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(54) Title: METHODS OF FORMING A MEMORY CELL MATERIAL, AND RELATED METHODS OF FORMING A SEMI-CONDUCTOR DEVICE STRUCTURE, MEMORY CELL MATERIALS, AND SEMICONDUCTOR DEVICE

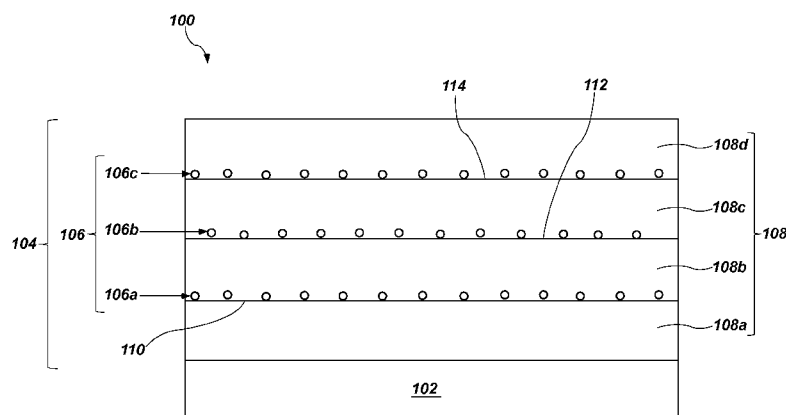


FIG. 1

(57) Abstract: A method of forming a memory cell material comprises forming a first portion of a dielectric material over a substrate by atomic layer deposition. Discrete conductive particles are formed on the first portion of the dielectric material by atomic layer deposition. A second portion of the dielectric material is formed on and between the discrete conductive particles by atomic layer deposition. A memory cell material, a method of forming a semiconductor device structure, and a semiconductor device structure are also described.