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Bialick et al.

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[54] PERIPHERAL DEVICE WITH INTEGRATED SECURITY FUNCTIONALITY

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Va.

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U.S. application No. 08/869,120, Bialick et al., filed Jun. 4, 1997, pending.

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Attorney, Agent, or Firm—David R. Graham

[73] Assignee: Spyrus, Inc., Santa Clara, Calif.

[57] ABSTRACT

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[22] Filed: Jun. 4, 1997

[51] Int. Cl.⁷ G06K 14/67

[52] U.S. Cl. 713/200; 713/201; 713/202

[58] Field of Search 395/188.01, 187.01,
395/186; 380/4, 25, 49; 713/200, 201, 202

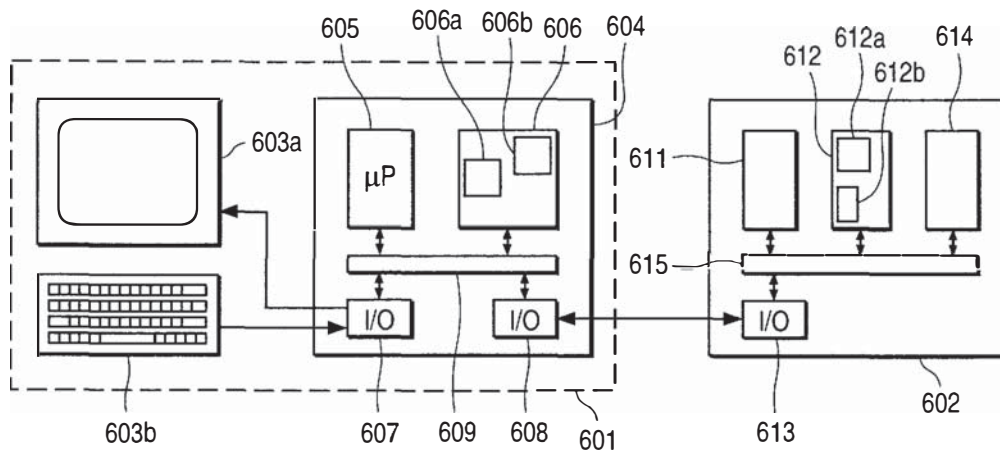
The invention enables a peripheral device to communicate with a host computing device to enable one or more security operations to be performed by the peripheral device on data stored within the host computing device, data provided from the host computing device to the peripheral device (which can then be, for example, stored in the peripheral device or transmitted to yet another device), or data retrieved by the host computing device from the peripheral device (e.g., data that has been stored in the peripheral device, transmitted to the peripheral device from another device or input to the peripheral device by a person). In particular, the peripheral device can be adapted to enable, in a single integral peripheral device, performance of one or more security operations on data, and a defined interaction with a host computing device that has not previously been integrated with security operations in a single integral device. The defined interactions can provide a variety of types of functionality (e.g., data storage, data communication, data input and output, user identification). The peripheral device can also be implemented so that the security operations are performed in-line, i.e., the security operations are performed between the communication of data to or from the host computing device and the performance of the defined interaction. Moreover, the peripheral device can be implemented so that the security functionality of the peripheral device is transparent to the host computing device.

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39 Claims, 9 Drawing Sheets



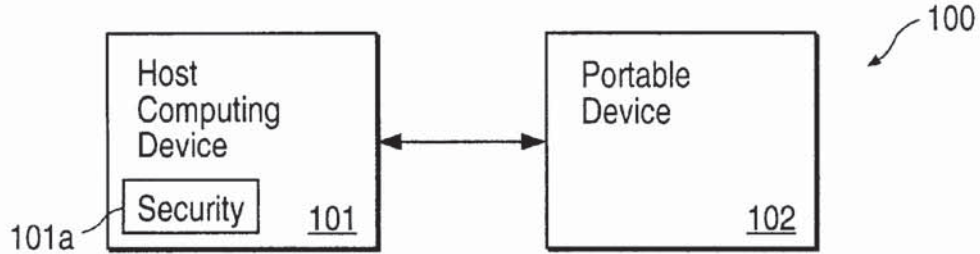


FIG. 1
(PRIOR ART)

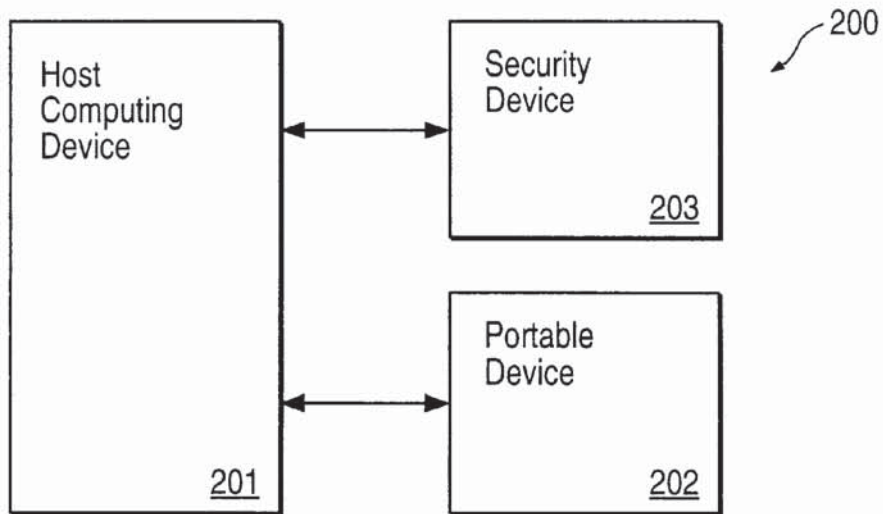


FIG. 2
(PRIOR ART)

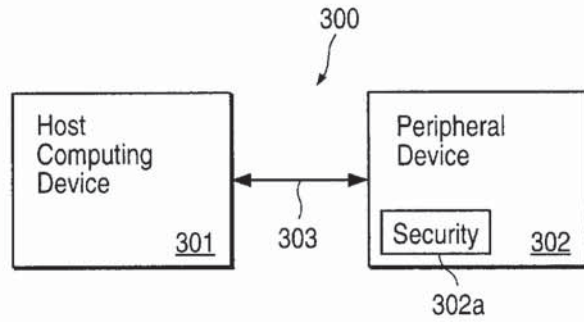


FIG. 3A

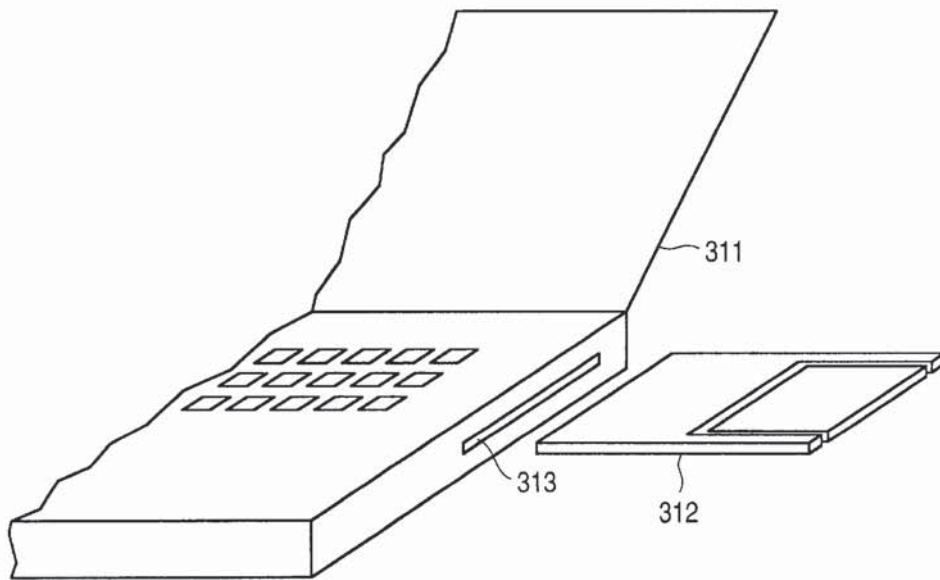


FIG. 3B

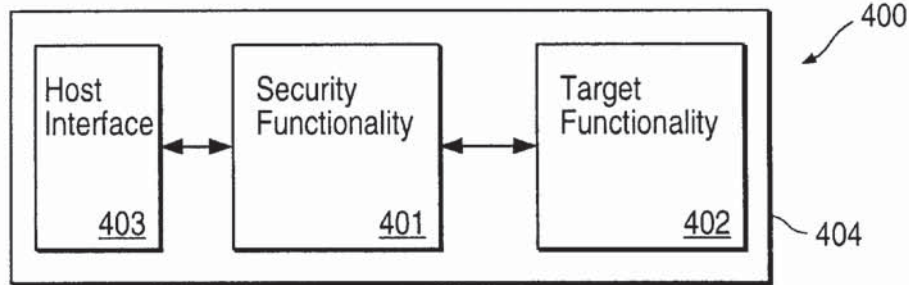


FIG. 4

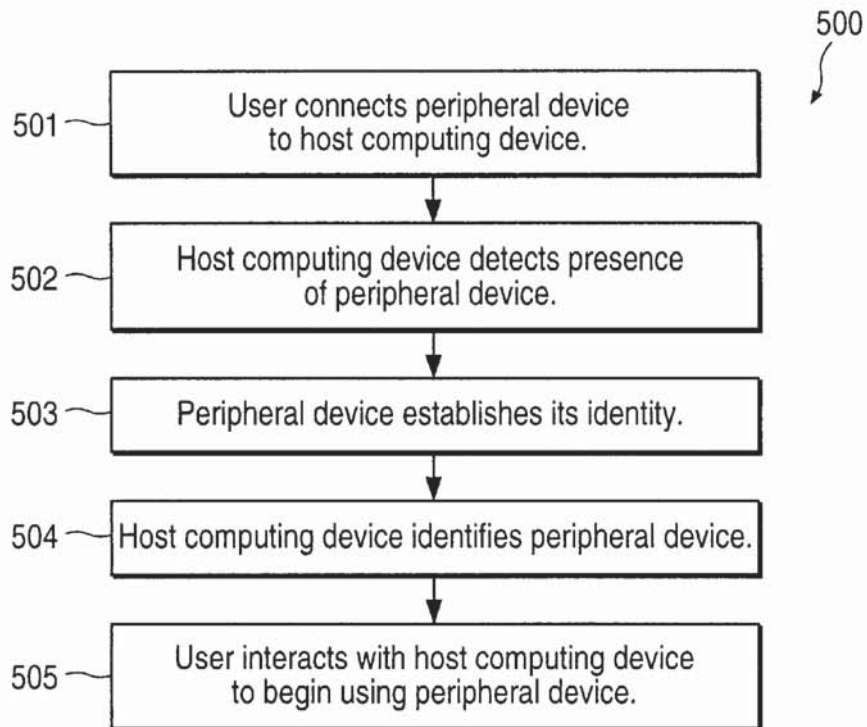


FIG. 5

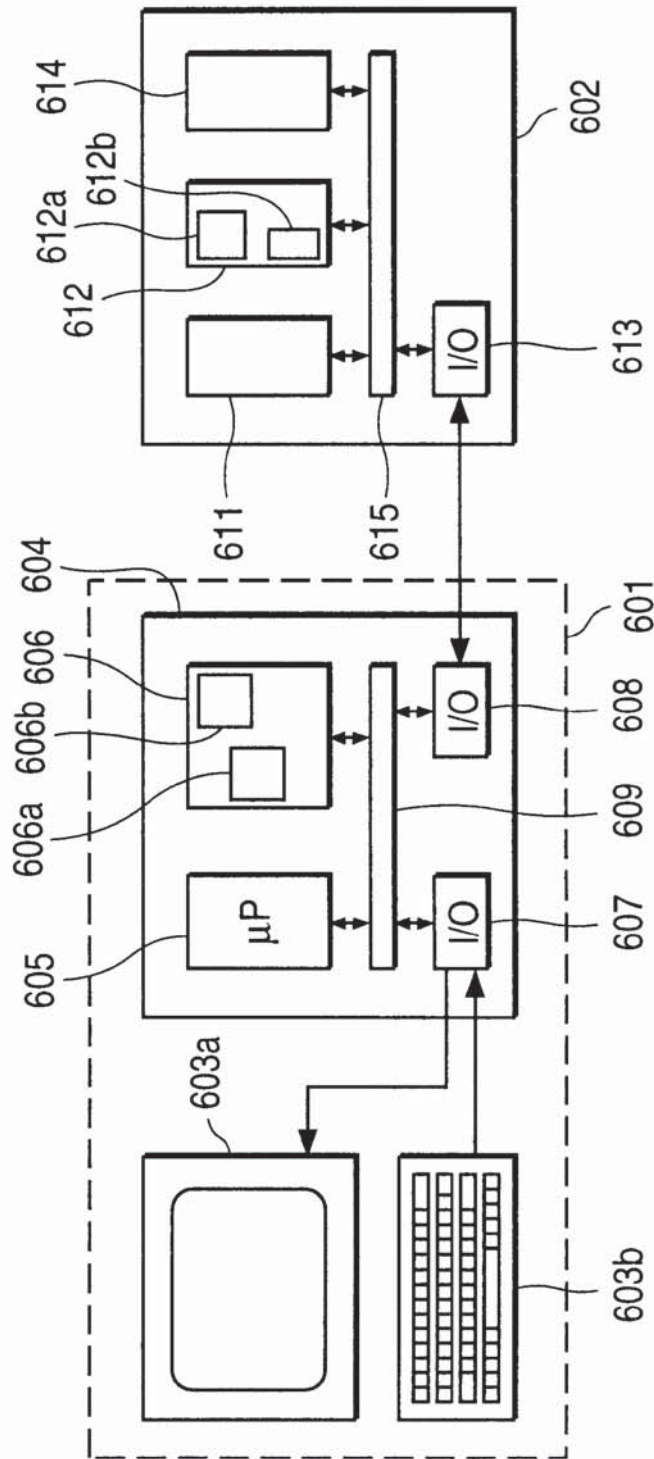


FIG. 6

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