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#### (57)ABSTRACT

A level shifter includes a buffer circuit, a first shift circuit, and a second shift circuit. The buffer circuit provides a first signal and a first inverted signal to the first shift circuit, such that the first shift circuit provides a second signal and a second inverted signal to the second shift circuit. The second shift circuit generates a plurality of output signals according to the second signal and the second inverted signal. The first shift circuit includes a plurality of first stacking transistors and a first voltage divider circuit. The first voltage divider circuit is electrically coupled between a first system high voltage terminal and a system low voltage terminal. The first voltage divider circuit is configured to provide a first inner bias to gate terminals of the first stacking transistors.

