

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

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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.

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