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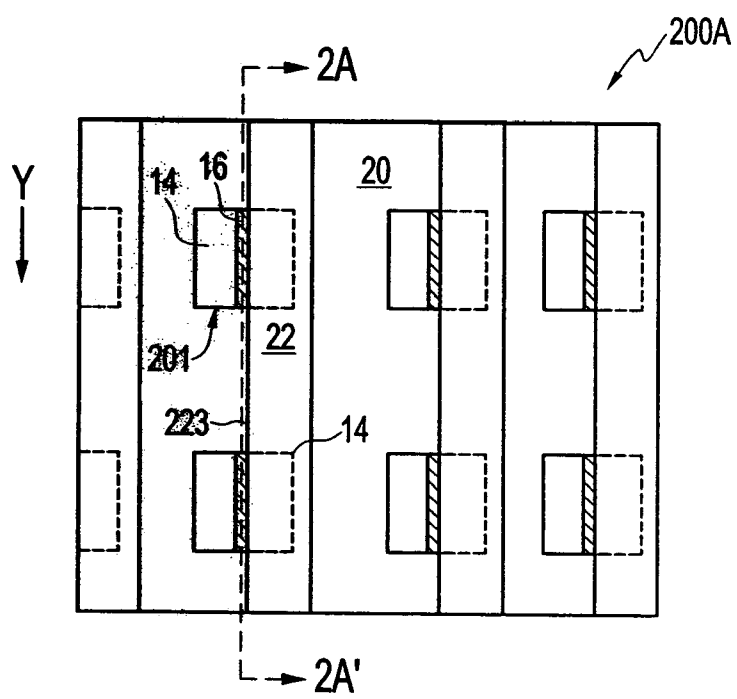
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(54) Title: PROGRAMMABLE RESISTANCE MEMORY DEVICES AND SYSTEMS USING THE SAME AND METHODS OF FORMING THE SAME



(57) Abstract: A programmable resistance memory element and method of forming the same is described. The memory element includes a first electrode (14), a dielectric layer (21) over the first electrode and a second electrode (22) over the dielectric layer. The dielectric layer and the second electrode each have sidewalls. A layer of programmable resistance material (16), e.g., a phase change material, is in contact with the first electrode and at least a portion of the sidewalls of the dielectric layer and the second electrode. Memory devices including plural memory elements and systems incorporating such memory devices are also disclosed.

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