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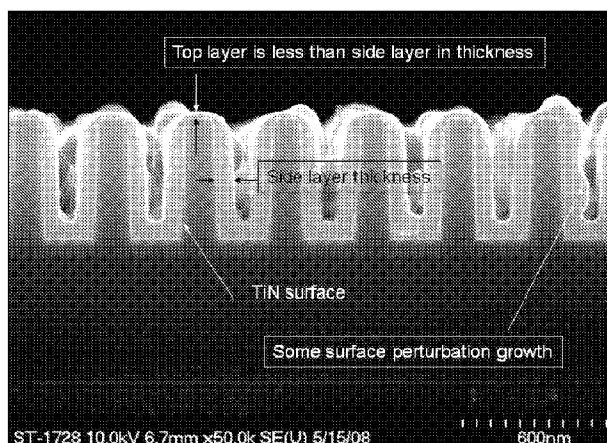
(54) Title: GeSbTe MATERIAL INCLUDING SUPERFLOW LAYER(S), AND USE OF Ge TO PREVENT INTERACTION OF
Te FROM Sb_xTe_y AND Ge_xTe_y RESULTING IN HIGH Te CONTENT AND FILM CRISTALLINITY

FIG.10

(57) Abstract: A multilayer film stack containing germanium, antimony and tellurium that can be annealed to form a GST product material of homogeneous and smooth character, wherein at least one antimony-containing layer is isolated from a tellurium-containing layer by an intervening germanium layer, and the multilayer film stack comprises at least two intervening germanium layers. The multilayer film stack can be formed by vapor deposition techniques such as chemical vapor deposition or atomic layer deposition. The annealable multilayer film stack can be formed in high aspect ratio vias to form phase change memory devices of superior character with respect to the stoichiometric and morphological characteristics of the GST product material.

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