

Title (en)
Air heater

Title (de)
Luftzuheizer

Title (fr)
Élément chauffant l'air

Publication
EP 1164816 A3 20031126 (DE)

Application
EP 01112177 A 20010517

Priority
DE 10028446 A 20000614

Abstract (en)
[origin: EP1164816A2] The air heater has a ceramic heating element with a semiconductor chip (5) in the heating pipe (9) directly adjacent to the heating element. The assembly of the semiconductor chip has contact strips (10-13), a current discharge pad (2), control pad (7) and a monitoring pad (8). The chip can be mounted without a housing on a heat conductive plate (6). The pads can be mounted on a non-electrically conductive heat conductor such as ceramic.

IPC 1-7
H05B 3/50; **H05B 3/14**

IPC 8 full level
H05B 3/02 (2006.01); **B60H 1/22** (2006.01); **F24H 3/04** (2006.01); **H01C 7/02** (2006.01); **H05B 3/14** (2006.01); **H05B 3/50** (2006.01)

CPC (source: EP KR US)
H05B 3/14 (2013.01 - EP KR US); **H05B 3/141** (2013.01 - EP KR US); **H05B 3/50** (2013.01 - EP KR US); **H05B 2203/022** (2013.01 - EP KR US)

Citation (search report)
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• [A] EP 0554459 A1 19930811 - NIPPON TUNGSTEN [JP], et al
• [A] US 5598502 A 19970128 - TAKAHASHI MINORU [JP], et al
• [A] US 4716279 A 19871229 - HORI MAKOTO [JP], et al

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CN102668691A; US6875962B2; US9089009B2; WO2011120946A1; WO2057100A3; DE102010061550B4

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

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