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(54) Title: PROCESSING SYSTEM AND PLATFORM FOR WET ATOMIC LAYER ETCHING USING SELF-LIMITING AND SOLUBILITY-LIMITED REACTIONS

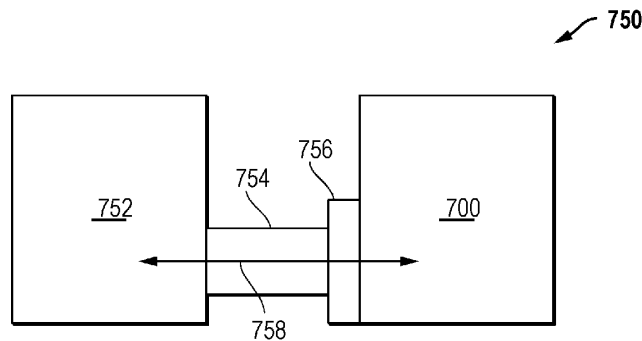


FIG. 7B

(57) Abstract: A processing system and platform for improving both the microscopic and macroscopic uniformity of materials during etching is disclosed herein. These improvements may be accomplished through the formation and dissolution of thin, self-limiting layers on the material surface by the use of wet atomic layer etching (ALE) techniques. For etching of polycrystalline materials, these self-limiting reactions can be used to prevent this roughening of the surface during etching. Thus, as disclosed herein, a wet ALE process uses sequential, self-limiting reactions to first modify the surface layer of a material and then selectively remove the modified layer.

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