

Title (en)
HIGH ENTHALPY PLASMA TORCH

Publication
EP 0515975 A3 19930512 (EN)

Application
EP 92108547 A 19920520

Priority
CA 2043504 A 19910529

Abstract (en)
[origin: EP0515975A2] A plasma torch comprises a torch housing, rear and front tubular electrodes coaxially mounted within such housing with a gap therebetween, both electrodes being fabricated from copper having tubular inserts of refractory material, a vortex generator for introducing a tangential flow of gas in opposite direction into the tubular electrodes through the gap between the two electrodes, and a cooling system for cooling the tubular electrodes. <IMAGE>

IPC 1-7
H05H 1/34; **H05H 1/28**

IPC 8 full level
B23K 10/00 (2006.01); **H05B 7/18** (2006.01); **H05H 1/28** (2006.01); **H05H 1/34** (2006.01)

CPC (source: EP US)
H05H 1/28 (2013.01 - EP); **H05H 1/34** (2013.01 - EP US); **H05H 1/3431** (2021.05 - EP); **H05H 1/3442** (2021.05 - EP); **H05H 1/3468** (2021.05 - EP)

Citation (search report)

- [Y] US 4668853 A 19870526 - FEY MAURICE G [US], et al
- [Y] US 3139509 A 19640630 - BROWNING JAMES A
- [Y] BE 896448 A 19831013 - CENTRE RECH METALLURGIQUE
- [Y] GB 2213636 A 19890816 - TOSHIBA KK [JP]
- [Y] US 3567898 A 19710302 - FEIN SAMUEL
- [Y] US 4928027 A 19900522 - DEININGER WILLIAM D [US], et al
- [A] US 3104310 A 19630917 - ROBERT MOSS ASHLEY
- [A] FR 2539942 A1 19840727 - PLASMA ENERGY CORP [US]
- [A] US 3301995 A 19670131 - ESCHENBACH RICHARD C, et al

Cited by
US5611896A; CN116582993A; FR2798247A1; FR2703557A1; EP2827685A3; CN109014456A; WO2012140425A1; US9277636B2; US11247282B2; US7250540B2; US6919015B2; TWI606861B

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