

Title (en)

ELECTRONIC CIRCUIT AND METHOD FOR ELECTRIC POWER SUPPLY TO AN ALTERNATIVE CURRENT ELECTRIC FURNACE

Title (de)

ELEKTRONISCHER SCHALTSTROM- UND VERFAHREN ZUM EINSPEISEN VON ELEKTRISCHER ENERGIE IN EINEN WECHSELSTROM-ELEKTROOFEN

Title (fr)

CIRCUIT ELECTRONIQUE ET PROCEDE POUR ALIMENTER EN ENERGIE ELECTRIQUE UN FOUR ELECTRIQUE A COURANT ALTERNATIF

Publication

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Application

EP 06776359 A 20060724

Priority

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Abstract (en)

[origin: US2008123714A1] The invention relates to an electronic circuit and a method for feeding power to at least one electrode of an alternating-current electric-arc furnace, particularly for melting metal. Known circuits of this type typically comprise a series connection with a transformer for providing a supply voltage for the electric-arc furnace from a power grid (1) and a AC power controller (8) connected between the transformer (6) and the electrode (11) for regulating the current through the electrode (11). According to the invention, a further development for such electronic circuits is proposed, which development has a simple design, is inexpensive and prevents overload of the AC power controller (8) even in operating modes of the electric-arc furnaces at high electrode currents. This further development provides to bypass the AC power controller with a bypass switch (9) that is opened or closed with the help of a controller as a function of the amount of current flowing through the electrode (11).

IPC 8 full level

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CPC (source: EP KR US)

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Citation (search report)

See references of WO 2007019943A1

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