TERLINDEN Richard Wilhelm

(1892 -)

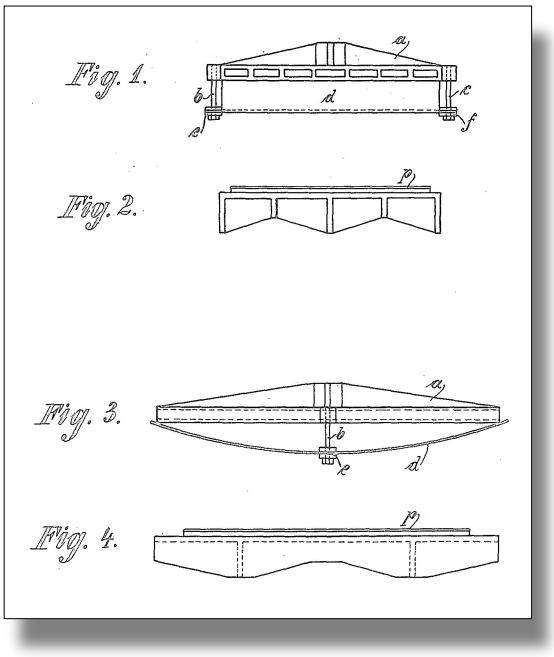
Oberhausen (DE)

Patents (details)

1 - Method for producing imitations of valuable woods and inlaid work on wood by the aid of transfer work

US patent	1464144
Application date	19 January 1923

The methods for imitating valuable woods, and for making inlaid work on less valuable woods, as used heretofore, in so far as they are based on bodily transferring pictures and designs, and in so far as they do not deal with the mere imitation of woodstreaks, have made use of transfer pictures of comparatively small dimensions, in which the colours are applied to an opaque layer (leaf-metal, white body colour or the like). The necessity for such an opaque layer was due to the fact that large surfaces could not be mechanically transferred in a simple manner and with certainty of success. One was confined to imitating small inlaid work, but could not imitate relatively large panels. Panels were usually first provided by hand, and over the whole surface, with the necessary wood tone so (for instance chestnut wood, walnut wood or the like), and then on the surface thus painted or stained, the comparatively small pictures were transferred.



The present invention now permits mechanically covering large surfaces with a unitary transfer picture, and thus produces an imitation which cannot be distinguished from the natural wood. This is accomplished by transferring the transfer picture, without any ground layer (such as leaf-metal, white body colour or the like) directly on a previously roughened wood surface by means of pressure and heat.

The new method differentiates from the old methods, in that pressure and heat is applied. It has been proposed to make use of ordinary printed paper, the colour layer of which has been applied under pressure and heat, to the raw wood. However this method has the drawback that the paper holds back those parts of the colour which have been absorbed by the paper fibers, and therefore the picture on the wood will always appear pale.

Another difference over the known methods consists in first roughening the wood. Heretofore the primary necessity for transferring transfer work on wood was a wood surface smoothened by a ground lacquer surface or by polish. However, when the wood is thus smoothened in any manner there is the defect that the colour layer transferred will be easily damaged in use together with the delicate lacquer layer, or that it will scale off and become cracked.

According to the present invention the roughening of the wood is preferably carried out by means of a solution of one part of shellac and 10 parts of spirit. In this solution the spirit has as object to raise the fibers of the wood, while the shellac has as object to retain the wood surface in this raised condition until the transferring by heat and pressure has been effected. Due to the heat the shellac is liquefied and penetrates the pores of the wood, and therefore does not remain as a layer on the wood surface. Due to the pressure during the heating, the wood fibers which had been raised by the spirit to facilitate the transfer will be pressed down smooth.

Corresponding patents

AT, CH, CA, FI, FR

2 - Method for producing imitations of woods or inlaid work on various materials by the aid of transfer work

US patent	1609500
Application date	7 November 1925
Assigned to	Wilh. Schaumans Tarso Aktiebolag

In my former Patent Nr. 1,464,144 I have described a method for producing imitations of valuable woods and inlaid work on wood by the aid of transfer work. The Recent invention has for its object an improvement of this method for imitating valuable woods and inlaid work on metal, celluloid, galalith or other materials, or otherwise to provide such materials with coloured ornamentations.

By my invention I apply on materials of the said description a very thin film of a zapon lacquer (that is a certain kind of celluloid lacquer as is described in Otto Lueger, Lexikon der Gesamten Technik, Volume II, page 428, edited by the Deutsche Verlags-Anstalt, Stuttgart and Leipzig). This zapon lacquer is applied by a spraying, squirting or spattering apparatus, and the surface of the material is thus adapted to firmly hold a film of colour later on applied thereto. As is well known zapon lacquer adheres very firmly even on polished metal surfaces.

In order to secure a good holding connection of the film of colour with the zaponized surface the transfer pictures produced according to my Patent 1,464,144 are finally varnished or printed with a special adhesive varnish, which for instance might consist of 65 parts of strong lithographic varnish, 20 parts of liquid siccative and one part of copal lacquer. The transfer on to the metal surface or other surface is carried out then in the same manner as is described in my said original patent, that is to say, with the application of pressure and heat. After the transfer has been carried out the film of colour is again hardened by a zapon lacquer applied by the aid of a squirting or spattering apparatus.

(no drawing)

Corresponding patent

CA

3 - Method of producing transfer work

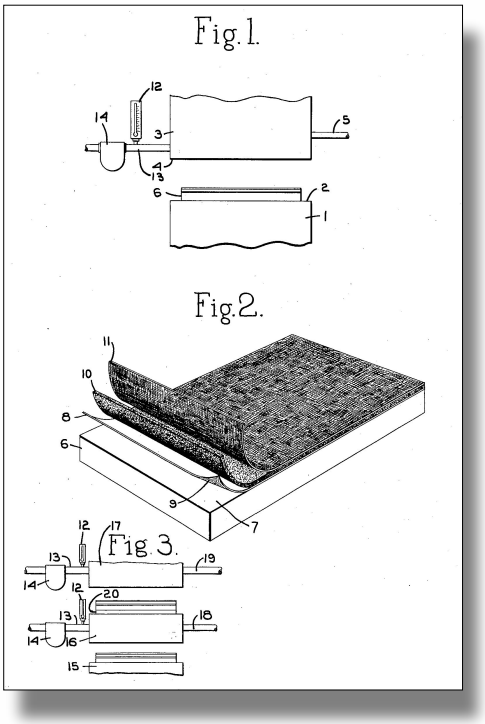
US patent	1713151
Application date	3 August 1927
Assigned to	American Tarso Company

This invention relates to the method of performing transfer work in which the color is transferred from a transfer sheet directly on to the surface of wood or other suitable material and brought into an intimate union therewith.

While transfer work by the use of transfer sheets has long been performed, its use has been of a limited nature owing to the difficulty of obtaining uniform results and of securing an intimate union between the color layer and the wood or other base material and of covering relatively large surfaces.

The present invention makes use of the ordinary transfer sheet comprising a backing of suitable material, usually a sheet of paper, and a color layer on the face of this backing. The color layer may be applied to the backing by any suitable and usual method and may present any required design, both as to configuration and as to color. Preferably the backing, such as the paper sheet having a coating of starch and dextrin or starch and gum, will then be coated with varnish or similar material before the color is applied thereto to assure a sharp, clear cut printing and to prevent a dissolution of the gum coating on the paper, which would otherwise distort the design, and also to prevent, so far as possible, the color from impregnating the backing or the fibre of the paper and also to enable the color, when the transfer sheet is subjected to the process of this invention, to become loosened from the backing and to pass to the wood or other material. …

In carrying out the process of this invention, the transfer sheet is superimposed or laid upon the wood or other material to be ornamented with the color layer in direct contact with the surface of the material. Pressure, heat and moisture are then simultaneously applied to effect the transfer.



Corresponding patent

CA

4 - A process for the reproduction of designs or pictures on non-textile porous bases

GB patent	385095
Application date	4 December 1934
Assigned to	Druckerei & Kartonnagen vorm. Gebr. Obpacher A.-G

This invention relates to an improvement in or modification of the process described and claimed in our Specification No. 380,306 for the reproduction of designs or pictures on fabric bases, according to which transfer designs or pictures are transferred to the fabric base by applying an intermediate layer to the said base, before the application of the transfer design. This intermediate layer penetrates into the base and opens and to a certain extent roughens the pores of the same. When the transfer design is applied to the base under the action of pressure and heat the intermediate layer becomes liquid and causes the colours of the transfer picture to become firmly fixed in the base.

Solutions of nitrocellulose in alcoholether and shellac solutions have been found to be suitable for the production of such intermediate layers, and may be applied to the fabric base, for example by spraying.

(no drawing)