

Title (en)

Method for electrically heating a furnace for thermal treatment of metallic workpieces

Title (de)

Verfahren zum elektrischen Beheizen von Öfen für die Wärmebehandlung metallischer Werkstücke

Title (fr)

Procédé de chauffage électrique d'un four pour le traitement thermique de pièces métalliques

Publication

EP 1318696 B1 20050615 (DE)

Application

EP 01128278 A 20011128

Priority

EP 01128278 A 20011128

Abstract (en)

[origin: EP1318696A1] The heating elements (8a-8c) of a vacuum furnace are supplied with a heating voltage that is generated on a secondary circuit of a variable reactance transformer (6) connected to a three-phase power network. The primary coil windings of the transformer are switched from delta connection to star connection in different heating phases and the time for switching of the connection is determined as a function of furnace temperature.

IPC 1-7

H05B 3/62

IPC 8 full level

C23C 8/36 (2006.01); **H05B 3/62** (2006.01); **H05B 3/64** (2006.01)

CPC (source: EP US)

C23C 8/36 (2013.01 - EP US); **H05B 3/62** (2013.01 - EP US); **H05B 3/64** (2013.01 - EP US)

Cited by

DE10352517A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

EP 1318696 A1 20030611; **EP 1318696 B1 20050615**; AT E298185 T1 20050715; CN 1242089 C 20060215; CN 1424426 A 20030618; DE 50106538 D1 20050721; ES 2242699 T3 20051116; US 2003098301 A1 20030529; US 6794618 B2 20040921

DOCDB simple family (application)

EP 01128278 A 20011128; AT 01128278 T 20011128; CN 02152746 A 20021127; DE 50106538 T 20011128; ES 01128278 T 20011128; US 29300802 A 20021113