

Title (en)  
An insulated heater

Title (de)  
Isolierte Heizvorrichtung

Title (fr)  
Élément chauffant isolé

Publication  
**EP 2731399 A1 20140514 (EN)**

Application  
**EP 12007654 A 20121112**

Priority  
EP 12007654 A 20121112

Abstract (en)

An insulated heater includes a heating unit (100), two thermal diffusion units (200,300) and a heat conduction glue (400). The heating unit (100) includes two electrode plates (111,112) and at least one PTC heating plate (120). The PTC heating plate (120) is sandwiched between two electrode plates (111,112). The thermal diffusion unit (200,300) includes a corrugated metal fin (210,310) and two heat conduction plates (220,320), and the corrugated metal fin (210,310) is sandwiched between two heat conduction plates (220,320). Each thermal diffusion unit (200,300) is attached to one of the electrode plates (111,112) via the heat conduction plate (220,320), and the heat conduction glue (400) is spread between each electrode plate (111,112) and the thermal diffusion unit (200,300) attached to the electrode plate (111,112). The thermal resistance between the thermal diffusion unit (200,300) and the electrode plate (111,112) can decrease by directly binding the thermal diffusion unit (200,300) and the electrode plate (111,112) with the heat conduction glue.

IPC 8 full level  
**H05B 3/04** (2006.01)

CPC (source: EP)  
**H05B 3/04** (2013.01); **H05B 2203/02** (2013.01); **H05B 2203/022** (2013.01); **H05B 2203/023** (2013.01)

Citation (search report)

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Designated contracting state (EPC)  
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