

Title (en)

ELECTRIC HEATING DEVICE, IN PARTICULAR FOR A MOTOR VEHICLE HEATING INSTALLATION

Title (de)

ELEKTRISCHE HEIZEINRICHTUNG, INSBESONDERE FÜR EINE KRAFTFAHRZEUG-HEIZINSTALLTION

Title (fr)

DISPOSITIF DE CHAUFFAGE ELECTRIQUE, NOTAMMENT POUR UNE INSTALLATION DE CHAUFFAGE DE VEHICULE AUTOMOBILE

Publication

EP 1405547 B1 20090429 (FR)

Application

EP 02762537 A 20020705

Priority

- FR 0202374 W 20020705
- FR 0109078 A 20010709

Abstract (en)

[origin: FR2827113A1] The electrical heating unit includes resistive elements (102) arranged in parallel between two electric conductors. An electronic circuit (20) with power components (208) switches the electrical supply to the bars, and is mounted on a heat dissipating support plate adjacent to the heating elements. The electrical heating unit for use in a vehicle comprises heating bars (10) with resistive elements (102) arranged, in parallel between two electric conductors, lying along the length of the bars. An electronic circuit (20) with power components (208) switches the electrical supply to the bars. Further elements (202) are provided for dissipating the heat produced by the resistive elements, the elements being exposed to the flow of air passing through the heater. The electronic circuit (20) with the power components (208) is supported by a further power dissipating plate (202), mounted directly on the heating bars (10), at one of their ends.

IPC 8 full level

H05B 3/22 (2006.01); **H05B 1/02** (2006.01); **H05B 3/50** (2006.01)

CPC (source: EP)

H05B 1/0236 (2013.01); **H05B 3/22** (2013.01); **H05B 3/50** (2013.01)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

FR 2827113 A1 20030110; FR 2827113 B1 20031017; AT E430461 T1 20090515; DE 60232148 D1 20090610; EP 1405547 A1 20040407; EP 1405547 B1 20090429; EP 1405547 B2 20141231; EP 1405547 B8 20090826; ES 2324602 T3 20090811; WO 03009645 A1 20030130

DOCDB simple family (application)

FR 0109078 A 20010709; AT 02762537 T 20020705; DE 60232148 T 20020705; EP 02762537 A 20020705; ES 02762537 T 20020705; FR 0202374 W 20020705