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Casebolt et al.

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(54) **METHOD AND APPARATUS FOR
DETECTING THE TYPE OF INTERFACE TO
WHICH A PERIPHERAL DEVICE IS
CONNECTED**

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(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

This patent is subject to a terminal dis-
claimer.

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(22) Filed: **Oct. 1, 1999**

Related U.S. Application Data

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Jul. 8, 1998, now Pat. No. 6,460,094.

(51) **Int. Cl.**⁷ **G06F 9/45**

(52) **U.S. Cl.** **716/8; 716/9; 716/10;**
716/11

(58) **Field of Search** **716/4, 8; 712/1,**
712/230; 710/8, 26, 63, 108, 262, 269,
305, 306; 379/142.15

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(57) **ABSTRACT**

A peripheral device is connectable to a computer having one
of a first interface and a second interface. The first interface
communicates with the peripheral device over a differential
data connection having a first data conductor and a second
data conductor. The second interface communicates with the
peripheral device over a clock conductor and a single ended
data connection which includes a data conductor. The
peripheral device includes an interface detection component
coupled to at least one of first and second communication
conductors used to communicate between the peripheral
device and the computer. The interface detection component
is configured to detect which of the first and second inter-
faces the peripheral device is connected to.

33 Claims, 7 Drawing Sheets

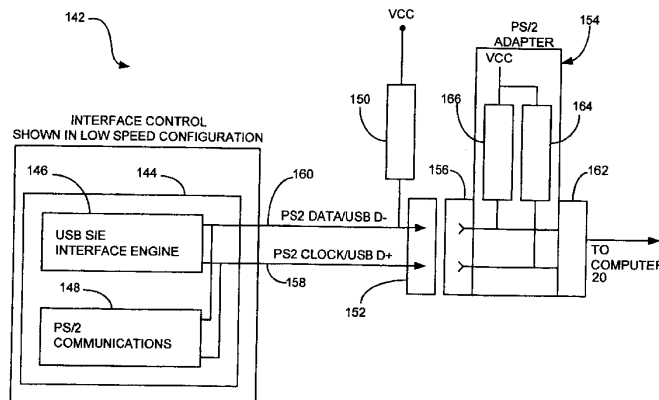
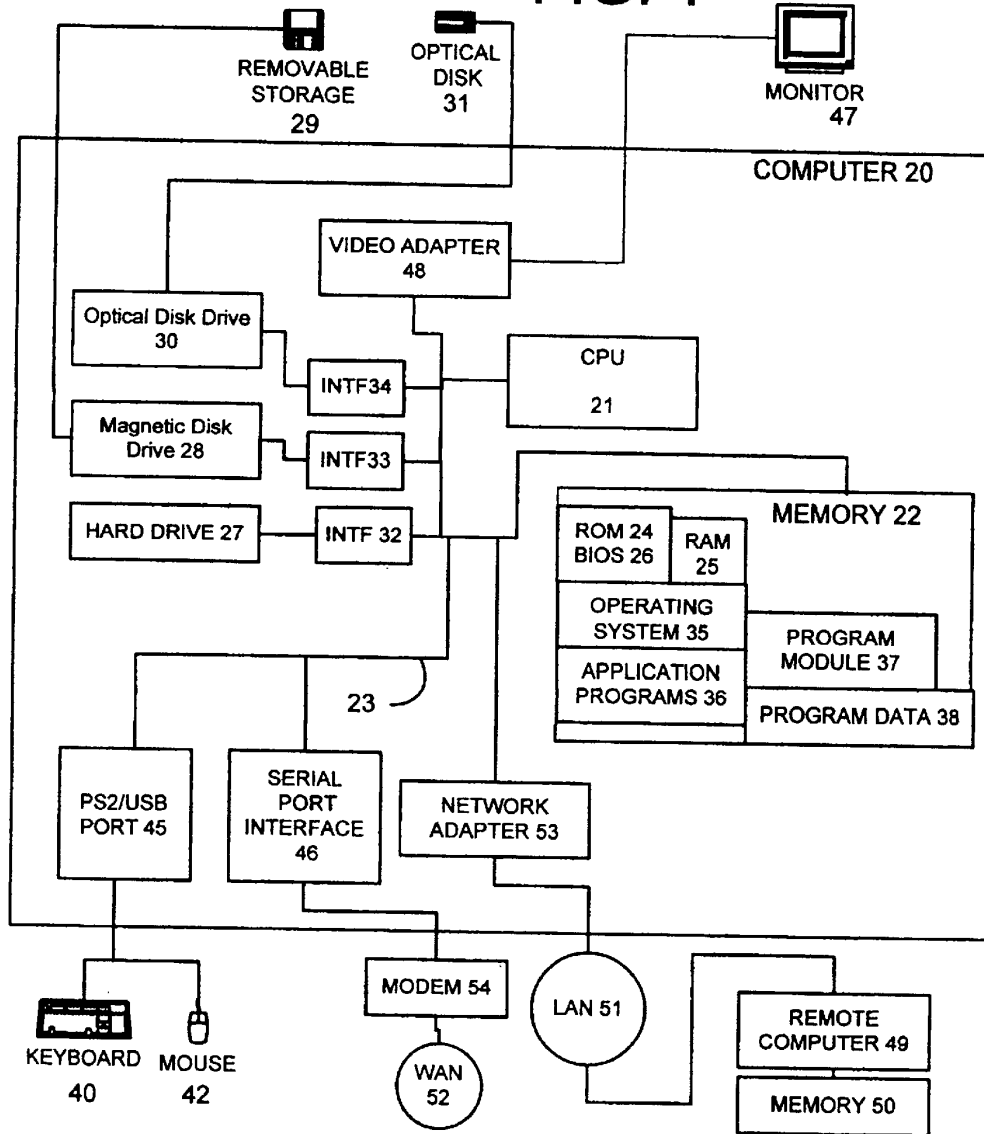


FIG. 1



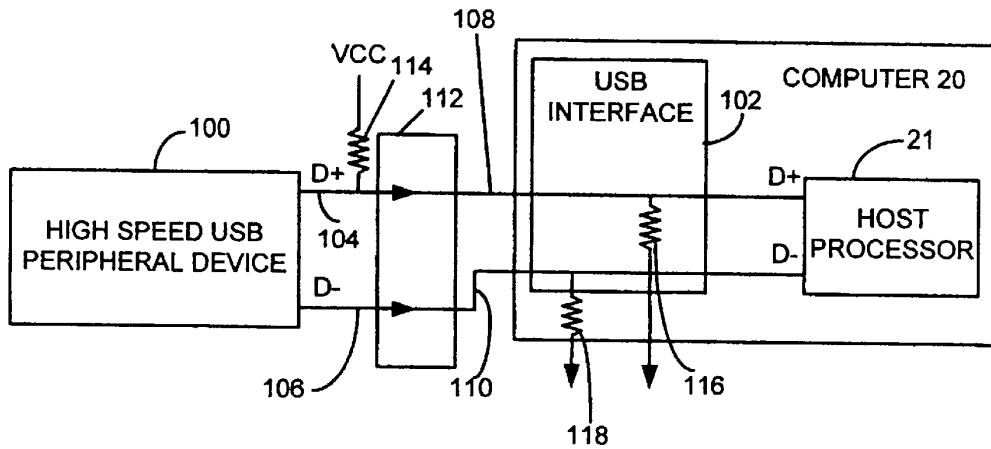


FIG. 2A

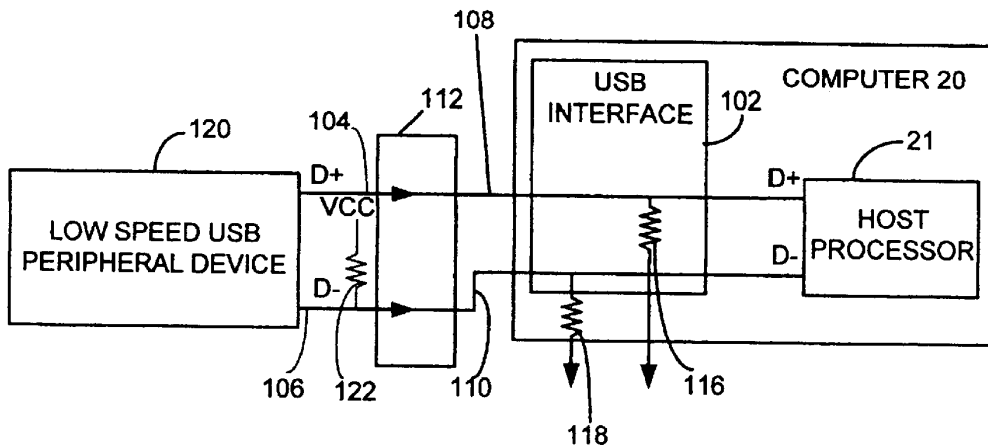


FIG. 2B

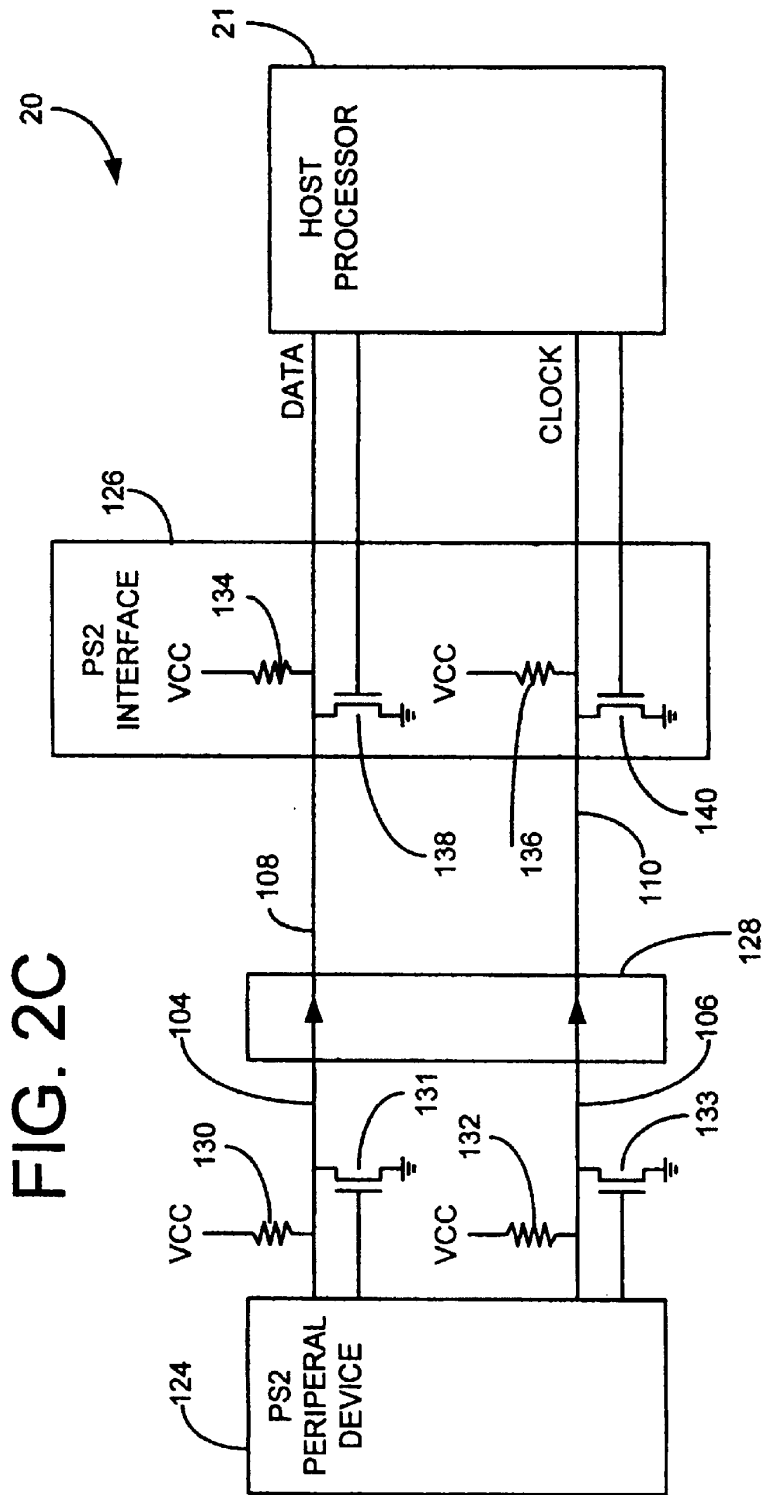


FIG. 2C

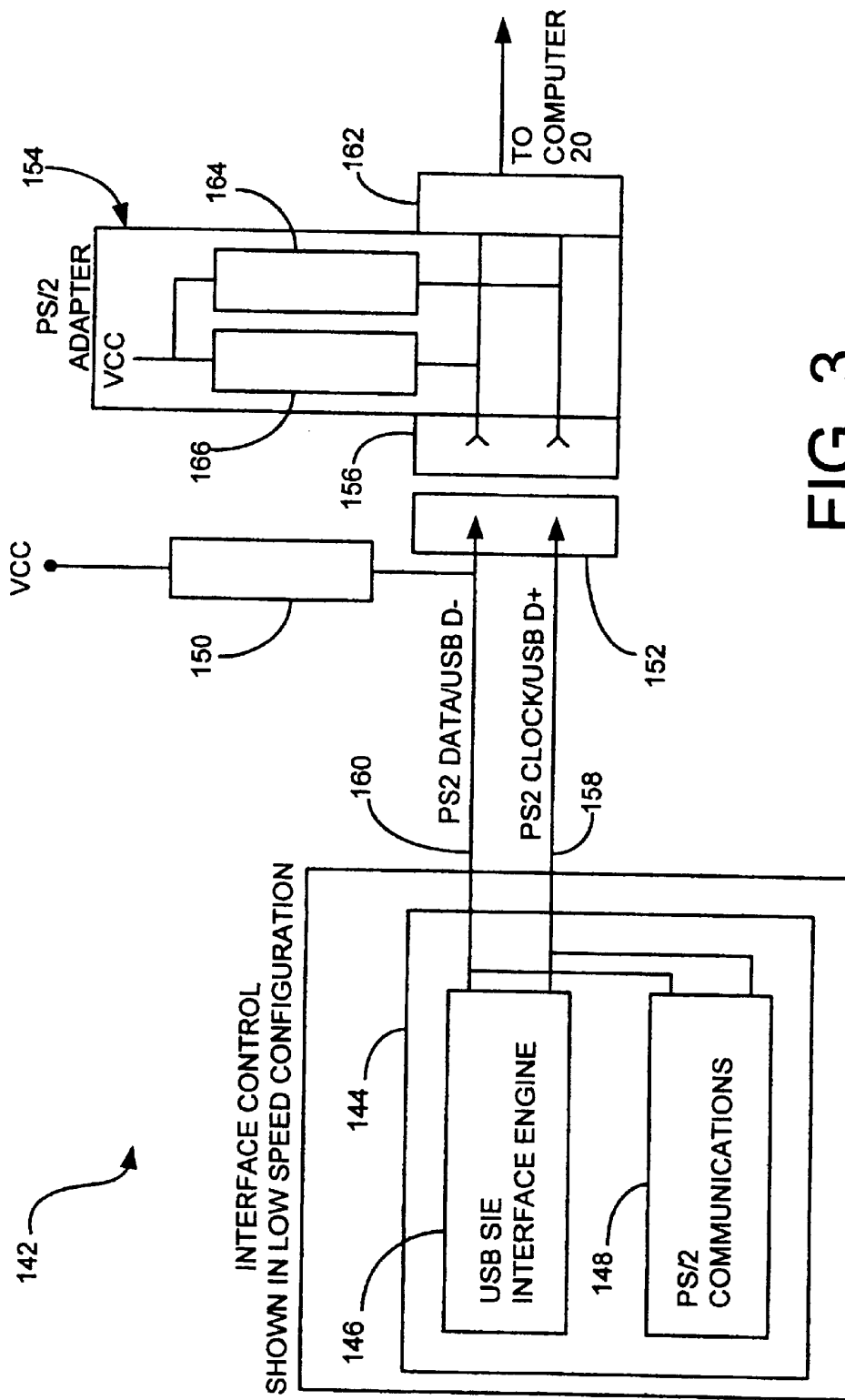


FIG. 3

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