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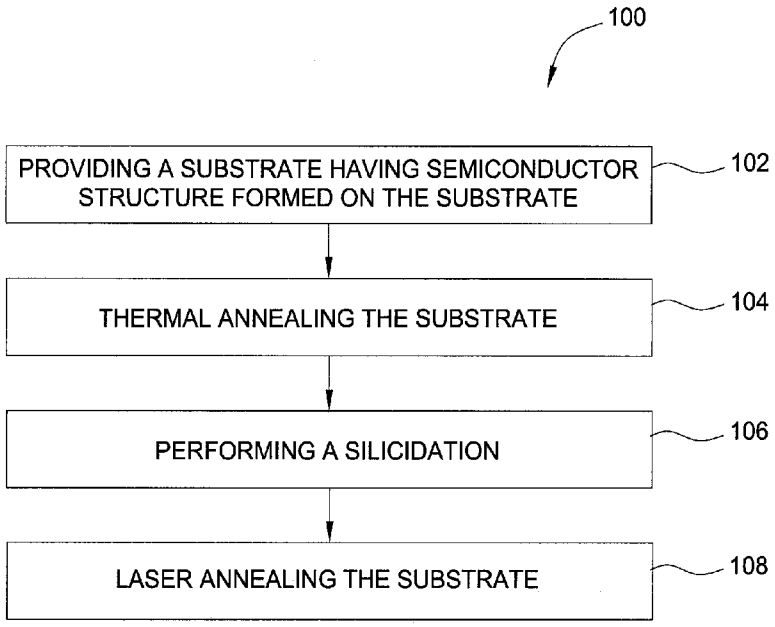
(54) **Title:** METHODS FOR CONTACT RESISTANCE REDUCTION OF ADVANCED CMOS DEVICES




(57) **Abstract:** Methods for reducing contact resistance in semiconductor devices are provided in the present invention. In one embodiment, the method includes providing a substrate having semiconductor device formed thereon, wherein the device has source and drain regions and a gate structure formed therein, performing a silicidation process on the substrate by a thermal annealing process, and performing a laser anneal process on the substrate. In another embodiment, the method includes providing a substrate having implanted dopants, performing a silicidation process on the substrate by a thermal annealing process, and activating the dopants by a laser anneal process.

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