(11) EP 2 050 513 A2

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:22.04.2009 Bulletin 2009/17

(51) Int Cl.: **B05C** 17/02^(2006.01)

(21) Application number: 08166592.9

(22) Date of filing: 14.10.2008

(84) Designated Contracting States:

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated Extension States:

AL BA MK RS

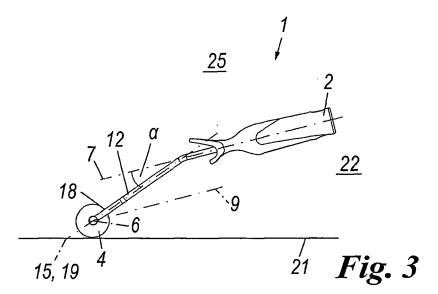
(30) Priority: 17.10.2007 IT MI20071999

- (71) Applicant: Nespoli Engineering KKFT H-1031 Budapest (HU)
- (72) Inventor: Nespoli, Alessandro 23896, Lecco (IT)
- (74) Representative: Ripamonti, Enrico Giambrocono & C. S.p.A., Via Rosolino Pilo, 19/B 20129 Milano (IT)

(54) Device for painting walls

(57) The device (1) for painting walls includes a handle (2) from which a stiff support (3) protrudes, arranged

for holding a roller (4) along a first axis (6). A longitudinal axis (7) of the handle (2) is spaced apart from the first axis (6)without intersecting it.



EP 2 050 513 A2

15

20

25

[0001] The present invention relates to a device for painting walls.

1

[0002] In particular, the invention relates to a device of roller type.

[0003] As it is well-known, the traditional devices of the typeshown in Figure 1 are made by providing a handle from which a support extends, which holds an idle rotary roller.

[0004] The roller is typically made of a spongy or woolly material and it is arranged (when it is dipped into a paint container) for absorbing the paint and releasing it on a wall, when the roller is brought at the wall and rolled on it. [0005] In particular, as shown in Figure 1, the roller axis and the handle axis intersect in a point I.

[0006] However, it has been found out that when such traditional devices are used, a huge force needs to be applied to the handle to press the roller against the wall which is being painted; this is necessary, for example, to release the desired amount of paint onto the wall to be painted.

[0007] Furthermore, it has been found out that the traditional devices turn out to be unstable during use, because when the roller is rolled onto the wall, it tends not to follow its own rectilinear trajectory.

Moreover, in some cases the traditional devices turned out to be uncomfortable to be used, because the handle is quite close to the wall during use.

[0008] Therefore, the technical object underlying the present invention is providing a device to paint walls allowing the above technical drawbacks of the prior art be eliminated.

[0009] Within this technical object, an object of the invention is to provide a device allowing to limit the force to be applied onto the handle for pressing the roller against the wall so as to release the desired quantity of paint.

[0010] Another object of the invention is implementing a device which can be used in a convenient way both when a device having stable behaviour is needed, in the sense that it keeps its own rectilinear trajectory, and when a device with unstable behaviour is needed, that is a device the roller of which does not keep its own rectilinear trajectory when it is rolled onto a surface.

[0011] The technical object, as well as these and other objects, according to the present invention are achieved by implementing a device for painting walls according to claim 1.

[0012] Other features of the present invention are further defined in the subsequent claims.

[0013] The device according to the invention, when it is used, on one side allows the force be limited, to be applied to the handle for pressing the roller against the wall; however, according to the invention, the device can be advantageously used also on the opposite side.

[0014] In this case, when used on one side the device turns out to be stable and the roller, upon rolling onto a

surface, keeps its own rectilinear trajectory; on the contrary, when used on the opposite side, the device turns out to be unstable, that is the roller, upon rolling onto a surface, tends not to keep its own rectilinear trajectory.

[0015] Therefore, the device according to the present invention can be handled in a simple way also by not skilled users, so as to make the roller to follow rectilinear and not rectilinear trajectories.

[0016] Additional features and advantages of the invention will result better evident from the description of a preferred, but not exclusive, embodiment, of the device according to the invention, illustrated by way of example and not for limitative purposes in the enclosed drawings, wherein:

figure 1 shows an elevational side view of a device of traditional type;

figures 2 and 3 show a plan view (with partially sectioned roller) and an elevational side view of the device according to the invention used at a first side, respectively;

figure 4 shows a perspective view of the device of figures 2, 3; and

figure 5 shows an elevational side view of the device of figure 3 used at a second side opposite to the first one.

[0017] With reference to the mentioned figures, a device for painting walls is shown, designated with the overall reference numeral 1.

[0018] The device comprises a handle 2 from which a stiff support 3 extends realized, for example, with a steel or aluminium rod and arranged for keeping a roller 4 on a first axis 6.

[0019] As shown in figure 3, in the elevational side view a longitudinal axis 7 of the handle 2 is spaced apart and it does not intersect the first axis 6 of the roller 4; an axis 9 parallel to the longitudinal axis 7 of the handle 2 is perpendicular to the first axis 6 of the roller 4.

[0020] The support 3 has a portion 11 connecting to the handle 2; the portion 11 is partially embedded in the handle 2 itself; to this purpose the handle 2 is made of rubber or plastic material, preferably of "soft touch" type. **[0021]** This allows realizing a stiff connection of the support 3 to the handle 2.

[0022] The portion 11 is connected to an intermediate portion 12 from which an end portion 13 extends; this portion 13 is angled with respect to the intermediate portion 12 and extends along the first axis 6.

[0023] The intermediate portion 12 of the support 3 extends along a second axis 15.

[0024] In an elevational side view (figure 3) the second axis 15 and the longitudinal axis 7 of the handle 2 are angled one relative to another by an angle, which is smaller than 35 degrees, preferably comprised between 10-30

2

25

30

35

40

45

50

degrees and more preferably equal to about 20 degrees. **[0025]** On the contrary, in a top view (figure 2) the axis 15 of the intermediate portion 12 is angled relative to the longitudinal axis 7 of the handle 2.

[0026] Furthermore, the support 3 has a spacing portion 18 between the end portion 13 and the intermediate portion 12 arranged for allowing the rotation of the roller 4 without interfering with said portions.

[0027] In the elevational side view (figure 3), the spacing portion 18 extends along a parallel axis 19 which overlaps the second axis 15 of the intermediate portion 12.

[0028] The spacing portion 18, in a plan view (figure 2), extends along an axis 19 parallel to the longitudinal axis 7 of the handle 2.

[0029] The operation of the device according to the invention appears clearly from the above description and the enclosed Figures and, in particular, is substantially the following.

[0030] The paint roller 4 is previously impregnated; then, the roller 4 is rested onto a wall 21 and it is made to rotate against it by exerting at the same time a pressure, the extent of which can be varied according to the needs.

[0031] As an alternative, the device 1 is used as shown in figure 3 or in the opposite direction (figure 5).

[0032] When used in the sense shown in figure 3, that is with the roller 4 included in an area 22 defined between the wall 21 and the axis 7 of the handle 2, the use is stable and the user has great precision in implementing rectilinear trajectories.

[0033] Furthermore, the use of the device in this way makes pressing the device against the wall 21 (with respect to the use of a traditional device) easier, more stable and more comfortable and it leaves great freedom in handling the device because the hand it is quite far from the wall.

[0034] The device can be conveniently used also in the direction opposite to that shown in figure 3, that is with the roller 22 included in an area 25 (figure 5); in this case the value of the chosen angle allows the device be handled in a very easy way.

[0035] In fact, when used in this way, the device is unstable and the user can perform even very articulated and complex (however not rectilinear) trajectories in a simple and easy way.

[0036] The device so conceived is susceptible to several modifications and variants, all within the scope of the invention; furthermore, all details can be replaced by technically equivalent members.

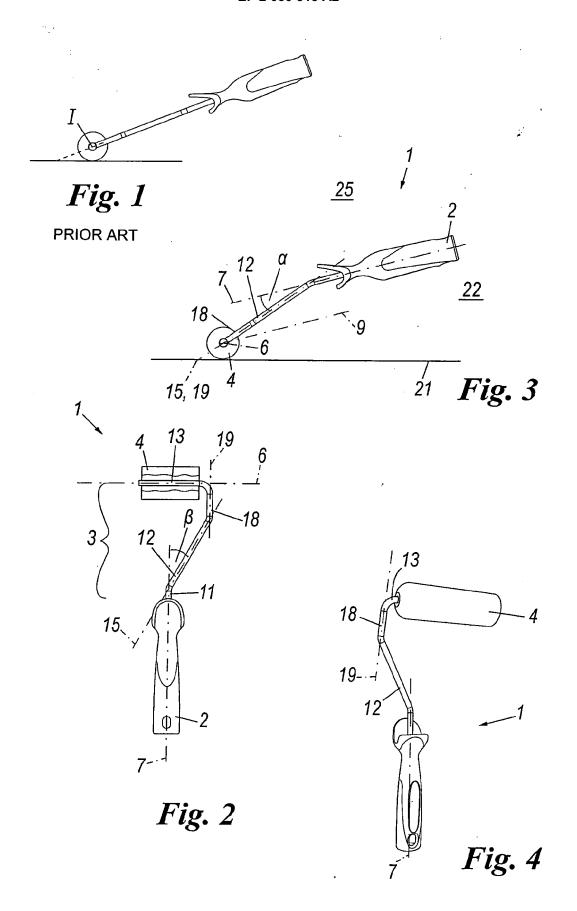
[0037] Practically, the used materials, as well as the sizes, could be anyone according to the needs and the state of art.

Claims 55

1. Device (1) for painting walls comprising a handle (2) from which a stiff support (3) protrudes, arranged for

holding a roller (4) along a first axis (6), **characterized in that** a longitudinal axis (7) of said handle (2) is spaced apart from said first axis (6)without intersecting it.

- 2. Device (1) according to claim 1, **characterized in that** said stiff support (3) is connected in a rigidly to said handle (2).
- 10 3. Device (1) according to one or more of the preceding claims, characterized in that an axis (9) parallel to the longitudinal axis (7) of the handle (2) is perpendicular to the first axis (6).
- Device (1) according to one or more of the preceding claims, characterized in that the support (3) has a portion (11) connecting to the handle (2) and connected to an intermediate portion (12) from which an end portion (13) extends which is angled with respect to the intermediate portion (12) and which extends along said first axis (6).
 - 5. Device (1) according to one or more of the preceding claims, **characterized in that** the intermediate portion (12) of the support (3) develops along a second axis (15), wherein said second axis (15) and said longitudinal axis (7) of the handle (2) are rotated therebetween, in a elevational side view, by an angle () smaller than 35 degrees, preferably comprised between 10-30 degrees and more preferably equal to about 20 degrees.
 - 6. Device (1) according to one or more of the preceding claims, characterized in that, in a top view, the axis (15) of the intermediate portion (12) is angled with respect to the longitudinal axis (7) of the handle (2).
 - 7. Device (1) according to one or more of the preceding claims, **characterized in that** said support (3) has a spacing portion (18) between the end portion (13) and the intermediate portion (12) arranged for allowing the roller (4) be rotated without interference, wherein the spacing portion (18) extends, in an elevational side view, along a parallel axis (19) and which overlaps the second axis (15) of the intermediate portion (12).
 - 8. Device (1) according to one or more of the preceding claims, **characterized in that** said spacing portion (18), in a plan view, extends along an axis (19) parallel to the longitudinal axis (7) of the handle (2).



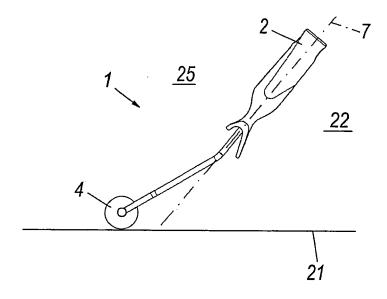


Fig. 5