

Title (en)
Heating plate

Title (de)
Heizplatte

Title (fr)
Plaque de chauffage

Publication
EP 2779784 A1 20140917 (EN)

Application
EP 13159228 A 20130314

Priority
EP 13159228 A 20130314

Abstract (en)

A heating plate includes a thermally conductive, electrically insulating main board (1) on whose surface an electrically-conductive heat-generating circuit (30) and an outer insulating layer are layered. The heat-generating circuit is formed by connecting one first electrically-conductive layer (31) and one second electrically-conductive layer (32) that are arranged in different directions. The first and second electrically-conductive layers (31, 32) are overlapped to form an overlapping area (33). The heat-generating circuit has at least two electrically-conductive segments (34) exposed outside the outer insulating layer. Thereby, when the electrically-conductive segments (34) receive incoming current, the electrically-conductive heat-generating circuit (30) can generate heat rapidly, and the heat can be transmitted to the main board (1) through the thermally-conductive insulating layer. The overlapping area (33) formed at each turning point along the electrically-conductive heat-generating circuit (30) is more capable of load bearing so that the electrically-conductive heat-generating circuit (30) is unlikely to be damaged at the turning point.

IPC 8 full level
H05B 3/28 (2006.01); **H05B 3/86** (2006.01)

CPC (source: EP)
H05B 3/28 (2013.01); **H05B 3/86** (2013.01); **H05B 2203/003** (2013.01); **H05B 2203/016** (2013.01)

Citation (applicant)

- TW M364834 U 20090911 - BEAUTY SILKS CO LTD [TW]
- EP 2461644 A1 20120606 - UBE INDUSTRIES [JP]
- DE 10130511 A1 20030116 - BLECKMANN GMBH LAMPRECHTSHAUSE [AT]
- AT 7326 U1 20050125 - ECON EXP & CONSULTING GROUP GM [AT]
- US 4659906 A 19870421 - FURTEK EDWARD J [US]

Citation (search report)

- [I] EP 2461644 A1 20120606 - UBE INDUSTRIES [JP]
- [I] DE 10130511 A1 20030116 - BLECKMANN GMBH LAMPRECHTSHAUSE [AT]
- [I] AT 7326 U1 20050125 - ECON EXP & CONSULTING GROUP GM [AT]
- [I] US 4659906 A 19870421 - FURTEK EDWARD J [US]

Cited by
CN114600554A; WO2019197648A1; WO2021078724A1

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Designated extension state (EPC)
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