

Title (en)
METHOD FOR FEEDING AN INDUCTION FURNACE OR INDUCTOR

Title (de)
VERFAHREN ZUR SPEISUNG EINES INDUKTIONSOFENS ODER INDUKTORS

Title (fr)
PROCÉDÉ D'ALIMENTATION D'UN FOUR À INDUCTION OU D'UN INDUCTEUR

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Application
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Priority
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Abstract (en)
[origin: WO2004071132A1] Disclosed is a method for feeding an induction furnace or inductor comprising at least one inverted rectifier (2A, 21B, 2C) that is fed by at least one rectifier (1, 1A, 1B, 1C) via at least one intermediate voltage circuit which is provided with an intermediate circuit capacitor (21A, 21B, 21C). At least one resonant capacitor (17, 18) forms a parallel resonant circuit (15) along with the inductive component (19) and the resistive component (20) of the resistive-inductive load (16) generated by the induction furnace or inductor. A modulation factor (m) is formed according to the current load voltage (URL) and the current load power (pl) and is supplied to a pulse-width modulator (7) which establishes the period of conductance (tm) for the semiconductor switches of the inverted rectifiers, which can be turned off, from said modulation factor (m). Each period of conductance (tm) begins, and thus the semiconductor switches are turned on, in strict synchrony with the moment of zero crossing of the load voltage while the switch-off time of the conducting semiconductor switches is defined in accordance with the period of conductance (tm).

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