

AUTOMATIC CONFIGURATION OF PRIMARY AND SECONDARY
PERIPHERAL DEVICES FOR A COMPUTER

ABSTRACT OF THE DISCLOSURE

A method of automatically configuring a computer peripheral device as a primary device or as a secondary device. There are four possible cases: (1) no other device present, (2) legacy primary device present, (3) legacy secondary device present and (4) second unconfigured device present. Each unconfigured device determines whether there are any legacy devices already installed (110, 114, 116) and whether there is another unconfigured device installed (120, 122, 126, 128) without requiring any changes to the host operating system software. Unconfigured devices assert a signal after reset with a first timing (120) that is dependent on an electronically readable identification on the device. For case (4), the first device to detect the signal (122) becomes the secondary device (124). In case of a tie, unconfigured devices continue to assert the signal (126) with a second timing that is dependent on the electronically readable identification on the device. A device that detects the signal being present at the end of the second timing (128) configures itself as a secondary device (130). A device that does not detect the signal being present at the end of the second timing configures itself as a primary device (132).

Figure 1B