Title (en)
METHOD AND DEVICE FOR PLASMA TREATMENT OF A FLAT SUBSTRATE

Title (de)
VERFAHREN UND VORRICHTUNG ZUR PLASMABEHANDLUNG EINES FLACHEN SUBSTRATS

Title (fr)
PROCÉDÉ ET DISPOSITIF DE TRAITEMENT AU PLASMA D'UN SUBSTRAT PLAT

Publication
EP 2351064 A1 20110803 (DE)

Application
EP 09765014 A 20091104

Priority
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Abstract (en)
[origin: WO2010051982A1] Method and device for the plasma treatment of a substrate in a plasma device, wherein - the substrate (110) is arranged between an electrode (112) and a counter-electrode (108) having a distance d between a surface area of the substrate to be treated and the electrode, - a capacitively coupled plasma discharge is excited, forming a DC self-bias between the electrode (112) and the counter-electrode (108), - in an area of the plasma discharge between the surface area to be treated and the electrode having a quasineutral plasma bulk (114), a quantity of at least one activatable gas species, to which a surface area of the substrate to be treated is subjected, is present - it is provided that a plasma discharge is excited, - wherein the distance d has a value comparable to s = se+sg, where se denotes a thickness of a plasma boundary layer (119) in front of the electrode, and sg denotes a thickness of a plasma boundary layer (118) in front of the substrate surface to be treated or - wherein the quasineutral plasma bulk (114) between the surface area to be treated and the electrode has a linear extension dp, where dp < 1/3d, dp < max(se +sg) or dp < 0.5s.

IPC 8 full level
H01J 37/32 (2006.01)

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