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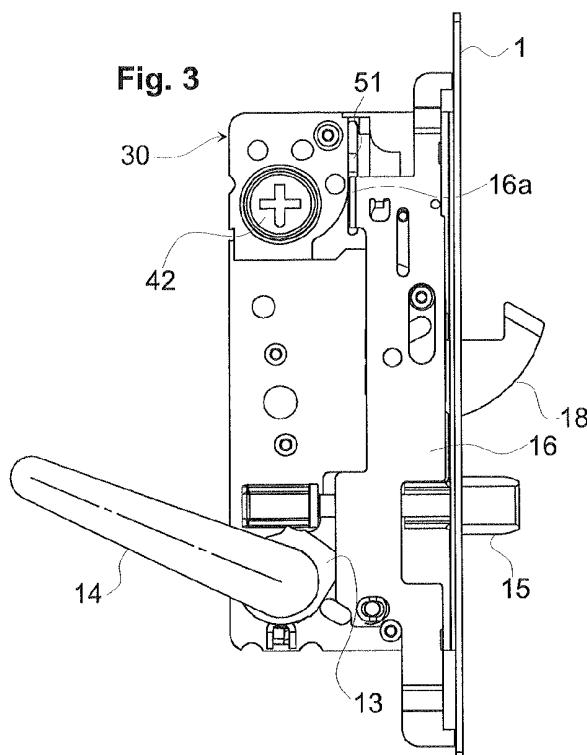
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(54) **Lock**

(57) Lock comprising a lock housing (10) in which are accommodated: a first follower (13), at least one coupling member (16, 17), which by means of the first follower is movable between a locked and an unlocked position for actuation of a lock bolt, a second follower (40), and a blocking element (50), which by means of the second follower is movable between a blocking position, in which the coupling member is blocked in its locked po-

sition, and a release position, in which the coupling member is movable at least from the locked into the unlocked position. A latching member (60) is arranged to allow latching of the blocking element in its blocking position. The second follower, the blocking element and the latching element are accommodated in an encapsulated modular unit (30) which is fitted as an integrated unit in the lock housing.



Description

Field of the invention

[0001] The invention relates to a lock of the type which is defined in the preamble to Patent Claim 1. The lock according to the invention can be used in locking devices having one or more bolts accommodated in the lock housing, but also in locking devices of the espagnolette type or other so-called multi-point locks in which one or more bolts arranged outside the lock housing are operated by means of the lock.

Background and prior art

[0002] Locks of this type are used, for example, in outer doors, balcony doors and windows. Such locks comprise a lock housing in which a first follower, for example a handle or door handle follower, and a second follower, for example a cylinder follower, are accommodated. The handle follower is coupled by means of a coupling member to one or more lock bolts, for example dead bolts which can be arranged in or outside the lock housing. By operating a handle coupled to the handle follower, it is possible to guide the coupling member, and thus the dead bolt or dead bolts, between a locked and an unlocked position. Once the coupling member has been guided into the locked position, which thus corresponds to the engagement of the dead bolt or dead bolts with a door jamb or the like, it is desirable for the coupling member to be blocked in this position. For this the lock can comprise a blocking member, which, with the aid of the cylinder follower, can be guided between a blocking position and a release position. By rotation of the cylinder follower by means of a key, the blocking member is moved into the blocking position, in which it engages with the coupling member, which is then blocked. The coupling member and the dead bolt or dead bolts cannot then be displaced towards the unlocked position unless the cylinder follower is first rotated back again. In order further to increase security, the lock can also comprise latching means, which prevent displacement of the blocking element towards the release position with a view to obstructing manipulation of the locking device.

[0003] In previously known locking devices of this type, the cylinder follower, the blocking element and the latching means are arranged as separate parts in the lock housing. This gives rise to the drawback that it may be possible to manipulate the blocking element or the latching means with the aid of a thin object such as a feeler, a steel wire or the like which is inserted in the lock housing, for example through a dead bolt opening in the forend of the lock housing. In previously known locks, it has in certain cases also been possible to end the blocking by applying blows or kicks to the outer side of the lock housing or the door in which the lock is fitted. Another drawback is that it can be laborious and time-consuming to fit the loose parts into the lock housing.

Summary of the invention

[0004] One object of the invention is to provide an improved lock which allows the latched blocking of one or more lock bolts in their locked position.

[0005] Another object is to provide a lock of this kind in which manipulation of the lock by the insertion of an object into the lock housing is prevented or is made considerably more difficult.

[0006] A further object is to provide a lock of this kind which is easy and relatively quick to fit.

[0007] One more object is to provide a lock of this kind in which manipulation of the lock by blows or kicks on the outer side of the lock housing is prevented or made considerably more difficult.

[0008] Yet another object is to provide a lock of this kind, with which a modularized production method of different locks forming part of a series is facilitated.

[0009] These and other objects are achieved with a lock of the type which is defined in the introductory part of Claim 1 and which has the special technical features defined in the characterizing part of the claim. The lock according to the invention comprises a lock housing in which are accommodated a first follower and a coupling member which is movable by means of the first follower between a locked and an unlocked position for the actuation of a bolt. The lock housing also accommodates a second follower, a blocking element which is movable by means of the second follower between a blocking position, in which the coupling member is blocked in its locked position, and a release position, in which the coupling member is movable at least from the locked into the unlocked position, and a latching member, which is arranged to allow the blocking element to be latched in its blocking position. According to the invention, the second follower, the blocking element and the latching element are accommodated in an encapsulated modular unit which is fitted as an integrated unit in the lock housing.

[0010] In the locking device according to the invention, the second follower, which is constituted, for example, by a cylinder follower or thumb turn follower, the blocking element and the latching member are thus arranged in an integrated and enclosing encapsulated unit. Since these parts are protected by the enclosing encapsulation, the possibility of manipulating these parts with an object inserted in the lock housing is made considerably more difficult. Moreover, the fact that all the parts included to effect blocking and latching of the blocking mechanism are arranged in an integrated unit implies a considerable simplification and time saving in the assembly of the lock. The integrated modular unit can further be used in connection with a host of different locking devices forming part of a module-based series.

[0011] The lock housing expediently has a front side which is adjacent to a forend of the lock or a face plate to which the lock housing can be fitted, wherein the encapsulated modular unit is expediently arranged at a distance from the front side. Further manipulation of the

blocking element and the latching member, for example by the insertion of a lamellar tool through a bolt opening in the forend or in the face plate, is hereby made more difficult.

[0012] In order to make such manipulation yet more difficult, the encapsulated modular unit is expediently arranged on a rear side of the lock housing situated opposite the front side.

[0013] The encapsulated modular unit expediently comprises a modular housing, which enclosingly accommodates the blocking element and the latching member. In a simple way, this enables the encapsulated modular unit to be given a robust, high-strength construction.

[0014] The modular housing can expediently comprise or be formed by a first and a second modular housing half, which modular housing halves are fixedly connected or otherwise joined together. Such an embodiment facilitates fitting of the modular unit in the lock housing and hence assembly of the lock.

[0015] The lock is expediently given an embodiment in which the latching member is movable in a first direction between a position which latches the blocking element and a non-latching position, and in which the blocking element is movable in a second direction between its blocking position and its release position, wherein the second direction is non-parallel with the first direction. In such embodiments, it is therefore required that the latching member is moved in a first direction and the blocking element in another direction to allow the dead bolt or dead bolts to be guided into the unlocked position. Manipulation of the lock by blows or kicks upon the outer side of the lock is thereby made more difficult, since such blows can only effect a relative movement of parts in the lock in one direction.

[0016] The latching member is expediently rotatable relative to the blocking element in the first direction and movable together with the blocking element in the second direction.

[0017] The blocking element and the latching member are expediently linearly displaceable in the second direction.

[0018] The latching member expediently comprises a stop, which, during rotation of the second follower and in contact with the second follower or a member actuated thereby, is arranged to effect movement of the latching member in the first direction and movement of the blocking element and the latching member in the second direction. In a simple and space-saving manner, this enables both motions which are necessary for release to be achievable with just one follower motion.

[0019] The lock can comprise one or more bolts, which are accommodated in the lock housing and are coupled to the coupling member.

[0020] Alternatively or in combination, the coupling member can comprise means for connection with at least one bolt rod or pull rod for the operation of one or more bolts arranged outside the lock housing.

[0021] Further objects and advantages of the invention

emerge from the following detailed description and from the claims.

Description of the figures

[0022] An illustrative embodiment of the invention is described below with reference to the figures, whereof:

Fig. 1 is a plan view of a lock according to one embodiment of the invention, in which certain parts have been removed and show the lock in a neutral position.

Fig. 2 is a view from above of the lock shown in Fig. 1.

Fig. 3 is a plan view corresponding to that in Fig. 1 and shows the lock in a locked position.

Fig. 4 is a plan view corresponding to that in Fig. 1 and shows the lock in an unlocked position.

Fig. 5 is a perspective view of a modular unit forming part of the lock shown in Fig. 1.

Fig. 6 is a plan view of the modular unit shown in Fig. 5 and shows the unit from the opposite side.

Fig. 7a is an exploded perspective view of the modular unit shown in Figs. 5 and 6.

Fig. 7b is a perspective view from another direction of certain of the parts shown in Fig. 7a.

Fig. 8a is a partial enlargement of the lock shown in Fig. 1 with further parts removed.

Fig. 8b is a partial enlargement of Fig. 8a.

Figs. 9a-c are partial enlargements of Fig. 8a and show the component parts in different positions.

[0023] In Figs. 1 and 2, a lock according to one illustrative embodiment of the invention is shown. The lock shown in the figures is fitted to a face plate 1 of an espagnolette (not otherwise shown).

Detailed description of illustrative embodiments

[0024] The lock comprises a lock housing 10 which is formed by a first 11 and a second 12 bent-over edge plate. In Fig. 1, the second plate 12 is removed, whereby the interior of the lock housing 10 is visible. In Fig. 2, a bent upper side portion of the first 11 and second 12 plate is removed, whereby the interior of the lock housing is visible also in Fig. 2.

[0025] In the lock housing 10 there is rotatably arranged a first follower 13 in the form of a handle follower. A handle 14 is coupled to the first follower 13. The first

follower 13 is coupled to a latch bolt 15 and to a first 16 and a second 17 coupling member. The two coupling members 16, 17 are coupled to a lock bolt, which in the shown example is constituted by a swing bolt 18. The two coupling members 16, 17 are constituted by plate members arranged parallel to each other. The two coupling members 16, 17 are linearly displaceable by means of the first follower 13 between an upper, unlocked position shown in Fig. 1 and a lower, locked position shown in Fig. 3.

[0026] The two coupling members 16, 17 have at their respective upper and lower ends coupling means 16a in the form of hooks for connection with bolt rods, dead bolt rods or pull rods (not shown) forming part of the espagnolette. The dead bolt rods are in turn coupled to dead bolts (not shown) forming part of the espagnolette, which can be constituted by, for example, end or side bolts and which can be configured as wedge bolts, mushroom bolts or any type of bolts whatsoever.

[0027] The lock housing 10 has a front side, which is constituted by that side of the lock housing which bears against the face plate 1 and which in the figures is constituted by the right-hand side of the lock housing. On the front side, the plates 11, 12 of the lock housing 10 have through openings (not shown), through which the latch bolt 15 and the dead bolt 18 extend in their respective extended positions. That side of the lock housing 10 which lies opposite the front side is constituted by a rear side, which rear side in the figures is constituted by the left-hand side of the locking housing.

[0028] In Fig. 1, the lock is shown in a neutral state. In this position, the latch bolt 15 is extended from and the dead bolt 18 is retracted into the lock housing 10. The coupling members 16, 17 are located in the upper, unlocked position. By clockwise turning of the handle 14, the two coupling members 16, 17 are driven by means of the first follower 13 in the direction downwards into the locked position shown in Fig. 3, whereupon the dead bolt 18 is rotated anti-clockwise into an extended position, in which position the dead bolt 18 is intended to engage with a striking plate (not shown) in a door jamb or the like. The lock has then assumed a locked state illustrated in Fig. 3.

[0029] By anti-clockwise turning of the handle 14 from the locked state shown in Fig. 3, the coupling members 16, 17 are driven by means of the first follower 13 such that they are displaced upwards into the unlocked position shown in Fig. 4, whereupon the dead bolt 18, by means of the coupling members 16, 17, is rotated clockwise into its retracted position. At the same time, the latch bolt 15 is driven by means of the first follower 13, to inward displacement into its retracted position. The lock has then assumed an unlocked state illustrated in Fig. 4, in which either the dead bolt 18 or the latch bolt 15 engages with the striking plate. The door (not shown) or the like on which the lock is fitted can then be opened.

[0030] To enable secure blocking of the coupling members 16, 17 in the locked position, the lock comprises

means for blocking the coupling members 16, 17 in their locked position and means for latching the blocking means in the blocking position.

[0031] With reference firstly to Figs. 5-9c, these blocking and latching means are described in greater detail below. In Fig. 5 is shown an encapsulated modular unit 30. As can be seen from Figs. 1-4, the modular unit 30 is accommodated in the lock housing 10 and arranged on the rear side of the lock housing, i.e. at the greatest possible distance from the front side of the lock housing 10, which front side is provided with bolt and dead bolt openings. In Figs. 5 and 6, the modular unit 30 is shown from the other side compared with the representation in Figs. 1, 3, 4 and 8a-9c.

[0032] The modular unit 30 comprises a modular housing 31, which is formed by two modular housing halves 32a, 32b. The modular housing halves 32a, 32b are constituted by cast components of zinc. It is also possible, however, to form the modular housing halves differently, for example of other cast metals or of reinforced polymer material. One modular housing half 32a has projecting pins 33, which in the assembled position are received in corresponding recesses (not shown) in the other modular housing half 32b. The pins 33 are received in the corresponding recesses with a press-fit. In this way, a certain cohesion of the modular housing during transport and other handling of the unit is achieved. When the modular unit 30 is fitted in the lock housing 10, the modular housing halves 32a, 32b, moreover, are held constantly together by the plates 11, 12 of the lock housing 10, as can be seen from Fig. 2. The two modular housing halves 32a, 32b have a number of inner recesses and together define an inner space. The inner recesses form a channel 34 having a latching recess 35 projecting from the channel 34, a spring recess 36 and electronics recesses 37', 37". In the inner space are arranged a second follower 40, a blocking element 50 and a latching member 60. A pressure spring 71 and a ball 72 are accommodated in the spring recess 36. The two modular housing halves 32a, 32b also have through recesses comprising follower openings 37a, 37b and a respective slot 38a, 38b made from the outside. The two slots 38a, 38b open out into and communicate with the channel 34.

[0033] The second follower 40 is constituted, in the shown example, by a two-part follower, having a first 41 and a second 42 part-follower. In the shown example, the first part-follower 41 is intended to be coupled to and operated by a lock cylinder (not shown), which is arranged on the outer side of the door or the like on which the lock is fitted. The second part-follower 42 is intended to be coupled to and operated by a thumb turn (not shown) or the like arranged on the inner side of the door. It is also possible, however, for the part-followers to be coupled to and operable by means of any type of operating member whatsoever, both mechanical and electrical and electromechanical. The two part-followers 41, 42 are arranged on and close off a respective continuous follower opening 37a, 37b in the two modular housing

halves 32. The two part-followers 41, 42 comprise radially outwardly projecting drive projections 43, 44. In the shown example, the two part-followers 41, 42 are constituted by separate parts, which can be operated independently of each other. The second follower can also however be constituted, for example, by two interconnected parts or a single part which can be coupled to the operating member on the inner and/or outer side of the door.

[0034] As can most clearly be seen from Figs. 7a and 7b, the blocking element 50 and the latching member 60 are constituted by a respective elongated part. The blocking element 50 is accommodated in a rectilinearly displaceable manner in the channel 34. The blocking element 50 comprises a blocking portion 51 having a latching recess 52, a follower stop 53, a triangular projection 54 and a concave cam surface 55.

[0035] The latching member 60 is also accommodated in the channel 34. The latching member 60 comprises a tongue 61, a latching projection 62, a follower stop 63 and a concave cam surface 64. A pressure spring 65 is arranged between the tongue 61 and the bottom of the latching recess 52 of the blocking element 50. The latching member 60 is arranged between the cam surface 55 of the blocking element 50 and the blocking portion 51, the tongue 61 and the spring 65 being accommodated in the latching recess 52 in the blocking portion 51. The latching member 60 is hereby rectilinearly displaceable in the channel 34, together with the blocking element 50. The latching member 60 is also pivotable relative to the blocking element 50 about an axis perpendicular to the direction of displacement, which axis is defined by the two cooperating cam surfaces 55, 64. The spring 65 endeavours to press the tongue 61 in the direction away from the blocking portion 51, so that the latching member 60 assumes, in the figures, an upwardly pivoted, non-parallel position in relation to the blocking element 50.

[0036] The part-followers 41, 42 close off the follower openings 37a, 37b, and the modular housing halves 32a, 32b are configured such that, with the exception of the opening between the slots 38a, 38b and the channel 34, and also the electronics recess 37", they fully shield the inner space of the modular unit from the environment outside the modular unit 30.

[0037] In order to allow blocking of the coupling members 16, 17 in the locked position, the coupling members 16, 17 have bent blocking projections 16a, 17a, which project in the direction towards each other (Fig. 2). The blocking projections 16a, 17a are accommodated and are rectilinearly displaceable in the slots 38b and 38a respectively of the modular unit 30.

[0038] With reference to Figs. 1-3 and 8a-9c, it is described below how blocking and latching are effected with that illustrative embodiment of the lock according to the invention which is shown in the figures. In Fig. 1, the coupling members 16, 17 are shown in their upper, unlocked positions. The blocking portion 51 of the blocking element 50 is here located in a position retracted into the

channel 34 and does not project into the slots 38a, 38b (Fig. 9c). The blocking projections 16a, 17a are located in an upper end position in the respective slot 38b, 38a (Fig. 1). In Fig. 3, the coupling members 16, 17 have assumed their lower, locked positions as described above. Once the coupling members 16, 17 have assumed the locked position, it is possible to effect blocking of the coupling members 16, 17 in this position. This is done, for example, by turning the part-follower 42 clockwise from the position shown in Fig. 9c by means of the lock cylinder (not shown) coupled to the part-follower 42. During such rotation, the drive projection 44 of the part-follower 42 come into contact with the follower stop 53 on the blocking element 50, which latter is driven such that it is rectilinearly displaced in the channel 34, to the right in Figs. 9c and 8a, in the direction of the slots 38a, 38b. A corresponding rotation of the part-follower 41 effects the same displacement of the blocking element 50, since the drive projection 43 too is arranged to come into contact with the follower stop 53 during rotation of the part-follower 41. Upon the displacement of the blocking element 50, the latching member 60 is also driven by contact between the two cam surfaces 55, 64 such that it is rectilinearly displaced in the same direction. The blocking portion 51 is here displaced out into the slots 38a, 38b and assumes a blocking position above the upper ends of the two blocking projections 16a, 17a (Figs. 3, 8a, 8b). In this way, the blocking projections 16a, 17a, and thus the coupling members 16, 17, are blocked from displacement in the direction of the unlocked position, whereupon the dead bolt 18, too, is blocked in its projecting position. Once the blocking element 50 has assumed the projecting blocking position, the spring 65 presses the latching member 60 to rotate relative to the blocking element 50. The latching recess 35 in the modular housing halves 32a, 32b is placed such that the latching projection 62 of the latching member 60 is located straight in front of the latching recess 35 when the blocking element 50 is located in the blocking position. The latching projection 62 is thus pressed into engagement with the latching recess 35. The tongue 61 of the latching member 60 is accommodated in the latching recess 52, however, even when the latching member has assumed this pivoting position. Hence the latching member 60 and the blocking element 50 are barred from displacement from the blocking position.

[0039] When the blocking of the coupling members 16, 17 is to be ended, the part-follower 42 is rotated, for example, in the anti-clockwise direction until the drive projection 44 comes into contact with the follower stop 63 on the latching member 60, as illustrated in Fig. 9a. During continued rotation of the part-follower 42, the drive projection 44 drives the latching member 60 such that it is rotated or pivots clockwise about the rotational axis defined by the cooperating cam surfaces 55, 64. The spring force of the spring 65 is hereby surmounted, wherein the latching projection 62 is pressed down and out of engagement with the latching recess 35, as illus-

trated in Fig. 9b. During further continued rotation of the part-follower 42, the latching member 50 and, by virtue of the contact between the tongue 61 and the latching recess 52, the blocking element are driven to the left in Figs. 9a-c, in the direction away from the blocking position, back to the non-blocking position shown in Fig. 9c.

[0040] During the displacements of the blocking element 50 and the latching member 60 towards and away from the blocking position, the spring 71 and the ball 72, in cooperation with the triangular projection 54 on the blocking element, achieve bistable detent of the blocking element 50 and the latching member 60 in the end positions.

[0041] As can be seen from the figures, the modular unit 30 is arranged on that side of the lock housing which is distal to the lock housing. Manipulation of the parts accommodated in the modular unit by the insertion of different types of manipulation tools through one of the bolt openings is thereby made more difficult. As has been stated above, the parts accommodated in the modular unit are enclosed, moreover, by the modular housing halves 32a, 32b and the follower 40. Although the openings between the channel 34 and the slots 38a, 38b constitute a passage from the outer side of the modular unit 30 into the same, these openings are blocked by the blocking portion 51 when the blocking element 50 is in the blocking position and by the blocking projections 16a, 17a on the coupling members when the coupling members are in their unlocked position. In the embodiment shown in the figures, the modular unit 30 has an electronics recess 37" for the reception of an electric cable. Although this recess 37" constitutes a passage into the modular unit, if the lock is wholly mechanical without electrical detection or control, the electronics recesses 37', 37" can be dispensed with. Even in those embodiments which comprise electronics recesses, these do not constitute a significant risk of manipulation by the insertion of manipulation tools. Partly because the electronics recess 37" has a complicated shape with many bends and partly because the electric cable and any position sensor present fill the electronics recesses 37' 37", it is not possible in practice, by means of manipulation tools inserted through a bolt opening, to reach the parts for blocking and latching of the coupling members, which parts are accommodated in the modular unit 30.

[0042] As can also be seen from the description above, in order to end the blocking of the coupling members, rectilinear displacement of the blocking element 50 and rotation of the latching element 60 are simultaneously required. This makes a manipulation of the lock by an attempt to effect blocking-ending motions of the moving parts of the lock with directed blows or kicks upon the outer side of the lock housing, or upon the door, more difficult. By virtue of the invention, a lock which offers very high security against different types of manipulation is therefore provided.

[0043] Above, illustrative embodiments of the invention have been described. The invention is not limited to

these embodiments, but rather can be freely varied within the scope of the following patent claims. The lock can constitute or form a constituent part of a so-called single-point lock having one or more bolts accommodated in the lock housing, or in a so-called multi-point lock having one more more bolts arranged outside the lock housing. For example, the hooks arranged on the coupling member for connection with bolt rods in an espagnolette can be dispensed with. In this case, the lock can comprise one or more bolts or dead bolts arranged in the lock housing. Regardless of whether the lock is suited for connection to an espagnolette or not, the bolts or dead bolts which form part of the lock can be of different type and configuration. Examples of such bolts are turning bolts or swing bolts, rectilinearly displaceable bolts, hook bolts, mushroom bolts and latch bolts. Instead of comprising a modular housing formed by two modular housing halves, the encapsulated modular unit can comprise just one, or more jointly enclosing parts. The enclosure of the parts accommodated in the modular unit can also be achieved, at least to a certain extent, by means of other parts forming part of the lock housing, such as, for example, portions of any one of the plates which form the lock housing, or other components accommodated in the lock housing. In one embodiment (not shown), the electronics recess 37' can receive position-detecting components, such as a single-element sensor or the like for detecting the position of the blocking element. These components can communicate with, for example, a control unit or a signal unit which is arranged outside the modular unit and possibly outside the lock housing, via signal lines accommodated in the electronics recess 37".

Claims

1. Lock comprising a lock housing (10) in which are accommodated:

- a first follower (13),
- at least one coupling member (16, 17), which by means of the first follower is movable between a locked and an unlocked position for actuation of a lock bolt,
- a second follower (40),
- a blocking element (50), which by means of the second follower is movable between a blocking position, in which the coupling member is blocked in its locked position, and a release position, in which the coupling member is movable at least from the locked into the unlocked position, and
- a latching member (60), which is arranged to allow latching of the blocking element in its blocking position,

characterized in that

the second follower, the blocking element and the latching element are accommodated in an

encapsulated modular unit (30) which is fitted as an integrated unit in the lock housing.

(16a) for connection with at least one pull rod for the operation of at least one bolt arranged outside the lock housing and forming part of a multi-point lock.

2. Lock according to Claim 1, in which the lock housing (10) has a front side which is intended to be adjacent to a forend or face plate (1) of the lock, wherein the encapsulated modular unit (30) is arranged at a distance from the front side. 5
3. Lock according to Claim 2, in which the encapsulated modular unit (30) is arranged on a rear side of the lock housing situated opposite the front side. 10
4. Lock according to any one of Claims 1-3, in which the encapsulated modular unit (30) comprises a modular housing (31), which enclosingly accommodates the blocking element (50) and the latching member (60). 15
5. Lock according to Claim 4, in which the modular housing (31) comprises a first (32a) and a second (32b) modular housing half, which modular housing halves are mutually held together. 20
6. Lock according to any one of Claims 1-5, in which the latching member (60) is movable in a first direction between a position which latches the blocking element (50) and a non-latching position, and in which the blocking element is movable in a second direction between its blocking position and its release position, wherein the second direction is non-parallel with the first direction. 25
30
7. Lock according to Claim 6, in which the latching member (60) is rotatable relative to the blocking element (50) in the first direction and movable together with the blocking element in the second direction. 35
8. Lock according to Claim 6 or 7, in which the blocking element (50) and the latching member (60) are linearly displaceable in the second direction. 40
9. Lock according to any one of Claims 6-8, in which the latching member (60) comprises a stop (63), which, during rotation of the second follower (40) and in contact with the second follower or a member actuated thereby, is arranged to effect movement of the latching member in the first direction and movement of the blocking element (50) and the latching member in the second direction. 45
50
10. Lock according to any one of Claims 1-9, comprising a lock bolt (18) which is accommodated in the lock housing and coupled to the coupling member (16, 17). 55
11. Lock according to any one of Claims 1-10, in which the coupling member (16, 17) comprises means

Fig. 1

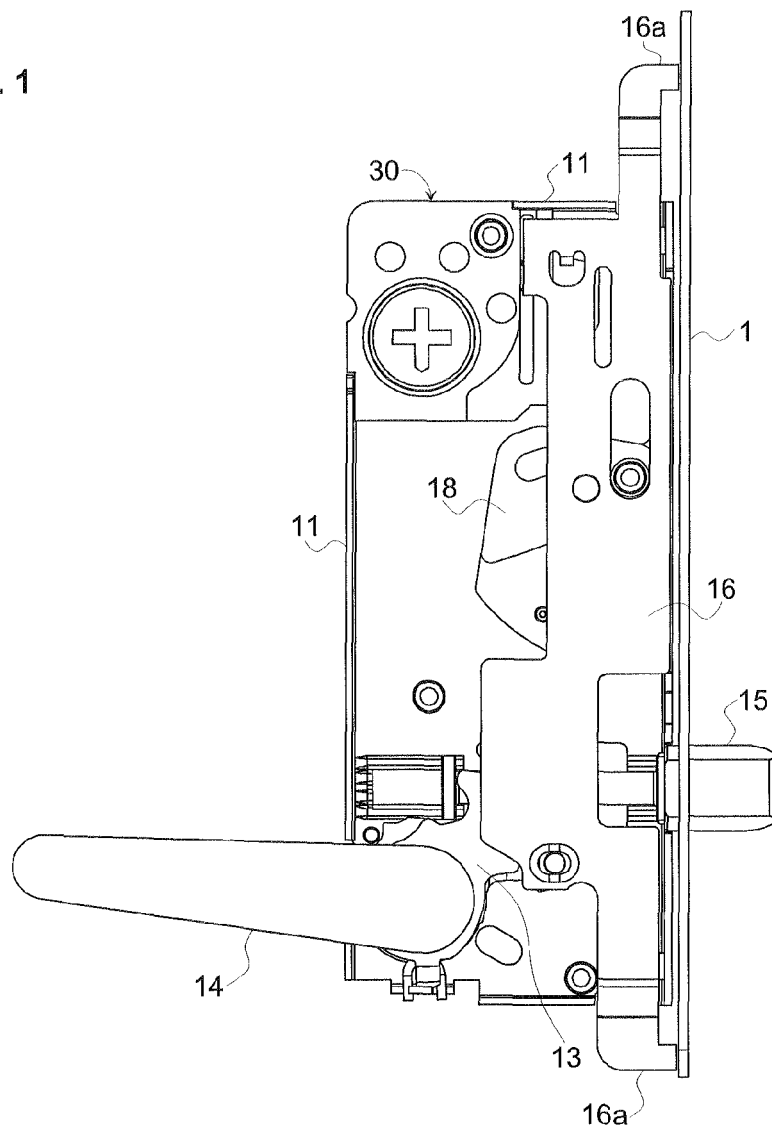
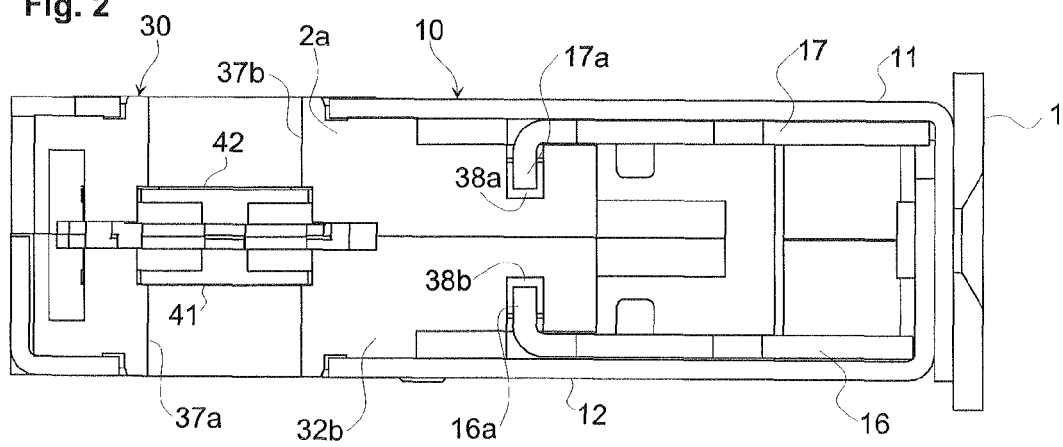


Fig. 2



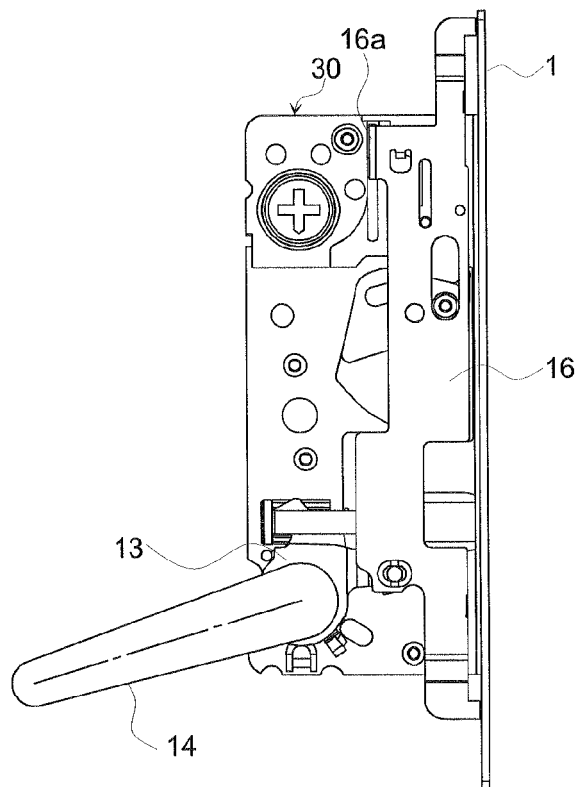
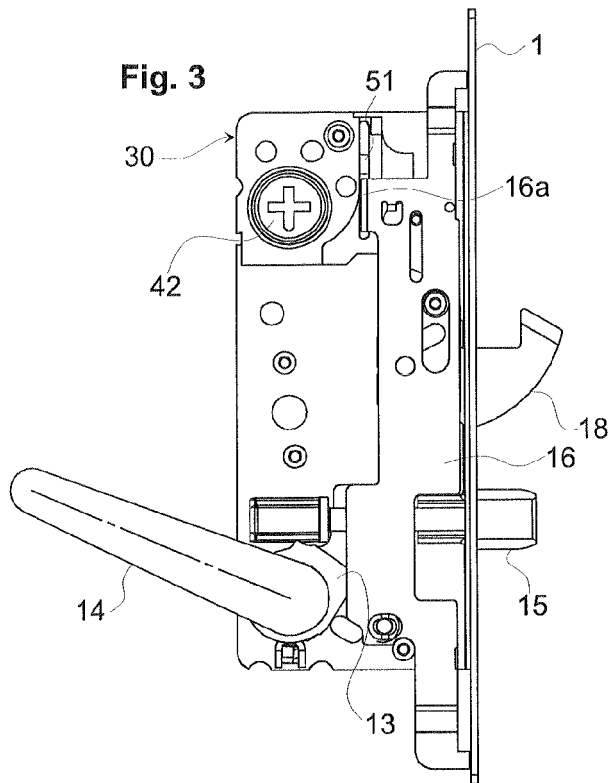


Fig. 4

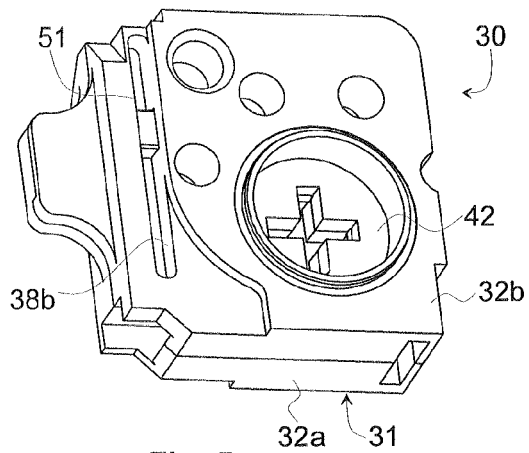


Fig. 5

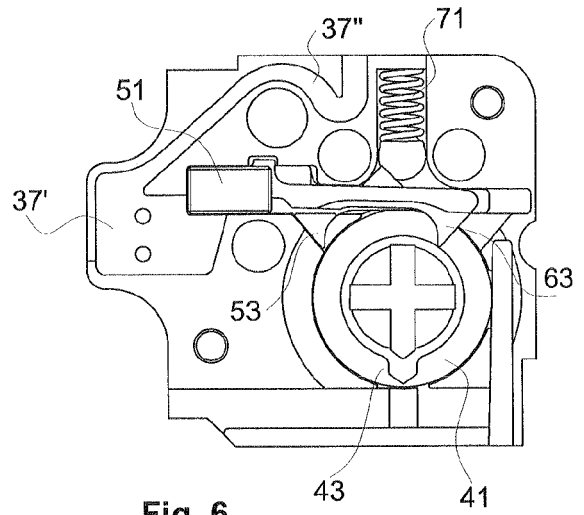


Fig. 6

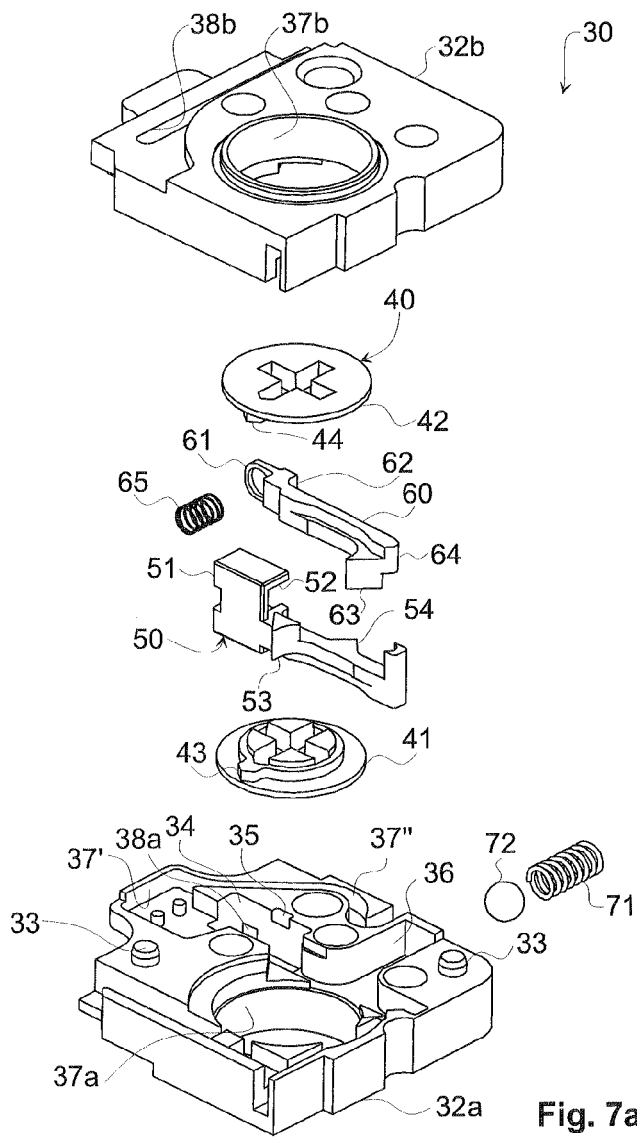


Fig. 7a

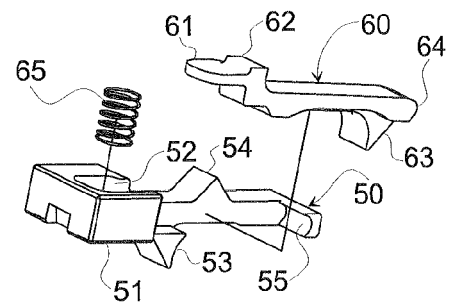


Fig. 7b

