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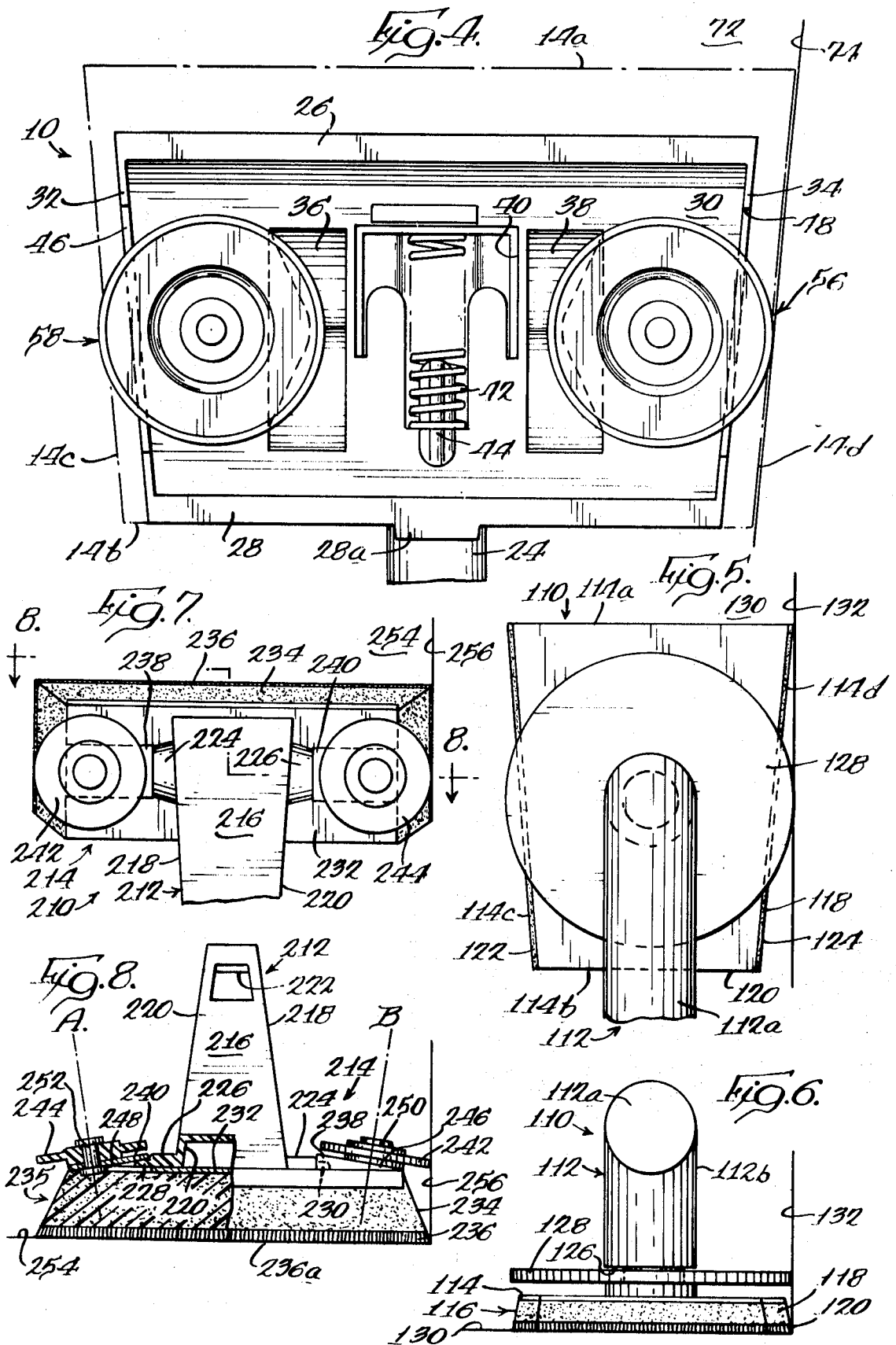
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3,605,165

PAINT APPLICATION WITH GUIDE MEANS

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2 Sheets-Sheet 2



1

3,605,165

PAINT APPLICATION WITH GUIDE MEANS
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7 Claims

ABSTRACT OF THE DISCLOSURE

A paint applicator with guide means for painting a surface which abuts an intersecting surface, characterized in that the guide means, preferably in the form of rollers, project outwardly beyond opposite sides of the applicator and lie on either side of the handle. Preferably, the applying surface is trapezoidal with the rollers overhanging nonparallel edges which converge toward each other.

BACKGROUND OF THE INVENTION

Field of the invention

This invention relates to paint applicators, and more particularly, to an improved guide means therefor.

Brief description of the prior art

When painting wall-like surfaces which abut other intersecting surfaces where only one surface is to be painted, it is desirable to utilize an applying instrument with guide means to keep the other surface free of paint. Pertinent prior art patents which show such instruments are the patents to Wood 2,810,148; Sopocy 2,985,902; and Moore 3,359,589.

The applicator shown in Sopocy 2,985,902 is a small circular pad at the end of an elongate handle with an enlarged rotatable disc at the top of the pad. The disc guides against adjacent surfaces, keeping the pad free of contact therewith.

The applicator shown in Moore 3,359,589 includes a small pad fixed to a generally flat base having an upraised grasping flange. Rollers project outwardly from one edge, or in the case of a triangular shaped applicator, one roller at the vertex overhangs two converging edges.

The applicator shown in Wood 2,810,148 includes a pad secured to a generally rectangular flat base having an upstanding grasping flange. A pair of rollers overlie one forward edge of the applicator.

All of these prior art devices are suitable for, and intended only for use in "trim" or "edge" work and not for general paint application. Thus, a user might switch between applicators for general application and another applicator for "trim" work. Accordingly, a desire for a general paint applying tool suitable for both general application and "edging" work has been felt in the art.

SUMMARY OF THE INVENTION

This invention is directed, in brief, to the provision of an improved general purpose paint applying tool having guide means for enabling the tool to do "edge" or "trim" work as well.

The best mode currently contemplated by me for carrying out the invention includes the provision of an applicator of the type having a handle pivoted to a base with an applying pad removably secured to the base similar to that disclosed and claimed in the copending application of Burns et al. entitled "Paint Applying Tool," issued Oct. 21, 1969 as U.S. Pat. No. 3,473,183. The structure shown in the aforementioned Burns patent includes an applicator and base which are generally trapezoidal in plan, having parallel leading and trailing edges and nonparallel converging sides. In addition, the sides of the applicator pad

2

taper upwardly toward each other from the pad face. In such an applicator, guide means in the form of rotatable disc-like rollers are positioned in opposite sides of the base with the periphery of the rollers overlying the opposite sides of the pad.

Another mode of this invention includes a centrally positioned large roller in the base which overlies both opposite side edges of the pad secured to the base.

Another mode of this invention includes tow rollers adjacent opposite sides of the pad and applicator with the rollers mounted so that they overlie the opposite edges as aforementioned, but with the axis of rotation of the rollers being inclined inwardly towards the center and face of the pad.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a fragmentary perspective view illustrating a paint applying tool of this invention in use painting a wall-like surface in abutment with an intersecting surface; FIG. 2 is a section view taken generally along the lines 2—2 of FIG. 1 with parts broken away for clarity of illustration;

FIG. 3 is a section view taken generally along the lines 3—3 of FIG. 2;

FIG. 4 is a fragmentary top plan view of the applicator of this invention;

FIG. 5 is a fragmentary top plan view of a modified form of this invention.

FIG. 6 is an elevational view of the structure shown in FIG. 5;

FIG. 7 is a fragmentary top plan view of another modified form of this invention; and

FIG. 8 is a front elevational view of the modified form shown in FIG. 7.

While this invention is susceptible of embodiment in many different forms, there is shown in the drawings and will herein be described in detail, a specific embodiment thereof, with the understanding that the present disclosure is to be considered as an exemplification of the principles of the invention and is not intended to limit the invention to the embodiment illustrated.

DESCRIPTION OF THE PREFERRED EMBODIMENT

The applicator 10 of this invention includes a handle portion 12 and an applicator element 14 releasably connected thereto. Generally speaking, the applicator element has substantially parallel front and rear edges 14a and 14b and non-parallel side edges 14c and 14d which converge toward each other in a forwardly to rearwardly direction. Also the sides converge upwardly and inwardly toward each other in a vertical direction. The applicator 14 includes a generally rigid backing member 16 having laterally extending front and rear flanges 16a and 16b along front and rear edges thereof. A compressible intermediate member preferably of a sponge-like substance is adhered to the backing member 16. A paint carrying or transfer member 20, including a plurality of short erect fibers, such as mohair or the like, is bonded to the lower surface of the intermediate member 18.

The handle member 12 is composed of two parts, such as a base 22 and a gripping member 24. Base 22 defines a male member cooperating with female member formed by the forward and rear flanges 16a and 16b of the backing member 16 to releasably mount the applicator 14 on the handle 12. In this connection, the base includes front and rear flanges 26 and 28 of a size and shape to be nestably received within the flanges 16a and 16b of the backing member 16. The base is also provided with a rearwardly extending portion 28a which extends through an aperture (not shown) in flange 16b of the backing member to assist in the securement of the two together.

3

The backing member includes an upraised platform portion 30 with spaced depending side walls 32 and 34 and depending front walls 33 and 35. A pair of spaced uprights 36 and 38 extend upwardly from the medial portion of the platform 30 on either side of the gripping member 24 which is pivoted therebetween by means of pin 39. A medial opening 40 in the platform 30 between uprights 36 and 38 permits the swinging movement of the gripping member 24 about pin 39. A spring 42 is biased between the interior of gripping member 24 and impaled on tongue 44 formed to the underside of the platform 30 to normally urge the gripping member to the position shown in FIG. 3.

The side walls 32 and 34 of base 22 are provided with forwardly to rearwardly extending slots 46 and 48. The underside of platform 30 is provided with a pair of spaced depending, generally circular, cylindrical, hollow stubs 50, each of which is provided with a circumferential groove 52 for accommodating a retaining ring 54.

A pair of guide means or guide rollers 56 and 58 are mounted for rotation about each of the depending stubs 50. Guide rollers 56 and 58 include a disc-like periphery 60, a frusto-conical intermediate portion 62, and a reduced upper end 64 having an opening 66 generally of a size and shape to be received about the stub 50. The center portion 64 is captivated between the retaining ring 54 on the underside and the inside of the platform. As best seen in FIG. 2, the periphery of each of the rollers 56 and 58 extends outwardly beyond the side walls 32 and 34 a distance sufficient to at least overlie, if not extend slightly beyond, the opposite side edges of the applicator pad.

In use, when the applicator tool 10 is used to paint one wall surface, such as wall 72, which is in abutment with another intersecting wall surface, such as surface 74, and when it is desired to apply paint only to the one wall surface 72, one of the rollers such as roller 58 will lie in rolling engagement with the face of the abutting intersecting wall surface 74 and hold the pad spaced outwardly therefrom so that only the leading edge or point defined by the intersection of the front and side edges of the applying surface 20 of the pad will touch the intersection of the two wall surfaces.

As best seen in FIG. 4, the generally trapezoidal configuration of the applicator pad lends to the use of the guide rollers. The pad may be pivoted about the one roller 56 or 58 which is in engagement with the adjacent wall to make sure of the desired line contact of the leading edge or point formed by the intersection of one of the side and the front edges. This will provide a minute paint applying area held, at a desired position with the aid of the guide rollers to insure that the paint will be applied up to the intersection of the two wall surfaces 72 and 74, but not beyond, or not on the surface 74.

A modified form of this invention is shown in FIGS. 5 and 6. There, the tool 110 is provided with a handle 112 having right angular portions 112a and 112b, portion 112a intended to be grasped by a hand during use and portion 112b interconnecting the portion 112a with base 114.

Base 114 is a generally planar structure, being substantially trapezoidal in plan, and having spaced parallel forward and rear edges 114a and 114b, respectively, and spaced forwardly to rearwardly converging side walls 114c and 114d, respectively. An applicator pad 116 is mounted on the base by suitable means, such as the releasable means shown in FIGS. 1 through 4, if desired, or by being permanently bonded thereto. Applicator pad 116 is similarly of a trapezoidal configuration as discussed with respect to base 14, having parallel front and rear edges 114a and 114b and converging sides 114c and 114d. The applicator pad preferably includes an intermediate compressible portion 118 made of suitable material such as sponge-rubber or the like and a paint applying and transferring surface 120, preferably being of the short

4

fibrous material previously discussed with respect to the applying surface 20 of tool 10.

Handle 112 is provided with a reduced neck portion 126 in the interconnecting portion 112b thereof. A rotatable guide disc 128 is rotatably mounted in the reduced neck area, the guide disc having a peripheral extent sufficient to overlie both of the sides 114c and 114d.

In use, when the applicator is used to apply paint to a surface 130 which abuts an intersecting surface 132, the periphery of the disc 128 will abut the wall to hold the side 114d out of paint applying contact with the wall 132. As previously discussed, the applicator 110 may be pivoted about the guide roller 128 to make the necessary fine adjustments to avoid application of paint to the wall surface 132. It has been found that the closer the axis of rotation of the guide rollers to the center of the paint applying tool, the better the control over the tool and the embodiment shown in FIGS. 5 and 6 carries this concept to the maximum extent since the guide roller 128 is positioned in the actual center of the applying tool.

FIGS. 7 and 8 show another modified form of this invention. There the tool 210 is provided with a channel shaped handle 212 and an applicator element 214.

The channel shaped handle 212 includes a medial portion or medial web 216 and two depending sides 218 and 220. The forward end of each of the two depending sides 218 and 220 is provided with laterally projecting feet 224 and 226, each of which terminates in reduced ends 228 and 230.

The applicator 214 includes a backing member 232, preferably of a rigid material, an intermediate member 234, preferably of a compressible material such as sponge material, and a paint carrying and transfer member 236 preferably of the fibrous nature mentioned with respect to the member 20 of tool 10. Paint transfer member 236 terminates in a generally flat face 236a. The backing member, intermediate member and transfer member are laminated together to form an applying element 235.

The upraised ears 238 and 240 on the backing member 232 receive the reduced feet ends 228 and 230 of the handle. Preferably, the handle is made of a generally rigid, but slightly compressible material, such as plastic, so that the sides 218 and 220 may be squeezed inwardly to withdraw the reduced feet ends 228 and 230 from the ears 238 and 240 to thereby provide a means for releasably associating the handle 212 with the applicator 214.

A pair of spaced disc-like guide rollers 242 and 244 are rotatably mounted on the upper inclined surfaces 246 and 248, respectively, of the ears 238 and 240, by suitable means, such as rivets 250 and 252. It is to be noted that the axis of rotation of the rollers is inclined relative to the face 236a of the transfer member 236 as indicated by the axes a and b shown in FIG. 8. Again, the periphery of the disc-like rollers 242 and 244 overlie the sides of the applicator member a sufficient distance to be at least coplanar with the lateral extent of the paint carrying and transfer surface 236. It has been found that an optimum degree of control can be also obtained by mounting the guide rollers on an inclined axis as shown in FIGS. 7 and 8. Also, this permits the use of an abutting, intersecting surface as a guide which is of reduced dimension such as the use of an adjacent window molding or the like as a guide surface which is extremely reduced in its transverse dimension as opposed to an intersecting wall.

The foregoing detailed description is given for clearness of understanding only and no unnecessary limitations are to be understood therefrom, as some modifications will be obvious to those skilled in the art.

I claim:

1. In combination with a paint applying tool of the type having a handle, a base having forward and rear edges and opposite sides, and an applying pad connected to the base, the pad including a backing member, an intermediate member and a paint applying and trans-

5

ferring face, and whereby the side walls of the pad taper upwardly and inwardly to the base from the transferring face of the pad, spacer means for holding the applicator pad in engagement with one surface out of paint applying contact with an abutting intersecting surface comprising: roller means rotatably mounted to opposite sides of the base and having peripheral portions overlying and projecting beyond the edges of the opposite sides of the applicat-
 ing pad, the roller means being generally centrally located with respect to the forward and rear edges of the base so that when the applicator is in a paint applying mode with the applying pad in engagement with one surface and the forward and rear edges thereof extending transversely to the surface, either side of the applicator will be maintained free of paint applying contact with an abutting intersecting surface.

2. The paint applicator combination of claim 1 wherein a roller means comprises a pair of rotatable rollers adjacent each side of the backing member mounted for rotation about an inclined axis.

3. The combination of claim 2 wherein the handle means extends obliquely outwardly from the backing member.

4. The combination of claim 2 wherein the forward and rear edges of the applying pad are generally parallel and the two side edges are nonparallel and converge.

5. The combination of claim 4 wherein the intermediate member is formed from a compressible material.

6. In a paint applicator of the type having a handle, a base, and an applying element connected to the base, the base and applying element having forward and rear edges and opposite sides, spacer means for holding

6

the applicator element in engagement with one surface out of paint applying contact with an abutting intersecting surface comprising: two rollers rotatably mounted to the base adjacent opposite sides of the applicator for rotation about an inclined axis, each roller having peripheral portions overlying and projecting beyond the edges of the opposite sides of the applying element, the rollers being generally centrally disposed with respect to the forward and rear edges of the base so that when the applicator is in a paint applying mode with the applying element in engagement with one surface and the forward and rear edges thereof extending transversely to the surface, either side of the applicator will be maintained free of paint applying contact with an abutting intersecting surface.

7. The applicator of claim 6 wherein the side walls of the applying element converge inwardly and upwardly from the applying face.

References Cited

UNITED STATES PATENTS

1,881,587	10/1932	Hopkins et al. -----	401—147X
2,534,589	12/1950	Gebien -----	401—193X
2,985,902	5/1961	Sopocy -----	15—210X
3,023,443	3/1962	Brandeis -----	15—230.11
3,204,276	9/1965	Kennedy -----	15—118X
3,359,589	12/1967	Moore -----	15—210
3,369,268	2/1968	Burns et al. -----	15—210

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