

Title (en)  
ELECTRICAL HEATING DEVICE FOR VEHICLES

Title (de)  
ELEKTRISCHE ERWÄRMUNGSVORRICHTUNG FÜR FAHRZEUGE

Title (fr)  
DISPOSITIF DE CHAUFFAGE ÉLECTRIQUE POUR VÉHICULES

Publication  
**EP 2462339 A4 20170510 (EN)**

Application  
**EP 10806705 A 20100726**

Priority  
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• SE 2010000197 W 20100726

Abstract (en)  
[origin: WO2011016763A1] Electrical heating device for heating a liquid in a vehicle, consisting of a container (15) and a heating plate (24), where the container (15) is produced from a thermoplastic material such as PA66 and where the heating plate (24) contains a number of PTC elements which are connected to an electrical energy source. The container (15) is connected to the system for the liquid with connection nipples (16, 17) arranged on the intermediate sides (37, 40) of the container (15).

IPC 8 full level  
**F02N 19/10** (2010.01); **F01M 5/02** (2006.01); **F24H 1/12** (2006.01); **H05B 3/40** (2006.01)

CPC (source: EP SE)  
**F01M 5/001** (2013.01 - SE); **F01M 5/021** (2013.01 - SE); **F02N 19/10** (2013.01 - EP SE); **H05B 3/28** (2013.01 - EP); **H05B 3/40** (2013.01 - SE); **H05B 3/82** (2013.01 - EP); **F01M 2013/0455** (2013.01 - EP); **F01P 11/04** (2013.01 - EP)

Citation (search report)  
• [X] EP 1213197 A1 20020612 - DAVID & BAADER DBK GMBH [DE]  
• [X] DE 4433814 A1 19960328 - BEHR GMBH & CO [DE]  
• [Y] EP 1793103 A2 20070606 - CALIX AB [SE]  
• [Y] DE 20121116 U1 20030424 - EICHENAUER GMBH & CO KG F [DE]  
• See also references of WO 2011016763A1

Cited by  
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