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(54) **Title**: CRYSTALLIZATION PROCESSING FOR SEMICONDUCTOR APPLICATIONS

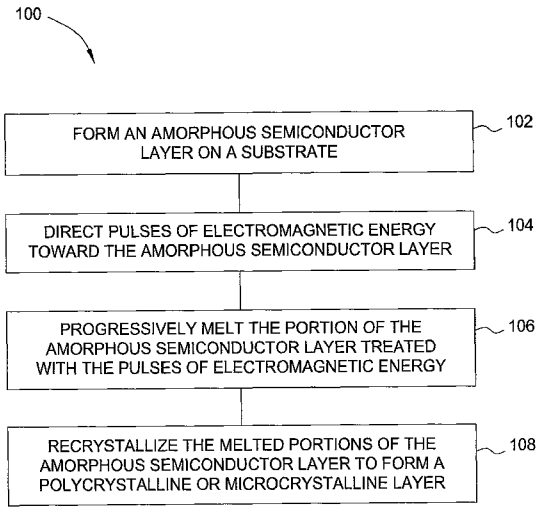


FIG. 1A

(57) **Abstract**: A method and apparatus for forming a crystalline semiconductor layer on a substrate are provided. A semiconductor layer is formed by vapor deposition. A pulsed laser melt/recrystallization process is performed to convert the semiconductor layer to a crystalline layer. Laser, or other electromagnetic radiation, pulses are formed into a pulse train and uniformly distributed over a treatment zone, and successive neighboring treatment zones are exposed to the pulse train to progressively convert the deposited material to crystalline material.

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