## CPC COOPERATIVE PATENT CLASSIFICATION

## E FIXED CONSTRUCTIONS

#### **BUILDING**

## E05 LOCKS; KEYS; WINDOW OR DOOR FITTINGS; SAFES

(NOTE omitted)

## E05C BOLTS OR FASTENING DEVICES FOR WINGS, SPECIALLY FOR DOORS

**OR WINDOWS** (latching means for sideboard or tailgate structures for vehicles <u>B62D</u>, {<u>B62D 33/02</u>}; fastening devices for constructional or engineering elements <u>E04</u>, <u>F16B</u>; locks, fastening devices structurally or operatively combined or having significant cooperation with locks <u>E05B</u>; means for operating or controlling wing fasteners in conjunction with mechanisms for moving the wing <u>E05F</u>)

#### NOTES

- 1. In this subclass only the movement essential for securing the wing is considered, e.g. a sliding bolt which is rotated on its axis to prevent its withdrawal is classified as having only a sliding movement.
- 2. Attention is drawn to the definition following the title of class E05.

#### **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:

E05C 3/32	covered by	E05C 3/30
E05C 17/06	covered by	E05C 17/04
E05C 17/10	covered by	E05C 17/04
E05C 21/02	covered by	E05C 21/00

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.

Bolts, latches, or equivalent wing-fastening devices, characterised by special way of movement, e.g. moving rectilinearly, pivotally or rotatively (devices released automatically by pull or pressure on the wing E05C 19/02; hasps E05C 19/08; hook fastenings E05C 19/10)

E05C 19/10)	,,
1/00	Fastening devices with bolts moving rectilinearly
1/002	• {perpendicular to the surface on which the fastener is mounted}
1/004	<ul> <li>{parallel to the surface on which the fastener is mounted}</li> </ul>
1/006	• • {parallel to the wing edge}
2001/008	• {the axis of the bolt movement forming an
	oblique angle with the surface from which the bolt protrudes, e.g. the wing edge}
1/02	<ul> <li>without latching action</li> </ul>
1/04	• • with operating handle or equivalent member rigid with the bolt
1/06	• • with operating handle or equivalent member moving otherwise than rigidly with the bolt
1/065	{flush}
1/08	<ul> <li>with latching action</li> </ul>
1/085	• • {With means for assisting depression of the latch bolt during latching}
1/10	• • with operating handle or equivalent member rigid with the latch
1/12	• • with operating handle or equivalent member moving otherwise than rigidly with the latch

- 1/14 . . . the handle or member moving essentially towards or away from the plane of the wing or frame
- 1/145 ... {flush}
- 1/16 . . . the handle or member moving essentially in a plane substantially parallel to the wing or frame
- 1/163 ... {Cylindrical or tubular latches}
- 1/166 . . . . {with sliding handle}

# 3/00 Fastening devices with bolts moving pivotally or rotatively

- 3/002 {sliding in an arcuate guide or the like (locks with circular bolts E05B 63/123)}
- 3/004 {about an axis perpendicular to the surface on which the fastener is mounted}
- 3/006 {about an axis parallel to the surface on which the fastener is mounted}
- 3/008 . . {parallel to the wing edge}
- 3/02 without latching action
- with operating handle or equivalent member rigid with the bolt
- 3/041 • {rotating about an axis perpendicular to the surface on which the fastener is mounted}
- 3/042 . . . {the handle being at one side, the bolt at the other side or inside the wing}
- 3/043 . . . {the pivot being between bolt and handle (E05C 3/042 takes precedence)}

Bolts, latches, or equivalent wing-fastening devices, characterised by special way of movement, e.g. moving...

moving			
3/044	• • • • {the bolt and handle being at the same side of the pivot (E05C 3/045, E05C 3/046 take	3/38	(E05C 3/24, E05C 3/30, E05C 3/36 take
3/045	precedence)} {in the form of a hook (hook-like fastenings E05C 19/10)}	3/40	precedence)  • • • with bolts engaging a stud-like keeper (E05C 3/24, E05C 3/30, E05C 3/36 take
3/046	• • • {in the form of a crescent-shaped cam (hooks E05C 3/045)}		precedence)
3/047	• • • {rotating about an axis parallel to the surface on which the fastener is mounted}	5/00	Fastening devices with bolts moving otherwise than only rectilinearly and only pivotally
3/048	• • • {parallel to the wing edge}		<b>or rotatively</b> {(E05C 9/1883, E05C 19/009, E05B 63/125, E05B 63/126, E05B 63/127 take
3/06	with operating handle or equivalent member moving otherwise than rigidly with the bolt		precedence; pivotally-mounted hooks-like fastenings with toggle action E05C 19/14; bayonet-type locks
3/08	towards or away from the plane of the wing or		<u>E05B 63/125</u> ; locks for sliding wings, with additional movement <u>E05B 65/0817</u> )}
3/10	frame  • the handle or member moving essentially in a plane substantially parallel to the wing {or frame}	2005/005	• {Pivoting bolts or catches being able to move in an additional direction, e.g. by sliding or by pivoting about an additional axis, in order to allow closing of the wing even if the bolt or catch is in its locked
3/12	• with latching action (devices in which the securing		position}
	part is formed or merely carried by a spring and moves only by distortion of the spring, e.g. snaps,	5/02	<ul> <li>both moving axially and turning about their axis to secure the wing</li> </ul>
3/122	<u>E05C 19/06</u> ; tilt-plate latches <u>E05C 19/007</u> ) . {flush}	5/04	• performing both movements simultaneously, e.g.
3/124	• • {with latch under compression force between its		screwing into a keeper
	pivot and the striker (E05C 3/122, E05C 3/14, E05C 3/16 and E05B 65/0852 take precedence)}	7/00	Fastening devices specially adapted for two wings
2003/126	• {Only part of the latch movable for latching}		NOTE
2003/128	• • {Pendulum-type bolt}		If a fastening device merely secures one wing
3/14	• • with operating handle or equivalent member rigid with the latch $\{(\underline{E05C\ 3/122}\ takes\ precedence)\}$		to another wing which is already closed it is not regarded as specially adapted for two wings
3/145	<ul><li>• { pivoting about an axis perpendicular to the wing}</li></ul>	7/002	• {for sluice doors (for nuclear reactors G21C 13/0285)}
3/16	with operating handle or equivalent member moving otherwise than rigidly with the latch	7/005	• {for "Dutch doors", i.e. upper and lower wings}
	$\{(E05C 3/122 \text{ takes precedence})\}$	2007/007	• {for a double-wing sliding door or window, i.e. where both wings are slidable}
3/162	• • • {the handle or member moving essentially towards or away of the plane of the wing or	7/02	• for wings which lie one behind the other when closed {(E05C 7/002 takes precedence)}
3/165	frame (E05C 3/167 takes precedence)} {the handle or member moving substantially	7/04	• for wings which abut when closed {(pillarless vehicle doors E05B 83/38)}
	parallel to the wing or frame (E05C 3/167 takes	7/045	• • {Sliding bolts mounted on or in the edge of
3/167	<ul><li>precedence)}</li><li>• {the latch pivoting about an axis perpendicular</li></ul>		a normally closed wing of a double-door or - window}
3/22	to the wing } the bolt being spring controlled	7/06	a fastening device for one wing being actuated or
3/24	• • • in the form of a bifurcated member		controlled by closing another wing {(locking one vehicle door by shutting another <u>E05B 77/52</u> )}
	{(automatic catches with a bifurcated latch E05C 19/024; locks with a bifurcated bolt E05B 65/0046, E05B 85/243)}	9/00	Arrangements of simultaneously actuated bolts or other securing devices at well-separated
3/26	• • • • engaging a stud-like keeper (stud-like keepers per se E05B 2015/0235)		<b>positions on the same wing</b> ({Locking, cross or security bars E05C 19/003; locks for safes or the
3/28	• • • • • • with simultaneously operating double bolts {(vehicle locks with a pair of bifurcated bolts <u>E05B 85/245)</u> }		like <u>E05B 65/0075</u> ; of the vertical-rod type for panic or emergency doors <u>E05B 65/1006</u> }; similar constructions for engineering closures <u>F16J 13/08</u> )
3/30	• • • • in the form of a hook {(hook-like fastenings <u>E05C 19/10</u> ; locks for sliding wings with pivoting bolts <u>E05B 65/0811</u> ,	9/002	• {with arrangements allowing the wing to be slamshut, e.g. by securing elements with latching action (E05B 63/20, E05B 63/24 take precedence)}
	E05B 65/0835)}	9/004	• {Faceplates (for other locks or fasteners
3/34	with simultaneously operating double	9/006	E05B 9/002); Fixing the faceplates to the wing} • {Details of bars}
	bolts {(locks for sliding wings with bolts pivoting about an axis parallel to the wings E05B 65/0835, comprising	9/008	<ul> <li>{Details of bars}</li> <li>{mounted in an elongate casing on the surface of the wing}</li> </ul>
3/36	simultaneously pivoting double hook-like locking members <u>E05B 65/0858</u> )} in the form of a rotary gear {(vehicle door	9/02	<ul> <li>with one sliding bar for fastening when moved in one direction and unfastening when moved in opposite direction; with two sliding bars moved in</li> </ul>
3/30	locks E05B 85/28)}		the same direction when fastening or unfastening

9/021 9/023	<ul><li> {with rack and pinion mechanism}</li><li> {between a lock cylinder and the bar}</li></ul>	9/24	<ul> <li>Means for transmitting movements between vertical and horizontal sliding bars, rods or cables {for the</li> </ul>
9/025	• • {with pins engaging slots}		fastening of wings}, e.g. corner guides (means
9/026	• • {comprising key-operated locks, e.g. a lock		for transmitting movements between vertical and
	cylinder to drive auxiliary deadbolts or latch bolts		horizontal sliding bars, rods or cables, for moving
	(E05C 9/023  takes precedence)		wings into open or closed position <u>E05F 7/08</u> )
9/028	• • {externally mounted on the wing, i.e. surface	17/00	Devices for holding wings open; Devices for
0.40.4	mounted (E05C 9/008 takes precedence)}		limiting opening of wings or for holding wings
9/04	with two sliding bars moved in opposite directions		open by a movable member extending between
0/041	when fastening or unfastening		frame and wing; Braking devices, stops or
9/041 9/042	<ul><li> { with rack and pinion mechanism}</li><li> { with pins engaging slots}</li></ul>		<b>buffers, combined therewith</b> (combined with hinges <u>E05D 11/00</u> ; combined with operating apparatus for
9/042	<ul><li> { with phis engaging slots }</li><li> { with crank pins and connecting rods }</li></ul>		wings <u>E05F</u> ; other braking devices, stops, buffers
9/045	<ul><li> {with craim phis and connecting roas}</li><li> {with inclined surfaces, e.g. spiral or helicoidal}</li></ul>		E05F 5/00)
9/046	• { with two interconnected mechanisms each	17/003	• {Power-actuated devices for limiting the opening of
	driving one rod}		vehicle doors}
9/047	• • {comprising key-operated locks, e.g. a lock	17/006	• • { with means for detecting obstacles outside the
	cylinder to drive auxiliary deadbolts or latch bolts		doors}
	$(\underline{E05C 9/041} \text{ takes precedence})$	17/02	• by mechanical means ( <u>E05C 17/60</u> takes
9/048	• • {externally mounted on the wing, i.e. surface	1=100=	precedence)
0.10.5	mounted ( <u>E05C 9/008</u> takes precedence)}	17/025	• • {Means acting between hinged edge and frame
9/06	with three or more sliding bars {(for watertight	17/04	(E05C 17/203 takes precedence)} . with a movable bar or equivalent member
	doors in bulkheads of vessels <u>B63B 43/24</u> , <u>B63B 43/32</u> ; for safe doors <u>E05B 65/0075</u> ; covers	17/04	extending between frame and wing
	or similar closures for pressure vessels F16J 13/00)	17/042	• • • {for anchoring the trunk lid of a car while
9/063	• • {extending along three or more sides of the wing		carrying oversize objects (E05C 17/36 takes
	or frame (means for transmitting movements		precedence)}
	between vertical and horizontal bars E05F 7/08)}	17/045	• • • {Hinges for the movable bar (E05C 17/163,
9/066	{Locks for windows or doors specially adapted		E05C 17/26, E05C 17/345 take precedence;
	for tilt and turn}	4=10.4=	hinges in general <u>F16C 11/04</u> , <u>E05D</u> )}
9/08	• with a rotary bar for actuating the fastening means	17/047	• • • {Portable bars or the like, i.e. completely
	{( <u>E05B 83/10</u> and <u>E05B 65/468</u> take precedence; for a plurality of drawers <u>E05B 65/465</u> )}	17/00	removable (E05C 17/042 takes precedence)
9/085	• • {pivoting about an axis perpendicular to the	17/08	<ul> <li>with special means for release, e.g. automatic release by further opening</li> </ul>
2/003	door (locking bars or the like pivoted about	17/085	• • • { automatic release by further opening }
	an axis perpendicular to the plane of the wing	17/12	consisting of a single rod
	E05C 19/005)}	17/14	Hook and eye, or equivalent
9/10	<ul> <li>Actuating mechanisms for bars</li> </ul>	17/16	pivoted only at one end and having an
	$\{(\underline{E05C \ 9/02} - \underline{E05C \ 9/06} \ \text{take precedence})\}$		elongated slot
9/12	• with rack and pinion mechanism $\{(\underline{E05C\ 9/021}, \underline{F05C\ 9/041}, F05C\ 9$	17/163	• • • • { with clamping or securing means at the
0/14	E05C 9/041 take precedence)}		pivot, e.g. friction hinge}
9/14	with pins engaging slots {(E05C 9/025, E05C 9/042 take precedence)}	17/166	{Security devices}
9/16	• with crank pins and connecting rods	17/18	pivoted only at one end having a row of
<i>7/</i> 10	{(E05C 9/043 takes precedence)}	17/20	holes, notches, or pins
9/18	Details of fastening means or of fixed retaining	17/20	• • • sliding through a guide ( <u>E05C 17/18</u> takes precedence)
	means for the ends of bars	17/203	{concealed, e.g. for vehicles}
9/1808	{Keepers}	17/206	• • • • {with elastomeric springs to hold wing
2009/1816	• • { snap-mounted without screw fasteners }	1//200	open}
9/1825	• • {Fastening means}	17/22	with braking, clamping or securing
9/1833	• • • {performing sliding movements}		means in the guide $\{(\underline{E05C\ 17/203}\ takes$
9/1841	{perpendicular to actuating bar}		precedence)}
9/185	• • • {parallel with actuating bar}	17/24	• • • pivoted at one end, and with the other end
9/1858	• • • • { of the roller bolt type }	17/26	running along a guide member with braking, clamping or securing means
2009/1866 9/1875	<ul><li> {of the keyhole slot type}</li><li> {performing pivoting movements (E05C 9/08)</li></ul>	17/20	at the pivot of the rod
	takes precedence)}	17/28	with braking, clamping or securing means
9/1883	• • • {pivotally mounted on the actuation bar}	17/20	at the connection to the guide member
9/1891	{pivoting around an axis parallel to the bar}	17/30	• • • of extensible, e.g. telescopic, construction (flexible members <u>E05C 17/36</u> {; locking
9/20	• Coupling means for sliding bars, rods, or cables {(connecting means between actuating rods for		of telescopic systems in general <u>F16B 7/10</u> ;
	vehicle door locks E05B 79/14)}		lockable telescopic gas springs F16F 9/0254})
9/22	• Guides for sliding bars, rods or cables	17/305	• • • {with hydraulic locks}
		17/32	consisting of two or more pivoted rods

Bolts, latches, or equivalent wing-fastening devices, characterised by special way of movement, e.g. moving...

17/34	with means for holding in more than one	19/008	• • {Tilt-plate latches}
	position	19/009	• {Latches with floating bolts, e.g. rings, balls}
17/345	• • • • {using friction, e.g. friction hinge}	19/02	. Automatic catches, i.e. released by pull or pressure
17/36	comprising a flexible member, e.g. chains		on the wing (E05C 19/06 takes precedence {; with
17/365	{Security chains}		locking means <u>E05B 63/22</u> })
17/38	• • with a curved rail rigid with the frame for	19/022	• • {Released by pushing in the closing direction}
1,,00	engagement with means on the wing, or <u>vice</u>	19/024	• • {with a bifurcated latch}
	versa	19/026	• • {with a keeper caught between two pivoting
17/40	Bars or like parts connecting a right wing with a	15/1020	bolts}
177.0	left wing which move against each other when	19/028	• • {with sliding bolt(s)}
	being closed	19/04	Ball or roller catches
17/42	connecting exterior and interior wings	19/04	<ul> <li>in which the securing part if formed or carried by a</li> </ul>
17/44	• • with a device carried on the wing for frictional	19/00	spring and moves only by distortion of the spring,
1// 11	or like engagement with a fixed flat surface, e.g.		e.g. snaps
	{for holding wings open or closed by} retractable	19/063	• • {Released by pull or pressure on the wing
	feet {(with wedging action between the wing and	17/003	(E05C 19/022 takes precedence)
	a flat surface <u>E05C 17/54</u> )}	19/066	• • • {made of plastics, e.g. hook-and-loop type
17/443	• • • { of the pivoted lever or eccentric type, e.g. for	19/000	fastener}
	sliding windows}	19/08	Hasps; Hasp fastenings; Spring catches therefor
17/446	• • • {of the retractable sliding feet type (similar		<ul> <li>Hook fastenings; Fastenings in which a link engages</li> </ul>
	devices for sliding wings <u>E05C 17/64</u> )}	19/10	a fixed hook-like member
17/46	• in which the wing or a member fixed thereon	19/105	
177.10	is engaged by a movable fastening member in		• {Butterfly latches}
	a fixed position; in which a movable fastening	19/12	pivotally mounted {around an axis (E05C 3/045,
	member mounted on the wing engages a	10/14	E05C 3/40 take precedence)}
	stationary member	19/14	with toggle action
17/48	comprising a sliding securing member	19/145	{flush}
17/50	comprising a single pivoted securing member	19/16	• Devices holding the wing by magnetic or
17/505	• • • {acting directly on the knob or handle}		electromagnetic attraction {(E05C 17/56 takes
17/52	comprising a snap, catch, or the like	10/161	precedence)}
17/525	• • • {comprising a suction cup}	19/161	• {magnetic gaskets}
17/54	Portable devices, e.g. wedges; wedges for	19/163	• • {a movable bolt being held in the striker by a
17751	holding wings open or closed (E05C 17/047 takes	10/165	permanent magnet}
	precedence)	19/165	• • {released by pushing in the closing direction}
17/56	by magnetic or electromagnetic attraction {or	19/166	• • {electromagnetic}
17700	operated by electric or electromagnetic means	19/168	• • • {a movable bolt being electromagnetically held
	(for closed wings <u>E05C 19/16</u> )}; (operation of		in the striker by electromagnetic attraction}
	locks or fasteners by electric or magnetic means	19/18	• Portable devices specially adapted for securing
	E05B 47/00)		wings ({E05C 17/54, E05C 19/003, E05B 65/0894,
17/58	<ul> <li>operated or controlled from a distance {, e.g.</li> </ul>		E05B 67/00 take precedence}; preventing operation
	pneumatically ( <u>E05C 17/56</u> takes precedence)}	10/102	of handles <u>E05B 13/00</u> )
17/60	<ul> <li>holding sliding wings open {(E05C 17/443,</li> </ul>	19/182	• • {insertable in the gap between the wing and the
	E05C 17/54 take precedence)}		frame or in the gap between a lock and its striker,
17/62	• using notches	10/194	e.g. for cooperation with the striker}
17/64	by friction	19/184	• • {a portable member cooperating with a fixed
			member or an opening on the wing or the frame, for locking the wing}
19/00	Other devices specially designed for securing	19/186	
	wings, {e.g. with suction cups}(movable draft	19/100	each other for grasping of an element on the
	sealings additionally used for bolting E06B 7/18)		wing, respectively on the frame, or for grasping
19/001	• {with bolts extending over a considerable extent,		of an element on each of the wings forming a
	e.g. nearly along the whole length of at least		double door}
	one side of the wing (movable sealing strips	19/188	• • {Removably mounted securing devices, e.g.
10/002	E06B 7/18)}	17/100	devices clamped to the wing or the frame
19/002	• • {Rotating about a longitudinal axis}		( <u>E05C 19/182</u> - <u>E05C 19/186</u> take precedence)}
19/003	• {Locking bars, cross bars, security bars (for sliding		
	wings E05B 65/0888; for a plurality of drawers	21/00	Arrangements or combinations of wing fastening,
19/004	E05B 65/467)}		securing, or holding devices, not covered by a
19/004	<ul><li>. {at an angle between door and floor or wall}</li><li>. {pivoted about an axis on the wing, perpendicular</li></ul>	01/005	single preceding main group; {Locking kits}
17/003	to the plane of the wing}	21/005	• {Provisional arrangements between door and frame
19/006	• {by displacement of the wing substantially in its		for holding vehicle doors closed or partially open
17/000	own plane ( <u>E05F 7/02</u> takes precedence)}		during manufacturing or maintenance}
19/007	• {Latches with wedging action (wedges between		
17,007	wing itself and fixed surface E05C 17/54)}		