



(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
09.01.2002 Bulletin 2002/02

(51) Int Cl.7: **A47L 13/22**

(21) Application number: **01500168.8**

(22) Date of filing: **03.07.2001**

(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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(30) Priority: **06.07.2000 ES 200001667**

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(54) **Product applicator device for floors**

(57) Product applicator device for floor products such as waxes, materials to clean or polish wood or similar ones, comprising a container (1) containing the product, lengthwise having a flat face on which a cover (2) fits, supporting at least one product delivery valve (5)

and a sponge (3) along its external face, with suitable texture and rigidity, centrally provided with a cylindrical cavity or hollow, suitably inclined to introduce a handle (4) allowing its use over the floor without the need to bend over.

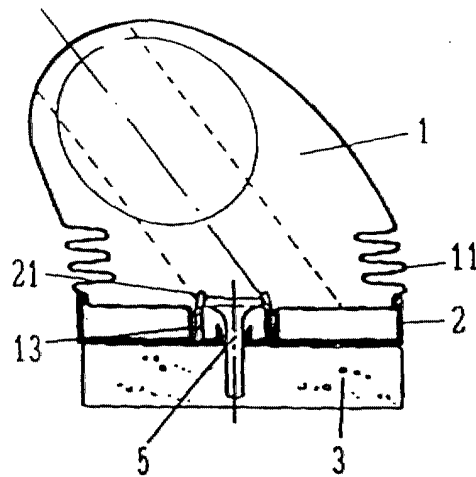


Fig. 2

Description

[0001] As its title indicates, the present invention refers to a device to apply floor products such as waxes, products to clean or polish wood, parquet and similar ones.

[0002] Floor cleaning, polishing or waxing products are sprayed or spilled over the surface and then spread out with a cloth, mop or any similar item. In the market, there is no knowledge of a container with products to be applied over the floor provided with its own application means, like that existing for other surfaces.

[0003] This device comprises a product container lengthwise provided with a flat face to which is adapted a part supporting at least one product delivery valve introduced inside the container, hence maintaining both components coupled; on the outside, it has a piece or block of sponge with suitable texture and rigidity. Either the container itself or its cover has a cavity or cylindrical protrusions suitable to introduce a handle which leaving the container with a certain inclination permits the correct application and distribution of the product of the container over the floor without needing to bend over.

[0004] The object of the present invention will be better understood with the aid of the following description which is based on a practical embodiment. This description is carried out on the grounds of the drawings, in which:

Figure 1 shows a general perspective view of the product applicator device object of this invention.

Figures 2 and 3 show two sections according to vertical planes at different points along this applicator device.

Figure 4 shows a perspective view of another cleaning device with these features with a lay out of all the parts.

[0005] The applicator device for floor products object of this invention comprises a container (1) having the shape of a bottle laying on its side, lengthwise having a flat face over which a cover (2) is fitted, supporting at least one product delivery valve (5), and on its external face having a sponge (3) with suitable texture and rigidity. A handle (4) emerges towards the centre of the container (1) and with an inclination of approximately 45°, having a length similar to that of a broom or mop and allowing application of the sponge (3) over the floor surface without the need to bend over, whilst fluid is extracted from the container (1) through the aforementioned valves.

[0006] As may be seen in figure 1, towards the centre and sideways the container (1) has a cylindrical shape (12) which is open above and suitable to fix the handle (4) of this device. Another option shown in figure 3, consists of a cylindrical extension (22) starting from the part as a cover (2), crossing the container (1) through a hollow (12), said extension (22) constituting the coupling

means of the handle (4). In the option shown in figure 4, this extension (22) has a coupling by means of two protrusions (23) forming a rotation axis, so that the handle (4) swings with respect to the part (2) modifying its inclination with respect to the application plane.

[0007] In figure 2, part (2) may be seen sectioned across one of its valves (5), which are assembled in a protruding cylindrical shape (21) which is introduced inside a hole corresponding to a protrusion (13) of the container base (1), allowing the coupling of both bodies (1) and (2) thanks to the tongue jointing between both protrusions.

[0008] Each valve consists of a pin emerging outside the cover (2), integrating itself in the sponge (3) which incorporates a head inside the shape (21) surrounding it, blocking the outlet channel around said pin which is opened on pressing it inwards when the cleaning device touches the floor, delivering a small amount of product impregnating the sponge (3) and is distributed over the floor surface to which it is applied.

[0009] In figure 4, a valve different from the previous one may be seen, comprising a ball (6) which touches the floor and on rolling it spreads the bottle contents through it. This ball (6) is inside a cavity (22) similar to that mentioned above and is coupled to the bottle (1) mouth (13) under pressure.

[0010] The container (1) has any geometrical shape with the sole peculiarity of having a flat face to incorporate the cover (2). However, preferably lengthwise and along both sides of the cover (2), it has a surface with a bellows shape (11) providing it some flexibility and facilitating exit of the product when pressing the container.

[0011] The material, shape and arrangement of the components may be varied, provided that such a change does not involve a modification of the essential features of the invention claimed below.

Claims

1. A product applicator device for floors for applying products such as waxes, materials to clean or polish wood or similar, **characterised in that** it comprises a container (1) containing the product and lengthwise having a flat face in which a part (2) is fitted, supporting at least one product delivery valve (5) introduced inside the container and along the outside of a piece or block of sponge (3) with suitable texture and rigidity; also **characterised in that** said part (2) and/or the container (1) defines a protrusion or inclined cylindrical hollow in the central area, which is suitable for the introduction of a handle (4) allowing this device to be used on the floor without having to bend over.
2. A device according to the previous claim, **characterised in that** towards the middle area and sideways, said container (1) has a cylindrical shape (12)

open above and suitable to fix the handle (4) of this device in it.

3. A device according to the previous claims, **characterised in that** said part with the shape of a cover (2) has in its middle part an inclined cylindrical extension (22) crossing the container (1) through a hollow existing for such a purpose, coupling the handle (4) of the device in it. 5
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4. A device according to the previous claim, **characterised in that** said extension (22) has two protrusions (23) defining an axis across which it couples in the cover (2) in a swinging manner, allowing the handle (2) inclination to slightly vary. 15
5. A device according to previous claims, **characterised in that** the cover (2) of the container integrates at least one valve (5) assembled in a protruding cylindrical shape (21) which is introduced inside a hole corresponding to a protrusion (13) of the container base (1), hence creating the link between both parts. 20
6. A device according to previous claims, **characterised in that** said valve (5) is formed by a pin emerging outside the cover (2), being integrated in the sponge (3), incorporating a head inside the shape (21) surrounding it, blocking the outlet around said pin, except when the latter is pressed inwards on applying the device to the floor. 25
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7. A device according to claims 1 to 5, **characterised in that** said valve comprises a ball (6) which rolls inside a cavity (22) defined in the cover (2) across which said cover couples, being introduced into the bottle (1) mouth (13) under pressure. 35
8. A device according to previous claims, **characterised in that** said container (1) has, lengthwise, next to the flat face on which the cover (2) fits, a bellows (11) shaped surface providing some flexibility. 40
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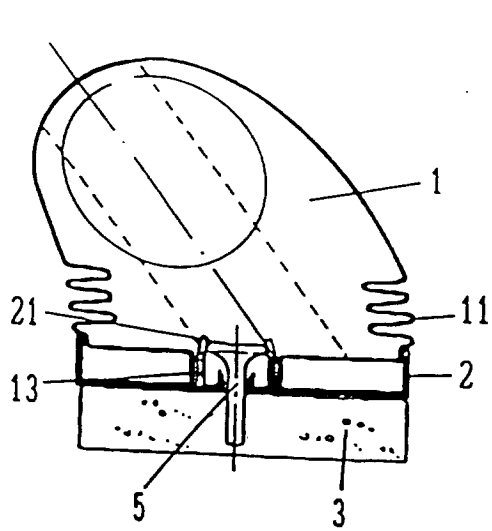


Fig. 2

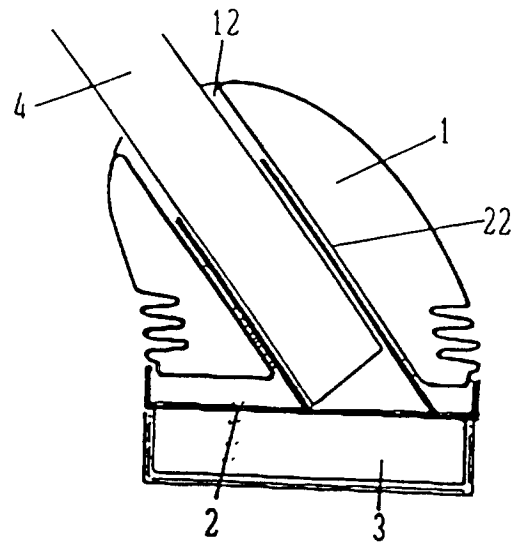


Fig. 3

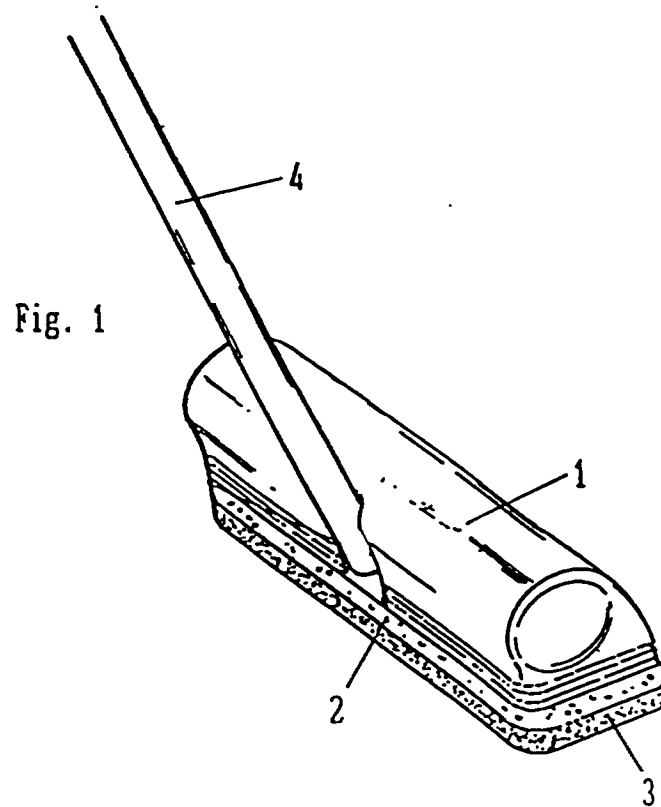


Fig. 1

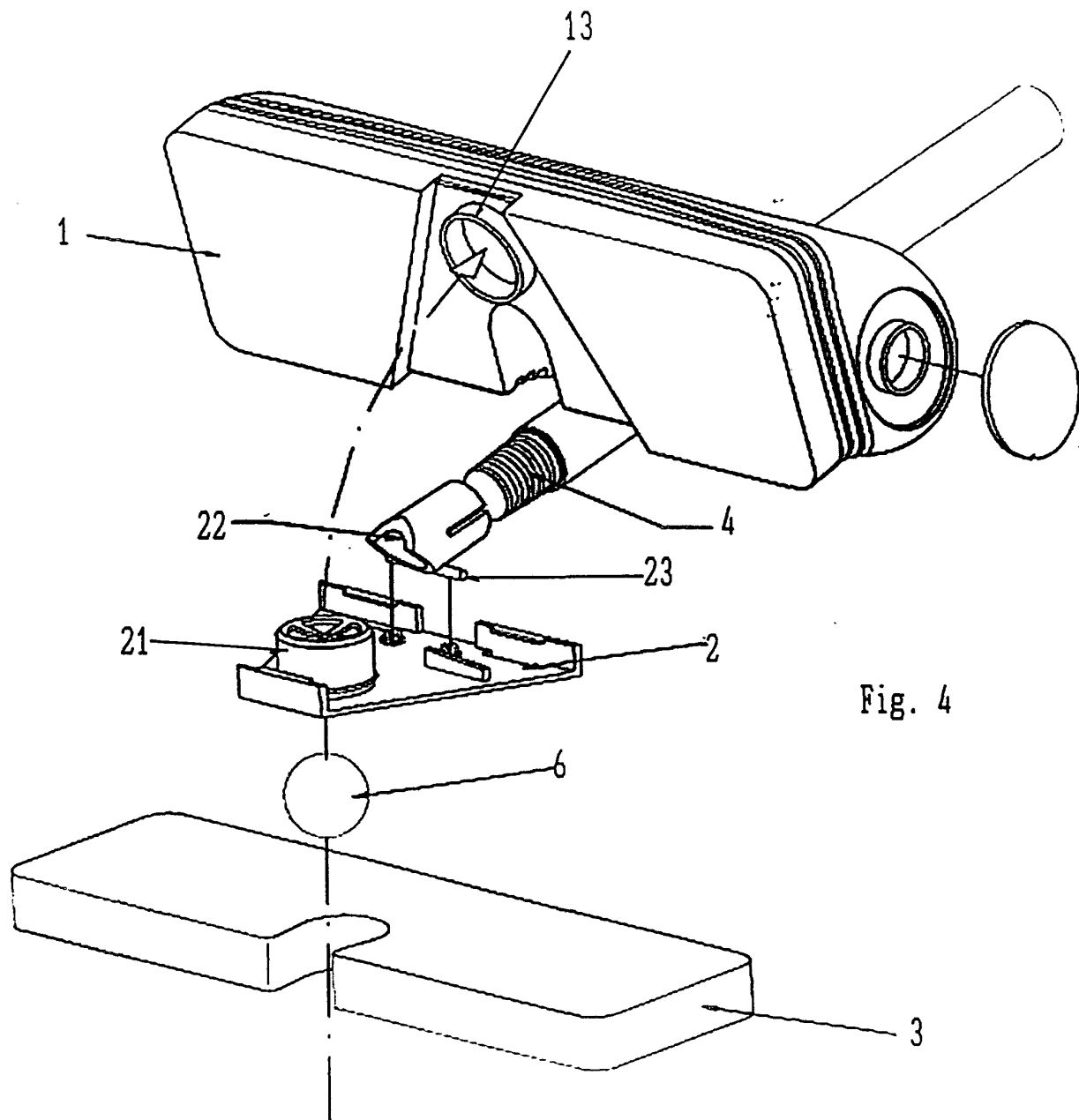


Fig. 4



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EUROPEAN SEARCH REPORT

Application Number
EP 01 50 0168

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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 18 October 2001	Examiner Bourseau, A-M
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)



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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			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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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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