

Title (en)

AUTOMOTIVE DOOR HINGE WITH STRUCTURALLY INTEGRATED PIVOT

Title (de)

FAHRZEUGSCHARNIER MIT IN DIE STRUKTUR INTEGRIERTEM ZAPFEN

Title (fr)

CHARNIERE DE PORTIERE D'AUTOMOBILE A PIVOT INTEGRE AU PLAN STRUCTURAL

Publication

**EP 1337730 A1 20030827 (EN)**

Application

**EP 02753989 A 20020730**

Priority

- CA 0201193 W 20020730
- CA 2354796 A 20010802
- US 31601701 P 20010831

Abstract (en)

[origin: CA2354796A1] An automotive hinge comprises: a door component adapted to be mounted to a vehicular closure panel, comprising a conical pivot axis aperture; a body component adapted to be mounted to a vehicular body structure, comprising a pivot arm; the door component and the body component being adapted to rotate about a pivot axis; an upstanding conical structural feature extending from the body component and adapted to be coaxially aligned with the pivot axis and structurally fixed to the pivot arm of the body component; such that when the hinge is assembled the door component interleaves over the body component, dimensionally locating the components by means of the walls of the conical pivot axis aperture of the door component interacting with an external conical bearing surface on the conical structural feature. In an alternative embodiment, the positions of the conical structural feature and pivot axis aperture are reversed. When the hinge components are assembled, either the conical structural feature is lowered into the conical pivot axis aperture, in the alternative embodiment, or the conical pivot axis aperture is placed over an upstanding conical structural feature in the first embodiment.

IPC 1-7

**E05D 5/12**; **E05D 5/14**; **E05D 7/10**

IPC 8 full level

**B60J 5/04** (2006.01); **E05D 5/12** (2006.01); **E05D 5/14** (2006.01); **E05D 7/10** (2006.01)

CPC (source: EP)

**E05D 5/12** (2013.01); **E05D 5/121** (2013.01); **E05D 5/14** (2013.01); **E05D 7/1044** (2013.01); **E05Y 2800/26** (2013.01); **E05Y 2900/132** (2013.01)

Citation (search report)

See references of WO 03012234A1

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)

**CA 2354796 A1 20030202**; AT E306004 T1 20051015; AU 2002322234 B2 20070301; BR 0205832 A 20040113; CA 2423923 A1 20030213; CA 2423923 C 20070828; CN 1271301 C 20060823; CN 1476508 A 20040218; DE 60206465 D1 20060216; DE 60206465 T2 20060713; EP 1337730 A1 20030827; EP 1337730 B1 20051005; ES 2251608 T3 20060501; JP 2004536986 A 20041209; JP 4084748 B2 20080430; WO 03012234 A1 20030213

DOCDB simple family (application)

**CA 2354796 A 20010802**; AT 02753989 T 20020730; AU 2002322234 A 20020730; BR 0205832 A 20020730; CA 0201193 W 20020730; CA 2423923 A 20020730; CN 02803062 A 20020730; DE 60206465 T 20020730; EP 02753989 A 20020730; ES 02753989 T 20020730; JP 2003517400 A 20020730