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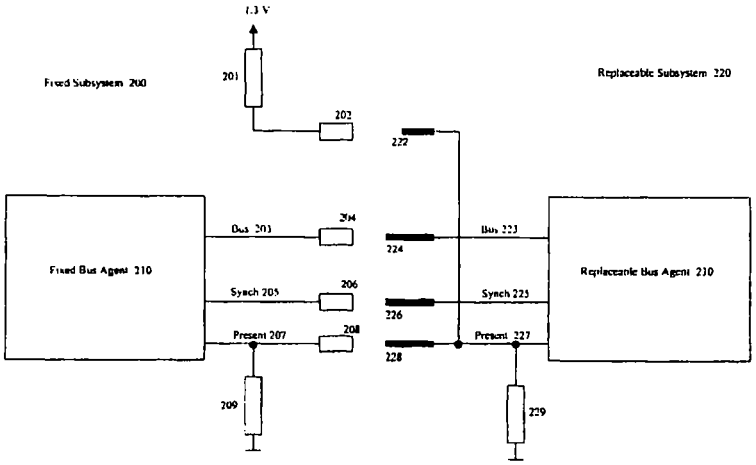
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(54) Title: METHOD AND APPARATUS FOR REMOVING AND INSTALLING A COMPUTER SYSTEM BUS AGENT WITHOUT POWERING DOWN THE COMPUTER SYSTEM



(57) Abstract: An example embodiment of a computer system that includes a removable agent that can be removed or installed without powering down the system includes a fixed bus agent and the replaceable bus agent. The fixed bus agent and the replaceable bus agent are electrically coupled together by a presence detect signal, a synchronization signal, and a data bus. A deassertion of the presence detect signal indicates to the fixed bus agent that the removable bus agent has been disconnected and is no longer electrically coupled to the fixed bus agent. The fixed bus agent tri-states its outputs and also prevents potentially invalid data from being delivered to the core circuitry of the fixed bus agent. An assertion of the presence detect signal indicates to the fixed bus agent that the replaceable bus agent is electrically connected to the fixed bus agent. In response to the assertion of the presence detect signal, the fixed bus agent and the replaceable bus agent enter reset periods. Following the reset periods and when each bus agent is ready to communicate to the other agent, the fixed bus agent and the replaceable bus agent signal to each other over the synchronization signal that each is ready to begin communication over the data bus.

WO 02/17088 A3

ACTION

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