

Title (en)
Plasma torch for powder spraying.

Title (de)
Plasmaspritzbrenner.

Title (fr)
Torche de rechargement à plasma.

Publication
EP 0250308 A1 19871223 (FR)

Application
EP 87401339 A 19870615

Priority
FR 8608736 A 19860617

Abstract (en)
1. Plasma torch for resurfacing comprising, along a common axis (XX'), a central cathode (110) having a tapered end (110a) and an annular anode (112) surrounding the cathode and delimiting therewith an annular space (114) for the supply of plasma-producing gas, this space being extended beyond the tapered end of the cathode by an outlet orifice (115) formed in the anode, at least one passage (120) for the supply of resurfacing powder being formed in the anode and having, at the level of the said outlet orifice, an outlet end (120a) tilted towards the said axis, characterized in that the outlet orifice (115) has a rear part (115a) adjacent to the annular space (114) and a front part (115b) emerging outside and having a diameter greater than the diameter of the rear part, the tilted end (120a) of the passage for the supply of resurfacing powder emerging in the front part (115b) of the outlet orifice, channels (122), substantially parallel to the said axis (XX'), being formed in the anode (112), around the rear part (115a) of the outlet orifice, in order to place the front part (115b) of this orifice in communication with the said annular space (114).

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H05H 1/42; **H05H 1/34**

IPC 8 full level
B05B 7/22 (2006.01); **H05H 1/34** (2006.01); **H05H 1/42** (2006.01)

CPC (source: EP US)
B05B 7/226 (2013.01 - EP); **H05H 1/34** (2013.01 - EP US); **H05H 1/3478** (2021.05 - EP); **H05H 1/42** (2013.01 - EP)

Citation (search report)
• [Y] US 3148263 A 19640908 - JENSEN GERALD A
• [Y] US 4127760 A 19781128 - MEYER PHILIP J, et al

Cited by
FR2636198A1; EP0445147A4; EP0461259A4; EP0423370A4; GB2300649A; GB2300649B; CN102189319A; GR1001021B; EP2676735A4; US6800336B1; US6379754B1; US7557324B2; WO0132949A1; WO9905339A1; WO2004028222A1; WO2019166473A1

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