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(54) **LOAD DEPENDENT METHOD TO REDUCE QUIESCENT CURRENT DURING MULTI-CELL TO SINGLE-CELL BATTERY REGULATION**

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(57) **ABSTRACT**

The techniques disclosed herein may achieve efficient regulation of power delivered from one or more batteries to a circuit or system with a power control device that has two or more operating modes. In a first operating mode, the power control device may select a first power circuit to deliver power to a system load with a first quiescent current, while in a second operating mode the power control device may select at least one additional power circuit to deliver power to the system load with a second quiescent current. The first quiescent current is significantly less than the second quiescent current such that operation of the first power circuit corresponds to a lower power mode than the additional power circuits. An ideal diode circuit may be configured to selectively couple the outputs of each of the power circuits to the system load.