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### (54) WELL PICK-UP REGION DESIGN FOR IMPROVING MEMORY MACRO PERFORMANCE

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#### (57)ABSTRACT

Well pick-up (WPU) regions are disclosed herein for improving performance of memory arrays, such as static random access memory arrays. An exemplary semiconductor device includes a circuit region, a first WPU region, second WPU region, a first well of a first conductivity type, and a second well of a second conductivity type. The circuit region, the first WPU region, and the second WPU region are arranged along a first direction in sequence. The first well has a first portion disposed in the circuit region and a second portion disposed in the first WPU region. The second well has a first portion disposed in the circuit region, a second portion disposed in the first WPU region, and a third potion disposed in the second WPU region. Measured along the first direction a width of the first WPU region is less than a width of the second WPU region.





