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(54) Process for obtaining a decorative effect on products obtained by moulding, and corresponding product

(57) Described herein is a process for obtaining a decorative effect on products obtained by moulding, consisting in: defining the decoration and shades thereof in order to establish the necessary number and types of peening and/or sandblasting operations; shielding the mould with a part of the pattern and treating it with a process of peening or sandblasting; extracting it from the machine which performs these operations and covering the processed part; and inserting within the mould another shielding for the other parts of the pattern, and reintroducing the mould into the machine for it to be peened/sandblasted, but with a peening or sandblasting operation different from the previous one in order to differentiate the surfaces of the mould and create on the moulded piece different lighting effects.

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Description

[0001] The present invention relates to a process for obtaining a decorative effect on products obtained by moulding and to products obtained using said process.

[0002] The main purpose of the present invention is to obtain a decorative effect (for example, floral decorations) on products obtained by moulding, such as vases, chairs, garden articles in general.

[0003] Processes for finishing of the mould by providing smooth parts and peened parts exist, but these surface finishes are provided only to solve particular technical problems of moulding and never for the purposes of creating decorations of a floral type or the like.

[0004] Two or more different finishes have never been used to create a decoration on a moulded product.

[0005] It is known that plastic, in the moulding process of a rotational type, copies perfectly the walls of the mould and reproduces the surface finishes thereof.

[0006] In order to achieve its purposes, the invention proposes a superposition of different surface finishes on one and the same mould in order to create, with this superposition, a decorative effect on the moulded piece.

[0007] Existing alternatives to the above consist in applying adhesives or spraying colour on parts of the mould, which are then absorbed by the moulded piece.

[0008] The peculiar characteristic of the product obtained using the process forming the subject of the present invention is that the different finishes on the moulded product provide a colour-on-colour decoration.

[0009] In order to achieve the aforesaid result, the process, in its essential steps, is described in what follows.

[0010] Once the decoration and the shades thereof have been defined in order to establish the necessary number and types of peening operations, certain shieldings are applied.

[0011] The mould is shielded with a part of the pattern and is treated with a process of peening or sandblasting.

[0012] The mould is then extracted from the machine that performs the above operations, and the processed part is covered.

[0013] Another shielding is inserted for the other parts of the pattern and ???the mould is re-introduced into the machine to undergo peening or sandblasting but with a peening/sandblasting operation different from the previous one in order to differentiate the surfaces of the mould and create on the moulded piece different light effects. If necessary, a third masking will be performed, and the other parts will be polished in order to increase the visibility or the complexity of the decoration.

[0014] The decoration obtained will be always and in any case co-planar and never in relief as was instead obtained with numerous already existing processes (photo-etching or the like).

[0015] The result that it is desired to obtain is to highlight on the finished piece images of various types, for example, flowers and leaves, or create texture images of a tartan type or alphanumeric characters or strings, always of the colour-on-colour type in so far as this process will be always and in any case limited to just one colour and the decoration will stand out against the background in so far as it will present different special lighting effects on smooth parts and on parts that are sandblasted or peened in different ways.

[0016] The attached figure illustrates a part of the product, which may be a vase, a table, a chair, or any other product obtained by moulding, which presents a decoration of the type that can be obtained according to the process described above.

[0017] The above process represents a substantial innovation in so far as, by applying it on vases, chairs, tables, armchairs, benches, etc., it is possible to render the pieces produced up to now far more attractive in appearance, as well as being personalized in so far as the decoration undoubtedly increases the aesthetic value thereof.

[0018] The process may be applied to all products moulded using ?rotational moulding, in particular the ones designed for furnishings in general, such as furniture, chairs, tables, vases, lamps in general, bathroom furnishings and accessories, office furniture.

[0019] Described in detail in what follows is the process according to the invention that it is necessary to follow to obtain colour-on-colour decorations with different surfaces. It is necessary to work directly on the mould as follows.

1) Once the type of decoration to be made on an item has been chosen, it is necessary to define and highlight the various types of shades; a certain type of surface finish that can be made on the surface of the mould (smoothing, sandblasting, peening, scraping, etc.) will be assigned to each shade.

2) Various masks or plaques will then be created; said plaques will be made of a material that is able to protect the surface of the mould from the subsequent surface processes.

3) Then, starting from the finest surface, the entire surface of the mould will be processed; for example, for a decoration whereby the finest surface required is smooth, the surface of the entire mould will be smoothed completely.

4) Next, the subsequent processing operations will be carried out on the mould, after protecting the pattern with masks or plaques glued thereon, previously cut or formed on the mould, with a shape identical to the one indicated on the pattern for that given type of finish; for example, petal-shaped adhesives will be applied in the positions indicated by the pattern where said petals were defined with a smooth effect; another surface finish of the sandblasting type will be made on the areas left exposed.

5) Other plaques or masks will be then applied in order to protect other areas of the mould following a procedure altogether similar to that of the previous

point 4, and another type of surface finishing will be carried out.

6) The process will be repeated for the necessary number of times according to the choice and number of shades initially defined.

7) Once all the protections and masks have been eliminated, the mould will present different surface finishes, which, on the item that is to be moulded, will form a colour-on-colour decorative effect on account of the shades having different surface finishes.

Claims

1. A process for obtaining a decorative effect on products obtained by moulding, such as vases, chairs, and garden articles in general, the process being **characterized in that** it comprises the following steps:

    - once the decoration and the shades thereof have been defined, purposely provided shieldings are applied in the mould in order to define the necessary number and types of peening and/or sandblasting operations;
    - the mould is shielded with a part of the pattern and is treated with a process of peening or sandblasting;
    - the mould is extracted from the machine which performs these operations and the processed part is covered;
    - inserted within the mould is another shielding for the other parts of the pattern, and the mould is re-introduced into the machine to be peened/sandblasted but with a peening or sandblasting operation different from the previous one in order to differentiate the surfaces of the mould and create on the moulded piece different lighting effects;
    - the material with which the product is to be made is injected into the mould; and
    - the end product is extracted from the mould.

2. The process according to Claim 1, **characterized in that**, after the second shielding, a third shielding is carried out, and other parts are polished in order to increase the visibility or the complexity of the decoration.

3. A surface decorated product obtained with the process specified in the preceding claims.