

# CPC COOPERATIVE PATENT CLASSIFICATION

## E FIXED CONSTRUCTIONS

### BUILDING

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

(NOTE omitted)

#### E05B LOCKS; ACCESSORIES THEREFOR; HANDCUFFS

##### NOTES

1. Operating or controlling of locks for vehicle wings are classified in groups [E05B 77/00](#) - [E05B 81/00](#).
2. Knobs, handles or press buttons for locks of vehicle wings are classified in [E05B 79/00](#) - [E05B 85/00](#).

##### 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:

<a href="#">E05B 1/02</a>	covered by	<a href="#">E05B 1/00</a>
<a href="#">E05B 5/02</a>	covered by	<a href="#">E05B 5/003</a>
<a href="#">E05B 5/04</a>	covered by	<a href="#">E05B 5/003</a>
<a href="#">E05B 9/06</a>	covered by	<a href="#">E05B 9/00</a> - <a href="#">E05B 9/048</a>
<a href="#">E05B 13/02</a>	covered by	<a href="#">E05B 11/00</a> , <a href="#">E05B 15/08</a> and <a href="#">E05B 17/14</a>
<a href="#">E05B 13/06</a>	covered by	<a href="#">E05B 11/00</a> , <a href="#">E05B 15/08</a> and <a href="#">E05B 17/14</a>
<a href="#">E05B 13/08</a>	covered by	<a href="#">E05B 13/00</a>
<a href="#">E05B 15/12</a>	covered by	<a href="#">E05B 17/2007</a>
<a href="#">E05B 17/02</a>	covered by	<a href="#">E05C 7/02</a>
<a href="#">E05B 19/02</a>	covered by	<a href="#">E05B 19/00</a>
<a href="#">E05B 19/06</a>	covered by	<a href="#">E05B 19/00</a>
<a href="#">E05B 19/08</a>	covered by	<a href="#">E05B 19/0017</a> , <a href="#">E05B 19/14</a> , <a href="#">E05B 35/003</a> and <a href="#">E05B 35/14</a>
<a href="#">E05B 19/10</a>	covered by	<a href="#">E05B 19/04</a>
<a href="#">E05B 19/12</a>	covered by	<a href="#">E05B 35/003</a>
<a href="#">E05B 19/16</a>	covered by	<a href="#">E05B 35/007</a> , <a href="#">E05B 27/0028</a> and <a href="#">E05B 29/0006</a>
<a href="#">E05B 21/02</a> - <a href="#">E05B 21/04</a>	covered by	<a href="#">E05B 21/00</a>
<a href="#">E05B 25/00</a> - <a href="#">E05B 25/10</a>	covered by	<a href="#">E05B 21/00</a>
<a href="#">E05B 27/04</a> - <a href="#">E05B 27/06</a>	covered by	<a href="#">E05B 21/00</a> and <a href="#">E05B 23/00</a>
<a href="#">E05B 29/02</a> - <a href="#">E05B 29/14</a>	covered by	<a href="#">E05B 27/0003</a> - <a href="#">E05B 27/0096</a>
<a href="#">E05B 35/04</a>	covered by	<a href="#">E05B 29/0006</a> - <a href="#">E05B 29/0093</a>
<a href="#">E05B 37/06</a>	covered by	<a href="#">E05B 35/00</a>
<a href="#">E05B 37/18</a>	covered by	<a href="#">E05B 37/04</a> and <a href="#">E05B 67/00</a>
<a href="#">E05B 37/22</a>	covered by	<a href="#">E05B 37/16</a> and <a href="#">E05B 67/00</a>
<a href="#">E05B 45/14</a>	covered by	<a href="#">E05B 37/20</a> and <a href="#">E05B 67/00</a>
<a href="#">E05B 47/04</a>	covered by	<a href="#">E05B 45/06</a>
<a href="#">E05B 47/08</a>	covered by	<a href="#">E05B 47/02</a>
<a href="#">E05B 49/02</a> - <a href="#">E05B 49/04</a>	covered by	<a href="#">E05B 47/06</a> and <a href="#">E05B 15/101</a>
<a href="#">E05B 55/02</a>	covered by	<a href="#">G07C 9/00</a>
<a href="#">E05B 55/04</a>	covered by	<a href="#">E05B 55/00</a>
<a href="#">E05B 55/08</a>	covered by	<a href="#">E05B 55/00</a> and <a href="#">E05B 13/00</a>
<a href="#">E05B 55/10</a>	covered by	<a href="#">E05B 55/06</a>
<a href="#">E05B 55/14</a> - <a href="#">E05B 55/16</a>	covered by	<a href="#">E05B 55/06</a>
<a href="#">E05B 59/02</a> - <a href="#">E05B 59/04</a>	covered by	<a href="#">E05B 55/00</a>
<a href="#">E05B 59/06</a>	covered by	<a href="#">E05B 59/00</a>
<a href="#">E05B 65/04</a>	covered by	<a href="#">E05B 15/102</a>
<a href="#">E05B 67/12</a>	covered by	<a href="#">E05C 7/02</a>
<a href="#">E05B 67/16</a>	covered by	<a href="#">E05B 67/10</a>
<a href="#">E05B 67/20</a>	covered by	<a href="#">E05B 67/14</a>
<a href="#">E05B 67/30</a>	covered by	<a href="#">E05B 67/18</a>
<a href="#">E05B 67/34</a>	covered by	<a href="#">E05B 67/28</a>
<a href="#">E05B 71/02</a>	covered by	<a href="#">E05B 67/32</a>
		<a href="#">E05B 71/00</a> and <a href="#">E05B 37/00</a>

E05B  
(continued) 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.

**Parts of locks or the like mountable on or in wings**

<p><b>1/00</b>    <b>Knobs or handles for wings; Knobs, handles, or press buttons for locks or latches on wings</b> (<a href="#">E05B 5/00</a>, <a href="#">E05B 7/00</a> take precedence)</p> <p>1/0007    . {Knobs (<a href="#">E05B 1/0015</a>, <a href="#">E05B 1/0053</a>, <a href="#">E05B 1/0061</a>, <a href="#">E05B 1/0069</a> take precedence)}</p> <p>1/0015    . {Knobs or handles which do not operate the bolt or lock, e.g. non-movable; Mounting thereof}</p> <p>2001/0023    . . {being movable into a non-operating position, e.g. foldable towards the mounting plane}</p> <p>1/003    . {Handles pivoted about an axis perpendicular to the wing (<a href="#">E05B 3/00</a>, <a href="#">E05B 5/00</a>, <a href="#">E05B 13/106</a> take precedence)}</p> <p>1/0038    . {Sliding handles, e.g. push buttons (<a href="#">E05B 13/105</a> takes precedence)}</p> <p>1/0046    . . {sliding parallel to the plane of the wing}</p> <p>1/0053    . {Handles or handle attachments facilitating operation, e.g. by children or burdened persons (foot-operation <a href="#">E05B 53/001</a>)}</p> <p>1/0061    . {Knobs or handles with protective cover, buffer or shock absorber}</p> <p>1/0069    . {Sanitary doorknobs or handles, e.g. comprising a disinfectant}</p> <p>2001/0076    . {The handle having at least two operating positions, e.g. the bolt can be retracted by moving the handle either upwards or downwards}</p> <p>1/0084    . {Handles or knobs with displays, signs, labels pictures, or the like (displays on locks <a href="#">E05B 17/226</a>; displays on keys <a href="#">E05B 19/0088</a>)}</p> <p>1/0092    . {Moving otherwise than only rectilinearly or only rotatively (<a href="#">E05B 5/003</a> takes precedence)}</p> <p>1/04    . with inner rigid member and outer cover or covers</p> <p>1/06    . of sheet material</p> <p><b>3/00</b>    <b>Fastening {knobs or} handles to lock or latch parts</b> {<a href="#">E05B 79/06</a> takes precedence}</p> <p>3/003    . {Fastening knobs or handles to hollow cylindrical spindles, e.g. of tubular locks}</p> <p>2003/006    . {Fastening knobs or handles to the spindle by means of tilt-plates}</p> <p>3/02    . Fastening {knobs or} handles to the spindle by pinning or riveting {(<a href="#">E05B 3/10</a> takes precedence)}</p> <p>3/04    . Fastening {the knob or} the handle shank to the spindle by screws, springs or snap bolts {(<a href="#">E05B 3/10</a> takes precedence)}</p> <p>3/06    . by means arranged in or on the rose {or escutcheon}</p> <p>3/065    . . {with spring biasing means for moving the handle over a substantial distance, e.g. to its horizontal position}</p> <p>3/08    . Fastening the spindle to the follower</p> <p>3/10    . by a bipartite or cleft spindle in the follower or in the handle shank</p> <p><b>5/00</b>    <b>Handles completely let into the surface of the wing</b> {<a href="#">E05B 85/10</a> takes precedence}</p> <p>5/003    . {Pop-out handles, e.g. sliding outwardly before rotation}</p> <p>5/006    . {essentially defining a completely closed surface together with the wing}</p>	<p><b>7/00</b>    <b>Handles pivoted about an axis parallel to the wing</b> (<a href="#">E05B 5/00</a>, {<a href="#">E05B 85/14</a>} take precedence; {combined with bolt movement <a href="#">E05C 1/00</a>, <a href="#">E05C 3/00</a>})</p> <p><b>9/00</b>    <b>Lock casings or latch-mechanism casings {; Fastening locks or fasteners or parts thereof to the wing}</b>(padlock casings <a href="#">E05B 67/02</a>; for vehicles <a href="#">E05B 79/04</a>, <a href="#">E05B 85/02</a>)</p> <p>9/002    . {Faceplates or front plates (<a href="#">E05C 9/004</a> takes precedence)}</p> <p>2009/004    . {Shape of the lock housing}</p> <p>2009/006    . . {circular}</p> <p>2009/008    . . {circle segment}</p> <p>9/02    . {Casings} of latch-bolt {or deadbolt} locks</p> <p>9/04    . {Casings} of cylinder locks {(details specific for pin or ball tumbler cylinder locks <a href="#">E05B 27/0014</a>; details specific for plate tumbler cylinder locks <a href="#">E05B 29/00</a>)}</p> <p>9/041    . . {Double cylinder locks (<a href="#">E05B 9/045</a>, <a href="#">E05B 9/048</a> take precedence)}</p> <p>9/042    . . . {Stators consisting of multiple parts being assembled together (<a href="#">E05B 9/045</a> takes precedence)}</p> <p>2009/043    . . . {whereby the casing contains an inner and outer rotor which are simultaneously operated by a long key}</p> <p>9/045    . . {Modular casings for adjusting the length of cylinder locks}</p> <p>2009/046    . . {Cylinder locks operated by knobs or handles}</p> <p>2009/047    . . {Means for returning cylinder locks to their neutral position}</p> <p>9/048    . . {Stator reinforcements (for drill protection <a href="#">E05B 15/1614</a>)}</p> <p>9/08    . Fastening {locks or fasteners or parts thereof, e.g.} the casings of latch-bolt locks or cylinder locks to the wing {(on glass wings <a href="#">E05B 65/0025</a>)}</p> <p>9/082    . . {with concealed screws}</p> <p>9/084    . . {Fastening of lock cylinders, plugs or cores}</p> <p>9/086    . . . {Fastening of rotors, plugs or cores to an outer stator}</p> <p>9/088    . . . . {Means for preventing loss of tumblers during mounting or removal}</p> <p>9/10    . Coupling devices for the two halves of double cylinder locks {, e.g. devices for coupling the rotor with the locking cam (<a href="#">E05B 47/0611</a> takes precedence)}</p> <p>9/105    . . {including disengagement means, e.g. opening from one side being still possible even if the key is inserted from the other side}</p> <p><b>11/00</b>    <b>Devices preventing keys from being removed from the lock {; Devices preventing falling or pushing out of keys</b> (preventing turning of the key <a href="#">E05B 13/00</a>; keyhole guards <a href="#">E05B 17/14</a>; <a href="#">E05B 35/086</a> takes precedence)}</p> <p>11/005    . {by key modifications or attachments, e.g. eccentric centre of gravity}</p> <p>11/02    . before the wing is locked</p> <p>11/04    . before the wing is closed</p>
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- 11/06 . . . for catching skeleton or incorrect keys
- 13/00 Devices preventing the key or the handle or both from being used** [{\(covers or guards for keyholes E05B 17/14\)}](#)
- 13/001 . . . {Covers preventing access to handles or keys}
- 13/002 . . . {locking the handle [\(E05B 13/10, E05B 47/0657 take precedence\)](#)}
- 13/004 . . . {by locking the spindle, follower, or the like}
- 13/005 . . . {Disconnecting the handle [\(E05B 13/101, E05B 47/0676, E05B 55/06 take precedence\)](#)}
- 13/007 . . . {Handles which are locked or blocked in the open position}
- 13/008 . . . {A single handle being used for actuation of several wings, e.g. simultaneously}
- 13/04 . . . shaped as fork-like implements grasping and fixing the key {or a handle, e.g. a thumb-turn}
- 13/10 . . . formed by a lock arranged in the handle
- 13/101 . . . {for disconnecting the handle [\(E05B 13/103, E05B 13/105 take precedence\)](#)}
- 13/103 . . . {Combination lock}
- 13/105 . . . {the handle being a pushbutton [\(E05B 13/103 takes precedence\)](#)}
- 13/106 . . . {for handles pivoted about an axis perpendicular to the wing [\(E05B 13/101, E05B 13/103, E05B 13/105 take precedence\)](#)}
- 13/108 . . . . {the lock coaxial with spindle}
- 15/00 Other details of locks; Parts for engagement by bolts of fastening devices**
- 15/0006 . . . {Devices for aligning wing and frame; Anti-rattling devices [\(for vehicle doors E05B 83/367\)](#)}
- 15/0013 . . . {Followers; Bearings therefor}
- 15/002 . . . {Energy storage by movement of wing}
- 15/0026 . . . {Adaptors cooperating with and acting on keys inserted in an existing lock, e.g. for transformation of a key actuated lock to handle actuation}
- 15/0033 . . . {Spindles for handles, e.g. square spindles}
- 15/004 . . . {Lost motion connections}
- 15/0046 . . . {Ratchet mechanisms}
- 15/0053 . . . {means providing a stable, i.e. indexed, position of lock parts}
- 15/006 . . . {Spring-biased ball or roller entering a notch}
- 2015/0066 . . . {axially operated}
- 15/0073 . . . {magnetically operated}
- 15/008 . . . {friction type}
- 15/0086 . . . {Toggle levers [\(toggle fasteners E05C 19/14\)](#)}
- 15/0093 . . . {Weight arrangements in locks; gravity activated lock parts [\(E05B 65/5292, E05B 77/06 take precedence\)](#)}
- 15/02 . . . Striking-plates; Keepers; Bolt staples; Escutcheons [{\(keyhole finders E05B 15/08; escutcheons made of hard materials E05B 15/1614; finger-plates E06B 7/285\)}](#)
- 15/0205 . . . {Striking-plates, keepers, staples [\(means for reducing friction E05B 17/007; electric strikers E05B 47/0046; staples for padlocks E05B 67/383; strikers for espagnolettes E05C 9/1808\)](#)}
- 15/021 . . . . {Strikers having multiple positions for the bolt}
- 2015/0215 . . . . {Screw-type}
- 15/022 . . . . {movable, resilient or yieldable [\(adjustable into different discrete positions E05B 15/024; yieldable striker for emergency opening E05B 65/1026\)](#)}
- 15/0225 . . . . {Resilient block type, e.g. made from rubber}
- 2015/023 . . . . {Keeper shape}
- 2015/0235 . . . . {Stud-like}
- 15/024 . . . . {adjustable}
- 15/0245 . . . . {Movable elements held by friction, cooperating teeth, or the like}
- 15/025 . . . . {the striker being movable by a screw/nut}
- 15/0255 . . . . {Deformable element}
- 2015/026 . . . . {using eccentrics}
- 2015/0265 . . . . {pivoting or tilting}
- 2015/027 . . . . {auto-adjustable}
- 2015/0275 . . . . {in two directions}
- 2015/028 . . . . {in three directions}
- 2015/0285 . . . . {Portable striker}
- 15/029 . . . . {Closures, e.g. preventing dirt or paint from entering into the striker}
- 15/0295 . . . . {specially adapted for forked or bifurcated bolts [\(for vehicles E05B 85/045\)](#)}
- 15/04 . . . Spring arrangements in locks [{\(E05B 3/065, E05B 15/101, E05B 15/143, E05C 19/06 take precedence\)}](#)
- 2015/0403 . . . . {Wound springs}
- 2015/0406 . . . . {wound in a cylindrical shape}
- 2015/041 . . . . {loaded perpendicular to cylinder axis}
- 2015/0413 . . . . {loaded by compression}
- 2015/0417 . . . . {loaded by traction}
- 2015/042 . . . . {wound in a plane, e.g. spirally}
- 2015/0424 . . . . {of conical shape}
- 2015/0427 . . . . {curved, e.g. toroidal}
- 2015/0431 . . . . {Modifying spring characteristic or tension [\(E05B 2015/0441 takes precedence\)](#)}
- 2015/0434 . . . . {Automatically}
- 2015/0437 . . . . {Attachments or mountings; Mounting of springs}
- 2015/0441 . . . . {Tensioning after mounting}
- 2015/0444 . . . . {Springs additionally fulfilling an electric function}
- 2015/0448 . . . . {Units of springs; Two or more springs working together}
- 2015/0451 . . . . {Folded springs}
- 2015/0455 . . . . {Torsion springs of bar type}
- 2015/0458 . . . . {Leaf springs; Non-wound wire springs}
- 2015/0462 . . . . {Ring springs}
- 2015/0465 . . . . {Cup- or dish-shaped springs}
- 2015/0468 . . . . {made of one piece with a lock part}
- 2015/0472 . . . . {Made of rubber, plastics or the like}
- 2015/0475 . . . . {of block type}
- 2015/0479 . . . . {of elastic string type}
- 2015/0482 . . . . {Heavy springs which cannot be operated by hand}
- 2015/0486 . . . . {A single spring working on more than one element}
- 2015/0489 . . . . {on more than one tumbler}
- 2015/0493 . . . . {Overcenter springs}
- 2015/0496 . . . . {Springs actuated by cams or the like}
- 15/06 . . . Lock wards
- 15/08 . . . Key guides; Key pins {; Keyholes; Keyhole finders [\(E05B 17/10 takes precedence\)](#)}
- 15/10 . . . Bolts of locks or night latches [{\(made of hard materials, e.g. to prevent sawing E05B 15/1614; lengthwise adjustable E05B 63/06\)}](#)}
- 15/101 . . . {Spring-retracted bolts}

- 15/102 . . {Bolts having movable elements ([E05B 23/00](#) takes precedence)}
- 15/104 . . . {Movable key-operated elements ("Schlüsselangriff")}
- 2015/105 . . . {Two pivoting latch elements with opposite inclined surfaces mounted on one slidable main latch-piece}
- 2015/107 . . . {Roller bolt, i.e. a slidable main latch-piece with a roller-, ball- or barrel-shaped rotating element}
- 15/108 . . {Bolts with multiple head ([E05B 65/0075](#) takes precedence)}
- 15/14 . Tumblers
- 15/143 . . {elastic, e.g. formed by a spring}
- 2015/146 . . {Tumblers with parts movable to each other}
- 15/16 . Use of special materials for parts of locks
- 15/1607 . . {Adhesive}
- 15/1614 . . {of hard materials, to prevent drilling ([E05B 67/04](#), [E05B 67/38](#) take precedence)}
- 15/1621 . . . {Hardened bolts, or bolts with hardened inserts}
- 2015/1628 . . . {Free-rotating protecting covers or discs}
- 15/1635 . . {of plastics materials ([springs E05B 15/04](#))}
- 2015/1642 . . . {for the whole lock}
- 2015/165 . . . {for bolts}
- 2015/1657 . . . {for escutcheons}
- 2015/1664 . . . {for lock housing ([E05B 17/002](#), [E05B 17/0041](#), [E05B 17/0045](#) take precedence)}
- 2015/1671 . . . {for strikers ([E05B 15/022](#) takes precedence)}
- 2015/1678 . . . {for handle bearings}
- 2015/1685 . . {Sheet materials}
- 2015/1692 . . {Wires or straps}
- 17/00** **Accessories in connection with locks** ([buffers E05F 5/00](#); means for preventing rattling of wings [E05F 7/04](#); means for taking the weight of the wing [E05F 7/06](#))
- 17/0004 . {Lock assembling or manufacturing ([making locksmith's goods of sheet metal B21D 53/38](#); [assembling in general B23P 21/00](#))}
- 17/0008 . . {Lock parts made by extrusion process}
- 17/0012 . {for lock parts held in place before or during mounting on the wing}
- 17/0016 . {Defrosting, e.g. heating devices}
- 17/002 . {Weather or dirt protection ([E05B 15/029](#), [E05B 17/14](#) take precedence; for vehicle locks [E05B 77/34](#))}
- 17/0025 . {Devices for forcing the wing firmly against its seat or to initiate the opening of the wing ([E05B 15/022](#), [E05B 65/0817](#), [E05B 81/20](#), [E05C 19/14](#) take precedence)}
- 17/0029 . . {motor-operated (for vehicles [E05B 81/20](#))}
- 17/0033 . . {for opening only ([E05B 17/0029](#) takes precedence)}
- 17/0037 . . . {Spring-operated}
- 17/0041 . {Damping means (for vehicles [E05B 77/42](#); [time locks with retarders E05B 43/00](#))}
- 17/0045 . {Silencing devices; Noise reduction ([resilient strikers E05B 15/022](#); for vehicles [E05B 77/36](#))}
- 17/005 . {Preventing accidental lock-out, e.g. by obstruction in the striker ([securing the bolt in the retracted position E05B 63/18](#); stops and buffers preventing the slamming of wings [E05F 5/02](#))}
- 17/0054 . {Fraction or shear lines; Slip-clutches, resilient parts or the like for preventing damage when forced or slammed}
- 17/0058 . . {with non-destructive disengagement ([E05B 17/045](#) takes precedence)}
- 17/0062 . . {with destructive disengagement}
- 17/0066 . . . {Handles with destructible elements}
- 17/007 . {Devices for reducing friction between lock parts ([E05B 17/08](#) takes precedence)}
- 17/0075 . {Insulating, e.g. for limiting heat transfer; Increasing fire-resistance of locks}
- 17/0079 . {Locks with audio features ([E05B 45/00](#) takes precedence)}
- 17/0083 . . {Sound emitting devices, e.g. loudspeakers}
- 17/0087 . . {Sound receiving devices, e.g. microphones}
- 17/0091 . {including protruding or recessed symbols in a surface for tactile indication/information, e.g. Braille symbols}
- 2017/0095 . {Means preventing wrong operation, e.g. preventing damaging contact between extended bolt and striker or bolt and frame}
- 17/04 . Devices for coupling the turning cylinder of a single or a double cylinder lock with the bolt operating member
- 17/041 . . {Coupling device with a shaft projecting axially rearwardly from the cylinder, e.g. affording a degree of universal motion to compensate for misalignment}
- 17/042 . . {using toothed wheels or geared sectors ([E05C 9/023](#), [E05C 9/041](#) take precedence)}
- 2017/043 . . . {Planetary gear}
- 17/044 . . {Clutches, disengageable couplings}
- 17/045 . . . {for keeping the rotor disconnected from the bolt actuating member, when being turned, e.g. forcefully, without the proper key}
- 17/046 . . . {disengaged manually from inside}
- 17/047 . . {with rotating output elements forming part of cylinder locks, e.g. locking cams of double cylinder locks}
- 17/048 . . {with sliding output elements forming part of cylinder locks, e.g. in the form of pins or cams}
- 17/049 . . . {sliding essentially in the axial direction of the cylinder lock}
- 17/06 . Templates for marking the position of apertures in fittings of wings {or frames; Apparatus for installation of a lockset ([drill jigs B23B 47/28](#); [mortised work B27F 5/12](#); [templates for hinges E05D 11/0009](#))}
- 17/08 . Lubricating devices
- 17/10 . Illuminating devices on or for locks or keys; {Transparent or translucent lock parts; Indicator lights}
- 17/103 . . {on keys ([E05B 17/106](#) takes precedence; [attached to key rings A44B 15/005](#); on key bags or wallets [A45C 11/32](#))}
- 17/106 . . {fluorescent}
- 17/12 . Devices for removing keys stuck in the lock
- 17/14 . Closures or guards for keyholes {(for vehicle ignition or steering lock [B60R 25/023](#))}
- 17/142 . . {with key-operated locks, e.g. padlocks}
- 17/145 . . {with combination lock}
- 17/147 . . {electrically-operated}
- 17/16 . . shaped as pins or key bits ([E05B 17/145](#) takes precedence)}

- 17/18 . . . shaped as lids or slides ([E05B 17/142](#), [E05B 17/145](#), [E05B 17/147](#) take precedence)
- 17/181 . . . {pivoting inwardly}
- 17/183 . . . {pivoting outwardly}
- 17/185 . . . {pivoting about an axis perpendicular to the lock face}
- 17/186 . . . {sliding}
- 17/188 . . . {flexible}
- 17/20 . Means independent of the locking mechanism for preventing unauthorised opening, e.g. for securing the bolt in the fastening position ([locks with means carried by the bolt for interlocking with the keeper E05B 63/12](#))
- 17/2003 . . {Preventing opening by insertion of a tool, e.g. flexible, between door and jamb to withdraw the bolt}
- 17/2007 . . {Securing, deadlocking or "dogging" the bolt in the fastening position ([E05B 15/0046](#), [E05B 15/0086](#), [E05B 67/383](#) take precedence)}
- 17/2011 . . . {using balls or the like cooperating with notches ([E05B 63/121](#) takes precedence)}
- 17/2015 . . . {with wedging action}
- 17/2019 . . . {elastic, i.e. the dog or detent being formed or carried by a spring}
- 17/2023 . . . {Loose pins, screws, or the like; Portable devices}
- 17/2026 . . . {automatic, i.e. actuated by a closed door position sensor}
- 17/203 . . . {not following the movement of the bolt}
- 17/2034 . . . . {moving pivotally or rotatively}
- 17/2038 . . . . {moving rectilinearly}
- 17/2042 . . . . {moving otherwise than only rectilinearly and only pivotally or rotatively}
- 17/2046 . . . . . {performing both movements simultaneously, e.g. screwing}
- 17/2049 . . . {following the movement of the bolt}
- 17/2053 . . . . {moving pivotally or rotatively relating to the bolt}
- 17/2057 . . . . . {moving rectilinearly relating to the bolt}
- 17/2061 . . . . . {moving otherwise than only rectilinearly and only pivotally or rotatively relating to the bolt}
- 17/2065 . . . . . {performing both movements simultaneously, e.g. screwing}
- 17/2069 . . . {by means of an additional dogging movement of a sliding bolt}
- 17/2073 . . . . . {pivotally or rotatively}
- 17/2076 . . . . . {about an axis parallel to its sliding movement}
- 17/208 . . . {by means of an additional dogging movement of a rotary bolt}
- 17/2084 . . {Means to prevent forced opening by attack, tampering or jimmying ([E05B 15/1614](#) takes precedence; for ignition or steering locks [B60R 25/023](#))}
- 17/2088 . . . {Means to prevent disengagement of lock and keeper ([E05B 63/12](#) takes precedence)}
- 17/2092 . . . {Means responsive to tampering or attack providing additional locking (for safes [E05B 65/0082](#))}
- 2017/2096 . . . {Preventing tampering by removal of lock parts which are vital for the function}
- 17/22 . . Means for operating or controlling lock or fastening device accessories, i.e. other than the fastening members, e.g. switches, indicators ([E05B 39/00](#) - [E05B 45/00](#) take precedence)
- 17/223 . . . {preventing lock actuation after detection of drug use, e.g. alcohol consumption}
- 17/226 . . . {Displays on locks, e.g. LED or LCD screens (on handles [E05B 1/0084](#); on keys [E05B 19/0088](#))}
- 19/00** **Keys; Accessories therefor** ({key modifications or attachments preventing removal from the lock [E05B 11/005](#); key rings [A44B 15/00](#); key cases [A45C 11/32](#); key holders [A47G 29/10](#);) making keys, see the relevant places, e.g. [B21D 53/42](#); milling grooves in keys [B23C 3/35](#))
- 19/0005 . . {Key safes ([E05B 35/086](#) takes precedence)}
- 19/0011 . . {Key decoders (general measuring of contours and curvatures [G01B 3/14](#), [G01B 5/20](#), [G01B 7/28](#))}
- 19/0017 . . {Key profiles}
- 19/0023 . . . {characterized by variation of the contact surface between the key and the tumbler pins or plates}
- 19/0029 . . . {characterized by varying cross-sections of different keys within a lock system (cross-sections of single keys [E05B 19/0041](#))}
- 19/0035 . . . {characterized by longitudinal bit variations}
- 19/0041 . . . {characterized by the cross-section of the key blade in a plane perpendicular to the longitudinal axis of the key}
- 19/0047 . . . . {with substantially circular or star-shape cross-section}
- 19/0052 . . . . {Rectangular flat keys}
- 19/0058 . . . . . {with key bits on at least one wide side surface of the key}
- 19/0064 . . . . . . {and with additional key bits on at least one narrow side edge of the key}
- 19/007 . . . . {with U- or V-shaped cross-section}
- 19/0076 . . . {Keys with a curved longitudinal axis}
- 19/0082 . . {Keys or shanks being removably stored in a larger object, e.g. a remote control or a key fob (general constructional details of electronic keys [G07C 9/00944](#))}
- 19/0088 . . {Displays on keys, e.g. LED or LCD screens}
- 19/0094 . . {protruding elements on the key preventing unauthorized insertion into the keyhole}
- 19/04 . . Construction of the bow {or head} of the key; Attaching the bow to the shank
- 19/043 . . . {the shank being pivotally mounted on the bow, e.g. for storage}
- 19/046 . . . {the shank being slidingly mounted on the bow, e.g. for storage}
- 19/14 . . Double {or multiple} keys {, e.g. with two or more bows or bits (see also [E05B 35/14](#))}
- 19/18 . . Keys adjustable before use
- 19/20 . . Skeleton keys; Devices for picking locks; Other devices for similar purposes {; Means to open locks not otherwise provided for, e.g. lock pullers (forcing doors open [A62B 3/005](#))}
- 19/205 . . . {Lock decoders}
- 19/22 . . Keys with devices for indicating whether the last operation was locking or unlocking
- 19/24 . . Key distinguishing marks {(fluorescent [E05B 17/106](#))}
- 19/26 . . Use of special materials for keys {(fluorescent [E05B 17/106](#); magnets [E05B 47/0038](#))}

**Locks with rotary keys moving lamelliform tublers perpendicular to the key**

	27/0085	. {wherein the key can be inserted or withdrawn in different positions or directions ( <a href="#">in general E05B 63/0047</a> )}
	27/0089	. . {wherein the key can be withdrawn in several angular positions}
	27/0092	. . {wherein the key can be inserted from both sides of the lock}
	27/0096	. . {reversible keys}
	27/02	. operated by the edge of the key
	27/08	. . arranged axially
	27/083	. . . {of the split-pin tumbler type}
	27/086	. . . {of the bar-tumbler type, the bars having slots or protrusions in alignment upon opening the lock}
	27/10	. operated by other surfaces of the key, e.g. openings receiving projections on the tumblers
<b>21/00</b>		<b>Locks with lamelliform tumblers {which are not set by the insertion of the key and} in which the tumblers do not follow the movement of the bolt {e.g. Chubb-locks}</b>
21/003		. {comprising tumblers moving in opposite directions, e.g. tumbler sets on opposite sides of the keyhole for operation by a double-bit key}
21/006		. {the bolt being operated by other means than the key bit, e.g. via a key-operated thrower}
21/06		. Cylinder locks, e.g. protector locks
21/063		. . {of the sliding-plate tumbler type}
21/066		. . {of the rotary-disc tumbler type ( <a href="#">tumblers which are set by inserting the key E05B 29/0013</a> )}
<b>23/00</b>		<b>Locks with lamelliform tumblers {which are not set by the insertion of the key and} in which the tumblers follow the movement of the bolt</b>
<b>27/00</b>		<b>Cylinder locks {or other locks} with tumbler pins or balls that are set by pushing the key in</b>
27/0003		. {Details}
27/0007		. . {Rotors}
27/001		. . . {having relatively movable parts, e.g. coaxial- or split-plugs ( <a href="#">for anti-picking purposes E05B 27/0075</a> )}
27/0014		. . {Stators ( <a href="#">cylinder lock casings in general E05B 9/04</a> )}
27/0017		. . {Tumblers or pins}
27/0021		. . . {having movable parts}
2027/0025		. . {having means preventing rotation of the tumbler}
27/0028		. {Other locks than cylinder locks with tumbler pins or balls}
27/0032		. {with both axially and radially arranged tumbler pins or balls}
27/0035		. {with indirectly actuated tumblers}
27/0039		. {with pins which slide and rotate about their axis}
27/0042		. {with additional key identifying function, e.g. with use of additional key operated rotor-blocking elements, not of split pin tumbler type ( <a href="#">E05B 27/0078 takes precedence</a> )}
27/0046		. {Axially movable rotor}
27/005		. {with changeable combinations}
27/0053		. {for use with more than one key, e.g. master-secondary key}
27/0057		. {with increased picking resistance}
27/006		. . {whereby a small rotation without the correct key blocks further rotation of the rotor ( <a href="#">E05B 27/0067 takes precedence</a> )}
27/0064		. . . {whereby the rotor is irreversibly blocked or can only be moved back with an authorized tool or key}
27/0067		. . {whereby a small rotation without the correct key blocks further movement of a tumbler ( <a href="#">E05B 27/0082 takes precedence</a> )}
27/0071		. . {by means preventing opening by using the bump-technique}
27/0075		. . {by movable rotor elements}
27/0078		. {Asymmetrical tumbler pins, e.g. with a key operating on a radial protrusion of a tumbler pin}
27/0082		. {Side bar locking}
	<b>29/00</b>	<b>Cylinder locks {and other locks} with plate tumblers which are set by pushing the key in {fastening of cylinders, rotors, plugs or cores <a href="#">E05B 9/084</a>; with magnetic tumblers <a href="#">E05B 47/0044</a>; with electromagnetic control <a href="#">E05B 47/0611</a>}</b>
	29/0006	. {Other locks than cylinder locks with plate tumblers}
	29/0013	. {with rotating plate tumblers ( <a href="#">E05B 29/0033 takes precedence</a> ; plate tumblers which are not set by inserting the key <a href="#">E05B 21/06</a> )}
	29/002	. . {rotating about an axis perpendicular to the key axis}
	29/0026	. {with longitudinally movable cylinder}
	29/0033	. {with floating plate tumblers, i.e. sliding or sliding and rotating in a plane}
	29/004	. {with changeable combinations}
	29/0046	. {for use with more than one key, e.g. master-secondary key}
	29/0053	. {with increased picking resistance}
	29/006	. . {by movable rotor elements}
	29/0066	. {Side bar locking}
	29/0073	. {wherein the key can be inserted or withdrawn in different positions or directions ( <a href="#">in general E05B 63/0047</a> )}
	29/008	. . {wherein the key can be withdrawn in several angular positions}
	29/0086	. . {wherein the key can be inserted from both sides of the lock}
	29/0093	. . {reversible keys}
	<b>31/00</b>	<b>Cylinder locks with both tumbler pins or balls and plate tumblers</b>
	<b>33/00</b>	<b>Cylinder locks in which the bolt is moved by means other than the key</b>
	<b>35/00</b>	<b>Locks for use with special keys or a plurality of keys {; keys therefor}</b>
	35/001	. {with key identifying function}
	35/002	. {for flexible keys}
	35/003	. {for keys with movable bits ( <a href="#">keys adjustable before use E05B 19/18</a> )}
	35/004	. . {pivoting about an axis perpendicular to the main key axis}
	35/005	. . {pivoting about an axis parallel to the main key axis}
	35/006	. {for rack- or pinion-like keys}
	35/007	. {the key being a card, e.g. perforated, or the like ( <a href="#">E05B 47/0045 takes precedence</a> )}

- 35/008 . . {for simple tool-like keys}
  - 2035/009 . . {Locks where a characteristic part of the user's body is used as a key}
  - 35/02 . . which can be shifted laterally {or rotated about an axis perpendicular to the key axis}
  - 35/06 . . for screw keys
  - 35/08 . . operable by a plurality of keys
  - 35/083 . . {with changeable combination [\(E05B 35/125 takes precedence; for cylinder locks E05B 27/005, E05B 29/004\)](#)}
  - 35/086 . . {using a pair of interlocked keys, one of the keys being non-removable; key-storing devices from which only one key can be removed at a time}
  - 35/10 . . with master and pass keys [{\(for cylinder locks E05B 27/0053\)}](#)
  - 35/105 . . . {Locks allowing opening by official authorities, e.g. master key opening of luggage locks by customs officials}
  - 35/12 . . requiring the use of two keys, e.g. safe-deposit locks [\(locks with key-operated keyhole cover E05B 17/142\)](#)
  - 35/125 . . . {with changeable combination}
  - 35/14 . . with keys of which different parts operate separate mechanisms [{\(E05B 35/003 takes precedence\)}](#)
  - 37/00** **Permutation {or combination} locks** [{\(handles with combination locks E05B 13/103; keyhole guards with combination locks E05B 17/145;\)} electric permutation locks E05B 49/00](#); **Puzzle locks**
  - 37/0003 . . {preventing detection of the combination}
  - 37/0006 . . {by avoiding unauthorized viewing of the combination}
  - 37/001 . . {through listening or feeling}
  - 37/0013 . . . {by producing noise}
  - 37/0017 . . . {by producing false clicks; by use of false gates}
  - 37/002 . . {Speed sensors}
  - 37/0024 . . {limited number of tries}
  - 37/0027 . . {X-ray protection}
  - 37/0031 . . {Locks with both permutation and key actuation [\(E05B 17/145 takes precedence\)](#)}
  - 37/0034 . . {actuated by either}
  - 37/0037 . . {with a key requiring successive operations, e.g. different mechanisms in a predetermined order [\(E05B 35/003 takes precedence\)](#)}
  - 37/0041 . . {Key actuation allowing recovery of a lost/ forgotten combination}
  - 37/0044 . . {with telephone-type dial}
  - 37/0048 . . {with changeable combination}
  - 37/0051 . . {by moving pins to another hole}
  - 37/0055 . . {by radial disengagement between hub and rim of tumbler discs or rings}
  - 37/0058 . . {by axial disengagement between hub and rim of tumbler discs or rings}
  - 37/0062 . . {Operation by feeling, e.g. in darkness using Braille signs}
  - 37/0065 . . {Master combination}
  - 37/0068 . . {in padlocks [\(E05B 37/025, E05B 37/10 and E05B 37/14 take precedence\)](#)}
  - 37/0072 . . {Sign-, picture- or letter-based permutations}
  - 37/0075 . . {Automatic scrambling}
  - 37/0079 . . {when unlocking}
  - 37/0082 . . {when locking}
  - 37/0086 . . {when the wing is opened}
  - 37/0089 . . {when the wing is closed}
  - 37/0093 . . {Obligatory manual scrambling}
  - 37/0096 . . {with tumbler discs arranged on concentric axes, each axis being operated by a different rotating knob}
  - 37/02 . . with tumbler discs or rings arranged on a single axis, each disc being adjustable independently of the others
  - 37/025 . . {in padlocks}
  - 37/04 . . with tumbler discs on a single axis, all the discs being adjustable by rotating a shiftable knob
  - 37/08 . . with tumbler discs on a single axis, all the discs being adjustable by a rotary knob which is not shifted [{for adjusting the discs \(E05B 37/0044 takes precedence\)}](#)
  - 37/10 . . in padlocks
  - 37/12 . . with tumbler discs on several axes
  - 37/14 . . in padlocks
  - 37/16 . . with two or more push or pull knobs, slides, or the like [{\(E05B 65/461 takes precedence\)}](#)
  - 37/163 . . {the knobs being pushed in a prescribed sequence}
  - 37/166 . . {each knob being pushed a predetermined number of times [\(E05B 37/163 takes precedence\)](#)}
  - 37/20 . . Puzzle locks {, e.g. of labyrinth type; Fasteners with hidden or secret actuating mechanisms}
- Locks with indicating or timing devices**
- 39/00** **Locks giving indication of {authorised} or unauthorised unlocking** [{\(with key identification means E05B 35/001; alarm locks E05B 45/00\)}](#)
  - 39/002 . . {by releasing a liquid, e.g. ill-smelling or dye}
  - 39/005 . . {Locks with means for tracking the location of locked items, e.g. freight containers}
  - 39/007 . . {Indication by a tactile impulse to the user, e.g. vibration of a lock-, handle- or key-part}
  - 39/02 . . with destructible seal closures or paper closures
  - 39/025 . . {with fracturable glass or the like, e.g. for emergency exits}
  - 39/04 . . with counting or registering devices [{\(time recording locks G07C 1/32\)}](#)
  - 41/00** **Locks with visible indication as to whether the lock is locked or unlocked** [{\(indicator lights E05B 17/10\)}](#)
  - 43/00** **Time locks**
  - 2043/002 . . {using mechanical clocks}
  - 43/005 . . {Timer devices controlling electrically operated locks}
  - 2043/007 . . {using hydraulic or pneumatic retarders}
  - 45/00** **Alarm locks**
  - 45/005 . . {Chain-locks, cable-locks or padlocks with alarms}
  - 45/02 . . with mechanically-operated bells
  - 45/04 . . with detonating alarm devices [{\(detonating alarm devices in general G08B 3/14, G08B 13/06\)}](#)
  - 45/06 . . Electric alarm locks [{\(E05B 45/005 takes precedence\)}](#)
  - 45/0605 . . {for preventing of leaving the key [\(key ejection E05B 63/003\)](#)}
  - 45/061 . . {for combination locks}
  - 2045/0615 . . {triggered by movement of the handle}
  - 2045/062 . . {by traction on a chain}
  - 2045/0625 . . {by pressure on a safety bar}

- 2045/063 . . {by movement of the wing}
  - 2045/0635 . . {by rotation of key or rotor}
  - 2045/064 . . {by movement of the lock housing or part thereof}
  - 2045/0645 . . {by movement of the keyhole cover}
  - 2045/065 . . {Switch or sensor type used in alarm locks}
  - 2045/0655 . . . {Photo-diodes}
  - 2045/066 . . . {Mercury switches}
  - 2045/0665 . . . {Magnetic switches, e.g. reed- or hall-switch}
  - 2045/067 . . . {Switches triggered by inertia}
  - 2045/0675 . . . {Foam or rubber element with contacts which close a circuit due to deformation of the element}
  - 2045/068 . . . {Piezoelectric sensors}
  - 2045/0685 . . . {Optical fibres for transmitting the sensor signal}
  - 2045/069 . . {Timers therefor}
  - 2045/0695 . . {Actuation of a lock triggering an alarm system, e.g. an alarm system of a building}
  - 45/08 . . with contact making inside the lock or in the striking plate
  - 45/083 . . . {with contact making either in the striking plate or by movement of the bolt relative to the striking plate}
  - 45/086 . . . . {by transverse movement}
  - 45/10 . . . by introducing the key {or another object}
  - 45/12 . . . by movement of the bolt {[E05B 45/083](#) takes precedence}
  - 45/125 . . . . {by transverse movement}
- Operation or control of locks by non-mechanical means, e.g. from a distance** (locking doors simultaneously in passenger vehicles [E05B65/36](#); key switches [H01H 27/00](#))
- 47/00 Operating or controlling locks or other fastening devices by electric or magnetic means** (electric permutation locks [E05B 49/00](#))
  - 47/0001 . {with electric actuators; Constructional features thereof (for vehicles [E05B 81/04](#))}
  - 47/0002 . . {with electromagnets}
  - 47/0003 . . . {having a movable core}
  - 47/0004 . . . . {said core being linearly movable}
  - 47/0005 . . . . {said core being rotary movable}
  - 47/0006 . . . {having a non-movable core; with permanent magnet}
  - 2047/0007 . . . {with two or more electromagnets}
  - 2047/0008 . . . . {having different functions}
  - 47/0009 . . {with thermo-electric actuators, e.g. heated bimetals}
  - 47/0011 . . {with piezoelectric actuators (piezoelectric devices [per se H10N 30/00](#))}
  - 47/0012 . . {with rotary electromotors (actuators with rotary electromotors [per se H02K 7/06](#), [H02K 23/68](#))}
  - 2047/0013 . . . {more than one motor for the same function, e.g. for redundancy or increased power}
  - 2047/0014 . . {Constructional features of actuators or power transmissions therefor}
  - 2047/0015 . . . {Output elements of actuators}
  - 2047/0016 . . . . {with linearly reciprocating motion}
  - 2047/0017 . . . . {with rotary motion}
  - 2047/0018 . . . {Details of actuator transmissions}
  - 2047/002 . . . . {Geared transmissions}
  - 2047/0021 . . . . . {Geared sectors or fan-shaped gears}
  - 2047/0022 . . . . . {Planetary gears}
  - 2047/0023 . . . . {Nuts or nut-like elements moving along a driven threaded axle}
  - 2047/0024 . . . . {Cams}
  - 2047/0025 . . . . . {in the form of grooves}
  - 2047/0026 . . . . {Clutches, couplings or braking arrangements}
  - 2047/0027 . . . . . {using centrifugal action}
  - 2047/0028 . . . . . {using electromagnetic means}
  - 2047/003 . . . . . {of the overload- slip- or friction type}
  - 2047/0031 . . . . . {of the elastic type}
  - 2047/0032 . . . . . {using flywheel action}
  - 2047/0033 . . . . . {using electro-rheological or magneto-rheological substances}
  - 2047/0034 . . . . . {using materials with a volume which changes due to electrical voltage or current}
  - 2047/0035 . . . {Actuators being driven in a single direction only}
  - 2047/0036 . . . {Reversible actuators}
  - 2047/0037 . . . {Powered actuators with automatic return to the neutral position by non-powered means, e.g. springs}
  - 47/0038 . {using permanent magnets}
  - 47/004 . . {the magnets acting directly on the bolt}
  - 47/0041 . . {with tumbler pins suspended for a pendulum movement}
  - 47/0042 . . {with rotary magnet tumblers}
  - 47/0043 . . {Mechanical locks operated by cards having permanent magnets}
  - 47/0044 . . {Cylinder locks with magnetic tumblers ([E05B 47/0041](#), [E05B 47/0042](#) take precedence)}
  - 47/0045 . . {keys with permanent magnets ([E05B 47/0043](#), [E05B 47/0044](#), [E05B 73/0052](#) take precedence)}
  - 47/0046 . {Electric or magnetic means in the striker or on the frame; Operating or controlling the striker plate ([E05B 47/0696](#), [E05B 63/248](#) take precedence)}
  - 47/0047 . . {Striker rotating about an axis parallel to the wing edge}
  - 2047/0048 . {Circuits, feeding, monitoring}
  - 2047/005 . . {Opening, closing of the circuit}
  - 2047/0051 . . . {by closing the wing}
  - 2047/0052 . . . {opening the circuit by detection of current increase}
  - 2047/0053 . . . {by operating the handle}
  - 2047/0054 . . . {using microprocessor, printed circuits, or the like}
  - 2047/0055 . . . {by blowing}
  - 2047/0056 . . . {by sensing the presence of a person, e.g. body heat sensor}
  - 2047/0057 . . {Feeding}
  - 2047/0058 . . . {by batteries}
  - 2047/0059 . . . {by transfer between frame and wing}
  - 2047/0061 . . . . {using induction}
  - 2047/0062 . . . {by generator}
  - 2047/0063 . . . {Energy transfer from key to lock, e.g. for emergency opening}
  - 2047/0064 . . . {by solar cells}
  - 2047/0065 . . {Saving energy ([E05B 2047/0053](#), [E05B 2047/0074](#), [E05B 2047/0077](#), [E05B 2047/0079](#), [E05B 2047/0081](#) take precedence)}
  - 2047/0066 . . . {Reduced holding current}
  - 2047/0067 . . . {Monitoring}

- 2047/0068 . . . {Door closed}
- 2047/0069 . . . {bolt position}
- 2047/0071 . . {Connecting lockparts by electronic communication means only, e.g. bus systems, time multiplexing}
- 2047/0072 . {Operation}
- 2047/0073 . . {Current to unlock only}
- 2047/0074 . . . {holding means other than current (mechanical, magnetic)}
- 2047/0075 . . . {locked by gravity}
- 2047/0076 . . {Current to lock only, i.e. "fail-safe"}
- 2047/0077 . . . {holding means other than current}
- 2047/0078 . . . {unlocked by gravity}
- 2047/0079 . . {Bi-stable electromagnet(s), different pulse to lock or unlock}
- 2047/0081 . . {Same pulse to lock or unlock}
- 2047/0082 . {Induction for charging or current transformation}
- 2047/0083 . {Devices of electrically driving keys, e.g. to facilitate opening}
- 2047/0084 . {Key or electric means; Emergency release}
- 2047/0085 . . {Key and electromagnet}
- 2047/0086 . . {Emergency release, e.g. key or electromagnet ([E05B 63/0073](#) takes precedence)}
- 2047/0087 . . . {Electric spare devices, e.g. auxiliary batteries or capacitors for back up}
- 2047/0088 . . {Key-operated switch}
- 2047/0089 . {with electronic learning functions}
- 2047/0091 . {Retrofittable electric locks, e.g. an electric module can be attached to an existing manual lock}
- 2047/0092 . {including means for preventing manipulation by an external magnetic field, e.g. preventing opening by using a strong magnet}
- 2047/0093 . {including means for preventing manipulation by external shocks, blows or the like}
- 2047/0094 . {Mechanical aspects of remotely controlled locks}
- 2047/0095 . . {Mechanical aspects of locks controlled by telephone signals, e.g. by mobile phones}
- 2047/0096 . . {Mechanical aspects of locks whose actuation is dependent on geographical location, e.g. by means of a GPS system}
- 2047/0097 . {including means for monitoring voltage, e.g. for indicating low battery state}
- 2047/0098 . {Arrangements for grounding electrical locks or elements thereof, e.g. for avoiding shocks or failure due to static electricity}
- 47/02 . {Movement of the bolt by electromagnetic means}; Adaptation of locks, latches, or parts thereof, for movement of the bolt by electromagnetic means **{(by means in the striker [E05B 63/248](#))}**
- 47/023 . . {the bolt moving pivotally or rotatively}
- 47/026 . . {the bolt moving rectilinearly}
- 47/06 . . Controlling mechanically-operated bolts by electromagnetically-operated detents
- 47/0603 . . {the detent moving rectilinearly}
- 47/0607 . . {the detent moving pivotally or rotatively}
- 47/0611 . . {Cylinder locks with electromagnetic control}
- 47/0615 . . . {operated by handles, e.g. by knobs}
- 47/0619 . . . {by blocking the rotor}
- 47/0623 . . . . {axially, i.e. with an axially engaging blocking element}
- 47/0626 . . . . {radially}
- 47/063 . . . . {with a rectilinearly moveable blocking element}
- 47/0634 . . . . . {with a pivotally moveable blocking element}
- 47/0638 . . . {by disconnecting the rotor}
- 47/0642 . . . . {axially, i.e. with an axially disengaging coupling element}
- 47/0646 . . . . {radially}
- 47/0649 . . . . . {with a rectilinearly moveable coupling element}
- 47/0653 . . . . . {with a pivotally moveable coupling element}
- 47/0657 . . {by locking the handle, spindle, follower or the like}
- 47/0661 . . . {axially, i.e. with an axially engaging blocking element}
- 47/0665 . . . {radially}
- 47/0669 . . . . {with a pivotally moveable blocking element}
- 47/0673 . . . . {with a rectilinearly moveable blocking element}
- 47/0676 . . {by disconnecting the handle}
- 47/068 . . . {axially, i.e. with an axially disengaging coupling element}
- 47/0684 . . . {radially}
- 47/0688 . . . . {with a pivotally moveable coupling element}
- 47/0692 . . . . {with a rectilinearly moveable coupling element}
- 47/0696 . . {locking the bolt by an electromagnet in the striker}
- 49/00 Electric permutation locks; Circuits therefor {; Mechanical aspects of electronic locks; Mechanical keys therefor (arrangements for sensing or reading record carriers [G06K 7/00](#); mechanisms including electronic locks actuated by nonmechanical keys such as passive and active electrical keys and other data carriers [G07C 9/00](#), [G07F 7/00](#); electronic switching [H03K 17/00](#))}**
- 49/002 . {Keys with mechanical characteristics, e.g. notches, perforations, opaque marks}
- 49/004 . . {actuating mechanical switches}
- 49/006 . . {actuating opto-electronic devices}
- 49/008 . . . {by alignment of movable perforated parts, e.g. perforated tumblers}
- 51/00 Operating or controlling locks or other fastening devices by other non-mechanical means**
- 51/005 . {by a bimetallic or memory-shape element ([heated by electricity \[E05B 47/0009\]\(#\); for panic door actuation \[E05B 65/104\]\(#\)](#))}
- 51/02 . . by pneumatic or hydraulic means **{([E05B 17/0029](#) takes precedence)}**
- 51/023 . . {actuated in response to external pressure, blast or explosion ([E05B 65/102](#) takes precedence)}
- 2051/026 . . {with manually generated fluid pressure}
- 53/00 Operation or control of locks by mechanical transmissions, e.g. from a distance**
- 53/001 . {Foot-operation}
- 53/003 . {flexible}
- 53/005 . . {Bowden}
- 53/006 . {of ball-train type}
- 53/008 . {by planetary gears}

**Locks with provision for latching** (for passenger vehicle doors **E05B65/20**)

<p><b>55/00</b>    <b>Locks in which a sliding latch is used also as a locking bolt</b></p> <p>55/005    . {Cylindrical or tubular locks}</p> <p>55/06     . the handle being disconnected {(E05B 13/101, E05B 47/0676 take precedence)}</p> <p>55/12     . the bolt being secured by the operation of a hidden parallel member {; Automatic latch bolt deadlocking mechanisms, e.g. using a trigger or a feeler}</p> <p><b>57/00</b>    <b>Locks in which a pivoted latch is used also as locking means</b></p> <p><b>59/00</b>    <b>Locks with latches separate from the lock-bolts or with a plurality of latches or lock-bolts</b></p> <p><b>61/00</b>    <b>Other locks with provision for latching</b></p> <p><b>Locks {or fastenings} with special structural characteristics or for special use</b></p> <p><b>63/00</b>    <b>Locks {or fastenings} with special structural characteristics</b></p> <p>63/0004    . {Additional locks added to existing lock arrangements}</p> <p>63/0008    . . {Mounted on the hinged side of the wing}</p> <p>63/0013    . {Locks with rotary bolt without provision for latching}</p> <p>63/0017    . {Locks with sliding bolt without provision for latching}</p> <p>63/0021    . . {the bolt being shot over an increased length by a single turning operation of the key}</p> <p>2063/0026 . {Elongated, e.g. stud-like, striker entering into an opening in which movable detent means engage the elongated striker}</p> <p>63/003     . {with key ejection means}</p> <p>63/0034    . {Locks for use instead of cylinder locks, e.g. locks with cylinder lock profile and a low security operating mechanism}</p> <p>2063/0039 . {Ground mounted locks or lock elements}</p> <p>63/0043    . {Dummy or simulated locks; Cover elements without lock function}</p> <p>63/0047    . {Locks having a key withdrawable in different positions (cylinder locks E05B 27/0085, E05B 29/0073)}</p> <p>63/0052    . {Locks mounted on the "frame" cooperating with means on the "wing" (E05B 47/0046, E05B 65/0829, E05B 65/0847, E05B 65/0882 take precedence)}</p> <p>63/0056    . {Locks with adjustable or exchangeable lock parts (adjustable strikers E05B 15/024; adjustable to different keys E05B 35/083; adjustable bolt or backset E05B 63/06; adjustable coupling means for bars, rods, cables E05C 9/20)}</p> <p>63/006     . . {for different door thicknesses (E05B 9/045 takes precedence; for fastening handles to lock or latch parts E05B 3/00)}</p> <p>63/0065    . {Operating modes; Transformable to different operating modes}</p> <p>63/0069    . . {Override systems, e.g. allowing opening from inside without the key, even when locked from outside (E05B 65/1086, E05B 9/105 take precedence; by movable striker E05B 63/246)}</p> <p>63/0073    . . . {by withdrawal of the entire lock unit}</p>	<p>63/0078    . . {allowing opening with key from outside, even with key inserted from inside (E05B 9/10 takes precedence)}</p> <p>2063/0082 . . . {Locking modes}</p> <p>2063/0086 . . . {Handles used only for locking, while unlocking is achieved by other means}</p> <p>2063/0091 . . . {Lock actuation dependent on temperature}</p> <p>2063/0095 . . . {Locking devices actuated or controlled by seismic activity, e.g. earthquakes}</p> <p>63/02     . without springs</p> <p>63/04     . for alternative use on the right-hand or left-hand side of wings</p> <p>63/042    . . {constructed symmetrically}</p> <p>63/044    . . {with reversible bolt or bolt head}</p> <p>63/046    . . {with double-bevelled latch or the like}</p> <p>63/048    . . {with bolt heads at both sides of the lock}</p> <p>63/06     . with lengthwise-adjustable bolts {; with adjustable backset, i.e. distance from door edge}</p> <p>63/08     . Mortise locks {(mortised work B27F 5/12)}</p> <p>63/10     . . requiring only two cylindrical holes in the wing</p> <p>63/12     . with means carried by the bolt for interlocking with the keeper</p> <p>63/121    . . {using balls or the like cooperating with notches}</p> <p>63/122    . . {with transverse, i.e. vertically movable bolt or dropbolt (E05B 63/126 takes precedence)}</p> <p>63/123    . . {with circular bolts}</p> <p>63/125    . . {with a sliding bolt rotating about its axis, i.e. of bayonet type}</p> <p>63/126    . . {the bolt having an additional sliding bolt or movement (E05B 63/121 takes precedence)}</p> <p>63/127    . . {the bolt having an additional rotating bolt or movement}</p> <p>63/128    . . {with additional bolt in the striker (electric E05B 47/0696)}</p> <p>63/14     . Arrangement of several locks or locks with several bolts, e.g. arranged one behind the other ({locks having bolts with multiple head E05B 15/108; } with provision for latching E05B 59/00, E05B 61/00)</p> <p>63/143    . . {Arrangement of several locks, e.g. in parallel or series, on one or more wings}</p> <p>63/146    . . {locks with two or more bolts, each bolt itself being a tumbler}</p> <p>63/16     . with the handles on opposite sides moving independently</p> <p>63/18     . with arrangements independent of the locking mechanism for retaining the bolt {or latch} in the retracted position</p> <p>63/185    . . {Preventing actuation of a bolt when the wing is open (E05B 63/20 takes precedence, similar safety devices E05D 15/526)}</p> <p>63/20     . . released automatically when the wing is closed {(for panic door locks of the vertical rod type E05B 65/1013)}</p> <p>63/202    . . . {a latch bolt being initially retained in an intermediate position and subsequently projected to its full extent when the wing is closed}</p> <p>63/205    . . . {by a trigger at the hinged edge of the wing}</p> <p>2063/207 . . . {Automatic deadlocking}</p> <p>63/22     . operated by a pulling or pushing action perpendicular to the front plate, {i.e. by pulling or pushing the wing itself (without deadlocking E05C 19/02)}</p>
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- 63/24 . Arrangements in which the fastening members which engage one another are mounted respectively on the wing and the frame and are both movable, e.g. for release by moving either of them ([operating or controlling locks using electric or magnetic means in the striker or on the frame E05B 47/0046](#), [adaptation of locks locking the bolt by an electromagnet in the striker E05B 47/0696](#), [locks with means carried by the bolt for interlocking with the keeper and having additional bolt in the striker E05B 63/128](#); [hasp locks E05B 65/48](#))
- 63/242 . . {Auxiliary bolts on the frame, actuated by bolts on the wing, or *vice versa*}
- 63/244 . . {the striker being movable for latching, the bolt for unlatching, or *vice versa*}
- 63/246 . . . {Emergency release from inside by releasing the striker}
- 63/248 . . {the striker being movable for latching, and pushed back by a member on the wing for unlatching, or *vice versa*}
- 65/00 Locks {or fastenings} for special use**
- 65/0003 . {for locking a plurality of wings, e.g. simultaneously ([E05B 65/0017](#), [E05B 77/46](#), [E05B 65/462](#), [E05C 7/00](#) take precedence)}
- 65/0007 . {for gates (for wire gates [E06B 11/021](#))}
- 65/001 . {for gas- or watertight wings}
- 65/0014 . {to prevent opening by children ([E05B 13/00](#) takes precedence; [child-proof container closures B65D 50/00](#))}
- 65/0017 . {Jail locks}
- 65/0021 . {for overhead or roll-up doors, e.g. garage doors}
- 65/0025 . {for glass wings}
- 65/0028 . {for narrow-stile wings}
- 65/0032 . {for hotel rooms ([electronic G07C 9/00904](#))}
- 65/0035 . {for privacy rooms, e.g. bathrooms}
- 2065/0039 . . {with emergency release}
- 65/0042 . {For refrigerators or cold rooms ([E05B 17/0075](#) takes precedence; [magnetic E05C 19/16](#))}
- 65/0046 . . {with a bifurcated bolt}
- 65/005 . . {with sliding bolt}
- 65/0053 . . {with safety release from inside ([by releasing the striker E05B 63/246](#); [similar means for safe doors E05B 65/0078](#))}
- 65/0057 . {for caskets, coffins or burial vaults ([coffins in general A61G 17/02](#))}
- 65/006 . {for covers or panels ([for manholes E02D 29/1427](#); [for holes enabling access to installations in buildings E04F 19/08](#); [for pressure vessels F16J 13/00](#))}
- 65/0064 . . {for openings in masts}
- 65/0067 . . {for portable computers, e.g. for locking the screen panel to the keyboard panel}
- 65/0071 . {for revolving doors}
- 65/0075 . {for safes, strongrooms, vaults, fire-resisting cabinets or the like ([safes, closures and fastenings therefor E05G](#))}
- 65/0078 . . {Safety means for persons trapped within the safe, e.g. release from inside, venting means ([by releasing the striker E05B 63/246](#); [similar means for refrigerator or cold-room doors E05B 65/0053](#))}
- 65/0082 . . {with additional locking responsive to attack, e.g. to heat, explosion ([in general E05B 17/2092](#))}
- 65/0085 . {for folding wings, e.g. bi-fold wings}
- 65/0089 . {for utility meters or the like}
- 65/0092 . {for wardrobe trunks}
- 2065/0096 . {Locks for sport stadiums}
- 65/02 . for thin, hollow, or thin-metal wings
- 65/025 . . {for lockers}
- 65/06 . for swing doors {or windows, i.e. opening inwards and outwards}
- 65/08 . for sliding wings
- 2065/0805 . . {with a handle operating in both directions}
- 65/0811 . . {the bolts pivoting about an axis perpendicular to the wings}
- 65/0817 . . . {with additional movement, e.g. toggle, overcenter, excentric}
- 65/0823 . . . {cooperating with the slide guide, e.g. the rail}
- 65/0829 . . . {mounted on the slide guide, e.g. the rail}
- 65/0835 . . {the bolts pivoting about an axis parallel to the wings}
- 65/0841 . . . {and parallel to the sliding direction of the wings}
- 65/0847 . . . {mounted on the slide guide, e.g. the rail ([E05B 65/0841](#) takes precedence)}
- 65/0852 . . . {with a bolt under compression force}
- 65/0858 . . {comprising simultaneously pivoting double hook-like locking members}
- 65/0864 . . {the bolts sliding perpendicular to the wings}
- 65/087 . . {the bolts sliding parallel to the wings}
- 65/0876 . . . {cooperating with the slide guide, e.g. the rail}
- 65/0882 . . . {mounted on the slide guide, e.g. the rail}
- 65/0888 . . {Locking bars}
- 65/0894 . . {Portable or removable locks ([E05B 65/0864](#), [E05B 65/0888](#) take precedence)}
- 65/10 . for panic or emergency doors
- 65/1006 . . {of the vertical rod type}
- 65/1013 . . . {Trigger means for holding the bolt in the retracted position and releasing the bolt when the door is closed}
- 65/102 . . {opening under pressure on the surface of the door itself ([E05C 19/02](#) takes precedence)}
- 65/1026 . . . {by a yieldable or breakable bolt or striker}
- 65/1033 . . {emergency release of windows, window grills, escape hatches or the like}
- 65/104 . . {actuated in response to heat, e.g. with fusible element, bimetal, memory shape or swelling material}
- 65/1046 . . {Panic bars}
- 65/1053 . . . {sliding towards and away from the door}
- 65/106 . . . {pivoting}
- 65/1066 . . . . {the pivot axis being substantially parallel to the longitudinal axis of the bar}
- 65/1073 . . . . {the pivot axis being substantially perpendicular to the longitudinal axis of the bar}
- 65/108 . . {Electronically controlled emergency exits}
- 65/1086 . . {Locks with panic function, e.g. allowing opening from the inside without a key even when locked from the outside}
- 65/1093 . . {Dogging means for holding the actuation means, e.g. the actuating handle}
- 65/44 . for furniture ([for drawers E05B 65/46](#))
- 65/46 . for drawers
- 65/461 . . {for cash drawers}
- 65/462 . . for two or more drawers

- 65/463 . . . Drawer interlock or anti-tilt mechanisms, i.e. when one drawer is open, at least one of the remaining drawers is locked
- 65/464 . . . . comprising two or more lock elements aligned in end-to-end abutting relation
- 65/465 . . . . with rotary locking bars
- 65/466 . . . . with tensionable or flexible elements, e.g. cables, bands, chains or ropes
- 65/467 . . . Locking bars secured in front of the drawers
- 65/468 . . . using rotary locking bars ([E05B 65/465](#), [E05B 65/467](#) take precedence)
- 2065/469 . . {for drawers which can be opened from both sides}
- 65/48 . Hasp locks ([hasp fastenings other than locks E05C 19/08](#))
- 65/50 . . for briefcases {or the like}
- 65/52 . Other locks for chests, boxes, trunks, baskets, travelling bags, or the like
- 65/5207 . . {characterised by bolt movement}
- 65/5215 . . . {sliding}
- 65/5223 . . . . {perpendicular to the surface on which the lock is mounted}
- 65/523 . . . . {parallel to the surface on which the lock is mounted}
- 65/5238 . . . . . {parallel to the wing edge}
- 65/5246 . . . {rotating}
- 65/5253 . . . . {about an axis perpendicular to the surface on which the lock is mounted}
- 65/5261 . . . . . {with simultaneously operating double bolts}
- 65/5269 . . . . {about an axis parallel to the surface on which the lock is mounted}
- 65/5276 . . . . . {parallel to the wing edge}
- 65/5284 . . {in which a movable latch is passed through a staple loop ([similar fasteners for buckles A44B 11/00](#))}
- 65/5292 . . {Gravity - or orientation sensitive mechanisms, e.g. to prevent opening when wrongside-up}
- 67/00 Padlocks ([permutation locks E05B 37/00](#)); Details thereof**
- 67/003 . {Chain, wire or cable locks ([alarms therefor E05B 45/005](#); [E05B 69/006](#) takes precedence)}
- 67/006 . . {with retraction of the cable for storage ([E05B 73/0029](#) takes precedence; for devices mounted to a fixed surface or a portable object [E05B 73/0011](#))}
- 67/02 . Cases
- 2067/025 . . {Bumpers}
- 67/04 . . Armoured cases ({[parts of the casing protecting the shackle E05B 67/38](#)})
- 67/06 . Shackles; Arrangement of the shackle
- 67/063 . . {Padlocks with removable shackles}
- 2067/066 . . {Shackle extensions}
- 67/08 . . Padlocks with shackles hinged on the case
- 67/10 . . . with devices for securing the free end of the shackle
- 67/14 . . . with devices for securing the hinged end of the shackle
- 67/18 . . . with devices for securing both ends of the shackle
- 67/22 . . Padlocks with sliding shackles, with or without rotary or pivotal movement
- 67/24 . . . with built- in cylinder locks
- 67/26 . . . with screw action, with or without the shackle being moved by turning the key
- 67/28 . . Padlocks with shackles forming a circle
- 67/32 . . Padlocks with pincer- like shackles
- 67/36 . Padlocks with closing means other than shackles {; Removable locks, the lock body itself being the locking element; Padlocks consisting of two separable halves or cooperating with a stud}
- 67/365 . . {with locking means in the form of balls or rollers}
- 67/38 . Auxiliary or protective devices ({[weather protection E05B 17/002](#); [armoured cases E05B 67/04](#)})
- 67/383 . . {Staples or the like for padlocks; Lock slings; Arrangements on locks to cooperate with padlocks}
- 2067/386 . . {Padlock holders}
- Locking devices for clothing, sticks, umbrellas, or cycles**
- 69/00 Devices for locking clothing; Lockable clothing holders or hangers**
- 69/003 . {for locking shoes against removal}
- 69/006 . {Lockable hangers or hanger racks}
- 69/02 . Lockable clothing hooks ([coin-controlled locking hooks G07F 17/10](#))
- 71/00 Locks specially adapted for bicycles, other than padlocks ({locks integral with holders for parking or storing bicycles [B62H 3/00](#)}; locks integral with cycles [B62H 5/00](#))**
- 73/00 Devices for locking portable objects against unauthorised removal; Miscellaneous locking devices ({motorcycle helmets [A42B 3/0413](#); supporting arrangements specially adapted for fastening helmets [B62J 11/24](#); gun racks [A47B 81/005](#); showcases with theft protection [A47F 3/002](#); anti-theft means for peg-boards, grids or rods for hanging merchandise [A47F 5/0861](#); show stands, hangers, shelves with provision against unauthorised removal [A47F 7/024](#); for self-service hand-carts [A47F 10/04](#); locking skis [A63C 11/004](#); locking bolts, nuts or pins [F16B 41/00](#))}**
- 73/0005 . {using chains, cables or the like (chain- or cable-locks of the padlock type [E05B 67/003](#); lockable clothing hangers or hanger racks [E05B 69/006](#))}
- 73/0011 . . {with retraction of the flexible element for storage ([E05B 73/0029](#) takes precedence; for padlocks [E05B 67/006](#))}
- 73/0017 . {Anti-theft devices, e.g. tags or monitors, fixed to articles, e.g. clothes, and to be removed at the check-out of shops}
- 73/0023 . . {Containers, boxes, cases or the like, e.g. for compact discs or video-cassettes, specially adapted therefor}
- 73/0029 . . {Tags wrapped around the protected product using cables, wires or the like, e.g. with cable retraction for tensioning}
- 73/0035 . . {for eyeglasses or spectacles}
- 73/0041 . . {for essentially round objects, e.g. bottles or racket handles}
- 73/0047 . . {Unlocking tools; Decouplers}
- 73/0052 . . . {of the magnetic type}
- 73/0058 . . . . {for essentially box-shaped devices}
- 73/0064 . . . {of the mechanical type}

- 73/007 . {for boats, surfboards or parts or accessories thereof}
- 73/0076 . . {outboard motors or propellers}
- 73/0082 . {for office machines, e.g. PC's, portable computers, typewriters, calculators}
- 2073/0088 . . {being lockable or unlockable by means of the office machine itself, e.g. by its keyboard}
- 73/0094 . {for skate-boards}
- 73/02 . for walking-sticks or umbrellas {(locks integral with walking sticks [A45B 1/04](#))}
- 75/00** **Handcuffs {; Finger cuffs; Leg irons; Handcuff holsters; Means for locking prisoners in automobiles (retaining devices for the body or body parts [A61F 5/37](#))}**
- 75/005 . {Handcuff holders, e.g. for storage}

**Locks for vehicles other than bicycles**

- 77/00** **Vehicle locks characterised by special functions or purposes (locks specially adapted for bicycles [E05B 71/00](#); locking arrangements for non-fixed vehicle roofs [B60J 7/185](#))**
- 77/02 . for accident situations
- 77/04 . . Preventing unwanted lock actuation, e.g. unlatching, at the moment of collision
- 77/06 . . . by means of inertial forces
- 77/08 . . Arrangements for protection of pedestrians
- 77/10 . . Allowing opening in case of deformed bodywork, e.g. by preventing deformation of lock parts
- 77/12 . . Automatic locking or unlocking at the moment of collision
- 77/14 . Specially controlled locking actions in case of open doors or in case of doors moved from an open to a closed position, e.g. lock-out prevention or self-cancelling
- 77/16 . . Preventing locking with the bolt in the unlatched position, i.e. when the door is open
- 77/18 . . Keyless locking with self-cancellation, e.g. resulting in an unlocking action when the door is being closed
- 77/20 . . . Override of self-cancellation, e.g. by actuation of the handle while the door is being closed
- 77/22 . Functions related to actuation of locks from the passenger compartment of the vehicle
- 77/24 . . preventing use of an inner door handle, sill button, lock knob or the like
- 77/245 . . . {by blocking the movement of a movable element}
- 77/26 . . . specially adapted for child safety
- 77/265 . . . . {hand actuated, e.g. by a lever at the edge of the door}
- 77/28 . . . for anti-theft purposes, e.g. double-locking or super-locking
- 77/283 . . . . {initiated by hand actuation, e.g. by using a mechanical key}
- 77/287 . . . . {Prevention or overriding of a super-lock condition, e.g. for preventing being trapped in the vehicle}
- 77/30 . . allowing opening by means of an inner door handle, even if the door is locked
- 77/32 . allowing simultaneous actuation of locking or unlocking elements and a handle, e.g. preventing interference between an unlocking and an unlatching action

- 77/34 . Protection against weather or dirt, e.g. against water ingress ([closures or guards for keyholes \[E05B 17/14\]\(#\)](#))
- 77/36 . Noise prevention; Anti-rattling means
- 77/38 . . Cushion elements, elastic guiding elements or holding elements, e.g. for cushioning or damping the impact of the bolt against the striker during closing of the wing
- 77/40 . . Lock elements covered by silencing layers, e.g. coatings
- 77/42 . Means for damping the movement of lock parts, e.g. slowing down the return movement of a handle ([E05B 77/38 takes precedence](#))
- 77/44 . Burglar prevention, e.g. protecting against opening by unauthorised tools ([E05B 77/28 takes precedence](#))
- 77/46 . Locking several wings simultaneously
- 77/465 . . {Automatic locking when all passengers have left the vehicle}
- 77/48 . . by electrical means
- 77/50 . . by pneumatic or hydraulic means
- 77/52 . Locking one wing by shutting another
- 77/54 . Automatic securing or unlocking of bolts triggered by certain vehicle parameters, e.g. exceeding a speed threshold ([triggered by vehicle collision \[E05B 77/12\]\(#\)](#))
- 79/00** **Mounting or connecting vehicle locks or parts thereof**
- 79/02 . Mounting of vehicle locks or parts thereof
- 79/04 . . Mounting of lock casings to the vehicle, e.g. to the wing
- 79/06 . . Mounting of handles, e.g. to the wing or to the lock
- 79/08 . . Mounting of individual lock elements in the lock, e.g. levers
- 79/10 . Connections between movable lock parts
- 79/12 . . using connecting rods
- 79/14 . . . the rods being linked to each other
- 79/16 . . . characterised by the means for linking the rods to other lock parts, e.g. to levers
- 79/18 . . . Rod guides
- 79/20 . . using flexible connections, e.g. Bowden cables
- 79/22 . . Operative connections between handles, sill buttons or lock knobs and the lock unit ([mounting of non-movable base elements of a handle to a lock \[E05B 79/06\]\(#\)](#))
- 81/00** **Power-actuated vehicle locks**
- 81/01 . {Comfort closing, i.e. the locking action for a wing is combined with actuation of other vehicle functions, e.g. locking the doors and closing the windows simultaneously}
- 81/02 . characterised by the type of actuators used
- 81/04 . . Electrical ([electrical circuits \[E05B 81/54\]\(#\)](#))
- 81/05 . . . {moving in one direction only}
- 81/06 . . . using rotary motors
- 81/08 . . . using electromagnets or solenoids
- 81/10 . . Hydraulic or pneumatic ([hydraulic or pneumatic circuits \[E05B 81/52\]\(#\)](#))
- 81/12 . characterised by the function or purpose of the powered actuators
- 81/13 . . {a single actuator for driving a lock and additional vehicle components, e.g. window wipers or window lifters}

- 81/14 . . . operating on bolt detents, e.g. for unlatching the bolt
- 81/15 . . . {with means preventing the detent to return to its latching position before the bolt has moved to the unlatched position}
- 81/16 . . . operating on locking elements for locking or unlocking action
- 81/18 . . . to effect movement of a bolt or bolts ([E05B 81/20 takes precedence](#))
- 81/20 . . . for assisting final closing or for initiating opening
- 81/21 . . . {with means preventing or detecting pinching of objects or body parts}
- 81/22 . . . by movement of the striker
- 81/24 . . . characterised by constructional features of the actuator or the power transmission
- 81/25 . . . {Actuators mounted separately from the lock and controlling the lock functions through mechanical connections}
- 81/26 . . . Output elements
- 81/28 . . . . Linearly reciprocating elements
- 81/30 . . . . Rotary elements
- 81/32 . . . Details of the actuator transmission
- 81/34 . . . . of geared transmissions
- 81/36 . . . . . Geared sectors, e.g. fan-shaped gears
- 81/38 . . . . . Planetary gears
- 81/40 . . . . Nuts or nut-like elements moving along a driven threaded axle
- 81/42 . . . . Cams
- 81/44 . . . . . in the form of grooves
- 81/46 . . . . Clutches
- 81/48 . . . Actuators being driven in a single direction
- 81/50 . . . Powered actuators with automatic return to the neutral position by non-powered means, e.g. by springs
- 81/52 . . . Pneumatic or hydraulic circuits ([for locking several wings simultaneously E05B 77/50](#))
- 81/54 . . . Electrical circuits ([for locking several wings simultaneously E05B 77/48](#))
- 81/56 . . . Control of actuators
- 81/58 . . . . including time control, e.g. for controlling run-time of electric motors
- 81/60 . . . . using pulse control, e.g. pulse-width modulation
- 81/62 . . . . for opening or closing of a circuit depending on electrical parameters, e.g. increase of motor current
- 81/64 . . . Monitoring or sensing, e.g. by using switches or sensors
- 81/66 . . . . the bolt position, i.e. the latching status
- 81/68 . . . . . by sensing the position of the detent
- 81/70 . . . . the wing position
- 81/72 . . . . the lock status, i.e. locked or unlocked condition
- 81/74 . . . . . by sensing the state of the actuator
- 81/76 . . . . Detection of handle operation; Detection of a user approaching a handle; Electrical switching actions performed by door handles
- 81/77 . . . . . {comprising sensors detecting the presence of the hand of a user}
- 81/78 . . . . . as part of a hands-free locking or unlocking operation
- 81/80 . . . characterised by the power supply; Emergency power operation
- 81/82 . . . . using batteries other than the vehicle main battery
- 81/84 . . . . using manually operated generator means
- 81/86 . . . . using capacitors
- 81/88 . . . . using inductive energy transmission
- 81/90 . . . Manual override in case of power failure
- 83/00** **Vehicle locks specially adapted for particular types of wing or vehicle (locks specially adapted for bicycles [E05B 71/00](#); locking arrangements for non-fixed vehicle roofs [B60J 7/185](#); latching means for sideboards or tailgates of open load compartments [B62D 33/037](#))**
- 83/01 . . . {Locks for military or armoured vehicles}
- 83/02 . . . Locks for railway freight-cars, freight containers or the like; Locks for the cargo compartments of commercial lorries, trucks or vans
- 83/04 . . . for sliding wings
- 83/06 . . . . of railway freight-cars
- 83/08 . . . with elongated bars for actuating the fastening means
- 83/10 . . . . Rotary bars
- 83/12 . . . for back doors of vans ([E05B 83/04](#), [E05B 83/08 take precedence](#))
- 83/14 . . . with provisions for sealing
- 83/16 . . . Locks for luggage compartments, car boot lids or car bonnets
- 83/18 . . . for car boot lids or rear luggage compartments
- 83/20 . . . . with two or more wings, which together close a single compartment
- 83/22 . . . for luggage compartments at the side of the vehicle, e.g. of buses or camper vans
- 83/24 . . . for car bonnets
- 83/243 . . . . {Hood clamps, i.e. individually actuated, usually yielding hooks}
- 83/247 . . . . {Simultaneously actuated fasteners at separated positions}
- 83/26 . . . Emergency opening means for persons trapped in the luggage compartment
- 83/28 . . . Locks for glove compartments, console boxes, fuel inlet covers or the like
- 83/30 . . . for glove compartments
- 83/32 . . . for console boxes, e.g. between passenger seats
- 83/34 . . . for fuel inlet covers essentially flush with the vehicle surface
- 83/36 . . . Locks for passenger or like doors
- 83/363 . . . {for railway vehicles ([E05B 77/54 takes precedence](#))}
- 83/367 . . . {with centering alignment pin}
- 83/38 . . . for pillar-less vehicles, i.e. vehicles where a front and a back door engage each other in the closed position
- 83/40 . . . for sliding doors
- 83/42 . . . for large commercial vehicles, e.g. trucks, construction vehicles or vehicles for mass transport
- 83/44 . . . for recreational vehicles, e.g. caravans or camper vans
- 85/00** **Details of vehicle locks not provided for in groups [E05B 77/00](#) - [E05B 83/00](#)**
- 85/01 . . . {Mechanical arrangements specially adapted for hands-free locking or unlocking (handles with means for initiation of a hands-free locking or unlocking process [E05B 81/78](#))}

- 85/02 . Lock casings
- 85/04 . Strikers
- 85/045 . . {for bifurcated bolts}
- 85/06 . Lock cylinder arrangements
- 85/08 . Sill-buttons, garnish buttons or inner door lock knobs
- 85/085 . . {Manipulators therefor ([E05B 19/20](#) takes precedence)}
- 85/10 . Handles
- 85/103 . . {creating a completely closed wing surface}
- 85/107 . . {Pop-out handles, e.g. sliding outwardly before rotation}
- 85/12 . . Inner door handles
- 85/13 . . . {with a locking knob forming part of the inside door handle unit}
- 85/14 . . Handles pivoted about an axis parallel to the wing
- 85/16 . . . a longitudinal grip part being pivoted at one end about an axis perpendicular to the longitudinal axis of the grip part
- 85/18 . . . a longitudinal grip part being pivoted about an axis parallel to the longitudinal axis of the grip part
- 85/20 . Bolts or detents
- 85/22 . . Rectilinearly moving bolts
- 85/24 . . Bolts rotating about an axis
- 85/243 . . . {with a bifurcated bolt}
- 85/245 . . . {with a pair of bifurcated bolts}
- 85/247 . . . {about a vertical axis}
- 85/26 . . . Cooperation between bolts and detents
- 85/28 . . . in which the member engaging the keeper is shaped as a toothed wheel or the like