

Title (en)
Removable electrical heating plate.

Title (de)
Abnehmbare elektrische Heizplatte.

Title (fr)
Plaque électrique chauffante amovible.

Publication
EP 0394148 A1 19901024 (FR)

Application
EP 90420188 A 19900412

Priority
FR 8905378 A 19890418

Abstract (en)
Removable electrical plate intended to be used in an induction furnace (9) comprising an inductor (8) and a glass-ceramic plate (23), and provided with a primary electrical circuit (7), comprising an outer heat-conductive surround (1) whose top (2) forms a heating plate and whose base (4) is made of an electrically insulating material. The heating of the said surround is effected by means of at least one electrical resistor (5) powered by a secondary electrical circuit (19) consisting of a choke (6) acting as sensor of the electromagnetic field emitted by the inductor (8) of the induction furnace (9), and mounted in parallel with a capacitor (12), the said circuit being closed in the said electrical resistor (5), the values of the inductance L of the choke (6) and of the capacitance C of the capacitor (12) being chosen so that the oscillating circuit thus defined becomes resonant for a frequency slightly greater than that of the induction circuit (7) of the induction furnace. <IMAGE>

IPC 1-7
H05B 3/68; H05B 6/12

IPC 8 full level
H05B 3/68 (2006.01); **A47J 37/06** (2006.01); **H05B 3/00** (2006.01); **H05B 6/12** (2006.01)

CPC (source: EP US)
H05B 6/1236 (2013.01 - EP US)

Citation (search report)

- [A] US 4038518 A 19770726 - MORTON RICHARD F, et al
- [A] DE 2505341 A1 19760819 - SACHS SYSTEMTECHNIK GMBH
- [A] FR 2582896 A1 19861205 - CABLECO SA [FR]
- [A] US 3761668 A 19730925 - HARNDEN J, et al
- [A] EP 0056974 A1 19820804 - TOKYO SHIBAURA ELECTRIC CO [JP]
- [A] FR 2231177 A1 19741220 - SACHS SYSTEMTECHNIK GMBH [DE]
- [A] FR 2588711 A1 19870417 - CABLECO SA [FR]
- [A] GB 2166916 A 19860514 - TOSHIBA KK
- [A] US 3742179 A 19730626 - HARNDEN J

Cited by
AU2011229523B2; EP0497191A1; EP2112861A1; US11245287B2; CN104365176A; EP3346799A1; EP3570637A1; WO2013098227A1; WO2007107888A3; WO2014075922A1; US9247588B2; US10312732B2; US9867236B2; US10129935B2; US10182472B2; WO2011113551A3; WO2013098040A1; US10925123B2; US11950347B2; US8097984B2; US9318912B2; US10305329B2

Designated contracting state (EPC)
AT BE CH DE DK ES GB IT LI LU NL SE

DOCDB simple family (publication)
EP 0394148 A1 19901024; CA 2014707 A1 19901018; FR 2646049 A1 19901019; FR 2646049 B1 19910524; JP H02299192 A 19901211; US 4996405 A 19910226

DOCDB simple family (application)
EP 90420188 A 19900412; CA 2014707 A 19900417; FR 8905378 A 19890418; JP 10275190 A 19900418; US 51004890 A 19900417