Title (en)

PORTABLE WORK MACHINE WITH DOUBLE FUNCTION OF ARC WELDER OR OF PLASMA CUTTER OF METAL OBJECTS

Title (de)

TRAGBARE ARBEITSMASCHINE MIT DOPPELFUNKTION ALS LICHTBOGENSCHWEISSGERÄT ODER PLASMASCHNEIDGERÄT FÜR METALLARTIKEL

Title (fr)

MACHINE DE TRAVAIL PORTATIVE AYANT DOUBLE FONCTION DE SOUDEUSE À ARC ÉLECTRIQUE OU DE DISPOSITIF DE COUPAGE PAR PLASMA D'OBJETS MÉTALLIQUES

Publication

EP 2242604 A1 20101027 (EN)

Application

EP 07866811 A 20071218

Priority

IT 2007000879 W 20071218

Abstract (en)

[origin: WO2009078043A1] A portable work machine with double function of arc welder and of plasma cutter of metal objects comprises a shared electronic system (D, E, R) two distinct electrical transformers (N, 0) or a single core transformer with double primary and/or secondary windings and related secondary rectifying stages (P, Q); a shared powering circuit connectable to AC voltage mains, including a main switch (A), an EMC filter (B), a switching power supply (C) for said shared electronic system (D, E, R), a sensor (F) of the mains voltage generating a signal that is applied to an input of a core circuit (E) of said electronic control system, a shared primary rectifying stage (G) of the mains voltage and levelling capacitors (H) of the rectified DC voltage, a shared full wave primary inverter (I) and a routing circuit (M) of the AC voltage output by said primary inverter (I) towards the primary winding of one or the other of said, electrical transformers (N, 0); a first shared sensor (RI) of the current flowing on output lines respectively of one or the other of said secondary rectifying stages (P, Q), generating a feedback signal that is applied to a second input (HPI) of the core circuit (E) of said electronic control system; a second sensor (R2) of the current flowing on an ancillary ground line connecting a metal body of an outlet nozzle of said plasma torch for signalling the lighting of a pilot arc between an inner spark electrode and the surrounding metallic body of the outlet nozzle of said plasma torch to the core circuit (E) of said electronic control system, through a third input (SENSE).

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

See references of WO 2009078043A1

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