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(54) **METHOD FOR PRODUCING A SEMICONDUCTOR WAFER COMPOSED OF SILICON WITH AN EPITAXIALLY DEPOSITED LAYER**

(75) Inventors: **Christian Hager**, Kastl (DE); **Thomas Loch**, Burghausen (DE); **Norbert Werner**, Tengling (DE)

(73) Assignee: **SILTRONIC AG**, Munich (DE)

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See application file for complete search history.

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Primary Examiner — Kenneth A Bratland, Jr.
(74) *Attorney, Agent, or Firm* — Brooks Kushman P.C.

(57) **ABSTRACT**

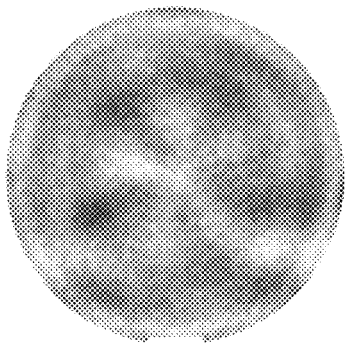
Semiconductor wafers composed of silicon with an epitaxially deposited layer, are prepared by:

placing a dummy wafer on a susceptor of an epitaxy reactor;

conducting an etching gas through the epitaxy reactor in order to remove residues on surfaces in the epitaxy reactor through the action of the etching gas;

conducting a first deposition gas through the epitaxy reactor in order to deposit silicon on surfaces in the epitaxy reactor;

replacing the dummy wafer by a substrate wafer composed of silicon; and

conducting a second deposition gas through the epitaxy reactor in order to deposit an epitaxial layer on the substrate wafer.

12 Claims, 3 Drawing Sheets