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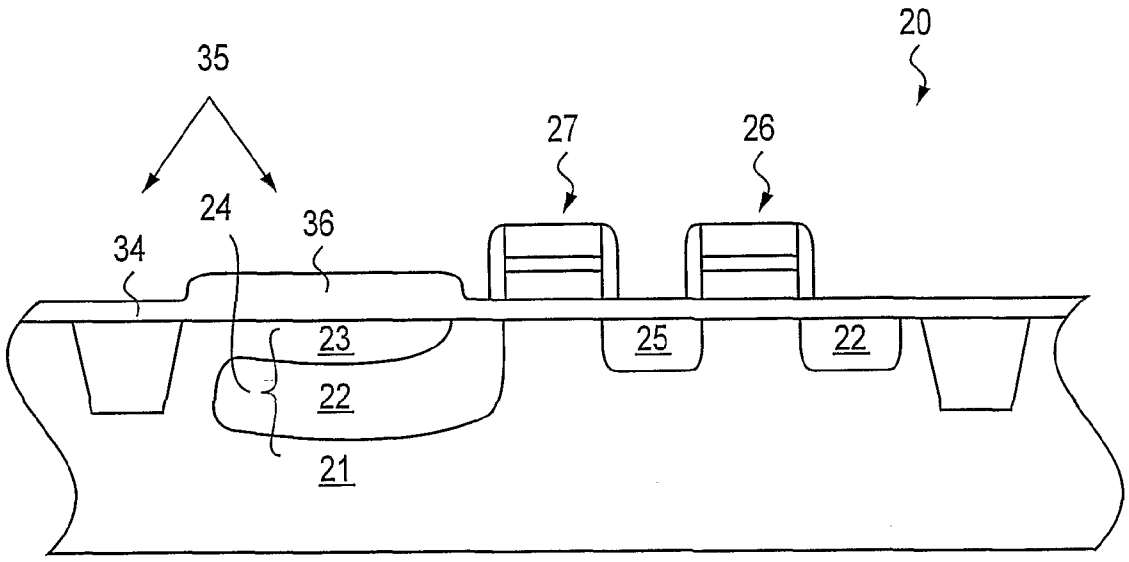
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(54) Title: CMOS IMAGER WITH NITRIDED GATE OXIDE AND METHOD OF FABRICATION



(57) Abstract: A CMOS imager having reduced dark current and methods of forming the same. A nitrided gate oxide layer having approximately twice the thickness of a typical nitrided gate oxide is provided over the photosensor region of a CMOS imager. The gate oxide layer provides an improved contaminant barrier to protect the photosensor, contains the p+ implant distribution in the surface of the p+ pinned region of the photosensor, and reduces photon reflection at the photosensor surface, thereby decreasing dark current.

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