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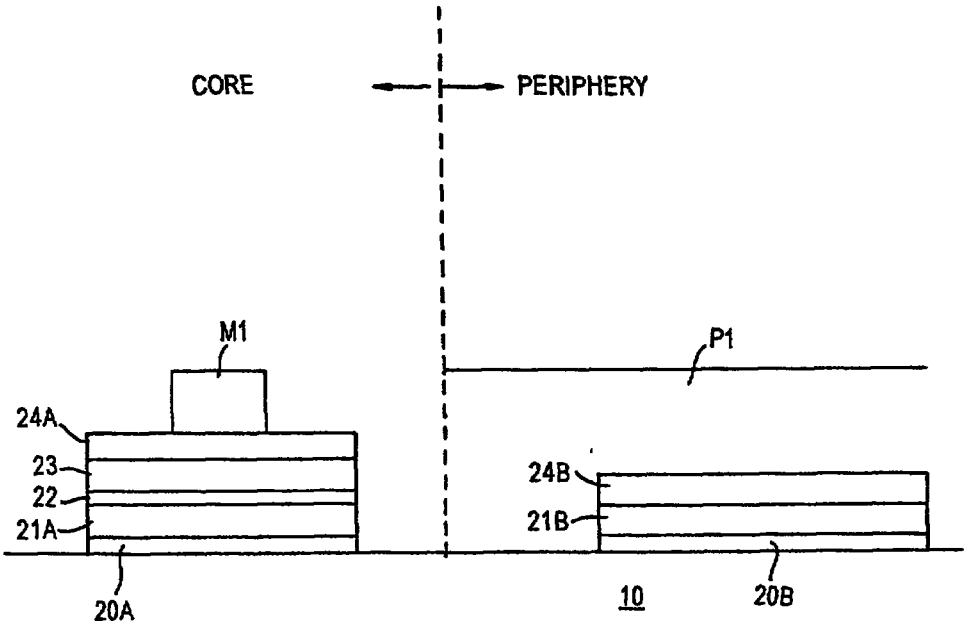
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(54) Title: METHOD OF MANUFACTURING A SEMICONDUCTOR MEMORY DEVICE WITH ANTI-REFLECTIVE COATING



(57) Abstract: Improved dimensional accuracy of the gate electrode structure in the peripheral circuitry region of a semiconductor device is achieved by reducing ARC loss during photoresist stripping associated with plural mask formation in the core memory cell region during patterning and ion implantations. Embodiments include sequentially etching the stacked gate electrode structure in the core memory cell region, photoresist stripping and etching to form the gate electrode structure in the peripheral circuitry region. Subsequently, plural maskings and ion implantations are implemented in the core memory cell region with attendant photoresist strippings.

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