

Title (en)

FRONT PANEL OF A MOTOR VEHICLE COMPRISING A BUMPER BEAM

Title (de)

VORDERWAND EINES KRAFTFAHRZEUG MIT STOSSFÄNGERSTANGE

Title (fr)

FACE AVANT DE VEHICULE AUTOMOBILE COMPRENANT UNE POUTRE PARE-CHOC

Publication

EP 1429956 A1 20040623 (FR)

Application

EP 02791885 A 20020927

Priority

- FR 0203299 W 20020927
- FR 0112598 A 20010928

Abstract (en)

[origin: WO03029068A1] The invention relates to the front panel of a motor vehicle comprising a bumper beam and at least one heat exchanger. The heat exchanger (5) is located below the bumper beam (3) in an essentially vertical position. Moreover, said heat exchanger comprises, in a horizontal plane, an upper face having a shape similar to that of the bumper beam (3) such that said upper face is covered by the bumper beam (3).

IPC 1-7

B62D 25/08; **B60K 11/04**; **F28D 1/047**

IPC 8 full level

B60K 11/04 (2006.01); **B60R 19/00** (2006.01); **B60R 19/12** (2006.01); **B60R 19/48** (2006.01); **B60R 21/34** (2011.01); **B62D 25/08** (2006.01); **F28D 1/047** (2006.01); **B60R 21/00** (2006.01)

CPC (source: EP US)

B60R 19/00 (2013.01 - EP US); **B60R 19/12** (2013.01 - EP US); **B60R 19/48** (2013.01 - EP US); **B60R 21/34** (2013.01 - EP US); **B62D 25/084** (2013.01 - EP US); **F28D 1/047** (2013.01 - EP US); **B60K 11/04** (2013.01 - EP US); **B60R 2021/0004** (2013.01 - EP US)

Citation (search report)

See references of WO 03029068A1

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)

WO 03029068 A1 20030410; EP 1429956 A1 20040623; FR 2830229 A1 20030404; FR 2830229 B1 20040123; JP 2005518294 A 20050623; MX PA04002873 A 20040715; US 2004239128 A1 20041202; US 7011360 B2 20060314

DOCDB simple family (application)

FR 0203299 W 20020927; EP 02791885 A 20020927; FR 0112598 A 20010928; JP 2003532348 A 20020927; MX PA04002873 A 20020927; US 48979104 A 20040316