

CPC COOPERATIVE PATENT CLASSIFICATION

E FIXED CONSTRUCTIONS

BUILDING

E05 LOCKS; KEYS; WINDOW OR DOOR FITTINGS; SAFES

(NOTE omitted)

E05D HINGES OR SUSPENSION DEVICES FOR DOORS, WINDOWS OR WINGS (pivotal connections in general [F16C 11/00](#))

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

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| 1/00 | Pinless hinges; Substitutes for hinges | 5/0207 | . . {for attachment to vehicles (E05D 5/043 , E05D 5/062 take precedence)} |
| 1/02 | . made of one piece | 5/0215 | . . {for attachment to profile members or the like} |
| 1/04 | . with guide members shaped as circular arcs | 5/0223 | . . . {with parts, e.g. screws, extending through the profile wall or engaging profile grooves} |
| 2001/045 | . . {for telescopic hinges} | 5/023 | {with parts extending through the profile wall} |
| 1/06 | . consisting of two easily-separable parts | 5/0238 | {with parts engaging profile grooves} |
| 3/00 | Hinges with pins (E05D 7/08 takes precedence)} | 5/0246 | . . {for attachment to glass panels} |
| 3/02 | . with one pin | 2005/0253 | . . . {the panels having conical or stepped recesses} |
| 3/022 | . . {allowing an additional lateral movement, e.g. for sealing} | 2005/0261 | . . . {connecting two or more glass panels} |
| 2003/025 | . . {having three knuckles} | 2005/0269 | {the panels being coplanar} |
| 2003/027 | . . . {the end knuckles being mutually connected} | 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)} |
| 3/04 | . . engaging three or more parts, e.g. sleeves, movable relatively to one another for connecting two or more wings to another member | 2005/0284 | . . {for embedding in concrete or masonry} |
| 3/06 | . with two or more pins (E05D 7/08 takes precedence) | 2005/0292 | . . {for passing through insulating layers} |
| 3/08 | . . for swing-doors, i.e. openable by pushing from either side | 5/04 | . . Flat flaps |
| 3/10 | . . with non-parallel pins | 5/043 | . . . {specially adapted for vehicles} |
| 3/12 | . . with two parallel pins and one arm | 5/046 | . . . {specially adapted for cabinets or furniture} |
| 3/122 | . . . {Gear hinges} | 5/06 | . . Bent flaps |
| 3/125 | . . . {specially adapted for vehicles} | 5/062 | . . . {specially adapted for vehicles} |
| 3/127 | {for vehicle doors} | 5/065 | . . . {specially adapted for cabinets or furniture} |
| 3/14 | . . with four parallel pins and two arms | 2005/067 | . . . {gooseneck shaped} |
| 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)} | 5/08 | . . of cylindrical shape |
| 3/145 | . . . {specially adapted for vehicles} | 5/10 | . Pins, sockets or sleeves; Removable pins (E05D 15/522 takes precedence) |
| 3/147 | {for vehicle doors} | 2005/102 | . . {Pins} |
| 3/16 | . . with seven parallel pins and four arms | 2005/104 | . . . {characterised by the materials} |
| 2003/163 | . . . {Horizontal pivot-axis} | 2005/106 | . . . {with non-cylindrical portions} |
| 2003/166 | . . . {Vertical pivot-axis} | 2005/108 | . . . {with elastically deformable parts} |
| 3/18 | . . with sliding pins or guides | 5/12 | . . Securing pins in sockets, movably or not |
| 3/183 | . . . {with at least one of the hinge parts having a cup-shaped fixing part, e.g. for attachment to cabinets or furniture} | 5/121 | . . . {Screw-threaded pins} |
| 3/186 | . . . {Scissors hinges, with two crossing levers and five parallel pins} | 2005/122 | {externally threaded} |
| 5/00 | Construction of single parts, e.g. the parts for attachment | 2005/124 | {internally threaded} |
| 5/02 | . Parts for attachment, e.g. flaps | 5/125 | {Non-removable, snap-fitted pins (removable snap-fitted pins E05D 7/1022 , E05D 7/1055)} |
| | | 5/127 | {by forcing the pin into the socket (E05D 5/125 takes precedence)} |
| | | 5/128 | {the pin having a recess or through-hole engaged by a securing member} |
| | | 5/14 | . . Construction of sockets or sleeves |
| | | 2005/145 | . . . {with elastically deformable parts} |

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| 5/16 | . . . to be secured without special attachment parts on the socket or sleeve | 2007/1038 | . . . {by axially moving free sockets} |
| 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) | 7/1044 | . . {in an axial direction (E05D 7/1005 takes precedence)} |
| 7/0009 | . {Adjustable hinges (E05D 7/04 takes precedence)} | 7/105 | . . . {requiring a specific angular position} |
| 7/0018 | . . {at the hinge axis} | 7/1055 | . . . {with snap-fitted pins} |
| 7/0027 | . . . {in an axial direction} | 7/1061 | . . {in a radial direction (E05D 7/1005 takes precedence)} |
| 2007/0036 | {with axially fixed hinge pins} | 7/1066 | . . . {requiring a specific angular position} |
| 7/0045 | . . . {in a radial direction} | 7/1072 | {the pin having a non-circular cross-section} |
| 7/0054 | {by means of eccentric parts} | 7/1077 | . . . {with snap-fitted pins} |
| 2007/0063 | {Eccentric hinge pins} | 7/1083 | . . {facilitating simultaneous assembly of a plurality of hinges, e.g. for mounting heavy wings} |
| 2007/0072 | {with sliding sleeves} | 2007/1088 | . . . {using hinge pins having different lengths} |
| 2007/0081 | {with swinging or rolling sleeves} | 2007/1094 | . . {Guiding devices therefor} |
| 7/009 | . {Elongate hinges, e.g. piano-hinges} | 7/12 | . to allow easy detachment of the hinge from the wing or the frame ({ E05D 15/507 takes precedence}) |
| 7/02 | . for use on the right-hand as well as the left-hand side; Convertible right-hand or left-hand hinges | 7/121 | . . {specially adapted for vehicles} |
| 7/04 | . Hinges adjustable relative to the wing or the frame | 7/123 | . . {specially adapted for cabinets or furniture} |
| 7/0407 | . . {the hinges having two or more pins and being specially adapted for cabinets or furniture} | 7/125 | . . . {the hinge having two or more pins} |
| 7/0415 | . . {with adjusting drive means} | 2007/126 | . . {in an axial direction} |
| 7/0423 | . . . {Screw-and-nut mechanisms (E05D 7/0407 , E05D 7/043 take precedence)} | 2007/128 | . . {in a radial direction} |
| 7/043 | . . {by means of dowel attachments} | 7/14 | . Hinges for safes |
| 2007/0438 | . . . {with bolts fixedly mounted on the hinge part} | 9/00 | Flaps or sleeves specially designed for making from particular material, e.g. hoop-iron, sheet metal, plastics |
| 2007/0446 | . . . {with threaded bolts fixedly mounted on the hinge part} | 9/005 | . {from plastics (E05D 1/02 takes precedence)} |
| 2007/0453 | . . . {with threaded sleeves} | 11/00 | Additional features or accessories of hinges {(edge protecting devices E06B 3/88)} |
| 2007/0461 | . . {in angular arrangement to the wing or the frame} | 11/0009 | . {Templates for marking the position of fittings on wings or frames (implements for making doors, windows or frames E04F 21/003)} |
| 2007/0469 | . . {in an axial direction} | 11/0018 | . {Anti-tamper devices} |
| 2007/0476 | . . {Pocket hinges} | 11/0027 | . . {arranged on or near the hinge and comprising parts interlocking as the wing closes, e.g. security studs} |
| 2007/0484 | . . {in a radial direction} | 2011/0036 | . . . {near the hinge} |
| 2007/0492 | . . {in three directions} | 2011/0045 | . . . {on the hinge} |
| 7/06 | . to allow tilting of the members | 11/0054 | . {Covers, e.g. for protection} |
| 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}) | 2011/0063 | . . {for screw-heads or bolt-heads} |
| 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 | 2011/0072 | . . {for the gap between hinge parts} |
| 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} | 11/0081 | . {for transmitting energy, e.g. electrical cable routing} |
| 7/083 | . . . with a fixed pivot axis | 2011/009 | . {Impact absorbing hinges for vehicle doors} |
| 7/084 | . . . with a movable pivot axis | 11/02 | . Lubricating arrangements |
| 7/085 | with two or more pivot axes, e.g. used at the same time | 11/04 | . relating to the use of free balls as bearing-surfaces (E05D 7/06 takes precedence) |
| 7/086 | . . . Braking devices structurally combined with hinges (braking devices for windows per se E05F 5/00) | 2011/045 | . . {located in line with the hinge axis} |
| 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) | 11/06 | . Devices for limiting the opening movement of hinges |
| 7/1005 | . . {by axially moving free pins, balls or sockets} | 11/08 | . Friction devices between relatively-movable hinge parts (E05D 7/086 takes precedence) |
| 7/1011 | . . . {biased by free springs (E05D 7/1016 takes precedence)} | 11/081 | . . {with both radial and axial friction, e.g. conical friction surfaces} |
| 7/1016 | . . . {requiring a specific angular position} | 11/082 | . . {with substantially radial friction, e.g. cylindrical friction surfaces} |
| 7/1022 | . . . {with snap-fitted pins} | 11/084 | . . . {the friction depending on direction of rotation or opening angle of the hinge} |
| 2007/1027 | . . . {by axially moving free pins} | 2011/085 | . . . {the friction depending on the opening angle} |
| 2007/1033 | . . . {by axially moving free balls} | 11/087 | . . {with substantially axial friction, e.g. friction disks} |
| | | 2011/088 | . . {with automatic disengagement} |

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| 11/10 | . Devices for preventing movement between relatively-movable hinge parts | 15/02 | . for revolving wings |
| 11/1007 | . . {with positive locking} | 15/04 | . with arms fixed on the wing pivoting about an axis outside of the wing |
| 11/1014 | . . {for maintaining the hinge in only one position, e.g. closed} | 15/06 | . for wings sliding horizontally more or less in their own plane |
| 11/1021 | . . . {the hinge having two or more pins and being specially adapted for cabinets or furniture} | 15/0604 | . . {allowing an additional movement (E05D 15/10 takes precedence; raising wings before sliding E05D 15/565)} |
| 11/1028 | . . {for maintaining the hinge in two or more positions, e.g. intermediate or fully open} | 15/0608 | . . . {caused by track lay-out} |
| 2011/1035 | . . . {with circumferential and evenly distributed detents around the pivot-axis} | 15/0613 | {with multi-directional trolleys} |
| 11/1042 | . . . {the maintaining means being a cam and a torsion bar, e.g. motor vehicle hinge mechanisms} | 15/0617 | . . {of cantilever type} |
| 11/105 | . . . {the maintaining means acting perpendicularly to the pivot axis} | 15/0621 | . . {Details, e.g. suspension or supporting guides (E05D 15/0604 , E05D 15/08 - E05D 15/14 take precedence)} |
| 11/1057 | {specially adapted for vehicles (E05D 11/1064 takes precedence)} | 15/0626 | . . . {for wings suspended at the top} |
| 11/1064 | {with a coil spring perpendicular to the pivot axis} | 15/063 | {on wheels with fixed axis} |
| 11/1071 | {specially adapted for vehicles} | 15/0634 | {with height adjustment} |
| 11/1078 | . . . {the maintaining means acting parallel to the pivot} | 15/0639 | {by vertical bolts} |
| 11/1085 | {specially adapted for vehicles} | 15/0643 | {on balls or floating rollers} |
| 2011/1092 | . . {the angle between the hinge parts being adjustable} | 15/0647 | {on sliding blocks} |
| 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) | 15/0652 | {Tracks (E05D 15/063 - E05D 15/0647 and E05D 15/0656 take precedence)} |
| 13/003 | . {Anti-dropping devices (E05D 13/1223 , E05D 13/1246 , E05D 13/1269 , E05D 13/1292 take precedence)} | 15/0656 | {Bottom guides} |
| 13/006 | . . {fixed to the wing, i.e. safety catches} | 15/066 | . . . {for wings supported at the bottom} |
| 13/04 | . {Fasteners specially adapted for holding sliding wings open (for holding wings closed E05C)} | 15/0665 | {on wheels with fixed axis} |
| 13/06 | . . {with notches for vertically sliding wings} | 15/0669 | {with height adjustment} |
| 13/08 | . . {acting by friction for vertically sliding wings} | 15/0673 | {by vertical bolts} |
| 13/10 | . {Counterbalance devices} | 15/0678 | {on balls or floating rollers} |
| 13/12 | . . {with springs} | 15/0682 | {on sliding blocks} |
| 13/1207 | . . . {with tension springs} | 15/0686 | {Tracks (E05D 15/0665 - E05D 15/0682 and E05D 15/0691 take precedence)} |
| 13/1215 | {specially adapted for overhead wings (E05D 13/1223 takes precedence)} | 15/0691 | {Top guides} |
| 13/1223 | {Spring safety devices} | 2015/0695 | . . . {Magnetic suspension or supporting means} |
| 13/123 | . . . {with compression springs} | 15/08 | . . consisting of two or more independent parts movable each in its own guides |
| 13/1238 | {specially adapted for overhead wings (E05D 13/1246 takes precedence)} | 15/10 | . . movable out of one plane into a second parallel plane |
| 13/1246 | {Spring safety devices} | 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)} |
| 13/1253 | . . . {with canted-coil torsion springs} | 15/1005 | . . . {the wing being supported on arms movable in horizontal planes} |
| 13/1261 | {specially adapted for overhead wings (E05D 13/1269 takes precedence)} | 15/1007 | {specially adapted for use in railway-cars or mass transit vehicles} |
| 13/1269 | {Spring safety devices} | 15/101 | {specially adapted for vehicles (E05D 15/1007 takes precedence)} |
| 13/1276 | . . . {with coiled ribbon springs, e.g. constant force springs (E05D 13/1253 takes precedence)} | 15/1013 | {specially adapted for windows} |
| 13/1284 | {specially adapted for overhead wings (E05D 13/1292 takes precedence)} | 15/1015 | {with an intermediate tilt position} |
| 13/1292 | {Spring safety devices} | 2015/1018 | . . . {with the track rotating around its axis} |
| 13/14 | . . {with weights} | 15/1021 | . . . {involving movement in a third direction, e.g. vertically} |
| 13/145 | . . . {specially adapted for overhead wings} | 15/1023 | {specially adapted for use in railway-cars or mass transit vehicles} |
| 15/00 | Suspension arrangements for wings (arrangements of wings not characterised by the construction of the supporting means E06B 3/32) | 2015/1026 | . . . {accessories, e.g. sliding or rolling guides, latches} |
| | | 2015/1028 | . . . {with only the wing moving transversely} |
| | | 2015/1031 | {the wing supported on arms extending from the carriage} |
| | | 2015/1034 | {the carriage having means for preventing rotation of the wing} |
| | | 2015/1036 | {the arms being movable in vertical, e.g. transverse, planes} |

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| 2015/1039 | {the wing sliding transversely on the carriage} | 15/266 | . . . {comprising two pivots placed at opposite edges of the wing} |
| 15/1042 | . . . {with transversely moving carriage (E05D 15/1065 takes precedence)} | 2015/268 | . . {the wings being successively folded} |
| 15/1044 | {specially adapted for use in railway-cars or mass transit vehicles} | 15/28 | . supported on arms movable in horizontal plane |
| 15/1047 | {specially adapted for vehicles (E05D 15/1044 takes precedence)} | 15/30 | . . with pivoted arms and sliding guides |
| 2015/1049 | {the carriage swinging or rotating in a transverse plane} | 15/32 | . . with two pairs of pivoted arms |
| 2015/1052 | {transversely over-dimensioned track sections or carriage} | 15/34 | . . . with wings opening parallel to themselves |
| 2015/1055 | {with slanted or curved track sections or cams} | 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 |
| 2015/1057 | {the carriage swinging or rotating in those track sections} | 15/38 | . . for upwardly-moving wings, e.g. up-and-over doors |
| 2015/106 | {transversely orientated track sections} | 15/40 | . supported on arms movable in vertical planes |
| 2015/1063 | {disconnecting the carriage from the track} | 15/401 | . . {specially adapted for overhead wings (E05D 15/403 - E05D 15/46 take precedence)} |
| 15/1065 | . . . {with transversely moving track} | 15/403 | . . {with arms fixed on the wing pivoting about an axis outside the wing} |
| 15/1068 | {specially adapted for use in railway-cars or mass transit vehicles} | 15/405 | . . {with curved arms fixed on the wing, rolling on a support} |
| 2015/1071 | {the track being directly linked to the fixed frame, e.g. slidingly} | 15/406 | . . {with pivoted arms and sliding guides (E05D 15/42 , E05D 15/44 take precedence)} |
| 2015/1073 | {rocking transversely} | 15/408 | . . . {with sliding guides fixed to the wing} |
| 2015/1076 | {swinging transversely, e.g. on arms} | 15/42 | . . with pivoted arms and horizontally-sliding guides |
| 2015/1078 | {swinging or rotating in a horizontal plane} | 15/425 | . . . {specially adapted for overhead wings} |
| 15/1081 | {specially adapted for vehicles (E05D 15/1068 takes precedence)} | 15/44 | . . with pivoted arms and vertically-sliding guides |
| 2015/1084 | {the carriage being directly linked to the fixed frame, e.g. slidingly} | 15/445 | . . . {specially adapted for overhead wings} |
| 2015/1086 | {swingingly, e.g. on arms} | 15/46 | . . with two pairs of pivoted arms |
| 2015/1089 | {the carriage having means for preventing rotation of the wing} | 15/463 | . . . {specially adapted for overhead wings} |
| 2015/1092 | {the carriage swinging or rotating in curved track sections} | 15/466 | . . . {specially adapted for windows} |
| 2015/1094 | {disconnecting itself from the track} | 15/48 | . allowing alternative movements (E05D 15/0604 takes precedence) ; for vertically-sliding wings E05D 15/22) |
| 2015/1097 | {with the carriage and track forming a telescopic element} | 2015/482 | . . {for panic doors} |
| 15/12 | . . consisting of parts connected at their edges | 2015/485 | . . {Swinging or sliding movements} |
| 15/14 | . . with movable arms situated in the plane of the wing | 2015/487 | . . {Tilting or swinging movements} |
| 15/16 | . for wings sliding vertically more or less in their own plane | 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) |
| 15/165 | . . {Details, e.g. sliding or rolling guides (E05D 15/18 - E05D 15/24 take precedence)} | 15/502 | . . . {by axial separation of the hinge parts at the hinge axis} |
| 15/18 | . . consisting of two or more independent parts, movable each in its own guides | 15/505 | . . . {by radial separation of the hinge parts at the hinge axis} |
| 15/20 | . . movable out of one plane into a second parallel plane | 15/507 | . . . {by detachment of the hinge from the wing or the frame} |
| 15/22 | . . allowing an additional movement (E05D 15/20 takes precedence)} | 15/52 | . . for opening about a vertical as well as a horizontal axis |
| 2015/225 | . . . {specially adapted for overhead wings} | 15/5202 | . . . {with non-horizontally extending checks} |
| 15/24 | . . consisting of parts connected at their edges | 15/5205 | . . . {with horizontally-extending checks} |
| 15/242 | . . . {Hinge connections between the parts} | 15/5208 | . . . {with means for transmitting movements between vertical and horizontal sliding bars, rods or cables} |
| 15/244 | . . . {Upper part guiding means} | 15/5211 | . . . {Concealed suspension fittings} |
| 15/246 | {with additional guide rail for producing an additional movement} | 15/5214 | . . . {Corner supports} |
| 15/248 | {with lever arms for producing an additional movement} | 15/5217 | . . . {Tilt-lock devices} |
| 15/26 | . for folding wings | 15/522 | . . . with disconnecting means for the appropriate pivoting parts |
| 15/262 | . . {folding vertically} | 15/523 | using movable rods |
| 15/264 | . . {for bi-fold wings} | 15/524 | Actuating mechanisms |

E05D

- 15/526 . . . Safety devices { ([E05D 15/5217](#) takes precedence) }
- 2015/5263 { acting parallel to the plane of the wing }
- 2015/5266 { acting perpendicular to the plane of the wing }
- 15/54 . . for opening both inwards and outwards
- 15/56 . with successive different movements { ([raising wings before being turned E05F 7/02](#)) }
- 15/565 . . { for raising wings before sliding }
- 15/58 . . with both swinging and sliding movements
- 15/581 . . . { the swinging axis laying in the sliding direction ([E05D 15/1015](#) takes precedence) }
- 15/582 . . . { with horizontal swinging axis ([E05D 15/581](#) takes precedence) }
- 15/583 { specially adapted for overhead wings }
- 2015/585 . . . { with stationary hinge parts }
- 2015/586 . . . { with travelling hinge parts }
- 2015/587 . . . { with axially separating hinge parts }
- 2015/588 . . . { with radially separating hinge parts }
- 2700/00 Hinges or other suspension devices especially for doors or windows**
- 2700/02 . Hinges with one pivot axis and one bearing surface
- 2700/04 . Hinges with one pivot axis and more than one bearing surface
- 2700/10 . Various door and window fittings, e.g. suspension devices for double hung windows or screens
- 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