

CPC COOPERATIVE PATENT CLASSIFICATION

E FIXED CONSTRUCTIONS

BUILDING

E06 DOORS, WINDOWS, SHUTTERS, OR ROLLER BLINDS IN GENERAL; LADDERS

E06B FIXED OR MOVABLE CLOSURES FOR OPENINGS IN BUILDINGS, VEHICLES, FENCES OR LIKE ENCLOSURES IN GENERAL, e.g. DOORS, WINDOWS, BLINDS, GATES (shades or blinds for greenhouses [A01G 9/22](#); curtains [A47H](#); lids for car boots or bonnets [B62D 25/10](#); skylights [E04B 7/18](#); sunshades, awnings [E04F 10/00](#))

NOTES

1. This subclass does not cover combinations of wings or frames with operating, mounting, latching or locking means of the type found in class [E05](#), which are covered by the relevant subclasses of class [E05](#), except such as are covered by groups [E06B 7/086](#), [E06B 9/00](#), or [E06B 11/02](#) of this subclass.
2. In this subclass, the following terms or expressions are used with the meanings indicated:
 - "wing" means a swingable, slidable or otherwise movable member such as a door or window, for closing an opening;
 - "wing frame" means the peripheral edge or edges which define the outer border of the wing.
3. For vehicle door or window arrangements, attention is drawn to Note (1) following the title of subclass [B60J](#).

WARNINGS

1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:
[E06B 11/06](#) covered by [E05B 65/0007](#)
2. 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.

1/00	Border constructions of openings in walls, floors, or ceilings; Frames to be rigidly mounted in such openings (E06B 5/00 takes precedence; features relating also to inner frames or wing frames, features relating solely to the mounting of inner frames E06B 3/00 ; corner joints or edge joints E06B 3/96)	1/16	. . . . Hollow frames
		1/18	. . . composed of several parts with respect to the cross-section of the frame itself
		1/20	. . . . adjustable with respect to the thickness of walls
1/003	. {Cavity wall closers; Fastening door or window frames in cavity walls (lintels E04C 3/02)}	1/22	. . . with integral thresholds of special form
1/006	. {of curvilinear outline}	1/24	. . Frames of natural stone, concrete, or other stone-like material
1/02	. Base frames, i.e. template frames for openings in walls or the like, provided with means for securing a further rigidly-mounted frame; Special adaptations of frames to be fixed therein ({ E06B 1/003 , E06B 1/24 take precedence; fastening door or window frames per se E06B 1/56)}	1/26	. . Frames of plastics
		1/28	. . . Hollow frames (E06B 1/30 takes precedence)
		1/30	. . . composed of several parts with respect to the cross-section of the frame itself
1/04	. Frames for doors, windows, or the like to be fixed in openings ({of curvilinear outline E06B 1/006 ; } special adaptations for fixing in base frames E06B 1/02 ; features relating solely to the mounting of glass panes or other sheets E06B 3/00)	1/32	. . Frames composed of parts made of different materials
1/045	. . {with separate wing abutment strips, e.g. adjustable; Door stops (sealing arrangements E06B 7/16)}	1/325	. . . {comprising insulation between two metal section members}
1/06	. . Wooden frames	1/34	. . Coverings, e.g. protecting against weather, for decorative purposes
1/08	. . . composed of several parts with respect to the cross-section of the frame itself	1/342	. . . {Reveal covering members disposed alongside of a window frame}
1/10	. . . . adjustable with respect to the thickness of walls	1/345	. . . {Renovation window frames covering the existing old frames}
1/12	. . Metal frames	1/347	. . . {Renovation door frames covering the existing old frames}
1/14	. . . of special cross-section (E06B 1/18 , E06B 1/22 take precedence){not used}	1/36	. . Frames uniquely adapted for windows
		1/363	. . . {Bay windows}
		1/366	. . . {Mullions or transoms therefor}
		1/38	. . . for shop, show, or like large windows
		1/40	. . . Frames with parts removable to admit the glass (E06B 1/38 takes precedence)

- 1/52 . . Frames specially adapted for doors
- 1/522 . . . {for overhead garage doors}
- 1/524 . . . {Mullions; Transoms}
- 1/526 . . . {for door wings that can be set up to open either left or right, outwards or inwards, e.g. provided with grooves for easily detachable hinges or latch plates (locks therefor [E05B 63/04](#); hinges therefor [E05D 7/02](#))}
- 1/528 . . . {with ducts for cables or pipes}
- 1/56 . Fastening frames to the border of openings {or to similar contiguous frames ([E06B 1/003](#) takes precedence)}
- 1/58 . . by filling up the joints, e.g. by cementing
- 1/60 . . by mechanical means, e.g. anchoring means
- 1/6007 . . . {between similar contiguous frames (bay windows [E06B 1/363](#))}
- 1/6015 . . . {Anchoring means ([E06B 1/6007](#), [E06B 1/6046](#) - [E06B 1/6092](#) take precedence)}
- 1/6023 {completely hidden between the frame and the border of the opening, at least part of the means being previously fixed to the wall ([E06B 1/6038](#) takes precedence)}
- 1/603 {adjustable}
- 1/6038 {specially adapted for being embedded in the wall}
- 1/6046 . . . {Clamping means acting perpendicular to the wall opening; Fastening frames by tightening or drawing them against a surface parallel to the opening ([E06B 1/6007](#) takes precedence)}
- 1/6053 {the frame being moved perpendicularly towards the opening and held by means of snap action behind a protrusion on the border of the opening}
- 1/6061 {with separate clamping means acting on opposite wall or associated surfaces}
- 1/6069 . . . {Separate spacer means acting exclusively in the plane of the opening; Shims; Wedges; Tightening of a complete frame inside a wall opening ([E06B 1/6084](#) takes precedence)}
- 1/6076 {of screw-type}
- 1/6084 . . . {Mounting frames elastically, e.g. with springs or other elastic material, between the wall and the frame ([E06B 1/6046](#) takes precedence)}
- 1/6092 . . . {Fastening door frames to the floor or ceiling; Jamb feet; Cross members uniting the jamb feet ([E06B 1/70](#) and [E06B 3/9632](#) take precedence)}
- 1/62 . Tightening or covering joints between the border of openings and the frame {or between contiguous frames} ([E06B 1/34](#) takes precedence)
- 2001/622 . . {especially adapted for door frames; Joint covering devices where the wall surface is parallel to the adjacent door or window frame part}
- 2001/624 . . {with parts to be embedded in the stucco layer or otherwise linked to this layer}
- 2001/626 . . {comprising expanding foam strips}
- 2001/628 . . {Separate flexible joint covering strips; Flashings}
- 1/64 . . by loosely-inserted means, e.g. strip, resilient tongue
- 1/66 . . by labyrinth packings
- 1/68 . . by profiled external parts
- 1/70 . Sills; Thresholds
- 1/702 . . {Window sills}
- 1/705 . . . {End-caps therefor}
- 2001/707 . . {Thresholds with special provision for insulation}
- 3/00 Window sashes, door leaves, or like elements for closing {wall or like} openings; Layout of fixed or moving closures, e.g. windows {in wall or like openings}; Features of rigidly-mounted outer frames relating to the mounting of wing frames ([E06B 5/00](#) takes precedence; shutters or the like [E06B 9/00](#); glass panes [C03](#))**
- 3/01 . Removable or disappearing walls for hangars or other halls, e.g. for aircraft (wall constructions [E04B 2/00](#))
- 3/02 . Wings made completely of glass {([E06B 3/4681](#) takes precedence)}
- 3/025 . . {consisting of multiple glazing units (units [per se](#) [E06B 3/66](#))}
- 3/04 . Wing frames not characterised by the manner of movement (features relating to the manner of movement [E06B 3/32](#))
- 3/06 . . Single frames
- 3/08 . . . Constructions depending on the use of specified materials ([E06B 3/24](#) takes precedence)
- 3/10 of wood
- 3/105 {reinforced}
- 3/12 of metal
- 3/14 of special cross-section {(not used, [see subgroup and E06B 3/12](#))}
- 3/16 Hollow frames {of special construction, e.g. made of folded sheet metal or of two or more section parts connected together}
- 3/163 {with a filled cavity}
- 2003/166 {with a filled cavity}
- 3/18 of concrete or other stone-like material
- 3/20 of plastics
- 3/205 {moulded or extruded around a core}
- 3/22 Hollow frames {([E06B 3/205](#) takes precedence)}
- 3/221 {with the frame member having local reinforcements in some parts of its cross-section or with a filled cavity}
- 3/222 {with internal prefabricated reinforcing section members inserted after manufacturing of the hollow frame}
- 3/223 {the hollow frame members comprising several U-shaped parts assembled around a reinforcing core member}
- 2003/224 {with reinforcing plastic section members}
- 2003/225 {Means for stabilising the insert}
- 2003/226 {by adhesives or filling up the remainder of the cavity, e.g. together with foam}
- 2003/227 {with reinforcing wooden section members}
- 2003/228 {with separate reinforcements situated outside the cavity or in the walls}
- 3/24 . . . specially adapted for double glazing (separable parts for securing panes [E06B 3/64](#))

- 3/26 . . . Compound frames, i.e. one frame within or behind another ([E06B 3/28](#) takes precedence; arrangements of movable frames [E06B 3/32](#))
- 3/2605 . . . {with frames permanently mounted behind or within each other, each provided with a pane or screen}
- 2003/261 {Frames made of wood}
- 2003/2615 {Frames made of metal}
- 2003/262 {Frames made of plastic material}
- 2003/2625 {with different frames made from different materials}
- 3/263 . . . Frames with special provision for insulation
- 3/26301 . . . {with prefabricated insulating strips between two metal section members (with two metal frame members having interpenetrating or overlapping parts when mounted [E06B 3/26336](#); combined with insulating elements formed *in situ* [E06B 3/2675](#))}
- 3/26303 {with thin strips, e.g. defining a hollow space between the metal section members}
- 3/26305 {Connection details (deformation of portions of the metal frame members [E06B 3/273](#); expansion of the extremities of the insulating elements [E06B 3/277](#))}
- 3/26307 {Insulating strips and metal section members both having L-shaped ribs, the engagement being made by a movement transversal to the plane of the strips}
- 2003/26309 {using glue}
- 2003/2631 {Screw or pin connections}
- 2003/26312 {Snap connections}
- 2003/26314 {Provisions for reducing the shift between the strips and the metal section members}
- 2003/26316 {Disconnectable connections or permitting shifting between the sections}
- 2003/26318 {Connecting by rotating the metal section or the strip around its longitudinal axis}
- 3/2632 . . . {with arrangements reducing the heat transmission, other than an interruption in a metal section}
- 2003/26321 {with additional prefab insulating materials in the hollow space}
- 2003/26323 {with coatings reducing the radiation}
- 2003/26325 {the convection or radiation in a hollow space being reduced, e.g. by subdividing the hollow space}
- 2003/26327 {with separate thin walled inserts}
- 2003/26329 {the insulating strips between the metal sections being interconnected}
- 2003/2633 {the insulating strips between the metal sections having ribs extending into the hollow space}
- 2003/26332 {Arrangements reducing the heat transfer in the glazing rabbet or the space between the wing and the casing frame}
- 2003/26334 {Contact reducing arrangements between the insulating strips and the metal sections}
- 3/26336 . . . {with two metal frame members having interpenetrating or overlapping parts when mounted (involving sheet metal section members [E06B 3/2735](#))}
- 3/26338 . . . {comprising short insulating elements disposed at intervals}
- 3/2634 {without separate insulating elements, e.g. the heat transmission being reduced by a smaller cross-section}
- 3/26341 {comprising only one metal frame member combined with an insulating frame member}
- 3/26343 {with two or more separate insulating zones alternating with metal section members}
- 3/26345 {for wooden or plastic section members}
- 3/26347 {specially adapted for sliding doors or windows}
- 2003/26349 {Details of insulating strips}
- 2003/2635 {Specific form characteristics}
- 2003/26352 {hollow}
- 2003/26354 {filled}
- 2003/26356 {Honeycomb}
- 2003/26358 {stepped or undulated}
- 2003/26359 {making flush mounting with neighbouring metal section members possible}
- 2003/26361 {Openings, incisions or indents}
- 2003/26363 {Screw channels}
- 2003/26365 {Composed of several similar parts positioned one after the other}
- 2003/26367 {making flush mounting with neighbouring metal section members possible}
- 2003/26369 {Specific material characteristics}
- 2003/2637 {reinforced}
- 2003/26372 {with coatings}
- 2003/26374 {with parts of differing nature}
- 2003/26376 {Non-plastic materials, e.g. wood, metal}
- 2003/26378 {comprising foam}
- 2003/26379 {Specific characteristics concerning the disposition between the metal section members}
- 2003/26381 {disposed obliquely}
- 2003/26383 {with two similar parallel strips, one shifted to one side}
- 2003/26385 {with strips disposed perpendicular to each other}
- 2003/26387 {Performing extra functions}
- 2003/26389 {Holding sealing strips or forming sealing abutments}
- 2003/2639 {Provisions for fittings, e.g. locks or hinges}
- 2003/26392 {Glazing bars}
- 2003/26394 {Strengthening arrangements in case of fire}
- 2003/26396 {specially adapted for sheet metal frames}
- 2003/26398 {with two metal sections clamping a pane}
- 3/267 with insulating elements formed *in situ*
- 3/2675 {combined with prefabricated insulating elements}
- 3/273 with prefabricated insulating elements held in position by deformation of portions of the {metal} frame members
- 3/2735 {comprising a sheet metal member, an edge or which is bent over the edge of the other metal member with interposition of an insulating element}
- 3/277 with prefabricated insulating elements held in position by expansion of the {extremities of the} insulating elements
- 3/28 with additional removable glass panes or the like, framed or unframed

- 3/285 . . . {flexible transparent foils without a proper frame fixed and sealed at a distance from the existing glass pane}
- 3/30 . Coverings, e.g. protecting against weather, for decorative purposes {(for door leaves [E06B 3/7001](#))}
- 3/301 . . {consisting of prefabricated profiled members or glass}
- 3/302 . . . {Covering wooden frames with metal or plastic profiled members}
- 3/303 . . . {Covering metal or plastic frames with wooden profiled members}
- 3/304 {the frames consist of two metal section members with insulating zone in between}
- 3/305 . . . {Covering metal frames with plastic or metal profiled members}
- 3/306 . . . {Covering plastic frames with metal or plastic profiled members}
- 3/307 . . . {Coverings with special provisions for insulation, e.g. foam filled}
- 3/308 . . {Wing frames covered on the outside by a rigidly-mounted outer frame}
- 3/32 . Arrangements of wings characterised by the manner of movement; Arrangements of movable wings in openings; Features of wings or frames relating solely to the manner of movement of the wing {(fittings or supporting means, separable from the frame, for guiding or controlling the movement of wings, arrangements of wings characterised by particular forms of such means [E05D](#))}
- 3/325 . . {Wings opening towards the outside}
- 3/34 . . with only one kind of movement ([E06B 3/48](#) takes precedence)
- 3/341 . . . {Tilt-and-turn wings}
- 2003/343 . . . {with at least two axes of rotation without additional frame within the wing}
- 2003/345 . . . {with additional rotating frame within the wing}
- 2003/346 {where the additional frame rotates around a vertical axis}
- 2003/348 {where the additional frame rotates around a horizontal axis}
- 3/36 . . . with a single vertical axis of rotation at one side of the opening, or swinging through the opening (wings requiring lifting before opening [E06B 3/52](#))
- 3/362 {Double winged doors or windows}
- 3/365 {Astragals for double doors}
- 3/367 {specially adapted for furniture}
- 3/38 . . . with a horizontal axis of rotation at the top or bottom of the opening {([E06B 3/5036](#) takes precedence)}
- 3/385 {specially adapted for furniture}
- 3/40 . . . with a vertical or horizontal axis of rotation not at one side of the opening, e.g. turnover wings
- 2003/403 {where the axis of rotation is horizontal}
- 2003/406 {where the axis of rotation is vertical}
- 3/42 . . . Sliding wings; Details of frames with respect to guiding {([E06B 3/26347](#) and [E06B 3/92](#) take precedence)}
- 3/44 Vertically-sliding wings
- 3/4407 {Single-hung, i.e. having a single vertical sliding panel}
- 3/4415 {Double-hung, i.e. with two vertical sliding panels}
- 3/4423 {disappearing in a wall pocket; Pockets therefor}
- 3/443 {specially adapted for furniture}
- 2003/4438 {characterised by the material used for the frames}
- 2003/4446 {Wood}
- 2003/4453 {Metal}
- 2003/4461 {Plastics}
- 2003/4469 {with at least two frames made from different materials}
- 2003/4476 {Coverings, e.g. for protecting against weather or for decorative purposes}
- 2003/4484 {Special provisions for mounting or dismantling sashes}
- 2003/4492 {provided with screens}
- 3/46 Horizontally-sliding wings {([E06B 3/487](#) takes precedence)}
- 3/4609 {for windows ([E06B 3/4654](#) - [E06B 3/4681](#) take precedence)}
- 3/4618 {the sliding wing being arranged beside a fixed wing ([E06B 3/4627](#) takes precedence)}
- 3/4627 {with the sliding wing flush closing or moving a considerable distance towards the opening when closing}
- 3/4636 {for doors ([E06B 3/4609](#) and [E06B 3/4654](#) - [E06B 3/4681](#) take precedence; sliding shower doors [A47K 3/34](#))}
- 3/4645 {with the sliding wing flush closing or moving a considerable distance towards the opening when closing}
- 3/4654 {disappearing in pockets in the wall; Pockets therefor}
- 3/4663 {specially adapted for furniture}
- 3/4672 {with the sliding wing flush closing or moving a considerable distance towards the opening when closing}
- 3/4681 {made of glass panes without frames ([E06B 3/4663](#) takes precedence)}
- 3/469 {Arrangements at the overlapping vertical edges of the wings that engage when closing}
- 3/48 . . . Wings connected at their edges, e.g. foldable wings
- 3/481 . . . {Wings foldable in a zig-zag manner or bi-fold wings}
- 3/482 {specially adapted for furniture}
- 3/483 {folding upwardly ([E06B 3/482](#) takes precedence)}
- 3/485 . . . {Sectional doors}
- 3/486 {with hinges being at least partially integral part of the section panels}
- 3/487 {sliding laterally}
- 3/488 {with horizontal strengthening means; anti-sag devices}
- 3/50 . . . with more than one kind of movement ([E06B 3/48](#) takes precedence){([E06B 3/92](#) takes precedence)}

3/5009	. . . {where the sliding and rotating movements are necessarily performed simultaneously (E06B 3/5027 , E06B 3/5036 take precedence)}	3/585	. . . {adjustable, e.g. for accommodating panes of various thickness, or with provisions for altering the clamping force on the pane (E06B 3/5871 takes precedence)}
3/5018	. . . . {where the pivot axis slides during pivoting of the wing}	3/5857	. . . . {the fixing being adjustable, e.g. in one of several possible positions}
3/5027	. . . {"Austral" windows}	3/5864	. . . . {with adjusting screws, wedges or cams}
3/5036	. . . {Louvre type windows, e.g. windows made of movable strips of glass}	3/5871	. . . {pivotally fixed on the frame; Borders with pivoting parts}
3/5045	. . . {specially adapted for furniture (E06B 3/52 takes precedence)}	3/5878	. . . {the borders being pre-assembled in a frame-like manner on the pane or on the frame before the pane is fitted to the frame (E06B 3/645 takes precedence)}
3/5054	. . . {where the sliding and rotating movements are independent of each other}	3/5885	. . . {Corner arrangements for borders; Devices for making rounded corners}
3/5063	. . . . {the vertical sliding wings having the possibility of an additional rotational movement}	3/5892	. . . {Fixing of window panes in openings in door leaves}
3/5072	. . . . {the horizontal sliding wings having the possibility of an additional rotational movement}	3/60	. . . of clamping cleats of metal
3/5081	. . . . {at least two wings have a different kind of movement}	3/605	. . . . {made of sheet metal}
3/509	. . . {where one of the sliding and rotating movements necessarily precedes the other}	3/62	. . . of rubber-like elastic cleats
3/52	. . . Wings requiring lifting before opening	3/6202	. . . . {positioned between adjoining panes without separate glazing bar}
3/54	. Fixing of glass panes or like plates	3/6205	. . . . {having on at least one lateral side no backing from a separate rigid glazing bead or other stiff part of the window frame}
3/5409	. . {Means for locally spacing the pane from the surrounding frame}	2003/6208	. . . . {with adjustable dimensions}
3/5418	. . {Permanently fixing of an additional unframed pane (compound frames E06B 3/2605)}	2003/6211	. . . . {with tear away strips}
3/5427	. . {the panes mounted flush with the surrounding frame or with the surrounding panes (E06B 3/5436 takes precedence; supporting structures for curtain walls E04B 2/885)}	2003/6214	. . . . {specially adapted for glazing bars}
3/5436	. . {involving holes or indentations in the pane}	2003/6217	. . . . {with specific fixing means}
3/5445	. . . {Support arms engaging the holes or indentations}	2003/622	. . . . {using nails or the like}
3/5454	. . {inside U-shaped section members}	2003/6223	. . . . {with protruding parts anchored in grooves}
2003/5463	. . . {in a preassembled frame, the pane being consecutively introduced obliquely, rotated and shifted}	2003/6226	. . . . {with locking strips}
2003/5472	. . . {in an at least partly preassembled frame by introducing it through a slot in one of the frame members or inserting the pane before completing the frame}	2003/6229	. . . . {with grooves anchoring the cleat on a rim}
3/5481	. . {by means of discrete fixing elements, e.g. glazing clips, glaziers points}	2003/6232	. . . . {using glue}
3/549	. . {by clamping the pane between two subframes}	2003/6235	. . . . {moulded on the pane}
3/56	. . by means of putty, cement, or adhesives only (E06B 3/64 { E06B 3/5427 } take precedence)	2003/6238	. . . . {having extra functions}
3/58	. . by means of borders, cleats, or the like (E06B 3/30 , E06B 3/64 take precedence)	2003/6241	. . . . {with drainage means}
3/5807	. . . {not adjustable}	2003/6244	. . . . {with extra parts sealing against the bottom of the glazing rebate or against the edge of the pane}
3/5814	. . . . {together with putty or fixed by glue}	2003/6247	. . . . {with extra parts sealing against the fixed or another window frame}
3/5821	. . . . {hooked on or in the frame member, fixed by clips or otherwise elastically fixed (E06B 3/585 takes precedence)}	2003/625	. . . . {Specific form characteristics}
3/5828	. . . . . {on or with auxiliary pieces}	2003/6252	. . . . . {wedge-shaped}
3/5835	. . . . . {together with parts of the border in the same undercut groove in the frame (E06B 3/5842 takes precedence)}	2003/6255	. . . . . {H-shaped}
3/5842	. . . . {fixed by a tongue-and-groove or mortise-and-tenon connection substantially parallel to the pane}	2003/6258	. . . . . {U-shaped}
		2003/6261	. . . . . {S-shaped}
		2003/6264	. . . . . {hollow}
		2003/6267	. . . . . {consisting of several separate parts}
		2003/627	. . . . {with specific characteristics concerning the material}
		2003/6273	. . . . . {reinforced, e.g. against elongation}
		2003/6276	. . . . . {with parts of differing nature, e.g. hardness}
		2003/6279	. . . . . {with coverings or embellisher strips}
		2003/6282	. . . . . {of cellular nature}
		2003/6285	. . . . . {with provisions for receiving putty or pasty adhesives}
		2003/6288	. . . . . {with fire resisting properties}
		2003/6291	. . . . {Corner arrangements}
		2003/6294	. . . . . {using separate corner members}

- 2003/6297 {for glazing panels of special shape, e.g. with undulating or U-shaped cross-section}
- 3/64 . . Fixing of more than one pane to a frame
- NOTE**
- Fixing of multiple glazing units to frames is classified in the relevant groups [E06B 3/5409](#) - [E06B 3/62](#), except for the fixing thereof to frames designed for one pane only, which is classified in group [E06B 3/645](#)
- 3/645 . . . {of units comprising two or more parallel panes to frames designed for single panes only, e.g. having too shallow a rabbet}
- 3/66 . Units comprising two or more parallel glass or like panes permanently secured together {(reforming and uniting glass sheets by fusing [C03B 23/00](#); joining glass to glass or to other materials [C03C 27/00](#); laminated glass [B32B 17/10](#))}
- 3/6604 . . {comprising false glazing bars or similar decorations between the panes (connectors therefor [E06B 3/6675](#))}
- 3/6608 . . {without separate spacing elements ([E06B 3/6707](#) and [E06B 3/6715](#) take precedence)}
- 3/6612 . . {Evacuated glazing units}
- 3/6617 . . {one of the panes being larger than another}
- 3/6621 . . {with special provisions for fitting in window frames or to adjacent units; Separate edge protecting strips ([E06B 3/66347](#) takes precedence)}
- 3/6625 . . . {molded on the edges}
- 3/663 . . Elements for spacing panes
- 3/66304 . . . {Discrete spacing elements, e.g. for evacuated glazing units}
- 3/66309 . . . {Section members positioned at the edges of the glazing unit}
- 3/66314 {of tubular shape ([E06B 3/66323](#) and [E06B 3/66333](#) take precedence)}
- 3/66319 {of rubber, plastics or similar materials}
- 3/66323 {comprising an interruption of the heat flow in a direction perpendicular to the unit}
- 3/66328 {of rubber, plastics or similar materials ([E06B 3/66314](#), [E06B 3/66323](#) and [E06B 3/66342](#) take precedence; transparent materials [E06B 3/66333](#))}
- 3/66333 {of unusual substances, e.g. wood or other fibrous materials, glass or other transparent materials}
- 2003/66338 {of glass}
- 3/66342 {characterised by their sealed connection to the panes}
- 3/66347 {with integral grooves or rabbets for holding the panes ([E06B 3/66366](#) takes precedence)}
- 3/66352 {with separate sealing strips between the panes and the spacer}
- 3/66357 {Soldered connections or the like}
- 3/66361 {with special structural provisions for holding drying agents, e.g. packed in special containers}
- 3/66366 {specially adapted for units comprising more than two panes or for attaching intermediate sheets}
- 3/66371 {positioned entirely outside the gap between the panes}
- 3/66376 {comprising lighting means}
- 2003/6638 {with coatings}
- 2003/66385 {with special shapes}
- 2003/6639 {sinuous}
- 2003/66395 {U-shape}
- 3/667 . . . Connectors therefor
- 3/6675 {for connection between the spacing elements and false glazing bars}
- 3/67 . . characterised by additional arrangements or devices for heat or sound insulation {or for controlled passage of light}
- 3/6707 . . . {specially adapted for increased acoustical insulation (doors, windows for insulation against noise [E06B 5/20](#))}
- 3/6715 . . . {specially adapted for increased thermal insulation or for controlled passage of light ([E06B 3/66323](#) takes precedence; coating of glass panes [C03C 17/00](#); devices or arrangements for controlling the intensity, colour, phase, polarisation or direction of light [G02F 1/00](#))}
- 3/6722 {with adjustable passage of light}
- 3/673 . . Assembling the units ([E06B 3/677](#) takes precedence {; making hollow glass sheets or bricks [C03B 23/24](#))}
- 3/67304 {Preparing rigid spacer members before assembly}
- 3/67308 {Making spacer frames, e.g. by bending or assembling straight sections (connectors [E06B 3/667](#))}
- 3/67313 {by bending}
- 3/67317 {Filling of hollow spacer elements with absorbants; Closing off the spacers thereafter}
- 3/67321 {Covering spacer elements, e.g. with sealants}
- 3/67326 {Assembling spacer elements with the panes}
- 3/6733 {by applying, e.g. extruding, a ribbon of hardenable material on or between the panes}
- 3/67334 {by soldering; Preparing the panes therefor}
- 3/67339 {Working the edges of already assembled units}
- 3/67343 {Filling or covering the edges with synthetic hardenable substances}
- 3/67347 {by extrusion techniques}
- 3/67352 {by forming techniques}
- 3/67356 {Covering the edges with bands or profiles}
- 3/6736 {Heat treatment (for soldering [E06B 3/67334](#))}
- 3/67365 {Transporting or handling panes, spacer frames or units during assembly ([E06B 3/67304](#) - [E06B 3/67339](#) take precedence)}
- 3/67369 {Layout of the assembly streets}
- 3/67373 {Rotating panes, spacer frames or units}
- 2003/67378 {Apparatus travelling around the periphery of the pane or the unit}
- 3/67382 {Transport of panes or units without touching the bottom edge}
- 3/67386 {Presses; Clamping means holding the panes during assembly}
- 3/67391 {Apparatus travelling around the periphery of the pane or the unit}

E06B

- 2003/67395 . . . {Non-planar units or of curvilinear outline, e.g. for vehicles}
- 3/677 . . . Evacuating or filling the gap between the panes {; Equilibration of inside and outside pressure}; Preventing condensation in the gap between the panes (by means of spacing elements [E06B 3/663](#)); Cleaning the gap between the panes
- 3/6775 . . . {Evacuating or filling the gap during assembly}
- 3/68 . . . Window bars {(bay windows [E06B 1/363](#); joints for frame members crossing each other [E06B 3/9628](#))}
- 3/685 . . . {False glazing bars ([E06B 3/6604](#) takes precedence)}
- 3/70 . . . Door leaves (wing frames [E06B 3/04](#))
- 3/7001 . . . {Coverings therefor; Door leaves imitating traditional raised panel doors, e.g. engraved or embossed surfaces, with trim strips applied to the surfaces}
- 3/7003 . . . {consisting of several adjacent similar elements, e.g. planks, without outer covering panels}
- 3/7005 . . . {without a separate supporting frame}
- 3/7007 . . . {Door leaves with curved, e.g. cylindrical or oval cross-section ([E06B 3/7001](#) takes precedence)}
- 3/7009 . . . {Door leaves with two similar parts placed one above the other, pivoting separately}
- 2003/7011 . . . {with easily replaceable or interchangeable panels}
- 2003/7013 . . . {put in place through a slot in the frame}
- 3/7015 . . . {characterised by the filling between two external panels (fireproof doors [E06B 5/16](#); noise insulating doors [E06B 5/20](#))}
- 3/7017 . . . {of grating type}
- 2003/7019 . . . {of corrugated type}
- 2003/7021 . . . {consisting of wooden strips filling the whole door}
- 2003/7023 . . . {of foam type}
- 2003/7025 . . . {of cork; of wood or similar fibres}
- 2003/7026 . . . {of granular type}
- 2003/7028 . . . {of cementitious type, e.g. concrete}
- 2003/703 . . . {containing a metallic layer}
- 2003/7032 . . . {of non-vegetal fibrous material, e.g. glass or rock wool}
- 2003/7034 {of asbestos}
- 2003/7036 {of plaster}
- 2003/7038 {made from a slurry}
- 2003/704 {of mineral material which is not further specified}
- 2003/7042 {with a fire retardant layer}
- 2003/7044 . . . {Garage doors}
- 2003/7046 . . . {with provisions for locks, hinges or other fittings}
- 2003/7048 . . . {with arcuate periphery; with openings having an arcuate periphery}
- 2003/7049 . . . {Specific panel characteristics}
- 2003/7051 {of layered construction involving different materials}
- 2003/7053 {corrugated}
- 2003/7055 . . . {Left-right hinged interchangeable door leaves}
- 2003/7057 . . . {with little passing through doors}
- 2003/7059 . . . {Specific frame characteristics}
- 2003/7061 {Wooden frames}
- 2003/7063 {reinforced; in combination with other materials, e.g. foam, honeycomb}
- 2003/7065 {Wood fibres}
- 2003/7067 {of layered construction}
- 2003/7069 {with cladding}
- 2003/7071 {made of a plurality of separate blocks or strips}
- 2003/7073 {with fire retardant measures in frame}
- 2003/7074 {Metal frames}
- 2003/7076 {insulated}
- 2003/7078 {with fire retardant measures in frame}
- 2003/708 {insulated}
- 2003/7082 {Plastic frames}
- 2003/7084 {reinforced with metal or wood sections}
- 2003/7086 {One-piece frames, e.g. made out of a single panel by cutting out a middle portion, moulded frames}
- 2003/7088 {Two-piece frames made of a stile and an U-shaped part surrounding the panel}
- 2003/709 {Frame parts being attached to both sides of the panel which extends till the door edge}
- 2003/7092 {with frame members not directly or resiliently connected to each other}
- 2003/7094 {with ventilated innerspace}
- 2003/7096 {with possibilities to alter the extension of the door}
- 2003/7098 {with bracing means crossing each other, e.g. diagonally disposed}
- 3/72 consisting of frame and panels {, e.g. of raised panel type ([E06B 3/7001](#) - [E06B 3/7015](#) and [E06B 3/82](#) take precedence)}
- 3/721 {with panels on one lateral side of the frame only}
- 3/723 {at least one side of the frame consisting solely of a bent panel edge}
- 3/725 {with separate hollow frames, e.g. foam-filled}
- 3/726 {of metal}
- 3/728 {of sheet metal}
- 3/74 with wooden panels {or frame ([E06B 3/721](#), [E06B 3/725](#) and [E06B 3/76](#) take precedence)}
- 3/76 with metal panels {([E06B 3/721](#) - [E06B 3/725](#) take precedence)}
- 3/78 with panels of plastics {([E06B 3/721](#) - [E06B 3/725](#) take precedence)}
- 3/80 flexible {(upwardly folding flexible screens [E06B 9/262](#))}
- 3/805 {folding sideways (doors of the bellows type [E06B 3/94](#))}
- 3/82 Flush doors, i.e. with completely flat surface ([E06B 3/02](#), {[E06B 3/7003](#) and [E06B 3/7015](#) take precedence}
- 3/822 {with an internal foursided frame}
- 3/825 {with a wooden frame}
- 3/827 {of metal without an internal frame, e.g. with exterior panels substantially of metal}
- 3/84 of plywood {or other wooden panels without an internal frame, e.g. with exterior panels substantially of wood}
- 3/86 of plastics {without an internal frame, e.g. with exterior panels substantially of plastics}
- 3/88 Edge-protecting devices for door leaves ({astragals for double doors [E06B 3/365](#)}; finger guards for doors or windows [E06B 7/36](#))}
- 3/90 Revolving doors; Cages or housings therefor ([turnstiles E06B 11/08](#))}

- 3/903 . . {consisting of arcuate wings revolving around a parallel axis situated outside the wing, e.g. a cylindrical wing revolving around its axis ([E06B 3/906](#) takes precedence)}
- 3/906 . . {combining radially extending wings and separately movable arcuate wings}
- 3/92 . Doors or windows extensible when set in position (foldable wings [E06B 3/48](#); sliding wings for windows [E06B 3/42](#); wall-closing devices which may be rolled up, e.g. shutters, [E06B 9/11](#))([E06B 3/01](#) takes precedence)}
- 3/921 . . {with several parts mounted telescopically inside each other}
- 3/922 . . {with several wings opening horizontally towards the same side of the opening and each closing a separate part of the opening ([E06B 3/921](#) and [E06B 3/928](#) take precedence)}
- 3/924 . . . {positioned in one plane when closed}
- 3/925 . . {with several wings opening vertically towards the same side of the opening and each closing a separate part of the opening ([E06B 3/921](#) and [E06B 3/928](#) take precedence)}
- 3/927 . . . {positioned in one plane when closed}
- 3/928 . . {Doors or windows of the lazy tongs type}
- 3/94 . . Doors of the bellows type
- 3/96 . Corner joints or edge joints for windows, doors, or the like frames or wings ([E06B 3/663](#) takes precedence)}
- 3/9604 . . {Welded or soldered joints ([E06B 3/988](#), [E06B 3/99](#) take precedence; welding of plastics [B29C 65/00](#), soldering or welding of metals [B23K](#))}
- 3/9608 . . . {Mitre joints}
- 3/9612 . . {by filling in situ the hollow ends of the abutted frame members with a hardenable substance}
- 3/9616 . . {characterised by the sealing at the junction of the frame members ([E06B 3/9632](#) takes precedence)}
- 3/962 . . . {Mitre joints}
- 3/9624 . . {with means specially adapted for aligning the frontal surfaces of adjacent frame member ends}
- 3/9628 . . {Mitre joints concealed to look like butt joints}
- 3/9632 . . {between a jamb and the threshold or sill of window or door frames}
- 3/9636 . . {for frame members having longitudinal screw receiving channels}
- 3/964 . . using separate connection pieces, e.g. T-connection pieces ([E06B 3/9604](#) - [E06B 3/9636](#) and [E06B 3/984](#) - [E06B 3/99](#) take precedence)
- 3/9641 . . . {part of which remains visible ([E06B 3/9647](#) takes precedence)}
- 3/9642 . . . {Butt type joints with at least one frame member cut off square; T-shape joints ([E06B 3/9641](#), [E06B 3/9644](#), [E06B 3/9647](#), [E06B 3/9649](#), [E06B 3/968](#) take precedence)}
- 3/9643 {for frame members being in one line with each other}
- 3/9644 . . . {L-shaped corner pieces having two articulated or flexible joined legs; Corner joints with variable angle}
- 3/9645 . . . {Mitre joints ([E06B 3/9641](#), [E06B 3/9644](#), [E06B 3/9647](#), [E06B 3/9649](#), [E06B 3/968](#) take precedence)}
- 3/9646 {using two similar connecting pieces each connected with one or the frame members and drawn together at the joint}
- 3/9647 . . . {the connecting piece being part of or otherwise linked to the window or door fittings}
- 3/9648 {Mitre joints}
- 3/9649 . . . {Tie rods spanning the whole width or height of the frame; Straps encircling the frame}
- 3/968 . . . characterised by the way the connecting pieces are fixed in or on the frame members
- 3/9681 {by press fit or adhesion}
- 3/9682 {Mitre joints}
- 3/9684 {by hooking protrusions on the connecting piece in openings of the frame member, e.g. by snap-locking ([E06B 3/972](#), [E06B 3/976](#), [E06B 3/98](#) take precedence)}
- 3/9685 {Mitre joints}
- 3/9687 {with screws blocking the connecting piece inside or on the frame member ([E06B 3/972](#), [E06B 3/976](#) take precedence)}
- 3/9688 {Mitre joints}
- 3/972 by increasing the cross-section of the connecting pieces, e.g. by expanding the connecting pieces with wedges ([E06B 3/976](#) takes precedence)
- 3/9725 {Mitre joints}
- 3/976 by deformation of the frame members {making sheet metal frames for openings [B21D 53/74](#)}
- 3/9765 {Mitre joints}
- 3/98 the connecting pieces being specially adapted for drawing the frame members towards each other ([E06B 3/9684](#), [E06B 3/972](#), [E06B 3/976](#) take precedence)
- 3/982 {Mitre joints}
- 3/984 . . specially adapted for frame members of wood or other material worked in a similar way ([E06B 3/99](#) takes precedence)
- 3/9845 . . . {Mitre joints}
- 3/988 . . specially adapted for sheet metal frame members with an open U-shaped cross-section
- 3/9885 . . . {Mitre joints}
- 3/99 . . for continuous frame members crossing each other with out interruption ([window bars](#) [E06B 3/68](#))
- 5/00 Doors, windows, or like closures for special purposes** {(insulated compound frames specially adapted for sliding doors or windows [E06B 3/26347](#)); **Border constructions therefor**
- 5/003 . {Storm doors; Combination-screen-and-storm-doors}
- 5/006 . {for furniture ([E06B 3/00](#), [E06B 9/115](#) take precedence)}
- 5/01 . Trap-doors
- 5/02 . for out-buildings or cellars; Other simple closures not designed to be close-fitting
- 5/025 . . {Provisional closures, e.g. temporary security doors}
- 5/04 . . with fixed wooden frames
- 5/06 . . with fixed metal frames
- 5/08 . . with fixed frames made of concrete, stone-like material or plastics

5/10	• for protection against air-raid or other war-like action; for other protective purposes	7/088	• with facing protective grille or safety guard
5/103	• . {safety foils therefor}	7/09	• mounted in movable wing, e.g. door
5/106	• . {Frames for bullet-proof windows (transparent bullet-proof laminates F41H 5/0407)}	7/092	• operable in two or more distinct sets
5/11	• . against burglary	7/094	• operable in sequence; characterised by additional independent movement
5/113	• . . {Arrangements at the edges of the wings, e.g. with door guards to prevent the insertion of prying tools (protection of the locking region by preventing insertion of a tool E05B 17/2003 ; means to prevent forced opening by attack, tampering or jimmying of lock E05B 17/2084 ; anti-tamper devices arranged on or near the hinges E05D 11/0018)}	7/096	• operated or interconnected by gearing (wing operators with gearing in general E05F 11/00)
5/116	• . . {Arrangements preventing the removal of glazing panels}	7/098	• with weather seal
5/12	• . against air pressure, explosion, or gas	7/10	• . by special construction of the frame members
5/125	• . . {Closures for relieving excess pressure inside the building}	7/12	• Measures preventing the formation of condensed water (double glazing E06B 3/24 - E06B 3/28 {and E06B 3/677 }; heating arrangements specially adapted for transparent or reflecting areas H05B 3/84)
5/14	• . . Gasproof doors or similar closures; Adaptation of fixed constructions therefor	7/14	• Measures for draining-off condensed water or water leaking-in {frame members for draining off condensation water, throats at the bottom of a sash}
5/16	• . Fireproof doors or similar closures; Adaptations of fixed constructions therefor	2007/145	• . {for glass façade, e.g. curtain wall}
5/161	• . . {Profile members therefor}	7/16	• Sealing arrangements on wings or parts co-operating with the wings ({specially adapted for fireproof or similar closures E06B 5/164 ; } E06B 7/098 takes precedence {; fixed sealing joints E04B 1/68 ; devices for fitting sealing strips E04F 21/00)}
5/162	• . . {Fireproof doors having windows or other openings, e.g. for permitting ventilation or escape}	7/18	• . by means of movable edgings, e.g. draught sealings additionally used for bolting {, e.g. by spring force or with operating lever}
5/164	• . . {Sealing arrangements between the door or window and its frame, e.g. intumescent seals specially adapted therefor}	7/20	• . . automatically withdrawn when the wing is opened {, e.g. by means of magnetic attraction, a pin or an inclined surface, especially for sills}
5/165	• . . {Fireproof windows (layered glass panes with expansion layers for fire protection B32B 17/10311)}	2007/202	• . . . {Actuator connected to wing frame}
5/167	• . . {Devices blocking doors or windows inside its frame in case of fire}	7/205	• . . . with sealing strip mounted on sill
5/168	• . . {Shape of edges of wing and/or its frame specially adapted therefor}	7/21	• . . . with sealing strip movable in plane of wing
5/18	• . against harmful radiation (against heat E06B 5/16)	7/215	• . . . with sealing strip being moved to a retracted position by elastic means, e.g. springs
5/20	• for insulation against noise	7/22	• . by means of elastic edgings, e.g. elastic rubber tubes; by means of resilient edgings, e.g. felt or plush strips, resilient metal strips (E06B 7/18 takes precedence)
5/205	• . {windows therefor}	7/23	• . . Plastic, sponge rubber, or like strips or tubes
7/00	Special arrangements or measures in connection with doors or windows ({arrangements against burglary at the edges of the wings E06B 5/113}; screening or similar protective devices E06B 9/00)}	7/2301	• . . . {without an integrally formed part for fixing the edging}
7/02	• for providing ventilation, e.g. through double windows; Arrangement of ventilation roses (airflow control members per se F24F 13/08)	7/2303	• {hollow}
2007/023	• . {Air flow induced by fan}	7/2305	• {with an integrally formed part for fixing the edging (E06B 7/2316 takes precedence)}
2007/026	• . {with air flow between panes}	7/2307	• {with a single sealing-line or -plane between the wing and the part co-operating with the wing}
7/03	• . Ventilating devices for inserting under upwardly-sliding windows (rain or draught deflectors E06B 7/26)	7/2309	• {with a hollow sealing part}
7/04	• . with ventilation wings (E06B 7/08 takes precedence)	7/231	• {with a solid sealing part}
7/06	• . . with one ventilation wing only	7/2312	• {with two or more sealing-lines or -planes between the wing and part co-operating with the wing}
7/08	• . Louvre doors, windows or grilles ({shutters E06B 9/04 ; louvre awnings E04F 10/08 - E04F 10/10)}	7/2314	• {characterised by the material}
7/082	• . . with rigid or slidable lamellae	7/2316	• {used as a seal between the floor and the wing}
7/084	• . . with rotatable lamellae	7/2318	• {by applying over- or under-pressure, e.g. inflatable (gasproof doors or windows E06B 5/12 ; for vehicles B60J 10/244)}
7/086	• . . . interconnected for concurrent movement	7/232	• . . Resilient strips of hard material, e.g. metal
		7/24	• . without separate sealing members, e.g. with labyrinth

7/26	• Rain or draught deflectors, e.g. under sliding wings {also protection against light for doors}	9/0661	• • • • • {Lazy tongue, pantograph or scissor-like systems in the plane of the opening}
7/28	• Other arrangements on doors or windows, e.g. door-plates, windows adapted to carry plants, hooks for window cleaners {(edge protecting devices for door leaves E06B 3/88 ; special glazing; emergency glazing; double glazing E06B 3/66)}	9/0669	• • • • • {stored in a zig-zag arrangement}
		9/0676	• • • • • {stored in a stacked configuration}
		2009/0684	• • • • • {stored in a spiral like arrangement}
7/285	• • {Finger plates (escutcheons E05B 15/02)}	9/0692	• • • {comprising flexible sheets as closing screen}
7/30	• • Peep-holes; Devices for speaking through; Doors having windows	9/08	• • Roll-type closures (roller blinds E06B 9/40 ; operating, guiding or securing devices or arrangements for roll-type closures E06B 9/56 ; usable only as awnings E04F 10/06)
2007/305	• • • {Microphone}	9/11	• • • Roller shutters
7/32	• • Serving doors; Passing-through doors {; Pet-doors}	9/115	• • • • {specially adapted for furniture}
		9/13	• • • • with closing members of one piece, e.g. of corrugated sheet metal
7/34	• • Doors containing cupboards (cabinet constructions per se A47B)	2009/135	• • • • • {Horizontal shutter reinforcements}
7/36	• • Finger guards {or other measures preventing harmful access between the door and the door frame (safety devices for doors in railway cars B61D 19/026 ; for lift doors B66B 13/26 ; detection of obstructions E05F 15/40)}	9/15	• • • • with closing members formed of slats or the like
		2009/1505	• • • • • {Slat details}
		2009/1511	• • • • • {Coatings}
7/362	• • • {the gap between the door and the door frame at the hinge side being constructed in a way to remain too small or too wide to cause injury}	2009/1516	• • • • • {Means to increase resistance against bending}
2007/365	• • • • {Rounded shape at gap, e.g. cylindrical}	2009/1522	• • • • • {Sealing joint between adjacent slats}
7/367	• • • {by covering the gap between the door and the door frame at the hinge side}	2009/1527	• • • • • {Transparent slats or transparent sections in slats}
		2009/1533	• • • • • {Slat connections}
		2009/1538	• • • • • {Slats directly connected}
9/00	Screening or protective devices for {wall or similar} openings, with or without operating or securing mechanisms; Closures of similar construction (E06B 5/10 takes precedence; wings for doors or windows, connected at their edges, E06B 3/48; additional indoor equipment of doors or windows, not forming part of the proper finishing work of a building, e.g. curtains, A47H; gratings as building elements E04C 2/24; fastening means E05; operating-mechanisms for wings in general E05F)	2009/1544	• • • • • {Engaging section has curved articulation surfaces}
		2009/155	• • • • • {Slats connected by separate elements}
		2009/1555	• • • • • {Flexible elements, e.g. tapes, strips, cords or chains}
2009/002	• {Safety guards or gates}	2009/1561	• • • • • {Strips}
2009/005	• {Storm panels; hurricane shutters}	2009/1566	• • • • • {Rigid elements, e.g. hinges, hooks or profiles}
2009/007	• {Flood panels}	2009/1572	• • • • • {Locking means to prevent slat disengagement}
9/01	• Grilles fixed to walls, doors, or windows; Grilles moving with doors or windows; Walls formed as grilles, e.g. claustra {(emergency release of window grilles E05B 65/1033 ; security bars for wings E05C 19/003)}	2009/1577	• • • • • {Slat end pieces used for guiding shutter}
		2009/1583	• • • • • {inserted in slat cavity}
		2009/1588	• • • • • {inserted in engaging section of adjacent slats}
2009/015	• • {Mounting details}	2009/1594	• • • • • {attached to outer surface of slat}
9/02	• Shutters, movable grilles, or other safety closing devices, e.g. against burglary (louvre windows or grilles E06B 7/08 ; lamellar blinds E06B 9/26)	9/165	• • • • • with slats disappearing in each other; with slats the distance between which can be altered
9/04	• • of wing type, e.g. revolving or sliding {(trap doors; louvre doors or windows E06B 7/08)}	9/17	• • • • Parts or details of roller shutters, e.g. suspension devices, shutter boxes, wicket doors, ventilation openings
9/06	• • collapsible or foldable, e.g. of the bellows or lazy-tongs type (bellows-type doors E06B 3/94 ; roll-type grilles E06B 9/18)	9/17007	• • • • • {Shutter boxes; Details or component parts thereof}
9/0607	• • • {comprising a plurality of similar rigid closing elements movable to a storage position}	9/17015	• • • • • {made of at most two pieces; Front opening details}
9/0615	• • • • {characterised by the closing elements}	9/17023	• • • • • {made of more than two pieces}
9/0623	• • • • • {Grilles}	9/1703	• • • • • {Fixing of the box; External plastering of the box}
9/063	• • • • • {Bars or rods perpendicular to the closing direction}	2009/17038	• • • • • {Shutter cleaning arrangements}
9/0638	• • • • • {Slats or panels}	9/17046	• • • • • {Bottom bars}
9/0646	• • • • {characterised by the relative arrangement of the closing elements in the stored position}	2009/17053	• • • • • {Door in shutter screen; wicket door}
9/0653	• • • • • {stored side by side in the closing plane}	9/17061	• • • • • {Connection of the box to the guides}
		2009/17069	• • • • • {Insulation}
		9/17076	• • • • • {Sealing or antirattling arrangements}
		2009/17084	• • • • • {closing outlet slot of shutter box}
		2009/17092	• • • • • {Manufacturing}

- 9/171 Rollers therefor; Fastening roller shutters to rollers
- 2009/1713 {Telescopic rollers}
- 2009/1716 {Arrangements to improve rolling of the shutter on the roller}
- 9/172 by clamping bars
- 9/173 by clasps or buttons
- 9/174 Bearings specially adapted therefor
- 2009/1743 {allowing radial roller movement}
- 2009/1746 {Axial connection of rollers}
- 9/18 . . . Roll-type grilles
- 9/24 . Screens or other constructions affording protection against light, especially against sunshine; Similar screens for privacy or appearance; {Slat blinds}(operating, guiding or securing devices or arrangements for roll-type closures [E06B 9/56](#); free-hanging flexible screens [A47H 23/00](#))
- 2009/2405 . . {Areas of differing opacity for light transmission control}
- 2009/2411 . . {Coloured fluid flow for light transmission control}
- 2009/2417 . . {Light path control; means to control reflection}
- 2009/2423 . . {Combinations of at least two screens}
- 2009/2429 . . . {One vertical sheet and slats}
- 2009/2435 . . . {Two vertical sheets and slats in-between}
- 2009/2441 . . . {Screens joined one below the other}
- 2009/2447 . . . {Parallel screens}
- 2009/2452 {moving independently}
- 2009/2458 {moving simultaneously}
- 2009/2464 . . {featuring transparency control by applying voltage, e.g. LCD, electrochromic panels}
- 2009/247 . . {Electrically powered illumination}
- 2009/2476 . . {Solar cells}
- 2009/2482 . . {Special shape}
- 2009/2488 . . . {Curved perimeter}
- 2009/2494 . . . {Trapezoidal or triangular}
- 9/26 . . Lamellar or like blinds, e.g. venetian blinds {(for vehicles [B60J 1/2088](#))}
- 9/262 . . . with flexibly-interconnected horizontal or vertical strips; Concertina blinds {, i.e. upwardly folding flexible screens}
- 2009/2622 {Gathered vertically; Roman, Austrian or festoon blinds}
- 2009/2625 {Pleated screens, e.g. concertina- or accordion-like}
- 2009/2627 {Cellular screens, e.g. box or honeycomb-like}
- 9/264 . . . Combinations of lamellar blinds with roller shutters, screen windows, windows, or double panes; Lamellar blinds with special devices
- 2009/2643 {Screens between double windows}
- 2009/2646 {Magnetic screen operator}
- 9/266 . . . Devices or accessories for making or mounting lamellar blinds or parts thereof {(cleaning of lamellar blinds [A47L 4/00](#); joining plastics plates for making venetian blinds [B29C 66/437](#))}
- 9/28 . . . with horizontal lamellae, e.g. non-liftable (louvre windows or gratings [E06B 7/08](#))
- 2009/285 {Means for actuating a rod (being tilt rod or lift rod)}
- 9/30 liftable
- 9/302 without ladder-tape, e.g. with lazy-tongs, with screw spindle
- 9/303 with ladder-tape
- 9/304 with tilting bar and separate raising shaft
- 9/305 with tilting bar and raising cords guided along fixed bar
- 9/306 with tilting bar along which the raising cords are guided
- 9/307 Details of tilting bars and their operation
- 9/308 with coaxial tilting bar and raising shaft
- 9/32 Operating, guiding, or securing devices therefor ([operation of tilting bars E06B 9/307](#))
- 9/322 Details of operating devices, e.g. pulleys, brakes, spring drums, drives ({operating devices [E06B 9/68](#)}; devices of general interest specially adapted or mounted for storing and repeatedly paying-out and re-storing lengths of material [B65H 75/34](#))
- 2009/3222 {Cordless, i.e. user interface without cords}
- 2009/3225 {Arrangements to aid the winding of cords rollers}
- 2009/3227 {Axially moving rollers}
- 9/323 Structure or support of upper box
- 9/324 Cord-locks {(cord-locks for curtains [A47H 3/00](#))}
- 9/325 Immobilising devices preventing raising
- 9/326 Details of cords, e.g. buckles, drawing knobs
- 2009/3265 {Emergency release to prevent strangulation or excessive load}
- 9/327 Guides for raisable lamellar blinds with horizontal lamellae
- 9/34 roller-type; {Roller shutters with adjustable lamellae}
- 9/36 . . . with vertical lamellae {; Supporting rails therefor}
- 9/361 {Transmissions located at the end of the supporting rail}
- 9/362 {Travellers; Lamellae suspension stems}
- 9/364 {Operating mechanisms therein}
- 9/365 {Distance pieces therefor}
- 9/367 {Lamellae suspensions ([E06B 9/362](#) takes precedence); Bottom weights; Bottom guides}
- 9/368 {Driving means other than pulling cords}
- 9/38 . . . Other details
- 9/382 Details of ladder-tapes or ladder chains, e.g. buckles for local shortening of tapes
- 9/384 Details of interconnection or interaction of tapes and lamellae
- 9/386 Details of lamellae
- 9/388 Details of bottom or upper slats or their attachment
- 9/40 . . Roller blinds (usable only as awnings [E04F 10/06](#))
- 2009/402 {adjustable without the use of tools or cutting instruments}
- 2009/405 {Two rollers}
- 2009/407 {Telescopic roller}

- 9/42 . . . Parts or details of roller blinds, e.g. suspension devices, blind boxes (brackets or adjustable mountings for roller blinds and drawable curtains [A47H 1/13](#))
- 2009/425 {Pull chain or cord attached to bottom edge of screen}
- 9/44 Rollers therefor; Fastening roller blinds to rollers
- 2009/445 {by adhesive}
- 9/46 by clamping bars
- 9/48 by clasps or buttons
- 9/50 Bearings specially adapted therefor
- 9/52 Devices affording protection against insects, e.g. fly screens; Mesh windows for other purposes {(screens [A47G 5/00](#))}
- 9/521 . . . {Frameless fly screens; Tensioning means therefor ([E06B 9/54](#) takes precedence)}
- 9/522 . . . {Dimensionally adjustable fly screens ([E06B 9/54](#) and [E06B 9/521](#) take precedence)}
- 2009/524 . . . {Mesh details}
- 2009/525 . . . {Patches for mesh repair or decoration}
- 2009/527 . . . {Mounting of screens to window or door}
- 2009/528 . . . {Screens extending between movable wing and fixed frame of window or door}
- 9/54 . . . Roller fly screens (operating, guiding or securing devices therefor [E06B 9/56](#))
- 2009/543 {Horizontally moving screens}
- 2009/546 {connected to end- or bottom-bar of roller shutter}
- 9/56 . . . Operating, guiding or securing devices or arrangements for roll-type closures; Spring drums; Tape drums; Counterweighting arrangements therefor (devices of general interest specially adapted or mounted for storing and repeatedly paying-out and re-storing lengths of material [B65H 75/34](#))
- 9/58 . . . Guiding devices
- 9/581 {Means to prevent or induce disengagement of shutter from side rails}
- 9/582 {Means to increase gliss, light, sound or thermal insulation}
- 2009/583 {Cords or cables}
- 2009/585 {Emergency release to prevent damage of shutter or guiding device}
- 2009/586 {with heating to prevent frost or condensate}
- 2009/587 {Mounting of guiding devices to supporting structure}
- 2009/588 {Sealings for guides}
- 9/60 . . . Spring drums operated only by closure members
- 9/62 . . . Counterweighting arrangements ([E06B 9/60](#) takes precedence)
- 9/64 . . . with lowerable roller
- 9/66 . . . with a roller situated at the bottom
- 9/68 . . . Operating devices or mechanisms, e.g. with electric drive
- 2009/6809 {Control}
- 2009/6818 {using sensors}
- 2009/6827 {sensing light}
- 2009/6836 {sensing obstacle}
- 2009/6845 {sensing position}
- 2009/6854 {sensing torque}
- 2009/6863 {sensing wind speed}
- 2009/6872 {using counters to determine shutter position}
- 2009/6881 {Mechanical counters}
- 2009/689 9/70 {using end switches}
- 9/70 . . . comprising an electric motor positioned outside the roller
- 9/72 . . . comprising an electric motor positioned inside the roller
- 2009/725 {with epicyclic or planetary gear train}
- 9/74 . . . adapted for selective electrical or manual operation
- 9/76 . . . using crank handles
- 9/78 . . . for direct manual operation, e.g. by tassels, by handles
- 2009/785 {by belts, straps, bands, tapes, cords, tassels}
- 9/80 . . . Safety measures against dropping or unauthorised opening; Braking or immobilising devices; Devices for limiting unrolling (securing devices or arrangements for direct manual operation [E06B 9/78](#))
- 2009/801 {Locking arrangements}
- 2009/802 {located in or close to shutter box}
- 2009/804 {acting directly on the shutter}
- 2009/805 {located on or in the guides}
- 2009/807 {Brakes preventing fast screen movement}
- 2009/808 {Fluid brakes}
- 9/82 automatic
- 9/84 against dropping
- 9/86 against unauthorised opening
- 9/88 for limiting unrolling
- 2009/885 {Braking mechanism activated by the bottom bar}
- 9/90 for immobilising the closure member in various chosen positions
- 2009/905 {using wrap spring clutches}
- 9/92 . . . Means allowing the closures to be shifted out of the plane of the opening
- 11/00 Means for allowing passage through fences, barriers or the like, e.g. stiles (general features of doors [E06B 1/00](#) - [E06B 9/00](#); {cattle grids [A01K 3/002](#); features peculiar to electrified wire fencing [A01K 3/005](#))}**
- 11/02 . . . Gates; Doors
- 11/021 . . . {Wire gates, e.g. traction gates; Fastenings therefor (insulators, poles, handles, or the like, in electric fences [H01B 17/145](#))}
- 11/022 . . . {characterised by the manner of movement}
- 11/023 {where the gate opens within the plane of the gate}
- 11/025 {vertically}
- 11/026 {horizontally}
- 11/027 {where the gate rotates around a horizontal axis parallel to the plane of the gate}
- 11/028 {with posts connected underground}
- 11/04 characterised by the kind of suspension (suspensions per se [E05D](#))
- 11/045 {exclusively for horizontally sliding gates}
- 11/08 . . . Turnstiles; {Gates for control of entry or exit of persons, e.g. in supermarkets} (control gates on vehicles [B60N 5/00](#) ; bank protection devices [E05G 5/00](#)); with registering means [G07C 9/10](#) ; coin-free facilities for turnstiles [G07F 17/14](#))

E06B

11/085 . . {non-rotary or with a limited angle of rotation,
e.g. 90°}