

Title (en)

Plasma torch external cooling device

Title (de)

Vorrichtung zur Aussenkühlung eines Plasmapbrenners

Title (fr)

Dispositif de refroidissement externe d'une torche à plasma

Publication

EP 0750448 A1 19961227 (FR)

Application

EP 96450014 A 19960617

Priority

FR 9507610 A 19950620

Abstract (en)

The torch electrode(s) lie within a cylinder (2, 3) secured by a collar (7) to an entry hole in an oven or other chamber. Outside the latter, the torch base holds connections for the injected gas and (5, 6) demineralised torch cooling water. The water outlet (6) is connected by flexible hose (9) to the external cooler inlet (21). The cooling sheath (8) inner tube is separated by a 1mm annular gap from the torch tube. The sheath's outer tube, octagonal in section, is connected to the inner by longitudinal baffles defining two parallel, serpentine, cooling water paths, one occupying each half-sheath, between inlet (21) and outlet (10) passages formed in an end flange trapped between the torch collar (7) and the oven wall.

IPC 1-7

H05H 1/28

IPC 8 full level

H05H 1/28 (2006.01); **H05H 1/34** (2006.01)

CPC (source: EP US)

H05H 1/28 (2013.01 - EP US); **H05H 1/34** (2013.01 - EP US)

Citation (search report)

- [A] EP 0427592 A1 19910515 - AEROSPATIALE [FR]
- [A] US 4710607 A 19871201 - WILHELMI HERBERT [DE], et al
- [A] DE 2651185 A1 19780511 - NUC WELD GMBH

Designated contracting state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

EP 96450014 A 19960617; CA 2179535 A 19960619; FR 9507610 A 19950620; JP 17993596 A 19960620; US 66590496 A 19960619; ZA 965243 A 19960620