

Title (en)
Electric heating apparatus

Title (de)
Elektrisches Heizgerät

Title (fr)
Appareil de chauffage électrique

Publication
EP 0668710 B1 20010926 (DE)

Application
EP 94120383 A 19941222

Priority
DE 4405040 A 19940217

Abstract (en)
[origin: EP0668710A2] The immersion heater has a heating element which is powered electrically and releases heat to the surroundings. It is manufactured out of ceramic material and encased in a thermally conducting but electrically insulating housing (11). There is thermal contact between the ceramic and the housing. The heating element is clamped between two electrically conducting plates, the clamp being independent of the housing. The plates have matching recesses to form a chamber for the element. At least one plate has a raised portion overhanging the clamp which acts as a thermal contact surface.

IPC 1-7
H05B 3/80; H05B 3/82

IPC 8 full level
H05B 3/14 (2006.01); **H05B 3/80** (2006.01); **H05B 3/82** (2006.01)

CPC (source: EP US)
H05B 3/141 (2013.01 - EP US); **H05B 3/80** (2013.01 - EP US)

Designated contracting state (EPC)
AT BE CH DE ES FR GB IT LI NL PT

DOCDB simple family (publication)
EP 0668710 A2 19950823; EP 0668710 A3 19960327; EP 0668710 B1 20010926; AT E206272 T1 20011015; DE 4405040 A1 19950824; DE 4405040 C2 19970925; DE 59409877 D1 20011031; ES 2164079 T3 20020216; PT 668710 E 20020328; US 5633978 A 19970527

DOCDB simple family (application)
EP 94120383 A 19941222; AT 94120383 T 19941222; DE 4405040 A 19940217; DE 59409877 T 19941222; ES 94120383 T 19941222; PT 94120383 T 19941222; US 38989695 A 19950216