

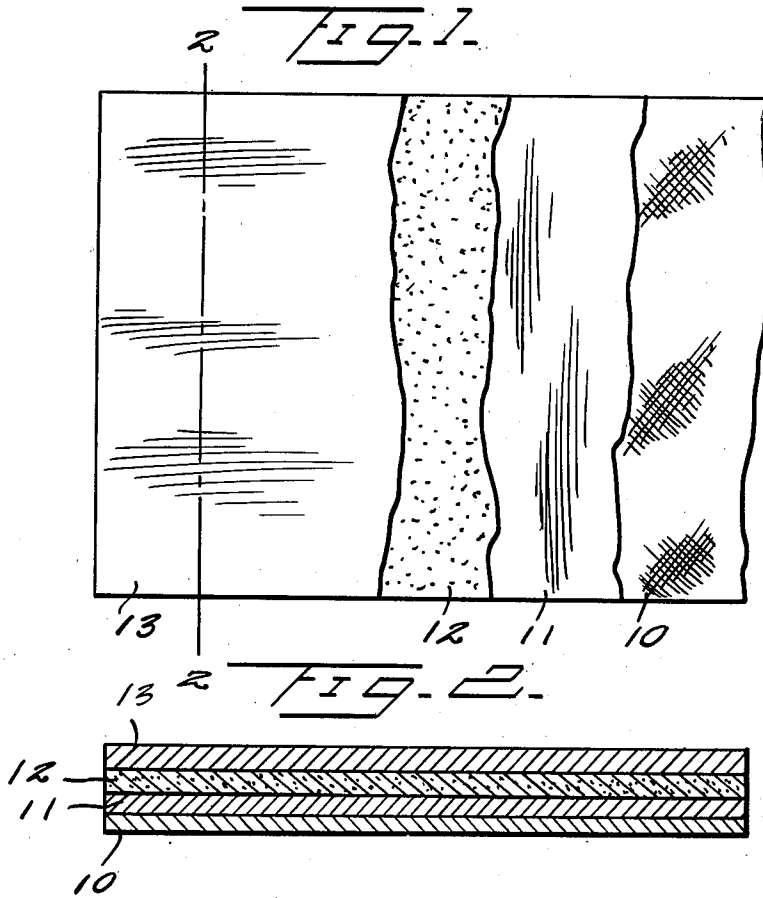
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DECALCOMANIA

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## UNITED STATES PATENT OFFICE

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## DECALCOMANIA

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This invention relates to decalcomanias.

In the production of a decalcomania the material forming the design or character is applied in a well known manner to a carrier, which may be paper or the like. This carrier is usually coated with a water soluble coating so that the decalcomania may be released from the carrier upon saturation of the carrier in water. In one type the decalcomania is removed from the carrier when the latter is moist by sliding the decalcomania off of the carrier onto the surface receiving the decalcomania and an adhesive is activated by the moisture which will cause the decalcomania to stick to the surface. However, in this type of decalcomania the design is frequently distorted or injured during the application thereof.

In another type of decalcomania, the surface receiving the decalcomania is coated with varnish, and at the time in the drying of the varnish when the latter is tacky the decalcomania is applied to the surface. This method of applying the decalcomania calls for close timing as to the tacky condition of the varnish so that the surface will not be marred.

It is, therefore, an object of this invention to provide an improved decalcomania which is removably mounted on a suitable carrier, such as paper or the like, and wherein the design or character is coated with a permanently tacky coating which is insoluble in water. The tacky coating is initially covered by a water soluble non-tacky coating so that the carriers with the decalcomanias thereon may be safely stacked one upon another without danger of sticking together.

With the above and other objects in view, our invention consists in the arrangement, combination and details of construction disclosed in the drawings and specification, and then more particularly pointed out in the appended claims.

In the drawings:

Figure 1 is a plan view partly broken away of a decalcomania.

Figure 2 is a sectional view taken on the line 2—2 of Figure 1.

Referring to the drawing, the numeral 10 designates generally a decalcomania carrier which is constructed in the form of a paper sheet which is conventionally treated in a manner whereby this sheet or carrier may be readily removed from a decalcomania indicated at 11 by moistening the carrier. The decalcomania 11 is of conventional construction and composition and is adhesively or otherwise secured to one face

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of the carrier 10 in a manner whereby upon moistening of the carrier 10 in water the latter may be readily removed.

In order to provide a means whereby the decalcomania 11 may be adhesively and firmly secured to a suitable surface the decalcomania 11 has disposed on the face thereof opposite from the carrier 10 a permanently tacky coating 12. The tacky coating 12 is insoluble in water and in one form of the composition of the coating 12 this coating comprises the following ingredients in approximately the proportions indicated:

Per cent by weight

Phthalic anhydride	45
Glycerin	25
Non-drying and non-oxidizing coconut oil	30

The mixture of phthalic anhydride, glycerin and oil is then mixed with xylol in the proportion of 40% xylol to the above mixture. Xylol comprises a volatile solvent for the mixture.

The above ingredients are mixed under room temperatures, and the coating is applied by silk screen or stencil whereupon the coating is air dried under normal room temperatures.

The coating 12 has a permanently tacky characteristic, and in order to provide a means whereby the decalcomanias carrying the coating 12 may be stacked and stored one upon the other the outer side of the tacky coating 12 has applied thereto a coating 13. The coating 13 is a water soluble coating and has a permanently non-tacky characteristic. The coating 13 in one form of this invention comprises the following ingredients in approximately the proportions indicated:

Per cent by weight

Polyvinyl alcohol	10
Water	60
Ethyl alcohol (denatured)	30

The coating 13 is mixed under normal room temperatures and is applied in any suitable manner such as by a roll coat or the like and is then air dried.

A modified form of water soluble coating which may be applied to the tacky coating 12 comprises the following ingredients in approximately the proportions indicated:

Per cent by weight

Methyl cellulose	4
Gum arabic	4
Water	92

The modified coating embodying methyl cellulose, gum arabic and water is mixed together

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under normal room temperatures and is applied under normal room temperatures and then air dried.

With a decalcomania constructed as hereinbefore described the water soluble coating forms a blocking out element for thoroughly coating the permanently tacky coating 12. The decalcomania 11 is initially applied to the carrier 10 in a normal and conventional manner whereupon the tacky coating 12 is applied as by a silk screen or stencil so that the coating 12 will be of sufficient thickness to provide for adhesion of the decalcomania 11 to the desired surface. In applying the decalcomania to the surface the assembly hereinbefore described is immersed in water which will immediately dissolve the water soluble coating 13 and expose the permanently tacky coating 12. The coating 12 with the decalcomania on one side thereof is then applied to the desired surface and as the carrier 10 is at this time saturated or moist with water the carrier 10 may be pulled from the decalcomania 11 leaving this latter element adhesively secured by the permanently tacky coating 12 to the applied surface.

It will, of course, be understood that the permanently tacky coating 12 may be varied as to the ingredients therein, it being only necessary that the tacky coating 12 retain its tacky or sticky characteristics for a substantial period of time. The example given hereinbefore as to the composition of the tacky coating is only one example of this coating.

What is claimed is:

1. A decalcomania comprising a fibrous carrier, a decalcomania member on one face of said car-

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rier and removable therefrom when said carrier has been moistened, a permanently tacky water insoluble coating on said member, said coating comprising a mixture composed of 45% phthalic anhydride, 25% glycerin, and 30% coconut oil, said mixture comprising 60% of the coating, the remaining 40% comprised of xylol, and a water soluble non-adhesive protective coating on said tacky coating.

2. A decalcomania comprising a paper carrier, a decalcomania member, a water soluble adhesive on one side of said decalcomania member securing said decalcomania member to said carrier whereby said decalcomania member may be removed therefrom when said carrier has been moistened, a permanently tacky water insoluble coating on the other side of said decalcomania member and formed of phthalic anhydride, glycerine, coconut oil and xylol, and a water soluble non-tacky non-adhesive protective coating completely covering said tacky coating.

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