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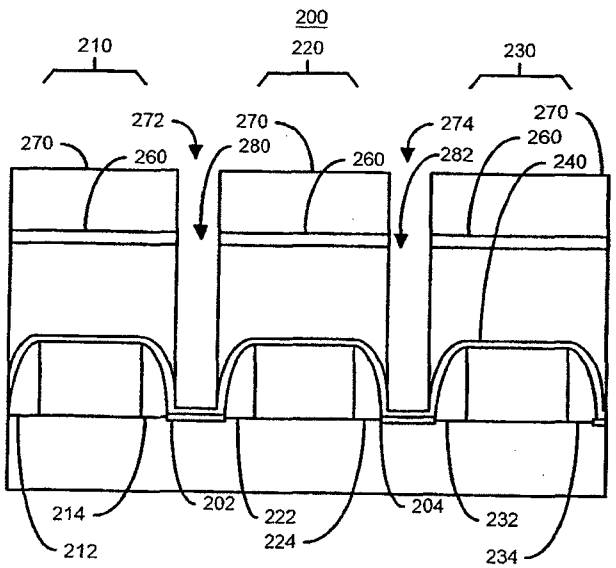
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(54) Title: METHOD FOR REDUCING CONTACT DEFECTS IN SEMICONDUCTOR CELLS



(57) Abstract: A method and system for providing at least One contact in a semiconductor device is described. The semiconductor device includes a substrate (201), an etch stop layer (240), an interlayer dielectric (250) on the etch stop layer (240), an anti-reflective coating (ARC) layer (260) on the interlayer dielectric (250), and at least one feature below the etch stop layer (240). A resist mask having an aperture and residing on the ARC layer (260) is provided. The aperture is above an exposed portion of the ARC layer (260). The method and system include etching the exposed ARC layer (260) and the underlying interlayer dielectric (250) without etching through the etch stop layer (240), thereby providing a portion of at least one contact hole. The method and system also include removing the resist mask in situ, removing a portion of the etch stop layer (240) exposed in the portion of the contact hole, and filling the contact hole with a conductive material.

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