

Title (en)
COMPLIANT FORCE DISTRIBUTION ARRANGEMENT FOR WINDOW WIPER

Title (de)
VERTEILUNGSANORDNUNG VON NACHGIEBIGEN KRÄFTEN FÜR SCHEIBENWISCHER

Title (fr)
SYSTEME REPARTITEUR DE FORCES FLEXIBLE POUR ESSUIE-GLACES

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EP 0918672 A1 19990602 (EN)

Application
EP 97934952 A 19970709

Priority
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• US 67804996 A 19960710

Abstract (en)
[origin: WO9801329A1] A force distribution arrangement, which is particularly adaptable as a support frame for a windshield wiper support frame (180) for a vehicle, and which can further be provided with an integrally formed windshield wiper blade, is provided with a force input for receiving a directional input force, a force distribution portion resiliently coupled to, and integrally formed with, the force input for transmitting and distributing the directional input force, and a plurality of force output points resiliently coupled to, and integrally formed with, the force distribution portion and the force input. The force output points produce a respective plurality of output forces to the windshield wiper blade, and are translatable with respect to one another along respective paths that are substantially parallel to the direction of the directional input force, and thereby accommodate the curvature of the surface contour of a windshield. A beam member (181) receives at an input thereof at least a portion of the directional input force, and produces at first and second outputs thereof respective ones of first and second output forces. A resilient beam coupling (183,8) portion is integrally formed at the force output point of the beam member. The resilient beam (183,8) coupling portion can be formed substantially as an S-shaped member or a V-shaped member, or the resilient elements can be tiered. Alternatively, the resilient beam coupling portion is formed substantially as a pair of opposingly spaced resilient portions for forming a resilient hinge, the resilient hinge being integrally formed with the beam member.

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