

Title (en)

Electrical heating unit, particularly for liquid supports

Title (de)

Elektrische Heizeinheit, insbesondere für flüssige Medien

Title (fr)

Unité de chauffage électrique, particulièrement destiné à des milieux liquides

Publication

EP 1152639 A3 20040721 (DE)

Application

EP 01110424 A 20010427

Priority

DE 10021512 A 20000503

Abstract (en)

[origin: EP1152639A2] The device has a bearer (2) with at least one electrical heating resistance (10) in flat conductor, especially thick film, technology forming a heating zone, at least one associated temperature sensor (20) and electrical contacts (19,24) for the heating zone and temperature sensor. The contacts are closely spaced in a connection area (26) so that they can be contacted by a common connector (30).

IPC 1-7

H05B 3/82; H05B 3/06; H05B 3/08

IPC 8 full level

H05B 3/82 (2006.01)

CPC (source: EP)

H05B 3/82 (2013.01); **H05B 2203/013** (2013.01); **H05B 2203/017** (2013.01)

Citation (search report)

- [X] DE 19648199 A1 19971113 - AEG HAUSGERAETE GMBH [DE]
- [X] EP 0967838 A1 19991229 - WHITE CONSOLIDATED IND INC [US]
- [X] DE 19611405 A1 19970925 - BOSCH SIEMENS HAUSGERAETE [DE]
- [A] DE 2331228 A1 19750116 - INT LABOR APPARATE GMBH
- [A] EP 0432470 A2 19910619 - BOSCH SIEMENS HAUSGERAETE [DE]

Cited by

DE102012215746A1; EP3088800A1; DE102015207253A1; DE102012213385A1; CN103904451A; DE102013202346B3; EP4116120A1; CN103808000A; CN113198558A; KR20190020729A; EP3540329A1; EP3421980A3; EP4009741A1; US10645758B2; US11287161B2; US8358922B2; WO2012012519A3; WO2019137692A1; US8978450B2; EP2693835A1; EP2226584A2; DE102009013269A1; DE102015218121A1; EP3145273A1; EP3614797A1; EP3637949B1

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 1152639 A2 20011107; **EP 1152639 A3 20040721**; **EP 1152639 B1 20051130**; **EP 1152639 B2 20151021**; AT E311734 T1 20051215; DE 10021512 A1 20011108; DE 50108215 D1 20060105; ES 2254283 T3 20060616; ES 2254283 T5 20160205

DOCDB simple family (application)

EP 01110424 A 20010427; AT 01110424 T 20010427; DE 10021512 A 20000503; DE 50108215 T 20010427; ES 01110424 T 20010427