

Title (en)

MOBILE CONTACT DEVICE FOR AN ELECTRODE OF A PLASMA TORCH AND TOOL FOR FIXING SAID DEVICE

Title (de)

MOBILE KONTAKTVORRICHTUNG FÜR EINE ELEKTRODE EINES PLASMA BRENNERS UND WERKZEUG ZUR BEFESTIGUNG DIESER VORRICHTUNG

Title (fr)

DISPOSITIF DE CONTACT MOBILE POUR UNE ÉLECTRODE D'UNE TORCHE À PLASMA ET OUTIL DE FIXATION DUDIT DISPOSITIF

Publication

**EP 3563644 A1 20191106 (EN)**

Application

**EP 17840534 A 20171228**

Priority

- IT 201600132405 A 20161229
- EP 2017084773 W 20171228

Abstract (en)

[origin: WO2018122351A1] A mobile contact device for an electrode (E) of a plasma torch (T) comprises a seating (S) for said device (1) and a chamber (C) assigned to slidably house an electrode (E) electrically powered by the device (1) and movable between a rest condition (R), in which it (E) matches with an end of a hollow of a nozzle (U) of the torch (T), and an operating condition (O), in which it (E) is spaced from said end. Said device (1) comprises a tubular body means (3) having a side wall (5) and an inner cavity (7) longitudinally crossing said tubular body means (3) from a first end to a second end of the tubular body means (3) itself. The first end is provided with a connection (9) for the removable connection to the seating (S) of the body means (3) which is electrically connected to electrical power supply means of the torch (T). Said device further comprises a contact means (11) movable in said inner cavity (7) and having a contact end (13) protruding, at least in the rest condition (R), from the second end of the body means (3) through a respective end opening (15) of said inner cavity (7). The inner cavity (7) further contains a resilient means (17) compressed between a shoulder means (19) of the contact means (11) and an abutment means (21). At least in the rest condition (R), the contact end (13) of the contact means (11) contacts a corresponding contact end of the electrode (E) electrically connecting it (E) to electric power supply means of the torch (T) through said body means (3) and/or resilient means (17) and/or abutment means (21). The inner cavity (7) is fed through a duct of said seating (S) with a fluid flowed into the torch (T) by respective feeding means of said fluid. The side wall (5) is located between the connection (9) and the second end of the body means (3) and it has a set of second pass-through channels (29) each flowing, on one side, to the outside of the device (1) and, on the other side, into the inner cavity (7) of the body means (3).

IPC 8 full level

**H05H 1/34** (2006.01)

CPC (source: EP US)

**H05H 1/3423** (2021.05 - EP US); **H05H 1/3489** (2021.05 - EP)

Citation (search report)

See references of WO 2018122351A1

Cited by

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Designated extension state (EPC)

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DOCDB simple family (publication)

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