

Title (en)

Plasma torch with electromagnetic coil for independent and integral arc base displacement

Title (de)

Plasmabrenner mit elektromagnetische Spule zur unabhängige und vollständige Bogenendebewegung

Title (fr)

Torche à plasma à bobine électromagnétique de déplacement du pied d'arc indépendante et intégrée

Publication

EP 0750451 A1 19961227 (FR)

Application

EP 96450015 A 19960619

Priority

FR 9507791 A 19950623

Abstract (en)

The plasma torch comprises a naked torch part (1), in which are arranged a single leading electrode or a pair of leading (6) and trailing coaxial electrodes, a field coil (9) for displacing the foot of the arc, and some means for injecting a plasma gas. A system is also provided to assure the starting of the torch. The field coil (9) has a generally cylindrical form and is made up of an assembly of three supports of electrically insulating material in the form of coaxial tubes (20,21,22) connected to a ring (25) equipped with the electrical connection mechanism (27) connected to at least one helicoidal winding arranged on at least one of the faces of one of the three cylindrical supports (20,21,22). This assembly is removable and can be inserted into the naked torch part (1) around the leading electrode (6). The electrodes are of tubular form and are cooled by an appropriate cooling circuit.

IPC 1-7

H05H 1/40

IPC 8 full level

H05H 1/26 (2006.01); **H05H 1/40** (2006.01)

CPC (source: EP US)

H05H 1/40 (2013.01 - EP US)

Citation (search report)

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EP 0750451 A1 19961227; CA 2179654 A1 19961224; FR 2735941 A1 19961227; FR 2735941 B1 19970919; JP H09115690 A 19970502; US 5719371 A 19980217; ZA 965304 B 19970226

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