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(54) **Hairdressing scissors and positioning device thereof**

Haarschneidescheren und Positioniervorrichtung dafür

Ciseaux de coiffure et dispositif pour les positionner

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Description

1. Field of the Invention

[0001] The present invention relates to a pair of hairdressing scissors and the positioning device thereof, and more particularly to a technique with which plural pairs of such hairdressing scissors can be positioned firmly after being detachably secured to one another.

2. Description of the Prior Art

[0002] The present invention relates to an improvement to the patents for the technique of connecting hairdressing scissors, that were previously obtained by the applicant, such as US Pat. Nos. 6,192,590 B1 and 6,634,106 B2. These patents allow a plurality of pairs of hairdressing scissors to be connected one another either in a parallel fashion or in a cascade fashion, so that the hairstylist can hold the plural pairs of hairdressing scissors in the same hand easily for proceeding with trimming, thinning or layering of the hair to obtain the desired special hairstyle. However, as shown in Fig. 1, each of the first blade **10** and the second blade **20** of the two pairs of hairdressing scissors **1** is provided a connecting structure **80,** in the front surface and on the rear surface of the connecting structure **80** are formed a recess **81** and a protrusion **82,** so that a plurality of pairs of hairdressing scissors can be secured to one another in such a manner that the protrusion **82** of a pair of hairdressing scissors is engaged in the recess **81** of another pair of hairdressing scissors. Due to the protrusion **82** is engaged in the recess **81** in a sliding manner, the protrusion **82** is very likely to slide or move relative to the recess **81,** and the plural pairs of hairdressing scissors **1** cannot be positioned firmly relative to one another. Therefore, when the hairstylist holds the plural pairs of hairdressing scissors in the same hand to do hair cutting, the plural pairs of hairdressing scissors **1** will slide relative to each other, and this will make it inconvenient for the hairstylist to hold the plural pairs of scissors firmly with one hand.

[0003] The present invention has arisen to mitigate and/or obviate the afore-described disadvantages.

SUMMARY OF THE INVENTION

[0004] The primary objective of the present invention is to provide a pair of hairdressing scissors and a positioning device thereof, the first blade and/or the second blade of the pair of hairdressing scissors installs at least a connecting structure, a front surface and a rear surface of the connecting structure being formed a recess and a protrusion, respectively. The connecting structure is defined by a through hole and a stop portion formed at a front end of the through hole, the front end of the through hole being connected to the recess. At least a positioning device is disposed in the through hole and includes a retaining member, an elastic member and a fixing member, the retaining member and the elastic member are sequentially placed in the through hole, and then the fixing member is inserted in the through hole, the elastic member is biased between the fixing member and the retaining member in such a manner that the retaining member partially protrudes out of the front end of the through hole and is pressed against the stop portion. When coupling a plurality of pairs of hairdressing scissors together, the protrusion of a pair of hairdressing scissors is engaged in the recess of another pair of hairdressing scissors. The protrusion moves toward and presses the retaining member, so that the retaining member will overcome the elastic force of the elastic member and retract into the through hole. When the protrusion traverses the retaining member completely, the retaining member, under the effect of the restoring force of the elastic member, will partially move out of the front end of the through hole and stop against the lower end of the protrusion. In this way, the plural pairs of hairdressing scissors can be coupled and positioned relative to one another firmly, thus enabling the hairstylist to hold the plural pairs of hairdressing scissors with one hand more easily and stably.

[0005] The secondary objective of the present invention is to provide a pair of hairdressing scissors and a positioning device thereof, the first blade and/or the second blade of the pair of hairdressing scissors installs at least a connecting structure, a front surface and a rear surface of the connecting structure being formed a recess and a protrusion, respectively. The connecting structure is defined by a through hole, the front end of the through hole being connected to the recess. A positioning device is disposed in the through hole and includes a retaining member with a supporting rod, a positioning piece, a stop piece, an elastic member and a fixing member. The retaining member and the elastic member are sequentially placed in the through hole, and then the fixing member is inserted in the through hole. The positioning piece and the stop piece are mounted on the supporting rod, the positioning piece is fixed in the through hole. The elastic member is biased between the stop piece and the fixing member, and then the stop piece abuts against the positioning piece, so that the retaining member will partially protrude out of the front end of the through hole under the effect of the elastic member. When coupling a plurality of pairs of hairdressing scissors together, the protrusion of a pair of hairdressing scissors is engaged in the recess of another pair of hairdressing scissors. The protrusion moves toward and presses the retaining member, so that the retaining member will overcome the elastic force of the elastic member and retract into the through hole. When the protrusion traverses the retaining member completely, the retaining member, under the effect of the restoring force of the elastic member, will partially move out of the front end of the through hole and stop against the lower end of the protrusion. In this way, the plural pairs of hairdressing scissors can be coupled and positioned relative to one another firmly.

[0006] Another objective of the present invention is to

provide a pair of hairdressing scissors and a positioning device thereof, the first blade and/or the second blade of the pair of hairdressing scissors disposes at least a connecting structure and a positioning device. In the above-mentioned blade is formed a through hole for positioning the positioning device. The positioning device includes a retaining member, an elastic member and a fixing member. At the rear end of the through hole is formed a stop portion, in the through hole are sequentially disposed the retaining member and the elastic member, and then the fixing member. The front end of the elastic member presses against the fixing member, and the rear end of the elastic member presses against the retaining member. The retaining member partially protrudes out of the rear end of the through hole and is stopped by the stop portion at the rear end of the through hole, furthermore, a concave portion will be formed in the front end of the through hole. When coupling a plurality of pairs of hairdressing scissors, a pair of hairdressing scissors moves toward and presses the retaining member, so that the retaining member will overcome the elastic force of the elastic member and retract into the through hole. When the retaining member is aligned to the concave portion of another pair of hairdressing scissors, the retaining member, under the effect of the restoring force of the elastic member, will be engaged in the concave portion. In this way, the plural pairs of hairdressing scissors can be positioned relative to each other in the same way.

[0007] The present invention will become more obvious from the following description when taken in connection with the accompanying drawings, which show, for purpose of illustrations only, the preferred embodiments in accordance with the present invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008]

Fig. 1 is an exploded view of two pairs of conventional hairdressing scissors that each has a connecting structure;

Fig. 2 is an exploded view of showing a first embodiment of the present invention;

Fig. 3 is an exploded view of showing a connecting structure and a positioning device in accordance with the first embodiment of the present invention;

Fig. 4 is an enlarged cross sectional view of showing the positioning device in accordance with the first embodiment of the present invention;

Fig. 5 is an operational view in accordance with the first embodiment of the present invention, of showing that two pairs of hairdressing scissors are being coupled each other;

Fig. 6 is a cross sectional view in accordance with the first embodiment of the present invention, of showing that two pairs of hairdressing scissors that have been coupled each other;

Fig. 7 is an enlarged cross sectional view of showing the positioning device in accordance with a second embodiment of the present invention;

Fig. 8 is an operational view in accordance with the second embodiment of the present invention, of showing that two pairs of hairdressing scissors are being coupled each other;

Fig. 9 is a cross sectional view in accordance with the second embodiment of the present invention, of showing that two pairs of hairdressing scissors that have been coupled each other;

Fig. 10 is an exploded view of showing a third embodiment of the present invention;

Fig. 11 is an operational view in accordance with the third embodiment of the present invention, of showing that two pairs of hairdressing scissors are being coupled each other;

Fig. 12 is a cross sectional view in accordance with the third embodiment of the present invention, of showing that two pairs of hairdressing scissors that have been coupled to each other;

Fig. 13 is a cross sectional view in accordance with the third embodiment of the present invention, of showing that two positioning devices are being positioned relative to each other;

Fig. 14 is an operational view in accordance with the third embodiment of the present invention, of showing that two pairs of hairdressing scissors are being coupled each other, in the front side of the fixing member is formed a cavity; and

Fig. 15 is a cross sectional view in accordance with the third embodiment of the present invention, of showing that two pairs of hairdressing scissors that have been coupled each other, the retaining member is engaged in the cavity.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0009] Referring to Figs. 2 and 3, wherein a first blade **30** and a second blade **40** of a pair of hairdressing scissor **2** in accordance with a first embodiment of the present invention are pivotally connected to each other by a pivot **50.** Each of the handle portions **31** and **41** of the first blade **30** and/or the second blade **40** installs at least a connecting structure **60,** the front and rear surfaces of the connecting structure **60** are formed a recess **61** and a protrusion **62,** respectively. The protrusion **62** and the recess **61** are interlocked each other in a dovetail or other arrangements, and the connecting structure **60** also can take other forms. The connecting structure **60** is defined by a through hole **611** and a stop portion **612** formed at the front end of the through hole **611.** As shown in Fig. 4, in the through hole **611** are arranged a positioning device **70** that includes a retaining member **71,** an elastic member **72** and a fixing member **73.** The retaining member **71** and the elastic member **72** are sequentially placed in the through hole **611,** and then the fixing member **73** is inserted in the rear end of the through hole **611,** so

that the elastic member **72** is biased between the fixing member **73** and the retaining member **71.** The retaining member **71** partially protrudes out of the front end of the through hole **611** and is confined within the recess **61** by the stop portion **612.**

[0010] A plurality of pairs of hairdressing scissors **2** are connected together in such way that the protrusion **62** of a pair of hairdressing scissors **2A** is engaged in the recess **61** of another pair of hairdressing scissors **2B.** The protrusion **62** moves toward and presses the retaining member **71,** so that the retaining member **71** will overcome the elastic force of the elastic member **72** and retract into the through hole **611.** At this moment, the elastic member **72** is in a compressed state, as shown in Fig. 5. When the protrusion **62** traverses the retaining member **71** completely, and the top end of the protrusion **62** stops against the retaining walls **311** and **411** defined between the handle portions **31** and **41** and the recess **61,** the retaining member **71,** under the effect of the restoring force of the elastic member **72,** will partially move out of the front end of the through hole **611** and stop against the lower end of the protrusion **62,** as shown in Fig. 6. In this way, the two pairs of hairdressing scissors **2A** and **2B** are coupled and positioned relative to each other, and the plural pairs of hairdressing scissors can be positioned relative to each other in the same way.

[0011] Referring to Fig. 7, a positioning device **70** in accordance with a second embodiment of the present invention is shown and includes a retaining member **71** having a supporting rod **711,** an elastic member **72** and a fixing member **73.** On the supporting rod **711** are mounted a positioning piece **74** and a stop piece **75.** The retaining member **71** and the elastic member **72** are sequentially received in the through hole **611,** so as to fix the positioning piece **74** into the through hole **611.** Then the fixing member **73** is fixed in the rear end of the through hole **611,** the elastic member **72** is biased between the stop piece **75** and the fixing member **73,** and then the stop piece **75** abuts against the positioning piece **74,** so that the retaining member **71** partially protrudes out of the front end of the through hole **611** and is confined within the recess **61.**

[0012] In the same way, the plural pairs of hairdressing scissors **2** are connected together in such way that the protrusion **62** of a pair of hairdressing scissors **2A** is engaged in the recess **61** of another pair of hairdressing scissors **2B.** The protrusion **62** moves toward and presses the retaining member **71,** so that the retaining member **71** will overcome the elastic force of the elastic member **72** and retract into the through hole **611.** At this moment, the elastic member **72** is in a compressed state, as shown in Fig. 8. When the protrusion **62** traverses the retaining member **71** completely, and the top end of the protrusion **62** stops against the retaining walls **311** and **411** defined between the handle portions **31** and **41** and the recess **61,** the retaining member **71,** under the effect of the restoring force of the elastic member **72,** will partially move out of the front end of the through hole **611** and stop against the lower end of the protrusion **62,** as shown in Fig. 9. In this way, the two pairs of hairdressing scissors **2A** and **2B** are coupled and positioned relative to each other, and the plural pairs of hairdressing scissors can be positioned relative to each other in the same way.

[0013] A positioning device **70** in accordance with a third embodiment of the present invention, as shown in Fig. 10, the through hole **611** is arranged in the handle portions **31, 41** of the first blade **30** and/or the second blade **40.** The front and rear surfaces of the connecting structure **60** are also formed a recess **61** and a protrusion **62,** respectively, so that the protrusion **62** is engaged in the recess **61,** and the connecting structure **60** also can be in other forms. The positioning device **70** is arranged in the through hole **611,** as shown in Fig. 11. In the through hole **611** are sequentially disposed the retaining member **71** and the elastic member **72,** and then the fixing member **73.** The front end of the elastic member **72** presses against the fixing member **73,** and the rear end of the elastic member **72** presses against the retaining member **71.** The retaining member **71** partially protrudes out of the rear end of the through hole **611** and is stopped by the stop portion **612** at the rear end of the through hole **611,** furthermore, a concave portion **613** will be formed in the front end of the through hole **611.** The aforementioned connecting structure **60** and the positioning device **70** can be arranged at other appropriate positions on the first blade **30** and/or the second blade **40.**

[0014] The plural pairs of hairdressing scissors **2** are connected together in such way that a pair of hairdressing scissors **2A** moves toward and presses the retaining member **71,** so that the retaining member **71** will overcome the elastic force of the elastic member **72** and retract into the through hole **611.** At this moment, the elastic member **72** is in a compressed state, as shown in Fig. 11. When the retaining member **71** is aligned to the concave portion **613** of another pair of hairdressing scissors **2B,** the retaining member **71,** under the effect of the restoring force of the elastic member **72,** will be engaged in the concave portion **613,** as shown in Fig. 12. In this way, the two pairs of hairdressing scissors **2A** and **2B** are coupled and positioned relative to each other, and the plural pairs of hairdressing scissors can be positioned relative to each other in the same way.

[0015] In the third embodiment, the positioning device **70** also can be directly arranged on the connecting structure **60,** as shown in Fig. 13. The through hole **611** is defined in the connecting structure **60,** and then the positioning device **70** is arranged in the through hole **611.** This also can achieve the same positioning effect after a plurality of pairs of hairdressing scissors **2** are coupled one another in a stacked fashion.

[0016] In addition, when the fixing member **73** of the positioning device **70** is fixed in the through hole **611** and is flush with the front side of the first blade **30** and/or the second blade **40,** the front side of the fixing member **73** is formed a cavity **731,** as shown in Fig. 14, the cavity **731** can be provided for positioning the retaining member

71, as shown in Fig. 15. Methods for fixing the aforementioned fixing member **73** in the through hole **611** include screwing, bell and spigot joint, gluing, soldering, etc. The fixing member **73** of the first and second embodiments is fixed in the through hole **611** by bell and spigot joint. The fixing member **73** of the third embodiment is fixed in the through hole **611** by screwing method. The fixing member **73** is formed with outer threads, and the through hole **611** is formed with inner threads, so that the fixing member **73** is screwed in the through hole **611.**

[0017] The retaining member **71** in the first, second and third embodiments is optimally a ball, but it also can be in other forms. The elastic member **72** in the first, second and third embodiments can be spring, reed or other elastic materials.

[0018] The operation of coupling and positioning the two pairs of hairdressing scissors **2A** and **2B** is as described in the first, second and third embodiments, and the two pairs of hairdressing scissors **2A** and **2B** also can be separated from each other by a reverse operation to the coupling operation.

[0019] Therefore, the present invention is made up of the abovementioned structures, and it truly has the following advantages as compared with the prior art:

[0020] When assembling the plural pairs of hairdressing scissors **2** together, the protrusion **62** of a pair of hairdressing scissors **2A** is engaged in the recess **61** of another pair of hairdressing scissors **2B.** The protrusion **62** moves toward and presses the retaining member **71,** so that the retaining member **71** will overcome the elastic force of the elastic member **72** and retract into the through hole **611.** When the protrusion **62** traverses the retaining member **71** completely, and the top end of the protrusion **62** stops against the retaining walls **311** and **411** defined between the handle portions **31** and **41** and the recess **61.** The elastic member **72** will be decompressed and push the retaining member **71** until it stops against the lower end of the protrusion **62.** The top end and the lower end of the protrusion **62** are fixed by being pressed against the retaining walls **311, 411** and the retaining member **71,** respectively, so that the plural pairs of hairdressing scissors **2** can be hold in position firmly, providing a best stable positioning effect for enabling the hairstylist to hold the plural pairs of hairdressing scissors with one hand more easily and stably.

[0021] While we have shown and described various embodiments in accordance with the present invention, it should be clear to those skilled in the art that further embodiments may be made without departing from the scope of the appended claims.

Claims

1. A pair of hairdressing scissors **(2)** and a positioning device **(70)** thereof comprising:

a first blade **(30);**

a second blade **(40)** pivotally connected to the first blade **(30);**

at least a connecting structure **(60)** arranged on at least one of the first and second blades **(30, 40),** a front surface and a rear surface of the connecting structure **(60)** being formed by a recess **(61)** and a protrusion **(62),** respectively, **characterized in that** the connecting structure **(60)** is defined by a through hole **(611)** and a stop portion **(612)** formed at a front end of the through hole **(611),** the front end of the through hole **(611)** being connected to the recess **(61);** and

at least a positioning device **(70)** being disposed in the through hole **(611)** and including a retaining member **(71),** an elastic member **(72)** and a fixing member **(73),** the retaining member **(71)** and the elastic member **(72)** are sequentially placed in the through hole **(611),** and then the fixing member **(73)** is inserted in the through hole **(611),** the elastic member **(72)** is biased between the fixing member **(73)** and the retaining member **(71)** in such a manner that the retaining member **(71)** partially protrudes out of the front end of the through hole **(611)** and is pressed against the stop portion **(612);** so that,

when coupling two pairs of hairdressing scissors **(2A, 2B)** together, the protrusion **(62)** of one pair of hairdressing scissors **(2A)** is engaged in the recess **(61)** of another pair of hairdressing scissors **(2B),** the protrusion **(62)** moves toward and presses the retaining member **(71),** when the protrusion **(62)** traverses the retaining member **(71)** completely, and a top end of the protrusion **(62)** stops against a retaining wall **(311 or 411)** defined between the handles portions (31, 41) and the recess **(61),** the retaining member **(71)** will partially project out of the front end of the through hole **(611)** and stop against a lower end of the protrusion **(62),** so that the two pairs of hairdressing scissors **(2A, 2B)** are positioned firmly.

2. The pair of hairdressing scissors **(2)** and a positioning device **(70)** thereof as claimed in claim 1, wherein the retaining member **(71)** is optimally a ball.

3. The pair of hairdressing scissors **(2)** and a positioning device **(70)** thereof as claimed in claim 1 or claim 2, wherein

the positioning device **(70)** further comprising a positioning piece **(74)** and a stop piece **(75);**

the retaining member **(71)** has a supporting rod **(711);**

the positioning piece **(74)** and the stop piece **(75)** are mounted on the supporting rod **(711);**

the positioning piece **(74)** is fixed in the through hole **(611);**

the elastic member **(72)** is biased between the stop piece **(75)** and the fixing member **(73);** and
the stop piece **(75)** abuts against the positioning piece **(74),** so that the retaining member **(71)** will partially protrude out of the front end of the through hole **(611)** under the effect of the elastic member **(72).**

4. The pair of hairdressing scissors **(2)** and a positioning device **(70)** thereof as claimed in claim 3, wherein the retaining member **(71)** is optimally a ball.

5. A pair of hairdressing scissors **(2)** and a positioning device **(70)** thereof comprising:

a first blade **(30)**;
a second blade **(40)** pivotally connected to the first blade **(30);** at least a connecting structure **(60)** arranged on at least one of the first and second blades **(30, 40)**, the connecting structure **(60)** enables two pairs of hairdressing scissors **(2)** to be coupled each other in a stacked fashion and ;
characterized in that at least a through hole **(611)** is formed in at least one of the first and second blades **(30, 40),** a stop portion **(612)** is formed at a rear end of the through hole **(611),** and a concave portion **(613)** is formed at a front end of the through hole **(611);**
at least a positioning device **(70)** is disposed in the through hole **(611)** and including a retaining member **(71),** an elastic member **(72)** and a fixing member **(73),** the retaining member **(71)** and the elastic member **(72)** are sequentially placed in the through hole **(611),** and then the fixing member **(73)** is inserted in the through hole **(611),** the elastic member **(72)** is biased between the fixing member **(73)** and the retaining member **(71)** in such a manner that the retaining member **(71)** partially protrudes out of the rear end of the through hole **(611)** under the effect of the elastic member **(72)** and is pressed against the stop portion **(612);** so that,
when coupling two pairs of hairdressing scissors **(2A, 2B)** together, the retaining member **(71)** of one pair of hairdressing scissors **(2A)** is engaged in the concave portion **(613)** of another pair of hairdressing scissors **(2B),** so that the two pairs of hairdressing scissors **(2A, 2B)** are positioned firmly.

6. The pair of hairdressing scissors **(2)** and a positioning device **(70)** thereof as claimed in claim 5, wherein the fixing member **(73)** is flush with a front side of a blade **(30 or 40)** to which the fixing member **(73)** is connected, a front side of the fixing member **(73)** is formed a cavity **(731)** in which the retaining member **(71)** is to be engaged.

7. The pair of hairdressing scissors **(2)** and a positioning device **(70)** thereof as claimed in claim 5, wherein the through hole **(611)** is formed in the connecting structure **(60).**

8. The pair of hairdressing scissors **(2)** and a positioning device **(70)** thereof as claimed in claim 6, wherein the through hole **(611)** is formed in the connecting structure **(60).**

9. The pair of hairdressing scissors **(2)** and a positioning device **(70)** thereof as claimed in claim 5, wherein the retaining member **(71)** is optimally a ball.

Patentansprüche

1. Friseurschere (2) und Plazierungsvorrichtung (70) dafür mit:

· einem ersten Scherenblatt (30);
· einem zweiten Scherenblatt (40), das mit dem ersten Scherenblatt (30) drehpunktverbunden ist;
· mindestens einer Verbindungsstruktur (60) auf mindestens einem des ersten und zweiten Scherenblatts (30, 40), wobei eine Vorderfläche und eine Rückfläche der Verbindungsstruktur (60) von einer Vertiefung (61) bzw. einem Vorsprung (62) gebildet wird, **gekennzeichnet dadurch, dass** die Verbindungsstruktur (60) von einer Durchgangsbohrung (611) definiert wird und ein Haltestück (612) an einem vorderen Ende der Durchgangsbohrung (611) gebildet ist, wobei das vordere Ende der Durchgangsbohrung (611) mit der Vertiefung (61) verbunden ist; und
· mindestens einer Plazierungsvorrichtung (70) in der Durchgangsbohrung (611), die ein Halteelement (71), ein elastisches Element (72) und ein Befestigungselement (73) umfasst, wobei das Halteelement (71) und das elastische Element (72) sequentiell in der Durchgangsbohrung (611) plaziert sind, und dann wird das Befestigungselement (73) in die Durchgangsbohrung (611) eingefügt, das elastische Element (72) wird zwischen dem Befestigungselement (73) und dem Halteelement (71) derart vorgespannt, dass das Halteelement (71) teilweise aus dem vorderen Ende der Durchgangsbohrung (611) herausragt und gegen das Haltestück (612) gedrückt wird; so dass

beim Zusammenstecken zweier Friseurscheren (2A, 2B) der Vorsprung (62) einer Friseurschere (2A) in die Vertiefung (61) einer anderen Friseurschere (2B) eingreift, der Vorsprung (62) bewegt sich in Richtung auf das Halteelement (71) und drückt es,

wenn der Vorsprung (62) das Halteelement (71) vollständig durchquert, und ein oberes Ende des Vorsprungs (62) schlägt gegen eine Haltewand (311 oder 411) an, die zwischen den Griffteilen (31, 41) und der Vertiefung (61) definiert ist, das Halteelement (71) ragt teilweise aus dem vorderen Ende der Durchgangsbohrung (611) und schlägt gegen ein unteres Ende des Vorsprungs (62) an, so dass die beiden Friseurscheren (2A, 2B) fest positioniert sind.

2. Friseurschere (2) und Plazierungsvorrichtung (70) dafür nach Anspruch 1, wobei das Halteelement (71) am besten eine Kugel ist.

3. Friseurschere (2) und Plazierungsvorrichtung (70) dafür nach Anspruch 1 oder Anspruch 2, wobei

· die Positionierungsvorrichtung (70) des weiteren ein Plazierungsstück (74) und ein Anschlagstück (75) umfasst; · das Halteelement (71) hat eine Stützstange (711);
· das Positionierungsstück (74) und das Anschlagstück (75) sind auf die Stützstange (711) montiert;
· das Positionierungsstück (74) ist in der Durchgangsbohrung (611) befestigt;
· das elastische Element (72) ist zwischen dem Anschlagstück (75) und dem Befestigungselement (73) vorgespannt; und
· das Anschlagstück (75) schlägt gegen das Positionierungsstück (74) an,

so dass das Halteelement (71) unter der Wirkung des elastischen Elements (72) teilweise aus dem vorderen Ende der Durchgangsbohrung (611) vorsteht.

4. Friseurschere (2) und Plazierungsvorrichtung (70) dafür nach Anspruch 3, wobei das Halteelement (71) am besten eine Kugel ist.

5. Friseurschere (2) und Plazierungsvorrichtung (70) dafür mit:

· einem ersten Scherenblatt (30);
· einem zweiten Scherenblatt (40), das mit dem ersten Scherenblatt (30) drehpunktverbunden ist;
· mindestens einer Durchgangsbohrung (611) die in mindestens einem des ersten und zweiten Scherenblatts (30, 40) gebildet wird, indem ein Haltestück (612) an einem Hinterende der Durchgangsbohrung (611) gebildet ist und ein konkaves Teilstück (613) an einem vorderen Ende der Durchgangsbohrung (611) gebildet wird;
· mindestens einer Verbindungsstruktur (60) auf mindestens einem des ersten und zweiten Scherenblatts (30, 40), wobei die Verbindungsstruktur (60) zwei Friseurscheren (2) befähigt, aufeinander gestapelt zu werden; und
· mindestens einer Plazierungsvorrichtung (70) welche in der Durchgangsbohrung (611) angeordnet ist und ein Halteelement (71), ein elastisches Element (72) und ein Befestigungselement (73) umfasst, wobei das Halteelement (71) und das elastische Element (72) sequentiell in der Durchgangsbohrung (611) plaziert sind, und das Befestigungselement (73) dann in die Durchgangsbohrung (611) eingefügt wird, wobei das elastische Element (72) zwischen dem Befestigungselement (73) und dem Halteelement (71) derart vorgespannt wird, dass das Halteelement (71) unter der Auswirkung des elastischen Elements (72) teilweise aus dem Hinterende der Durchgangsbohrung (611) ragt und gegen das Haltestück (612) gedrückt wird; so dass,

wenn man zwei Friseurscheren (2A, 2B) zusammensteckt, ist das Halteelement (71) der einen Friseurschere (2A) in Eingriff mit dem konkaven Teilstück (613) der anderen Friseurschere (2B), so dass beide Friseurscheren (2A, 2B) fest positioniert sind.

6. Friseurschere (2) und Plazierungsvorrichtung (70) dafür nach Anspruch 5, wobei das Befestigungselement (73) auf einer Linie mit einer Vorderseite eines Scherenblatts (30 oder 40) ist, mit dem das Befestigungselement (73) verbunden ist, und auf einer Vorderseite des Befestigungselements (73) ein Hohlraum (731) gebildet ist, in den das Halteelement (71) eingreifen soll.

7. Friseurschere (2) und Plazierungsvorrichtung (70) dafür nach Anspruch 5, wobei die Durchgangsbohrung (611) in der Verbindungsstruktur (60) gebildet wird.

8. Friseurschere (2) und Plazierungsvorrichtung (70) dafür nach Anspruch 6, wobei die Durchgangsbohrung (611) in der Verbindungsstruktur (60) gebildet wird.

9. Friseurschere (2) und Plazierungsvorrichtung (70) dafür nach Anspruch 5, wobei das Halteelement (71) am besten eine Kugel ist.

Revendications

1. Paire de ciseaux de coiffure (2) et dispositif de positionnement (70) pour celle-ci comprenant :

· une première lame (30) ;

. une seconde lame (40) associée à pivotement à la première lame (30) ;
. au moins une structure de jonction (60) prévue sur au moins une des première et seconde lames (30, 40), une face avant et une face arrière de la structure de jonction (60) étant respectivement conformées avec un évidement (61) et une saillie (62), la structure de jonction (60) présentant un orifice traversant (611) et une partie de butée (612) conformée sur l'extrémité avant de l'orifice traversant (611), l'extrémité avant de l'orifice traversant (611) étant associée à l'évidement (61) ; et
. au moins un dispositif de positionnement (70) logé dans l'orifice traversant (611) et comportant un élément de retenue (71), un élément élastique (72) et un élément de fixation (73), l'élément de retenue (71) et l'élément élastique (72) étant placés séquentiellement dans l'orifice traversant (611), et l'élément de fixation (73) étant ensuite introduit dans l'orifice traversant (611), l'élément élastique (72) étant chargé initialement entre l'élément de fixation (73) et l'élément de retenue (71) de manière que l'élément de retenue (71) dépasse partiellement hors de l'extrémité avant de l'orifice traversant (611) et soit appuyé contre la partie de butée (612) ;

lors de l'association de deux paires de ciseaux de coiffure (2A, 2B), la saillie (62) d'une paire de ciseaux de coiffure (2A) est engagée dans l'évidement (61) d'une autre paire de ciseaux de coiffure (2B), la saillie (62) se déplace vers et appuie sur l'élément de retenue (71), lorsque la saillie (62) traverse complètement l'élément de retenue (71), et qu'une extrémité supérieure de la saillie (62) est en butée contre une paroi de retenue (311 ou 411) délimitée entre les parties de poignées (31, 41) et l'évidement (61), l'élément de retenue (71) fera partiellement saillie hors de l'extrémité avant de l'orifice traversant (611) et sera en butée contre une extrémité inférieure de la saillie (62), de sorte que les deux paires de ciseaux de coiffure (2A, 2B) soient solidement positionnées.

2. Paire de ciseaux de coiffure (2) et dispositif de positionnement (70) pour celle-ci selon la revendication 1, dans lesquels, de manière optimale, l'élément de retenue (71) est une bille.

3. Paire de ciseaux de coiffure (2) et dispositif de positionnement (70) pour celle-ci selon la revendication 1 ou la revendication 2, dans lesquels :

. le dispositif de positionnement (70) comporte en outre une pièce de positionnement (74) et une pièce de butée (75) ;
. l'élément de retenue (71) présente une tige de support (711) ;
. la pièce de positionnement (74) et la pièce de butée (75) sont montées sur la tige de support (711) ;
. la pièce de positionnement (74) est fixée dans l'orifice traversant (611) ;
. l'élément élastique (72) est chargé initialement entre la pièce de butée (75) et l'élément de fixation (73) ; et
. la pièce de butée (75) est en butée contre la pièce de positionnement (74),

de sorte que l'élément de retenue (71) fasse partiellement saillie hors de l'embout avant de l'orifice traversant (611) sous l'effet de l'élément élastique (72).

4. Paire de ciseaux de coiffure (2) et dispositif de positionnement (70) pour celle-ci selon la revendication 3, dans lesquels, de manière optimale, l'élément de retenue (71) est une bille.

5. Paire de ciseaux de coiffure (2) et dispositif de positionnement (70) pour celle-ci comprenant :

. une première lame (30) ;
. une seconde lame (40) associée à pivotement à la première lame (30) ;
. au moins un orifice traversant (611) conformé dans au moins une des première et seconde lames (30, 40), une partie de butée (612) étant conformée à une extrémité arrière de l'orifice traversant (611), et une partie concave (613) étant conformée à une extrémité avant de l'orifice traversant (611) ;
. au moins une structure de jonction (60) prévue sur au moins une des première et seconde lames (30, 40), la structure de jonction (60) permettant à deux paires de ciseaux de coiffure (2) d'être associées par empilement ; et
. au moins un dispositif de positionnement (70) prévu dans l'orifice traversant (611) et comportant un élément de retenue (71), un élément élastique (72) et un élément de fixation (73), l'élément de retenue (71) et l'élément élastique (72) étant placés séquentiellement dans l'orifice traversant (611), et l'élément de fixation (73) étant alors introduit dans l'orifice traversant (611), l'élément élastique (72) étant chargé initialement entre l'élément de fixation (73) et l'élément de retenue (71) de manière que l'élément de retenue (71) fasse partiellement saillie hors de l'extrémité arrière de l'orifice traversant (611) sous l'effet de l'élément élastique (72) et soit appuyé contre la partie de butée (612) ;

lors de l'association de deux paires de ciseaux de coiffure (2A, 2B), l'élément de retenue (71) d'une paire de ciseaux de coiffure (2A) est engagé dans la partie concave (613) d'une autre paire de ciseaux

de coiffure (2B), de sorte que les deux paires de ciseaux de coiffure (2A, 2B) soient solidement positionnées.

6. Paire de ciseaux de coiffure (2) et dispositif de positionnement (70) pour celle-ci selon la revendication 5, dans lesquels l'élément de fixation (73) affleure avec la face avant d'une lame (30 ou 40) à laquelle l'élément de fixation (73) est associé, une face avant de l'élément de fixation (73) étant conformée avec un évidement (731) dans lequel l'élément de retenue (71) peut être engagé.

7. Paire de ciseaux de coiffure (2) et dispositif de positionnement (70) pour celle-ci selon la revendication 5, dans lesquels l'orifice traversant (611) est conformé dans la structure de jonction (60).

8. Paire de ciseaux de coiffure (2) et dispositif de positionnement (70) pour celle-ci selon la revendication 6, dans lesquels l'orifice traversant (611) est conformé dans la structure de jonction (60).

9. Paire de ciseaux de coiffure (2) et dispositif de positionnement (70) pour celle-ci selon la revendication 5, dans lesquels, de manière optimale, l'élément de retenue (71) est une bille.

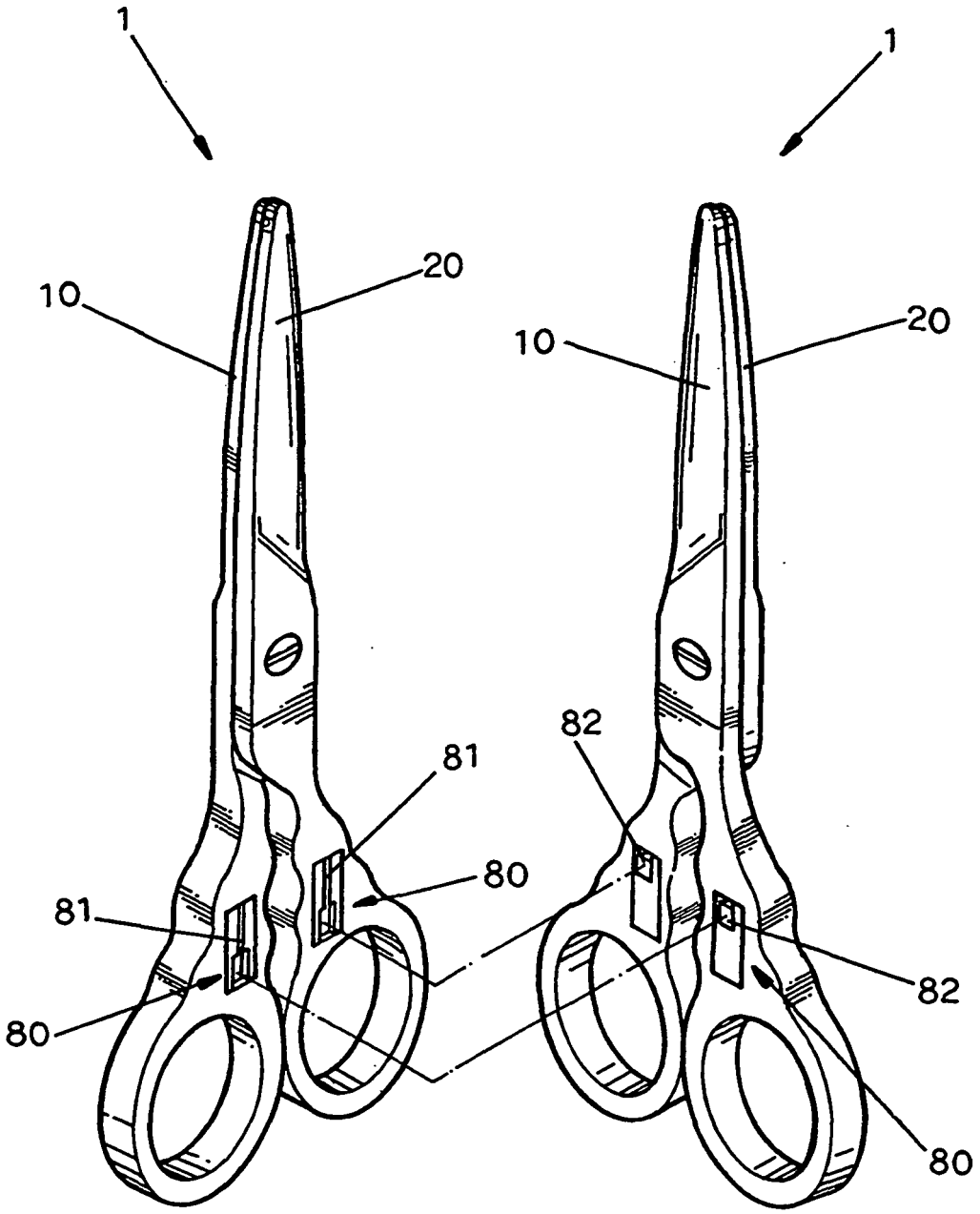

FIG. 1(Prior Art)

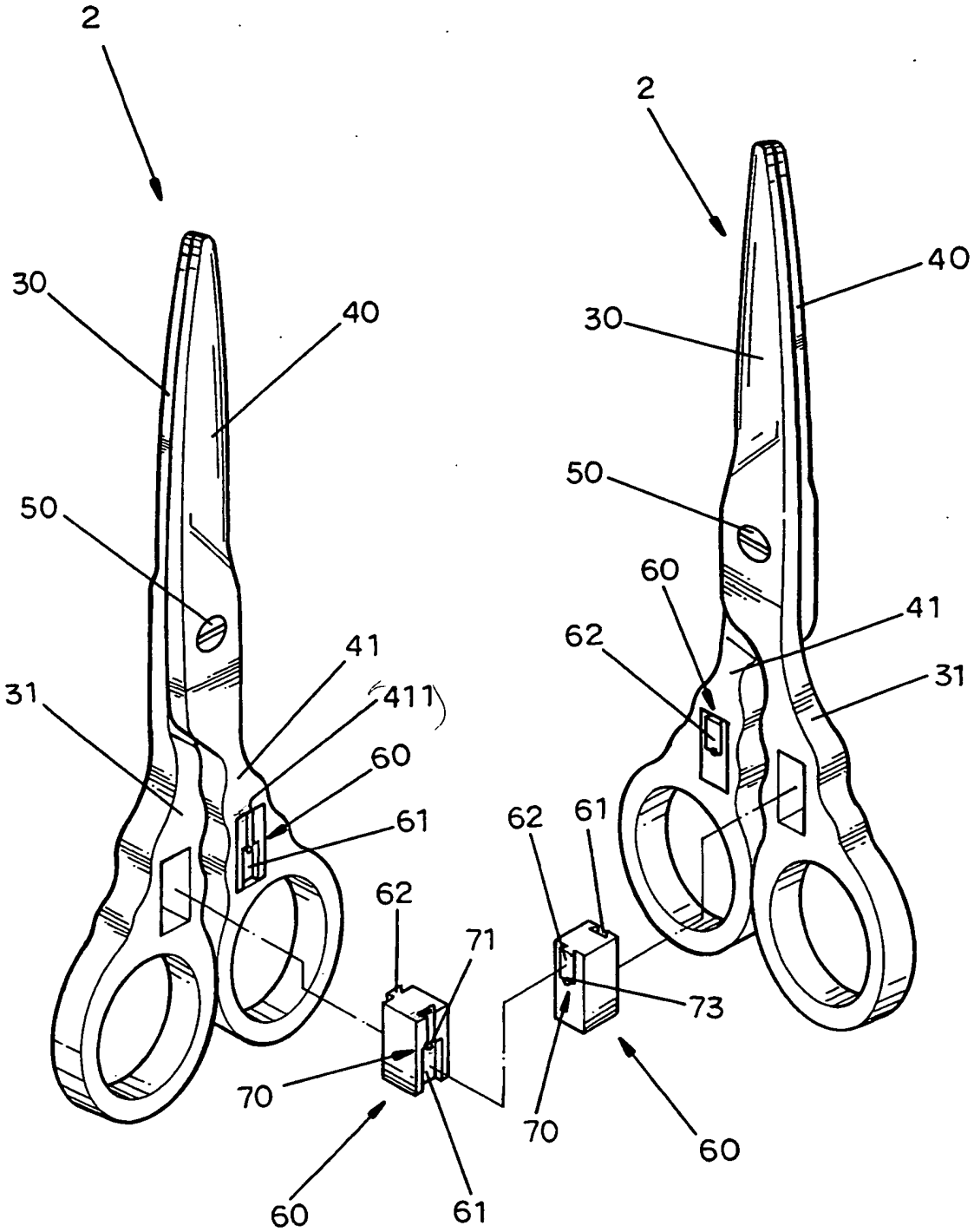
2
30
40
50
41
411
31
60
61
62
71
70
60
61
2
40
30
50
60
41
62
31
62
61
73
70
60

FIG. 2

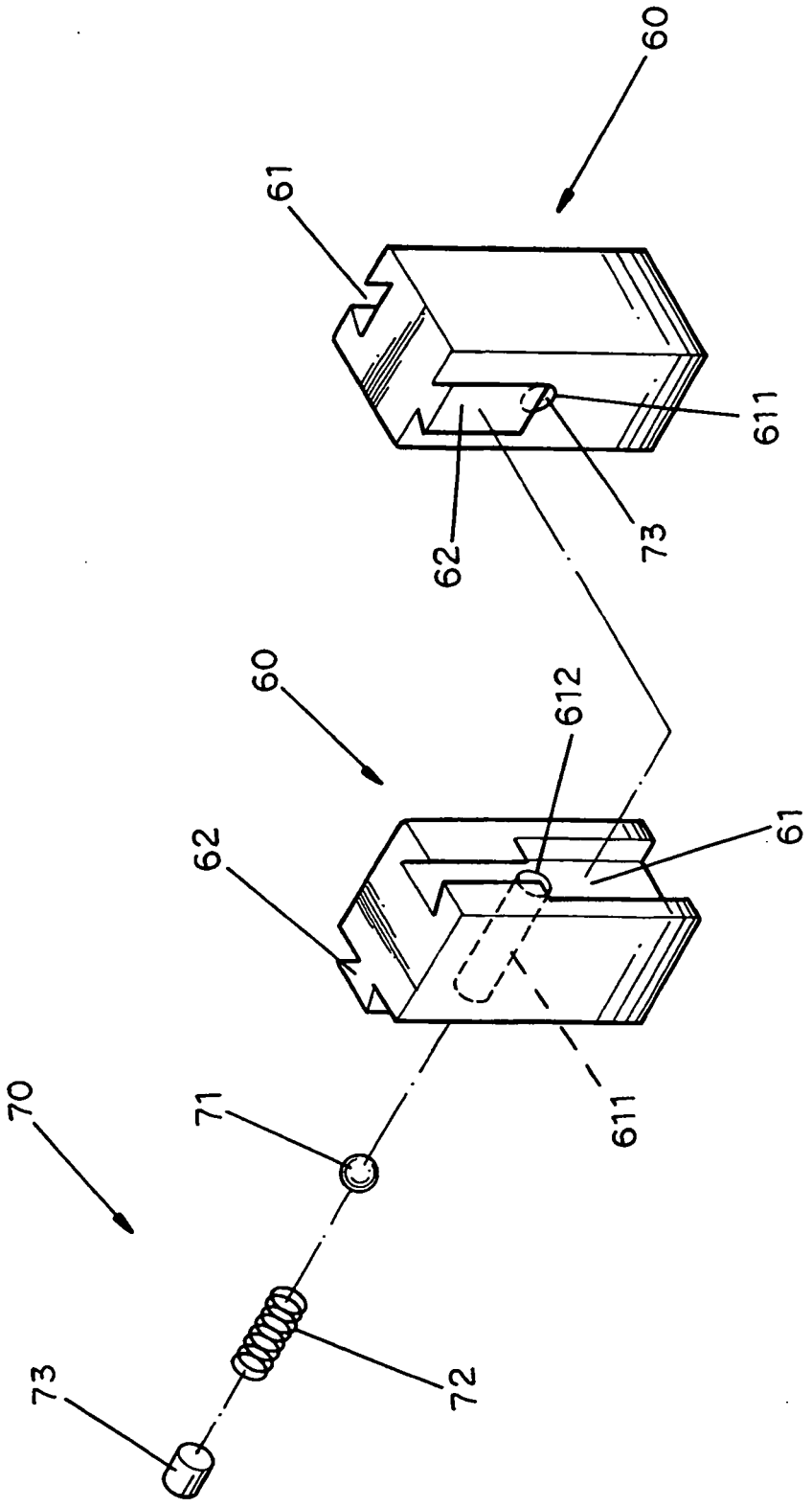

FIG. 3

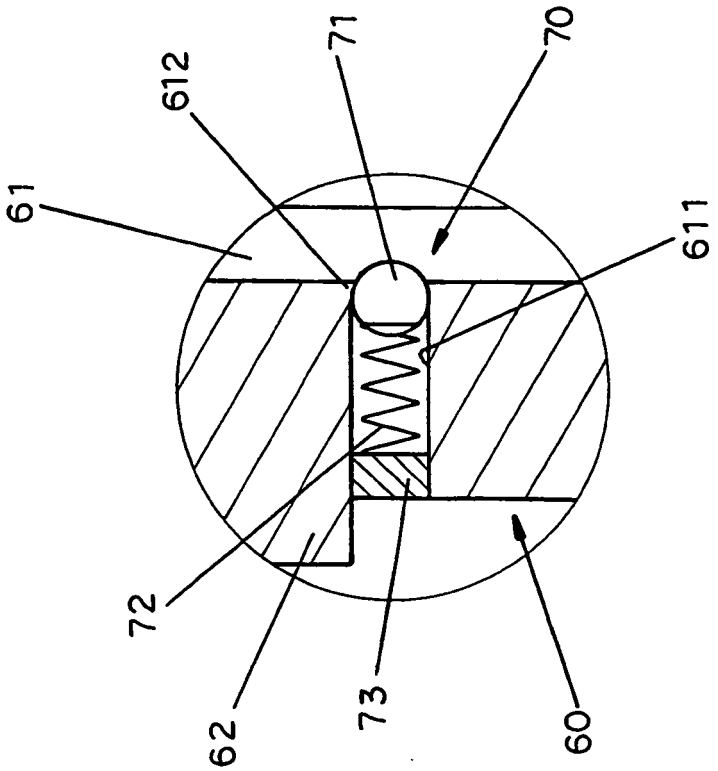

FIG. 4

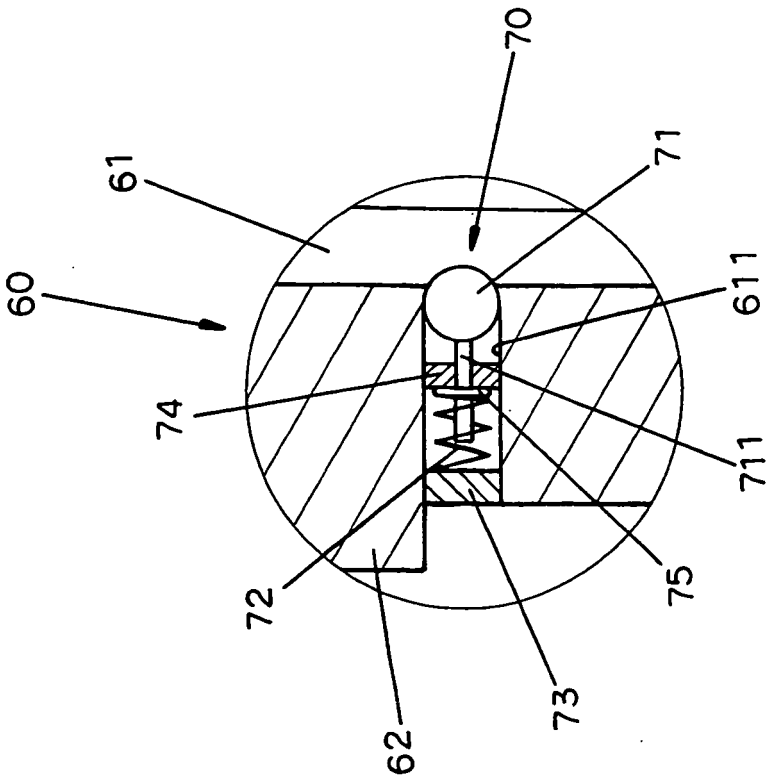

FIG. 7

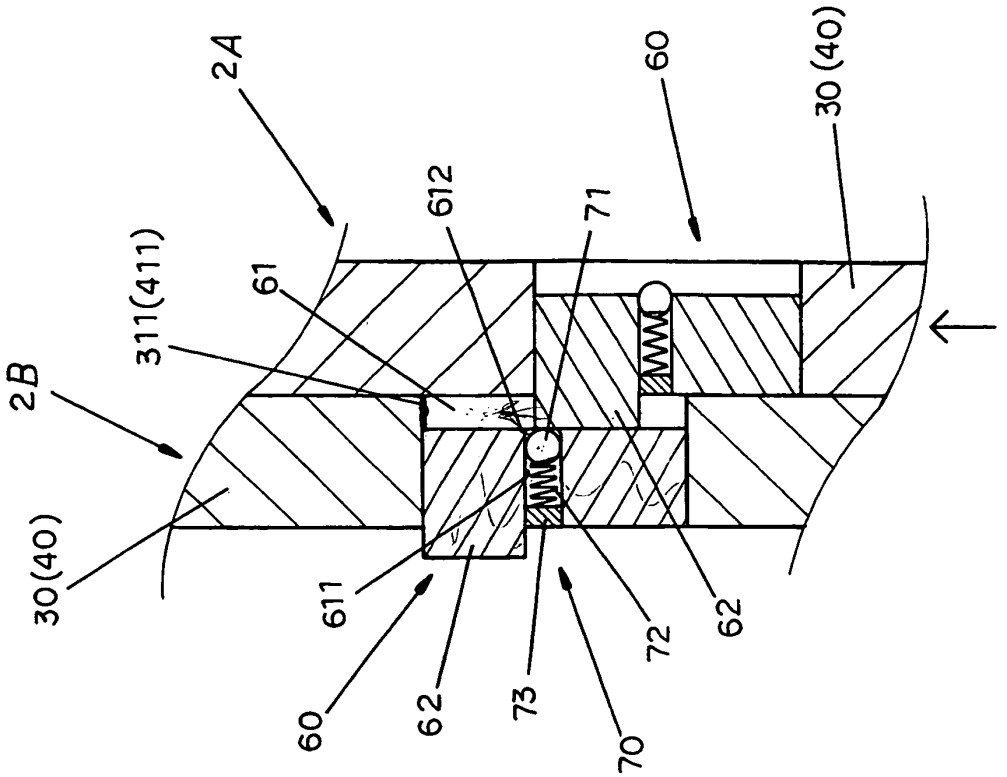
2A
612
71
60
30 (40)
61
311(411)
2B
30(40)
611
72
62
60
62
73
70

FIG. 5

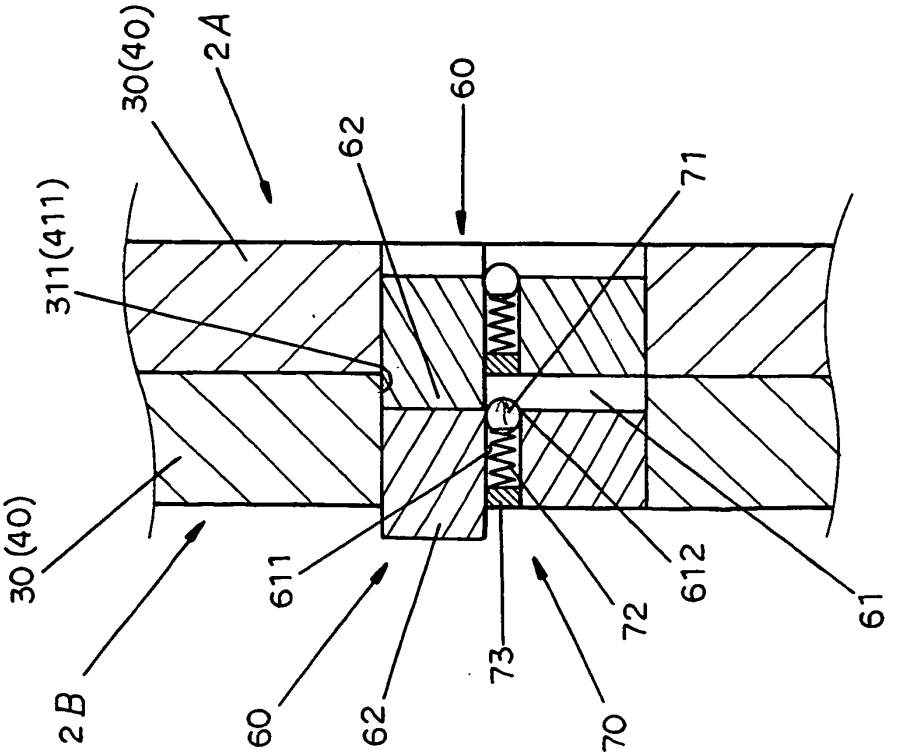
30(40)
2A
60
62
71
311(411)
30 (40)
611
612
61
72
2B
60
62
73
70

FIG. 6

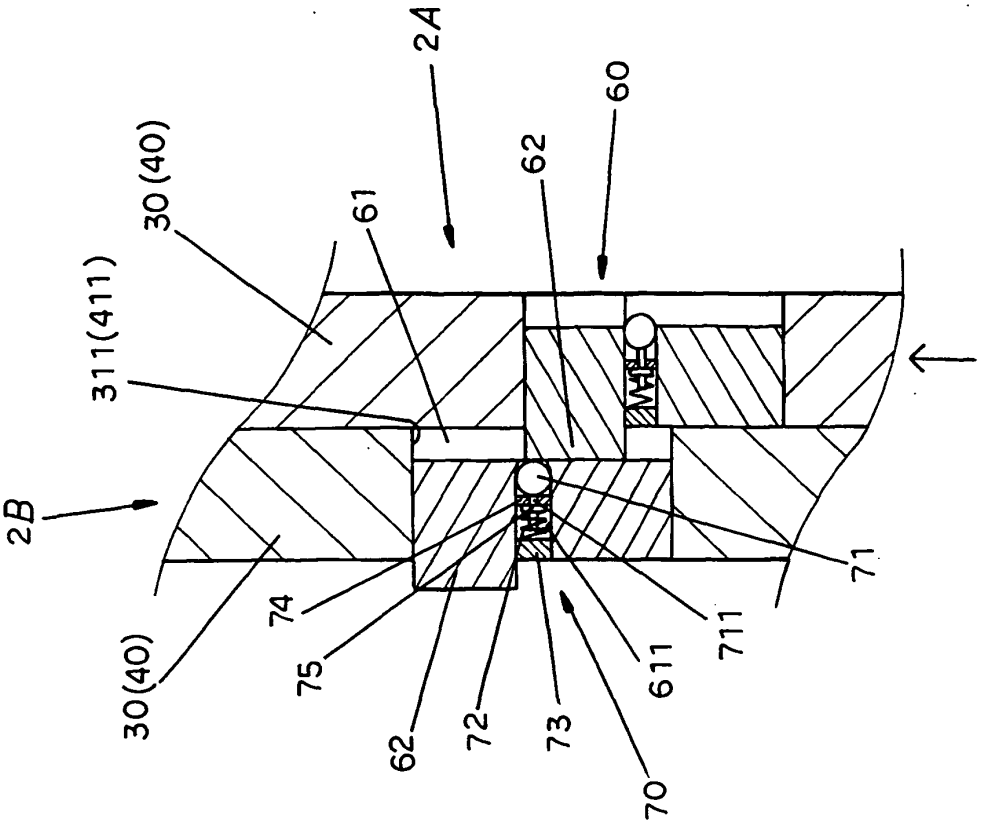
2A
60
62
61
30(40)
311(411)
2B
71
74
75
711
611
72
73
70
62
30(40)

FIG. 8

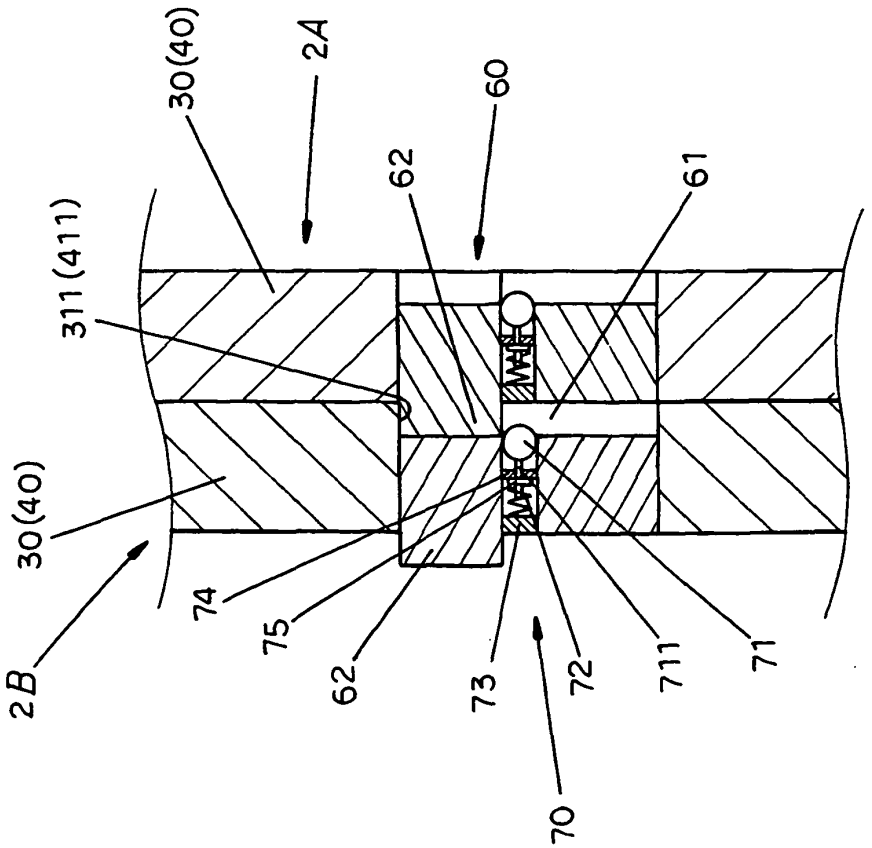
30(40)
2A
60
62
61
311(411)
30(40)
74
75
62
73
72
711
71
2B
70

FIG. 9

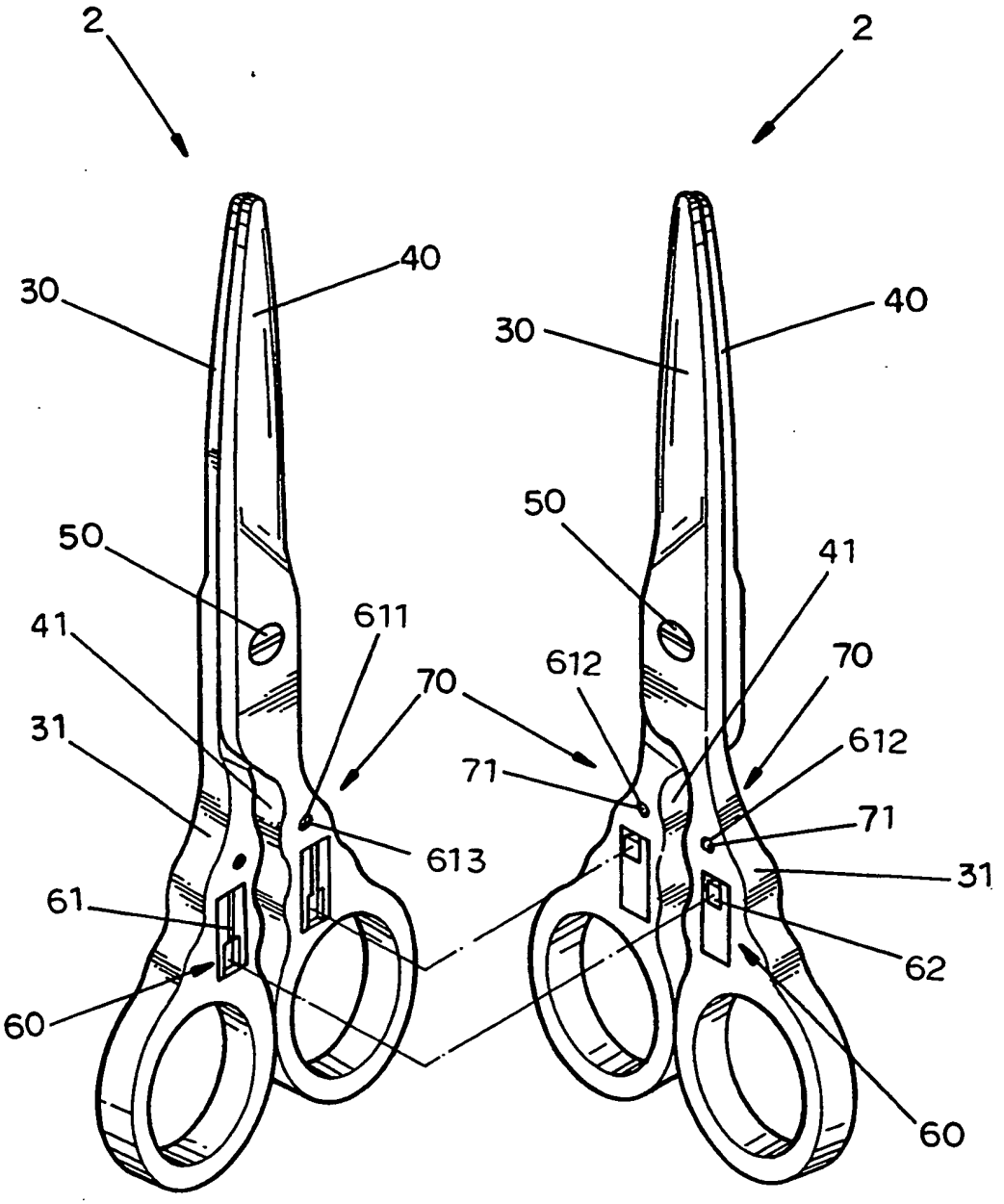
2
2
40
30
40
30
50
50
41
611
41
70
612
70
31
71
612
71
613
71
31
61
62
60
60

FIG. 10

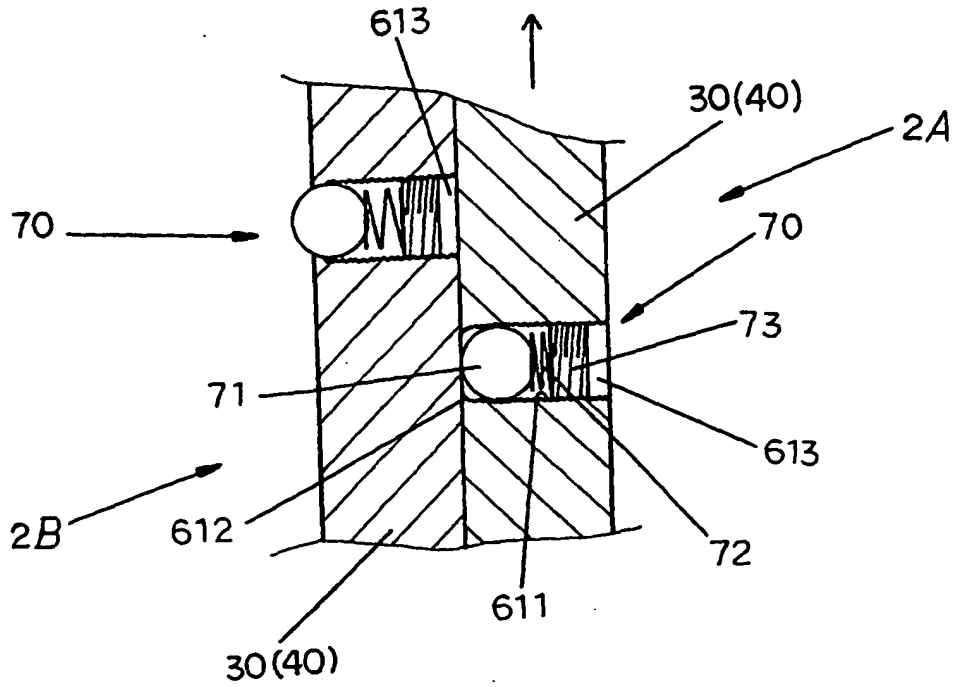
613
30(40)
2A
70
70
73
71
613
2B
612
72
611
30(40)

FIG. 11

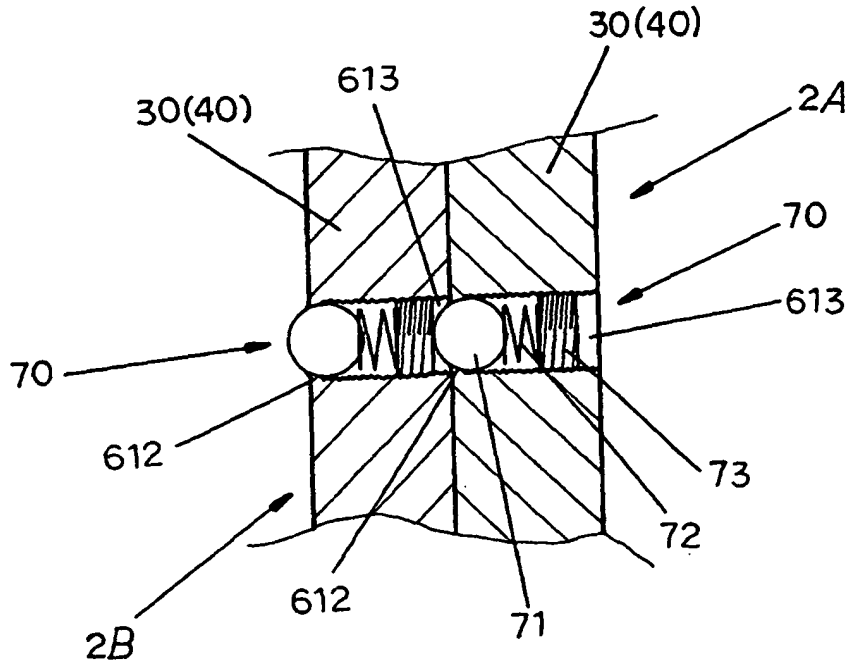
30(40)
613
30(40)
2A
70
613
70
612
73
72
612
71
2B

FIG. 12

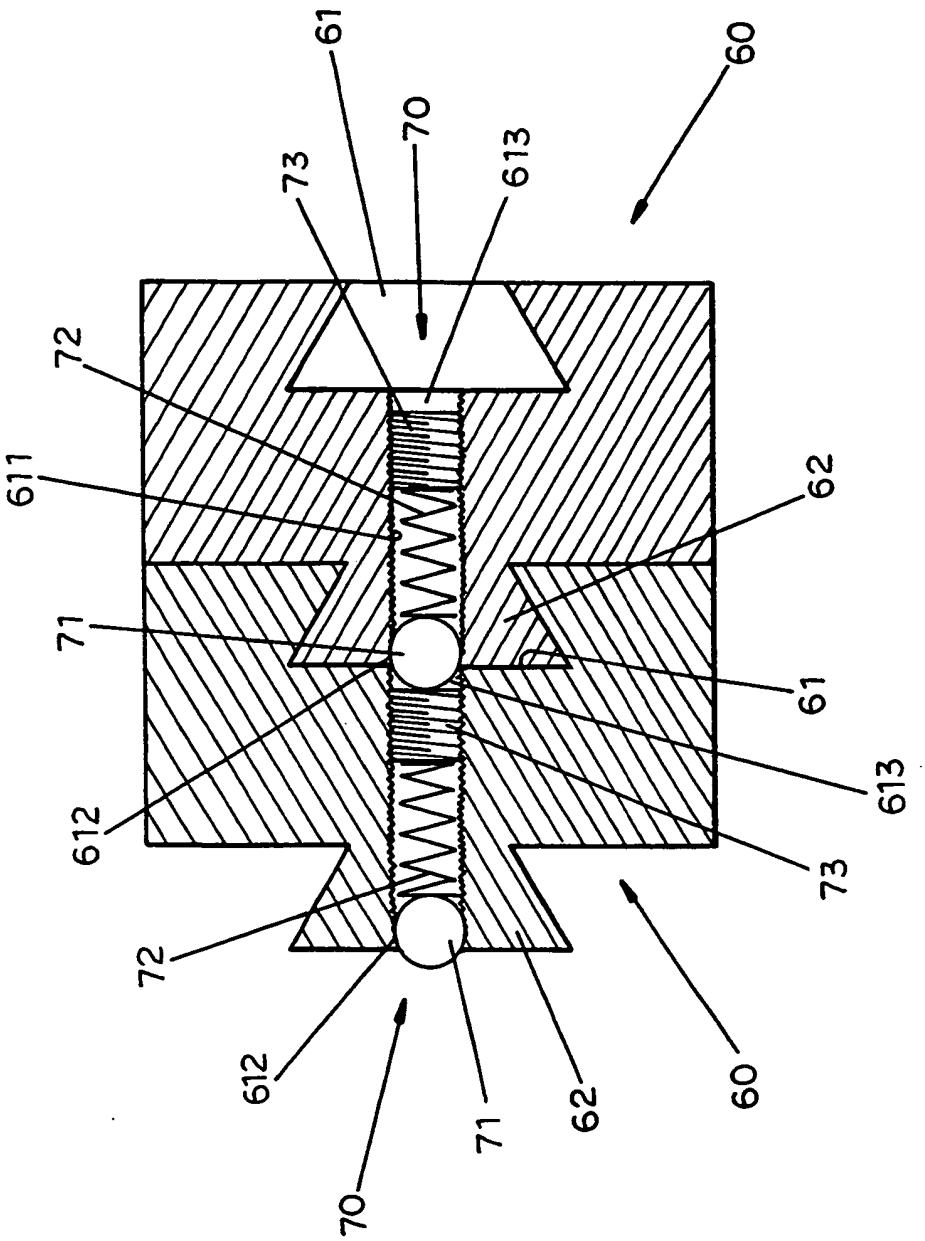

FIG. 13

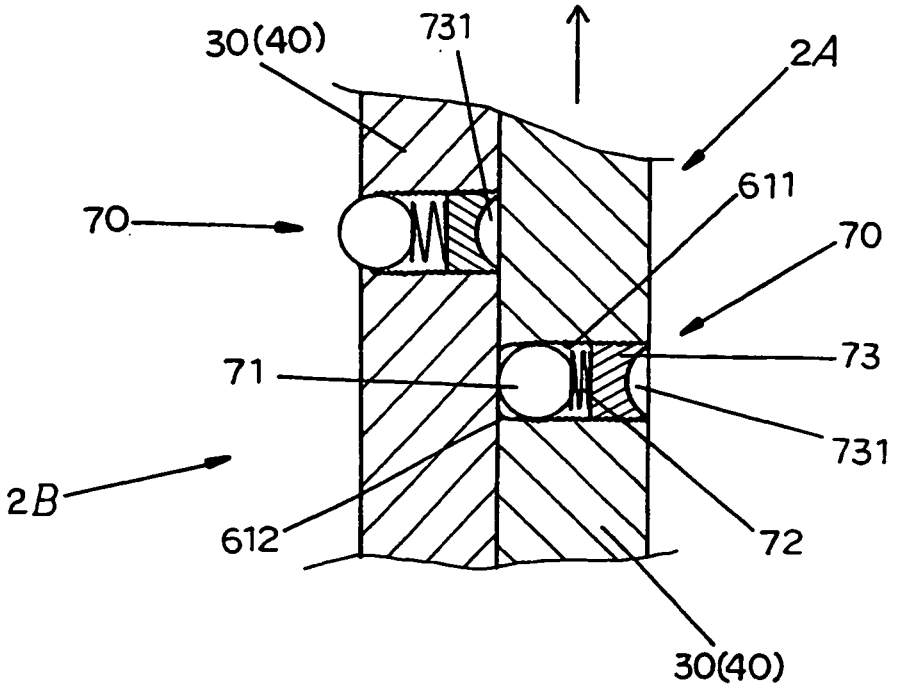
30(40)
731
2A
611
70
70
73
71
731
2B
612
72
30(40)

FIG. 14

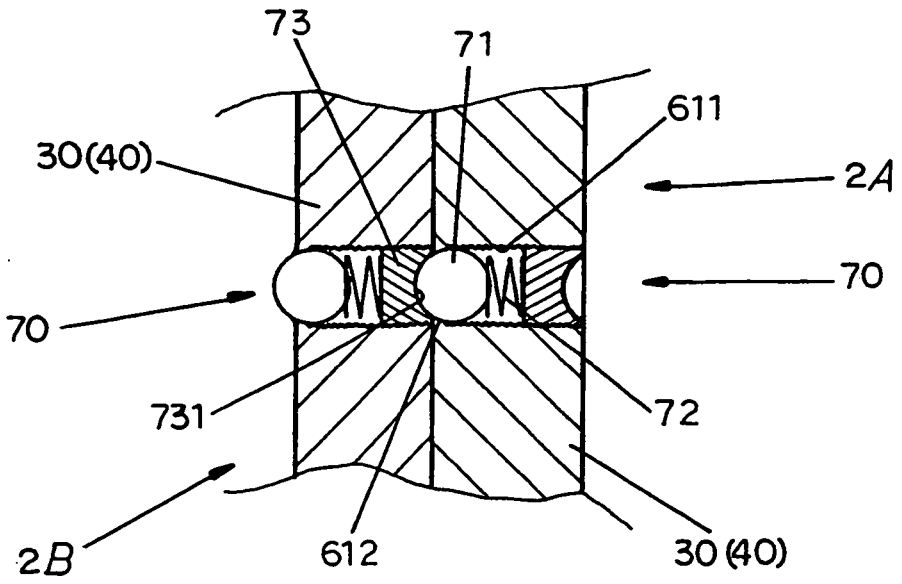
73
71
611
30(40)
2A
70
70
731
72
2B
612
30(40)

FIG. 15

REFERENCES CITED IN THE DESCRIPTION

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- US 6192590 B1 **[0002]**
- US 6634106 B2 **[0002]**