



HU000033410T2

(19) **HU****MAGYARORSZÁG****Szellemi Tulajdon Nemzeti Hivatala**(11) Lajstromszám: **E 033 410**(13) **T2**

EURÓPAI SZABADALOM SZÖVEGÉNEK FORDÍTÁSA

(21) Magyar ügyszám: **E 15 152194**(22) A bejelentés napja: **2015. 01. 22.**(51) Int. Cl.: **A45C 13/26** (2006.01)**A45C 5/14** (2006.01)

(96) Az európai bejelentés bejelentési száma:

EP 20150152194

(97) Az európai bejelentés közzétételi adatai:

EP 2995215 A1 **2016. 03. 16.**

(97) Az európai szabadalom megadásának meghirdetési adatai:

EP 2995215 B1 **2017. 05. 24.**

(30) Elsőbbségi adatok:

14184652 **2014. 09. 12.** **EP**

(72) Feltaláló(k):

Song Kündig, Jennifer, 6300 Zug (CH)

(73) Jogosult(ak):

Jensong GmbH, 6300 Zug (CH)

(74) Képviselő:

SBGK Szabadalmi Ügyvivői Iroda, Budapest

(54)

Bőrönd

Az európai szabadalom ellen, megadásának az Európai Szabadalmi Közlönyben való meghirdetésétől számított kilenc hónapon belül, felszólalást lehet benyújtani az Európai Szabadalmi Hivatalnál. (Európai Szabadalmi Egyezmény 99. cikk(1))

A fordítást a szabadalmas az 1995. évi XXXIII. törvény 84/H. §-a szerint nyújtotta be. A fordítás tartalmi helyességét a Szellemi Tulajdon Nemzeti Hivatala nem vizsgálta.

Suitcase

Description

- [1] The present invention relates to a suitcase.
- [2] There are numerous suitcases 10 equipped with wheels 13 and a handle 11 (see US 2006/0213735), so that the suitcase can be pulled behind the person. Figure 1A shows one such suitcase 10 (referred to here as a rolling case 10) in a schematic side view. A fundamental weakness of such a rolling suitcase 10 becomes apparent when attempting to move such a rolling suitcase 10 up or down stairs 1. One such situation is illustrated in Figure 1B. This exceeds the physical limit of many people, in particular when the case is heavy. On the one hand, the wheels 13 on a rolling case 10 often do not adequately reach the landing of the stairs 1 and, on the other hand, the rolling case 10 with its rear wall facing the stairs 1 slips along the edges of the individual stair steps.
- [3] There are rolling cases 10 which have sliding profiles in the area of the rear wall of the case, so that one need not use so much strength when moving the rolling case 10 along the edges of stair steps. However, this solution does not actually facilitate the operation.
- [4] The object is therefore to make available a rolling case that can be moved up or down a step or stairs relatively easily. On the one hand, the required application of force should be reduced as much as possible. On the other hand, secure handling should be possible and slipping of the rolling case should be prevented if at all possible.
- [5] According to the invention a case according to claim 1 is made available, having special features, which permit better mobility on stairs.
- [6] A case according to the invention has a case area for receiving and transporting objects. Furthermore, the case has transport means which are arranged in the area of the bottom side and/or rear side of the case. In addition, a handle arrangement is mounted on the case to facilitate maneuvering of the case along an essentially horizontal surface when in the basic position and enabling maneuvering of the case (for example, sliding or rolling with the transport means) along steps when in a special position. This handle arrangement is designed so that it can be converted by a pivoting movement out of the basic position into at least one special position.
- [7] With cases according to the invention, transport means such as wheels, rollers, skids, rails, running belts or combinations of such means are preferably used.
- [8] Preferred embodiments can be found in the dependent claims.
- [9] Additional details and advantages of the invention are described below on the basis of exemplary embodiments and with reference to the drawings. It should be noted that the drawings are not drawn to scale.

Figure 1A shows a schematic side view of a known rolling case with the handle extended in a vertical position;



- Figure 1B shows a schematic side view of the rolling case according to Figure 1A in an inclined position when pulling it along stairs;
- Figure 2A shows a schematic side view of a case according to the invention with the handle extended in a basic position (for example, for pulling or pushing);
- Figure 2B shows a schematic side view of the case according to Figure 2A when pulling it along stairs, wherein the handle arrangement is in a corresponding (first) special position;
- Figure 3 shows a schematic side view of an optional arrangement with peripheral rolling belt, which may be used on a case according to the invention;
- Figure 4A shows a schematic side view of another case according to the invention with the handle pushed in;
- Figure 4B shows a schematic side view of the case from Figure 4A with the handle extended (corresponding to the basic position);
- Figure 4C shows a schematic front view of the case from Figure 4A with the handle partially extended;
- Figure 5A shows a schematic view of another case according to the invention with the handle extended (corresponding to a special position);
- Figure 5B shows a schematic side view of the case from Figure 5A with the handle extended (corresponding to the special position);
- Figure 6 shows a schematic exploded view of a few parts of an additional case according to the invention.

[10] In the following description, positions and directions are indicated in order to be able to better describe the invention but these specifications should not be interpreted as a restriction on the scope of the invention.

[11] On the basis of Figures 2A and 2B, a first case 100 according to the invention is described. The case 100 has a case region 14 which is designed to receive and transport objects (for example, items of clothing). In all embodiments of the usual type and manner, the case 100 may be equipped with wheels 13.1 (referred to here as transport means 13 in general), thereby making it possible to pull or push the case 100. The wheels 13.1 can be fastened onto the case 100 by means of a roller bearing 13.3, for example. In all embodiments, the wheels 13.1, if present, preferably sit in the area of the bottom side U of the case region 14.

[12] According to the invention, instead of the aforementioned wheels 13.1, other transport means 13 may also be arranged on the case 100, sitting in the region of the bottom side U and/or the rear side 101 of the case region 14. Wheels 13.1, rollers, skids and runners 13.2, running belts 20 or combinations of the aforementioned means may serve as the transport means 13. When using the stable and almost indestructible plastic materials (e.g., resin-reinforced carbon Kevlar or glass fibers) that have gained acceptance today, even in production of suitcases and other cases, it is also possible to use the surface of the case as a sliding body or pushable body. To prevent scratching of the actual case 100, the rear side 101 and/or the

bottom side U may optionally be provided with a protective film, for example, which is removable and replaceable by a new film, for example.

[13] If no wheels 13.1 are used as transport means 13, then skids or runners 13.2, for example (see Figures 2A and 2B, for example), such as those that are already known may be used in the area of the rear wall 101 of a case or a running belt 20 may be provided on the case 100 such as that shown in Figure 3, for example. The running belt 20 may comprise, for example, a continuous belt and a roller bearing with wheels 21, wherein the continuous belt may be fastened so that it can be rolled on the case 100 (preferably on a frame element of the case 100) by means of the roller bearing.

[14] In the embodiment shown in Figures 2A and 2B, the case 100 comprises a handle arrangement 200, which, in a basic position (Figure 2A), allows the case 100 to be maneuvered along a surface (for example, an essentially horizontal floor 2). In a (first) special position (Figure 2B), the handle arrangement 200 allows maneuvering of the case 100 along stairs 1 (or an inclined surface, for example, such as a ramp). In the special position, the case 100 can be moved slidably or rollingly along the edges K1 of the stairs 1 with the transport means 13, for example. However, in the special position, it is also possible to use other transport means 13, which are not used in the normal position when maneuvering the case 100 along a horizontal floor 2.

[15] Since the case 100 according to the invention should be maneuverable both along a surface 2 and along stairs 1, for example, the handle arrangement 200 is designed so that it can be converted by a pivoting movement out of the basic position and into at least one special position.

[16] To allow the handle arrangement 200 to be converted from the basic position to at least one special position and to be able to pull the case 100 in both positions, the handle arrangement 200 must thus be connected to the case 100 in such a way that, on the one hand, it is capable of transferring the pulling forces ZK1 to the case 100 while the handle arrangement 200 is in the basic position. On the other hand, it must also be possible to transfer pulling forces ZK2 to the case 100 if the handle arrangement 200 is in the special position.

[17] As can be seen on the basis of the schematic Figures 2A and 2B, an angle WG can be defined between the main axis of the case 100 (this main axis T runs parallel to the back side 101 of the case 100, for example) and the floor 2. This angle WG typically amounts to between 30 and 70° (depending on the size of the person pulling the case 100, the size of the case 100, the position and size of the transport means 13 and the length of the handle arrangement 200).

[18] In maneuvering the case 100 along stairs 1 (see Figure 2B), the main axis T of the case 100 must run essentially as a tangent to the horizontal edges of the stair steps, as indicated in Figure 2B. The case 100 with its optional skid(s) or runner(s) 13.2 can therefore be pulled upward along the stairs 1. To permit maneuvering of the case 100 in this shallow position, the handle arrangement 200 is converted to the special position. In this special position, the person pulling the case 100 may continue to walk upright and pull on an upper bar of the handle arrangement 200 in the usual manner. The corresponding pulling force ZK1 is indicated by a

block arrow in Figure 2B. The angle WS in the special position shown here typically amounts to between 20° and 35° (depending on the size of the person pulling the case 100, the inclination of the stairs, the size of the case 100, the position and size of the transport means 13 and the length of the handle arrangement 200).

[19] Most embodiments are characterized in that the angle WS in the special position is smaller than the angle WG in the basic position.

[20] Figure 3 shows in pure schematic form transport means 13, which comprise, on the one hand, conventional wheels 13.1 and, on the other hand, a running belt that is not a running belt 20, which is guided around two wheels 21. The running belt 20 can be attached to the case 100 (preferably to a frame element of the case 100), for example, although the case 100 is not shown in Figure 3.

[21] On the basis of Figures 4A, 4B and 4C, an additional case 100 according to the invention will now also be explained. The transport means 13 are intentionally not shown here. Figure 4A shows a side view of one embodiment, in which the handle arrangement 200 has been collapsed in a telescoping manner. The handle arrangement 200 can be rotated by means of an articulated element 201 and can be connected to the case area 14 in a locked position.

[22] By operating the release mechanism, the handle arrangement 200 can be pulled out, as illustrated in Figure 4B. To this end, the handle arrangement 200 on each longitudinal side of the case may comprise a first lower side rail 202.1, a second middle side rail 202.2 and an upper side rail 202.3. These side rails 202.1, 202.2, 202.3 can be telescoped into one another in a telescoping configuration, wherein the middle side rail 202.2 accommodates the upper side rail 202.3, and the lower side rail 202.1 accommodates the middle side rail 202.2 together with the upper side rail 202.3.

[23] All embodiments of the invention may comprise a telescoping arrangement such as the handle arrangement 200.

[24] All embodiments of the invention may comprise a telescoping arrangement having more than three side rails per side. This is important to ensure a sufficient safety distance between the case 100 being pulled and a person's feet.

[25] All embodiments of the invention may comprise a handle arrangement 200 having an upper crossbar/gripping bar 203.

[26] Figure 4C shows the case 100 in a front view. In the condition shown here the handle arrangement 200 is only partially extracted (the side rails 202.2 are still sitting inside the side rails 202.1). Figure 4C shows the crossbar/gripping bar 203 well. Furthermore, the course of the pivot axle R is also shown.

[27] Figures 5A and 5B show another case 100 in a special position. Figure 5A shows a perspective view of the case 100. Figure 5B shows a corresponding side view of the case 100. These figures show that the handle arrangement 200 assumes a different angular position relative to the case area 14 in the special position. This principle has already been described with reference to Figures 2A and 2B. The two articulated elements 201 are preferably connected to one another by a (transverse) axle (not shown in the figures) because it lies in the

interior of the case 100. The (transverse) axle mentioned above would collapse with the axle R in Figure 4C.

[28] All the embodiments of the invention may comprise a (transverse) axle, which preferably runs in the interior (i.e., in the interior of the case region 14). If such a (transverse) axle is present, then the two articulated elements 201 are arranged coaxially to one another as illustrated here. The (transverse) axle is preferably embodied as a rigid axle. The aforementioned pivot axle R coincides with the optional (transverse) axle. Such a (transverse) axle provides more stability to the entire case 100 and prevents twisting of the side rails 202.1, 202.2, 202.3.

[29] However, all the embodiments of the invention may also have two independent axles or axle stumps, each of which may be mounted to rotate on the case (e.g., on a hard shell of the case 100).

[30] On the whole, the preferred embodiments are those in which the handle arrangement 200 with the side rails 202.1, 202.2, 202.3, the transverse rail/handle rail 203 and the optional (transverse) axle together form a closed frame having a rectangular basic shape.

[31] The handle arrangement 200 may preferably comprise (interior) guide shoes, which permit a clean telescoping of the side rails 202.1, 202.2, 202.3.

[32] On the basis of a schematic exploded diagram, Figure 6 shows the elements of a handle arrangement 200 according to the invention, but only the elements of one side of a case 100 are shown here. The handle arrangement 200 comprises a plate 206, which is mounted (using screws or rivets, for example) on a side wall of the case region 14, so that it is coaxial with the axle R. A small shaft stump 207 is mounted on the plate 206. A bearing sleeve 208 may be placed on this shaft stump 207. This is followed by a cover 210 with an axial bore 209 for inserting a shaft or screw. The cover 210 here comprises a receptacle opening 211, which is designed for receiving a deployment mechanism 212. This deployment mechanism 212 can sit in the interior of the lower side rail 202.1, for example. Activating elements 213 (e.g., a tension cable or rods) may run through the interior of the side rail 202.1, as indicated in Figure 6.

[33] In all embodiments of the invention, the handle arrangement 200 may act on the plate 206 by movement of the activating element(s) 213 by means of the deployment mechanism 212. For example, by raising the deployment mechanism 212, unlocking may be accomplished. After unlocking the mechanism, the entire handle arrangement 200 together with the deployment mechanism 212 and the cover 210 can be rotated about the axle R until it engages again in another angular position. To enable the locking (engagement) in various angular positions (there is preferably a basic position and at least one special position), corresponding elements that engage with one another are preferably provided on the plate 206 and/or on the cover 210 in all embodiments.

[34] The elements/parts 212, 213 are components of an actuating mechanism.

[35] In all embodiments of the invention, a latching arrangement and/or a sliding block guide is/are preferably provided on the plate 206. The latching arrangement is preferably designed so that it provides at least two latching positions or angle positions of the handle arrangement 200

relative to the case region 14. The sliding block guide is preferably designed so that it guides the rotational or pivoting movement of the handle arrangement 200 relative to the case region 14. The sliding block guide, if present, preferably comprises an arc-shaped track for guiding the pivoting movement of the handle arrangement 200.

[36] In all embodiments of the invention, the handle arrangement 200 may be provided with a lever or head, which enables the unlocking of the handle before it is pivoted out of the basic position and into the special position. The lever or head preferably sits on the transverse rail/handle rail 203.

[37] In another embodiment, the unlocking is carried out by pulling the cover 210 manually away from the case 100 in parallel with the axle R, for example. This displacement of the cover 210 unlocks the handle arrangement 200. Then the handle arrangement 200 can be pivoted in relation to the case 100. On reaching a desired angular position (referred to as a special position), the handle can be locked in place again by depressing the cover 210 in parallel with the axle R in the direction of the case 100. The cover 210 is preferably spring mounted so that it engages automatically on reaching a predetermined angular position.

[38] In another embodiment, the unlocking is carried out by manually switching a lever on the cover 210, for example, or depressing a spring-loaded head.

List of Reference Numerals

Stairs	1
Bottom	2
Case	10
Handle rail	11
Frame	12
Transport means	13
Wheels	13.1
Skid(s)	13.2
Wheel suspension	13.3
Case region	14
Handle rail	15
Running belt	20
Wheels	21
Case	100
Rear wall of case	101
Angle extension	102
Tension belt	103
Handle arrangement	200
Articulated element	201
Side rails	202.1, 202.2, 202.3
Transverse rail/handle rail	203
Plate	206
Shaft stump	207
Bearing sleeve	208
Axial bore	209
Cover	210
Receptacle opening	211
Deployment mechanism	212
Edge	K1
Pivot axis	R
Main axis	T
Base angle	WG
Angle of the special position	WS
Pulling forces	ZK1, ZK2

SZABADALMI IGÉNYPONTOK

BÖRÖND

1. Börönd (100) tárgyak befogadására és szállítására kialakított böröndterülettel (14) és szállítóeszközzel (13), amely a böröndterület (14) egy alsó oldalának (U) és/vagy hátsó oldalának területén van elrendezve, ahol a böröndön (100) egy fogantyúelrendezés (200) van kialakítva, amely egy alapállásban a böröndnek (100) egy vízszintes felületen történő mozgatását teszi lehetővé, és egy különleges állásban a börönd (100) csúszó vagy guruló mozgatását teszi lehetővé egy lépcső vagy egy ferde felület mentén, ahol:

- a fogantyúelrendezés (200) egy billenő mozgással, az alapállásból a különleges állásba állítható;

- a fogantyúelrendezés (200) legalább egy első oldalszárat (202.1, 202.2, 202.3) és egy második oldalszárat (202.1, 202.2, 202.3) tartalmaz, ahol az oldalszárak (202.1, 202.2, 202.3) egymással párhuzamosan futnak, és ahol az első oldalszár (202.1, 202.2, 202.3) a böröndterület (14) egyik oldalán egy első csuklóelemmel, (201) és a második oldalszár (202.1, 202.2, 202.3) a böröndterület (14) egy ellentétes oldalán egy második csuklóelemmel (201) forgathatóan van rögzítve, és

- a csuklóelemek (201) egyenként egy, a böröndterületre (14) rögzített alaplemezt (206), és egy fedelet (210) foglal magába, ahol a fedél (210) a fogantyúelrendezéssel (200) össze van kötve és ahol a fedél (210) a fogantyúelrendezéssel (200) együtt az alaplemezhez (206) képest egy tengely (R) körül elforgatható.

2. Az 1. igénypont szerinti börönd, azzal jellemezve, hogy a csuklóelem (201) a fogantyúelrendezés (200) a böröndterülethez (14) képest legalább két rögzítési állását, vagy szögállását biztosít.

3. Az 1. vagy a 2. igénypont szerinti börönd, azzal jellemezve, hogy a fogantyúelrendezés (200) egy működtető mechanikát (212, 213) tartalmaz, amely egy manuális nyitás működtetését teszi lehetővé, mielőtt a fogantyúelrendezést (200) egy billenő mozgással az alapállásból egy különleges állásba átvezethető.



SZTNH-100077946

4. Az 1-3. igénypontok bármelyike szerinti bőrönd, azzal jellemezve, hogy a csuklóelem (201) egy forgástengellyel (R) egytengelyűen van elrendezve, ahol a tengely előnyösen merev tengelyként van kialakítva.

5. Az 1-4. igénypontok bármelyike szerinti bőrönd, azzal jellemezve, hogy a fogantyúelrendezés (200) több oldalszárat (202.1, 202.2, 202.3) tartalmaz, amelyek teleszkóposan egymásba csúszthatók.

6. Az 1-5. igénypontok bármelyike szerinti bőrönd, azzal jellemezve, hogy a fogantyúelrendezés (200) egy gombot vagy egy működtető kart tartalmaz, amely a kioldáshoz van kialakítva, mielőtt a fogantyúelrendezést (200) a billenő mozgás által az alapállásból a különleges állásba átvezethető.

7. Az 1-6. igénypontok bármelyike szerinti bőrönd, azzal jellemezve, hogy a csuklóelem (201) a nyitáshoz mozgatható.

8. Az 1-7. igénypontok bármelyike szerinti bőrönd, azzal jellemezve, hogy a bőröndterület (14) egy hátsó oldalán egy csúszó, gördülő vagy más szállítóeszközzel (13) van ellátva, amely egy lépcsőn (1) történő csúszást, húzást, siklást vagy gurulást tesz lehetővé.

9. A 8. igénypontok szerinti bőrönd, azzal jellemezve, hogy a bőröndterület (14) egy alsó oldalán (U) egy csúszó, gördülő vagy más szállítóeszközzel (13) van ellátva, amely egy lényegében vízszintes felület (2) mentén történő csúszást, húzást, siklást vagy gurulást tesz lehetővé.

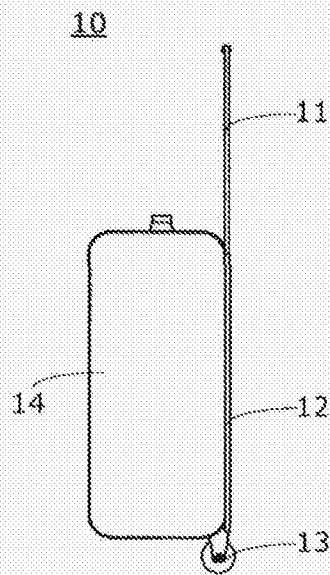


Fig. 1A

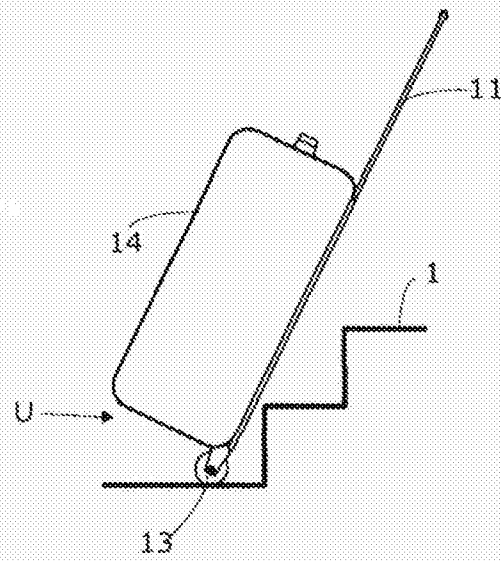
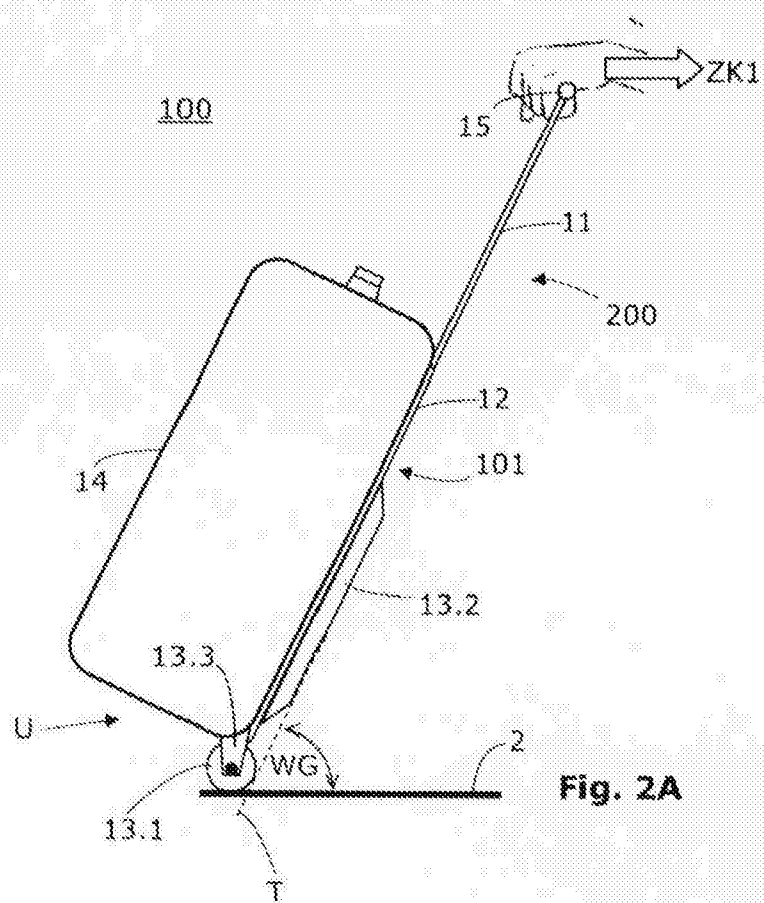


Fig. 1B



SZTNH-100077947



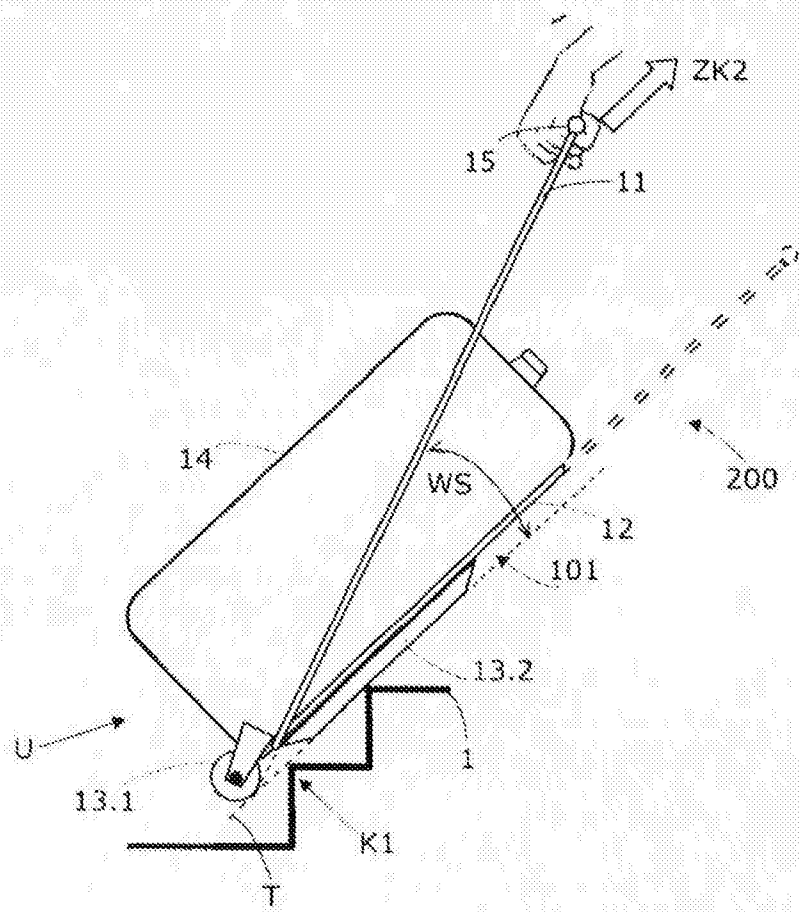


Fig. 2B

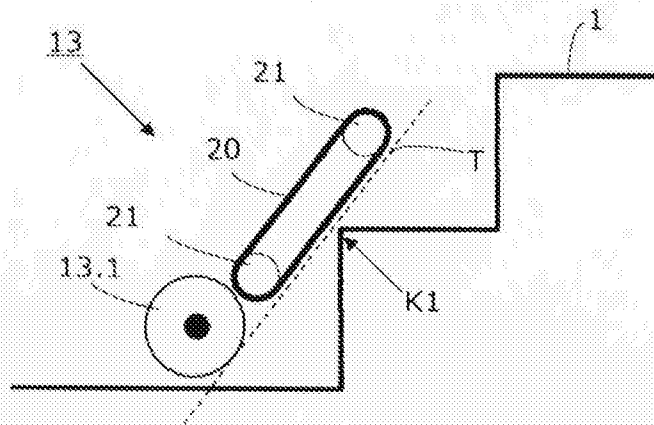


Fig. 3

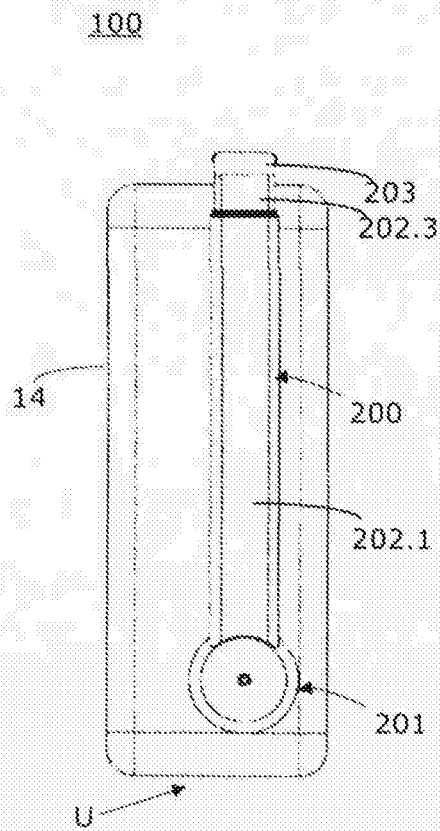


Fig. 4A

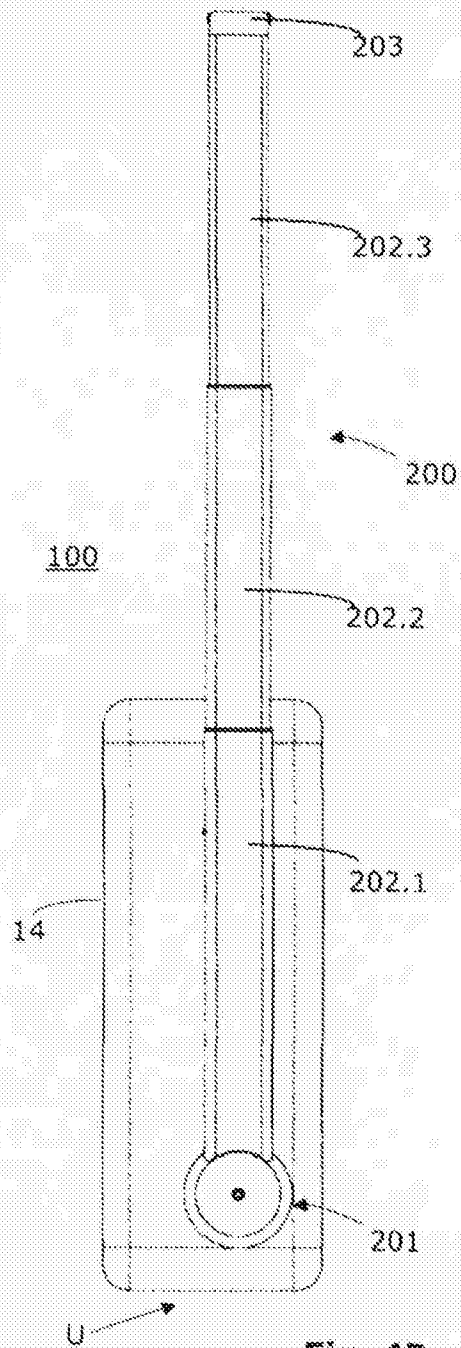


Fig. 4B

100

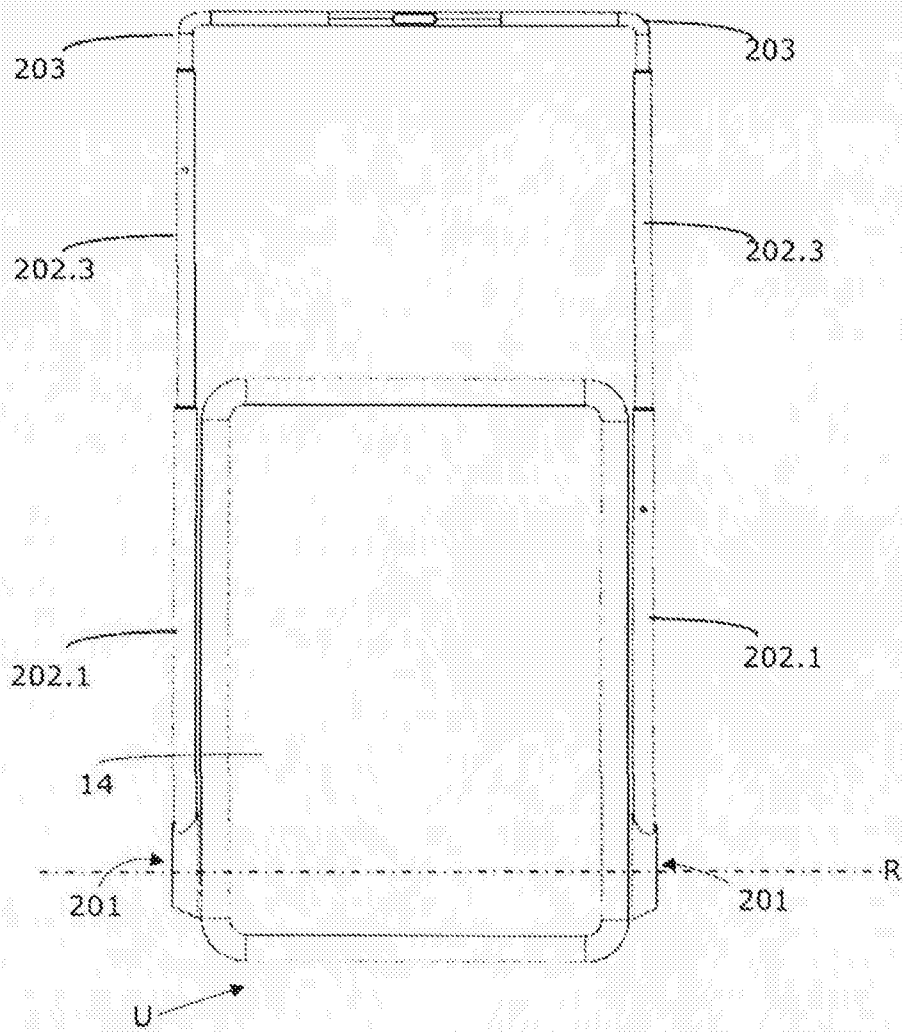


Fig. 4C

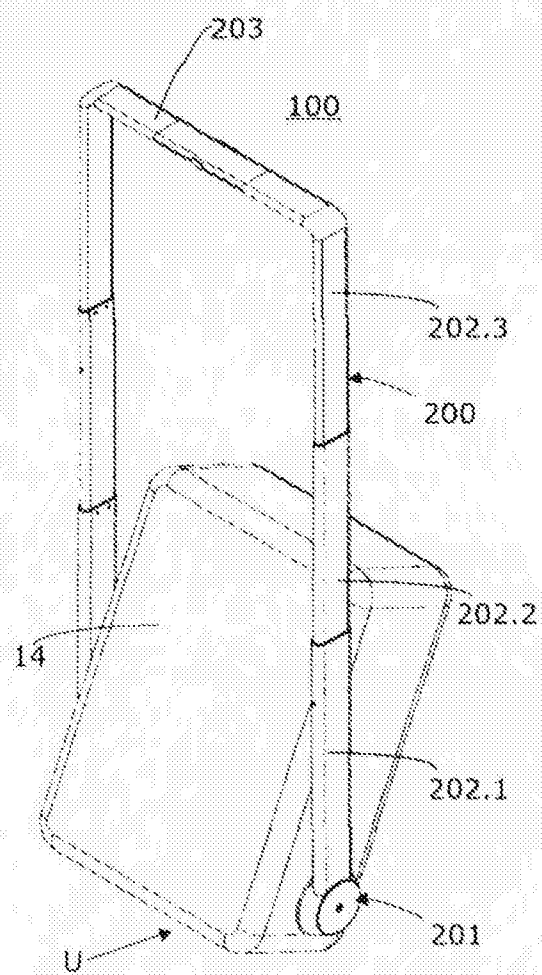


Fig. 5A

7/8

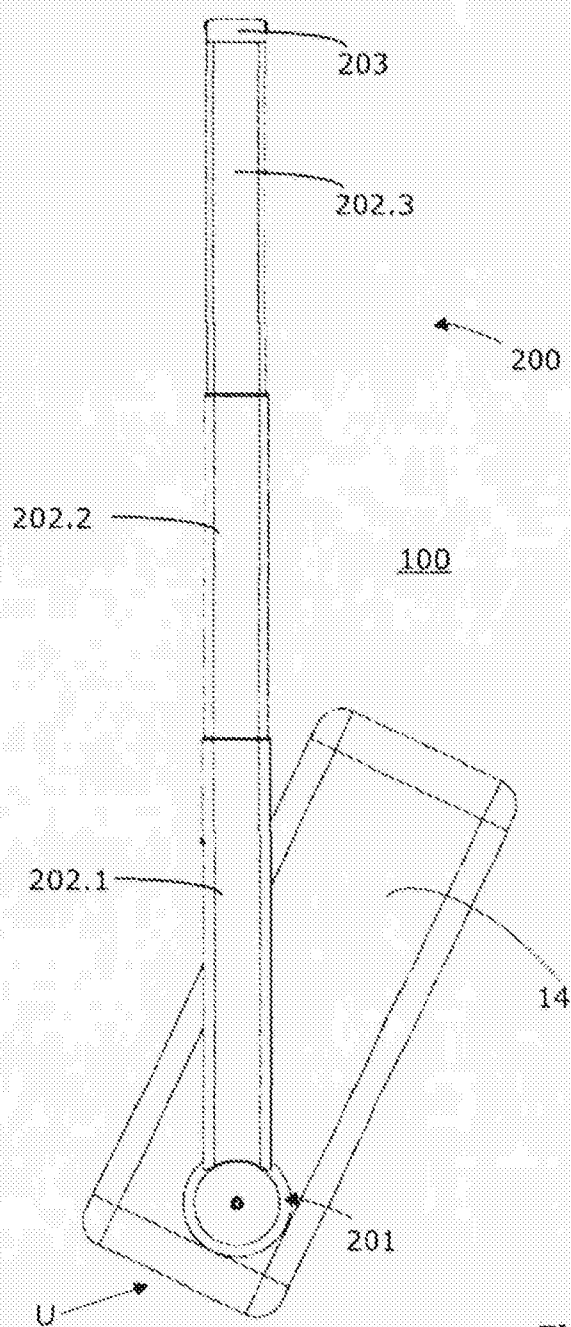


Fig. 5B

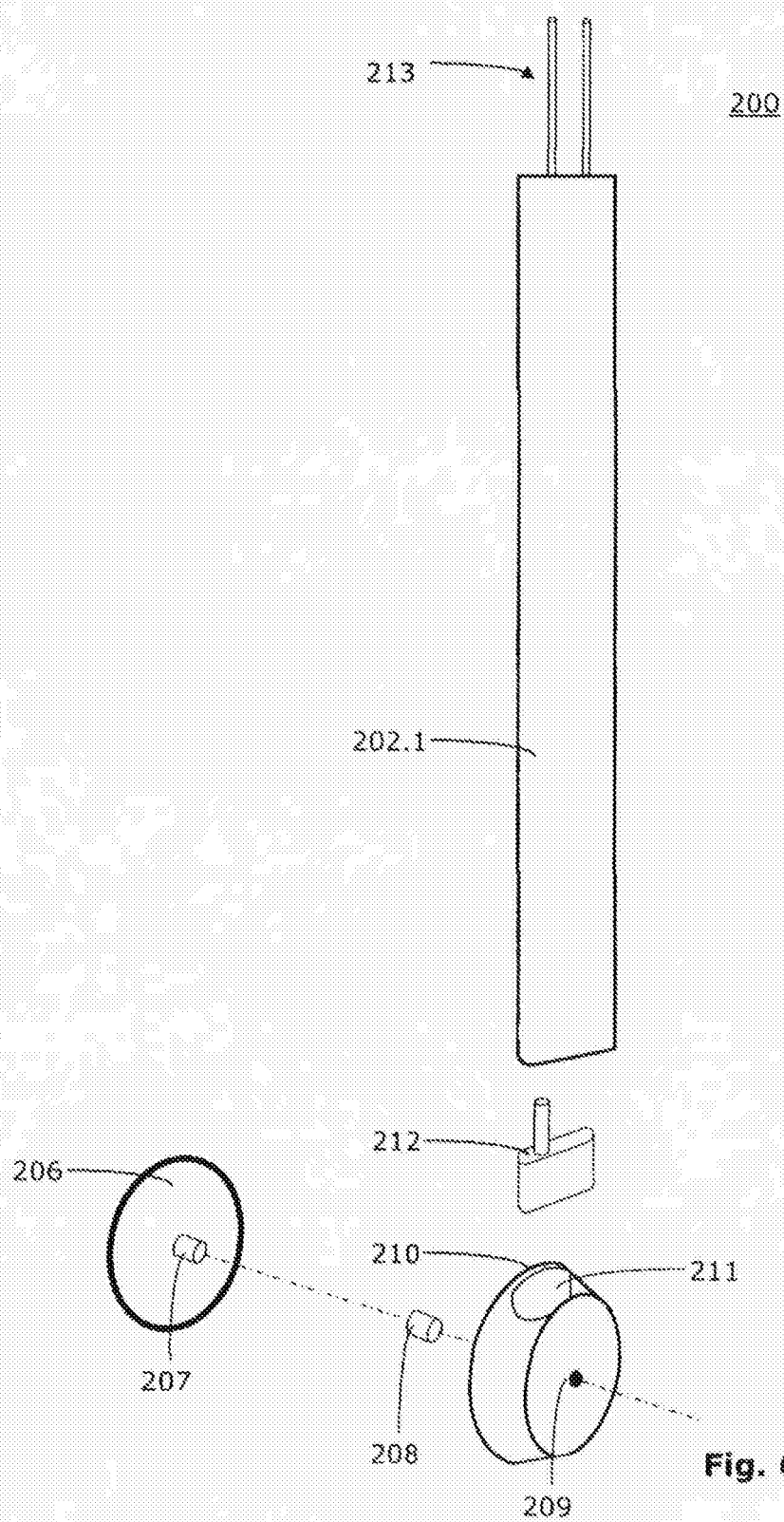


Fig. 6