

Title (en)
LIQUID METAL IONS SOURCE WITH A VACUUM ARC

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EP 0300566 B1 19930210 (FR)

Application
EP 88201511 A 19880714

Priority
FR 8710391 A 19870722

Abstract (en)
[origin: EP0300566A1] Liquid metal ion source with vacuum arc using the principle of anode spot creation and whose small-sized anode surface (8) is fed with liquid metal (7) from a reservoir (6) through a wall (9) consisting of a material chosen so as to exhibit, in relation to the liquid metal, a large difference in the temperatures required to obtain an equal vapour pressure. The mode of feeding the anode surface through this wall can be obtained by means of a porous material (13) or of contiguous slots (14). The liquid metals which can be used may be liquid at ambient temperature (gallium, caesium) or liquefied by heating (tin, indium). The cathode (1) and the control gate (10, 11) have a ring-shaped structure whose central aperture (2) is close to the anode (8, 9), the latter being placed along the axis of the said ring. <??>Application: ion implanters. <IMAGE>

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H01J 27/08; H01J 27/22

IPC 8 full level
H01J 37/08 (2006.01); **H01J 27/08** (2006.01); **H01J 27/22** (2006.01)

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