

Title (en)
Plasma torch head

Title (de)
Plasmabrennerkopf

Title (fr)
Tête de torche à plasma

Publication
EP 0817547 A1 19980107 (FR)

Application
EP 97401417 A 19970619

Priority
FR 9607816 A 19960624

Abstract (en)
A plasma torch head, e.g. for welding, cutting and thermal treatment, consists of an axial electrode (10) and a peripheral nozzle (11) ending in an axial duct (24) through which the plasma jet is ejected. The electrode and the nozzle are adjustable axially relative to one another so that it can make temporary contact along a surface (23) to initiate an electric arc between the nozzle and the electrode. The base of the nozzle has a peripheral axial projection (40), and the contact surface (23) between the nozzle base and electrode is offset away from the axial outlet duct (24). The end of the electrode can have a second annular projection to increase the area of contact, which can be in a continuous or interrupted line, and can have transverse radial grooves. In addition, the electrode can have an axial insert (16) e.g. of hafnium.

Abstract (fr)
L'invention concerne une tête de torche à plasma comportant une électrode axiale (10) et une tuyère périphérique (12) en forme de coupelle dont le fond (22) comporte un conduit axial (24) d'éjection du jet de plasma et dont la paroi latérale entoure l'électrode. L'électrode (10) et la tuyère (12) sont déplaçables axialement l'une par rapport à l'autre en vue de leur mise en contact temporaire suivant une surface de contact pour initier un arc électrique entre l'électrode (10) et la tuyère (12). Application aux torches de coupe par jet de plasma. <IMAGE>

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IPC 8 full level
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Citation (search report)
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• [YA] DE 3840459 A1 19900517 - MERKLE WILHELM SCHWEISSMASCH [DE]
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