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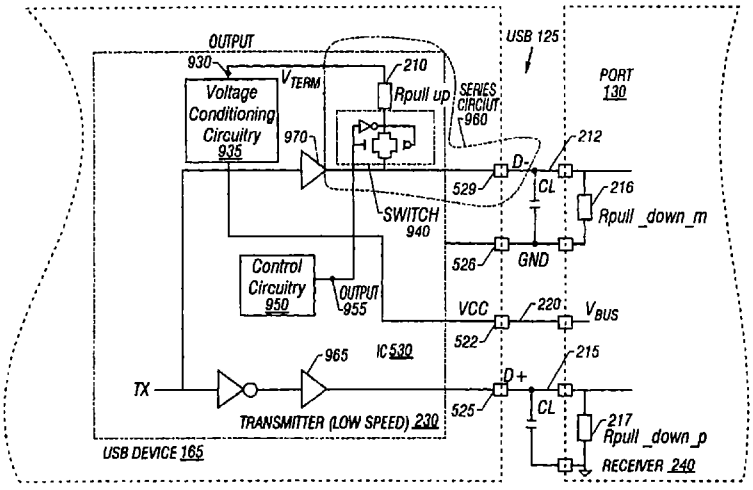
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(54) Title: METHOD AND APPARATUS FOR COMMUNICATING WITH A HOST

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(57) Abstract: A method and apparatus is disclosed. In one embodiment, a smart card has an IC with voltage conditioning circuitry and a pull-up resistor. The card is capable of signaling a host over a bus using the resistor selectively coupled to a voltage output of the conditioning circuitry and a first output of the card. The conditioning circuitry output is selectively coupled to the first output through the resistor, responsive to being powered by the bus but not transmitting. This tends to pull up the first output to the voltage level of the voltage source, making the card capable of being detected by the host upon the bus being driven by a host. Selectively disconnecting the resistor while transmitting or receiving results in a more balanced output. Since the resistor and conditioning circuitry are an integrated part of the IC, no separate contact is required for voltage to the resistor, permiting compatibity with the contact configuration of certain existing smart cards, and eliminating a pull-up resistor or conditioning circuitry in a card reader.

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