degraded surface state can render the substrate unsuitable for use in a process for the manufacture of electronic components, in particular manufacture of CMOS circuits.

In order to overcome this difficulty, it is known, for example from US 7 601 224 B2, to use susceptors possessed of gas passages in order to make it possible to direct a trickle of gas toward the rear face of the substrate able to prevent the flow of the reactive gases under the substrate, thus inhibiting the undesirable deposition of reactive gases on the rear face of the substrate.

The use of such susceptors is liable to disrupt the flow of the reactive gases in the chamber, which risks bringing about a non-uniformity of the epitaxial deposition. This use is also complex, expensive and requires a significant modification of the equipment.

BRIEF DESCRIPTION OF THE INVENTION

Embodiments of the invention are targeted at avoiding the deposition of reactive gases on the rear face of a substrate during an epitaxial deposition on the front face of the latter, while overcoming the abovementioned disadvantages of the susceptors having gas passages.

An aspect of the invention provides a process for the production of a semiconductor substrate comprising an epitaxially deposited layer, successively comprising the stages of etching a susceptor of an epitaxy reactor, of coating the susceptor, of installation of a semiconductor substrate on the susceptor and of deposition of an epitaxial layer on the semiconductor substrate. The process additionally comprises, after the coating and before the deposition, the exposure of the susceptor to an oxygen-containing gas mixture. This exposure results in an oxidation of the susceptor, which will form an oxide layer at the surface of the susceptor. During the deposition of the epitaxial layer on a front face of the substrate, this oxide layer is found inserted between the susceptor and a rear face of the substrate. This process additionally comprises, after the installation of the semiconductor substrate on the susceptor and before the deposition of the epitaxial layer on the semiconductor substrate, a stage of baking the semiconductor substrate which removes, except on the underside of the semiconductor substrate, the oxide layer formed by the exposure of the susceptor to an oxygen-containing gas mixture.