

Title (en)

Heating element of an electric heating device

Title (de)

Wärmeerzeugendes Element einer elektrischen Heizvorrichtung

Title (fr)

Élément d'un dispositif de chauffage produisant de la chaleur électrique

Publication

**EP 2025541 B1 20130102 (DE)**

Application

**EP 08015712 A 20070718**

Priority

EP 07014118 A 20070718

Abstract (en)

[origin: EP2017103A1] The device has a set of cross-ties (20) extending right angle to layers of a heat outputting unit (12) and a heat producing unit (10), where the cross-ties cover frame openings (16) are provided at a housing (2). Another set of cross-ties (43) extends parallel to the layers, are formed by a heating block (8) and covers the openings. The cross-ties (43) is extend between the cross-ties (20) in such a manner that the cross-ties (20) are fixed between sections of the cross-ties (20) in a form-fit manner, so that the cross-ties (20, 43) form a grid arrangement for reinforcing the housing.

IPC 8 full level

**B60H 1/22** (2006.01); **F24H 3/04** (2006.01); **F24H 9/18** (2006.01)

CPC (source: EP KR US)

**F24H 3/0405** (2013.01 - EP US); **F24H 3/0429** (2013.01 - EP US); **F24H 3/0435** (2013.01 - EP US); **F24H 3/0441** (2013.01 - EP US); **F24H 3/0447** (2013.01 - EP US); **F24H 3/0464** (2013.01 - EP US); **F24H 3/0476** (2013.01 - EP US); **F24H 9/1863** (2013.01 - EP US); **F24H 9/1872** (2013.01 - EP US); **H05B 3/06** (2013.01 - KR); **H05B 3/14** (2013.01 - KR)

Citation (opposition)

Opponent : MAHLE Behr GmbH & Co. KG

EP 1318694 A1 20030611 - CATEM GMBH & CO KG [DE]

Cited by

EP3667197A1; DE102018220858A1; US11912106B2

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**EP 2017103 A1 20090121**; **EP 2017103 B1 20160504**; CN 101348067 A 20090121; CN 101348067 B 20110323; EP 2025541 A1 20090218; EP 2025541 B1 20130102; JP 2009043716 A 20090226; JP 4939490 B2 20120523; KR 100960748 B1 20100601; KR 20090009138 A 20090122; US 2009026194 A1 20090129; US 8362406 B2 20130129

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