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Ogawa et al.

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(54) **METHOD AND DEVICE FOR REDUCING INTERFACE AREA OF A MEMORY DEVICE**

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H01L 21/336 (2006.01)

(52) **U.S. Cl.** **438/257**; 438/238; 438/381;
257/E21; 257/613; 257/694; 257/645

(58) **Field of Classification Search** 438/257,
438/258, 238, 381, 647, 657, 734, 735, 954
See application file for complete search history.

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Primary Examiner—David Nhu

(57) **ABSTRACT**

A method and device for reducing interface area of a memory device. A poly-2 layer is formed above a substrate at an interface between a memory array and a periphery of the memory device. The poly-2 layer is etched proximate to the memory array. The poly-2 layer is etched proximate to the periphery such that a portion of the poly-2 layer remains at the interface.

14 Claims, 6 Drawing Sheets

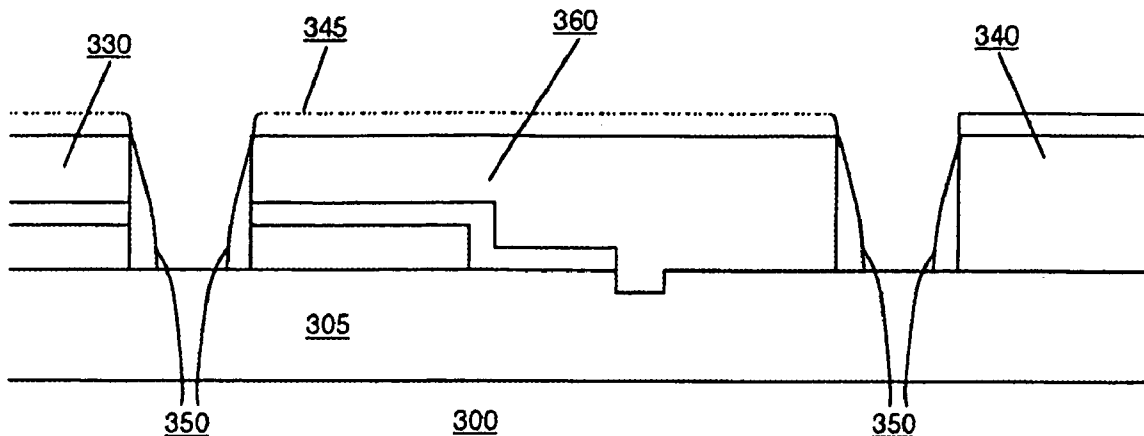


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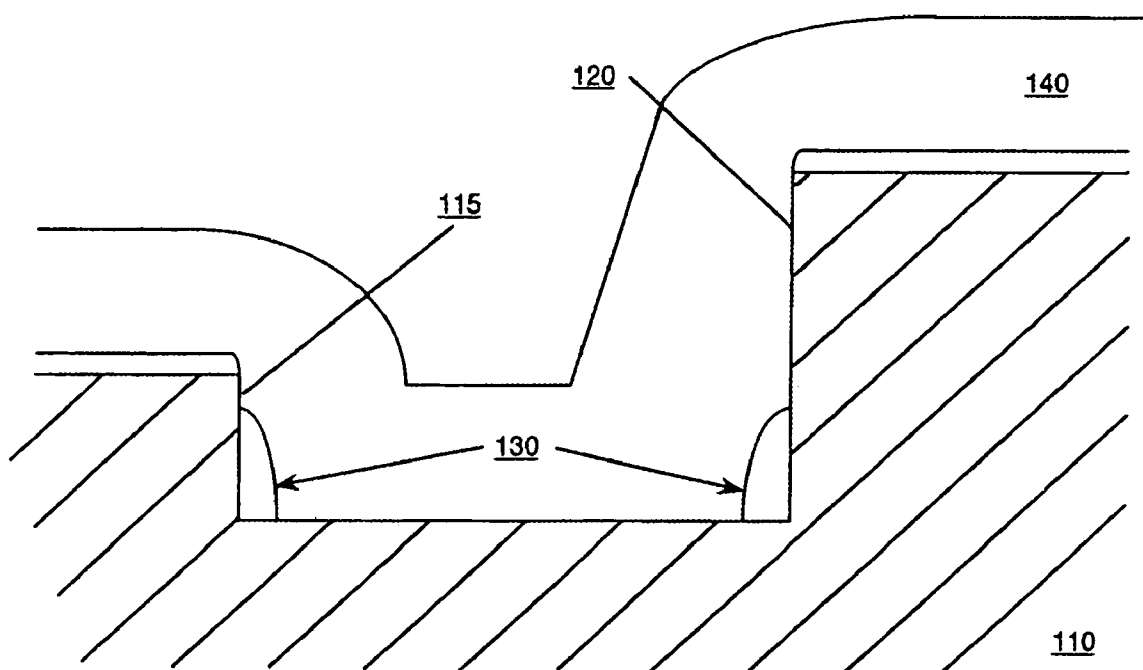


Figure 1
(Prior Art)

200

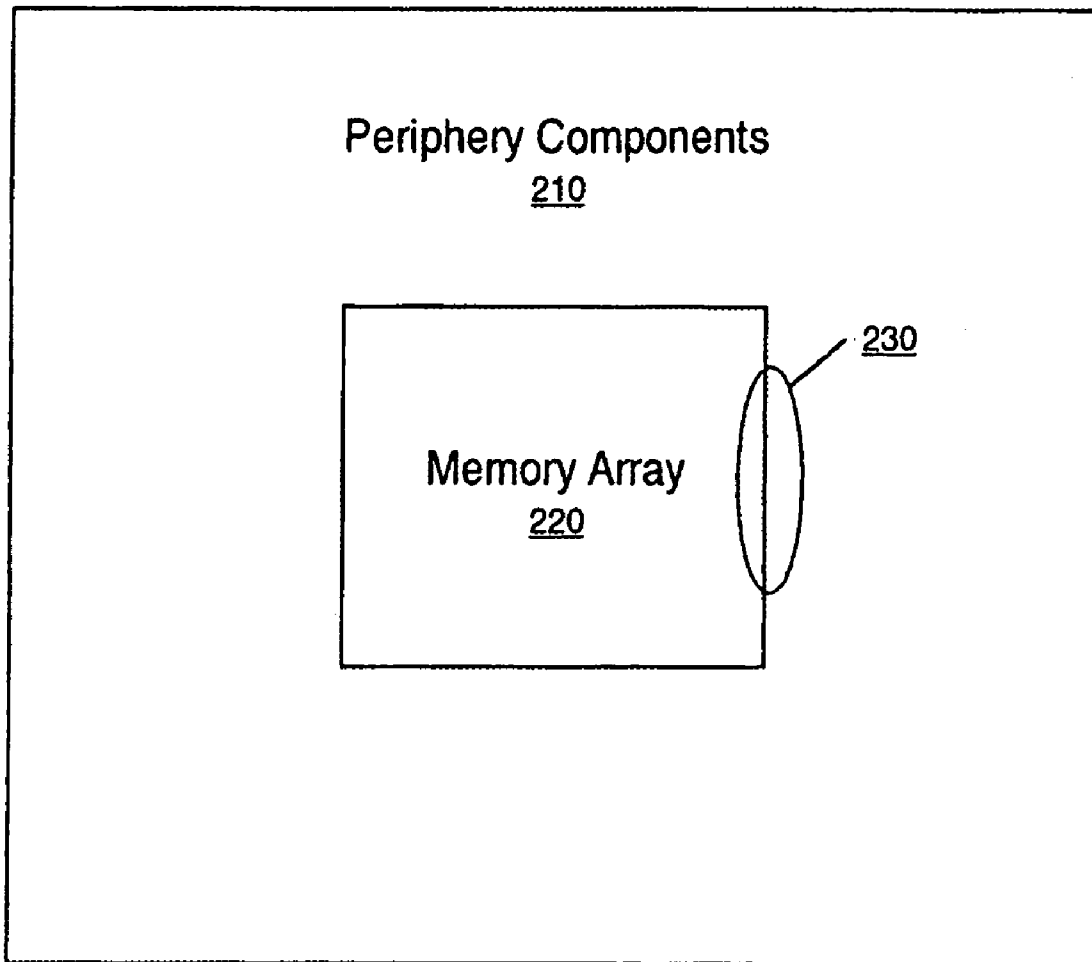
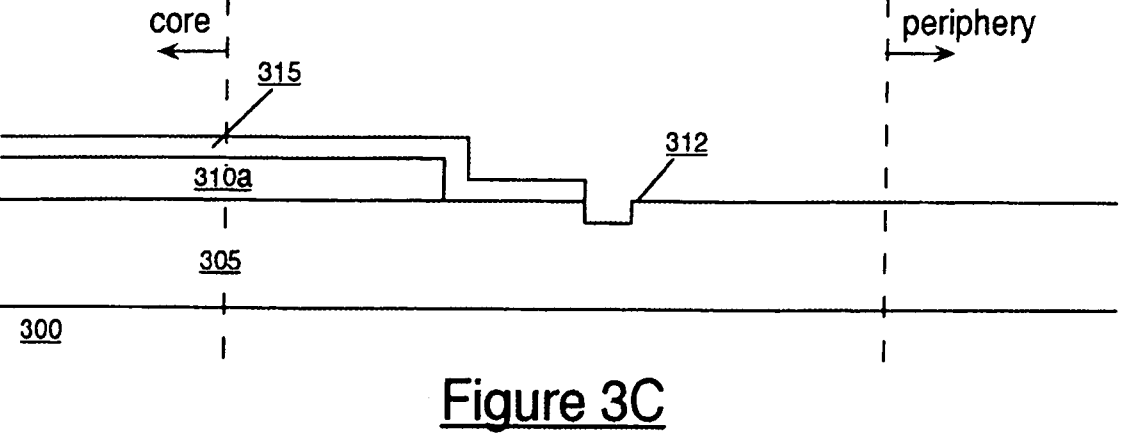
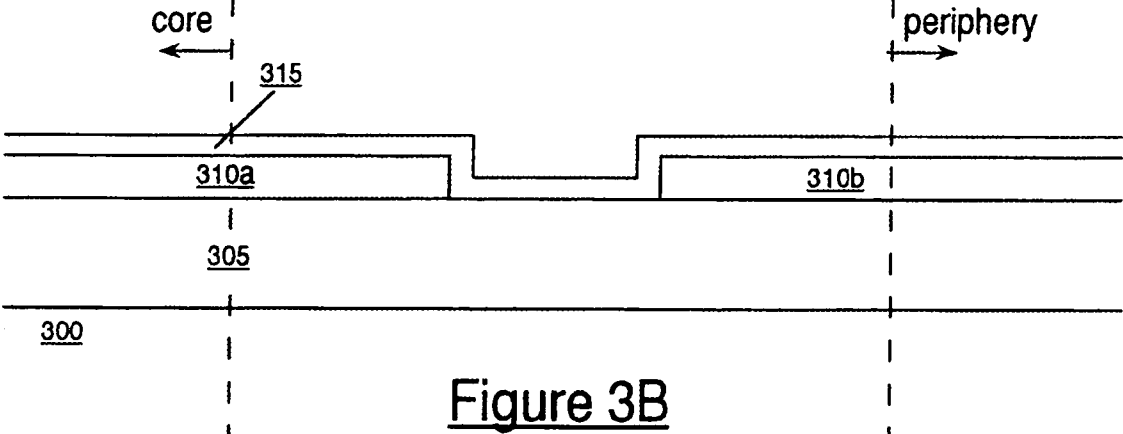
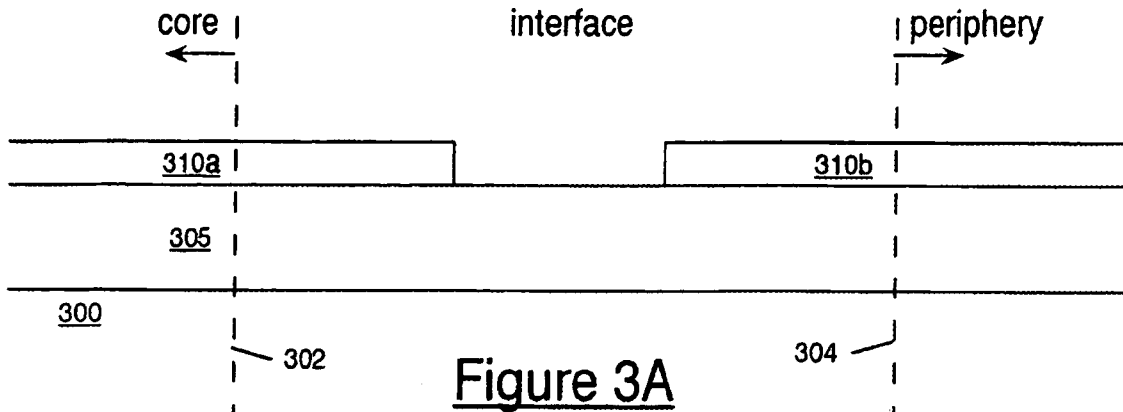


Figure 2



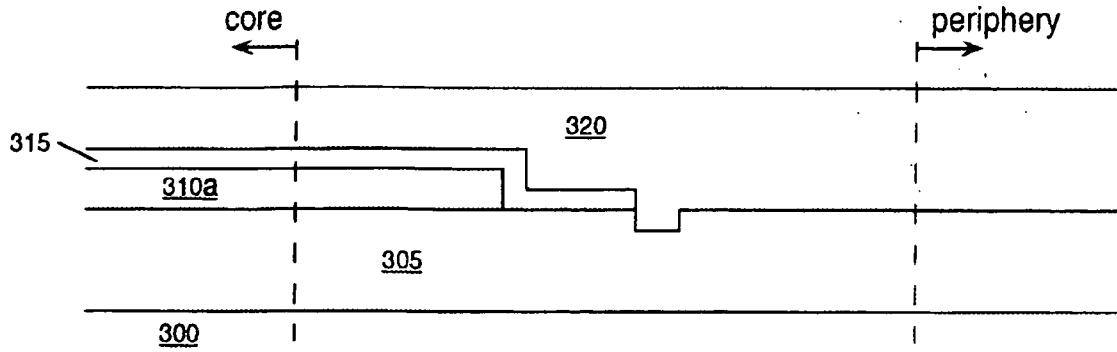


Figure 3D

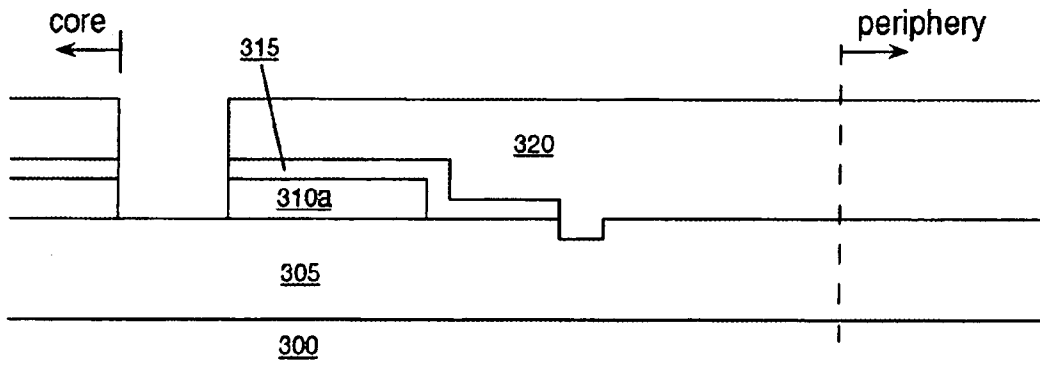


Figure 3E

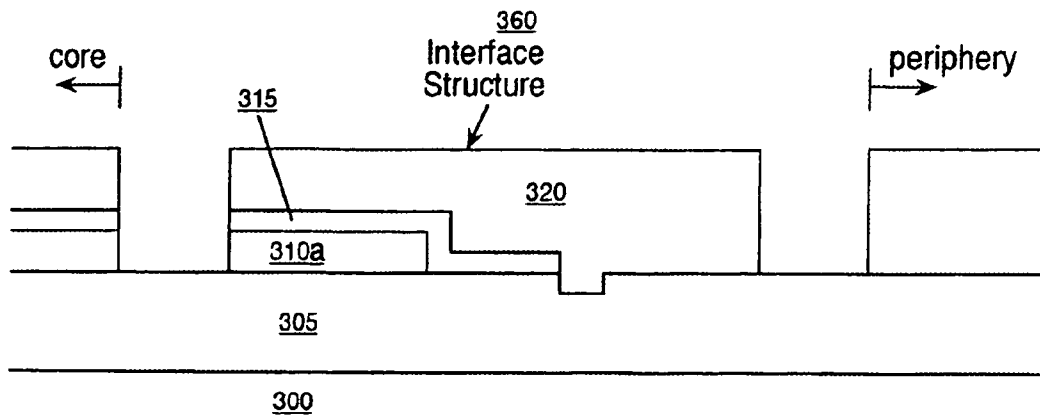


Figure 3F

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