

CPC**COOPERATIVE PATENT CLASSIFICATION****E05D****HINGES OR OTHER SUSPENSION DEVICES FOR DOORS, WINDOWS OR WINGS** ({ foldable tables [A47B 3/00](#) ; hinged panels [A47B 5/00](#) ; foldable chairs

[A47C 4/00](#) ; making hinges [B21D 53/40](#) , [B21K 13/02](#) ; making holes for taking-up fittings [B27F 5/12](#) ; for vehicle tailboards [B60P 1/00D](#) ; for refuse receptacles [B65F 1/1646](#) } ; pivotal connections in general [F16C 11/00](#) ; mounting of stove or range doors [F24C 15/023](#) ; for folding flat displays of portable computers [G06F 1/16P2H](#)])

WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups: [E05D 5/16](#) covered by [E05D 5/14](#)

[E05D 7/081](#) covered by [E05D 7/08](#)

[E05D 7/083](#) covered by [E05D 7/082](#)

[E05D 15/04](#) covered by [E05D 15/02](#) , [E05D 15/28](#) , [E05D 15/40 B](#)

[E05D 15/522](#) covered by [E05D 15/52](#)

[E05D 15/523](#) covered by [E05D 15/52](#)

[E05D 15/524](#) covered by [E05D 15/52](#)

E05D 1/00**Pinless hinges ; Substitutes for hinges****E05D 1/02**

- . made of one piece

E05D 1/04

- . with guide members shaped as circular arcs

E05D 1/06

- . consisting of two easily-separable parts

E05D 3/00**Hinges with pins** { ([E05D 7/08](#) takes precedence) }**E05D 3/02**

- . with one pin

E05D 3/022

- .. { allowing an additional lateral movement, e.g. for sealing }

E05D 3/04

- .. engaging three or more parts, e.g. sleeves, movable relatively to one another for connecting two or more wings to another member

E05D 3/06

- . with two or more pins ([E05D 7/08](#) takes precedence)

E05D 3/08

- .. for swing-doors, i.e. openable by pushing from either side

E05D 3/10

- .. with non-parallel pins

E05D 3/12

- .. with two parallel pins and one arm

E05D 3/122

- ... { Gear hinges }

E05D 3/125

- ... { specially adapted for vehicles }

E05D 3/127

- { for vehicle doors }

E05D 3/14

- .. with four parallel pins and two arms

E05D 3/142

- ... { with at least one of the hinge parts having a cup-shaped fixing part, e.g. for attachment to cabinets or furniture ([E05D 11/1021](#) takes precedence) }

E05D 3/145

- ... { specially adapted for vehicles }

- E05D 3/147 { for vehicle doors }
- E05D 3/16 . . with seven parallel pins and four arms
- E05D 3/18 . . with sliding pins or guides
- E05D 3/183 . . . { with at least one of the hinge parts having a cup-shaped fixing part, e.g. for attachment to cabinets or furniture }
- E05D 3/186 . . . { Scissors hinges, with two crossing levers and five parallel pins }

E05D 5/00**Construction of single parts, e.g. the parts for attachment**

- E05D 5/02 . Parts for attachment, e.g. flaps
- E05D 5/0207 . . { for attachment to vehicles ([E05D 5/043](#) , [E05D 5/062](#) take precedence) }
- E05D 5/0215 . . { for attachment to profile members or the like }
- E05D 5/0223 . . . { with parts, e.g. screws, extending through the profile wall or engaging profile grooves }
- E05D 5/023 { with parts extending through the profile wall }
- E05D 5/0238 { with parts engaging profile grooves }
- E05D 5/0246 . . { for attachment to glass panels }
- E05D 5/0276 . . { for attachment to cabinets or furniture, the hinge having two or more pins ([E05D 5/046](#) , [E05D 5/065](#) , [E05D 7/125](#) take precedence) }
- E05D 5/04 . . Flat flaps
- E05D 5/043 . . . { specially adapted for vehicles }
- E05D 5/046 . . . { specially adapted for cabinets or furniture }
- E05D 5/06 . . Bent flaps
- E05D 5/062 . . . { specially adapted for vehicles }
- E05D 5/065 . . . { specially adapted for cabinets or furniture }
- E05D 5/08 . . of cylindrical shape
- E05D 5/10 . Pins, sockets or sleeves ; Removable pins ([E05D 15/522](#) takes precedence)
- E05D 5/12 . . Securing pins in sockets, movably or not
- E05D 5/121 . . . { Screw-threaded pins }
- E05D 5/125 . . . { Non-removable, snap-fitted pins (removable snap-fitted pins [E05D 7/1022](#) , [E05D 7/1055](#)) }
- E05D 5/127 . . . { by forcing the pin into the socket ([E05D 5/125](#) takes precedence) }
- E05D 5/128 . . . { the pin having a recess or through-hole engaged by a securing member }
- E05D 5/14 . . Construction of sockets or sleeves
- E05D 5/16 . . . to be secured without special attachment parts on the socket or sleeve

E05D 7/00**Hinges or pivots of special construction (used for special suspension arrangements [E05D 15/00](#) ; so as to be self-closing [E05F 1/06](#) , [E05F 1/12](#) ; with means for raising wings before being turned [E05F 7/02](#))**

- E05D 7/0009 . { Adjustable hinges ([E05D 7/04](#) takes precedence) }
- E05D 7/0018 . . { at the hinge axis }
- E05D 7/0027 . . . { in an axial direction }
- E05D 7/0045 . . . { in a radial direction }

- E05D 7/0054 { by means of eccentric parts }
- E05D 7/009 . { Elongate hinges, e.g. piano-hinges }
- E05D 7/02 . for use on the right-hand as well as the left-hand side ; Convertible right-hand or left-hand hinges
- E05D 7/04 . Hinges adjustable relative to the wing or the frame
- E05D 7/0407 . . { the hinges having two or more pins and being specially adapted for cabinets or furniture }
- E05D 7/0415 . . { with adjusting drive means }
- E05D 7/0423 . . . { Screw-and-nut mechanisms ([E05D 7/0407](#) , [E05D 7/043](#) take precedence) }
- E05D 7/043 . . { by means of dowel attachments }
- E05D 7/06 . to allow tilting of the members
- E05D 7/08 . for use in suspensions comprising two spigots placed at opposite edges of the wing, especially at the top and the bottom, e.g. trunnions { ([E05D 15/266](#) takes precedence) }
- E05D 7/081 . . the pivot axis of the wing being situated near one edge of the wing, especially at the top and bottom, e.g. trunnions
- E05D 7/082 . . the pivot axis of the wing being situated at a considerable distance from the edges of the wing, { e.g. for balanced wings }
- E05D 7/083 . . . with a fixed pivot axis
- E05D 7/084 . . . with a movable pivot axis
- E05D 7/085 with two or more pivot axes, e.g. used at the same time
- E05D 7/086 . . . Braking devices structurally combined with hinges ([braking devices for windows per se E05F 5/00](#))
- E05D 7/10 . to allow easy separation { or connection } of the parts at the hinge axis ({ [E05D 5/12](#) and [E05D 15/50](#) take precedence } ; substitutes for hinges [E05D 1/06](#))
- E05D 7/1005 . . { by axially moving free pins, balls or sockets }
- E05D 7/1011 . . . { biased by free springs ([E05D 7/1016](#) takes precedence) }
- E05D 7/1016 . . . { requiring a specific angular position }
- E05D 7/1022 . . . { with snap-fitted pins }
- E05D 7/1044 . . { in an axial direction ([E05D 7/1005](#) takes precedence) }
- E05D 7/105 . . . { requiring a specific angular position }
- E05D 7/1055 . . . { with snap-fitted pins }
- E05D 7/1061 . . { in a radial direction ([E05D 7/1005](#) takes precedence) }
- E05D 7/1066 . . . { requiring a specific angular position }
- E05D 7/1072 { the pin having a non-circular cross-section }
- E05D 7/1077 . . . { with snap-fitted pins }
- E05D 7/1083 . . { facilitating simultaneous assembly of a plurality of hinges, e.g. for mounting heavy wings }
- E05D 7/12 . to allow easy detachment of the hinge from the wing or the frame { ([E05D 15/507](#) takes precedence) }
- E05D 7/121 . . { specially adapted for vehicles }

- E05D 7/123 . . { specially adapted for cabinets or furniture }
- E05D 7/125 . . . { the hinge having two or more pins }
- E05D 7/14 . Hinges for safes
- E05D 9/00** **Flaps or sleeves specially designed for making from particular material, e.g. hoop-iron, sheet metal, plastics**
- E05D 9/005 . { from plastics ([E05D 1/02](#) takes precedence) }
- E05D 11/00** **Additional features or accessories of hinges { (edge protecting devices [E06B 3/88](#)) }**
- E05D 11/0009 . { Templates for marking the position of fittings on wings or frames (implements for making doors, windows or frames [E04F 21/003](#)) }
- E05D 11/0018 . { Anti-tamper devices }
- E05D 11/0027 . . { arranged on or near the hinge and comprising parts interlocking as the wing closes, e.g. security studs }
- E05D 11/0054 . { Covers, e.g. for protection }
- E05D 11/0081 . { for transmitting energy, e.g. electrical cable routing }
- E05D 11/02 . Lubricating arrangements
- E05D 11/04 . relating to the use of free balls as bearing-surfaces ([E05D 7/06](#) takes precedence)
- E05D 11/06 . Devices for limiting the opening movement of hinges
- E05D 11/08 . Friction devices between relatively-movable hinge parts ([E05D 7/086](#) takes precedence)
- E05D 11/081 . . { with both radial and axial friction, e.g. conical friction surfaces }
- E05D 11/082 . . { with substantially radial friction, e.g. cylindrical friction surfaces }
- E05D 11/084 . . . { the friction depending on direction of rotation or opening angle of the hinge }
- E05D 11/087 . . { with substantially axial friction, e.g. friction disks }
- E05D 11/10 . Devices for preventing movement between relatively-movable hinge parts
- E05D 11/1007 . . { with positive locking }
- E05D 11/1014 . . { for maintaining the hinge in only one position, e.g. closed }
- E05D 11/1021 . . . { the hinge having two or more pins and being specially adapted for cabinets or furniture }
- E05D 11/1028 . . { for maintaining the hinge in two or more positions, e.g. intermediate or fully open }
- E05D 11/1042 . . . { the maintaining means being a cam and a torsion bar, e.g. motor vehicle hinge mechanisms }
- E05D 11/105 . . . { the maintaining means acting perpendicularly to the pivot axis }
- E05D 11/1057 { specially adapted for vehicles ([E05D 11/1064](#) takes precedence) }
- E05D 11/1064 { with a coil spring perpendicular to the pivot axis }
- E05D 11/1071 { specially adapted for vehicles }

- E05D 11/1078 . . . { the maintaining means acting parallel to the pivot }
- E05D 11/1085 { specially adapted for vehicles }

E05D 13/00

Accessories for sliding or lifting wings, e.g. pulleys, safety catches ({ closers or openers for horizontally sliding wings [E05F 1/02](#) , [E05F 1/08](#) } ; counterbalance devices { for swinging wings } [E05F 1/00](#) , [E05F 3/00](#))

- E05D 13/003 . { Anti-dropping devices ([E05D 13/1223](#) , [E05D 13/1246](#) , [E05D 13/1269](#) , [E05D 13/1292](#) take precedence) }
- E05D 13/006 . . { fixed to the wing, i.e. safety catches }
- E05D 13/04 . Fasteners specially adapted for holding sliding wings open ({ [E05D 15/06B2](#) takes precedence } ; for holding wings closed [E05C](#))
- E05D 13/06 . . with notches { for vertically sliding wings }
- E05D 13/08 . . acting by friction { for vertically sliding wings }
- E05D 13/10 . Counterbalance devices
- E05D 13/12 . . with springs
- E05D 13/1207 . . . { with tension springs }
- E05D 13/1215 { specially adapted for overhead wings ([E05D 13/1223](#) takes precedence) }
- E05D 13/1223 { Spring safety devices }
- E05D 13/123 . . . { with compression springs }
- E05D 13/1238 { specially adapted for overhead wings ([E05D 13/1246](#) takes precedence) }
- E05D 13/1246 { Spring safety devices }
- E05D 13/1253 . . . { with canted-coil torsion springs }
- E05D 13/1261 { specially adapted for overhead wings ([E05D 13/1269](#) takes precedence) }
- E05D 13/1269 { Spring safety devices }
- E05D 13/1276 . . . { with coiled ribbon springs, e.g. constant force springs ([E05D 13/1253](#) takes precedence) }
- E05D 13/1284 { specially adapted for overhead wings ([E05D 13/1292](#) takes precedence) }
- E05D 13/1292 { Spring safety devices }
- E05D 13/14 . . with weights
- E05D 13/145 . . . { specially adapted for overhead wings }

E05D 15/00

Suspension arrangements for wings (arrangements of wings not characterised by the construction of the supporting means [E06B 3/32](#))

- E05D 15/02 . for revolving wings
- E05D 15/04 . with arms fixed on the wing pivoting about an axis outside of the wing
- E05D 15/06 . for wings sliding horizontally more or less in their own plane
- E05D 15/0604 . . { allowing an additional movement ([E05D 15/10](#) takes precedence; raising wings before sliding [E05D 15/565](#)) }
- E05D 15/0608 . . . { caused by track lay-out }
- E05D 15/0613 { with multi-directional trolleys }

E05D 15/0617	..	{ of cantilever type }
E05D 15/0621	..	{ Details, e.g. suspension or supporting guides (E05D 15/0604 , E05D 15/08 to E05D 15/14 take precedence) }
E05D 15/0626	...	{ for wings suspended at the top }
E05D 15/063	....	{ on wheels with fixed axis }
E05D 15/0634	.....	{ with height adjustment }
E05D 15/0639	.....	{ by vertical bolts }
E05D 15/0643	....	{ on balls or floating rollers }
E05D 15/0647	....	{ on sliding blocks }
E05D 15/0652	....	{ Tracks (E05D 15/063 to E05D 15/0647 and E05D 15/0656 take precedence) }
E05D 15/0656	....	{ Bottom guides }
E05D 15/066	...	{ for wings supported at the bottom }
E05D 15/0665	....	{ on wheels with fixed axis }
E05D 15/0669	.....	{ with height adjustment }
E05D 15/0673	.....	{ by vertical bolts }
E05D 15/0678	....	{ on balls or floating rollers }
E05D 15/0682	....	{ on sliding blocks }
E05D 15/0686	....	{ Tracks (E05D 15/0665 to E05D 15/0682 and E05D 15/0691 take precedence) }
E05D 15/0691	....	{ Top guides }
E05D 15/08	..	consisting of two or more independent parts movable each in its own guides
E05D 15/10	..	movable out of one plane into a second parallel plane
E05D 15/1002	...	{ specially adapted for use in railway-cars or mass transit vehicles (E05D 15/1007 , E05D 15/1023 , E05D 15/1044 , E05D 15/1068 take precedence) }
E05D 15/1005	...	{ the wing being supported on arms movable in horizontal planes }
E05D 15/1007	....	{ specially adapted for use in railway-cars or mass transit vehicles }
E05D 15/101	....	{ specially adapted for vehicles (E05D 15/1007 takes precedence) }
E05D 15/1013	....	{ specially adapted for windows }
E05D 15/1015	.....	{ with an intermediate tilt position }
E05D 15/1021	...	{ involving movement in a third direction, e.g. vertically }
E05D 15/1023	....	{ specially adapted for use in railway-cars or mass transit vehicles }
E05D 15/1042	...	{ with transversely moving carriage (E05D 15/1065 takes precedence) }
E05D 15/1044	....	{ specially adapted for use in railway-cars or mass transit vehicles }
E05D 15/1047	....	{ specially adapted for vehicles (E05D 15/1044 takes precedence) }
E05D 15/1065	...	{ with transversely moving track }
E05D 15/1068	....	{ specially adapted for use in railway-cars or mass transit vehicles }
E05D 15/1081	....	{ specially adapted for vehicles (E05D 15/1068 takes precedence) }
E05D 15/12	..	consisting of parts connected at their edges
E05D 15/14	..	with movable arms situated in the plane of the wing
E05D 15/16	.	for wings sliding vertically more or less in their own plane
E05D 15/165	..	{ Details, e.g. sliding or rolling guides (E05D 15/18 to E05D 15/24 take

- precedence) }
- E05D 15/18 . . . consisting of two or more independent parts, movable each in its own guides
- E05D 15/20 . . . movable out of one plane into a second parallel plane
- E05D 15/22 . . . allowing an additional movement { ([E05D 15/20](#) takes precedence) }
- E05D 15/24 . . . consisting of parts connected at their edges
- E05D 15/242 . . . { Hinge connections between the parts }
- E05D 15/244 . . . { Upper part guiding means }
- E05D 15/246 . . . { with additional guide rail for producing an additional movement }
- E05D 15/248 . . . { with lever arms for producing an additional movement }

- E05D 15/26 . . . for folding wings
- E05D 15/262 . . . { folding vertically ([E05D 15/26B1](#) , [E05D 15/26B2B](#) take precedence) }
- E05D 15/264 . . . { for bi-fold wings }
- E05D 15/266 . . . { comprising two pivots placed at opposite edges of the wing }

- E05D 15/28 . . . supported on arms movable in horizontal plane
- E05D 15/30 . . . with pivoted arms and sliding guides
- E05D 15/32 . . . with two pairs of pivoted arms
- E05D 15/34 . . . with wings opening parallel to themselves

- E05D 15/36 . . . moving along slide-ways so arranged that one guide-member of the wing moves in a direction substantially perpendicular to the movement of another guide member
- E05D 15/38 . . . for upwardly-moving wings, e.g. up-and-over doors

- E05D 15/40 . . . supported on arms movable in vertical planes
- E05D 15/401 . . . { specially adapted for overhead wings ([E05D 15/403](#) to [E05D 15/46](#) take precedence) }
- E05D 15/403 . . . { with arms fixed on the wing pivoting about an axis outside the wing }
- E05D 15/405 . . . { with curved arms fixed on the wing, rolling on a support }
- E05D 15/406 . . . { with pivoted arms and sliding guides ([E05D 15/42](#) , [E05D 15/44](#) take precedence) }
- E05D 15/408 . . . { with sliding guides fixed to the wing }
- E05D 15/42 . . . with pivoted arms and horizontally-sliding guides
- E05D 15/425 . . . { specially adapted for overhead wings }
- E05D 15/44 . . . with pivoted arms and vertically-sliding guides
- E05D 15/445 . . . { specially adapted for overhead wings }
- E05D 15/46 . . . with two pairs of pivoted arms
- E05D 15/463 . . . { specially adapted for overhead wings }
- E05D 15/466 . . . { specially adapted for windows }

- E05D 15/48 . . . allowing alternative movements { ([E05D 15/0604](#) takes precedence) ; for vertically-sliding wings [E05D 15/22](#) }
- E05D 15/50 . . . for opening at either of two opposite edges { (hinges or pivots of special construction to allow easy separation or connection of the parts at the hinge axis [E05D 7/10](#) ; to allow easy detachment of the hinge from the wing or the frame [E05D 7/12](#)) }

- E05D 15/502 ... { by axial separation of the hinge parts at the hinge axis }
- E05D 15/505 ... { by radial separation of the hinge parts at the hinge axis }
- E05D 15/507 ... { by detachment of the hinge from the wing or the frame }
- E05D 15/52 .. for opening about a vertical as well as a horizontal axis
- E05D 15/5202 ... { with non-horizontally extending checks }
- E05D 15/5205 ... { with horizontally-extending checks }
- E05D 15/5208 ... { with means for transmitting movements between vertical and horizontal sliding bars, rods or cables }
- E05D 15/5211 ... { Concealed suspension fittings }
- E05D 15/5214 ... { Corner supports }
- E05D 15/5217 ... { Tilt-lock devices }
- E05D 15/522 ... with disconnecting means for the appropriate pivoting parts
- E05D 15/523 using movable rods
- E05D 15/524 Actuating mechanisms
- E05D 15/526 ... Safety devices { ([E05D 15/5217](#) takes precedence) }
- E05D 15/54 .. for opening both inwards and outwards

- E05D 15/56 . with successive different movements { ([raising wings before being turned E05F 7/02](#)) }
- E05D 15/565 .. { for raising wings before sliding }
- E05D 15/58 .. with both swinging and sliding movements
- E05D 15/581 ... { the swinging axis laying in the sliding direction ([E05D 15/1015](#) takes precedence) }
- E05D 15/582 ... { with horizontal swinging axis ([E05D 15/581](#) takes precedence) }
- E05D 15/583 { specially adapted for overhead wings }

E05D 2001/00 Pinless hinges ; Substitutes for hinges

- E05D 2001/04 . with guide members shaped as circular arcs
- E05D 2001/045 .. for telescopic hinges

E05D 2003/00 Hinges with pins { ([E05D 7/08](#) takes precedence) }

- E05D 2003/02 . with one pin
- E05D 2003/025 .. having three knuckles
- E05D 2003/027 ... the end knuckles being mutually connected

- E05D 2003/06 . with two or more pins ([E05D 7/08](#) takes precedence)
- E05D 2003/16 .. with seven parallel pins and four arms
- E05D 2003/163 ... Horizontal pivot-axis
- E05D 2003/166 ... Vertical pivot-axis

E05D 2005/00 Construction of single parts, e.g. the parts for attachment

- E05D 2005/02 . Parts for attachment, e.g. flaps

- E05D 2005/0246 . . { for attachment to glass panels }
- E05D 2005/0253 . . . the panels having conical or stepped recesses
- E05D 2005/0261 . . . connecting two or more glass panels
- E05D 2005/0269 the panels being coplanar
- E05D 2005/0284 . . for embedding in concrete or masonry
- E05D 2005/0292 . . for passing through insulating layers
- E05D 2005/06 . . Bent flaps
- E05D 2005/067 . . . gooseneck shaped

- E05D 2005/10 . Pins, sockets or sleeves ; Removable pins ([E05D 15/522](#) takes precedence)
- E05D 2005/102 . . Pins
- E05D 2005/104 . . . characterised by the materials
- E05D 2005/106 . . . with non-cylindrical portions
- E05D 2005/108 . . . with elastically deformable parts
- E05D 2005/12 . . Securing pins in sockets, movably or not
- E05D 2005/121 . . . { Screw-threaded pins }
- E05D 2005/122 externally threaded
- E05D 2005/124 internally threaded
- E05D 2005/14 . . Construction of sockets or sleeves
- E05D 2005/145 . . . with elastically deformable parts

- E05D 2007/00** **Hinges or pivots of special construction** (used for special suspension arrangements [E05D 15/00](#) ; so as to be self-closing [E05F 1/06](#) , [E05F 1/12](#) ; with means for raising wings before being turned [E05F 7/02](#))

- E05D 2007/0009 . . { Adjustable hinges ([E05D 7/04](#) takes precedence) }
- E05D 2007/0018 . . { at the hinge axis }
- E05D 2007/0027 . . . { in an axial direction }
- E05D 2007/0036 with axially fixed hinge pins
- E05D 2007/0045 . . . { in a radial direction }
- E05D 2007/0054 { by means of eccentric parts }
- E05D 2007/0063 Eccentric hinge pins
- E05D 2007/0072 with sliding sleeves
- E05D 2007/0081 with swinging or rolling sleeves

- E05D 2007/04 . . Hinges adjustable relative to the wing or the frame
- E05D 2007/043 . . { by means of dowel attachments }
- E05D 2007/0438 . . . with bolts fixedly mounted on the hinge part
- E05D 2007/0446 . . . with threaded bolts fixedly mounted on the hinge part
- E05D 2007/0453 . . . with threaded sleeves
- E05D 2007/0461 . . in angular arrangement to the wing or the frame
- E05D 2007/0469 . . in an axial direction
- E05D 2007/0476 . . Pocket hinges
- E05D 2007/0484 . . in a radial direction

- E05D 2007/0492 . . . in three directions
- E05D 2007/10 . . . to allow easy separation { or connection } of the parts at the hinge axis ({ [E05D 5/12](#) and [E05D 15/50](#) take precedence } ; substitutes for hinges [E05D 1/06](#))
- E05D 2007/1005 . . . { by axially moving free pins, balls or sockets }
- E05D 2007/1027 . . . by axially moving free pins
- E05D 2007/1033 . . . by axially moving free balls
- E05D 2007/1038 . . . by axially moving free sockets
- E05D 2007/1083 . . . { facilitating simultaneous assembly of a plurality of hinges, e.g. for mounting heavy wings }
- E05D 2007/1088 . . . using hinge pins having different lengths
- E05D 2007/1094 . . . Guiding devices therefor
- E05D 2007/12 . . . to allow easy detachment of the hinge from the wing or the frame { ([E05D 15/507](#) takes precedence) }
- E05D 2007/126 . . . in an axial direction
- E05D 2007/128 . . . in a radial direction
- E05D 2011/00 Additional features or accessories of hinges { (edge protecting devices [E06B 3/88](#)) }**
- E05D 2011/0018 . . . { Anti-tamper devices }
- E05D 2011/0027 . . . { arranged on or near the hinge and comprising parts interlocking as the wing closes, e.g. security studs }
- E05D 2011/0036 . . . near the hinge
- E05D 2011/0045 . . . on the hinge
- E05D 2011/0054 . . . { Covers, e.g. for protection }
- E05D 2011/0063 . . . for screw-heads or bolt-heads
- E05D 2011/0072 . . . for the gap between hinge parts
- E05D 2011/009 . . . Impact absorbing hinges for vehicle doors
- E05D 2011/04 . . . relating to the use of free balls as bearing-surfaces ([E05D 7/06](#) takes precedence)
- E05D 2011/045 . . . located in line with the hinge axis
- E05D 2011/08 . . . Friction devices between relatively-movable hinge parts ([E05D 7/086](#) takes precedence)
- E05D 2011/082 . . . { with substantially radial friction, e.g. cylindrical friction surfaces }
- E05D 2011/085 . . . the friction depending on the opening angle
- E05D 2011/088 . . . with automatic disengagement
- E05D 2011/10 . . . Devices for preventing movement between relatively-movable hinge parts
- E05D 2011/1028 . . . { for maintaining the hinge in two or more positions, e.g. intermediate or fully open }
- E05D 2011/1035 . . . with circumferential and evenly distributed detents around the pivot-axis
- E05D 2011/1092 . . . the angle between the hinge parts being adjustable
- E05D 2015/00 Suspension arrangements for wings (arrangements of wings not characterised by the construction of the supporting means [E06B 3/32](#))**

- E05D 2015/06 . for wings sliding horizontally more or less in their own plane
- E05D 2015/0621 .. { Details, e.g. suspension or supporting guides ([E05D 15/0604](#) , [E05D 15/08](#) to [E05D 15/14](#) take precedence) }
- [E05D 2015/0695](#) ... Magnetic suspension or supporting means
- E05D 2015/10 .. movable out of one plane into a second parallel plane
- [E05D 2015/1018](#) ... with the track rotating around its axis
- [E05D 2015/1026](#) ... accessories, e.g. sliding or rolling guides, latches
- [E05D 2015/1028](#) ... with only the wing moving transversely
- [E05D 2015/1031](#) the wing supported on arms extending from the carriage
- [E05D 2015/1034](#) the carriage having means for preventing rotation of the wing
- [E05D 2015/1036](#) the arms being movable in vertical, e.g. transverse, planes
- [E05D 2015/1039](#) the wing sliding transversely on the carriage
- E05D 2015/1042 ... { with transversely moving carriage ([E05D 15/1065](#) takes precedence) }
- [E05D 2015/1049](#) the carriage swinging or rotating in a transverse plane
- [E05D 2015/1052](#) transversely over-dimensioned track sections or carriage
- [E05D 2015/1055](#) with slanted or curved track sections or cams
- [E05D 2015/1057](#) the carriage swinging or rotating in those track sections
- [E05D 2015/106](#) transversely orientated track sections
- [E05D 2015/1063](#) disconnecting the carriage from the track
- E05D 2015/1065 ... { with transversely moving track }
- [E05D 2015/1071](#) the track being directly linked to the fixed frame, e.g. slidingly
- [E05D 2015/1073](#) rocking transversely
- [E05D 2015/1076](#) swinging transversely, e.g. on arms
- [E05D 2015/1078](#) swinging or rotating in a horizontal plane
- [E05D 2015/1084](#) the carriage being directly linked to the fixed frame, e.g. slidingly
- [E05D 2015/1086](#) swingingly, e.g. on arms
- [E05D 2015/1089](#) the carriage having means for preventing rotation of the wing
- [E05D 2015/1092](#) the carriage swinging or rotating in curved track sections
- [E05D 2015/1094](#) disconnecting itself from the track
- [E05D 2015/1097](#) with the carriage and track forming a telescopic element

- E05D 2015/16 . for wings sliding vertically more or less in their own plane
- E05D 2015/22 .. allowing an additional movement ({ [E05D 15/20](#) takes precedence })
- [E05D 2015/225](#) ... specially adapted for overhead wings

- E05D 2015/26 . for folding wings
- [E05D 2015/268](#) .. the wings being successively folded

- E05D 2015/48 . allowing alternative movements ({ [E05D 15/0604](#) takes precedence } ; for vertically-sliding wings [E05D 15/22](#))
- [E05D 2015/482](#) .. for panic doors
- [E05D 2015/485](#) .. Swinging or sliding movements
- [E05D 2015/487](#) .. Tilting or swinging movements

- E05D 2015/52 . . for opening about a vertical as well as a horizontal axis
- E05D 2015/526 . . . Safety devices { ([E05D 15/5217](#) takes precedence) }
- [E05D 2015/5263](#) acting parallel to the plane of the wing
- [E05D 2015/5266](#) acting perpendicular to the plane of the wing

- E05D 2015/56 . with successive different movements { ([raising wings before being turned E05F 7/02](#)) }
- E05D 2015/58 . . with both swinging and sliding movements
- [E05D 2015/585](#) . . . with stationary hinge parts
- [E05D 2015/586](#) . . . with travelling hinge parts
- [E05D 2015/587](#) . . . with axially separating hinge parts
- [E05D 2015/588](#) . . . with radially separating hinge parts

- [E05D 2700/00](#) Hinges or other suspension devices especially for doors or windows**

- [E05D 2700/02](#) . Hinges with one pivot axis and one bearing surface
- [E05D 2700/04](#) . Hinges with one pivot axis and more than one bearing surface
- [E05D 2700/10](#) . Various door and window fittings, e.g. suspension devices for double hung windows or screens
- [E05D 2700/12](#) . Suspension devices for doors or windows movable in a direction perpendicular to their plane or pivotable about an axis being situated at a considerable distance from the edge of the wing by means of pivot arms