

(19)



(11)

EP 3 965 609 B1

(12)

EUROPEAN PATENT SPECIFICATION

(45) Date of publication and mention of the grant of the patent:

01.02.2023 Bulletin 2023/05

(21) Application number: **20742444.1**

(22) Date of filing: **04.05.2020**

(51) International Patent Classification (IPC):
A45C 13/26 ^(2006.01)

(52) Cooperative Patent Classification (CPC):
A45C 13/262; A45C 2013/267

(86) International application number:
PCT/IB2020/054193

(87) International publication number:
WO 2020/229936 (19.11.2020 Gazette 2020/47)

(54) **TELESCOPIC HANDLE**

TELESKOPGRIFF

POIGNÉE TÉLESCOPIQUE

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

(30) Priority: **10.05.2019 IT 201900006669**

(43) Date of publication of application:
16.03.2022 Bulletin 2022/11

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Description

[0001] The present invention relates to a telescopic handle for transportable containers, such as suitcases, trolley cases or the like, according to the preamble of claim 1.

[0002] The present invention relates in particular to the field of manufacture of travel containers such as suitcases, trolley cases and other luggage.

[0003] Technological development has in fact led to a continuous increase in the use of public transport, such as aeroplanes, trains or the like, for business or pleasure trips.

[0004] As a result, users increasingly use transportable containers, such as trolley cases or the like, for medium or long-distance travels.

[0005] It is therefore essential to be able to create trolley cases or transportable containers which have functional solutions to facilitate the different users during use, but which, at the same time, have aesthetically pleasing aspects and a high degree of robustness.

[0006] A critical aspect of the trolley cases known in the state of the art is the telescopic handles, which allow the trolley case to be gripped and facilitate its transport.

[0007] In trolley cases known in the state of the art, such handles consist of telescopic rods which can be retracted in special housing seats obtained within the trolley case structure.

[0008] Each rod is generally made up of two or more tubular elements which slide inside each other in order to limit the sizes, once such rods are in retracted condition.

[0009] There are also fixing pins that have a dual function, as some pins lock one tubular element with respect to another one avoiding sliding, while other pins engage in appropriate engagement seats provided on the trolley case, to avoid the retraction of the rods inside the trolley case.

[0010] It is evident that such pins will be activated when the user needs to grab the trolley case, while they will be deactivated when the user needs to retract the rods for transporting the trolley case on planes, cars, trains or the like.

[0011] In trolley cases known in the state of the art, the handles generally have a button which allows the pins to be activated/deactivated.

[0012] Such button represents a critical part of the trolley case handles known in the state of the art, as it is often subject to breakages, of the button itself or of the mechanism which controls it.

[0013] The breakages are mainly due to possible impacts that the trolley case undergoes during transport and during positioning in aircraft holds/overhead locker, as well as in the car luggage compartments.

[0014] It is also very likely to hit the button because, in order to ensure its functionality, the button protrudes with respect to the shape of the trolley case and is therefore more subject to blows.

[0015] Finally, precisely because of such protrusion, the button also has an aesthetically unpleasant appearance, which disturbs the continuity of the profiles and surfaces of the trolley case.

[0016] A possible solution is disclosed in document US5553350, which relates to a handle set including two telescopic handles with freely adjustable length. Each of the telescopic handles includes a first tube, a second tube into which the first tube is telescopically insertable, a tubular anchor with an upper tip attached to a lower tip of the first tube, a lower portion defining a plurality of slits so that the lower portion of the tubular anchor can be expanded easily, a link insertable through the first tube, a plug attached to a lower tip of the link. The plug can be moved to an upper position by pulling the link for abutting the lower portion of the tubular anchor against the first tube for restraining the first tube relative to the second tube. The plug can be moved to a lower position by pushing the link for releasing the lower portion of the tubular anchor from the first tube for allowing the movement of the first tube in respect to the second tube. Each of two link-driving devices is connected between a grip and one of the telescopic handles. The links can be driven by means of the link-driving devices by pivoting the grip.

[0017] Another solution is presented by document US5371923 referring to a handle of a telescopic handle assembly for a baggage cart, which includes at least a handle seat fixedly connected to an inner tube of the telescopic handle assembly, an actuator rotatably received within a mounting hole of the handle seat, a grip portion formed by an assembly of two grip members with semi-circular peripheries and being fixedly connected to the actuator so that a rotation of the grip portion can rotate the actuator, and an operating block which has at least a portion being forcedly in contact with a portion of the actuator so that a rotation of the actuator can cause a lifting movement of the operating block from a position to a selected position. The operating block is fixedly connected to a locking means for locking the inner tube with an outer tube of the telescopic handle assembly. Once the operating block is lifted to the selected position, the locking of the locking means for locking the inner tube with the outer tube is unlocked.

[0018] A further solution is disclosed in document US5970579 referring to a handle assembly for a wheeled luggage case includes two outer tubes, two inner tubes respectively and retractably received in the two outer tubes, a rotated handle connected between the two inner tubes, two actuating means respectively in the inner tubes, and two rods received in the inner tubes and operatably engaged with the actuating means. The rotated handle has two ends to push the two rods to actuate the actuating means when the rotated handle is rotated. The actuating means each have a positioning member received therein so as to position the inner tubes corresponding to the outer tubes.

[0019] Despite of the cited documents, there is therefore an unmet need to create a handle and a transport-

able container, such as a trolley case or the like, which solves the functional disadvantages described above, while keeping pleasant aesthetic characteristics.

[0020] The present invention achieves the above purposes by making a telescopic handle as described above and according to the characterizing part of claim 1.

[0021] The handle part replaces the button placed on the handles of the containers known in the state of the art and performs the same function, that is, the activation/deactivation of the pins which fix the telescopic handle in predetermined positions.

[0022] It is evident that such solution has better characteristics of solidity, from a constructive point of view, and efficiency, from a functional point of view: the handle part must simply rotate, does not have parts that can remain stuck in the central elongated element, as it happens in the buttons currently used, or parts that, subjected to high numbers of operating cycles, can fail.

[0023] The present invention relates particularly to the upper part of the handles, as it is responsible for the entire movement of telescopic rods that allow the transport of the container.

[0024] For this reason, preferably, the lateral elongated elements are made in a manner completely similar to the telescopic rods of the trolley cases known in the state of the art.

[0025] Similarly, the hooking means are also made as the common pins present in the trolley cases known in the state of the art.

[0026] According to the invention, the central elongated element comprises means for transforming the rotational movement of the handle part, configured so as to transform the rotation of the handle part into a translation movement.

[0027] In combination with such solution, translation motion transmission means are provided to the hooking means.

[0028] Since the pins known in the state of the art, which allow the fixation of the lateral elongated elements, are activated through a translation movement, it is necessary to provide in the handle object of the present invention such means for transforming the rotational motion of the handle part.

[0029] According to the invention, described in detail below through some illustrated examples, the transformation means comprise at least a first portion, positioned adjacent and in contact with an end of the handle part, and a second part in contact with the first part, such second part being mounted translatable with respect to the first part, such that the second part moves from an approached condition to a spaced apart condition with respect to the first part.

[0030] In an approached condition, the first part and the second part identify a housing seat housing a pusher element integral with the handle part, such that during the rotation of the handle part, the external walls of the pusher element push the second part, which in turn transmits the translation to the transmission means.

[0031] It is evident that such a pushing means can be made of any shape, provided that during the rotation integral with the handle part, its shape widens the housing seat, pushing the second part translatable with respect to the first.

[0032] The handle object of the present invention, for use in combination with containers such as trolley cases or the like, must nevertheless meet component lightness requirements, for which it is necessary to size the various parts in order to obtain the best compromise between robustness and lightness.

[0033] For this reason, according to the invention, the pusher element is formed by a pin having at least one protruding head, while the first and second parts have insertion seats of the pin ends.

[0034] The first part has a first face facing in the direction of a second face belonging to the second part, which faces have a profile complementary to the shape of the protruding head, such that in an approached condition the two faces identify a housing seat of the protruding head and such that during the rotation of the handle part, the protruding head flows along the profile of the faces and pushes the second part in a spaced apart condition.

[0035] In order to facilitate the pushing action of the protruding head and to limit its consumption, it is possible to provide that the protruding head consists of a wheel which has a rotation axis perpendicular to the longitudinal axis of the pin, so that the wheel rotates along the profile of the second face during the rotation of the handle part.

[0036] According to a possible variant, the pin has two protruding heads, positioned diametrically opposite to the section of said pin.

[0037] Thanks to such configuration, the thrust of the pusher element occurs on two sides symmetrically, and prevents that, with the use of the handle, imbalances, leading to breakages of one or more components, can be created that.

[0038] Obviously, it is possible to provide that both protruding heads are made up of wheels, as described above.

[0039] According to a preferred embodiment at least one end of the central elongated element is connected with the corresponding lateral elongated element through a curvilinear element.

[0040] The curvilinear element does not simply have a pleasant aesthetic appearance, but also has advantages from the functional point of view.

[0041] In fact, the curvilinear element has a channel which provides a course corresponding to the profile of said curvilinear element, which allows to accommodate a plurality of spheres arranged adjacent to each other.

[0042] Such spheres are part of the means for transmitting the translation movement of the second part, as they are arranged in such a way that the sphere closest to the central elongated element is connected to the second part.

[0043] Advantageously, in order to improve the functionality characteristics of the handle object of the present

invention, such a handle can be made symmetrically, according to a plane parallel to the longitudinal axis of the lateral elongated elements.

[0044] In this case the transformation means will be provided positioned at both ends of the central elongated element.

[0045] As anticipated, the handle object of the present invention must also meet aesthetic as well as functional requirements.

[0046] For this reason, in order to give the handle a pleasant aesthetic appearance, the handle part has at least one upper external wall made in such a way as to be flush with the upper external wall of the remaining part of the central elongated element in a non-rotated condition of the handle part.

[0047] Given the advantages discussed above, the present invention also relates to a transportable container of the trolley case, suitcase or the like type, comprising a handle made according to one or more of the characteristics described above.

[0048] These and other features and advantages of the present invention will become clearer from the following description of some exemplary embodiments illustrated in the attached drawings wherein:

figure 1 illustrates a transportable container, a trolley case known in the state of the art;

figures 2a and 2b show respectively a perspective and sectional view of a preferred embodiment of the handle object of the present invention;

figures 3a and 3b show respectively a view and a detail of a preferred embodiment of the handle object of the present invention, particularly in a non-rotated condition of the handle part;

figures 4a and 4b show respectively a view and a detail of a preferred embodiment of the handle object of the present invention, particularly in a rotated condition of the handle part;

figure 5 illustrates an exploded view of a preferred embodiment of the handle object of the present invention.

[0049] It is specified that the figures attached to the present patent application illustrate some embodiments of the handle object of the present invention to better understand its advantages and characteristics described.

[0050] Such embodiments are therefore to be understood for purely illustrative and non-limiting purposes of the inventive concept of the present invention, namely that of realizing a handle for a transportable container of the trolley case type, which is strong, robust and light and which facilitates users during use of such containers.

[0051] Particularly, figure 1 illustrates a trolley case known in the state of the art.

[0052] The trolley case includes an outer casing 1 and a handle 2.

[0053] The handle 2 has a central elongated element

20 and two lateral elongated elements 30 which connect to the central elongated element 20, particularly to the ends of the central elongated element 20.

[0054] The lateral elongated elements 30 move from an extracted condition, illustrated in figure 1, to a condition inserted in special seats provided within the casing 1 of the trolley case and consequently the central elongated element 20 goes from a maximum spaced apart condition, illustrated in figure 1 and corresponding to the extracted condition, to a maximum approaching condition, corresponding to the inserted condition, with respect to the external casing 1 of the trolley case.

[0055] The transition from the extracted condition to the inserted condition and vice versa occurs through a translation of the lateral elongated elements 30 along the directions indicated by arrows A.

[0056] In order to stably keep the extracted or inserted condition, hooking means of at least one lateral elongated element 30 are present, preferably of both lateral elongated elements 30.

[0057] Such hooking means consist of pins which engage in corresponding engagement seats provided on the trolley case.

[0058] Generally, such pins are stably kept in engagement condition by elastic means such as springs or the like.

[0059] Therefore, in order to move from the extracted condition to the inserted condition, and vice versa, it is necessary to deactivate such pins and for this reason the trolley cases known in the state of the art provide on the central elongated element 20 an activation/deactivation button.

[0060] Pressing such a button, urges the elastic elements so as to allow the deactivation of the pins (for example by re-entering such pins inside the lateral elongated elements 30) and allow the sliding of the lateral elongated elements 30 in the directions of the arrows A.

[0061] The inserted condition and the extracted condition represent two limit switch conditions and generally pin engagement seats may be provided for each of these conditions.

[0062] For example, starting from the extracted condition, the pressure on the button deactivates the pins, which are currently engaged inside a first engagement seat.

[0063] The handle 2 can slide in the direction of the external casing 1 of the trolley case, until the pins are positioned at a second engagement seat, wherein they will engage, locking the further slide of the handle.

[0064] With particular reference to figure 1, the two lateral elongated elements 30 consist of two telescopic tubular rods 301 and 302.

[0065] During the transition from the extracted condition to the inserted condition, the rod 301 is inserted inside the rod 302.

[0066] To lock the sliding of the rod 301 with respect to the rod 302 it is possible to provide pins completely similar to those described above, also activated/deacti-

vated by the button on the handle.

[0067] Unlike the trolley cases known in the state of the art, the present invention provides a specific solution of the handle 2, which allows the pins to be activated/deactivated through the rotation of part of the central elongated element 20.

[0068] In fact, with particular reference to Figures 2a and 2b, the means for activating/deactivating the hooking means consist of a handle part 21 belonging to the central elongated element 20, mounted rotatably with respect to the longitudinal axis B of the central elongated element 20.

[0069] The handle part 21 is configured so that the rotation thereof causes the activation/deactivation of the hooking means.

[0070] With particular reference to figures 2a and 2b, the central elongated element 20 consists of the handle part 21 and two lateral parts 24, arranged side by side with the ends of the handle part 21.

[0071] The handle part 21 may rotate with respect to the axis B, while the parts 24 are fixed.

[0072] Moreover, the handle part has a shape of the lower face 210 such as to facilitate grasping by the hand of a user and allow an easy rotation of the handle part 21.

[0073] Figure 2b illustrates a section of part of the central elongated element 20, wherein it is evident that the handle part 21 is connected to transformation means 22 suitable to transform the motion of the rotational movement of the handle part 21 into a translation movement.

[0074] The rotational motion transformed into displacement is transmitted to an output element of the motion 230 via transmission means 23.

[0075] The output element 230 will then act directly on the activation/deactivation of the hooking means, i.e. the pins, in any of the ways known in the state of the art.

[0076] Figures 3a to 4b illustrate in detail both the transformation means 22 and the transmission means 23, illustrating, respectively, the non-rotated and rotated condition of the handle part 21.

[0077] It is specified that in a non-rotated condition of the handle part 21, the entire telescopic handle is locked, i.e. it stably fixes, in an extracted or inserted condition, the lateral elongated elements 30 (reference to figure 1), while the rotated condition of the handle part 21 causes the unlocking of the hooking means placed in the lateral elongated elements 30 and allows the transition from the inserted condition to the extracted condition or vice versa.

[0078] It is obviously possible to provide, by slightly modifying the operation of the transformation means 22 and the transmission means 23, that the operation is reversed, i.e. locking in a rotated condition and unlocking in a non-rotated condition.

[0079] With particular reference to figures 3a to 4b, the transformation means 22 comprise a first part 221 positioned adjacent to and in contact with one end of the handle part 21 and a second part 222 in contact with said first part 221.

[0080] The second part 222 is mounted translatable

with respect to the first part 221, such that the second part 222 moves from an approached condition to a spaced apart condition with respect to the first part 221.

[0081] Figures 3a and 3b illustrate the approached condition of the second part 222, the handle part 21 is in a non-rotated condition and the second part 222 is moved to the right, in contact with the first part 221.

[0082] In Figures 4a and 4b, the second part 222 is in a spaced apart condition: the handle part 21 is rotated and the second part 222 is moved to the left, no longer in contact with the first part 221.

[0083] The displacement of the second part 222 occurs thanks to the presence of a pusher element 224.

[0084] As is apparent from figure 3b, in the approaching condition, the two parts 221 and 222 identify a housing seat 220 for such a pusher element, particularly a compartment suitable to enclose the pusher element 224.

[0085] The pusher element 224, in the condition illustrated in figure 3b, is located with its external walls in contact with the internal walls of such housing seat.

[0086] Since the pusher element 224 is integral with the handle part 21, a rotation of the handle part 21 also causes rotation of the pusher element 224 and the contact of the walls causes the pusher element 224 to push the second part 222 to the left, figure 4b.

[0087] For construction requirements, the second part 222 has an output element 223 which transmits the displacement to the transmission means 23.

[0088] Before describing a particular embodiment of the first part 221, the second part 222 and the pusher element 224, figures 3a to 4b illustrate a preferred embodiment of the transmission means 23.

[0089] According to such an embodiment, the lateral parts 24 have a curvilinear element with a channel 231 that provides a course corresponding to the profile of said curvilinear element.

[0090] The transmission of the translation motion of the element 223 takes place thanks to the presence of a plurality of spheres 232 inserted inside the channel 231 and arranged adjacent to each other.

[0091] As is evident from figures 3b and 4b, the sphere 232 closest to the central elongated element, i.e. the one more to the right with reference to the figures, is connected to the second part 222.

[0092] The element 223 has dimensions equal to those of the channel 231, so that it can fit inside the channel 231, in a rotated condition of the handle part 21 (figure 4b), and push the spheres 232.

[0093] It is specified that the element 223 may be independent of the spheres 232.

[0094] According to a further embodiment, the element 223 is firmly connected to the plurality of spheres 232, whereby, by rotating the handle part 21, it pushes the spheres 232 downwards, while by returning the handle part 21 in a non-rotated condition, it drags the spheres 232 to the right.

[0095] Such configuration allows not to provide elastic means that keep the hooking pins in a predetermined

position, but allows to always control the movement of the hooking pins, ensuring that the pins are active in a non-rotated condition of the handle part 21 and that they are deactivated in a rotated condition of the handle part 21.

[0096] Similarly, means may be provided for bringing the second part 222 in approaching condition with respect to the first part 221.

[0097] For example, such means may consist of connecting means between the pusher element 224 and the second part 222 so that the second part 222 is not only pushed by the pusher element 224 to the left, with reference to the figures, but is also pulled to the right, with reference to the figures, when the handle part 21 returns to the non-rotated condition.

[0098] Alternatively, elastic elements, such as springs or the like, positioned between the second part 222 and the curvilinear element 24 which are compressed in a rotated condition of the handle part 21 can be provided.

[0099] By the time the handle part 21 is in a non-rotated condition, such elastic elements will tend to lose compression, pushing the second part 222 toward the first part 221.

[0100] The figures attached to the present patent application illustrate the section of a single part 24, but it is evident that preferably the handle object of the present invention is made symmetrically with respect to a plane perpendicular to the axis B.

[0101] Figure 5 illustrates an exploded view of the handle object of the present invention and in particular a preferred embodiment of the pusher element 224.

[0102] According to such embodiment, the pusher element 224 consists of a pin 2241 having two protruding heads 2242.

[0103] The first part 221 and the second part 222 have insertion seats of the pin 2241 ends.

[0104] In addition, the first part 221 has a first face 2211 facing in the direction of a second face 2221 belonging to the second part 222.

[0105] Faces 2211 and 2221 have a profile complementary to the shape of the protruding heads 2242, such that, in an approached condition, the two faces 2211 and 2221 make a housing seat 220 (fig. 3b) of the protruding heads 2242, whose surfaces are in contact with said heads 2242.

[0106] The pin 2241 is then inserted with its ends into the first and second parts and is free to rotate integrally with the handle part 21.

[0107] The pin 2241 during rotation drags the protruding heads 2242, which slide along the profile of the surfaces 2211 and 2221 in such a way that during rotation of said handle part 21, the heads 2242 push the second part 222 in a spaced apart condition.

[0108] To facilitate such sliding, advantageously the protruding heads 2242 consist of wheels which have a rotation axis perpendicular to the longitudinal axis of the pin 2241.

[0109] Finally, it is specified that, as illustrated in fig-

ures 2a and 2b, in a non-rotated condition, the handle part 21 has at least one upper external wall made so as to be flush with the upper external wall of the remaining part of the central elongated element 20.

[0110] With particular reference to figure 2a, the handle part 21 is on three sides, apart from the lower side with the face 210, flush with the external walls of the central elongated element 20.

[0111] While the invention can be changed according to various modifications and alternative constructions, some preferred embodiments have been shown in the drawings and described in detail.

[0112] However, it should be understood that there is no intention of limiting the invention to the specific illustrated embodiment but, on the contrary, it aims at covering all modifications, alternative constructions, and equivalents falling within the scope of the invention as defined in the claims.

Claims

1. Telescopic handle for transportable containers, such as suitcases, trolley cases or the like, comprising an upper central elongated element (20) and two lateral elongated elements (30) connected to the central elongated element (20), the lateral elongated elements (30) moving from an extracted condition to a condition inserted in special seats provided inside said container,

the central elongated element (20) moving from a maximum spaced apart condition, corresponding to the extracted condition, to a maximum approaching condition, corresponding to the inserted condition, with respect to said container.

means for hooking at least one lateral elongated element (30), configured to stably keep the extracted condition or the inserted condition, being present

and means for activating/deactivating said hooking means being present

said activation/deactivation means consisting of a handle part (21) belonging to said central elongated element (20),

the said handle part (21) being pivotally mounted with respect to the longitudinal axis of the central elongated element (20) and being configured so that the rotation of the said handle part (21) causes the said hooking means to be activated/deactivated said central elongated element (20) comprising means (22) for transforming the rotational movement of said handle part (21), which means (22) are configured so as to transform the rotation of said handle part (21) into a translation movement, with transmission means (23) of said translation motion being provided to

said hooking means,
 wherein said transformation means (22) comprise at least a first part (221) positioned adjacent and in contact with an end of said handle part (21) and a second part (222) in contact with said first part (221), which second part (222) is mounted translatable with respect to said first part (221), so that said second part (222) moves from an approached condition to a spaced apart condition with respect to said first part (221), in an approached condition, the said first part (221) and the said second part (222) identifying a housing seat (220) housing a pusher element (224) integral with said handle part (21), such that during the rotation of said handle part (21) the external walls of the said pusher element (224) push the second part (222) which in turn transmits the translation to said transmission means (23), **characterized in that** said pusher element (224) consisting of a pin (2241) having at least one protruding head (2242), said first (221) and said second (222) parts have insertion seats for the ends of said pin (2241), said first part (221) having a first face (2211) facing in the direction of a second face (2221) belonging to said second part (222), the first (2211) and second (2221) faces having a profile complementary to the shape of said protruding head (2242), such that in an approached condition the two faces (2211, 2221) identify a housing seat (220) of said protruding head (2242) and such that during the rotation of said handle part (21), the said protruding head (2242) flows along the profile of said faces (2211, 2221) and pushes the said second part (222) in a spaced apart condition.

2. Handle according to claim 1, wherein the said protruding head (2242) consists of a wheel having an axis of rotation perpendicular to the longitudinal axis of said pin (2241).
3. Handle according to one or more of the preceding claims, wherein said pin (2241) has two protruding heads (2242), positioned diametrically opposite to the section of said pin (2241).
4. Handle according to one or more of the preceding claims, wherein at least one end of said central elongated element (20) is connected with the corresponding lateral elongated element (30) through a curvilinear element, which curvilinear element has a channel (231) that provides a course corresponding to the profile of said curvilinear element, the transmission means comprising a plurality of spheres (232) inserted within said channel (231) and arranged adjacent to each other, the sphere being near said central elongated element (20) in connection

with said second part (222).

5. Handle according to one or more of the preceding claims, wherein said transformation means (22) are provided positioned at both ends of said central elongated element (20).
6. Handle according to one or more of the preceding claims, wherein said handle part (21) has at least one upper external wall made so as to be flush with the upper external wall of the remaining part (24) of the central elongated element (20) in a non-rotated condition of said handle part (21).
7. Transportable container of the trolley case, suitcase or the like type, **characterized in that** it comprises a handle made according to one or more of claims 1 to 6.

Patentansprüche

1. Teleskopgriff für transportable Behälter, wie Koffer, Trolley-Koffer oder dergleichen, der ein oberes zentrales längliches Element (20) und zwei seitliche längliche Elemente (30), die mit dem zentralen länglichen Element (20) verbunden sind, umfasst, wobei sich die seitlichen länglichen Elemente (30) von einem ausgezogenen Zustand in einen Zustand, der in spezielle Sitze eingesetzt ist,

die im Inneren des Behälters bereitgestellt sind, bewegt,
 sich das zentrale längliche Element (20) von einem maximal beabstandeten Zustand, der dem ausgezogenen Zustand entspricht, zu einem maximal annähernden Zustand, der dem eingesetzten Zustand entspricht,
 in Bezug auf den Behälter bewegt,

wobei Mittel zum Einhängen mindestens eines seitlichen länglichen Elements (30), das dazu konfiguriert ist, den ausgezogenen Zustand oder den eingesetzten Zustand stabil zu halten, vorhanden sind, und Mittel zum Aktivieren/Deaktivieren der Einhängmittel vorhanden sind, wobei die Aktivierungs-/Deaktivierungsmittel aus einem Griffteil (21) bestehen, das zu dem zentralen länglichen Element (20) gehört, wobei das Griffteil (21) in Bezug auf die Längsachse des zentralen länglichen Elements (20) schwenkbar montiert und dazu konfiguriert ist, dass die Drehung des Griffteils (21) bewirkt, dass das Einhängmittel aktiviert/deaktiviert wird, wobei das zentrale längliche Element (20) Mittel (22) zum Um-

wandeln der Drehbewegung des Griffteils (21) umfasst, wobei die Mittel (22) dazu konfiguriert sind, die Drehung des Griffteils (21) in eine Verschiebungsbewegung umzuwandeln, wobei Übertragungsmittel (23) der Verschiebungsbewegung an den Ein-
hakmitteln bereitgestellt sind,
wobei:

die Umwandlungsmittel (22) mindestens ein erstes Teil (221), das angrenzend an und in Kontakt mit einem Ende des Griffteils (21) positioniert ist, und ein zweites Teil (222) in Kontakt mit dem ersten Teil (221) umfassen, wobei das zweite Teil (222) in Bezug auf das erste Teil (221) verschiebbar derart montiert ist, dass sich das zweite Teil (222) von einem angenäherten Zustand zu einem beabstandeten Zustand in Bezug auf das erste Teil (221) bewegt,

in einem angenäherten Zustand das erste Teil (221) und das zweite Teil (222) einen Gehäusesitz (220) identifizieren, der ein Schubelement (224) aufnimmt, das mit dem Griffteil (21) derart einstückig ist, dass während der Drehung des Griffteils (21) die Außenwände des Schubelements (224) das zweite Teil (222) schieben, das wiederum die Verschiebung an die Übertragungsmittel (23) überträgt, **dadurch gekennzeichnet, dass**

das Schubelement (224) aus einem Stift (2241) besteht, der mindestens einen vorragenden Kopf (2242) aufweist, das erste (221) und das zweite (222) Teil Einsetzsitze für die Enden des Stifts (2241) aufweisen,

wobei das erste Teil (221) eine erste Fläche (2211) aufweist, die in die Richtung einer zweiten Fläche (2221) gewandt ist, die zu dem zweiten Teil (222) gehört, wobei die erste (2211) und die zweite (2221) Fläche ein Profil aufweisen, das zu der Form des vorragenden Kopfes (2242) derart komplementär ist, dass in einem angenäherten Zustand die zwei Flächen (2211, 2221) einen Gehäusesitz (220) des vorragenden Kopfes (2242) identifizieren, und derart, dass während der Drehung des Griffteils (21) der vorragende Kopf (2242) entlang des Profils der Flächen (2211, 2221) läuft und das zweite Teil (222) zu einem beabstandeten Zustand schiebt.

2. Griff nach Anspruch 1, bei dem der vorragende Kopf (2242) aus einem Rad besteht, das eine Drehachse senkrecht zu der Längsachse des Stifts (2241) aufweist.

3. Griff nach einem oder mehreren der vorstehenden Ansprüche, wobei der Stift (2241) zwei vorragende Köpfe (2242) aufweist, die dem Abschnitt des Stifts (2241) diametral entgegengesetzt positioniert sind.

4. Griff nach einem oder mehreren der vorstehenden Ansprüche, wobei mindestens ein Ende des zentralen länglichen Elements (20) mit dem entsprechenden seitlichen länglichen Element (30) durch ein krummliniges Element verbunden ist, wobei das krummlinige Element einen Kanal (231) aufweist, der einen Verlauf bereitstellt, der dem Profil des krummlinigen Elements entspricht, wobei die Übertragungsmittel eine Vielzahl von Kugeln (232) umfassen, die in den Kanal (231) eingesetzt und aneinander angrenzend eingerichtet sind, wobei die Kugel nahe dem zentralen länglichen Element (20) mit dem zweiten Teil (222) in Verbindung steht.

5. Griff nach einem oder mehreren der vorstehenden Ansprüche, wobei die Umwandlungsmittel (22) an beiden Enden des zentralen länglichen Elements (20) positioniert bereitgestellt sind.

6. Griff nach einem oder mehreren der vorstehenden Ansprüche, wobei das Griffteil (21) mindestens eine obere Außenwand aufweist, die derart hergestellt ist, dass sie mit der oberen Außenwand des verbleibenden Teils (24) des zentralen länglichen Elements (20) in einem nicht gedrehten Zustand des Griffteils (21) bündig ist.

7. Transportabler Behälter vom Typ Trolley-Koffer, Koffer oder dergleichen, **dadurch gekennzeichnet, dass** er einen Griff umfasst, der nach einem oder mehreren der Ansprüche 1 bis 6 hergestellt ist.

Revendications

1. Poignée télescopique pour des conteneurs transportables, tels que des valises, des valises à roulettes ou similaires, comprenant un élément allongé central supérieur (20) et deux éléments allongés latéraux (30) reliés à l'élément allongé central (20), les éléments allongés latéraux (30) se déplaçant d'une condition extraite à une condition insérée dans des sièges spéciaux

disposés à l'intérieur dudit conteneur, l'élément allongé central (20) se déplaçant d'une condition espacée maximale, correspondant à la condition extraite, à une condition d'ap-

proche maximale, correspondant à la condition insérée,
par rapport audit conteneur.

Des moyens d'accrochage d'au moins un 5
élément allongé latéral (30) étant présents,
configurés pour maintenir de manière stable la condition extraite ou la condition insérée
et des moyens d'activation/désactivation 10
desdits moyens d'accrochage étant présents
lesdits moyens d'activation/désactivation
étant constitués d'une partie poignée (21) 15
appartenant audit élément allongé central (20),
ladite partie poignée (21) étant montée pivotante par rapport à l'axe longitudinal de l'élément allongé central (20) et étant configurée de telle sorte que la rotation de ladite 20
partie poignée (21) amène ledit moyen d'accrochage à être activé/désactivé ledit élément allongé central (20) comprenant des
moyens (22) pour transformer le mouvement de rotation de ladite partie poignée 25
(21), moyen (22) qui est configuré de façon à transformer la rotation de ladite partie poignée (21) en un mouvement de translation,
des moyens de transmission (23) dudit mouvement de translation étant fournis 30
auxdits moyens d'accrochage,
dans laquelle
lesdits moyens de transformation (22) comprennent au moins une première partie 35
(221) positionnée de manière adjacente et en contact avec une extrémité de ladite partie poignée (21) et une seconde partie (222)
en contact avec ladite première partie (221), seconde partie (222) qui est montée de manière à pouvoir être translatée par rapport 40
à ladite première partie (221), de sorte que ladite seconde partie (222) passe d'une condition approchée à une condition espacée par rapport à ladite première partie (221),
dans une condition rapprochée, ladite première partie (221) et ladite seconde partie 45
(222) identifiant un siège de logement (220) logeant un élément poussoir (224) solidaire de ladite partie poignée (21), de sorte que pendant la rotation de ladite partie poignée (21), les parois externes dudit élément poussoir (224) poussent la seconde partie (222) qui à son tour transmet la translation auxdits moyens de transmission (23), **caractérisée en ce que**
ledit élément poussoir (224) étant constitué 50
d'une goupille (2241) qui a au moins une

tête saillante (2242),
lesdites première (221) et seconde (222) parties ont des sièges d'insertion pour les extrémités de ladite goupille (2241),
ladite première partie (221) ayant une première face (2211) orientée en direction d'une seconde face (2221) appartenant à ladite seconde partie (222), les première (2211) et seconde (2221) faces ayant un profil complémentaire par rapport à la forme de ladite tête saillante (2242), de sorte que dans une condition rapprochée les deux faces (2211, 2221) identifient un siège de logement (220) de ladite tête saillante (2242) et de sorte que pendant la rotation de ladite partie poignée (21), ladite tête saillante (2242) s'écoule le long du profil desdites faces (2211, 2221) et pousse ladite seconde partie (222) dans une condition espacée.

2. Poignée selon la revendication 1, dans laquelle ladite tête saillante (2242) consiste en une roulette ayant un axe de rotation perpendiculaire à l'axe longitudinal de ladite goupille (2241).
3. Poignée selon une ou plusieurs des revendications précédentes, dans laquelle ladite goupille (2241) comporte deux têtes saillantes (2242), positionnées diamétralement opposées à la section de ladite goupille (2241).
4. Poignée selon une ou plusieurs des revendications précédentes, dans laquelle au moins une extrémité dudit élément allongé central (20) est reliée à l'élément allongé latéral correspondant (30) par l'intermédiaire d'un élément curviligne, élément curviligne qui comporte un canal (231) qui fournit un tracé correspondant au profil dudit élément curviligne, les moyens de transmission comprenant une pluralité de sphères (232) insérées à l'intérieur dudit canal (231) et disposées adjacentes les unes aux autres, la sphère étant proche dudit élément allongé central (20) lié à ladite seconde partie (222).
5. Poignée selon une ou plusieurs des revendications précédentes, dans laquelle lesdits moyens de transformation (22) sont prévus positionnés aux deux extrémités dudit élément allongé central (20).
6. Poignée selon une ou plusieurs des revendications précédentes, dans laquelle ladite partie poignée (21) comporte au moins une paroi externe supérieure fabriquée de manière à affleurer la paroi externe supérieure de la partie restante (24) de l'élément allongé central (20) dans une condition non tournée de ladite partie poignée (21).
7. Conteneur transportable du type valise à roulettes,

valise ou similaires, **caractérisé en ce qu'il** comprend une poignée fabriquée selon une ou plusieurs des revendications 1 à 6.

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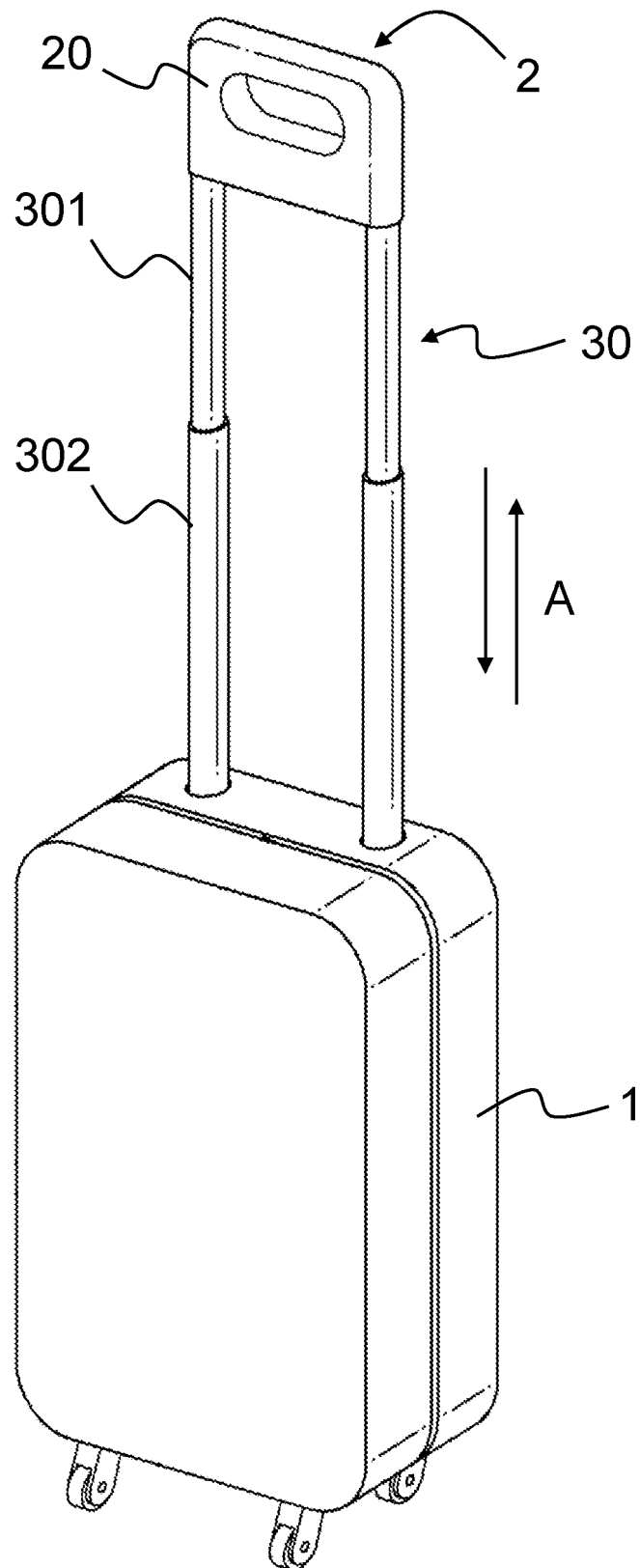
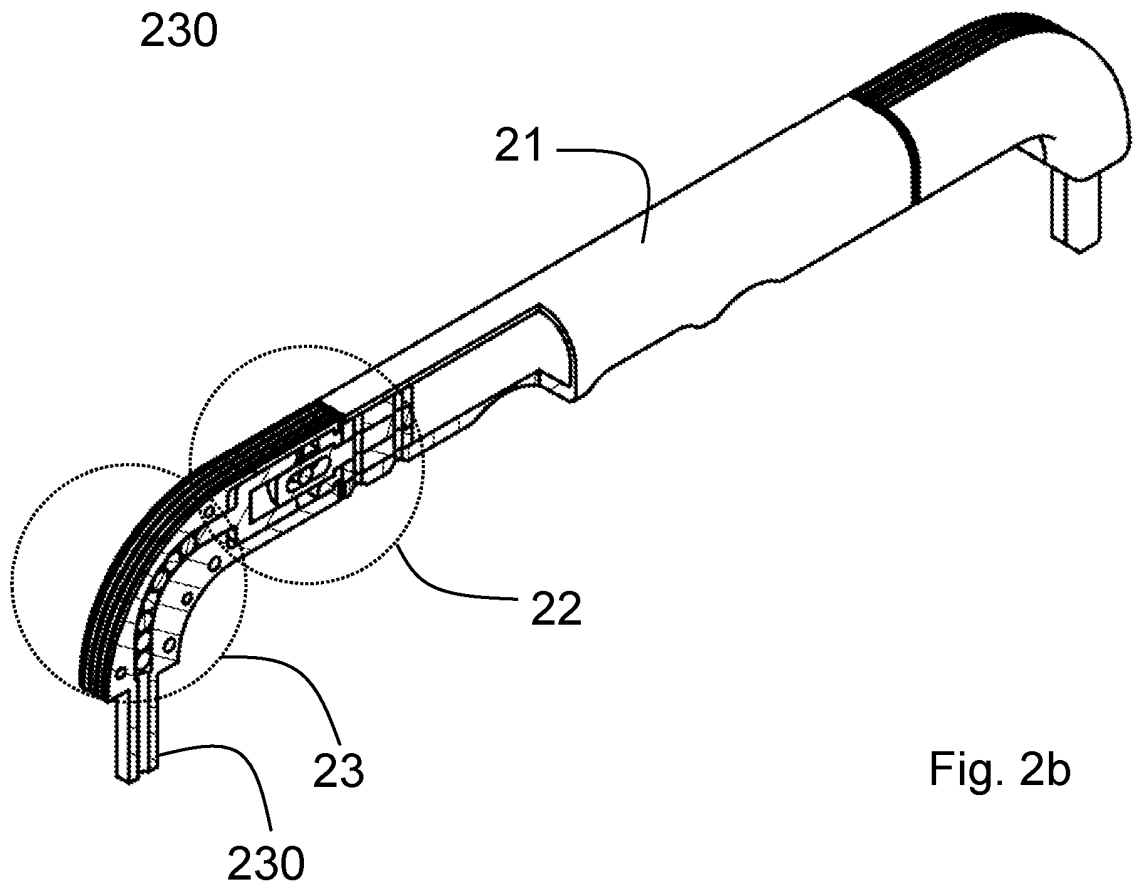
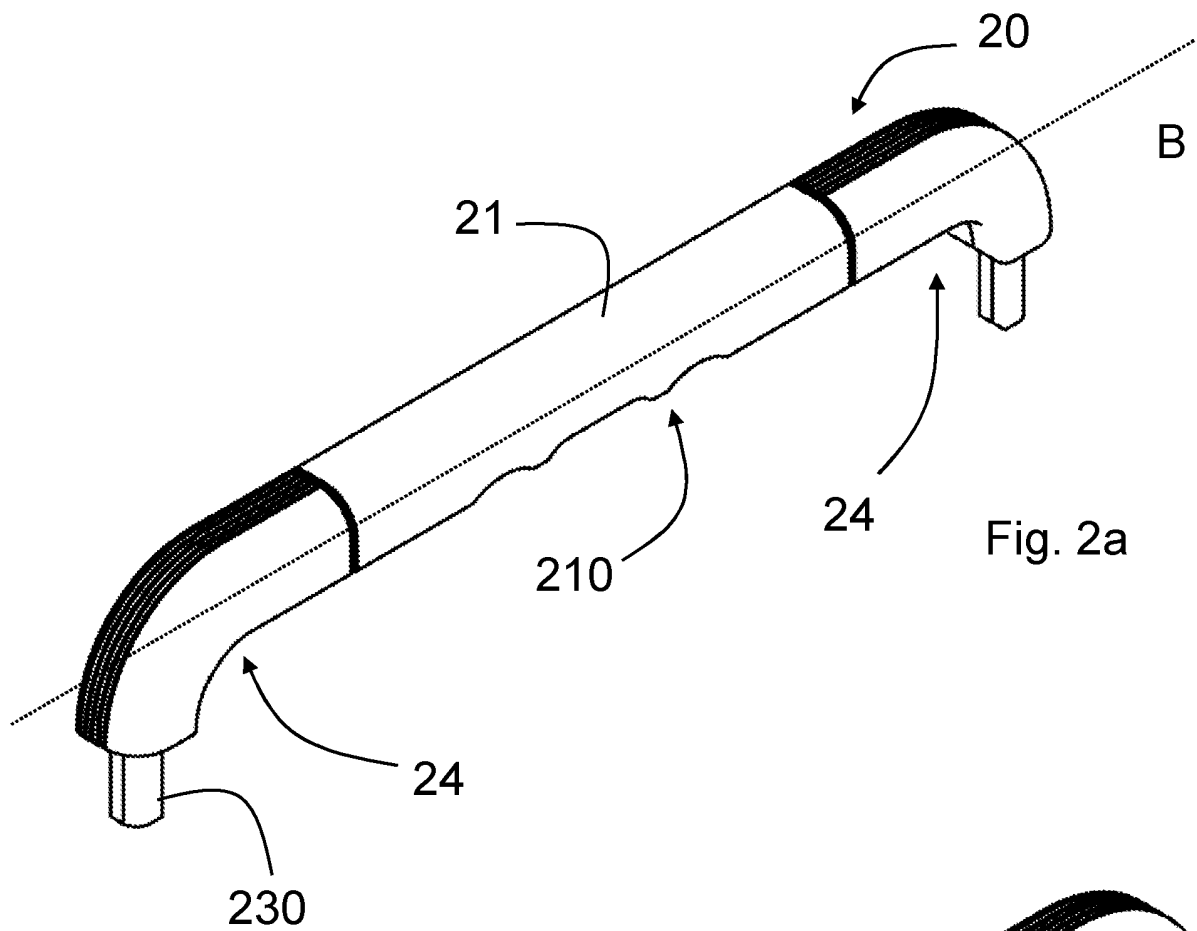
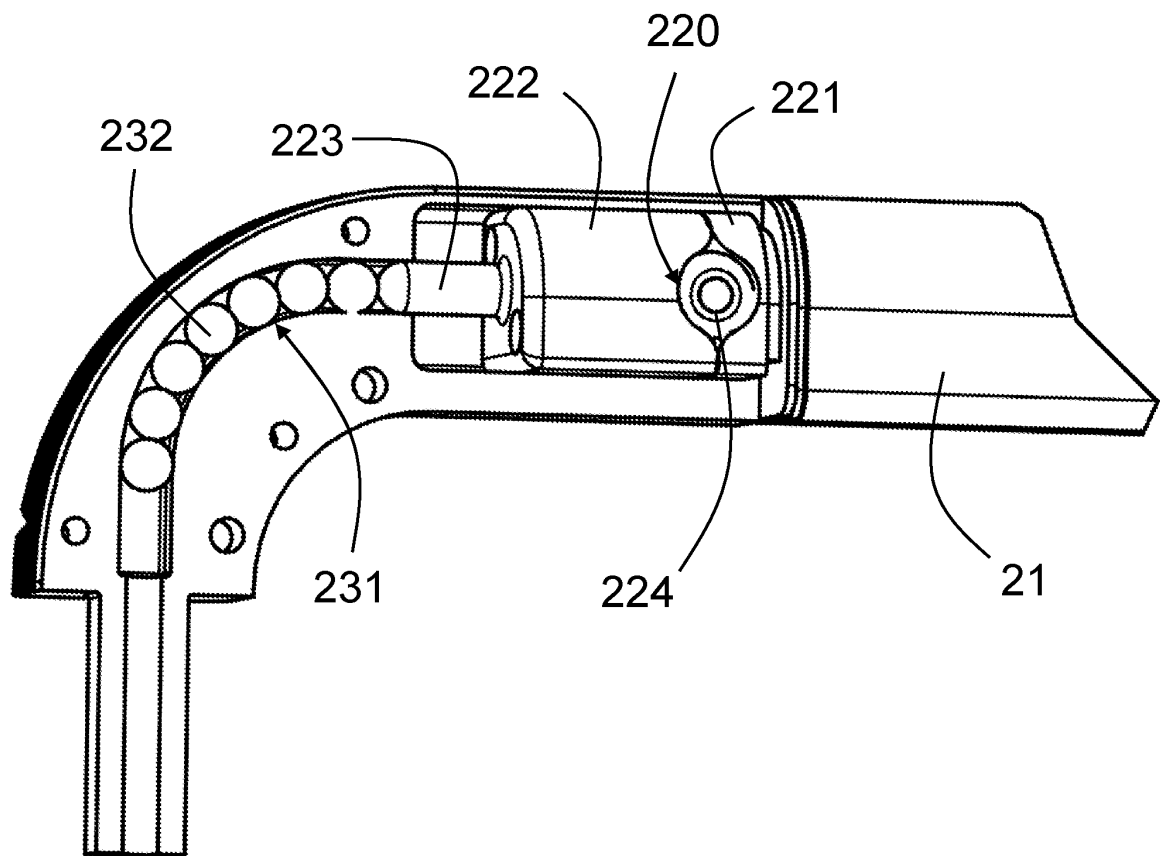
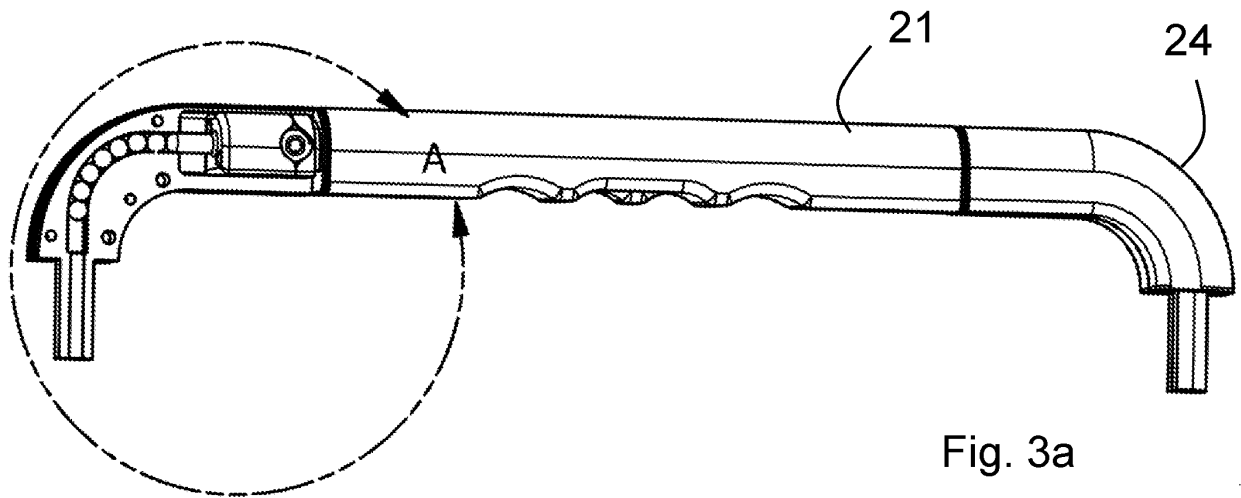


Fig. 1





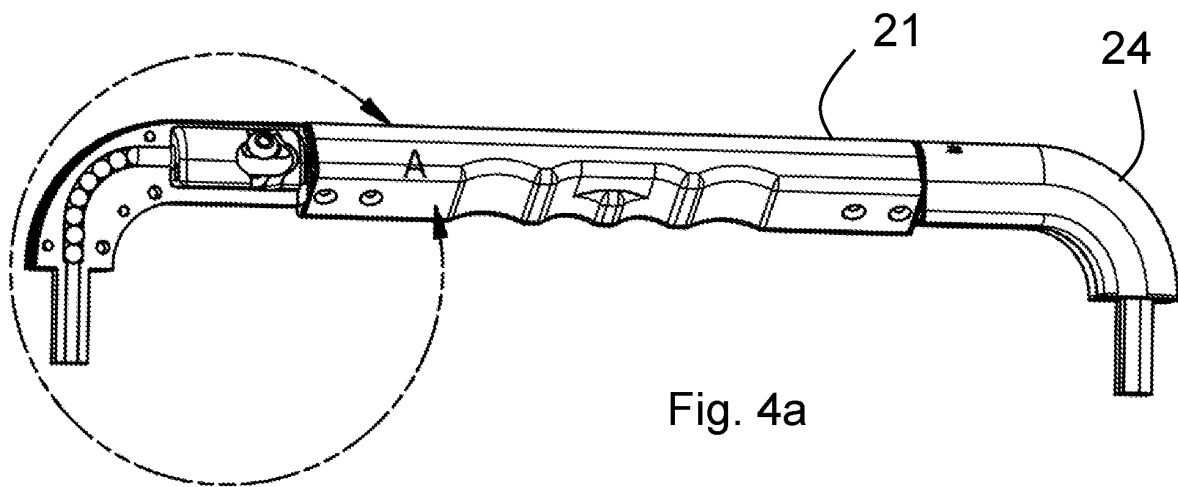


Fig. 4a

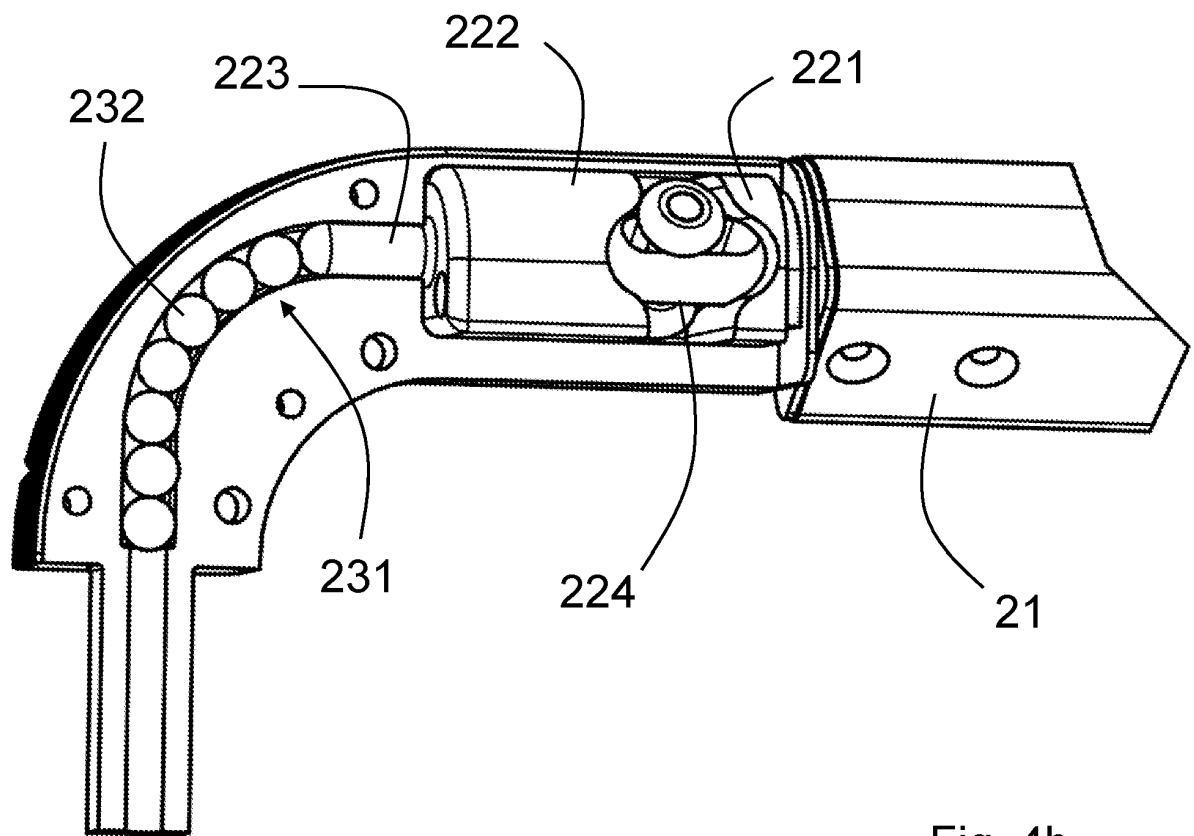


Fig. 4b

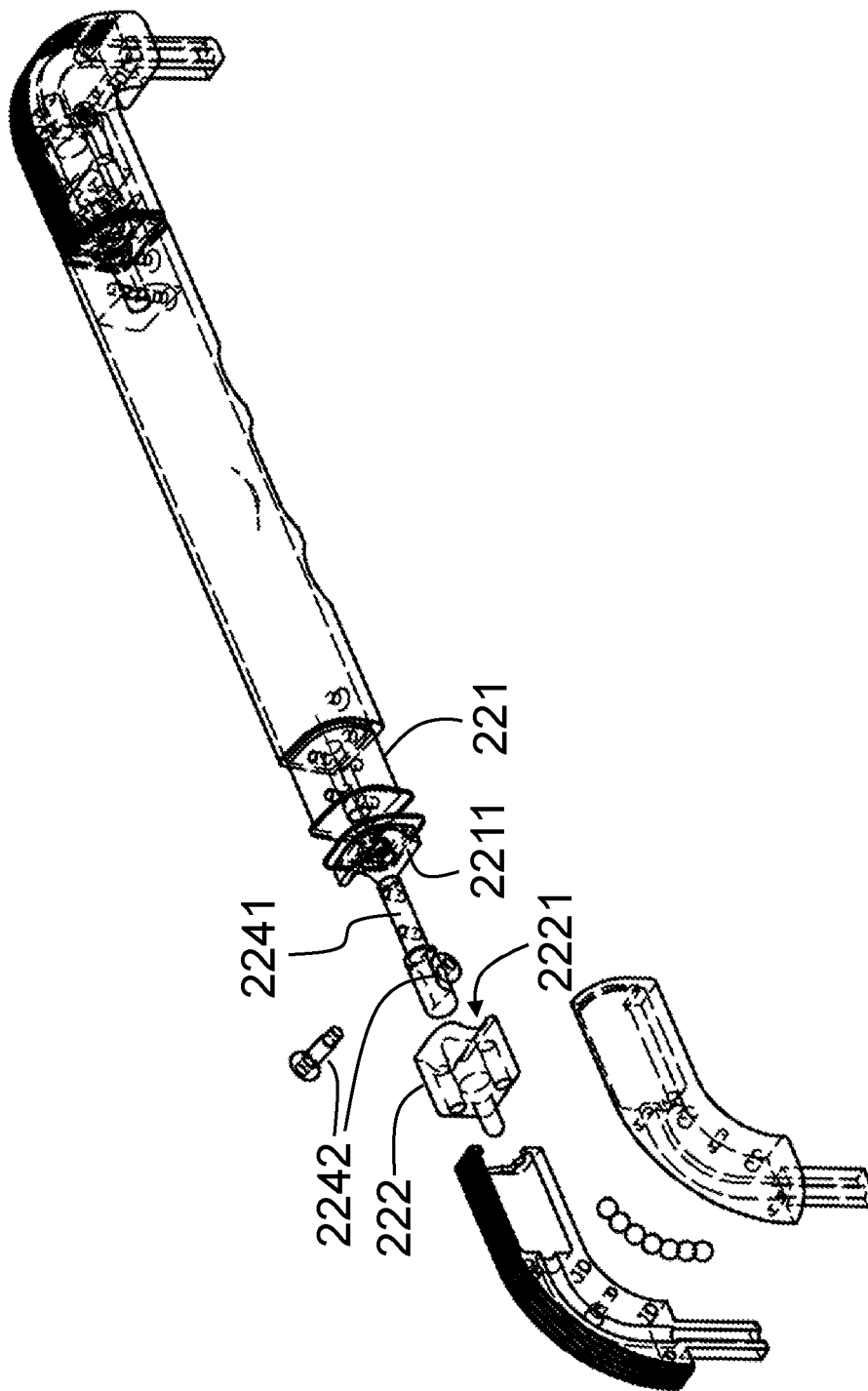


Fig. 5

REFERENCES CITED IN THE DESCRIPTION

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