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(54) Title: POLYSILICON PLANARIZATION SOLUTION FOR PLANARIZING LOW TEMPERATURE POLYSILICON THIN FILM PANELS

(57) Abstract: A highly aqueous, strongly basic planarizing solution and a process for its use to reducing or essentially eliminating protrusions or projections extending generally upwardly from a generally planar surface of polysilicon film produced by Low Temperature Poly Si (LTPS) annealing a film of amorphous silicon deposited on a substrate; the process including contacting the surface of the generally planar polysilicon film with the highly aqueous, strongly basic solution for a time sufficient to selectively etch the protrusions or projections from the surface of the generally planar polysilicon film without any significant etching of the generally planar polysilicon film, said highly aqueous, strongly basic solution being a solution having a pH of 12 or higher and comprising water, at least one strong base, and at least one etch rate control agent.



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