

Title (en)
Hinge.

Title (de)
Scharnier.

Title (fr)
Charnière.

Publication
EP 0003323 A1 19790808 (DE)

Application
EP 79100144 A 19790118

Priority
DE 2803061 A 19780125

Abstract (en)
1. Hinge with two pairs of linkages, which are each hinged at one end to a base (5, 5'), by means of which the hinge can be fixed to the parts (6, 11) which are to be swivelled relative to one another, and which pairs of linkages are pivotally joined to one another in the form of a four-bar linkage, - the inner linkages (2, 2' ; 16, 17) crossing over and being pivotally joined to one another at the cross-over point, - the free ends of the outer linkage (1, 1' ; 18, 19) being hinged to one another, and - the free ends of the inner linkage (2, 2' ; 16, 17) being hinged, in the zone of the free ends of the outer linkages (1, 1' ; 18, 19), to the latter with the formation of a four-bar linkage, characterized in that - the distance between the hinge points (3, 4 ; 3', 4') on the base (5, 5') of each pair of linkages is smaller than the distance between the corresponding hinge points (7, 9 or 7, 10) on the opposite end of the connection, - the linkages (1, 2 ; 1', 2' ; 16, 19 ; 17, 18) each have two arms extending at an angle to one another, the bending points, located in the central zone, of each pair of linkage facing away from one another, and - at least one of the linkages (1, 2 ; 1', 2' ; 16, 19 ; 17, 18) is resiliently elastic or - at least one of the hinge points (3, 4 ; 3', 4' ; 7-10) is formed as a positive guide for a hinge pin (20) which is displaceable and rotatable in a slot (21).

Abstract (de)
Bei einem Scharnier mit sich kreuzenden Lenkerpaaren (1, 2), die in Form eines Gelenkvierecks (7-10) miteinander verbunden und am anderen Ende einzeln an jeweils einen Sockel (5) angelenkt sind, sind zur Erzielung eines grossen Schwenkbereichs die Lenker jedes Lenkerpaares (1, 2) schräg zueinander geführt, so dass sich eine Art Kurbelbewegung der Lenker an jeder Scharnierhälfte ergibt. Zum Ueberwinden des Totpunkts bei der Kurbelbewegung kann wenigstens einer der Lenker elastisch oder eine der Gelenkstellen als formschlüssige Führung ausgebildet sein. Für einen maximalen Schwenkbereich sind die Lenkerpaare (1, 2) gegeneinander abgewinkelt.

IPC 1-7
E05D 3/06

IPC 8 full level
E05D 3/06 (2006.01); **E05D 11/10** (2006.01)

CPC (source: EP)
E05D 3/18 (2013.01); **E05D 11/1021** (2013.01); **E05Y 2900/20** (2013.01)

Citation (search report)
• DE 1559887 A1 19700305 - HOFFMANN FRITZ
• US 2206708 A 19400702 - STUMPF WALTER W
• US 2073689 A 19370316 - GEORG GOTZINGER

Cited by
US7698785B2; CN110952852A

Designated contracting state (EPC)
CH FR GB IT NL SE

DOCDB simple family (publication)
EP 0003323 A1 19790808; EP 0003323 B1 19810610; DE 2803061 A1 19790726

DOCDB simple family (application)
EP 79100144 A 19790118; DE 2803061 A 19780125