

Title (en)

CVD REACTOR WITH CARRYING RING FOR SUBSTRATE HANDLING, AND USE OF A CARRYING RING ON A CVD REACTOR

Title (de)

CVD REAKTOR MIT TRAGRING ZUM SUBSTRATHANDHABEN UND VERWENDUNG EINES TRAGRINGS AN EINEM CVD REAKTOR

Title (fr)

RÉACTEUR CVD AYANT UNE BAGUE DE SUPPORT POUR LA MANIPULATION DE SUBSTRAT ET UTILISATION D'UNE BAGUE DE SUPPORT SUR UN RÉACTEUR CVD

Publication

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Application

EP 19729690 A 20190604

Priority

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Abstract (en)

[origin: WO2019233965A1] The invention relates to the use of a device having a susceptor assembly (3) which is situated in a reactor housing (1) and has at least one wide side plane (15'), which faces a process chamber (2) and has a pocket (17), and a carrying element (20) which lies in the at least one pocket (17), for carrying and handling the substrate (10), wherein an upper face (26), extending parallel to the wide side plane (15'), of the carrying element (20) is adjacent to a limiting face of a recess (11) in which the substrate (20) is arranged, a section (24) of the limiting face which runs along a cylinder inner lateral face merging into the upper face (26) of the carrying element (20), forming a rounded edge (25) or a chamfer (25'), to deposit layers of decomposition products of gaseous starting substances containing silicon and carbon built up on one or more substrates (10). To reduce the growth of parasitic deposits on an inner edge of the ring (20), the invention proposes that the section of the limiting face (24) which runs along the cylinder inner lateral face have a height (a) which is greater than the material thickness (d) of the substrate (10), and that the radius (R) of the rounded edge (25') be greater than 0.4 mm.

IPC 8 full level

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