

Title (en)

ARRANGEMENT AND METHOD FOR HEATING BY INDUCTION WITH SEVERAL INDUCTOR WORKPIECES, IN PARTICULAR TUBES AND RODS

Publication

EP 0143144 B1 19880713 (DE)

Application

EP 84102925 A 19840316

Priority

DE 3342889 A 19831126

Abstract (en)

[origin: EP0143144A2] 1. Arrangement for heating workpieces (W), especially tubes or rods, by induction, using a plurality of inductors (L1 , L2 , Ln) which with capacitors (C1 , C2 , C3) form a plurality of individual resonant circuits (L1 , C1 ; L2 , C2 , Ln , Cn) powered by a common a.c. source, the current supply to said resonant circuits being adapted to be connected and disconnected individually and/or in groups by a controlling system (V, E) in response to a deviation in the temperature of the workpiece, said controlling system (V, E) only connecting the supply of current to one or more individual resonant circuits if the voltage from the a.c. source disappears at least for the switching instant, characterised in that the a.c. source is a controlled anti-resonant circuit converter (U) the rectifier valves of which can be moved into the blocking state by the controlling system (V, E) containing a device (GW) for setting the delay angle of the rectifier valves whenever an individual resonant circuit (L1 , C1 ; L2 , C2 ; Ln , Cn) is to be connected or the last individual resonant circuit in operation is to be disconnected, but which, however, can only be operated to give a reduced output voltage from the a.c. source if one of the connected individual resonant circuits is to be disconnected, said reduced output voltage corresponding roughly to the reduced power output of the a.c. source expected after the individual resonant circuit is disconnected.

IPC 1-7

H05B 6/06; **H05B 6/08**

IPC 8 full level

H05B 6/06 (2006.01); **H05B 6/08** (2006.01)

CPC (source: EP)

H05B 6/06 (2013.01); **H05B 6/08** (2013.01)

Cited by

DE4038560A1; DE3815686A1; EP1280381A3; WO2024115750A1

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI SE

DOCDB simple family (publication)

EP 0143144 A2 19850605; **EP 0143144 A3 19850703**; **EP 0143144 B1 19880713**; AT E35760 T1 19880715; DE 3342889 A1 19850605; DE 3342889 C2 19870423; DE 3472747 D1 19880818; ES 532148 A0 19850101; ES 8502308 A1 19850101

DOCDB simple family (application)

EP 84102925 A 19840316; AT 84102925 T 19840316; DE 3342889 A 19831126; DE 3472747 T 19840316; ES 532148 A 19840503