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(54) **ENHANCED RISING AND FALLING
TRANSITIONS FOR LEVEL SHIFTING
LOW-VOLTAGE INPUT SIGNALS**

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(57) **ABSTRACT**

A level-shifter is provided with a first transistor and a second transistor. The first transistor functions to discharge an internal node responsive to an assertion of an inverted input signal to a first power supply voltage. A second transistor functions to discharge an inverted level-shifter output signal responsive to an assertion of an input signal to the first power supply voltage. An inverter inverts the inverted level-shifter output signal to form a level-shifter output signal that is asserted to a second power supply voltage responsive to the assertion of the input signal.

