Title (en)
PROCESS AND APPARATUS FOR CLEANING SILICON WAFERS

Title (de)
VERFAHREN UND EINRICHTUNG ZUR REINIGUNG VON SILIZIUM SUBSTRATEN

Title (fr)
PROCEDE ET DISPOSITIF DE NETTOYAGE DE TRANCHES DE SILICIUM

Publication
EP 1250712 A2 20021023 (EN)

Application
EP 01904990 A 20010119

Priority
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Abstract (en)
[origin: WO0154181A2] An effective electropurge process and apparatus for wet processing of semiconductor wafers applies electrical charges to the wafer surface with an ample voltage sufficient to provide an effective field intensity which can substantially eliminate intolerable sub-0.05 micron "killer" defects when making highly advanced microchips with a feature size or line width less than 0.15 micron. The process can be used with frequent voltage reversal for automated wet-batch cleaning operations using cassettes that hold 10 to 50 wafers at a time and in various other operations involving megasonic transducers, mechanical brush scrubbers, laser cleaners and CMP equipment. The electropurge process is primarily intended for Fab plants where large wafers with a diameter of 200 to 400 mm require 250 to 350 steps including many dry layering, patterning and doping operations and at least 30 wet processing steps.

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