

Title (en)
Plasma neutralisation cathode.

Title (de)
Plasma-Neutralisationskathode.

Title (fr)
Cathode de neutralisation à plasma.

Publication
EP 0464383 A2 19920108 (EN)

Application
EP 91109114 A 19910604

Priority
SU 4843045 A 19900626

Abstract (en)
A plasma compensation cathode comprises a casing (1) accommodating coaxially with its outlet hole (2) a hollow holder (3) and a thermal emitter (4) with a central passage (5), a layer (10) of material chemically inert at high temperatures to the materials of the holder and emitter being interposed therebetween. The central passage (5) is blind at the side of admission of gas, and is communicated with the interior of the holder (3) by way of a through passage (8) made in the wall of the thermal emitter (4) so that its axis intersects the axis of passage (5), and longitudinal grooves (9) made in the side surface of the thermal emitter (4) at the location of the inlet holes of the through passage (8). The holder (3) is embraced by heater (6) having a support ring (7) positioned in its midportion and secured in an insulation sleeve (18) separating the heater (6) from the coaxial heat screens (11) interconnected successively to define a sealed cavity (14) wherethrough the interior of the holder (3) communicates with the gas feeding pipe (13) secured in the casing (1) through the support insulator (17). Interposed between mechanical filters (16) and between holder (3) and pipe (13) is a getter (15). <IMAGE>

IPC 1-7
H01J 3/02

IPC 8 full level
H05H 1/34 (2006.01); **F03H 1/00** (2006.01); **H01J 3/02** (2006.01); **H01J 37/077** (2006.01); **H05H 1/24** (2006.01); **H05H 1/54** (2006.01)

CPC (source: EP)
H01J 3/025 (2013.01)

Cited by
CN114458564A; CN114320801A; CN111720281A; CN113371233A; CN105626410A; WO9950878A3

Designated contracting state (EPC)
AT CH DE FR GB IT LI NL

DOCDB simple family (publication)
EP 0464383 A2 19920108; **EP 0464383 A3 19920715**; **EP 0464383 B1 19940921**; AT E112096 T1 19941015; DE 69104142 D1 19941027; DE 69104142 T2 19950119; JP 2963903 B2 19991018; JP H04299000 A 19921022; RU 2012946 C1 19940515

DOCDB simple family (application)
EP 91109114 A 19910604; AT 91109114 T 19910604; DE 69104142 T 19910604; JP 18013491 A 19910625; SU 4843045 A 19900626