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(54) **POWER SUPPLY CONTROL SYSTEM**

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(57) **ABSTRACT**

In an example a power supply control system for switchably routing at least a first power supply voltage to an output voltage supply node may include a first compound switch circuit. The first compound switch circuit may include a first field effect transistor (FET), where a drain of the first FET may be connected to the first power supply voltage. The first compound switch circuit may also include a second FET, where a source of the second FET may be connected to a source of the first FET, where a drain of the second FET may be connected to the output voltage supply node, where a gate of the first FET and a gate of the second FET may be connected together to form a first shared source node. The power supply control system may also include first voltage driving circuitry which may drive an “on” gate-to-source voltage level.

