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(54) **Title**: METHOD FOR REPROCESSING SEMICONDUCTOR SUBSTRATE AND METHOD FOR MANUFACTURING SOI SUBSTRATE

FIG. 1A

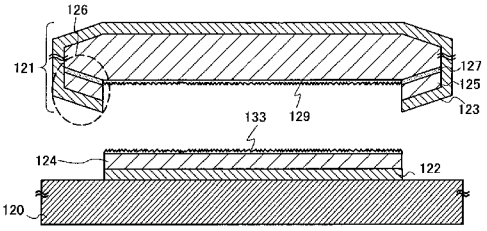


FIG. 1B

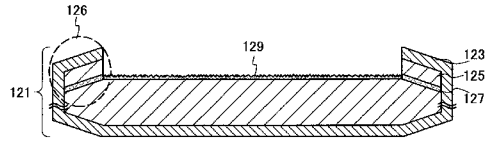


FIG. 1C

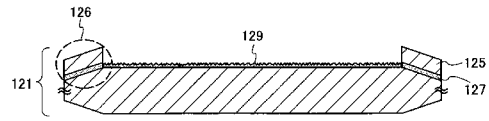
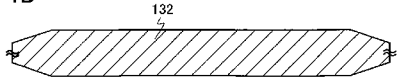


FIG. 1D



(57) **Abstract**: The embrittlement layer and the semiconductor layer remaining on the periphery of the semiconductor substrate after separation are selectively removed using a mixed solution containing a substance functioning as an oxidizer for oxidizing a semiconductor, a substance dissolving an oxide of a semiconductor, and a substance functioning as a decelerator of oxidization of a semiconductor and dissolution of an oxide of a semiconductor. Note that the semiconductor film is separated from the semiconductor substrate along an embrittlement layer that is formed in the semiconductor substrate by implantation of an H^+ ion generated from a hydrogen gas with use of an ion implantation apparatus.

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