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(54) WEBBING FASTENER OF A LUGGAGE ARTICLE AND DOUBLE-MATERIAL INTEGRALLY-FORMED PLASTIC PRODUCT AND INJECTION MOLDING METHOD THEREOF

(57) A webbing fastener of a luggage article, relating to the field of luggage article parts design and comprising a webbing and a hard rubber part. The bottom side face of the hard rubber part is integrally provided with a webbing insertion slot, and the left end of the webbing is integrally formed in the webbing insertion slot; the bottom side face of the hard rubber part is integrally provided with several positioning cylinders, the right side of the positioning cylinder is provided with a slot, a slider is mounted in the positioning cylinder in a sliding-fit manner, a threaded hole is formed on the slider, a bump is formed at the right side of the bottom end of the slider, and the bump is mounted in the slot in a sliding-fit manner; the outer end of the bump is integrally provided with a compressing edge, the compressing edge is mounted in the webbing insertion slot in a clearance-fit manner, the compressing edge compresses the left edge of the webbing, and the compressing edge is positioned at the right side of the several positioning cylinders. The webbing fastener of a luggage article disclosed has the following beneficial effects that punching holes on a webbing is not needed, assembly is easy, and loosening after assembly is prevented.

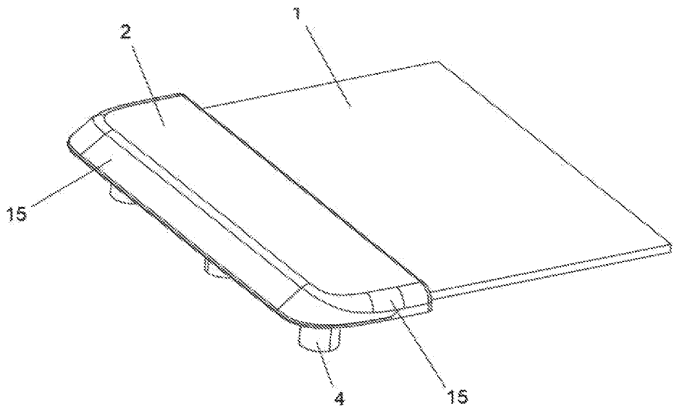

FIG. 1

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Description

TECHNICAL FIELD

[0001] The present disclosure relates to luggage article parts, and in particular a webbing fastener of a luggage article.

[0002] The present disclosure also relates to the technical field of plastic products, and in particular to a plastic product formed of two materials in one piece and an injection molding method thereof.

BACKGROUND

[0003] A luggage article, as the generic term of various bags for holding items, may include ordinary shopping bags, handbags, clutch bags, wallets, backpacks, shoulder bags, satchels, waist bags and various trolley cases. Generally, a webbing is required at the outer side of a luggage article, so that the luggage article is convenient to carry due to the webbing at the outer side thereof.

[0004] At present, punching on a webbing is necessary in webbing assembly. In the existing handle belt mounting structure and a sound box (Application No.: 202122039399.2), locking fixation is achieved by using positioning columns to penetrate through positioning holes of a handle belt, so there needs to punch holes on the handle belt, causing cumbersome assembly steps of the handle belt.

[0005] The mounting structure of a conventional webbing on a luggage article comprises a hard rubber part and a webbing. The webbing needs to be punched holes, mounted in the hard rubber part via the holes and then locked and fixed through screws. Such an assembly procedure is relatively cumbersome, low in efficiency and poor in appearance.

[0006] It is therefore desirable to provide a webbing fastener of a luggage article, which does not need punching, and is convenient and stable to assemble, high in production efficiency and good in appearance.

[0007] Injection mold processing is to first add plastic to the mold, and then the mold is continuously rotated along two vertical axes and heated. Under the action of gravity and heat energy, the plastic in the mold is gradually and evenly coated, melted and adhered to the entire mold cavity. On the surface, it is molded into the required shape and then cooled and set.

[0008] The existing one-piece soft and hard dual-material breast pump cover (application number is 201920791510.3) realizes that one part has two materials of different hardness, which can meet their respective functional requirements and has safety, sealing, comfort and convenience. Advantages of use.

[0009] However, for plastic products that are made of two materials or multiple materials combined into one piece, the first material needs to be processed in advance, and then the first material is put into the injection mold for secondary molding. After the injection mold is closed, Injecting another material allows two or more materials to be combined into one piece. During the injection molding process, the glue will directly impact the previous material, which can easily cause the material to shift and cause positioning errors, especially For lightweight and soft materials, they are very easy to deform, resulting in a generally low pass rate for secondary molding processing.

SUMMARY

[0010] The present disclosure seeks to overcome or at least ameliorate the problems associated with the prior art. According to a first aspect, there is provided:

A webbing fastener of a luggage article comprises a webbing and a hard rubber part.

[0011] The bottom side face of the hard rubber part is integrally provided with a webbing insertion slot, and the left end of the webbing is integrally formed in the webbing insertion slot.

[0012] The bottom side face of the hard rubber part is integrally provided with several positioning cylinders, the right side of the positioning cylinder is provided with a slot, a slider is mounted in the positioning cylinder in a sliding-fit manner, a threaded hole is formed on the slider, a bump is formed at the right side of the bottom end of the slider, and the bump is mounted in the slot in a sliding-fit manner.

[0013] The outer end of the bump is integrally provided with a compressing edge, the compressing edge is mounted in the webbing insertion slot in a clearance-fit manner, the compressing edge compresses the left edge of the webbing, and the compressing edge is positioned at the right side of the several positioning cylinders.

[0014] Optionally, the bottom side of the compressing edge is provided with several anti-slip teeth which are equidistantly arrayed.

[0015] Optionally, the left edge of the webbing is fixedly provided with a first reinforcing edge disposed on the top side of the webbing, and the first reinforcing edge is clamped at the left side of the compressing edge.

[0016] Optionally, the right side of the webbing insertion slot is led out of the hard rubber part, the front side and the rear side of the webbing insertion slot each are provided with a flange, and the webbing is arranged between the two flanges in a clearance-fit manner.

[0017] Optionally, the webbing is selected from any one of a common webbing and an elastic webbing.

[0018] Optionally, several second reinforcing edges are integrally formed between the positioning cylinders and the bottom side face of the hard rubber part, and the several second reinforcing edges are mutually criss-crossed.

[0019] Optionally, the bottom side face of the hard rubber part is provided with a concave groove, the positioning cylinder is integrally formed in the concave groove, the left edge of the webbing insertion slot is led into the concave groove, and the second reinforcing edges are

integrally formed in the concave groove.

[0020] Optionally, the periphery of the top side of the hard rubber part is provided with chamfers.

[0021] Compared with the prior art, the webbing fastener of a luggage article provided by the present disclosure has the following beneficial effects that: the hard rubber part is locked on a luggage article by screws, the screws are screwed in the threaded holes, and the edge of the webbing can be fixed along the outer side of the luggage article by using the compressing edge so as to avoid loosening of the webbing; as the webbing is integrally formed in the webbing insertion slot of the hard rubber part, subsequent assembly is not needed, and punching holes on the webbing is not needed either, the cumbersome assembly procedure is avoided and the assembly cost is lowered. Besides, as only a single side of the webbing is exposed, the product looks more beautiful and the assembled product is more clung to the luggage article.

[0022] According to a second aspect, there is provided: A two-material integrated plastic product, including a hard part and a soft part, the hard part and the soft part being integrally formed with each other;

[0023] The bottom surface of the hard part is integrally formed with a slot, and the right side of the slot leads out of the hard part. The bottom surface of the hard part is integrally formed with an isolation groove.

The edges are arranged in correspondence with each other and lead into the space groove;

[0024] The left edge of the soft piece is integrally formed in the slot, and the soft piece is arranged between the two spaced slots.

[0025] Optionally, the bottom surface of the hard component is integrally formed with a plurality of positioning blind holes, and the side edges of the positioning blind holes are inserted into the slot.

[0026] Optionally, the hard parts are made of hard plastic parts, and the soft parts are made of webbing.

[0027] Optionally, the front and rear sides of the hard component are integrally formed with injection molding openings, and the spacer grooves are arranged on the inside of the injection molding openings in one-to-one correspondence.

[0028] Optionally, the width of the slot is equal to the width of the left edge of the soft part.

[0029] According to a third aspect, there is provided: An injection molding method for producing the above-mentioned two-material one-piece plastic product, including the following steps:

S 1. Set an injection mold according to the hard parts and the soft parts, and set two rigid pins in the cavity of the injection mold. The rigid pins are inserted into the spaced groove with one-to-one clearance fit;

S2. Install the injection mold into the injection molding machine, install the previously processed soft parts into the injection mold for injection molding, and use the rigid pin to separate the injection port and the soft rubber. pieces;

S3. The glue forms the hard part in the injection mold, and the soft part is integrally molded on the hard part. After the glue cools, a dual-material integrated plastic product is produced.

[0030] Optionally, the injection mold adopts a multi-cavity injection mold.

[0031] Compared with the prior art, the beneficial effects are:

1. Set up space grooves on both sides of the groove. During injection molding, the glue will be blocked by the space grooves to prevent the glue from directly hitting the soft parts and prevent the soft parts from deforming and shifting. Improved the pass rate of secondary molding processing;

2. Hard parts are processed by injection molding through side injection, thus achieving the effect of hiding the injection port and ensuring the aesthetics of the product.

[0032] Additional aspects and advantages of the present disclosure are set forth by way of example only in the description that follows.

BRIEF DESCRIPTION OF THE DRAWINGS

[0033] In order to more clearly illustrate the technical solution of the present disclosure, the accompanying figures will be briefly introduced. The accompanying drawings described below are merely examples of the present disclosure.

Fig.1 is a schematically structural diagram of an example webbing fastener;

Fig.2 is a schematically structural diagram of the webbing fastener of Fig. 1 viewed from another angle;

Fig.3 is an enlarged schematic diagram of part A in Fig.2;

Fig.4 is a schematically structural diagram of a hard rubber part;

Fig.5 is an exploded view in case of using anti-slip teeth;

Fig.6 is a schematically structural diagram of a slider.

In drawings 1 to 6, the reference signs represent: 1. webbing; 2. hard rubber part; 3.webbing insertion slot; 4. positioning cylinder; 5. slot; 6. slider; 7. threaded hole; 8.

bump; 9. compressing edge; 10. anti-slip teeth; 11. first reinforcing edge; 12. flange; 13. second reinforcing edge; 14. concave groove; 15. chamfer.

Figure 7 is a schematic structural diagram of hardware and software;

Figure 8 is a schematic structural diagram of Figure 7 from another perspective;

Figure 9 is a schematic structural diagram of the hardware;

Figure 10 is a schematic structural diagram of Figure 9 from another perspective;

Figure 11 is a schematic structural diagram of the injection molding process of the present invention;

Figure 12 is a schematic structural diagram of Figure 11 from another perspective.

[0034] In the drawings 7-12, shown in the picture: 16. Hard parts; 17. Soft parts; 18. Slotting; 19. Spaced slots; 20. Positioning blind holes; 21. Semi-circular chamfer; 22. U-shaped groove; 23. Positioning through holes; 24. Injection mouth.

DETAILED DESCRIPTION

[0035] The present disclosure will be described below by way of example only in combination with the accompanying drawings.

[0036] Generally, the components described and illustrated in the accompanying drawings of the examples of the present disclosure may be configured and designed in various ways. Therefore, the detailed description of the examples in combination with the accompanying drawings are not intended to limit the scope of the invention.

[0037] In the description of the present disclosure, it should be noted that, orientation or positional relationships indicated by the terms "center", "upper", "lower", "left", "right", "vertical", "horizontal", "inner", "outer" and the like are those indicated based on the accompanying drawings, and only for the convenience of describing the disclosure and simplification of description rather than indicating or implying that the referenced device or element must have a particular orientation, be constructed and operated in a particular orientation, and thus are not to be construed as limiting the present disclosure. In addition, the terms "first", "second", "third", and the like are used for descriptive purposes only and are not to be construed as indicating or implying relative importance.

[0038] In the description, it should also be noted that, unless otherwise expressly specified and limited, the terms "mounted", "connected" and "attached" are to be construed in a broad sense, for example, it can be "fixedly connected", "detachably connected", or "integrally connected"; it can be "mechanically connected", or "electrically connected"; or it can be "directly connected" or "indirectly connected" through an intermediate medium"; or it may be interiorly communicated of two elements. The specific meanings of the above terms in the may be understood by those of ordinary skill in the art depending on specific circumstances.

[0039] As shown in Figs. 1-6, the present disclosure provides a webbing fastener of a luggage article, comprising a webbing 1 and a hard rubber part 2.

[0040] The bottom side face of the hard rubber part 2 is integrally provided with a webbing insertion slot 3, and the left end of the webbing 1 is integrally formed in the webbing insertion slot 3.

[0041] The bottom side face of the hard rubber part 2 is integrally provided with several positioning cylinders 4, the right side of the positioning cylinder 4 is provided with a slot 5, a slider 6 is mounted in the positioning cylinder 4 in a sliding-fit manner, a threaded hole 7 is formed on the slider 6, a bump 8 is formed at the right side of the bottom end of the slider 6, and the bump 8 is mounted in the slot 5 in a sliding-fit manner.

[0042] The outer end of the bump 8 is integrally provided with a compressing edge 9, the compressing edge 9 is mounted in the webbing insertion slot 3 in a clearance-fit manner, the compressing edge 9 compresses the left edge of the webbing 1, and the compressing edge 9 is positioned at the right side of the several positioning cylinders 4.

[0043] The principle is that: a luggage article is punched to form holes, and the hard rubber part 2 is inserted into the holes in the luggage article via the positioning cylinders 4 so as to be positioned, and then locked on the luggage article by screws; the screws are screwed in the threaded holes 7; the edge of the webbing 1 can be fixed along the outer side of the luggage article by the compressing edge 9 so as to avoid loosening of the webbing 1; as the webbing 1 is integrally formed in the webbing insertion slot 3 of the hard rubber part 2, subsequent assembly is not needed, and punching on the webbing 1 is not needed either, the cumbersome assembly procedure is avoided and the assembly cost is lowered. Besides, as only a single side of the webbing 1 is exposed, the product looks more beautiful and the assembled product is more clung to the luggage article.

[0044] As a further solution, the bottom side of the compressing edge 9 is provided with several anti-slip teeth 10 which are equidistantly arrayed. The compressing edge 9 can compress the webbing 1 through the several anti-slip teeth 10 so as to avoid loosening and falling off of the webbing 1.

[0045] As a further solution, the left edge of the webbing 1 is fixedly provided with a first reinforcing edge 11 disposed on the top side of the webbing 1, and the first reinforcing edge 11 is clamped at the left side of the compressing edge 9. Before the hard rubber part 2 is mounted on a luggage article, the webbing 1 is clamped in the

webbing insertion slot 3 through the first reinforcing edge 11 so as to achieve precise positioning.

[0046] As a further solution, the right side of the webbing insertion slot 3 is led out of the hard rubber part 2, the front side and the rear side of the webbing insertion slot 3 each are provided with a flange 12, and the webbing 1 is arranged between the two flanges 12 in a clearance-fit manner. Due to the flanges 12, the clearance between the webbing 1 and the webbing insertion slot 3 can be reduced, the webbing 1 is stably fitted.

[0047] As a further solution, the webbing 1 is selected from any one of a common webbing and an elastic webbing.

[0048] As a further solution, several second reinforcing edges 13 are formed between the positioning cylinders 4 and the bottom side face of the hard rubber part 2, and the several second reinforcing edges 13 are mutually criss-crossed. Therefore, the positioning cylinders 4 are more stable and are not easy to incline or displace, and stable mounting of the hard rubber part 2 on a luggage article is ensured.

[0049] As a further solution, the bottom side face of the hard rubber part 2 is provided with a concave groove 14, the positioning cylinder 4 is integrally formed in the concave groove 14, the left edge of the webbing insertion slot 3 is led into the concave groove 14, and the second reinforcing edges 13 are integrally formed in the concave groove 14, thus effectively reducing the weight of the hard rubber part 2, ensuring no influence on the hardness and the service life of the hard rubber part 2.

[0050] As a further solution, the periphery of the top side of the hard rubber part 2 is provided with chamfers 15. Due to the chamfers 15, the appearance of the hard rubber part 2 is improved.

[0051] The foregoing examples are not intended to make any limitations on the shape, material, structure and the like of the present disclosure. Moreover, any simple alterations, equivalent variations and modifications made to the above examples according to the technical essence of the disclosure shall fall into the scope claimed.

[0052] As shown in Figures 7-12, a dual-material integrated plastic product of the present invention includes a hard part 16 and a soft part 17. The hard part 16 and the soft part 17 are integrally formed with each other;

[0053] The bottom surface of the hard part 16 is integrally formed with a slot 18, and the right side of the slot 18 leads out of the hard part 16. The bottom surface of the hard part 16 is integrally formed with a spacer groove 19. The front and rear edges of the slot 18 are configured to pass into the isolation slot 19 in one-to-one correspondence;

[0054] The left edge of the soft piece 17 is integrally formed in the slot 18, and the soft piece 17 is set between the two spaced slots 19;

[0055] The space grooves 19 are provided on both sides of the slot 18. During the injection molding process, the glue liquid will be blocked by the space grooves 19 to prevent the glue liquid from directly hitting the soft part 17. To avoid deformation and displacement of the soft part 17 and improve the pass rate of the secondary molding process.

[0056] The bottom surface of the hard part 16 is integrally formed with a number of positioning blind holes 20, and the side edges of the positioning blind holes 20 pass into the slot 18; the arrangement of the positioning blind holes 20 can increase The contact between the injection molding liquid and the soft part 2 ensures the stability of the secondary molding process of the product.

[0057] Optionally: the hard part 16 is made of hard plastic, and the soft part 17 is made of webbing; the hard part 16 and the soft part 17 can be combined into a structure of a webbing outside the bag.

[0058] The side of the hard part 1 away from the soft part 17 is formed with a semi-circular chamfer 21.

[0059] The top surface of the hard part 16 is integrally formed with a U-shaped groove 22, both ends of the U-shaped groove 22 pass out of the right side surface of the hard part 16, and the U-shaped groove 22 The middle part is located inside the semi-circular chamfer 21; the arrangement of the U-shaped groove 22 can increase the strength of the hard part 16, making the hard part 16 less likely to be deformed and damaged. The hard part 16 is formed with a positioning through hole 23, and the center of the circle of the positioning through hole 23 and the center of the semicircle chamfer 21 are arranged to coincide with each other.

[0060] The front and rear sides of the hard part 16 are integrally formed with injection molding openings 24, and the spacer grooves 19 are arranged on the inside of the injection molding opening 24 in one-to-one correspondence; The hardware part 16 achieves the effect of hiding the injection molding port 24 and ensures the overall aesthetics of the product.

[0061] The width of the slot 18 is equal to the width of the left edge of the soft part 17; after the soft part 17 is formed and processed, both sides of the soft part will pass through the avoidance groove. 19 is separated from the hard part 16, and the glue liquid during injection molding is prevented from directly hitting the soft part 17 on the premise of ensuring the stable molding of the soft part 17, so as to avoid the occurrence of damage to the soft part 17.

[0062] An injection molding method for producing the above-mentioned two-material one-piece plastic product, including the following steps:

S1. Set an injection mold according to the hard part 16 and the soft part 17, and set two rigid pins in the cavity of the injection mold. The rigid pins are inserted into the spaced groove with a one-to-one clearance fit.

S2. Install the injection mold into the injection molding machine, install the pre-processed soft part 17 into the injection mold for injection molding, and use the rigid pin to separate the injection port 24 and the

injection molding machine.

S3. The glue liquid forms the hard part 16 in the injection mold, and the soft part 17 will be integrally molded on the hard part 16. After the glue liquid is cooled, a dual-material integrated plastic product is produced..

[0063] The injection mold adopts a multi-cavity injection mold.

[0064] The mold opening method of this type of product is to inject glue from the side through the injection port 24. The product adds the spacer slot 19 between the webbing and the glue inlet, so that the rigid pin at the corresponding position of the mold blocks the direct insertion of glue. Injection effectively prevents product defects caused by the swing of the webbing and ensures the consistency of product appearance.

[0065] An aspect of the invention may be defined in one or more of the following clauses:

Clause 1. A two-material integrated plastic product, including a hard part and a soft part, the hard part and the soft part being integrally formed with each other;

It is characterized in that: the bottom surface of the hard part is integrally formed with a slot, and the right side of the groove is provided with the hard part, and the bottom surface of the hard part is integrally formed with a space-dividing groove, and the groove is The front and rear sides of the edges are configured to pass into the said space slot in one-to-one correspondence;
The left edge of the soft piece is integrally formed in the slot, and the soft piece is arranged between the two spaced slots.

Clause 2. A dual-material integrated plastic product according to clause 1, characterized in that: the bottom surface of the hard part is integrally formed with a number of positioning blind holes, and the sides of the positioning blind holes pass into the opening. slot settings.

Clause. 3. A dual-material integrated plastic product according to clause 1, characterized in that: the hard parts are made of hard plastic parts, and the soft parts are made of webbing.

Clause 4. A two-material integrated plastic product according to clause 3, characterized in that: the side of the hard part away from the soft part is formed with a semi-circular chamfer.

Clause 5. A dual-material integrated plastic product according to clause 4, characterized in that: the top surface of the hard part is integrally formed with a U-shaped groove, and both ends of the U-shaped groove pass out of the hard part. On the right side surface of the component, the middle part of the U-shaped groove is located inside the semi-circular chamfer.

Clause. 6. A dual-material integrated plastic product according to clause 4, characterized in that: the hard part is formed with a positioning through hole, and the center of the positioning through hole and the center of the semicircle chamfer are arranged to coincide with each other..

Clause. 7. A dual-material one-piece molded plastic product according to clause 1, characterized in that: the front and rear sides of the hard part are integrally formed with injection molding openings, and the spacer grooves are provided in the injection molding in one-to-one correspondence. The inside of the mouth.

Clause 8. A two-material integrated plastic product according to clause 1, characterized in that: the width of the slot is equal to the width of the left edge of the soft part.

Clause 9. An injection molding method for producing a dual-material one-piece plastic product according to any one of clauses 1 to 8, characterized in that it includes the following steps:

S 1. Set an injection mold according to the hard parts and the soft parts, and set two rigid pins in the cavity of the injection mold. The rigid pins are inserted into the spaced groove with one-to-one clearance fit;
S2. Install the injection mold into the injection molding machine, install the pre-processed soft parts into the injection mold for injection molding, and use the rigid pin to separate the injection port and the soft rubber. pieces;
S3. The glue forms the hard part in the injection mold, and the soft part is integrally molded on the hard part. After the glue cools, a dual-material integrated plastic product is produced.

Clause 10. An injection molding method according to clause 9, characterized in that the injection mold adopts a multi-cavity injection mold.

Claims

1. A webbing fastener of a luggage article, including a webbing and a hard rubber part, **characterized in that**:

the bottom side face of the hard rubber part is integrally provided with a webbing insertion slot, and the left end of the webbing is integrally formed in the webbing insertion slot;
the bottom side face of the hard rubber part is integrally provided with several positioning cylinders, the right side of the positioning cylinder is provided with a slot, a slider is mounted in the positioning cylinder in a sliding-fit manner, a threaded hole is formed on the slider, a bump is formed at the right side of the bottom end of the slider, and the bump is mounted in the slot in a sliding-fit manner;
the outer end of the bump is integrally provided with a compressing edge, the compressing edge is mounted in the webbing insertion slot in a clearance-fit manner, the compressing edge compresses the left edge of the webbing, and the compressing edge is positioned at the right side of the several positioning cylinders.

2. The webbing fastener of a luggage article according to claim 1, wherein the bottom side of the compressing edge is provided with several anti-slip teeth which are equidistantly arrayed.

3. The webbing fastener of a luggage article according to any of claims 1 and 2, wherein the left edge of the webbing is fixedly provided with a first reinforcing edge disposed on the top side of the webbing, and the first reinforcing edge is clamped at the left side of the compressing edge.

4. The webbing fastener of a luggage article according to any of the preceding claims, wherein the right side of the webbing insertion slot is led out of the hard rubber part, the front side and the rear side of the webbing insertion slot each are provided with a flange, and the webbing is arranged between the two flanges in a clearance-fit manner.

5. The webbing fastener of a luggage article according to any of the preceding claims, wherein the webbing is selected from any one of a common webbing and an elastic webbing.

6. The webbing fastener of a luggage article according to any of the preceding claims, wherein several second reinforcing edges are integrally formed between the positioning cylinders and the bottom side face of the hard rubber part, and the several second reinforcing edges are mutually criss-crossed.

7. The webbing fastener of a luggage article according to any of the preceding claims, wherein the bottom side face of the hard rubber part is provided with a concave groove, the positioning cylinder is integrally formed in the concave groove, the left edge of the webbing insertion slot is led into the concave groove, and the second reinforcing edges are integrally formed in the concave groove.

8. The webbing fastener of a luggage article according to any of the preceding claims, wherein the periphery of the top side of the hard rubber part is provided with chamfers.

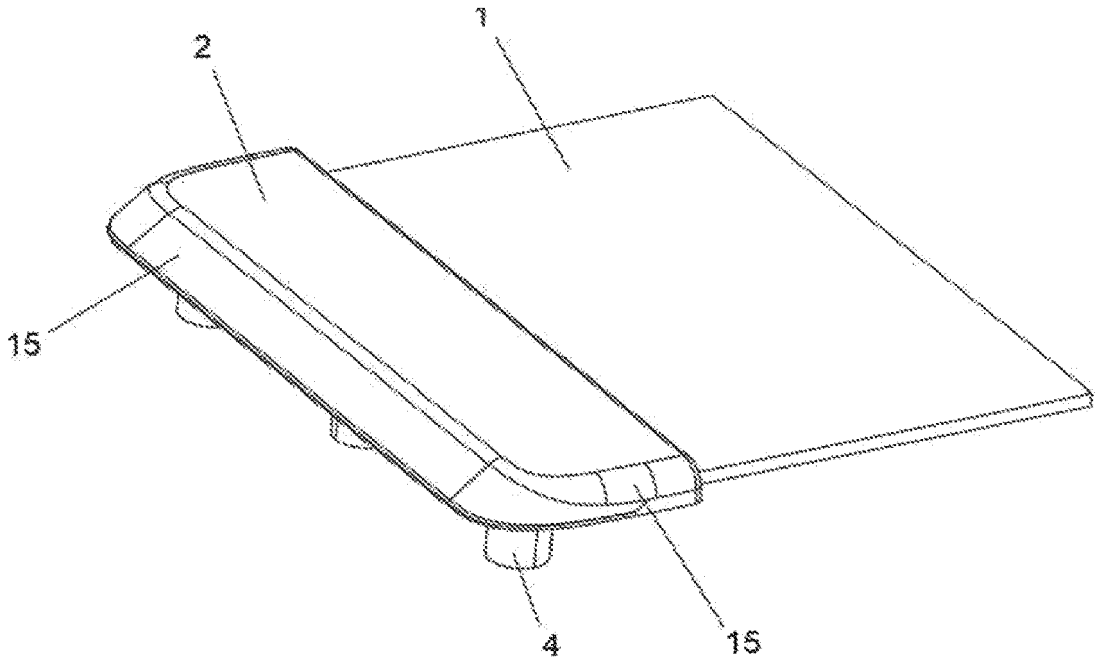

FIG. 1

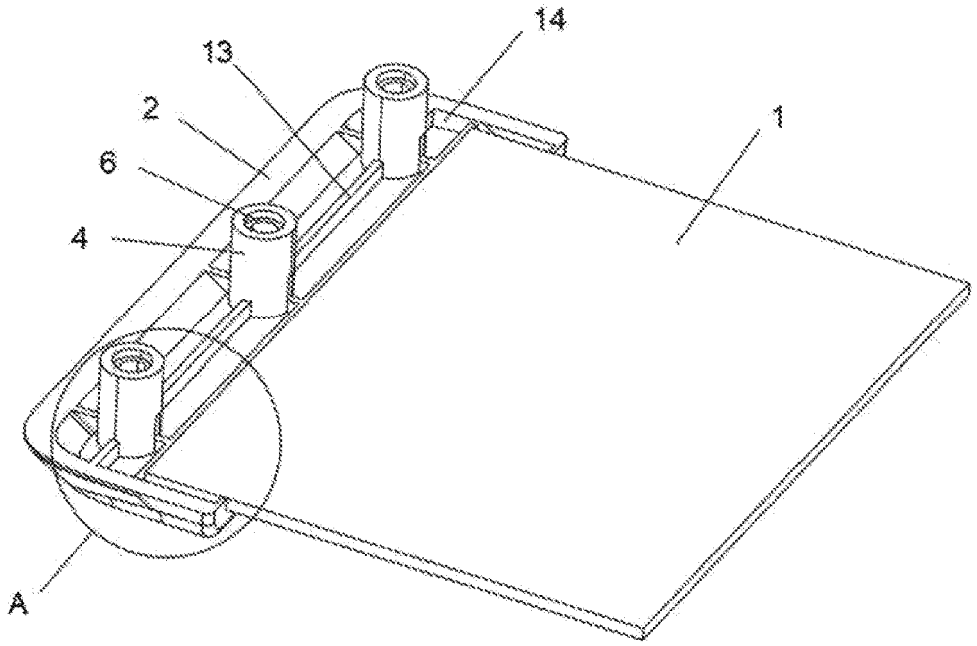

FIG. 2

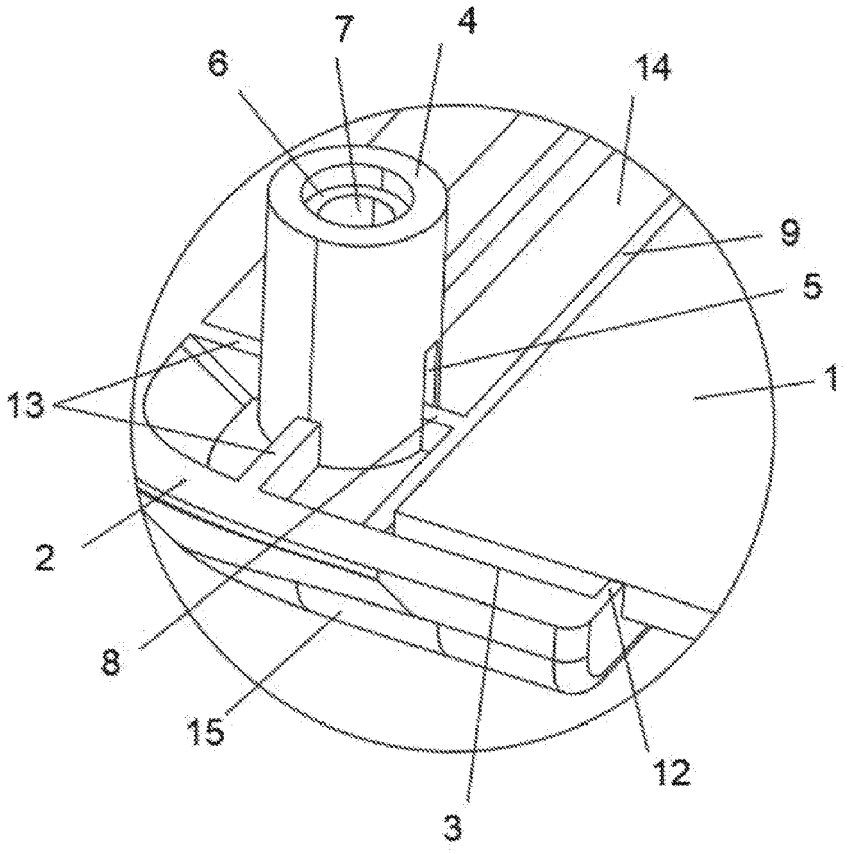

FIG. 3

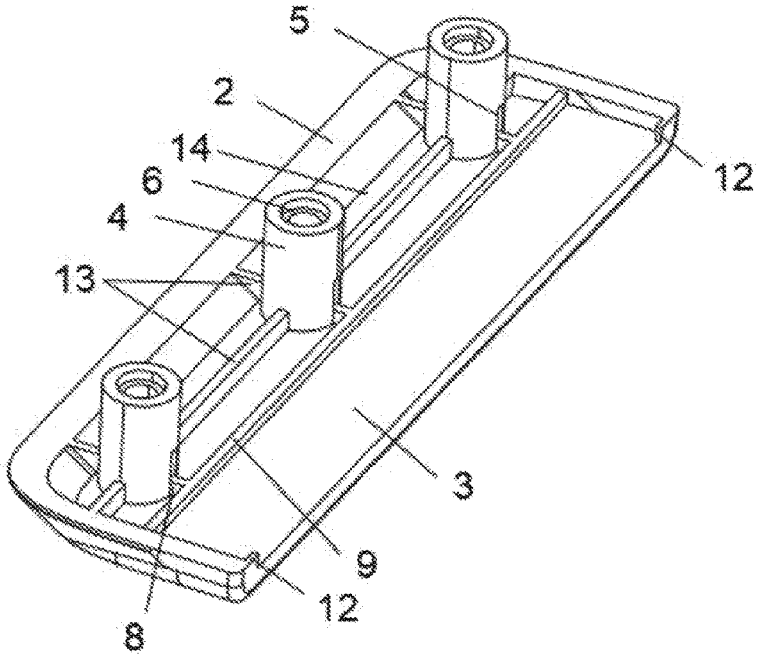

FIG. 4

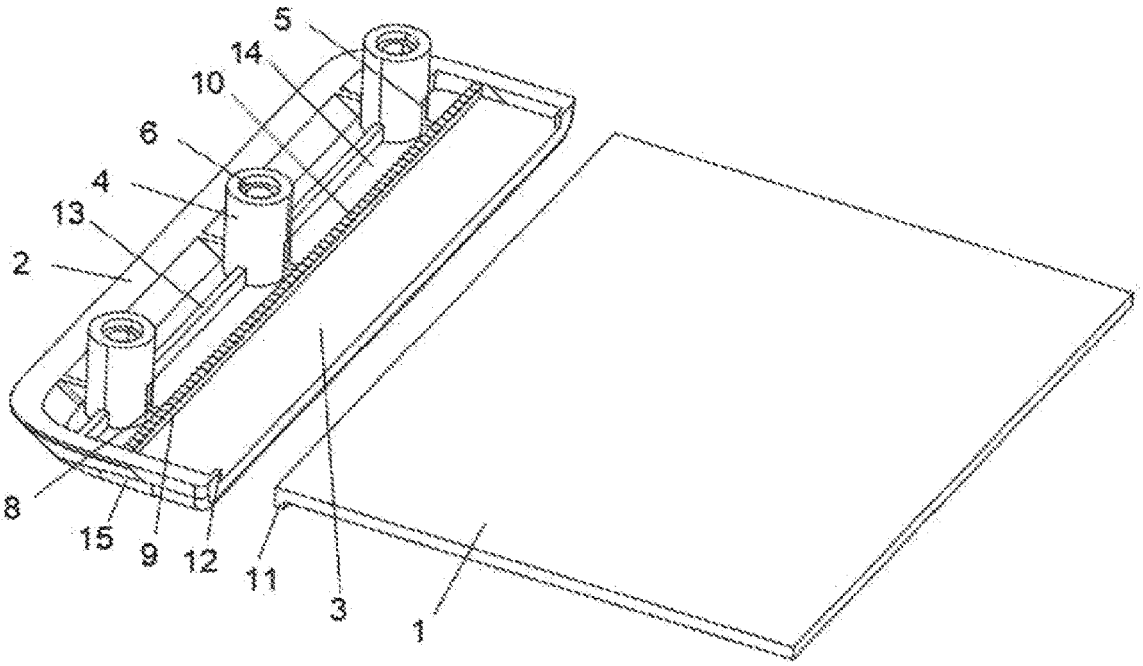

FIG. 5

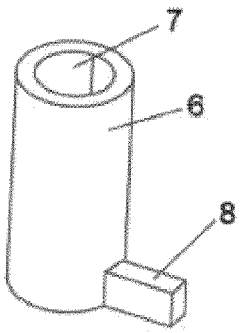

FIG. 6

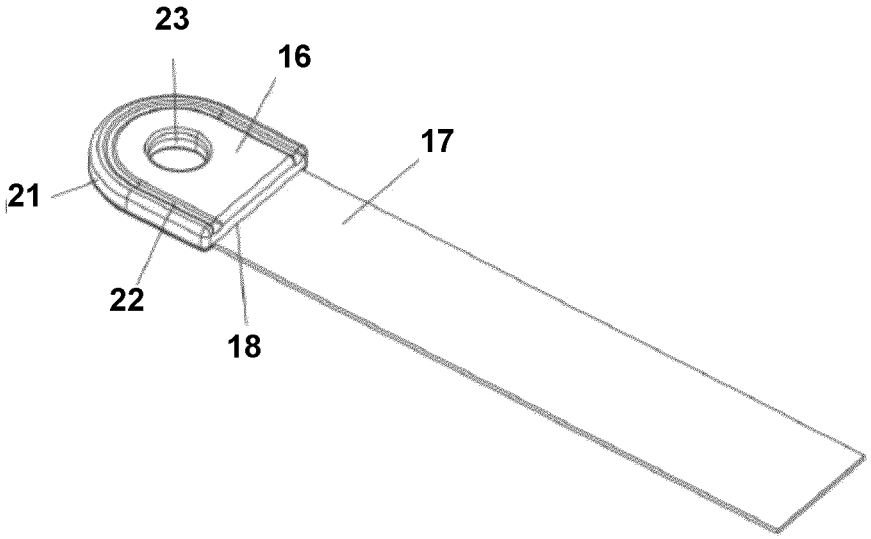

FIG. 7

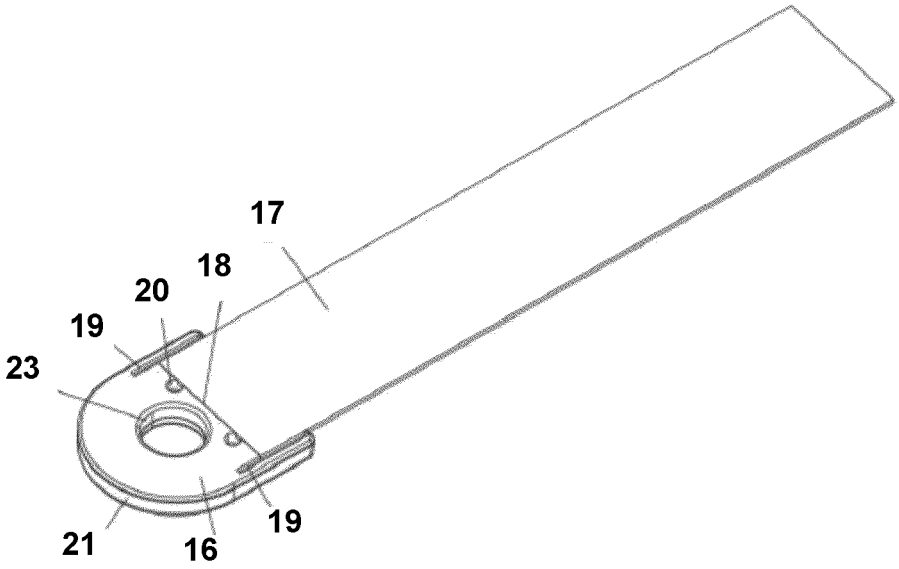

FIG. 8

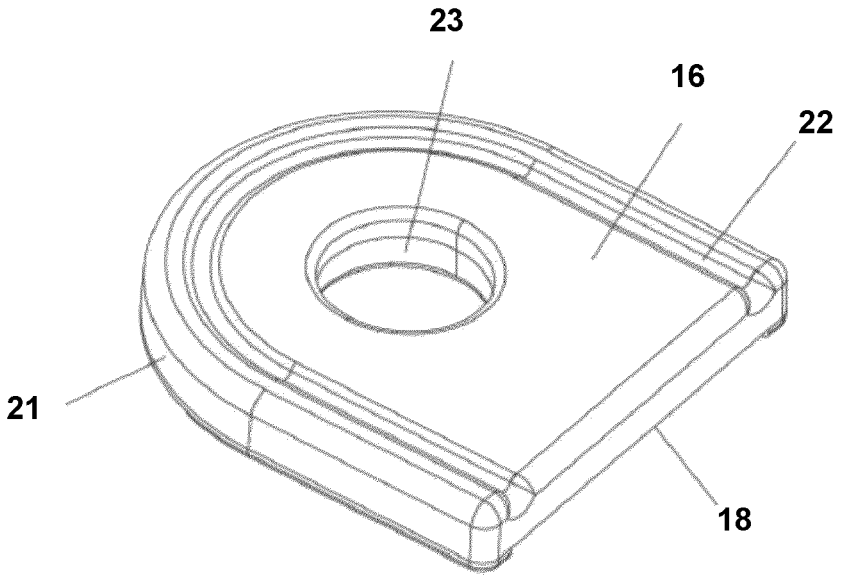

FIG. 9

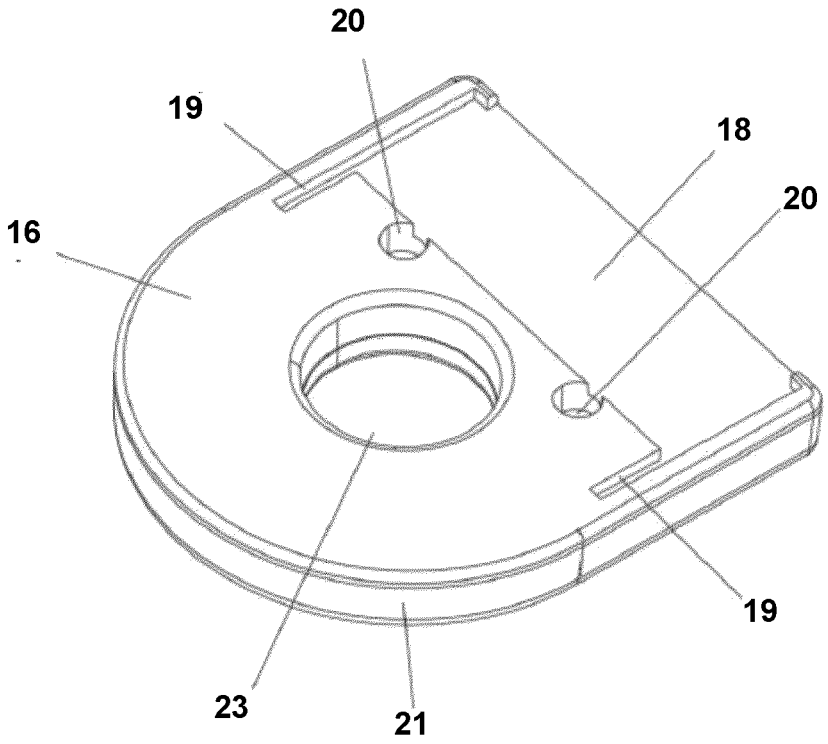

FIG. 10

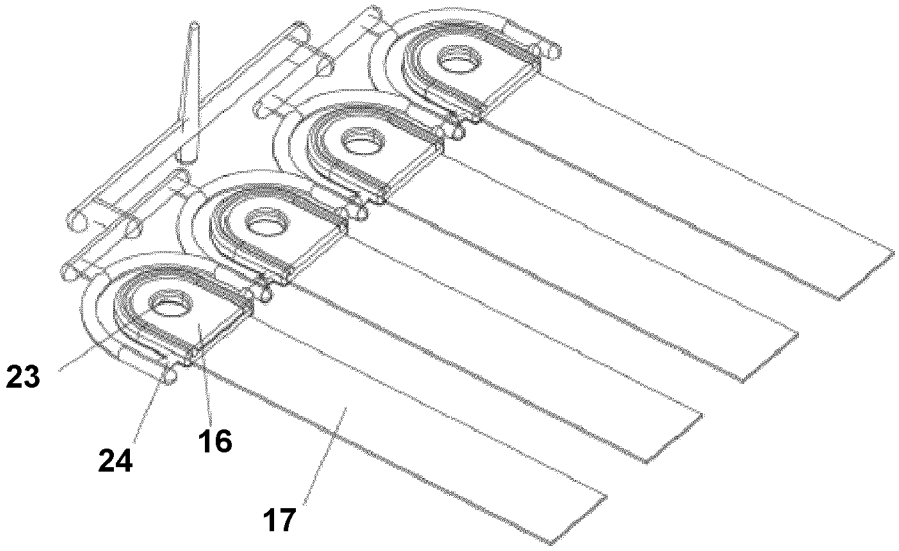

FIG. 11

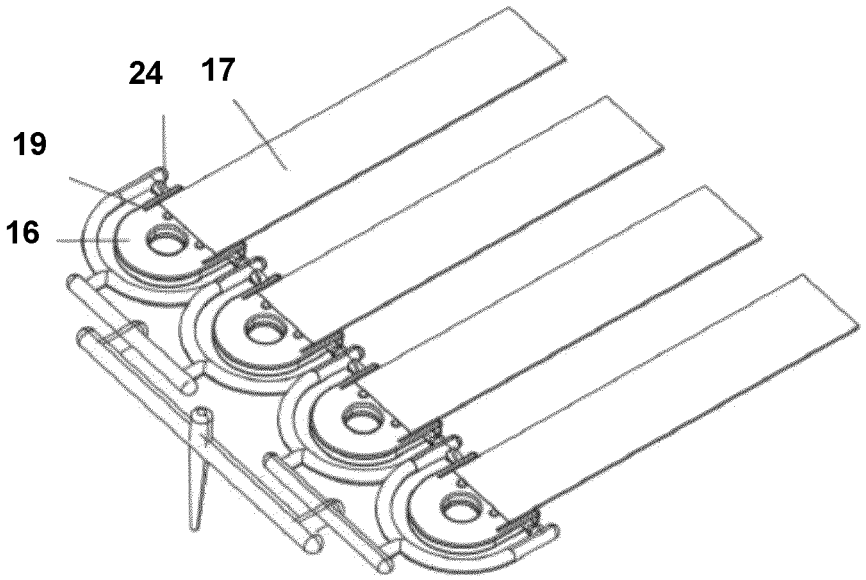

FIG. 12

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EUROPEAN SEARCH REPORT

Application Number
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Place of search	Date of completion of the search	Examiner
The Hague	23 May 2024	Zattoni, Federico

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