

Abstract**Process for manufacturing semiconductor wafers containing a gas-phase epitaxial layer in a deposition chamber**

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Disclosed is a process for manufacturing semiconductor wafers containing a gas-phase epitaxial layer in a deposition chamber, involving removing, from the deposition chamber by etching the deposition chamber, material settled in the deposition chamber during preceding coating processes; performing successive

10 coating operations in the etched deposition chamber, each of said coating operations involving having a robot place a substrate wafer on a susceptor having a circular circumference, the robot moving the substrate wafer into a drop-off position and placing it on the susceptor, the center of the substrate wafer not lying over the center of the susceptor in the drop-off position because of a predefined corrective

15 parameter; and depositing an epitaxial layer on the substrate wafer such that a semiconductor wafer containing an epitaxial layer is produced, characterized in that for each first substrate wafer moved by the robot into the drop-off position, the value of the predefined corrective parameter corresponds to a mean value of differences in the positions of a number of previously coated substrate wafers which had been the

20 first substrate wafers to be coated following a preceding chamber etching operation.

[Fig. 2]