

Title (en)

DEVICE FOR REACTIVE PLASMA TREATMENT OF SUBSTRATES AND METHOD FOR THE USE THEREOF

Title (de)

EINRICHTUNG ZUR REAKTIVEN PLASMABEHANDLUNG VON SUBSTRATEN UND VERFAHREN ZUR ANWENDUNG

Title (fr)

DISPOSITIF DE TRAITEMENT AU PLASMA REACTIF DE SUBSTRATS, ET PROCEDE PERMETTANT SON UTILISATION

Publication

**EP 1421227 A2 20040526 (DE)**

Application

**EP 02760136 A 20020823**

Priority

- DE 0203131 W 20020823
- DE 10141142 A 20010824

Abstract (en)

[origin: WO03018870A2] The invention relates to a device for reactive plasma treatment of substrates (4) comprising a vacuum chamber (1) with at least one substrate arrangement, a plasma source e.g. a high-frequency plasma source with planar electrodes (8,9), a reactive gas inlet (15) and a substrate heating device. The vacuum chamber (1) comprises a first area (6) and a second area (7) which are separated from each other by means of a separating wall made of glass or ceramics. The substrate arrangement and the reactive gas inlet (15) are arranged in the first area (6). The electrodes (8,9) of the plasma source and the substrate heating device are arranged in the second area (7). The substrate arrangement and the electrodes (8,9) of the plasma source can be arranged parallel to each other. The invention also relates to a method for the use of said device. At least one substrate (4) is introduced into the first area (6) of the vacuum chamber (1) as a substrate arrangement, the vacuum chamber (1) is evacuated, the substrate (4) is heated to a technologically predetermined temperature by means of the substrate heating device and plasma is produced (6) following deposition of a coating on the substrate (4) or in order to surface-treat the substrates (4) by means of the plasma source in the first area (6) and a reactive gas is admitted.

IPC 1-7

**C23C 16/509**

IPC 8 full level

**C23C 16/48** (2006.01); **C23C 16/509** (2006.01); **C23C 16/54** (2006.01); **H01J 37/32** (2006.01)

CPC (source: EP)

**C23C 16/481** (2013.01); **C23C 16/509** (2013.01); **C23C 16/54** (2013.01); **H01J 37/32082** (2013.01); **H01J 37/32743** (2013.01); **H01J 37/32779** (2013.01); **H01J 2237/2001** (2013.01)

Citation (search report)

See references of WO 03018870A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

**WO 03018870 A2 20030306**; **WO 03018870 A3 20030522**; DE 10141142 A1 20030327; DE 10141142 B4 20041111; EP 1421227 A2 20040526

DOCDB simple family (application)

**DE 0203131 W 20020823**; DE 10141142 A 20010824; EP 02760136 A 20020823