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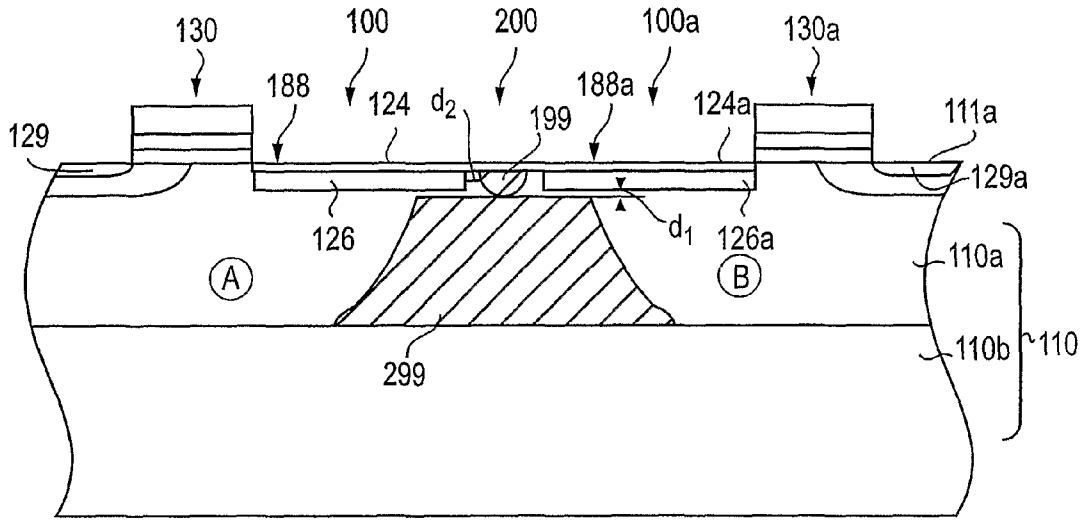
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(54) **Title:** ISOLATION PROCESS AND STRUCTURE FOR CMOS IMAGERS



(57) **Abstract:** A barrier implanted region of a first conductivity type formed (199, 299) in lieu of an isolation region of a pixel sensor cell that provides physical and electrical isolation of photosensitive elements (100, 100a) of adjacent pixel sensor cells of a CMOS imager. The barrier implanted region comprises a first region (199) having a first width and a second region (299) having a second width greater than the first width, the second region (299) being located below the first region (199) . The first region (199) is laterally spaced from doped regions (126, 126a) of a second conductivity type of adjacent photodiodes (100, 100a) of pixel sensor cells of a CMOS imager.

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