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(11) **EP 1 325 700 A1**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
09.07.2003 Bulletin 2003/28

(51) Int Cl.7: **A47K 5/122**

(21) Application number: **02000410.7**

(22) Date of filing: **07.01.2002**

(84) Designated Contracting States:
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE TR**
Designated Extension States:
AL LT LV MK RO SI

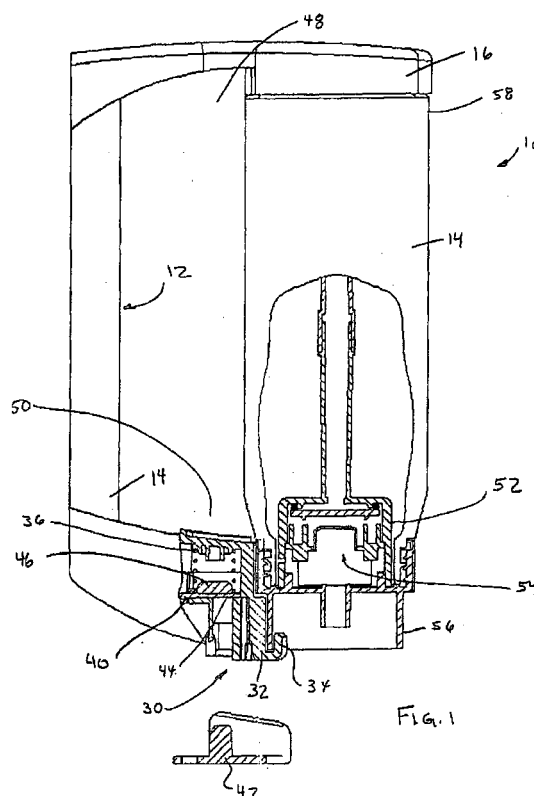
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(54) **Dosing dispenser for liquids**

(57) The dosing dispenser of the present invention is for use with liquid soap, hair shampoo or similar fluids. The dosing dispenser has a generally C-shaped holder (12) releasably retaining between its two free end zones (48,50) a storage vessel (14) from which the fluid is dischargeable by way of an automatically closing delivery valve (54) of a discharge device (52). The storage vessel (14) and discharge device (52) are connected thereto forming a replaceable refill unit. The storage vessel consists of an elastic material and is retained in the holder so as to be exposed and pressurizable at least in the flexible portion of its vessel wall. The deliver valve is openable by application of pressure to the vessel valve in the storage vessel. The holder has at one of two free end zones thereof a holding means which is designed so as to secure the discharge device to the holder by means of a safeguard (30) to prevent pilfering. The holding means has a hook like member (34) which can be moved from an open position where the refill unit can be removed from the holder to a closed position where the hook like member holds the storage vessel at its lower end. The safeguard is designed so as to lock any movement of the hook like member from its closed position to its opened position.



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Description

FIELD OF THE INVENTION

[0001] This invention relates dosing dispensers for liquid soaps and in particular dosing dispensers that include a holder having a safeguard to prevent pilfering.

BACKGROUND OF THE INVENTION

[0002] Dosing dispensers have long been used in industrial and commercial washrooms. They provide an easy and sanitary way of providing soap or other liquids to users. They are typically mounted on a wall and activated by pushing a button or a lever. More recently wall mounted dosing dispensers have been produced that provide for a pressure activated dose whereby the user squeezes the storage vessel to release the fluid.

[0003] One disadvantage of many of these dosing dispensers is that the while the storage vessels are refillable the discharge device are reused. Accordingly the discharge device may become clogged after repeated refills. More importantly bacteria may have a chance to grow in the discharge device after repeated refills.

[0004] Therefore some dosing dispensers have been developed which require both the storage vessel and the discharge device be relaced when the liquid therein is finished. One such dispenser is shown in European Patent 0 530 789 granted June 7, 1995 to ADA Hotel-cosmetic GmbH for a Dosing Dispenser for Liquid Soap or Similar. This patent shows a dosing dispenser having a C-shaped, a storage vessel releasably retained between two free end zones, a discharge device and a safeguard to prevent pilfering. The storage vessel and the discharge device form a replaceable refill unit. The discharge device includes a valve the is openable by pressure to the vessel wall of the storage vessel. The safeguard includes a holding sleeve which locally embraces the storage vessel, is detachably connected to the holder and is secured thereto so as to prevent pilfering. Although this dosing dispenser addresses some of the problems associated with the dosing dispensers generally its safeguard is difficult to use. It is awkward to use a sleeve to embrace the storage vessel and then attach the sleeve to the holder.

[0005] Accordingly it would be advantageous to provide a dosing dispenser with a safeguard that does not require a detachable sleeve. Further it would be advantageous to provide a safeguard that is easy to use and easy to manufacture.

SUMMARY OF THE INVENTION

[0006] The dosing dispenser of the present invention is for use with liquid soap, hair shampoo or similar fluids. The dosing dispenser has a generally C-shaped holder releasably retaining between its two free end zones a storage vessel from which the fluid is dischargeable by

way of an automatically closing delivery valve of a discharge device. The storage vessel and discharge device are connected thereto forming a replaceable refill unit. The storage vessel consists of an elastic material and is retained in the holder so as to be exposed and pressurizable at least in the flexible portion of its vessel wall. The deliver valve is openable by application of pressure to the vessel valve in the storage vessel. The holder has at one of two free end zones thereof a holding means which is designed so as to secure the discharge device to the holder by means of a safeguard to prevent pilfering. The holding means has a hook like member which can be moved from an open position where the refill unit can be removed from the holder to a closed position where the hook like member holds the storage vessel at its lower end. The safeguard is designed so as to lock any movement of the hook like member from its closed position to its opened position.

[0007] Further features of the invention will be described or will become apparent in the course of the following detailed description.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] The invention will now be described by way of example only, with reference to the accompanying drawings, in which:

Fig. 1 is a side view of the dosing dispenser constructed in accordance with the present invention with a portion broken away and shown in section; Fig. 2 is a blown apart perspective view of C-shaped holder of the dosing dispenser constructed in accordance with the present invention; and Fig. 3 is a partial blown apart perspective view of C-shaped holder of the dosing dispenser of figure 1 but showing the push button assembled with the holder.

DETAILED DESCRIPTION OF THE INVENTION

[0009] Referring to figures 1, the dosing dispenser is shown generally at 10. The dosing dispenser includes a generally C-shaped holder 12 and a storage vessel 14 shown only. The dosing dispenser is for use with liquid soap, hair shampoo or other similar liquids.

[0010] Referring to figures 1 through 3, the C-shaped holder 12 includes a bracket body 14, a bracket top 16 and a wall plate 18. Wall plate 18 is attachable to a wall by way of a sticky pad 20 and/or with screws secured through screw apertures 22. Wall plate 18 has side channels 24 formed therein and bracket body 14 slides up into the side channels 24 and is held in position with latch 26. Bracket top 16 slides into side channels 24 from the top and is held in place with plug 28. Once C-shaped holder 12 is assembled it is very difficult to disassemble without braking one of the parts.

[0011] C-shaped holder 12 also includes a safeguard

to prevent pilfering 30. The safeguard 30 includes a push button 32 having a hook like member 34, a spring 36, a push button clip 38, a snap lock 40 and a key 42. Bracket body 14 has a push button seat 42 formed therein. Push button seat 44 has a spring detent 46 extending upwardly as best seen in figure 1. When assembled, spring 36 is positioned over spring detent 46 on push button seat 44 and push button 32 is positioned thereover. Push button clip 38 is attached to push button 32 to form side push button channels therebetween which engage bracket body 12 next to push button seat 44. Once the safeguard 30 is assembled it is very difficult to disassemble without braking one of the parts. Snap lock 40 is inserted into back of push button clip 38 and holds it in place until it is released with key 42. Hook like member 34 has a closed position or rest position and an open position which is when the push button 32 is depressed.

[0012] Referring to figure 1, storage vessel 14 is held in the C-shaped holder 12 between its two free end zones 48, 50. Storage vessel 14 has a discharge device 52 with an automatically closing delivery valve 54 from which the fluid is discharged. The storage vessel 14 with discharge device 52 connected thereto form a replaceable refill unit. The storage vessel 14 consists of an elastic material and is retained in the holder 12 so as to be exposed and pressurizable at least in the flexible portion of its vessel wall. The deliver valve 54 is openable by application of pressure to the vessel wall. The storage vessel has a rim 56 which sits in hook like member 34 of push button 32. In the embodiment shown herein the rim 56 forms part of the discharge device 52. Storage vessel 14 has one end shaped 58 to be received by bracket top and to sit therein.

[0013] In use to position a storage vessel 14 into the C-shaped holder 12 the key 42 is inserted into safeguard 30 thereby releasing snap lock 40. The shaped end 58 of storage vessel 14 is positioned in the top bracket 16; the push button 32 is depressed so that the hook 34 moves downwardly; the rim 56 is positioned such that when the push button is released the rim 56 sits in the hook 34; and then the push button 32 is released and the key 42 is removed. When removing the storage vessel 14 from the C-shaped holder 12 the procedure is similar. First the key is inserted thereby releasing the snap lock; the push button 32 is depressed thereby moving the hook 34 into the release position; and then removing the rim 56 on the storage vessel 14, the shaped end 58 from the top bracket 16 and the storage vessel 14 from the C-shaped holder. Safeguard 30 is designed so as to lock any movement of the hook like member 34 from its closed position to its opened position.

[0014] It will be appreciated by those skilled in the art that there are a number of advantages that may be realized by the dosing dispenser disclosed herein. Firstly, the dispenser 10 is designed so as to allow for quick and easy replacement of the storage vessel 14 with the use of a uniquely designed key 42. Further, since the C-

shaped holder 12 is manufactured from multiple pieces the colours of the different pieces may be varied thereby creating a design that is different from generally available holders which have a unitary construction.

[0015] It will be appreciated that the above description relates to the invention by way of example only. Many variations on the invention will be obvious to those skilled in the art and such obvious variations are within the scope of the invention as described herein whether or not expressly described.

Claims

1. A dosing dispenser for liquid soap, hair shampoo or similar fluids, having a generally C-shaped holder (12) releasably retaining between its two free end zones (48, 50) a storage vessel (14) from which the fluid is dischargeable by way of an automatically closing delivery valve (54) of a discharge device (52), the storage vessel (14) and discharge device (52) connected thereto forming a replaceable refill unit, wherein the storage vessel (14) consists of an elastic material and is retained in the holder so as to be exposed and pressurizable at least in the flexible portion of its vessel wall, wherein the deliver valve (54) is openable by application of pressure to the vessel wall of the storage vessel (14), and the holder (12) has at one of two free end zones (48, 50) thereof a holding means which designed so as to secure the discharge device to the holder by means of a safeguard (30) to prevent pilfering, **characterized in that** the holding means comprises a hook like member (34) which can be moved from an open position where the refill unit can be removed from the holder (12) to a closed position where the hook like member holds the storage vessel at its lower end, wherein said safeguard (30) is designed so as to lock any movement of said hook like member from its closed position to its opened position.
2. A dosing dispenser as claimed in claims 1 further including a push button (32) and a biasing means, wherein the hook like member (34) is integrally attached to the push button (32), a push button seat is formed in the C-shaped holder (12) and the push button (32) is positioned in the push button seat and the biasing means biases the hook like member (34) into the closed position.
3. A dosing dispenser as claimed in claim 3 wherein the biasing means is a spring (36).
4. A dosing dispenser as claimed in claim 2 or 3 wherein the safeguard includes snap lock (40) which holds the hook in the closed position and a key (42) which disengages the snap lock (40) there-

by allowing the hook to move from closed position to the open position.

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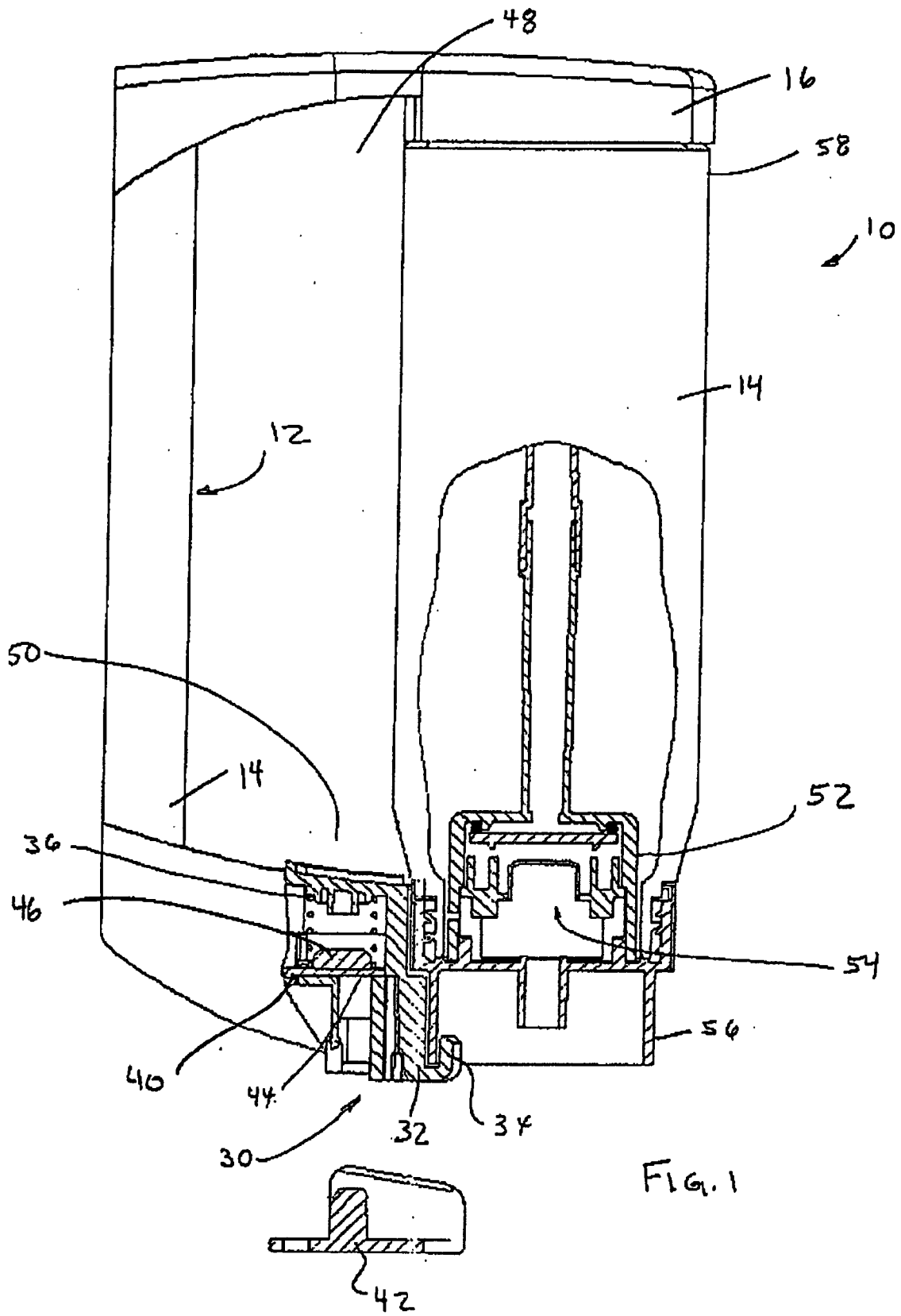
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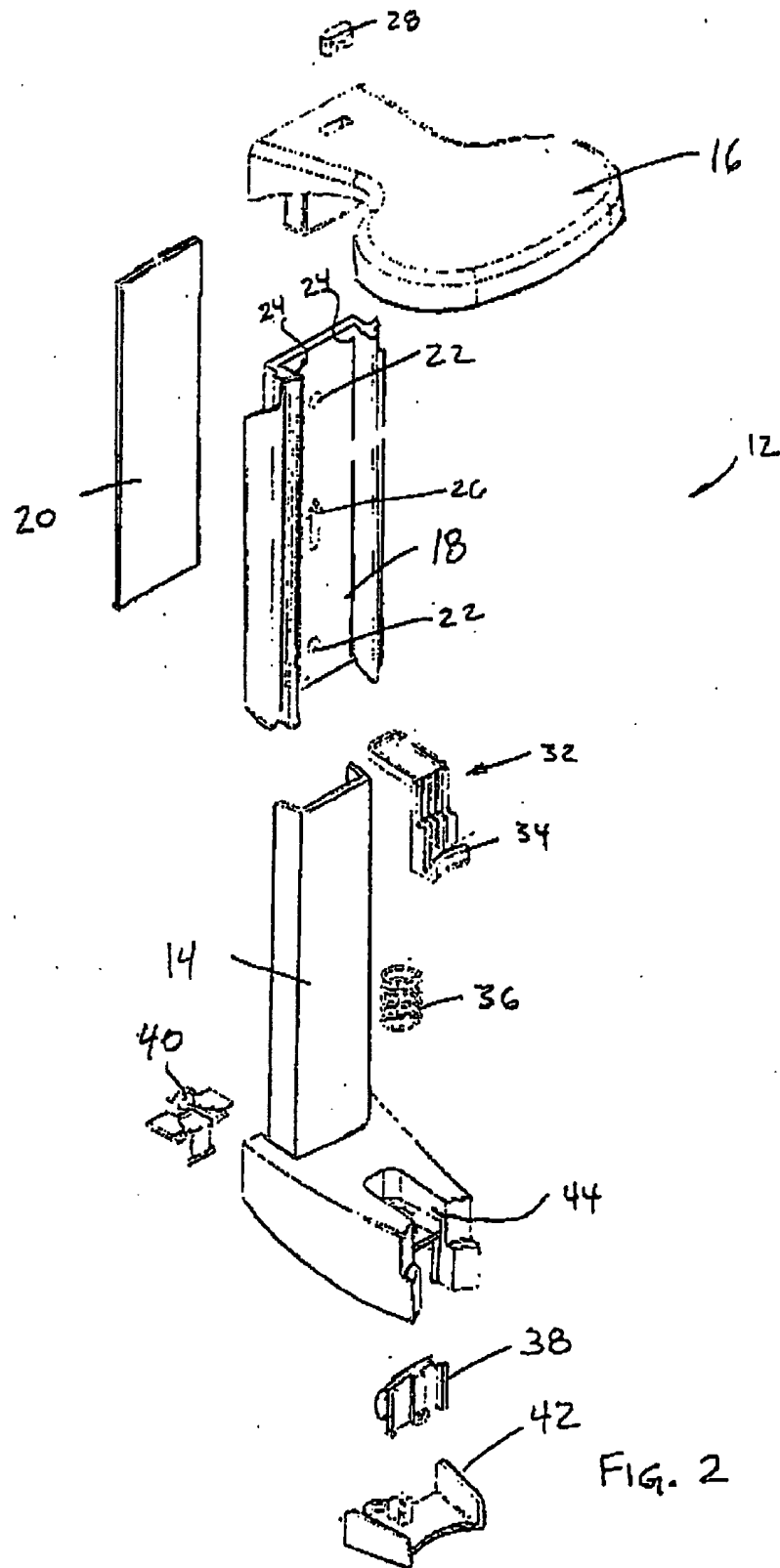
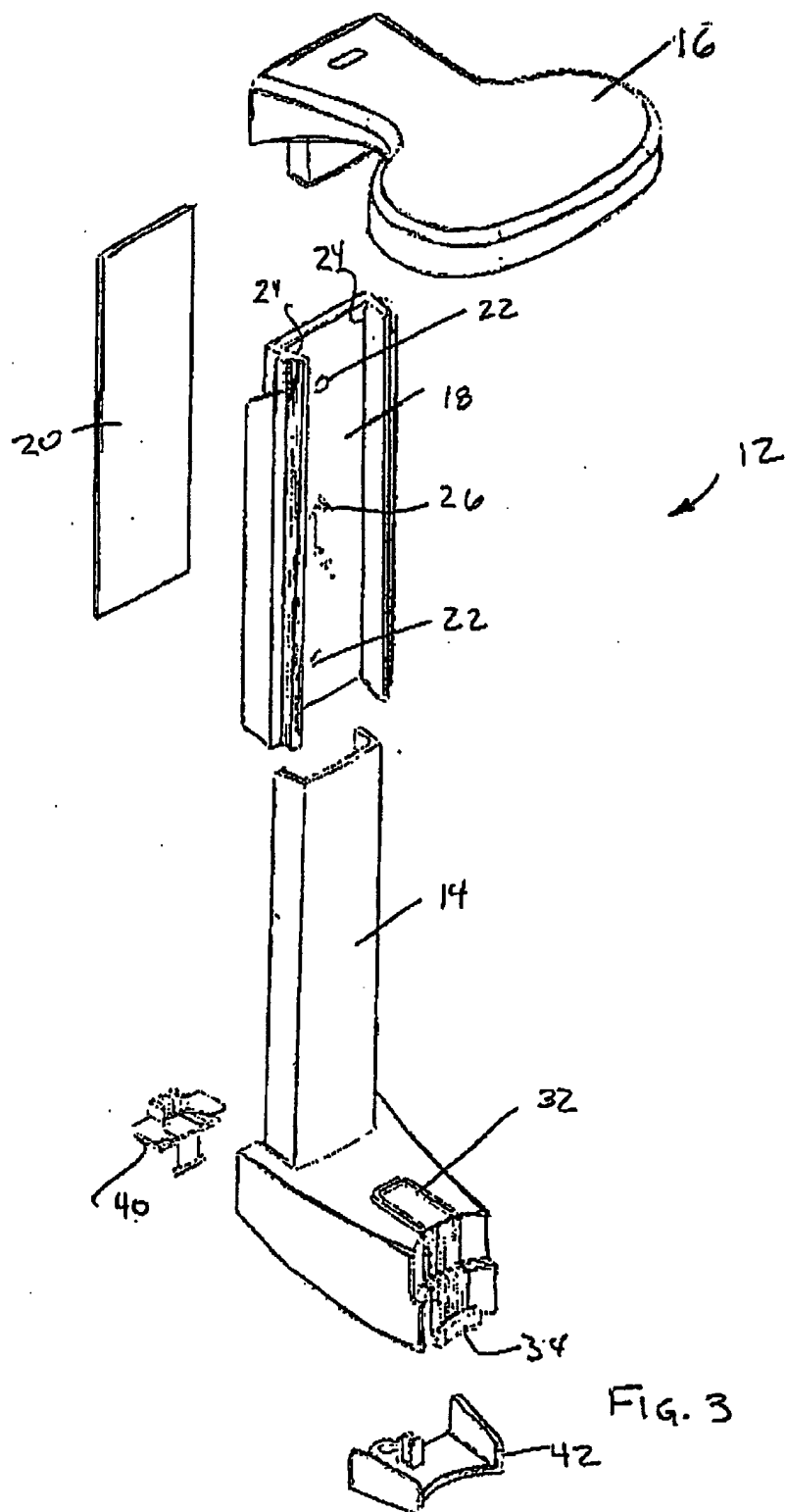


FIG. 2





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EUROPEAN SEARCH REPORT

Application Number
EP 02 00 0410

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The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
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Place of search		Date of completion of the search	Examiner
THE HAGUE		7 May 2002	Fordham, A
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03 82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 02 00 0410

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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