

ECLA**EUROPEAN CLASSIFICATION****E05D****HINGES OR OTHER SUSPENSION DEVICES FOR DOORS, WINDOWS OR WINGS** ([N: foldable tables [A47B3/00](#); hinged panels [A47B5/00](#); foldable chairs [A47C4/00](#); making hinges [B21D53/40](#), [B21K13/02](#); making holes for taking-up fittings [B27F5/12](#); for vehicle tailboards [B60P1/00D](#); for refuse receptacles [B65F1/16E](#)]; pivotal connections in general [F16C11/00](#); mounting of stove or range doors [F24C15/02B2](#); for folding flat displays of portable computers [G06F1/16P2H](#))] [C9801]

[N: foldable tables [A47B3/00](#); hinged panels [A47B5/00](#); foldable chairs [A47C4/00](#); making hinges [B21D53/40](#), [B21K13/02](#); making holes for taking-up fittings [B27F5/12](#); for vehicle tailboards [B60P1/00D](#); for refuse receptacles [B65F1/16E](#)]; pivotal connections in general [F16C11/00](#); mounting of stove or range doors [F24C15/02B2](#); for folding flat displays of portable computers [G06F1/16P2H](#))] [C9801]

[N: WARNING]

The following IPC groups are not used in the internal ECLA classification scheme. Subject matter covered by these groups is classified in the following ECLA groups:

[E05D5/16](#) covered by [E05D5/14](#)

[E05D7/081](#) covered by [E05D7/08](#)

[E05D7/083](#) covered by [E05D7/082](#)

[E05D15/04](#) covered by [E05D15/02](#), [E05D15/28](#), [E05D15/40B](#)

[E05D15/522](#) covered by [E05D15/52](#)

[E05D15/523](#) covered by [E05D15/52](#)

[E05D15/524](#) covered by [E05D15/52](#)

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E05D1/00**Pinless hinges; Substitutes for hinges****E05D1/02**

- made of one piece

E05D1/04

- with guide members shaped as circular arcs

E05D1/06

- consisting of two easily-separable parts

E05D3/00**Hinges with pins** [N: ([E05D7/08](#) takes precedence)]**E05D3/02**

- with one pin

E05D3/02B

- [N: allowing an additional lateral movement, e.g. for sealing]

E05D3/04

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

E05D3/06

- with two or more pins ([E05D7/08](#) takes precedence)

E05D3/08

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

E05D3/10

- with non-parallel pins

E05D3/12

- with two parallel pins and one arm [N0811]

E05D3/12G

- [N: Gear hinges] [N0811]

E05D3/12V

- [N: specially adapted for vehicles] [N0811]

E05D3/12V2

- [N: for vehicle doors] [N0811]

E05D3/14

- with four parallel pins and two arms [N0811]

E05D3/14C

- [N: with at least one of the hinge parts having a cup-shaped fixing part, e.g. for attachment to cabinets or furniture ([E05D11/10D2](#) takes precedence)] [N0811]

E05D3/14V

- [N: specially adapted for vehicles] [N0811]

- E05D3/14V2 [N: for vehicle doors] [N0811]
 - E05D3/16 . . with seven parallel pins and four arms [N0811]
 - E05D3/18 . . with sliding pins or guides [N0811]
 - E05D3/18C . . . [N: with at least one of the hinge parts having a cup-shaped fixing part, e.g. for attachment to cabinets or furniture] [N0811]
 - E05D3/18S . . . [N: Scissors hinges, with two crossing levers and five parallel pins] [N0811]
- E05D5/00 Construction of single parts, e.g. the parts for attachment**
- E05D5/02 . Parts for attachment, e.g. flaps
 - E05D5/02A . . [N: for attachment to vehicles ([E05D5/04A](#), [E05D5/06A](#) take precedence)] [N9811]
 - E05D5/02B . . [N: for attachment to profile members or the like]
 - E05D5/02B2 . . . [N: with parts, e.g. screws, extending through the profile wall or engaging profile grooves] [N9608]
 - E05D5/02B2B [N: with parts extending through the profile wall] [N9608]
 - E05D5/02B2D [N: with parts engaging profile grooves] [N9608]
 - E05D5/02C . . [N: for attachment to glass panels]
 - E05D5/02D . . [N: for attachment to cabinets or furniture, the hinge having two or more pins ([E05D5/04B](#), [E05D5/06B](#), [E05D7/12B2](#) take precedence)] [C9811]
 - E05D5/04 . . Flat flaps
 - E05D5/04A . . . [N: specially adapted for vehicles] [N9811]
 - E05D5/04B . . . [N: specially adapted for cabinets or furniture] [N9811]
 - E05D5/06 . . Bent flaps
 - E05D5/06A . . . [N: specially adapted for vehicles] [N9801]
 - E05D5/06B . . . [N: specially adapted for cabinets or furniture] [N9804]
 - E05D5/08 . . of cylindrical shape
 - E05D5/10 . Pins, sockets or sleeves; Removable pins ([E05D15/522](#) takes precedence)
 - E05D5/12 . . Securing pins in sockets, movably or not [C9604]
 - E05D5/12B . . . [N: Screw-threaded pins] [N9604]
 - E05D5/12D . . . [N: Non-removable, snap-fitted pins (removable snap-fitted pins [E05D7/10B5](#), [E05D7/10C4](#))] [N9604]
 - E05D5/12F . . . [N: by forcing the pin into the socket ([E05D5/12D](#) takes precedence)] [N9604]
 - E05D5/12H . . . [N: the pin having a recess or through-hole engaged by a securing member] [N9604]
 - E05D5/14 . . Construction of sockets or sleeves
 - E05D5/16 . . . to be secured without special attachment parts on the socket or sleeve [N1204]
- E05D7/00 Hinges or pivots of special construction (used for special suspension arrangements [E05D15/00](#); so as to be self-closing [E05F1/06](#), [E05F1/12](#); with means for raising wings before being turned [E05F7/02](#))**
- E05D7/00B . [N: Adjustable hinges ([E05D7/04](#) takes precedence)]
 - E05D7/00B2 . . [N: at the hinge axis]
 - E05D7/00B2A . . . [N: in an axial direction] [N9609]

- E05D7/00B2B . . . [N: in a radial direction] [N9609]
- E05D7/00B2B2 [N: by means of eccentric parts] [N9609]
- E05D7/00C . [N: Elongate hinges, e.g. piano-hinges]
- E05D7/02 . for use on the right-hand as well as the left-hand side; Convertible right-hand or left-hand hinges
- E05D7/04 . Hinges adjustable relative to the wing or the frame
- E05D7/04B . . [N: the hinges having two or more pins and being specially adapted for cabinets or furniture]
- E05D7/04C . . [N: with adjusting drive means] [N9707]
- E05D7/04C2 . . . [N: Screw-and-nut mechanisms ([E05D7/04B](#), [E05D7/04D](#) take precedence)] [N9707]
- E05D7/04D . . [N: by means of dowel attachments] [N9705]
- E05D7/06 . to allow tilting of the members
- E05D7/08 . for use in suspensions comprising two spigots placed at opposite edges of the wing, especially at the top and the bottom, e.g. trunnions [N: ([E05D15/26B2](#) takes precedence)]
- E05D7/081 . . the pivot axis of the wing being situated near one edge of the wing, especially at the top and bottom, e.g. trunnions [N1204]
- E05D7/082 . . the pivot axis of the wing being situated at a considerable distance from the edges of the wing, [N: e.g. for balanced wings]
- E05D7/083 . . . with a fixed pivot axis [N1204]
- E05D7/084 . . . with a movable pivot axis
- E05D7/085 with two or more pivot axes, e.g. used at the same time
- E05D7/086 . . . Braking devices structurally combined with hinges (braking devices for windows per se [E05F5/00](#))
- E05D7/10 . to allow easy separation [N: or connection] of the parts at the hinge axis ([N: [E05D5/12](#) and [E05D15/50](#) take precedence]; substitutes for hinges [E05D1/06](#)) [C9611]
- E05D7/10B . . [N: by axially moving free pins, balls or sockets] [N9502] [C9505]
- E05D7/10B1 . . . [N: biased by free springs ([E05D7/10B3](#) takes precedence)] [N9502] [C9505]
- E05D7/10B3 . . . [N: requiring a specific angular position] [N9502]
- E05D7/10B5 . . . [N: with snap-fitted pins] [N9502]
- E05D7/10C . . [N: in an axial direction ([E05D7/10B](#) takes precedence)] [N9502]
- E05D7/10C2 . . . [N: requiring a specific angular position] [N9502]
- E05D7/10C4 . . . [N: with snap-fitted pins] [N9502]
- E05D7/10D . . [N: in a radial direction ([E05D7/10B](#) takes precedence)] [N9502]
- E05D7/10D2 . . . [N: requiring a specific angular position] [N9502]
- E05D7/10D2B [N: the pin having a non-circular cross-section] [N9506]
- E05D7/10D4 . . . [N: with snap-fitted pins] [N9502]
- E05D7/10E . . [N: facilitating simultaneous assembly of a plurality of hinges, e.g. for mounting heavy wings] [N9502]
- E05D7/12 . to allow easy detachment of the hinge from the wing or the frame [N:([E05D15/50D](#)

- takes precedence)][C9611]
- E05D7/12A
 - · [N: specially adapted for vehicles] [N9707]
- E05D7/12B
 - · [N: specially adapted for cabinets or furniture] [N9709]
- E05D7/12B2
 - · · [N: the hinge having two or more pins] [N9709]
- E05D7/14
 - Hinges for safes
- E05D9/00**

Flaps or sleeves specially designed for making from particular material, e.g. hoop-iron, sheet metal, plastics
- E05D9/00B
 - [N: from plastics ([E05D1/02](#) takes precedence)]
- E05D11/00**

Additional features or accessories of hinges [N: (edge protecting devices [E06B3/88](#))] [C9607]
- E05D11/00B
 - [N: Templates for marking the position of fittings on wings or frames (implements for making doors, windows or frames [E04F21/00C](#))] [C9608]
- E05D11/00C
 - [N: Anti-tamper devices] [C9607]
- E05D11/00C2
 - · [N: arranged on or near the hinge and comprising parts interlocking as the wing closes, e.g. security studs] [C9607]
- E05D11/00D
 - [N: Covers, e.g. for protection] [N9605]
- E05D11/00E
 - [N: for transmitting energy, e.g. electrical cable routing] [N9605]
- E05D11/02
 - Lubricating arrangements
- E05D11/04
 - relating to the use of free balls as bearing-surfaces ([E05D7/06](#) takes precedence)
- E05D11/06
 - Devices for limiting the opening movement of hinges
- E05D11/08
 - Friction devices between relatively-movable hinge parts ([E05D7/086](#) takes precedence)
- E05D11/08B
 - · [N: with both radial and axial friction, e.g. conical friction surfaces] [N9705]
- E05D11/08C
 - · [N: with substantially radial friction, e.g. cylindrical friction surfaces] [N9705]
- E05D11/08C2
 - · · [N: the friction depending on direction of rotation or opening angle of the hinge] [N9705]
- E05D11/08D
 - · [N: with substantially axial friction, e.g. friction disks] [N9705]
- E05D11/10
 - Devices for preventing movement between relatively-movable hinge parts
- E05D11/10B
 - · [N: with positive locking]
- E05D11/10D
 - · [N: for maintaining the hinge in only one position, e.g. closed]
- E05D11/10D2
 - · · [N: the hinge having two or more pins and being specially adapted for cabinets or furniture]
- E05D11/10E
 - · [N: for maintaining the hinge in two or more positions, e.g. intermediate or fully open]
- E05D11/10E2
 - · · [N: the maintaining means being a cam and a torsion bar, e.g. motor vehicle

- hinge mechanisms]
- E05D11/10E3 . . . [N: the maintaining means acting perpendicularly to the pivot axis]
- E05D11/10E3A [N: specially adapted for vehicles ([E05D11/10E3B](#) takes precedence)][N9707]
- E05D11/10E3B [N: with a coil spring perpendicular to the pivot axis] [N9702]
- E05D11/10E3B2 [N: specially adapted for vehicles] [N9707]
- E05D11/10E4 . . . [N: the maintaining means acting parallel to the pivot]
- E05D11/10E4A [N: specially adapted for vehicles] [N9707]

E05D13/00

Accessories for sliding or lifting wings, e.g. pulleys, safety catches ([N: closers or openers for horizontally sliding wings [E05F1/02](#), [E05F1/08](#)]; counterbalance devices [N: for swinging wings] [E05F1/00](#), [E05F3/00](#)) [C9705]

- E05D13/00B . [N: Anti-dropping devices ([E05D13/12D4](#), [E05D13/12F4](#), [E05D13/12G4](#), [E05D13/12H4](#) take precedence)] [N9601]
- E05D13/00B2 . . [N: fixed to the wing, i.e. safety catches] [N9601]
- E05D13/04 . [N: IPC3] Fasteners specially adapted for holding sliding wings open ([N: [E05D15/06B2](#) takes precedence]; for holding wings closed [E05C](#)) [C9409]
- E05D13/06 . . [N: IPC3] with notches [N: for vertically sliding wings] [C9409]
- E05D13/08 . . [N: IPC3] acting by friction [N: for vertically sliding wings] [C9409]
- E05D13/10 . [N: IPC3] Counterbalance devices [C9601]
- E05D13/12 . . [N: IPC3] with springs [C9409]
- E05D13/12D . . . [N: with tension springs] [N9601]
- E05D13/12D2 [N: specially adapted for overhead wings ([E05D13/12D4](#) takes precedence)] [N9601]
- E05D13/12D4 [N: Spring safety devices] [N9601]
- E05D13/12F . . . [N: with compression springs] [N9601]
- E05D13/12F2 [N: specially adapted for overhead wings ([E05D13/12F4](#) takes precedence)] [N9601]
- E05D13/12F4 [N: Spring safety devices] [N9601]
- E05D13/12G . . . [N: with canted-coil torsion springs] [N9601]
- E05D13/12G2 [N: specially adapted for overhead wings ([E05D13/12G4](#) takes precedence)] [N9601]
- E05D13/12G4 [N: Spring safety devices] [N9601]
- E05D13/12H . . . [N: with coiled ribbon springs, e.g. constant force springs ([E05D13/12G](#) takes precedence)] [N9601]
- E05D13/12H2 [N: specially adapted for overhead wings ([E05D13/12H4](#) takes precedence)] [N9601]
- E05D13/12H4 [N: Spring safety devices] [N9601]
- E05D13/14 . . [N: IPC3] with weights [C9409]
- E05D13/14B . . . [N: specially adapted for overhead wings] [N9502]

E05D15/00

Suspension arrangements for wings (arrangements of wings not characterised by the construction of the supporting means [E06B3/32](#))

- E05D15/02 . . . for revolving wings
- E05D15/04 . . . with arms fixed on the wing pivoting about an axis outside of the wing [N1204]
- E05D15/06 . . . for wings sliding horizontally more or less in their own plane
- E05D15/06B . . . [N: allowing an additional movement ([E05D15/10](#) takes precedence; raising wings before sliding [E05D15/56B](#))] [C9901]
- E05D15/06B1 [N: caused by track lay-out] [N9711]
- E05D15/06B1B [N: with multi-directional trolleys] [N9711]
- E05D15/06C . . . [N: of cantilever type] [N0207]
- E05D15/06D . . . [N: Details, e.g. suspension or supporting guides ([E05D15/06B](#), [E05D15/08](#) to [E05D15/14](#) take precedence)] [N9409]
- E05D15/06D1 [N: for wings suspended at the top] [N9409]
- E05D15/06D1B [N: on wheels with fixed axis] [N9701]
- E05D15/06D1B2 [N: with height adjustment] [N1204]
- E05D15/06D1B2B [N: by vertical bolts] [N1204]
- E05D15/06D1D [N: on balls or floating rollers] [N9701]
- E05D15/06D1F [N: on sliding blocks] [N9701]
- E05D15/06D1H [N: Tracks ([E05D15/06D1B](#) to [E05D15/06D1F](#) and [E05D15/06D1K](#) take precedence)] [N9701]
- E05D15/06D1K [N: Bottom guides] [N9701]
- E05D15/06D2 [N: for wings supported at the bottom] [N9409]
- E05D15/06D2B [N: on wheels with fixed axis] [N9904]
- E05D15/06D2B2 [N: with height adjustment] [N1204]
- E05D15/06D2B2B [N: by vertical bolts] [N1204]
- E05D15/06D2D [N: on balls or floating rollers] [N9904]
- E05D15/06D2F [N: on sliding blocks] [N9904]
- E05D15/06D2H [N: Tracks ([E05D15/06D2B](#) to [E05D15/06D2F](#) and [E05D15/06D2K](#) take precedence)] [N9904]
- E05D15/06D2K [N: Top guides] [N9904]
- E05D15/08 . . . consisting of two or more independent parts movable each in its own guides
- E05D15/10 . . . movable out of one plane into a second parallel plane
- E05D15/10B [N: specially adapted for use in railway-cars or mass transit vehicles ([E05D15/10C1](#), [E05D15/10P1](#), [E05D15/10S1](#), [E05D15/10T1](#) take precedence)] [N9409] [C9711]
- E05D15/10C [N: the wing being supported on arms movable in horizontal planes] [N9409] [C9702]
- E05D15/10C1 [N: specially adapted for use in railway-cars or mass transit vehicles] [N9502]
- E05D15/10C2 [N: specially adapted for vehicles ([E05D15/10C1](#) takes precedence)] [N9709]
- E05D15/10C3 [N: specially adapted for windows] [N9702]
- E05D15/10C3B [N: with an intermediate tilt position] [N9711]
- E05D15/10P [N: involving movement in a third direction, e.g. vertically] [N9502]
- E05D15/10P1 [N: specially adapted for use in railway-cars or mass transit vehicles]

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- E05D15/10S . . . [N: with transversely moving carriage ([E05D15/10T](#) takes precedence)] [N9702]
 - E05D15/10S1 [N: specially adapted for use in railway-cars or mass transit vehicles] [N9711]
 - E05D15/10S2 [N: specially adapted for vehicles ([E05D15/10S1](#) takes precedence)] [N9709] [C9711]
 - E05D15/10T . . . [N: with transversely moving track] [N9502] [C9702]
 - E05D15/10T1 [N: specially adapted for use in railway-cars or mass transit vehicles] [N9502]
 - E05D15/10T3 [N: specially adapted for vehicles (E05D15/10T1 takes precedence)] [N0607]
 - E05D15/12 . . consisting of parts connected at their edges
 - E05D15/14 . . with movable arms situated in the plane of the wing

 - E05D15/16 . for wings sliding vertically more or less in their own plane
 - E05D15/16D . . [N: Details, e.g. sliding or rolling guides ([E05D15/18](#) to [E05D15/24](#) take precedence)] [N9409]
 - E05D15/18 . . consisting of two or more independent parts, movable each in its own guides
 - E05D15/20 . . movable out of one plane into a second parallel plane
 - E05D15/22 . . allowing an additional movement [N: ([E05D15/20](#) takes precedence)] [C9409]
 - E05D15/24 . . consisting of parts connected at their edges
 - E05D15/24B . . . [N: Hinge connections between the parts] [N0312]
 - E05D15/24D . . . [N: Upper part guiding means] [N0312]
 - E05D15/24D1 [N: with additional guide rail for producing an additional movement] [N0312]
 - E05D15/24D3 [N: with lever arms for producing an additional movement] [N0312]

 - E05D15/26 . for folding wings
 - E05D15/26A . . [N: folding vertically ([E05D15/26B1](#), [E05D15/26B2B](#) take precedence)] [N9502]
 - E05D15/26B . . [N: for bi-fold wings]
 - E05D15/26B2 . . . [N: comprising two pivots placed at opposite edges of the wing]

 - E05D15/28 . supported on arms movable in horizontal plane
 - E05D15/30 . . with pivoted arms and sliding guides
 - E05D15/32 . . with two pairs of pivoted arms
 - E05D15/34 . . . with wings opening parallel to themselves

 - E05D15/36 . 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
 - E05D15/38 . . for upwardly-moving wings, e.g. up-and-over doors

 - E05D15/40 . supported on arms movable in vertical planes
 - E05D15/40A . . [N: specially adapted for overhead wings ([E05D15/40B](#) to [E05D15/46](#) take precedence)] [N9705]
 - E05D15/40B . . [N: with arms fixed on the wing pivoting about an axis outside the wing] [C9409]
 - E05D15/40C . . [N: with curved arms fixed on the wing, rolling on a support]
 - E05D15/40D . . [N: with pivoted arms and sliding guides ([E05D15/42](#), [E05D15/44](#) take precedence)]

- E05D15/40D2 . . . [N: with sliding guides fixed to the wing]
- E05D15/42 . . with pivoted arms and horizontally-sliding guides
- E05D15/42B . . . [N: specially adapted for overhead wings] [N9409]
- E05D15/44 . . with pivoted arms and vertically-sliding guides
- E05D15/44B . . . [N: specially adapted for overhead wings] [N9409]
- E05D15/46 . . with two pairs of pivoted arms
- E05D15/46B . . . [N: specially adapted for overhead wings] [N9509]
- E05D15/46C . . . [N: specially adapted for windows] [N9705]

- E05D15/48 . allowing alternative movements ([N: [E05D15/06B](#) takes precedence]; for vertically-sliding wings [E05D15/22](#)) [C9409]
- E05D15/50 . . for opening at either of two opposite edges [N: (hinges or pivots of special construction to allow easy separation or connection of the parts at the hinge axis [E05D7/10](#); to allow easy detachment of the hinge from the wing or the frame [E05D7/12](#))] [C9611]
- E05D15/50B . . . [N: by axial separation of the hinge parts at the hinge axis] [N9611]
- E05D15/50C . . . [N: by radial separation of the hinge parts at the hinge axis] [N9611]
- E05D15/50D . . . [N: by detachment of the hinge from the wing or the frame] [N9611]
- E05D15/52 . . for opening about a vertical as well as a horizontal axis
- E05D15/52A . . . [N: with non-horizontally extending checks] [N9607]
- E05D15/52B . . . [N: with horizontally-extending checks] [C9607]
- E05D15/52C . . . [N: with means for transmitting movements between vertical and horizontal sliding bars, rods or cables]
- E05D15/52D . . . [N: Concealed suspension fittings]
- E05D15/52E . . . [N: Corner supports] [N9607]
- E05D15/52F . . . [N: Tilt-lock devices] [N9607]
- E05D15/522 . . . with disconnecting means for the appropriate pivoting parts [N1204]
- E05D15/523 using movable rods [N1204]
- E05D15/524 Actuating mechanisms [N1204]
- E05D15/526 . . . Safety devices [N: ([E05D15/52E](#) takes precedence)] [C9607]
- E05D15/54 . . for opening both inwards and outwards

- E05D15/56 . with successive different movements [N: (raising wings before being turned [E05F7/02](#))] [C9901]
- E05D15/56B . . [N: for raising wings before sliding] [N9901]
- E05D15/58 . . with both swinging and sliding movements
- E05D15/58A . . . [N: the swinging axis laying in the sliding direction ([E05D15/10C3B](#) takes precedence)] [N9711]
- E05D15/58B . . . [N: with horizontal swinging axis ([E05D15/58A](#) takes precedence)] [N9711]
- E05D15/58B1 [N: specially adapted for overhead wings] [N9711]