

Title (en)

APPARATUS FOR TREATING OBJECTS WITH PLASMA, USE OF THIS APPARATUS AND METHOD OF USING THIS APPARATUS

Title (de)

VORRICHTUNG ZUR BEHANDLUNG VON GEGENSTÄNDEN MIT PLASMA, VERWENDUNG DIESER VORRICHTUNG UND VERFAHREN ZUR VERWENDUNG DIESER VORRICHTUNG

Title (fr)

INSTALLATION POUR LE TRAITEMENT D'OBJETS PAR PLASMA, UTILISATION DE CETTE INSTALLATION ET PROCÉDÉ DE MISE EN OEUVRE DE CETTE INSTALLATION

Publication

EP 3278350 A1 20180207 (FR)

Application

EP 16717427 A 20160329

Priority

- FR 1552733 A 20150331
- FR 2016050699 W 20160329

Abstract (en)

[origin: WO2016156728A1] Apparatus for treating the surface of objects with plasma, comprising: an enclosure (10; 110); means (P45, P46) for placing this enclosure under vacuum; a zone for storing objects to be treated, which is called the upstream storing zone (20; 120); a zone for storing treated objects, which is called the downstream storing zone (70; 120); at least two plasma treatment chambers (40, 50, 60; 140, 150) comprising means (42A, 42B; 42A; 142B) for injecting an active gas mixture, means (43; 143) for creating an electrical discharge and means for confining the plasma to the volume inside the chamber; and means (30; 130) for transferring between the storing zones and the chambers, characterized in that the transferring means are conveying means (30; 2 30) defining a conveying direction (F30; F130), and in that the various chambers are placed one behind the other, in the conveying direction, and in that the atmospheres of the various plasma treatment chambers are not hermetically sealed off from one another.

IPC 8 full level

H01J 37/32 (2006.01); **H01L 21/677** (2006.01)

CPC (source: EP US)

H01J 37/32403 (2013.01 - EP US); **H01J 37/32669** (2013.01 - EP US); **H01J 37/32733** (2013.01 - EP US); **H01J 37/32779** (2013.01 - EP US); **H01J 37/32889** (2013.01 - EP US); **H01J 37/32899** (2013.01 - EP US); **H01L 21/6715** (2013.01 - EP US); **H01L 21/67173** (2013.01 - EP US); **H01L 21/6776** (2013.01 - EP US)

Citation (search report)

See references of WO 2016156728A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2016156728 A1 20161006; EP 3278350 A1 20180207; FR 3034434 A1 20161007; FR 3034434 B1 20211022; US 10903058 B2 20210126; US 2018053639 A1 20180222

DOCDB simple family (application)

FR 2016050699 W 20160329; EP 16717427 A 20160329; FR 1552733 A 20150331; US 201615560605 A 20160329