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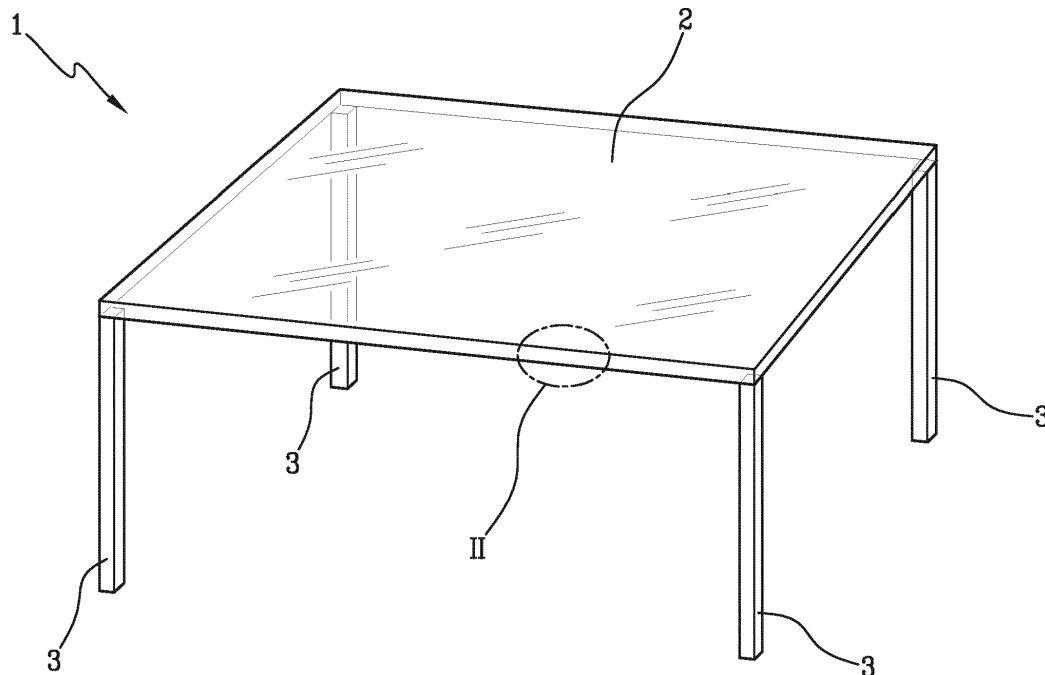
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(54) **METHOD FOR MAKING A TABLE AND A TABLE OBTAINED WITH THE METHOD**

(57) Described is a method for making a table (1) comprising a supporting surface (2) made of glass. The method comprises applying a base layer (4) of the grip-

ping type on the supporting surface (2), printing a graphical design (5) printed on the base layer (4) and applying an outer transparent protective layer (6).

Fig.1



Description

[0001] This invention relates to a method for making a table.

[0002] Moreover, the invention relates to a table obtained with the method for making a table.

[0003] Various tables are known on the market equipped with coverings of various types for protecting the supporting surface of the table.

[0004] In particular, tables are present on the market equipped with coverings which damage to the material with which the supporting surface is made to be avoided.

[0005] Disadvantageously, it is possible that, following cleaning of the supporting surface by means of specific cleaning agents (such as, for example, detergents for tables), there is a gradual deterioration of the coverings. Even more disadvantageously, it is possible that the heat emanated from a pan rested on the table (both through a special separator or by direct contact with the supporting surface) leads to a detachment of the protective coverings resulting in an exposure of the material with which the supporting surface is made.

[0006] Moreover, the heat emanated by the pan rested on the table could result in the formation of bubbles on the supporting surface. Moreover, the disadvantages described above can occur in an environment with a high humidity.

[0007] More specifically, these disadvantages occur with tables in which the surface is made of glass, where the slow degradation of the coverings leads to an exposure of the glass which, inevitably, would lose the appearance characteristics for which it has been purchased by a buyer.

[0008] The technical purpose of the invention is therefore to provide a method for making a table and a table obtained with the method which are able to overcome the drawbacks of the prior art.

[0009] The aim of the invention is to provide a method for making a table and a table obtained with the method which allow a long life of the protective layers of the supporting surface of the table.

[0010] A further aim of the invention is to provide a method for making a table and a table obtained with the method which allow the formation of detachments of the protective layers to be avoided or bubbles as a result of high temperatures and high humidity.

[0011] The technical purpose indicated and the aims specified are substantially achieved by a method for making a table and a table obtained with the method comprising the technical features described in one or more of the appended claims.

[0012] The dependent claims can correspond to possible embodiments of the invention.

[0013] Further features and advantages of the invention are more apparent in the non-limiting description which follows of a preferred non-limiting embodiment of a method for making a table and a table obtained with the method illustrated in the accompanying drawings, in

which:

- Figure 1 is a schematic view of a table according to the invention;
- Figure 2 is a schematic view of a detail of the table according to the invention;
- Figure 3 is a schematic view of a graphical effect obtained with the method for making a table according to the invention.

[0014] With reference to the accompanying drawings, the numeral 1 denotes in its a table.

[0015] The table 1 comprises a supporting surface 2 made from glass and a predetermined number of supports 3 designed to support the table on a floor or on the ground.

[0016] The supporting surface 2 in Figure 1 is represented simply by way of example as a surface having a rectangular shape.

[0017] Alternatively, the supporting surface 2 can have a circular, elliptic, polygonal or other shape not specifically referred to below.

[0018] Preferably, but without limiting the invention, the supporting surface 2 is made of opaque glass.

[0019] Preferably, but without limiting the invention, the supporting surface 2 is made of transparent glass.

[0020] The supports 3 are shown in Figure 1 as four rods which extend from the four corners of the supporting surface 2 towards the floor.

[0021] Alternatively, the supports 3 can have an undulated shape.

[0022] Preferably, but without limiting the invention, the supports 3 can be connected together by means of a rod suitable for supporting the feet of a user (and not shown in the accompanying drawings).

[0023] Alternatively, the number of supports 3 can be more or less depending on the dimensions of the table and whether the table is installed (for example) in a wall.

[0024] For example, the table 1 can be equipped with a centrally positioned single support 3.

[0025] Alternatively, the table 1 can be equipped with two supports 3 located solely on one side of the supporting surface 2 (since the opposite side is installed and/or fixed in a wall).

[0026] The table 1 also comprises applying a base layer 4 of the gripping type applied on the supporting surface 2.

[0027] The base layer 4 is a gripping primer particularly suitable to withstand high temperatures and humidity.

[0028] Advantageously, the base layer 4 allows the formation of bubbles on the supporting surface 2 to be avoided.

[0029] The base layer 4 can be transparent or be coloured depending on the final result to be obtained.

[0030] Preferably, but without limiting the invention, the base layer 4 is a water-based binder paint.

[0031] The table 1 also comprises a graphical design 5 printed on the base layer 4.

[0032] Preferably, but without limiting the invention, the graphical design 5 defines a marble effect.

[0033] The graphical design 5 provides a predetermined effect which is able to enrich the glass with which the supporting surface 2 is made.

[0034] In other words, the purpose of the graphical design 5 is substantially decorative and allows the glass to be similar to another type of material. Advantageously, the graphical design 5 gives to the glass an appearance similar to that of a slab of marble.

[0035] According to a preferred, non-limiting embodiment of the invention, the base layer 4 has the colour typical of marble and the graphical design 5 defines the darker streaking which is typical of this material as shown in Figure 3. The graphical design 5 is printed on the base layer 4 by means of a UV type cold ink.

[0036] UV type ink means an ink comprising at least the following four components: monomers, oligomers, pigments (and other adhesives) and photoinitiators. The photoinitiators dry the cold UV ink.

[0037] In short, the UV ink is activated by exposure to specific UV lamps; absorbing light and energy they generate free radicals, which trigger the polymerisation.

[0038] The above-mentioned UV lamps are advantageously low consumption cold type LEDs, which allow an almost drying of the UV ink on the support 4, fixing it definitively to the support 4.

[0039] The use of the above-mentioned cold ink allows a higher quality printing to be obtained since during the drying step there is no thermal expansion of the particles of ink which adversely affect the final quality of the printing. Moreover, the use of the above-mentioned cold ink ensures that there are no significant dimensional limitations which are known in the prior art printing methods (hot type), since no oven is needed in the production process.

[0040] The presence of a UV type bulb is sufficient to perform the drying of the ink. UV lamps do not have dimensional limitations since it is possible to place a plurality of them mutually close to each other.

[0041] Moreover, the drying step of the cold ink is much faster than that of hot ink performed in ovens, resulting in a significant reduction in the production times of the table 1 and, therefore, a reduction in the overall production costs.

[0042] Further, unlike the surfaces printed with the prior art technologies using hot ink, the supporting surfaces 2 are immediately ready for the subsequent production steps and a special area for drying the supporting surfaces 2 is not required inside the factory.

[0043] The term "cold ink" means an ink which dries at almost ambient temperatures (below 35 degrees centigrade) and does not need to be heated to temperatures above 40 degrees centigrade in order to complete the drying.

[0044] The table 1 also comprises an outer and transparent protective layer 6. The protective layer allows the glass with which the supporting surface 2 is made to be

further protected. In particular, the protective layer 6 allows deterioration of the graphical design 5 and the base layer 4 to be avoided. In other words, the protective layer 6 protects the supporting surface 2, the base layer 4 and the graphical design 5.

[0045] Preferably, but without limiting the invention, the protective layer 6 is transparent and colourless.

[0046] Preferably, but without limiting the invention, the protective layer 6 is transparent and coloured. According to this embodiment, the protective layer 6 has a colour suitable for providing the supporting surface 2 (that is, the base layer 4) with a colouring different from the classic one of marble. Advantageously, the protective layer 6 allows the reaching of the lower layers following continuous passages of detergent for cleaning the table to be avoided. In other words, if a user often cleans the table 1, the protective layer 6 can withstand these continuous passes.

[0047] Moreover, the protective layer 6 allows the lower layers to be protected from sunlight to which the supporting surface 2 may be exposed.

[0048] The invention also relates to a method for making a table 1 as described above. In particular, the method for making the table comprises covering the supporting surface 2 of the above-mentioned table 1 with a plurality of layers.

[0049] In other words, the method for making the table can be carried out before or after having installed the supports 3 on the table 1.

[0050] The method above all comprises applying a base layer 4 of the type gripping on the supporting surface 2.

[0051] The base layer 4 is a gripping primer particularly suitable to withstand high temperatures and humidity. Advantageously, the base layer 4 allows the formation of bubbles on the supporting surface 2 to be avoided.

[0052] The base layer 4 can be transparent or be coloured depending on the final result to be obtained.

[0053] Moreover, the base layer 4 is designed to remain anchored to the glass with which the supporting surface 2 is made. In particular, the base layer 4 is designed to obtain a substantially total adherence with the supporting surface 2 of the layers subsequently applied with the method.

[0054] Preferably, but without limiting the invention, the base layer 4 is a water-based binder.

[0055] Preferably, but without limiting the invention, the base layer 4 is a paint of alcohol-based, gripping type. Advantageously, the base layer 4 allows a rapid drying of the paint, thereby allowing the subsequent steps of the method according to the invention to be performed.

[0056] After drying the base layer 4 on the supporting surface 2, the method comprises printing a graphical design 5 on the base layer 4. Preferably, but without limiting the invention, the graphical design 5 is printed by means of a cold ink.

[0057] The graphical design 5 allows a predetermined effect to be obtained which is able to enrich the glass

with which the supporting surface 2 is made. In other words, the purpose of the graphical design 5 is substantially decorative and allows a table 1 to be obtained in which the supporting surface 2 made of glass can be similar to another type of material.

[0058] Preferably, but without limiting the invention, the step for moulding the graphical design 5 comprises printing on the supporting surface 2 a design with a marble-like effect. Advantageously, the design allows a supporting surface 2 made of glass to be obtained which has an appearance similar to that of a slab of marble.

[0059] Other embodiments are possible, for example the design 5 can give the glass forming the supporting surface 2 grains similar to those of wood or other materials of interest.

[0060] According to a preferred, non-limiting embodiment of the invention, the base layer 4 has the colour typical of marble and the graphical design 5 allowing the darker streaking to be obtained which is typical of this material as shown in Figure 3.

[0061] The method now comprises covering the supporting surface 2 with an outer and transparent protective layer 6.

[0062] The protective layer allows the glass with which the supporting surface 2 is made to be further protected. In particular, the protective layer 6 allows deterioration of the graphical design 5 and the base layer 4 to be avoided. Preferably, but without limiting the invention, the covering step comprises applying a transparent colourless protective layer 6.

[0063] Preferably, but without limiting the invention, the covering step comprises applying a transparent coloured protective layer 6. According to this embodiment, the protective layer 6 has a colour suitable for providing the supporting surface 2 with a colouring different from the classic one of marble. Advantageously, the above-mentioned method for making the table allows the supporting surface 2 to be protected, also allowing a desired decorative effect to be obtained. Advantageously, the method for making the table allows a table 1 to be obtained wherein bubbles do not form on the supporting surface 2 thanks to the use of the base layer 4.

[0064] Advantageously, the protective layer 6 allows the reaching of the lower layers following continuous passages of detergent for cleaning the table to be avoided. In other words, if a user often cleans the table 1, the protective layer 6 can withstand these continuous passages.

[0065] Moreover, the protective layer 6 allows the lower layers to be protected from sunlight to which the supporting surface 2 may be exposed.

[0066] The invention also relates to a table 1 made with the method described above.

[0067] The table 1 comprises a supporting surface 2 made from glass and a predetermined number of supports 3 designed to support the table on a floor or on the ground.

[0068] The supporting surface 2 in Figure 1 is repre-

sented as a surface with a rectangular shape. Alternatively, the supporting surface 2 can have a circular, elliptic, polygonal or other shape not specifically referred to below. Preferably, but without limiting the invention, the supporting surface 2 is made of transparent glass.

[0069] Preferably, but without limiting the invention, the supporting surface 2 is made of opaque glass.

[0070] In particular, the supporting surface 2 has a base layer 4, a printed graphical design 5 and a protective layer 6 made with the method described above and having the same technical characteristics.

[0071] The method for making the table and the table 1 described above (as well as the table 1 made with the method) are able to overcome the drawbacks of the prior art.

[0072] Advantageously, the base layer 4 allows the formation of bubbles or the detachment of other layers as a result of high temperatures to be avoided. Advantageously, the graphical design 5 allows a desired appearance of the supporting surface 2 to be obtained, in such a way as to give the glass a different and functional appearance to the environment in which the table is to be positioned 1.

[0073] Advantageously, the protective layer 6 allows further appearances to be given to the supporting surface 2 as well as protecting the base layer 4 and the graphical design 5 following continuous applications of detergents or exposure to sunlight.

Claims

1. A method for making a table (1), the table (1) comprising a supporting surface (2) made of glass, the method comprising the following steps, in the specific order indicated:
 - applying a base layer (4) of the type gripping on the supporting surface (2);
 - printing a graphical design (5) on the base layer (4);
 - applying an outer transparent protective layer (6) **characterised in that** the step of printing the graphical design (5) is performed by applying a cold ink on the base layer (4).
2. The method according to claim 1, wherein the step of applying the base layer (4) comprises applying a paint of the water-based, gripping type.
3. The method according to claim 1 or 2, wherein the step of printing the graphical design (5) comprises printing on the base layer (4) a design (5) forming a marble effect.
4. The method according to any one of claims 1 to 3 wherein the cold ink is an ink which can be catalysed by exposure to UV type lamps.

5. The method according to any one of the preceding claims, wherein the covering step comprises applying a transparent colourless protective layer (6).
6. The method according to any one of claims 1 to 5, wherein the covering step comprises applying a transparent coloured protective layer (6). 5
7. A table (1) comprising a supporting surface (2) made of glass, a base layer (4) of the gripping type applied on the supporting surface, a graphical design (5) printed on the base layer (4) and an outer transparent protective layer (6). 10
8. The table (1) according to claim 7, wherein the base layer (4) is a paint of water-based, gripping type. 15
9. The table (1) according to claim 7 or 8, wherein the graphical design (5) defines a marble effect. 20
10. The table (1) according to any one of claims 7 to 9, wherein the graphical design (5) is printed on the base layer (4) by means of a cold ink.
11. The table (1) according to any one of claims 7 to 10, wherein the protective layer (6) is a transparent colourless protective layer (6). 25
12. The table (1) according to any one of claims 7 to 10, wherein the protective layer (6) is a transparent coloured protective layer (6). 30
13. The table (1) according to any one of claims 7 to 12, wherein the supporting surface (2) is made of opaque glass. 35
14. The table (1) according to any one of claims 7 to 12, wherein the supporting surface (2) is made of transparent glass. 40
15. A table (1) made with a method according to any one of claims 1 to 6. 45

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Fig.1

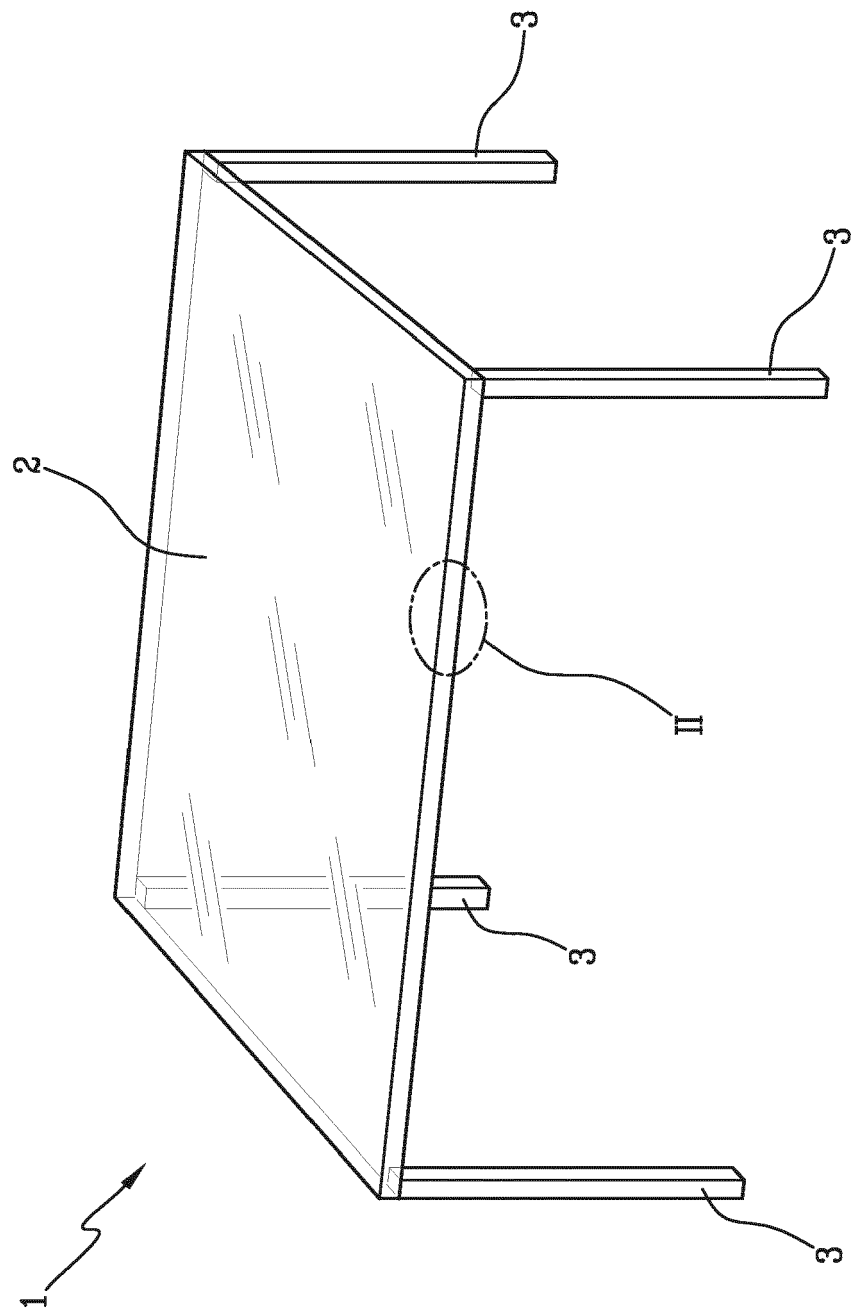


Fig.2

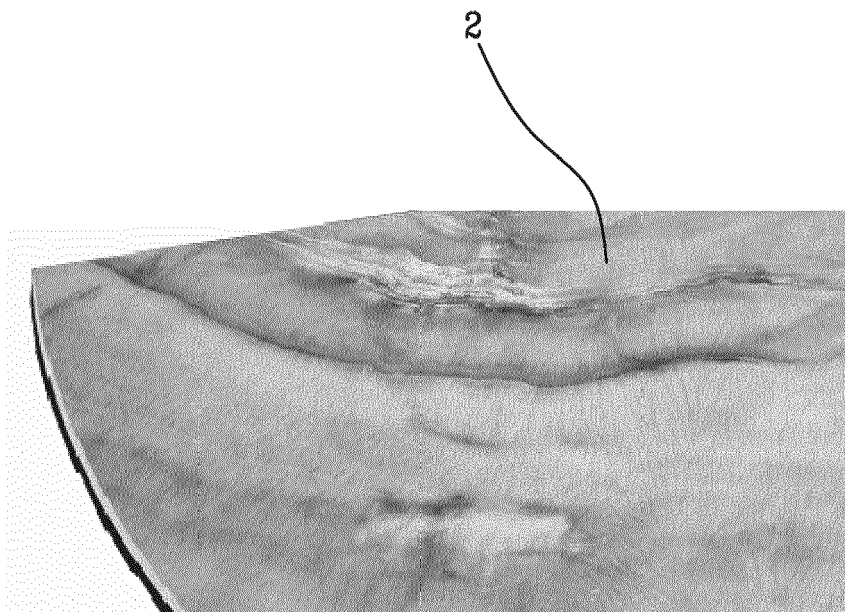
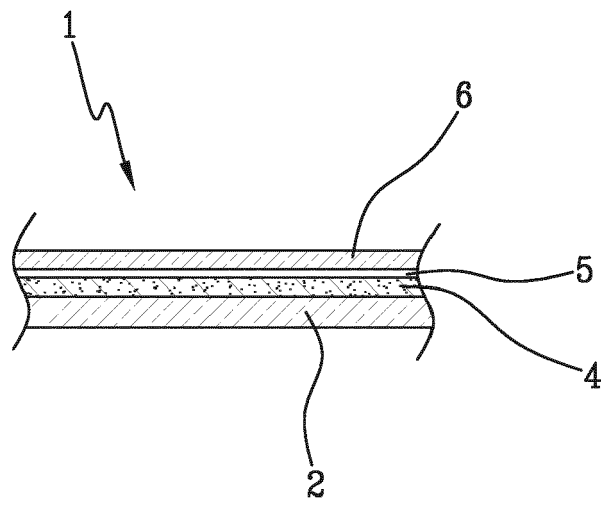


Fig.3



EUROPEAN SEARCH REPORT

Application Number
EP 19 20 0336

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EPO FORM 1503 03.82 (P04C01)

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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 5 November 2019	Examiner Ibarrondo, Borja
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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