

Title (en)
Heating device

Title (de)
Heizeinrichtung

Title (fr)
Dispositif de chauffage

Publication
EP 2282605 A1 20110209 (DE)

Application
EP 10006398 A 20100619

Priority
DE 102009035837 A 20090801

Abstract (en)
The device has heating elements arranged in pipes (2a) and adjacent to contact plates, which are connected to a conductor rail (3). The pipes are formed by multiple extruded aluminum profiles (2), which are arranged in parallel and transverse to a flow direction of a fluid to be heated. The contact plates project from the pipes, and retainers are formed as frames e.g. upper frame part (1a), lower frame part (1b) and side frame parts (1c). The aluminum profiles are retained by the retainers, where a longitudinal direction of each pipe runs transverse to a plane of each retainer.

Abstract (de)
Die Erfindung betrifft eine Heizeinrichtung mit Heizelementen (7), die in Rohren (2a) angeordnet sind und an Kontaktblechen (8) anliegen, die aus den Rohren (2a) herausragen. Erfindungsgemäß ist vorgesehen, dass die Rohre (2a) von mehreren Strangpressprofilen (2) gebildet sind, die quer zur Anströmrichtung eines zu erwärmenden Fluids nebeneinander angeordnet und von einer Halterung (1a, 1b, 1c) gehalten sind.

IPC 8 full level
F24H 3/00 (2006.01); **H05B 3/50** (2006.01)

CPC (source: EP KR US)
F24H 3/0429 (2013.01 - EP KR US); **F24H 3/081** (2013.01 - EP KR US); **F24H 9/1863** (2013.01 - EP KR US); **F24H 9/1872** (2013.01 - EP KR US); **H05B 3/50** (2013.01 - EP KR US); **H05B 2203/023** (2013.01 - EP KR US)

Citation (applicant)
DE 102006018784 B4 20071220 - BERU AG [DE], et al

Citation (search report)

- [Y] US 2006289475 A1 20061228 - TUNG CHAO-NIEN [CN], et al
- [Y] EP 0464955 A1 19920108 - TEXAS INSTRUMENTS INC [US], et al
- [A] EP 1370117 A2 20031210 - CEBI SPA [IT]
- [A] DE 4215498 A1 19931125 - TUERK & HILLINGER GMBH [DE]
- [A] EP 1731852 A1 20061213 - CEBI SPA [IT]

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)
BA ME RS

DOCDB simple family (publication)
EP 2282605 A1 20110209; DE 102009035837 A1 20110203; KR 20110013248 A 20110209; US 2011052161 A1 20110303

DOCDB simple family (application)
EP 10006398 A 20100619; DE 102009035837 A 20090801; KR 20100070570 A 20100721; US 84607010 A 20100729