

Title (en)

RIPPLE CURRENT GENERATOR WITH A SATURABLE SELF-INDUCTING COIL

Title (de)

WECHSELSTROMERZEUGER MIT SÄTTIGBARER REAKTANZ

Title (fr)

GENERATEUR DE COURANT ONDULE A SELF SATURABLE

Publication

**EP 0734639 B1 19970903 (FR)**

Application

**EP 95901493 A 19941115**

Priority

- FR 9401334 W 19941115
- FR 9313587 A 19931115

Abstract (en)

[origin: WO9514364A1] A ripple current generator for use in an induction heating apparatus, comprising a resonant circuit with a current injecting self-inducting coil (6), a capacitor (13), an induction heating coil (14) and a high-frequency controlled power switch (12). Said current injecting self-inducting coil (6) is saturable and mounted in series with a parallel assembly consisting of two arms, i.e. a first arm (B1) containing the switch (12) and a second arm (B2) containing a capacitor (13) mounted in series with the induction heating coil (14). Said generator is useful in household cooking appliances such as induction plates, cookers or deep fryers, as well as industrial induction heating equipment for treating metal components.

IPC 1-7

**H05B 6/06**

IPC 8 full level

**H05B 6/12** (2006.01); **H05B 6/04** (2006.01); **H05B 6/06** (2006.01)

CPC (source: EP KR US)

**H05B 6/06** (2013.01 - KR); **H05B 6/062** (2013.01 - EP US)

Designated contracting state (EPC)

BE DE ES GB IT NL PT SE

DOCDB simple family (publication)

**WO 9514364 A1 19950526**; CN 1067836 C 20010627; CN 1135827 A 19961113; DE 69405412 D1 19971009; DE 69405412 T2 19980115;  
EP 0734639 A1 19961002; EP 0734639 B1 19970903; ES 2106632 T3 19971101; FR 2712763 A1 19950524; FR 2712763 B1 19960202;  
JP 2002512726 A 20020423; JP 3724804 B2 20051207; KR 100318806 B1 20020422; KR 960706280 A 19961108; TW 277178 B 19960601;  
US 5854473 A 19981229

DOCDB simple family (application)

**FR 9401334 W 19941115**; CN 94194152 A 19941115; DE 69405412 T 19941115; EP 95901493 A 19941115; ES 95901493 T 19941115;  
FR 9313587 A 19931115; JP 51425995 A 19941115; KR 19960702533 A 19960514; TW 83110742 A 19941118; US 63772196 A 19960430