

Title (en)
PLASMA TORCH

Title (de)
PLASMABRENNER

Title (fr)
CHALUMEAU À PLASMA

Publication
EP 2092805 B1 20100630 (EN)

Application
EP 07825716 A 20071115

Priority
• IB 2007003601 W 20071115
• IT BO20060793 A 20061122

Abstract (en)
[origin: WO2008062300A1] A plasma torch (1) consists of a torch body (2) comprising: an electrode (3) mounted centrally in the torch body (2); a nozzle (4) mounted on the torch body (2), surrounding the tip of the electrode (3) and having a first central through hole (6) for the passage of the plasma; a nozzle holder (7) whose inside wall faces the outside wall of the nozzle (4) in such a way as to form a cooling chamber (8) through which a second cooling fluid (F1) passes; a nozzle (4) and nozzle holder (7) covering unit (10) composed of a first member (10a) that can be joined to the torch body (2) and a second member (10b) that can be joined to the proximal end of the first member (10a); the second member (10b) is provided with a second central hole (11), coaxial with the first hole (6); a channel (12) for the passage of a third, cooling fluid (F2) is formed between the nozzle holder (7) and the covering unit (10) in such a way as to reach the second hole (11); in the join area defined by the proximal end of the first holder member (10a) and the annular edge of the second member (10b) there is a plurality of concavities (13) designed to enable a part (F2a) of the third cooling fluid (F2) to flow to the outside of the second member (10b).

IPC 8 full level
H05H 1/34 (2006.01)

CPC (source: EP US)
H05H 1/28 (2013.01 - EP); **H05H 1/34** (2013.01 - EP US); **H05H 1/3457** (2021.05 - EP); **H05H 1/3478** (2021.05 - EP)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2008062300 A1 20080529; AT E472930 T1 20100715; DE 602007007515 D1 20100812; EP 2092805 A1 20090826;
EP 2092805 B1 20100630; IT BO20060793 A1 20080523

DOCDB simple family (application)
IB 2007003601 W 20071115; AT 07825716 T 20071115; DE 602007007515 T 20071115; EP 07825716 A 20071115; IT BO20060793 A 20061122