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(54) **CIRCUIT AND METHOD TO FACILITATE THRESHOLD VOLTAGE EXTRACTION AND FACILITATE OPERATION OF A CAPACITOR MULTIPLIER**

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(57) **ABSTRACT**

A system and method to extract a threshold voltage for a MOSFET include first and second stages, which include inputs that receive functionally related input currents, are connected to each other. The first stage includes a second input that is coupled to a corresponding input of the second stage through part of a voltage divider. Another part of the voltage divider is coupled between an internal gate node and the input of the second stage that receives the respective input current. The input of the second stage that receives the respective input current also provides an output voltage substantially equal to the threshold voltage for one or both of the MOSFETs.

**33 Claims, 6 Drawing Sheets**





























