

Title (en)

APPARATUS FOR PRODUCING A PLASMA SOURCE HAVING A HIGHER RADIATION INTENSITY IN THE X-RAY RANGE

Publication

EP 0387838 A3 19910515 (DE)

Application

EP 90104819 A 19900314

Priority

DE 3908480 A 19890315

Abstract (en)

[origin: EP0387838A2] An apparatus for producing a plasma source having a high radiation intensity in the X-ray range, having two concentric electrodes (10, 11) which have a discharge space (12) between them, filled with a gas at low pressure, which discharge space (12) is open at one end (13) and is closed by an insulator (15) at the other end (14), which has a surface (16) allowing a homogeneous plasma layer to build up, and having a high-power switch (HS), which connects the electrodes (10, 11) to a high-voltage source for a brief period. In order to achieve a long life of the insulator (15) of the apparatus, said apparatus is designed such that the insulator (15) is an annular disc and adjoins the discharge space (12) with a surface (16) which is at right angles or inclined at a maximum of 45 DEG with respect to the cylinder vertical (18), and such that the electrodes (10, 11) are arranged at a distance (25) from one another allowing multiplication of the electrons in a homogeneous discharge. <IMAGE>

IPC 1-7

H05G 2/00

IPC 8 full level

H05G 2/00 (2006.01)

CPC (source: EP)

H05G 2/003 (2013.01)

Citation (search report)

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- [A] INSTRUMENTS & EXPERIMENTAL TECHNIQUES, Band 31, Nr. 1, Januar/Februar 1988, Seiten 221-223, New York, US; R.B. BAKSHT et al.: "Compact plasma source of soft X-rays"

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