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(54) **TILE GUARD**

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(57) **ABSTRACT**

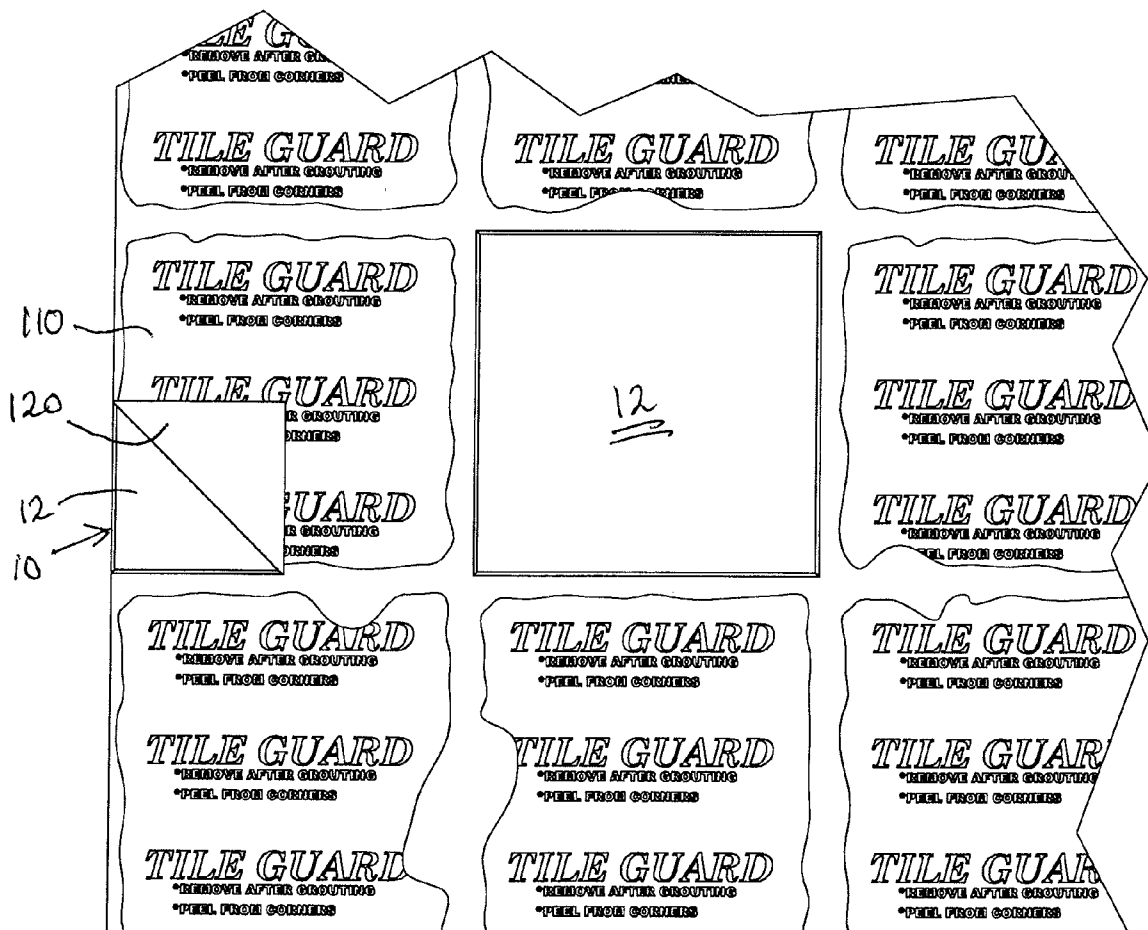
A tile guard for use in a method of installing a plurality of tiles on a floor surface includes a layer of film having opposed top and bottom surfaces, the top surface having a generally smooth texture and the bottom surface including an adhesive. The method of installing the tiles includes the steps of positioning the layer of film on a top surface of respective tiles of the plurality of tiles such that respective film bottom surface are in contact with respective top surfaces of the respective tiles. The method includes positioning the respective tiles on the floor surface such that the film top surface faces upwardly and such that predetermined gaps are left between the respective tiles. The method includes spreading grout over the positioned tiles and directing the grout into the gaps between the respective tiles and then removing the layer of film from the respective tiles.

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(22) Filed: **May 21, 2009**

**Related U.S. Application Data**

(60) Provisional application No. 61/128,378, filed on May 21, 2008.



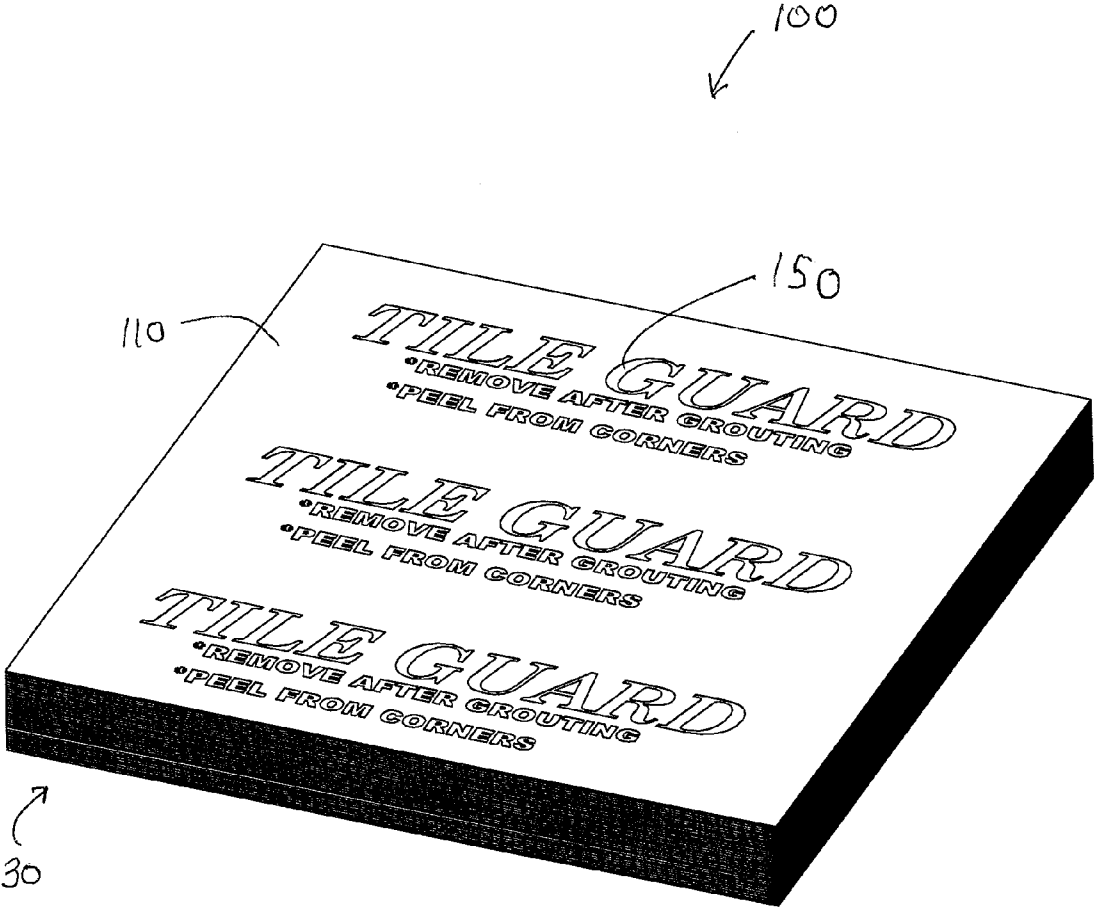


FIG. 1

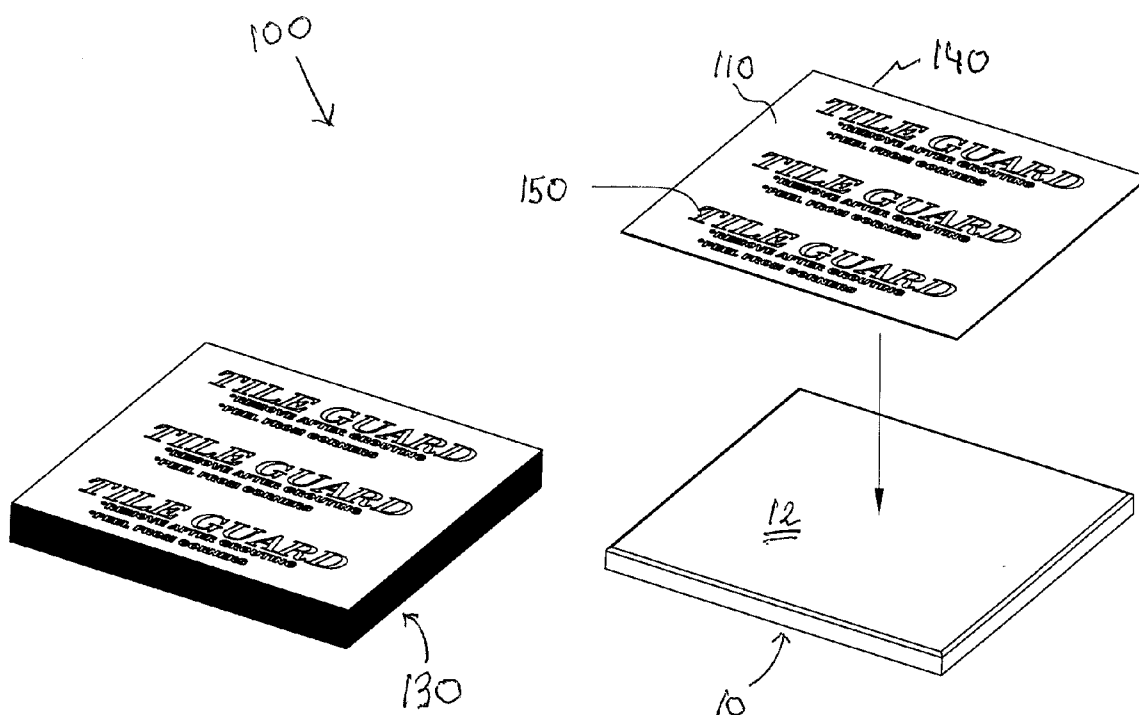


FIG. 2

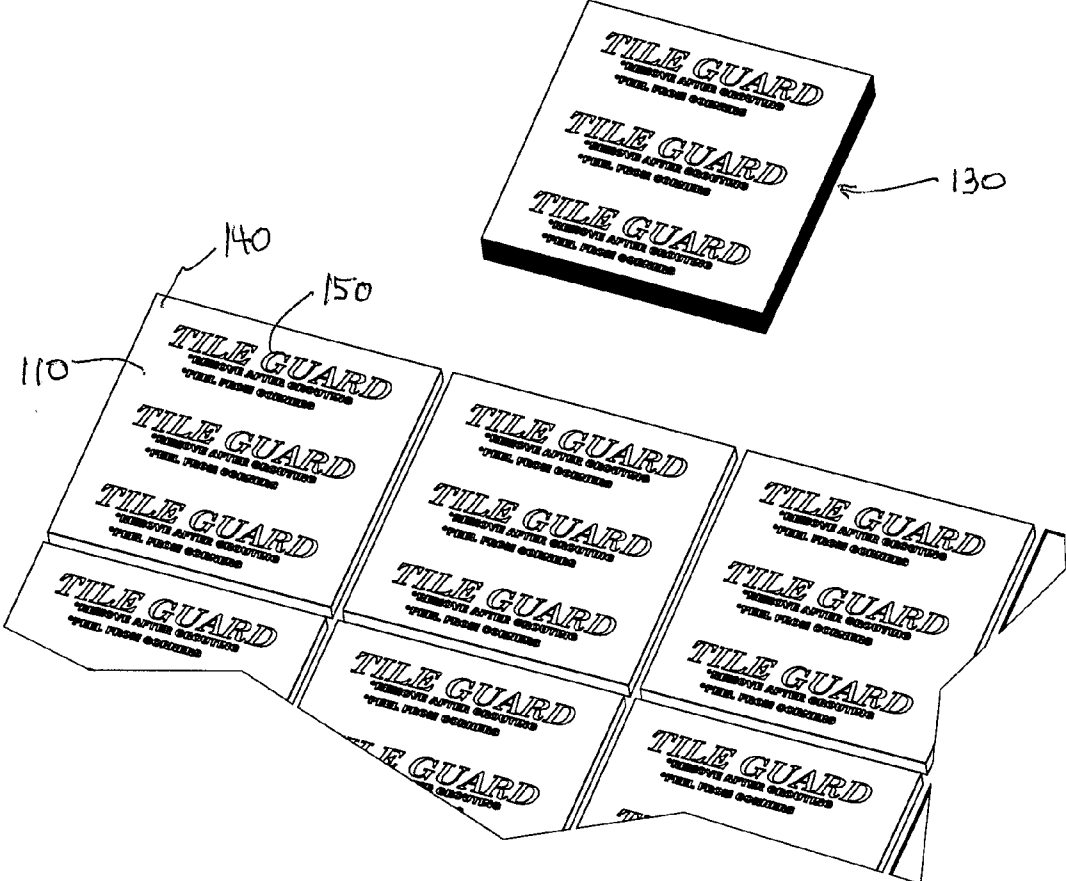


FIG. 3

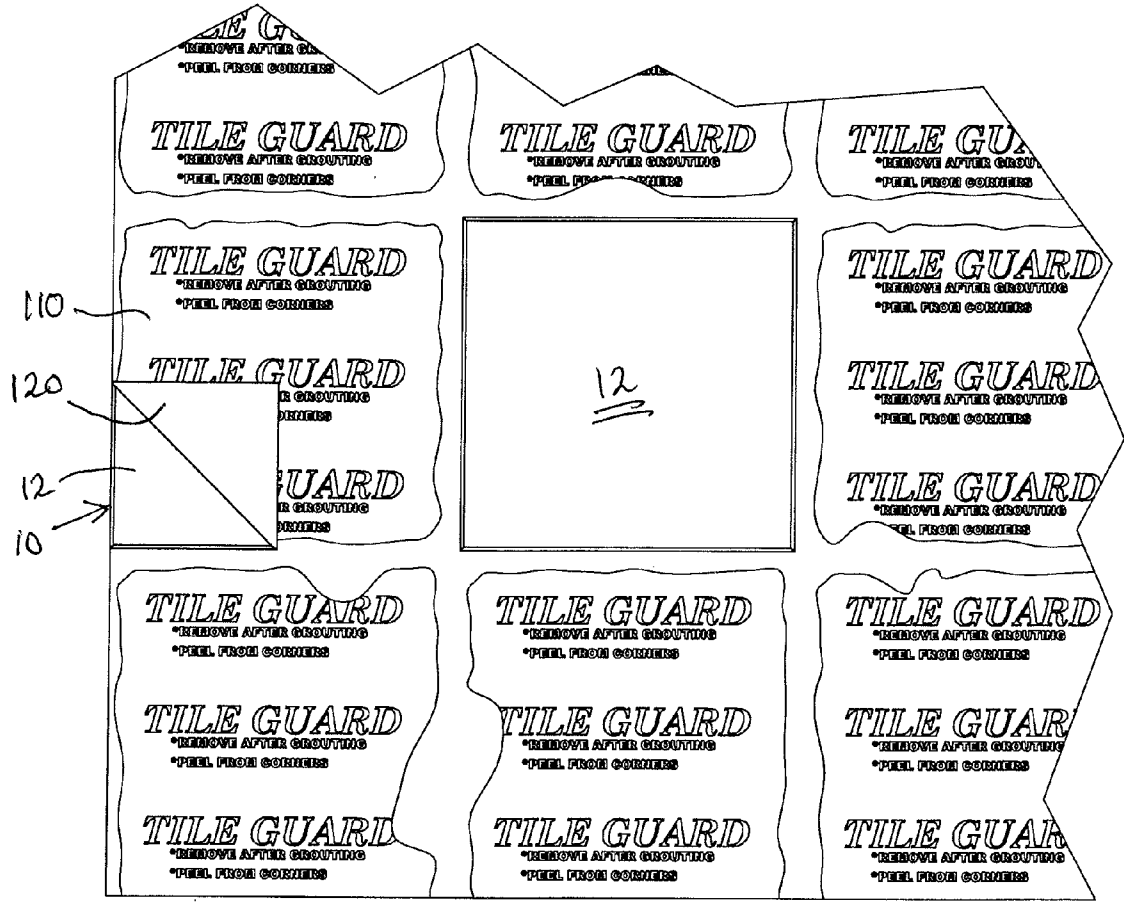


FIG. 4

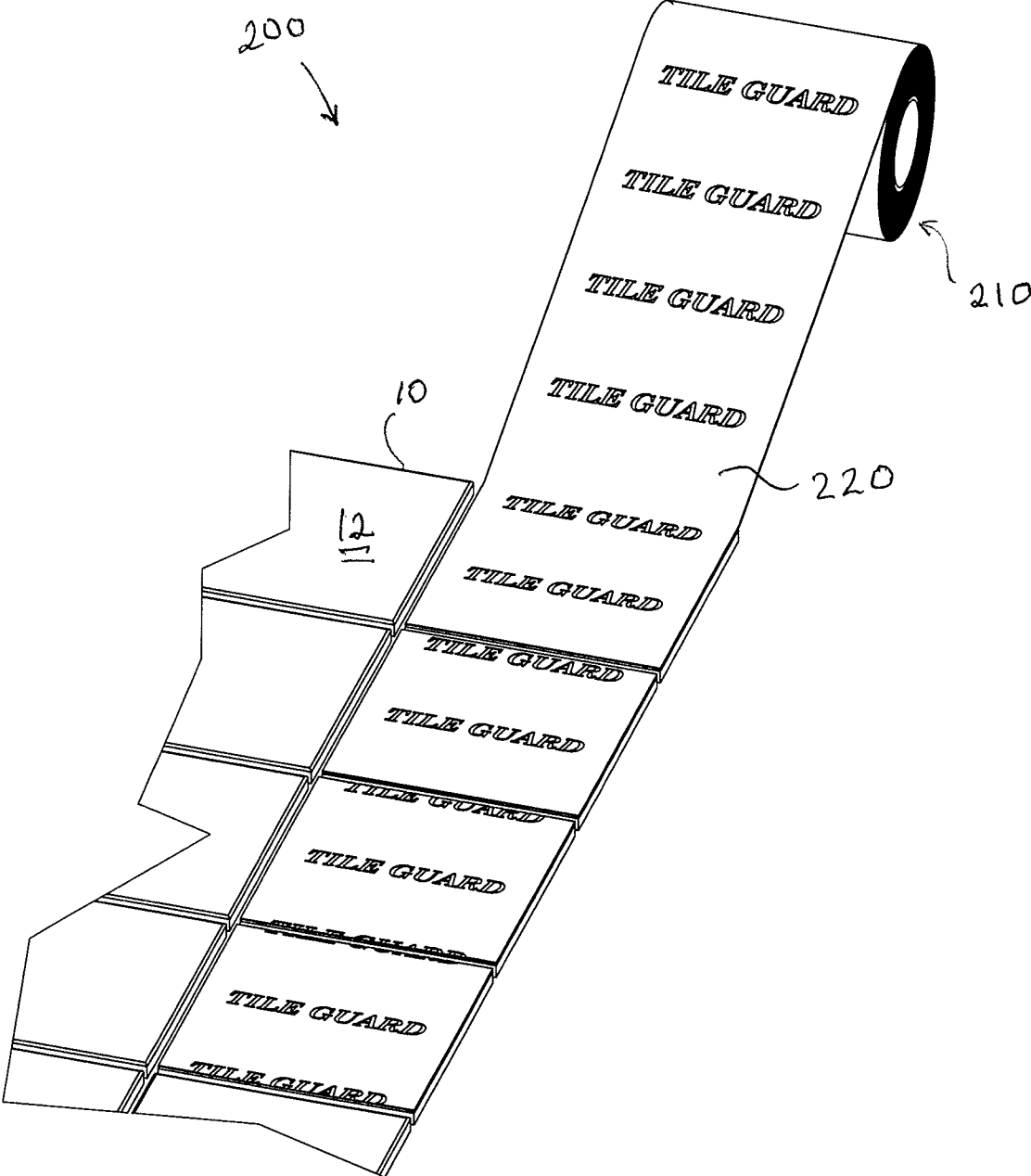


FIG. 5

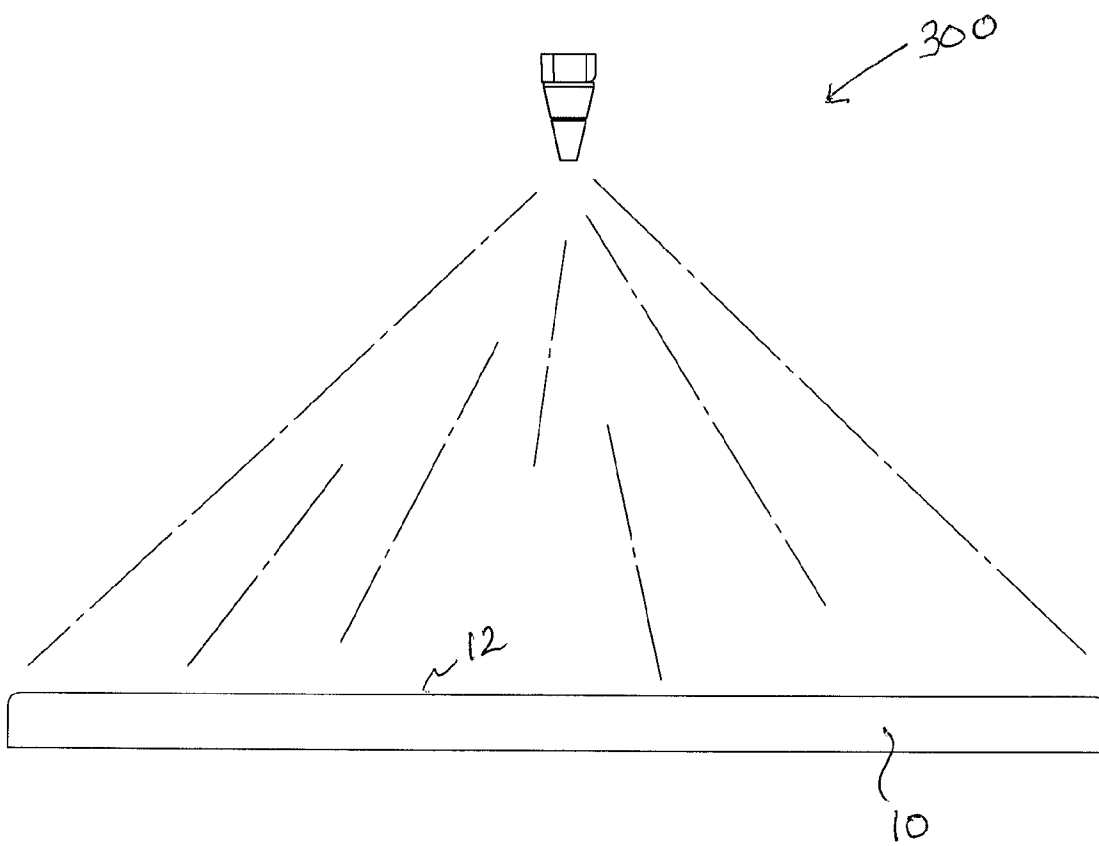


FIG. 6

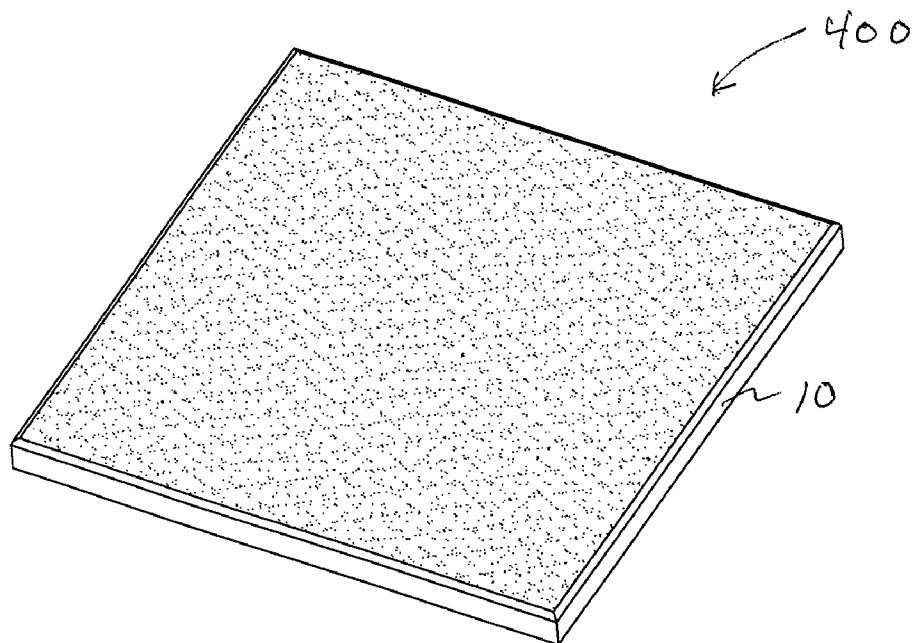


FIG. 7a

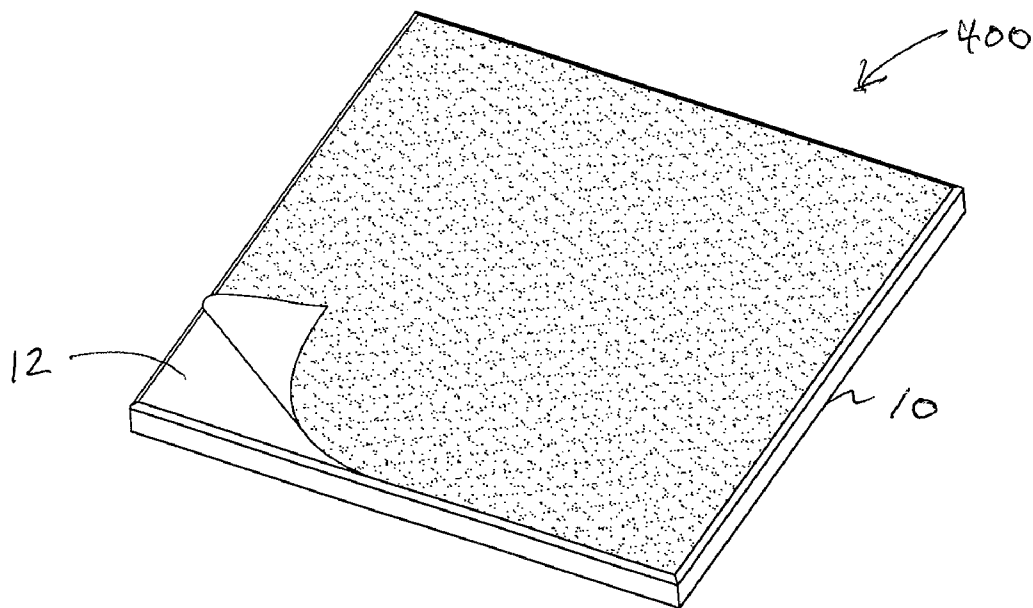


FIG. 7b



**TILE GUARD**

CROSS REFERENCE TO RELATED APPLICATION

[0001] This non-provisional patent application claims the benefit of provisional application Ser. No. 61/128,378 filed on May 21, 2008, titled "Tile Guard."

BACKGROUND OF THE INVENTION

[0002] The invention relates to devices and methods for the installation of ceramic tiles, stone tiles and any tile-like material that requires the use of thin set mortar or grout to finish the installation. More particularly, this invention relates to a tile guard having a protective removable coating that protects the surface of the tiles primarily during the installation process.

[0003] Many of today's popular tiles and stone are not smooth, but rather have a wide variety of textures, colors and irregular surfaces giving them a more natural appearance. These surface irregularities and textures make the installation process more tedious and time consuming because the mortar and grout fill the lines and detailed textures of the grout making it very difficult and time consuming to remove the excess grout and mortar from the surface of the tiles. Often the grout stains the tiles and alters the finished look of the tile.

[0004] The normal process of installing tiles uses thin set mortar to "set" or adhere the tiles to the surface then finishing by grouting the "cracks" or spaces between the tiles. During both of these steps, the mortar and grout comes in contact with the surface of the tiles. During the "setting" of the tiles, often the thin set mortar accidentally contacts the finished surface of the tiles. The most problematic issue is the standard practice and published process for applying the grout in which it is spread all over the tiles with a grout float and then the grout is worked into the spaces between the tiles, the excess grout being scraped off the tiles with the edge of the float tool. Then, after fifteen to thirty minutes before the grout sets too firmly or dries too much, the tiles must be cleaned using a sponge and water to remove the rest of the unwanted grout. An installer must not wait too long or start cleaning too soon. If the installer starts scrubbing too soon, he is likely to remove too much grout from the grout lines or gaps and it is also possible to "flood" the grout lines with too much water hence washing them out and weakening the finished grout. If the installer waits too long, the grout is set, and it is very difficult to remove from the surface of the tile, especially textured tiles.

[0005] The greater the variance or texture of the tile the more difficult and time consuming it is to clean off the unwanted grout on the surface and in the case of "coliseum" tiles or stone with pits and small grooves it is often impossible to remove all the grout without harming the "grout lines" or the tile surface. Often, the unwanted grout and stains left behind on the tiles destroys the original design and desired finished look of the tile.

[0006] Various devices and methods have been proposed in the art for removing grout and for cleaning tile. Although assumably effective for their intended purposes, the existing products and patent proposals are time consuming and require that much care be taken to avoid damaging the grout lines or the tiles themselves.

[0007] Therefore, it would be desirable to have a tile guard that provides a protective and removable coating for wall, floor, and ceiling tiles.

SUMMARY OF THE INVENTION

[0008] A tile guard for use in a method of installing a plurality of tiles on a floor surface includes a layer of film having opposed top and bottom surfaces, the top surface having a generally smooth texture and the bottom surface including an adhesive. The method of installing the tiles includes the steps of positioning the layer of film on a top surface of respective tiles of the plurality of tiles such that respective film bottom surface are in contact with respective top surfaces of the respective tiles. The method includes positioning the respective tiles on the floor surface such that the film top surface faces upwardly and such that predetermined gaps are left between the respective tiles. The method includes spreading grout over the positioned tiles and directing the grout into the gaps between the respective tiles and then removing the layer of film from the respective tiles.

[0009] Therefore, a general object of this invention is to provide a tile guard having a removable coating that can be peeled off the tiles after the grout has been applied and installation of the tiles is complete.

[0010] Another object of this invention is to provide a tile guard, as aforesaid, having a surface that can be used to print tile information, installation instruction, alignment marks, and warning directly to the front of the tiles.

[0011] Still another object of this invention is to provide a tile guard, as aforesaid, that minimizes the labor intensive process of removing unwanted grout and mortar from tiled surfaces.

[0012] Yet another object of this invention is to provide a tile guard, as aforesaid, that avoids the problem of the tiles being stained by the dyes in the grout by preventing the grout from coming in contact with the surface of the tiles.

[0013] A further object of this invention is to provide a tile guard, as aforesaid, that protects the tiles during shipping and handling.

[0014] Other objects and advantages of the present invention will become apparent from the following description taken in connection with the accompanying drawings, wherein is set forth by way of illustration and example, embodiments of this invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0015] FIG. 1 is a perspective view of a tile guard according to one embodiment of the present invention with a plurality of film layers in a stack;

[0016] FIG. 2 is an exploded view illustrating one peel and stick member removed from the stack and being applied to a respective tile;

[0017] FIG. 3 is a fragmentary view illustrating application of respective peel and stick members to respective tiles;

[0018] FIG. 4 is a fragmentary plan view illustrating partial removal of one peel and stick member;

[0019] FIG. 5 is a perspective view of use of a tile guard according to another embodiment of the present invention;

[0020] FIG. 6 is a perspective view of a tile guard according to yet another embodiment of the present invention;

[0021] FIG. 7a is a perspective view of a tile guard according to yet another embodiment of the present invention applied to a tile at the point of manufacture; and

[0022] FIG. 7*b* is a perspective view of the tile guard as in FIG. 7*a* being partially removed from the tile.

#### DESCRIPTION OF THE PREFERRED EMBODIMENT

[0023] A tile guard according to a preferred embodiment of the present invention will now be described with reference to FIGS. 1 to 8 of the accompanying drawings. More particularly, a tile guard 100 includes a layer of film having opposed top 110 and bottom 120 surfaces, the top surface 110 having a generally smooth texture and the bottom surface including an adhesive. The tile guard 100 may take the form of one of several embodiments. For instance, one embodiment of the layer of film is best illustrated in FIGS. 1 through 3 in which multiple layers of film are organized one atop another in a stack of pre-cut peel and stick members 140. Each film layer is preferably an acrylic polymer coating that is about 3 to 12 mils thick. As shown in FIGS. 2 and 3, a single peel and stick member 140 may be removed from the stack 130 and its bottom surface 120 (adhesive) may be applied to a top surface 12 of a tile 10 (FIG. 2). Once a plurality of tiles have been positioned on a floor surface and respective peel and stick members 140 have been adhered thereto, the tiles will be covered as shown in FIG. 3. It is understood that the tiles 10 may be floor, ceiling, or wall tiles, etc.

[0024] Each peel and stick member 140 may be selectively removed from the top surface 12 of a respective tile 10 by peeling it upwardly such that the adhesive on the bottom surface of a layer of film is separated from a respective tile top surface 12 (FIG. 4). Each layer of film and, more particularly, each peel and stick member 140 includes a width that is substantially similar to a width of a respective tile 10 to which it is applied. The top surface 110 of each layer of film preferably includes a generally smooth surface that may include indicia 150 imprinted thereon. The indicia 150 on the top surface 110 of the layer of film may be selected from the group including alphanumeric, graphic, alignment markings, and tactile indicia. Alphanumeric indicia may include instructions for use or warnings such as "Stay Off."

[0025] A tile guard 200 according to another embodiment includes a layer of film arranged as continuous roll of film 210 (FIG. 5). As in the stack 130 of film layers described previously, the continuous roll of film 210 includes a top surface 220 having a generally smooth texture for having indicia thereon and a bottom surface (not shown) that includes an adhesive. In use in the method for installing tile 10, the roll of film layer 220 may be unrolled and applied to multiple tiles before the tiles 10 are positioned on a floor surface. It is understood, of course, that the plurality of tiles 10 may be first positioned on the floor before the roll of film 210 is unrolled and applied to the tiles 10 as shown in FIG. 5. Or, the roll may be unrolled and a plurality of tiles positioned top side down on the adhesive layer, excess film being trimmed off with a razor knife. Selective portions of the film positioned on respective tiles 10 may be removed by peeling the top layer upwardly so as to separate the adhesive bottom surface from a respective tile top surface, as described previously.

[0026] A tile guard 300 according to yet another embodiment involves the film layer in a liquid polymer coating form that is sprayable upon the top surface of tiles 10 after they are already positioned upon a floor surface (FIG. 6). It is understood that once the coating sufficiently dries upon the tile, it may be peeled off in a manner substantially similar to that described previously.

[0027] A tile guard 400 according to still another embodiment is shown in FIGS. 7*a* and 7*b* and includes a film layer that is applied to a tile surface at the point of manufacture. In other words, a polymer coating having adhesive properties on one surface for application to a tile top surface and a generally smooth texture on an opposed side may be applied to tile 10 at the time of manufacturing for immediate installation upon a floor or ceiling surface. Again, the film layer may be selectively removed from a tile in a manner substantially similar to that described previously.

[0028] The various embodiments of the tile guard described above may be used in a method for installing a plurality of tiles on a floor surface that protects the tiles from damage or stain from grout as it is applied between the tiles. The method also enables grout lines to be properly established between the tiles. More particularly, the method for use with the tile guards includes the step of positioning a layer of film, such as a peel and stick member 140, atop a top surface 12 of a tile 10 (FIG. 2). It is understood that the bottom adhesive surface 120 of the film layer will adhere to the top surface 12 of the tile. Then, the method includes positioning and adhering the tile 10 to a floor surface in an orientation in which the tile top surface 12 faces upwardly. Of course, the method may be used in a substantially similar manner with tile being applied to a wall or ceiling surface. Preferably, gaps of predetermined dimensions are left between adjacent tiles in a traditional manner of tile installation.

[0029] Then, grout may be spread over the positioned tiles using traditional grout spreading tools and particularly directed into the gaps between adjacent tiles (FIG. 4). Traditionally, the grout would be given a predetermined period of time to "set up," such as 30 minutes, and then the grout would be carefully wiped from the top surface of each covered tile with a sponge while leaving the grout in the gaps between tiles. In the present method, however, there is no need to clean the tiles since they are covered with layers of film. Nevertheless, it may be preferable to still wait a period of time before proceeding with the method so that the grout between adjacent tiles has firmed up sufficiently to prevent unintended movement of the tiles.

[0030] Finally, the layer of film adhered to the tiles may be removed to reveal the clean and attractive appearance of the tile (FIG. 4). More particularly, the layer of film may be removed by peeling the layer of film upwardly such that the adhesive is separated from each tile top surface (FIG. 4). Preferably, peeling is accomplished by using a user's finger to lift a corner of the film layer and then peeling toward the center and then opposite corner.

[0031] It is understood that while certain forms of this invention have been illustrated and described, it is not limited thereto except insofar as such limitations are included in the following claims and allowable functional equivalents thereof.

1. A tile guard for use in a method of installing a plurality of tiles on a floor surface that protects said tiles from damage from or to surrounding grout, said tile guard comprising:

a layer of film having opposed top and bottom surfaces, said top surface having a generally smooth texture and said bottom surface including an adhesive;

wherein the method of installing the plurality of tiles comprises the steps of:

positioning said layer of film on a top surface of respective tiles of the plurality of tiles such that respective

film bottom surface are in contact with respective top surfaces of said respective tiles;  
positioning said respective tiles on the floor surface such that said film top surface faces upwardly and such that predetermined gaps are left between said respective tiles;  
spreading grout over said positioned tiles and directing said grout into said gaps between said respective tiles; and  
removing said layer of film from said respective tiles.

2. The tile guard as in claim 1, wherein said step of removing said layer of film includes peeling said layer of film such that said adhesive is separated from respective tile top surfaces.

3. The tile guard as in claim 2, wherein the method of installing the plurality of tiles comprises the step of waiting a predetermined amount of time after spreading said grout before removing said layer of film, whereby to allow said grout to partially harden.

4. The tile guard as in claim 1, wherein said step of positioning said layer of film includes a width dimension that is substantially the same as a width of said respective tile to which it is applied.

5. The tile guard as in claim 1, wherein said layer of film is constructed of an acrylic polymer that is from 3 to 12 mils thick.

6. The tile guard as in claim 3, wherein said layer of film is constructed of an acrylic polymer that is from 3 to 12 mils thick.

7. The tile guard as in claim 1, wherein said layer of film is a continuous roll of film.

8. The tile guard as in claim 1, wherein said layer of film is a liquid polymer coating that is sprayable.

9. The tile guard as in claim 1, wherein said top surface of said layer of film includes indicia from the group including alphanumeric, graphic, alignment markings, and tactile indicia.

10. The tile guard as in claim 1, wherein the layer of film is applied to the plurality of tile at the time of manufacturing of the tile.

11. The tile guard as in claim 1, wherein said layer of film is a plurality of pre-cut, peel and stick members.

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