

Title (en)

Plasma torch with electromagnetic coil for rotating the arc.

Title (de)

Plasmabrenner mit elektromagnetischer Spule zur Rotierung des Lichtbogens.

Title (fr)

Torche à plasma pourvue d'une bobine électromagnétique de rotation de pieds d'arc.

Publication

EP 0427590 B1 19940824 (FR)

Application

EP 90403044 A 19901029

Priority

FR 8914675 A 19891108

Abstract (en)

[origin: EP0427590A1] The invention relates to a plasma torch of the type comprising - two tubular and coaxial electrodes (5 and 6), one a continuation of the other, each electrode being arranged in a holder (3 and 4); - fluid-flushed means of cooling said electrodes, the said means of at least one electrode comprising a sealed cylindrical chamber (16) provided in the corresponding holder and separated by a cylindrical wall dividing the chamber into two communicating annular spaces (16A and 16B) through which the said coolant fluid circulates; - means (9) for initiating an electric arc between the electrodes; - means (11, 13) for injecting a plasma-forming gas between the electrodes; and, - electromagnetic coil means for displacing the pick-up points of the said electric arc onto the inner surfaces of the said electrodes. According to the invention, the coolant fluid for the said electrode, whose sealed chamber (16) contains the separation wall, is electrically insulating and the said electromagnetic coil (15) does the job of the separation wall.

IPC 1-7

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IPC 8 full level

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CPC (source: EP KR US)

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Cited by

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