



(11) **EP 1 774 865 B1**

(12) **EUROPEAN PATENT SPECIFICATION**

(45) Date of publication and mention of the grant of the patent:
13.02.2008 Bulletin 2008/07

(51) Int Cl.:
A44B 15/00 (2006.01) A45C 11/32 (2006.01)

(21) Application number: **05022086.2**

(22) Date of filing: **11.10.2005**

(54) **Key holder**

Schlüsselhalter

Porte-clé

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

(43) Date of publication of application:
18.04.2007 Bulletin 2007/16

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Description

1. Field of the Invention

[0001] The present invention relates to a key holder, and more particularly to a key holder, which can receive keys within it and is safe and convenient to carry and use, known for instance, from EP-A-1 449 455.

2. Description of the Related Art

[0002] At present, it is common for people to amass a large number of keys on a key ring. However, the keys are usually not contained in any kind of holder such that they hang out in the open and can easily hurt the user or others if not careful. The keys can also cause damage to surfaces or other objects if the user is not careful.

[0003] Therefore, the invention provides a key holder to mitigate or obviate the aforementioned problems.

[0004] The main objective of the present invention is to provide a key holder, with which it is convenient for a user to carry keys safely.

[0005] This objective is met by the key holder according to claim 1.

[0006] Other objectives and advantages of the invention will become more apparent from the following detailed description when taken in conjunction with the accompanying drawings.

IN THE DRAWINGS

[0007]

Fig. 1 is an exploded perspective view of a first embodiment of a key holder in accordance with the present invention;

Fig. 2 is an operational cross-sectional side view of the key holder in Fig. 1;

Fig. 3 is an exploded perspective view of a second embodiment of a key holder in accordance with the present invention;

Fig. 4 is an exploded perspective view of a third embodiment of a key holder in accordance with the present invention;

Fig. 5 is an exploded perspective view of a fourth embodiment of a key holder in accordance with the present invention;

Fig. 6 is an operational cross-sectional view of the fourth embodiment of a key holder in Fig. 5; and

Fig. 7 is a cross-sectional view of the fourth embodiment of a key holder in Fig.5.

[0008] With reference to Fig. 1, a first embodiment of a key holder has a seat (10) and a housing (40).

[0009] The seat (10) comprises a key (20) and a base (30) in which the key (20) is mounted. A tongue (21) is integrally formed in a lower end of the key (20) and a channel (31) is longitudinally defined in a center of the

base (30). The tongue (21) is inserted into the channel (31). A notch (22) is transversely defined in the tongue (21). A threaded hole (32) is defined in a side of the base (30) and communicates with the channel (31).

[0010] The housing (40) has a chamber (41) longitudinally defined therein forming a box with an open end. The base (30) with the key (20) can be inserted into the housing (40) and slide freely up and down within the chamber (41). A slot (42) is longitudinally defined through a side of the housing (40) and in communication with the chamber (41). A stopping edge (43) is formed at the open end of the housing (40) closing the end of the slot (42).

[0011] A screw (50) has a head (51), the diameter of which is slightly larger than that of the slot (42), integrally formed in an end thereof and a thread (52), the diameter of which is slightly smaller than that of the notch (22), extending from the head (51). The thread (52) is securely mated with the threaded hole (32) and securely fastened to the notch (22). In other embodiments of the present invention, the screw (50) can be any type of fastener.

[0012] With reference to Figs. 1 and 2, the key (20) is inserted into the channel (31) and the base (30) is inserted into the chamber (41). The screw (50) is inserted so that the thread (52) extends through the slot (42) and into the threaded hole (32) in the base (30). The thread (52) also extends through the notch (22) in the tongue (21) of the key (20) thereby securing the key (20) in the base (30). The head (5) remains outside of the housing (40) abutting the slot (42). When the head (51) is pushed upwards along the slot (42), an end of the key (20) extends out of the chamber (41) to be used. When the head (51) abuts the stopping edge (43), the key (20) cannot be pushed farther and will not be separated from the housing (40).

[0013] With reference to Fig. 3, a second embodiment of the invention is the same as the first embodiment except that the second embodiment has a housing (60) which has two chambers (61) longitudinally defined therein and in alignment with each other. Two seats (10), each of which is composed of a key (20) and a base (30), are received respectively into the chambers (61). Two slots (62) parallel to each other are longitudinally defined through a side of the housing (60) and in communication with the chambers (61). Hence, each key (20) is fastened to each base (30) with a fastener (50) being inserted into each slot (62) and through each threaded hole (32). The operation of the second embodiment of the invention is similar to that of the first embodiment.

[0014] With reference to Fig. 4, a third embodiment of the invention is the same as the second embodiment except that the third embodiment has a housing (70), which has three parallel chambers longitudinally defined therein. The operation of the third embodiment of the invention is similar to that of the second embodiment.

[0015] With reference to Figs. 5-7, a fourth embodiment of the invention has a box (80), which has an open end and two chambers (81) defined therein and in alignment with each other. A single housing (40) and a double

housing (60) are received respectively into the chambers (81). Multiple slots (82) are defined in two sides of the box (80) and correspond to the slots (42)(62) in the housings (40)(60). The seats (10) are received into the housings (40)(60) and the housings (40)(60) are received into the box (80). The fasteners (50) are inserted through the slots (82)(42)(62) in turn and fastened in the threaded holes (32). Hence, the keys (20) are secured in the bases (30) and the seats (10) can slide within the chambers (81). A cap (90), which is configured to mate with the box (80), is mounted over the open end of the box (80) thereby preventing dust from entering the box (80). The operation of the fourth embodiment is the same as that of the previous embodiments.

[0016] The advantages of the present invention are described as follows:

1. The keys (20) are contained within the key holder when not in use to prevent injury or damage to persons or objects nearby.
2. A key (20) can be quickly and easily extended for use. When the keys (20) are retracted within the housings (40)(60), the key holder has an attractive appearance and the keys (20) are separated so they will not strike each other and make noise.
3. The key holder can be configured to hold different numbers of keys (20).

Claims

1. A key holder comprising:

at least one seat (10), each one of the at least one seat (10) having
 a key (20) with a tongue (21) formed at a lower end thereof, wherein the tongue (21) has a notch (22);
 a base (30) connected to the key (20) and having a channel (31) defined longitudinally through a center to receive the tongue (21), and a hole (32) defined in a side of the base (30) and in communication with the channel (31) and the notch (22) in the tongue (21);
 a housing (40) holding the at least one seat (10) inside and having an open end;
 at least one chamber (41) defined longitudinally in the housing (40), corresponding respectively to and held the at least one seat (10) inside, and at least one slot (42) defined longitudinally through a side of the housing (40) and corresponding respectively to the channel (31) in the base (30) of the at least one seat (10) **characterized in that** the hole (32) is threaded,
 at least one fastener corresponding respectively to the at least one seat (10), and each one of the at least one fastener having
 a head (51) with a diameter slightly larger than

that of a corresponding one of the at least one slot (42) in the housing (40) and abutting a periphery of the corresponding slot (42), and a thread (52) extending from the head (51), wherein the fastener is inserted through the corresponding slot (42) into a corresponding one of the at least one threaded hole (32) and has a diameter slightly smaller than that of a corresponding one of the at least one notch (22), whereby the fastener is securely mated with the corresponding notch (22) to fasten a corresponding one key (20) to a corresponding one base (30).

2. The key holder as claimed in claim 1 further comprising a box (80) holding the at least one housing (40) inside and having an open end, at least one chamber (81) and at least one slot (82) longitudinally defined in the box (80).
3. The key holder as claimed in claim 2, wherein the key holder has multiple housings (40) received into the box (80).
4. The key holder as claimed in claim 2, wherein the key holder (80) has two housings (40) received into the box (80).
5. The key holder as claimed in claim 2 further comprising a cap (90) mounted over the open end of the box (80).

Patentansprüche

1. Schlüsselhalter, umfassend mindestens einen Sitz (10), wobei jeder von dem mindestens einen Sitz (10) aufweist:

einen Schlüssel (20) mit einer an dem unteren Ende davon ausgebildeten Zunge (21), wobei die Zunge (21) eine Kerbe (22) aufweist;
 eine Basis (30), verbunden mit dem Schlüssel (20) und mit
 einem in Längsrichtung durch ein Zentrum definierten Kanal (31) zum Aufnehmen der Zunge (21), und
 einem Loch (32), definiert in einer Seite der Basis (30) und in Verbindung mit dem Kanal (31) und der Kerbe (22) in der Zunge (21);

ein Gehäuse (40), das in seinem Inneren den mindestens einen Sitz (10) hält und mit

einem offenen Ende;
 mindestens einer in Längsrichtung in dem Gehäuse (40) definierten Kammer (41), jeweils entsprechend dem mindestens einen Sitz (10) und

um diesen im Inneren zu halten, und mindestens einem Langloch (42), definiert in Längsrichtung durch eine Seite des Gehäuses (40) und jeweils entsprechend dem Kanal (31) in der Basis (30) des mindestens einen Sitzes (10), **dadurch gekennzeichnet, dass** das Loch (32) mit einem Gewinde versehen ist, mindestens ein Befestigungselement, jeweils entsprechend dem mindestens einen Sitz (10) und wobei jedes von dem mindestens einen Befestigungselement aufweist:

einen Kopf (51), mit einem Durchmesser ein wenig größer als der von dem entsprechenden mindestens einen Langloch (42) in dem Gehäuse (40) und anstoßend an die Außenfläche des entsprechenden Langloches (42), und ein sich von dem Kopf (51) aus erstreckendes Gewinde (52), wobei das Befestigungselement durch das entsprechende Langloch (42) in ein entsprechendes von dem mindestens einen Gewindeloch (32) eingeführt wird und einen ein wenig kleineren Durchmesser als derjenige der mindestens einen Kerbe (22) hat, wodurch das Befestigungselement sicher in die entsprechende Kerbe (22) eingreift, um einen entsprechenden Schlüssel (20) an einer entsprechenden Basis (30) zu befestigen.

2. Schlüsselhalter gemäß Anspruch 1, ferner umfassend eine Kassette (80), die im Inneren das mindestens eine Gehäuse (40) hält und ein offenes Ende, mindestens eine Kammer (81) und mindestens ein in Längsrichtung in der Kassette (80) definiertes Langloch (82) aufweist.
3. Schlüsselhalter gemäß Anspruch 2, wobei der Schlüsselhalter mehrere in der Kassette (80) untergebrachte Gehäuse (40) aufweist.
4. Schlüsselhalter gemäß Anspruch 2, wobei der Schlüsselhalter (80) zwei in der Kassette (80) untergebrachte Gehäuse (40) aufweist.
5. Schlüsselhalter gemäß Anspruch 2, ferner umfassend eine über dem offenen Ende der Kassette (80) angebrachte Kappe (90).

Revendications

1. Un porte-clé, comprenant:

au moins un logement (10), chacun des au moins un logements (10) ayant une clé (20) avec une langue (21), formée dans

une inférieure de ses extrémités, la langue (21) ayant une rainure (22);
 une base (30), reliée avec la clé (20) et ayant un passage (31), défini en longueur à travers un centre pour accommoder la langue (21), et un trou (32), défini dans un côté de la base (30) et étant en communication avec le passage (31) et la rainure (22) dans la langue (21);
 une boîte (40), portant l'au moins un logement (10) dans son intérieur et ayant une extrémité ouverte;
 au moins une chambre (41), définie en longueur dans la boîte (40), correspondant avec ou bien portant l'au moins un logement (10) dans son intérieur, et
 au moins un trou longitudinal (42), défini en longueur à travers un côté de la boîte (40) et chacun correspondant au passage (31) dans la base (30) du au moins un logement (10), **caractérisé en ce que** le trou (32) est pourvu d'un filet, au moins un élément de fixation, chacun correspondant à au moins un logement (10), et chacun des au moins un éléments de fixation ayant une tête (51) avec un diamètre un peu plus grand que celui d'un correspondant des au moins un trous longitudinaux (42) dans la boîte (40) et aboutant le bord du trou longitudinal (42) correspondant, et
 un filet (52), s'étendant de la tête (51), l'élément de fixation étant inséré à travers le trou longitudinal correspondant (42) dans un correspondant des au moins un trous filetés (32), et ayant un diamètre un peu moins grand que celui de la correspondante des au moins une rainures (22), l'élément de fixation étant sûrement adapté à la rainure (22) correspondante pour fixer une clé (20) correspondante à une base (30) correspondante.

2. Le porte-clé comme revendiqué dans la revendication 1, comprenant en outre une cassette (80), portant l'au moins une boîte (40) dans l'intérieur et ayant une extrémité ouverte, au moins une chambre (81) et au moins un trou longitudinal (82) défini en longueur dans la cassette (80).
3. Le porte-clé comme revendiqué dans la revendication 2, le porte clé ayant plusieurs boîtes (40) accommodées dans la cassette (80),
4. Le porte-clé comme revendiqué dans la revendication 2, le porte clé (80) ayant deux boîtes (40) accommodées dans la cassette (80).
5. Le porte-clé comme revendiqué dans la revendication 2, comprenant en outre un capuchon (90), monté au-dessus de l'extrémité ouverte de la cassette (80).

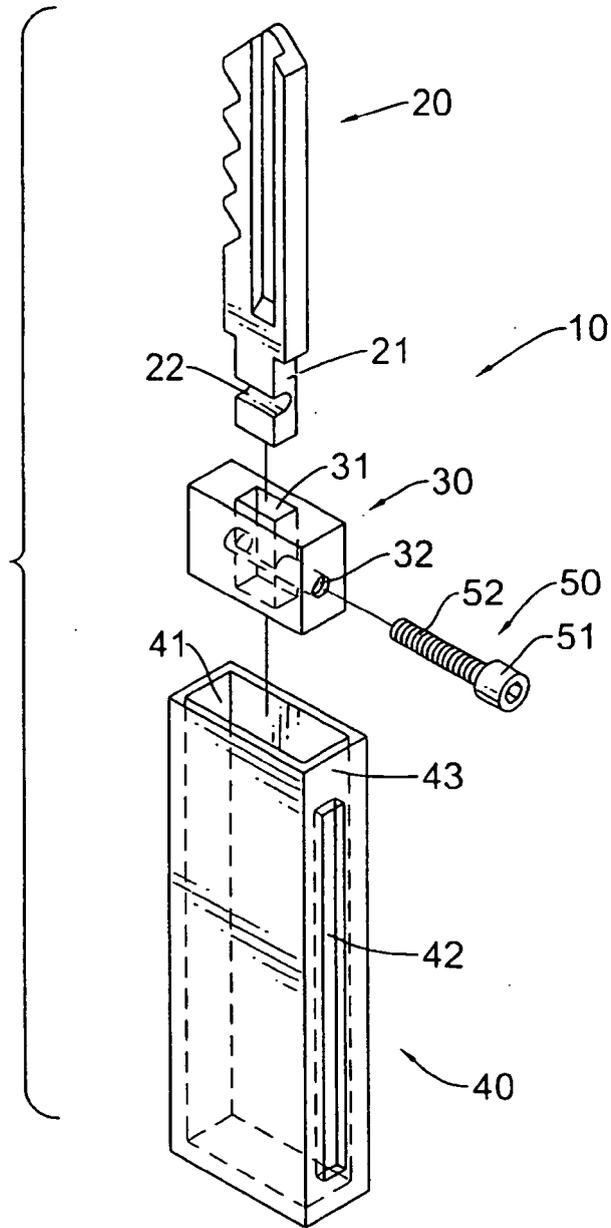


FIG.1

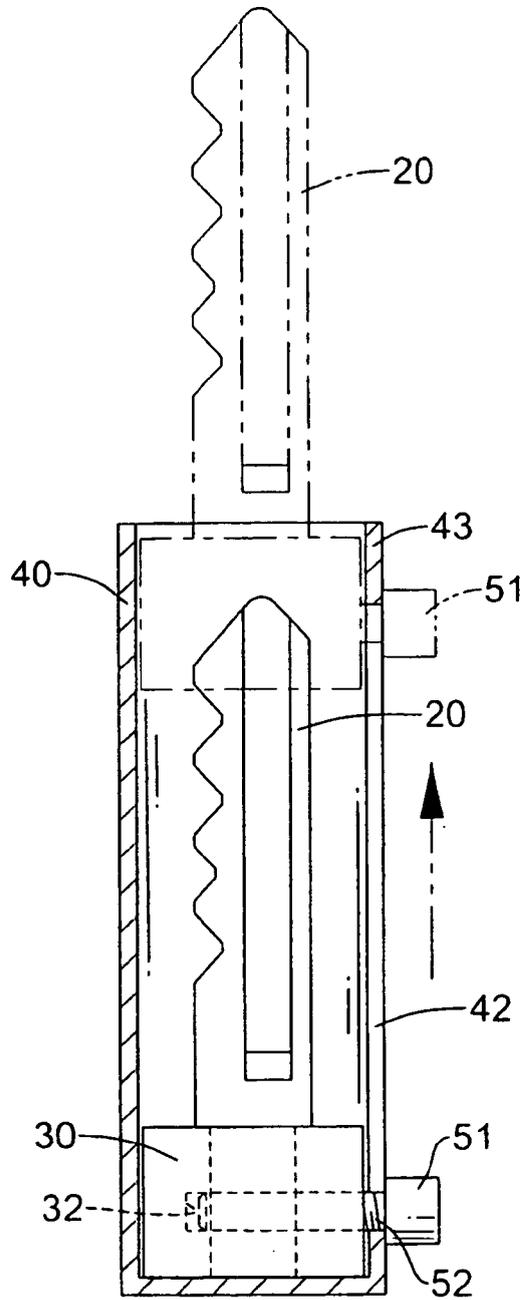


FIG. 2

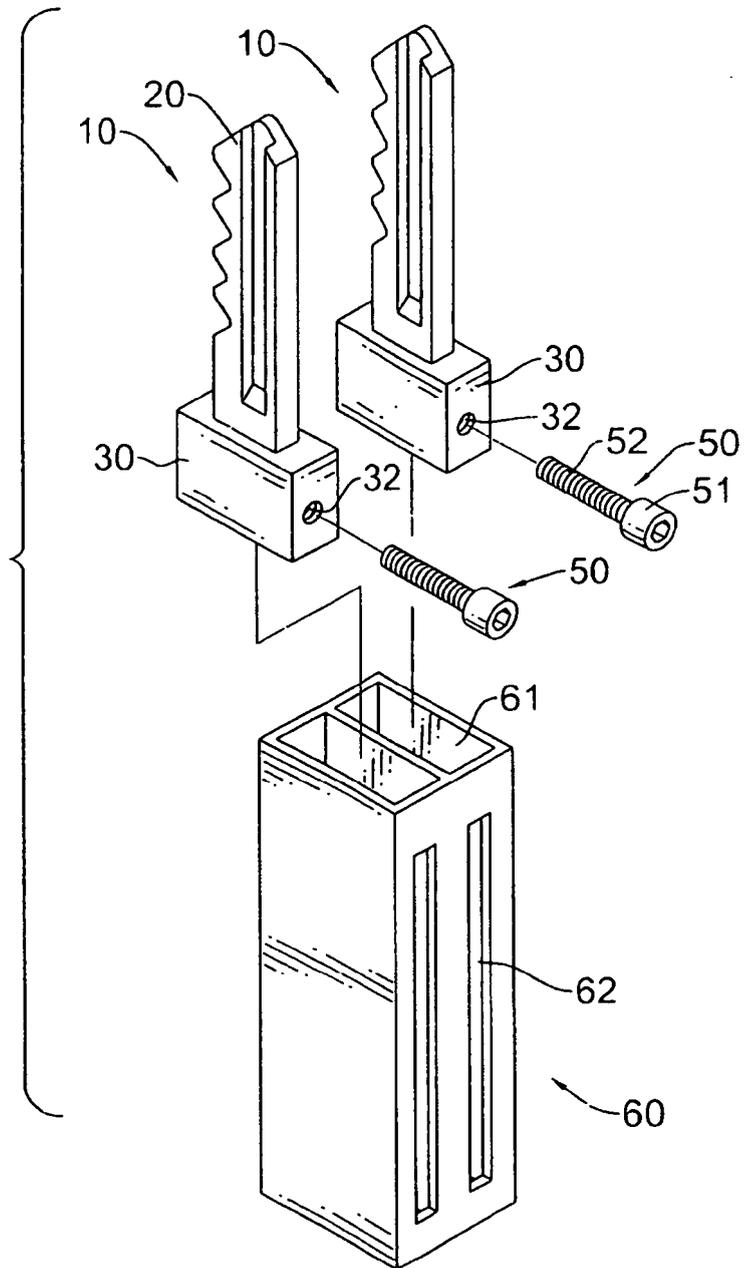


FIG.3

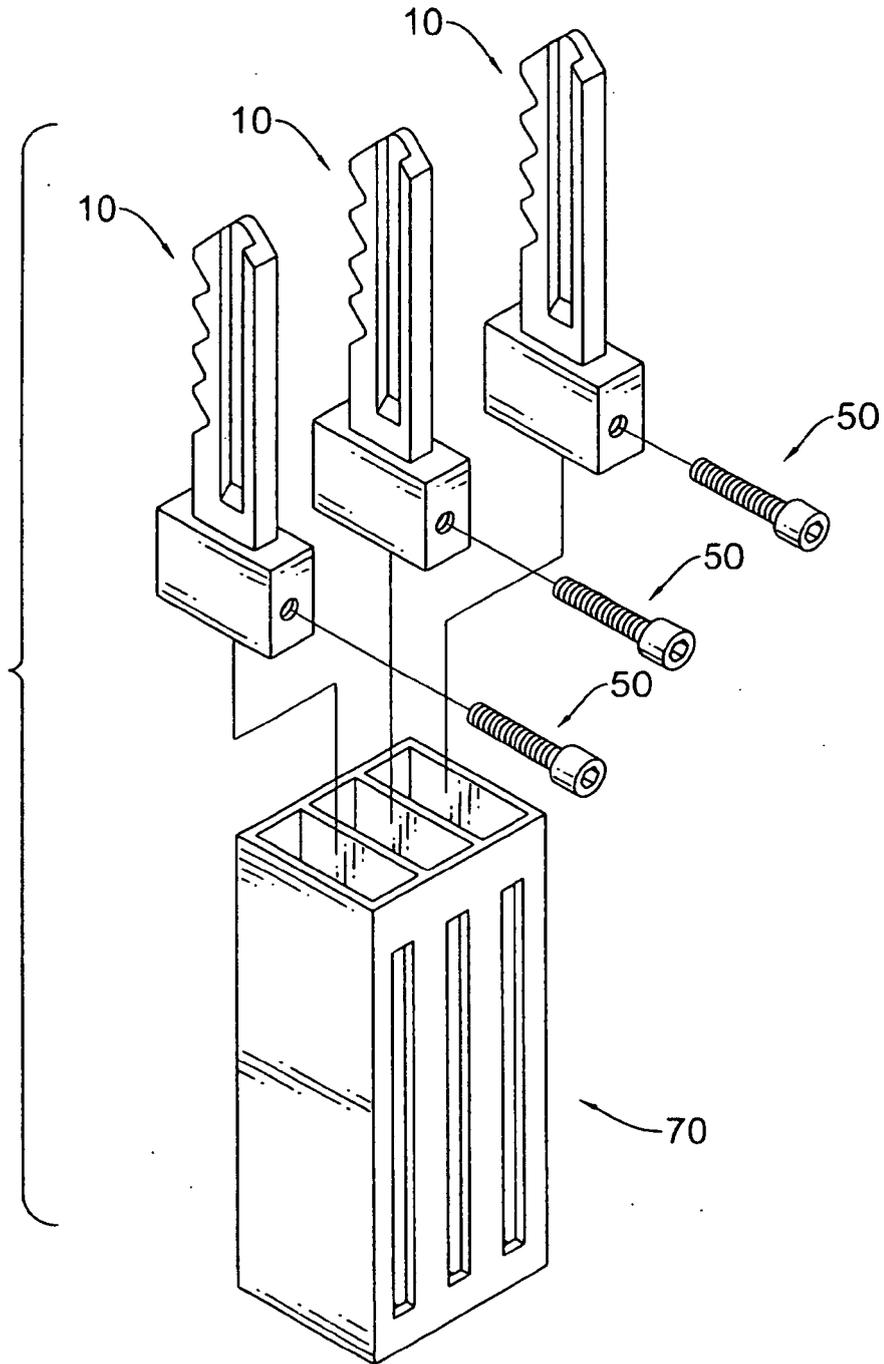


FIG.4

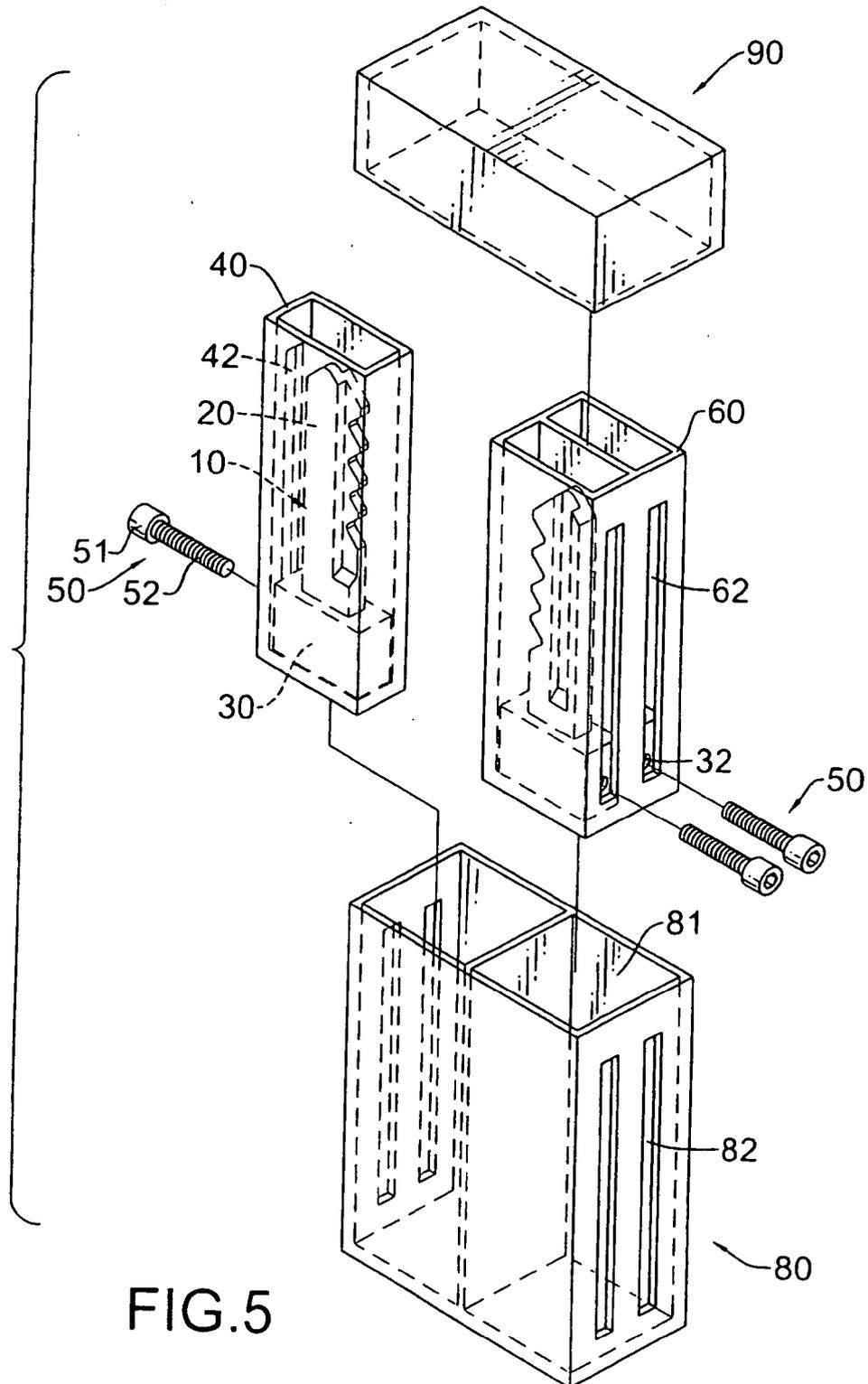


FIG.5

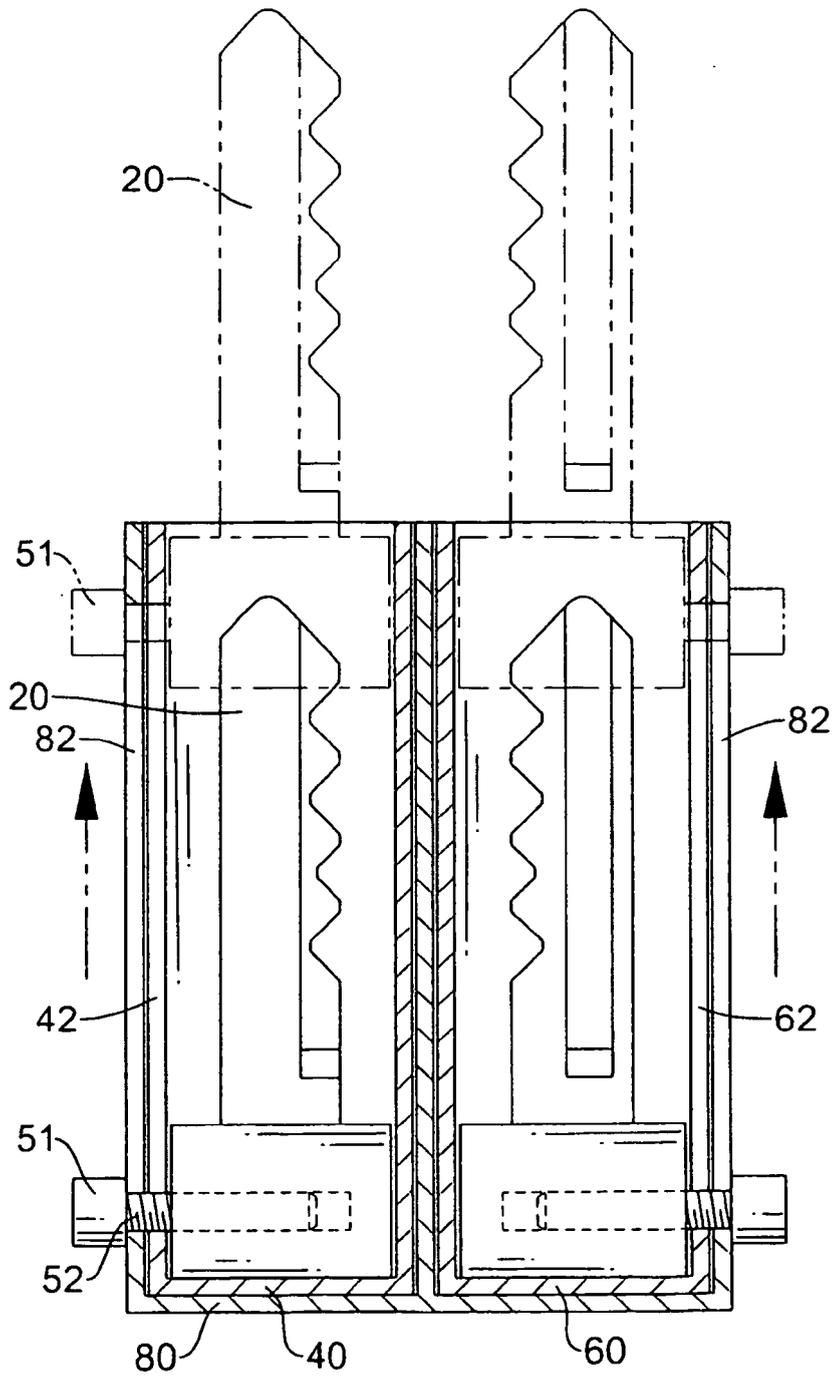


FIG.6

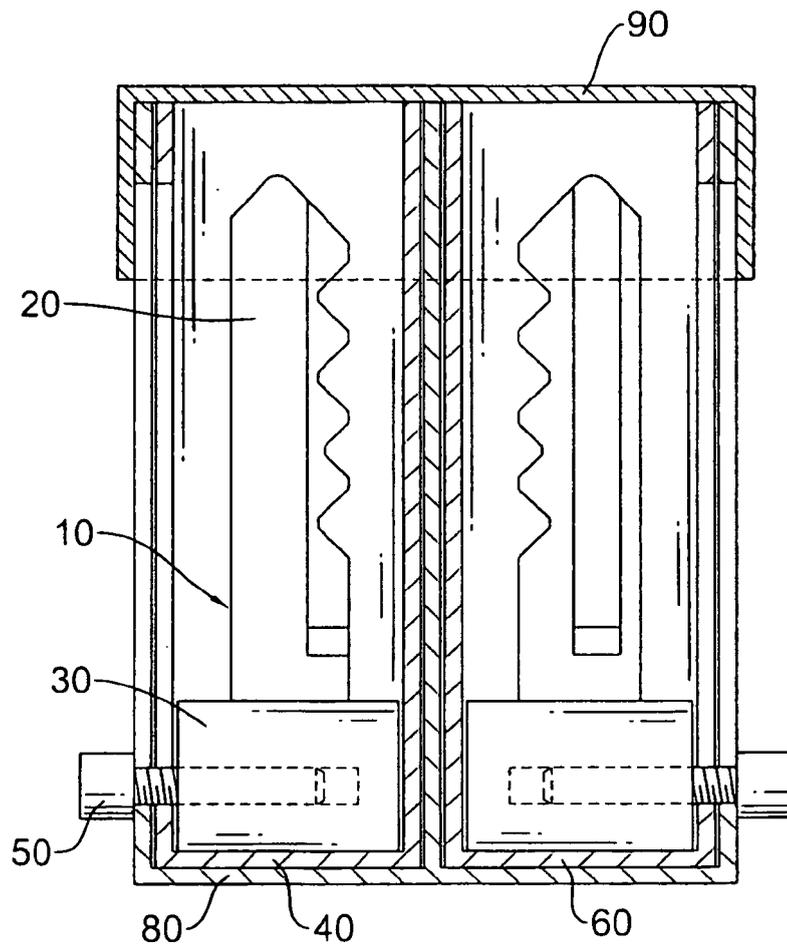


FIG.7

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

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