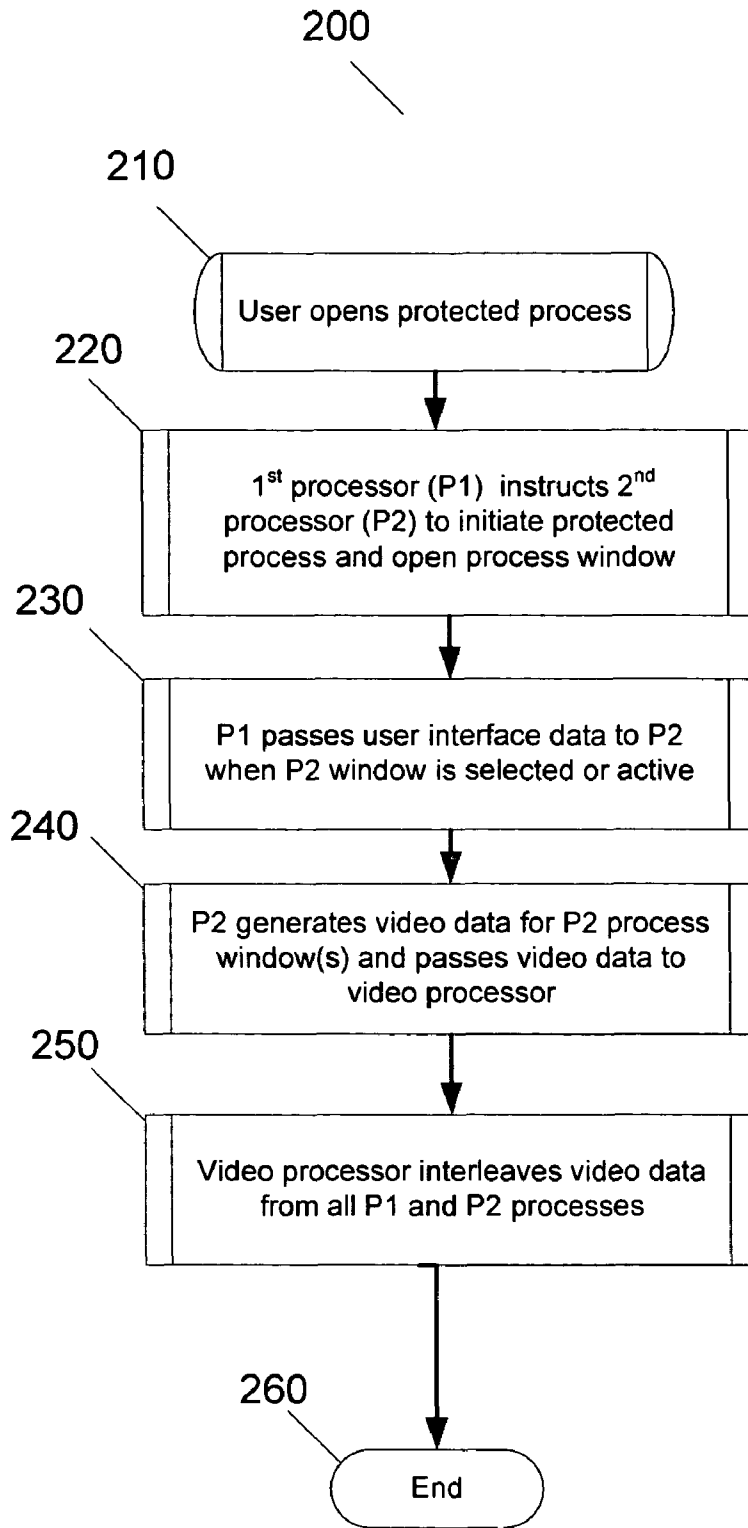
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Fig. 2

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