



(11) **EP 2 037 055 A2**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:  
**18.03.2009 Bulletin 2009/12**

(51) Int Cl.:  
**E04F 13/08<sup>(2006.01)</sup> E04F 19/02<sup>(2006.01)</sup>**

(21) Application number: **08252755.7**

(22) Date of filing: **20.08.2008**

(84) Designated Contracting States:  
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR**  
Designated Extension States:  
**AL BA MK RS**

(72) Inventors:  
• **Swinfield, Murray ,**  
**c/o Airfield Ind. Estate**  
**Ashbourne, Derbyshire, DE6 1HA (GB)**  
• **Clark, Greg ,**  
**c/o Airfield Ind. Estate**  
**Ashbourne, Derbyshire, DE6 1HA (GB)**

(30) Priority: **15.09.2007 GB 0718047**

(27) Previously filed application:  
**15.09.2007 GB 0718047**

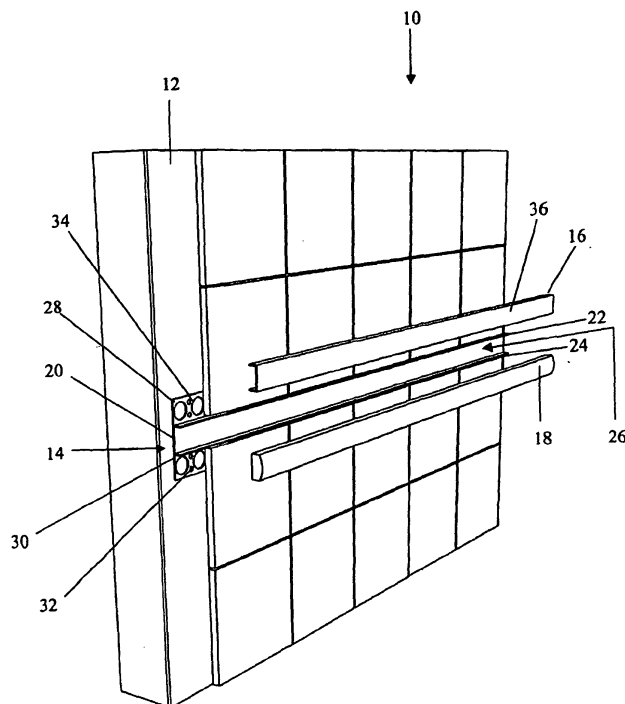
(74) Representative: **Patel, Binesh**  
**Barker Brettell LLP**  
**10-12 Priests Bridge**  
**London**  
**SW15 5JE (GB)**

(71) Applicant: **Homelux Nenplas Limited**  
**Ashbourne, Derbyshire DE6 1HA (GB)**

(54) **Tiling system**

(57) A tiling system 10 for tiling a surface 12 comprising a trim strip receiver 14 having securing means arranged to facilitate securing the receiver 14 to the surface 12 and attachment means arranged to facilitate re-

movable attachment of a trim strip 16 to the trim strip receiver 14 such that the trim strip 16 or another trim strip 18 can be attached via the attachment means to the receiver 14.



**Figure 2**

**EP 2 037 055 A2**

## Description

**[0001]** This invention relates to tiling systems.

**[0002]** Techniques for tiling surfaces, such as walls, are well known. Often a trim strip is placed between adjacent rows or columns of tiles for decorative purposes. As with the tiles, the trim strip is typically made from a ceramic material and is secured in place with a tile adhesive in the same way as the tiles.

**[0003]** According to the present invention there is provided a tiling system for tiling a surface comprising a trim strip receiver having securing means arranged to facilitate securing the receiver to the surface and attachment means arranged to facilitate removable attachment of a trim strip to the trim strip receiver such that the trim strip or another trim strip can be attached via the attachment means to the receiver.

**[0004]** Advantageously, using the tiling system of this invention it is possible to remove a trim strip easily from a tiled surface and replace the trim strip with another trim strip - this can provide a different decorative appearance when desired. Advantageously it is also possible to remove a trim strip for cleaning and replace it. This is both hygienic and can provide an improved decorative appearance.

**[0005]** Embodiments of the present invention will now be described by way of example only with reference to the accompanying drawings in which:

Figures 1a to 1e show stages in the installation of a prior art tiling system;

**Figure 2** shows a tiling system according to an embodiment of this invention along with two removable trim strips; and

Figures 3a to 3g show stages in the installation of a tiling system according to an embodiment of this invention.

**[0006]** Referring to Figure 1, a prior art tiling system for attaching tiles 2 to a wall 3 is shown. Between adjacent rows of tiles 2 a tile trim 4 is required to be attached to the wall 3. The tile trim comprises an elongate, C-shaped profile.

**[0007]** The tiling system 1 is installed by applying tile adhesive 5 to the wall 3 in the region in which the tiles 2 and trim 4 are required to be attached.

**[0008]** From Figures 1a to 1e it will be seen that initially (Figure 1a) tile adhesive 5 is applied to the wall 3 in the region of the wall required to be tiled. Next (Figure 1b), a first row of tiles is fixed to the wall 3 via the tile adhesive 5, followed by the trim strip 4 (Figure 1c) and then a second row of tiles (Figure 1d). A small gap is left between the tiles 2 and the trim 4 as seen in Figure 1d. This gap is filled with further tile adhesive in the form of grout 6.

**[0009]** Once the tile adhesive 5 and grout 6 are dry, the tiles 2 and trim 4 are secured to the wall 3 and relative

to each other. No substantial movement of the tiles 2 or trim 4 is possible. If it is desired to replace the tile trim 4 with another tile trim e.g. for decorative purposes or if the tile trim 4 becomes damaged e.g. cracked, then it is necessary to remove the dried tile adhesive and grout at least in the region surrounding the tile trim - it may be necessary to remove the adjacent tiles depending upon how securely the tile adhesive and grout have set. This is potentially expensive, time consuming and wasteful for the sole purpose of replacing the tile trim.

**[0010]** Referring to Figure 2, a tiling system 10 according to a first embodiment of this invention is provided to tile a wall 12. The tiling system 10 comprises a trim strip receiver 14 having securing means arranged to facilitate securing the receiver 14 to the wall 12. The receiver 14 also has attachment means which are arranged to facilitate removable attachment of one or more trim strips 16, 18 to the receiver 14. The trim strip receiver 14 comprises an elongate profile in this embodiment. The receiver 14 comprises a base portion 20 from which two parallel upstanding walls 22, 24 extend to define a receiving channel 26 therebetween. The receiving channel 26 is profiled to receive trim strips 16, 18. In this embodiment the receiver 14 comprises an integrally formed profile, but in other embodiments the receiver 14 may not be integrally formed.

**[0011]** The receiver 14 is made from a plastic material. In other embodiments the receiver can be any suitable material, such as metal, e.g. steel. In this embodiment the securing means comprises the flat base 20, which advantageously is able to sit substantially flush against a substantially flat surface such as the wall 10. In other embodiments the base may not be flat. The base may have some form of grip enhancing feature to aid tile adhesive bonding between an irregular surface and the base. The securing means also comprises flange portions 28, 30 of the base 20. The flange portion 28, 30 are the portions of the base 20 which extend outwardly from the locations at which the upstanding walls 22, 24 extend. The flanges 28, 30 are also substantially flat. The securing means also comprises fixing holes 32 provided through the flanges 28, 30. These fixing holes 32 are arranged to receive screws to securely fix the receiver 14 to the wall 12. In other embodiments the fixing holes 32 may be arranged to receive nails or other suitable fixing means. In other embodiments the fixing holes may not be present. In some embodiments the fixing holes may be present but may not be used. In some embodiments a self-adhesive layer may be provided on the base of the receiver 14 to enable easy attachment to the wall 12.

**[0012]** The securing means also comprises bonding apertures 34 formed through the flanges 28, 30. The bonding apertures allow tile adhesive/grout to flow there-through in order to provide enhanced securing of the receiver 14 to the wall 12 as will be described below.

**[0013]** The fixing holes 32 may also act as bonding apertures in some embodiments.

**[0014]** The channel 26 is shaped and sized to tightly receive the trim strips 16, 18. The trim strips 16, 18 are elongate strips in this embodiment - but may be any desired shape in other embodiments. The trim strip 16 is an elongate profile, which is C-shaped and therefore when it is attached to the receiver 14 and in place in the channel 26, there is a gap behind a front face 36 of the strip 16 and the base 20 of the receiver 14. In this embodiment the trim strip 16 is made of a flexible plastics material. In other embodiments it may be made of a metal material or a ceramics material. In some embodiments the strip 16 may be made of more than one material - for example the front face 36 may be made of ceramic and the legs of the strip may be made of a plastic or metal material.

**[0015]** In this embodiment the strip 16 is flexible - this allows it to bend so that it can be tightly received within the channel 26 of the receiver 14. The legs of the strip 16 flex generally outwardly to push against the upstanding walls 22, 24 of the receiver 14.

**[0016]** The trim strip 18 is an elongate plastic material strip. In other embodiments the elongate strip may be metal, ceramic or any other suitable material. The strip 18 is able to be push-fitted into the channel 26 of the receiver 14 and is a tight friction fit therein.

**[0017]** Advantageously, after installation, the user can easily remove and replace different trim strips as required. For example a user may wish to clean a trim strip and replace it. Alternatively a user may wish to insert a different trim strip into the trim strip receiver 14 for a different decorative effect.

**[0018]** In a further embodiment, illumination means may be provided in the gap between the front face 36 of the trim strip 16 and the base 20 of the receiver 14. The trim strip 16 in such embodiments may be made of a transparent or partly transparent material so that an external illumination effect is achieved when the illumination means is lit. The illumination means may comprise one or more electro-luminescent light sources. In other embodiments the illumination means may comprise bulbs, LEDs, fibre optics or any other suitable source.

**[0019]** Referring to Figure 3, a method of installation of the tiling system 10 of this invention is shown. Initially (Figure 3a) a tile adhesive 40 is spread over the region of the wall which is required to be tiled. Next (Figure 3b) the trim strip receiver 14 is placed in a desired position against the wall 12. The tile adhesive 40 is still setting at this stage and so some of the tile adhesive passes through the bonding apertures 30, 32 as the receiver 14 is pressed towards the wall 12. This enhances the bonding effect of the tile adhesive 40 which bonds the receiver 14 to the wall 12 since it eventually will dry and set around multiple surfaces of the flange 28.

**[0020]** Next (Figure 3c) a first row of tiles 42 is placed in a desired position relative to the wall 12 and the receiver 14. In this embodiment each tile 42 overlaps the upper flange 28 of the receiver 14. In some embodiments initially each tile 42 overlaps the lower flange 30 of the

receiver 14. Some of the tile adhesive 40 is present on both sides of the flange 28 (i.e. the wall side and the exterior side) as previously described. This allows secure bonding of the entire tile 42 via the tile adhesive 40 to the wall 12.

**[0021]** Next (Figure 3d), a second row of tiles is similarly attached overlapping the lower flange of the trim strip receiver 14.

**[0022]** Next (Figure 3e) a small gap is left between the upstanding walls 22, 24 and the tiles 42 and this is filled in with a further adhesive (grout) by the installer. This gap is usually the same size as the gap left between adjacent tiles in the rest of the tile arrangement. This will provide a neat, waterproof finish to the installed system.

**[0023]** The tiling adhesive 40 is then allowed to dry. Next (Figure 3f) a tile trim 50 is push fitted into the channel 26 of the receiver 14. The tile trim 50 is securely held in place since it is a friction fit within the channel. When it is desired to remove the trim 50 for any reason (e.g. cleaning or replacing with another trim) then it can easily be pulled out of the channel by manual force.

**[0024]** Figure 3g illustrates a further trim 52 in place within the channel 26.

**[0025]** Various modifications may be made to the present invention without departing from its scope. For example different forms of attachment means will be apparent to the skilled person. For example an attachment means with a clip-fit between the tile trim and the receiver will be apparent to the skilled person. Either the upstanding walls of the receiver, the legs of the tile trim profile, or a combination of both may be resilient and urge towards each other in order to provide a tight fit therebetween.

**[0026]** Different forms of securing means to secure the tile trim receiver to the surface will be apparent to the skilled person. For example a self-adhesive surface or tape may be provided on the receiver and it may be not be necessary to use tile adhesive to initially secure the receiver to the wall (e.g. at the step of Figure 3b).

## Claims

1. A tiling system (10) for tiling a surface (12) comprising a trim strip receiver (14) having securing means arranged to facilitate securing the receiver (14) to the surface (12) and attachment means arranged to facilitate removable attachment of a trim strip (16) to the trim strip receiver (14) such that the trim strip (16) or another trim strip (18) can be attached via the attachment means to the receiver (14).
2. The system of Claim 1, wherein the attachment means comprises a clip fit, friction fit, push fit, screw fit, a projection-recess arrangement, a removable glue or silicon fixing or any combination thereof.
3. The system of Claim 1 or Claim 2, wherein the se-

curing means comprises a flat base (20).

4. The system of Claim 3, wherein the securing means comprises one or more flanges (28, 30) extending from the flat base (20). 5
5. The system of Claim 4, wherein the or each of any one or more of the flanges (28, 30) comprises fixing holes (32) arranged to receive screws or other fixing means. 10
6. The system of Claim 4 or Claim 5, wherein the or each or any one or more of the flanges (28, 30) comprise bonding apertures (34) arranged to allow bonding fluid, such as tile adhesive, to flow therethrough. 15
7. The system of any preceding claim, wherein the attachment means comprises a channel (26) arranged to receive the trim strip (16, 18). 20
8. The system of Claim 7 wherein the channel (26) is profiled to tightly receive the trim strips.
9. The system of Claim 7 or Claim 8, wherein the channel is defined by first (22) and second (24) walls. 25
10. The system of Claim 9, wherein the or each wall (22, 24) is resilient to tightly receive the trim strip.
11. The system of Claim 9 or Claim 10, further comprising a trim strip (16, 18) having flexible portions to engage resiliently with the walls (22, 24) so that the trim strip is securely attached. 30
12. The system of Claim 11, further comprising a trim strip having a front face (36) and which is profiled such that there is a gap between the front face (36) and the receiver when it is attached. 35
13. The system of any of Claims 4 to 12, wherein the or each flange (28, 30) is arranged to be received between the surface (12) and one or more tiles being attached to the surface. 40

45

50

55

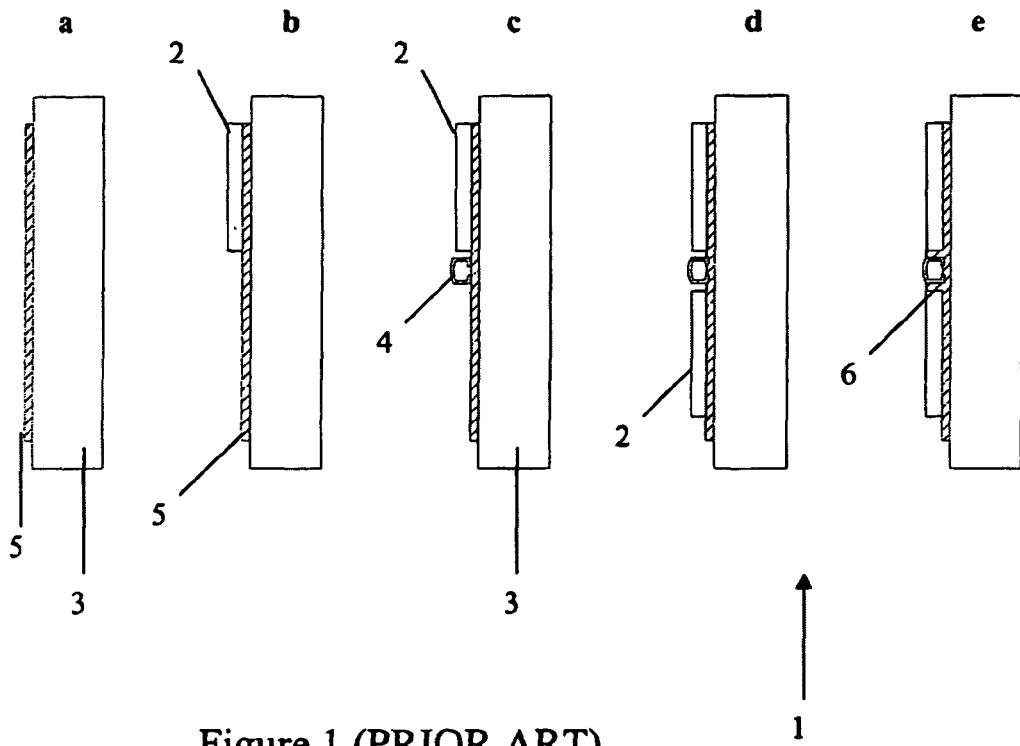


Figure 1 (PRIOR ART)



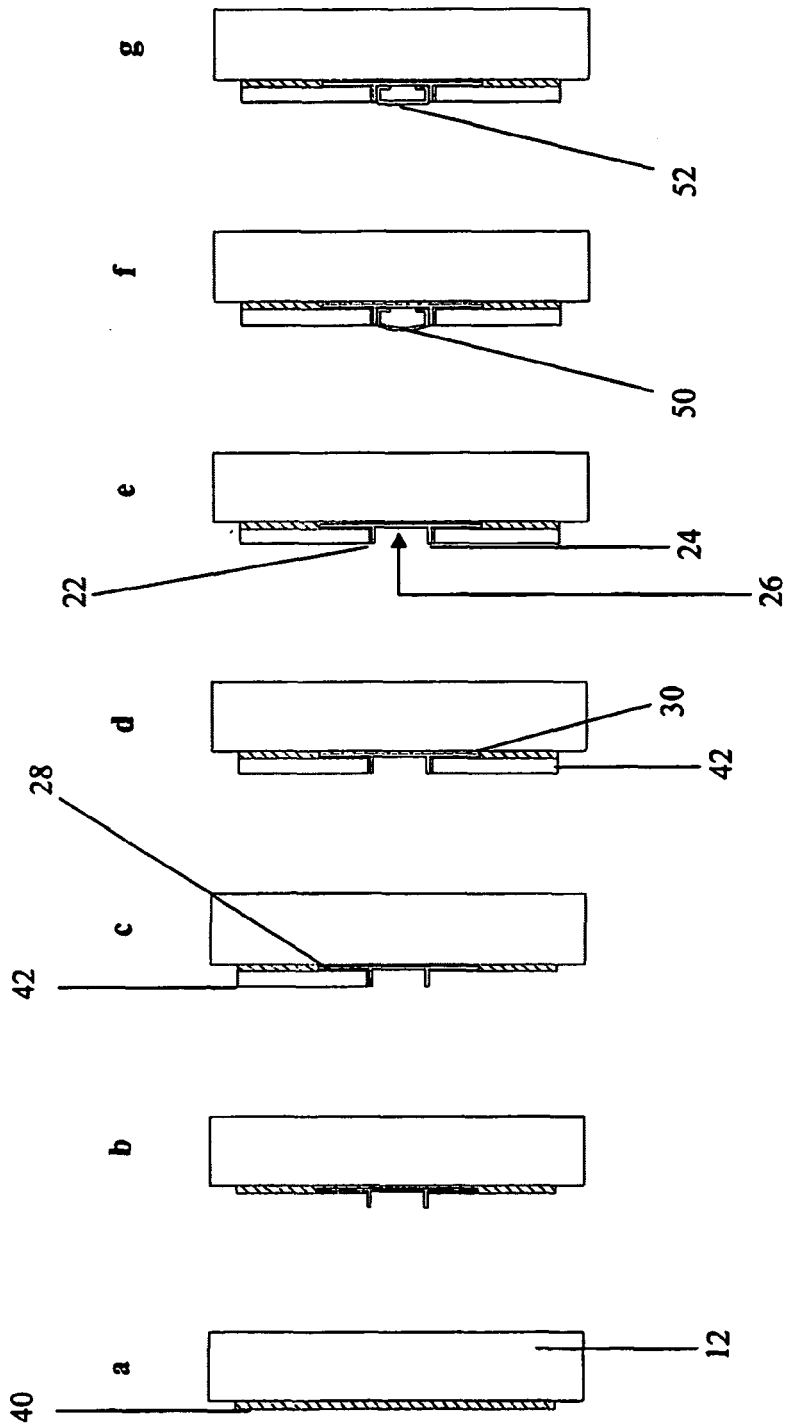


Figure 3