

EXTERNAL POWER SOURCE TO MAIN BATTERY POWER SOURCE SWITCH

Abstract of the Disclosure

A switching circuit (30) in a portable telephone connects a gate of a field-effect transistor (Q1) to a voltage below the transistor's gate threshold voltage when the voltage at a first power source terminal (B) falls below a threshold voltage, thus disconnecting the first power source terminal (B) from a portable telephone power input terminal (B+) and connecting a second power source terminal (A) to the power input terminal (B+). The threshold voltage is set at a voltage above the minimum supply voltage of the portable telephone. The first power source terminal may be connected to a main battery and the second power source terminal may be connected to an adapter such as a battery eliminator adapter, hands-free adapter, or mobile transceiver adapter. This switching circuit prevents a call in progress from being disconnected when power sources are exchanged during a GSM burst.

Figure 3 accompanies this abstract.