

Title (en)
PLASMA NEUTRALISATION CATHODE

Publication
EP 0464383 A3 19920715 (EN)

Application
EP 91109114 A 19910604

Priority
SU 4843045 A 19900626

Abstract (en)
[origin: EP0464383A2] 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)

Citation (search report)
• [A] PROCEEDINGS OF THE 8TH SYMPOSIUM ON ENGINEERING PROBLEMS OF FUSION RESEARCH vol. 2, 1979, NEW YORK pages 1038 - 1043; D.E. SCHECTER: 'HOLLOW CATHODE FOR POSITIVE ION SOURCES'
• [A] PATENT ABSTRACTS OF JAPAN vol. 7, no. 204 (E-197)(1349) 9 September 1983 & JP-A-58 102 440 (TOKYO SHIBAURA DENKI K K) 18 June 1983
• [A] PATENT ABSTRACTS OF JAPAN vol. 7, no. 292 (E-219)(1437) 27 December 1983 & JP-58 169 752 (TOKYO SHIBAURA DENKI K K) 6 October 1983

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