

Title (en)

LASER SUSTAINED PLASMA TORCH AND METHOD FOR USING SAME.

Title (de)

VOM LASER UNTERSTÜTZTE PLASMAFLAMME UND VERFAHREN ZUR VERWENDUNG.

Title (fr)

CHALUMEAU A PLASMA ENTRETENU PAR UN LASER ET PROCEDE D'UTILISATION DU CHALUMEAU.

Publication

EP 0325583 A4 19891219 (EN)

Application

EP 87904598 A 19870622

Priority

US 87728686 A 19860623

Abstract (en)

[origin: WO8707862A1] Apparatus (10) generating a laser sustained plasma torch includes a laser (12), producing laser radiation (14) which is focused to a focal region (17) at least partially within a plasma torch nozzle means (24). The plasma torch nozzle means (24) is supplied with pressurized gas and includes an outlet (26) so that a plasma (37) sustained by the focused laser radiation is at least partially confined within the plasma torch nozzle means (24). The plasma (37) produced by the torch is employed as a working medium in materials processing applications such as welding, drilling, cutting, flame spraying, heat treating, and surface alloying.

IPC 1-7

B23K 9/00

IPC 8 full level

B23K 10/00 (2006.01); **B23K 26/00** (2006.01); **B23K 26/14** (2006.01); **H05H 1/22** (2006.01); **H05H 1/26** (2006.01)

CPC (source: EP KR)

B23K 9/00 (2013.01 - KR); **B23K 26/348** (2015.10 - EP); **G21B 1/23** (2013.01 - EP); **H05H 1/26** (2013.01 - EP); **Y02E 30/10** (2013.01 - EP)

Citation (search report)

- No further relevant documents have been disclosed.
- See references of WO 8707862A1

Cited by

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Designated contracting state (EPC)

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WO 8707862 A1 19871230; EP 0325583 A1 19890802; EP 0325583 A4 19891219; JP H01503612 A 19891207; KR 880701151 A 19880725

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