



PATENT SPECIFICATION

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"A Bracket"

The present invention relates to a bracket, in particular a spacer bracket for use with a modular
5 decking system.

Referring to figures 1 to 3, a modular decking system includes a frame assembly assembled from a plurality of sub-frame members. The sub-frame members are generally
10 laid out in a side-by-side arrangement so as to form rows. A number of substantially rectangular or square sub-frame members may therefore form a substantially square shaped frame assembly by assembling the sub-frame members in either a regular side-by-side or
15 staggered arrangement. Furthermore, a combination of differently sized sub-frame members may be used to alter the shape of the frame assembly, and thus the resultant modular decking system.

20 Differently shaped sub-frame members can also be incorporated into the frame assembly. For example, the inclusion of one or more hemispherical, round or triangular members can be used to create a frame assembly having a distinctive shape. Once arranged
25 according to the desired shape, the sub-frame members are then secured together to form the frame assembly using any suitable means such as a series of nuts and bolts. The sub-frame members may, for example, comprise a number of pre-drilled bolt holes.

Once the frame assembly has been secured together, the frame assembly is positioned in an area in which the modular decking system is to be assembled and finished. A series of decking planks, generally in the form of decking panels, are then secured to the frame assembly to create the modular decking system, again using any suitable means.

It is often desirable to assemble such a modular decking system against a wall. One problem that arises when assembling a modular decking system against a wall is that it is often difficult to assemble the decking system whilst avoiding obstacles such as pipes, drains and the like.

A further problem arises when the modular decking system is assembled against an uneven wall. For example, sections of the wall may be angled in different directions, or the wall itself may have an uneven finish that needs to be accommodated.

It is therefore an object of the present invention to mitigate one of these problems.

According to the present invention there is provided a spacer bracket for maintaining a space between a frame assembly and a wall, the spacer bracket comprising a spacer frame including a load bearing surface, wherein the load bearing surface is adapted to receive a plank, such that, in use, the plank is supported on the spacer frame between the spaced-apart wall and frame assembly.

Preferably, the spacer bracket is arranged, in use, so that the load bearing surface is substantially horizontal and is positioned substantially orthogonal
5 to the wall.

Preferably, the spacer frame is substantially square or obround section in shape, one surface of which forms said load bearing surface.

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Preferably, the spacer frame is also provided with an aperture adapted to receive a screw-threaded adjustable leg which is ground-engaging in use, wherein the adjustable leg is adapted for incremental adjustment of
15 the height of the load-bearing surface relative to the ground. In this case, the height of the spacer frame, and consequently the height of the load bearing surface, may be adjusted as desired. This is particularly useful in order to adjust the height of
20 the load bearing surface in accordance with the height of a particular sub-frame member in use.

Preferably, the spacer frame includes a securing member arranged to enable the spacer bracket to be secured to
25 the plank.

An embodiment of the invention will now be described with reference to the accompanying drawings in which:-

Figure 1 is a perspective view of a plurality of sub-frame members assembled so as to form a portion of a frame assembly;

- 5 Figure 2 is a perspective view of the sub-frame members of figure 1, showing the sub-frame members being secured together by bolts;

Figure 3 is a perspective view of a finished modular
10 decking system;

Figure 4 is a schematic view of a spacer bracket of the present invention, the spacer bracket having a spacer
frame;

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Figure 5 is a schematic view of the spacer bracket of figure 4, wherein the spacer frame is shown to include a screw-threaded adjustable leg;

- 20 Figure 6 is a perspective view of the spacer bracket being placed between a spaced-apart sub-frame member of a frame assembly and a wall;

Figure 7 is a perspective view of the spacer bracket
25 being secured to a plank; and

Figure 8 shows further planks in the form of panels being placed on the frame assembly.

- 30 Referring now to figures 1-3, a frame assembly 40 is shown to comprise a plurality of sub-frame members 42

secured by bolts 44 or the like, as described above. Figure 3 shows a finished modular decking system 60, comprising a series of panels 54 mounted on the frame assembly 40 (not shown in figure 3) and secured thereto. The modular decking system 60 also includes a series of railing units 58 assembled around the periphery thereof.

Referring now to figures 4-7, there is illustrated a spacer bracket 10 according to a preferred embodiment of the present invention. The spacer bracket 10 is preferably used to maintain a space between a wall 30 and an otherwise wall-engaging sub-frame member 42 of a frame assembly 40.

The spacer bracket 10 comprises a spacer frame 12 which is preferably made of metal, and is preferably substantially square section or obround section in shape. One side of the spacer frame 12 forms a load bearing surface 16 which is arranged to receive a plank 52. In use, the plank 52 is supported on the spacer frame 12 between the spaced-apart wall 30 and frame assembly 40, as will be described in more detail hereinafter.

Referring now to figures 4 and 5 in particular, the spacer frame 12 preferably includes first and second spaced apart legs 18, 20 extending from the otherwise free ends of the load bearing surface 16 and connected to each other by a connecting element 22. The connecting element 22 and the load bearing surface 16

are preferably arranged in parallel spaced relation. One or more apertures (not shown) is preferably provided in the second leg 20 to enable the second leg 20 to be secured to the sub-frame member 42 in use.

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The connecting element 22 is preferably provided with a collar 24 defining an aperture (not shown). The collar 24 is preferably internally threaded and arranged to receive a screw-threaded adjustable leg 26, as shown in
10 figures 5 and 6. The adjustable leg 26 preferably includes a base portion 28 having a ground-engaging surface 28a. Thus, in use, the height of the spacer frame 12 and hence the load bearing surface 16 is adjustable incrementally by adjusting the position of
15 the adjustable leg 26 within the collar 24. It will be appreciated that the spacer bracket 10 is not limited to including the adjustable leg 26, wherein, if desired, the connecting element 22 itself would provide a ground-engaging surface (not shown).

20

The spacer frame 12 also includes a securing member 34 extending from the second leg 20 in a direction and substantially orthogonally to the load bearing surface 16. The securing member 34 is used to enable the spacer
25 bracket 10 to be secured to the plank 52 as will be described in more detail hereinafter.

The spacer bracket 10 is preferably used with a modular decking system 60 as follows, with reference to figures
30 6 and 7 in particular. Once the sub-frame members 42 have been bolted together, the frame assembly 40 is

generally placed abutting a wall 30 against which the decking system 60 is to be assembled. When an obstacle such as a pipe 32 (not shown in figure 6) extends from the wall 30, the frame assembly 40 is placed adjacent
5 the wall 30, but spaced apart therefrom.

The spacer bracket 10 is then inserted (to one side of the pipe 32) in the space between the wall 30 and the frame assembly 40, such that the securing member 34 is
10 disposed away from the wall 30 and towards the frame assembly 40, as shown in figure 6. In this way, the spacer bracket 10 is preferably arranged, in use, so that the load bearing surface 16 is substantially horizontal and is positioned substantially orthogonal
15 to the wall 30 as shown.

The height of the spacer bracket 10 is adjusted as required by screwing or unscrewing the adjustable leg 26. Generally, the height of the spacer bracket 10 is
20 adjusted until the load bearing surface 16 is substantially flush with the upper surface of the adjacent sub-frame member 42. The spacer bracket 10 is then preferably secured to the sub-frame member 42, for example by securing the second leg 20 to the member 42
25 by means of a screw inserted through the one or more apertures present in the second leg 20. Thus, in this way, the spacer bracket 10 enables the wall 30 and the frame assembly 40 to be maintained in spaced-apart relation.

Once the spacer bracket 10 is in place as described above, a plank 52 is placed on the load bearing surface 16, i.e. between the spaced-apart wall 30 and frame assembly 40, as shown in figure 7 for example. The plank 52 preferably has substantially the same width as the length of the load bearing surface 16. Furthermore, the plank 52 preferably has a thickness comparable to the height of the securing member 34, also as shown in figure 7. The securing member 34 is then secured to the plank 52 using any suitable means, such as a screw and screwdriver 36.

The spacer bracket 10 therefore abuts the frame assembly (by means of the second leg 20), and also abuts the plank 52 (by means of the load bearing surface 16 and the securing member 34).

Although not shown, it will be appreciated that once the plank 52 is in place, a further spacer bracket (not shown) is then placed on the other side of the pipe 32, and the process is repeated. This enables a plank 52 to be supported on either side of the pipe 32 against the wall 30, whilst maintaining the frame assembly 40 intact and spaced-apart from the wall 30. The spacer bracket 10 therefore conveniently enables such an obstacle 32 to be avoided when assembling the modular decking system 60.

Once the required number of planks 52 have been placed against the wall as described above, a plurality of planks 52 in the form of panels 54 are placed on the

frame assembly 40 so as to form the overall modular decking system 60, as shown in figure 8 for example. Due to the incremental height adjustment possible by means of the adjustable leg 26, the height of the plank 52 abutting the wall 30 can be further adjusted so as to be substantially flush with the rest of the planks 52 forming the panels 54 of the modular decking system 60. In this way, the spacer bracket 10 is used not only to avoid obstacles when assembling the modular decking system 60, but it can also conveniently provides an even finish to the decking system 60.

It will be appreciated that the spacer bracket 10 is not limited to the embodiment described herein. For example, spacer brackets having different sizes, e.g. having different lengths of load bearing surfaces (not shown) may be provided for use with sections of a wall (not shown) which are angled in different directions, or for sections of a wall (not shown) that have an uneven finish (not shown).

In these cases, spacer brackets of different sizes can be used at different intervals along the wall, the size of the spacer bracket being dependent on the size of the space between the wall and the frame assembly at a particular point. The planks to be supported by the spacer brackets will generally be cut down to size, for example to taper at a certain point. Using the spacer brackets of the present invention eliminates the requirement to cut the frame assembly, which can remain intact.

The present invention is not limited to the embodiment described herein, which may be amended or modified without departing from the scope of the present
5 invention.

Claims:

1. A spacer bracket for maintaining a space between a frame assembly and a wall, the spacer bracket
5 comprising a spacer frame including a load bearing surface, wherein the load bearing surface is adapted to receive a plank, such that, in use, the plank is supported on the spacer frame between the spaced-apart wall and frame assembly.
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2. A spacer bracket as claimed in Claim 1, wherein the spacer bracket is arranged, in use, so that the load bearing surface is substantially horizontal and is positioned substantially orthogonal to the wall.
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3. A spacer bracket as claimed in Claim 1 or Claim 2, wherein the spacer frame is substantially square or obround section in shape, one surface of which forms said load bearing surface.
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4. A spacer bracket as claimed in any of Claims 1 to 3, wherein the spacer frame is also provided with an aperture adapted to receive a screw-threaded adjustable leg which is ground-engaging in use, and wherein the
25 adjustable leg is adapted for incremental adjustment of the height of the load bearing surface relative to the ground.
5. A spacer bracket as claimed in any preceding
30 claim, wherein the spacer frame includes a securing

member arranged to enable the spacer bracket to be secured to the plank.

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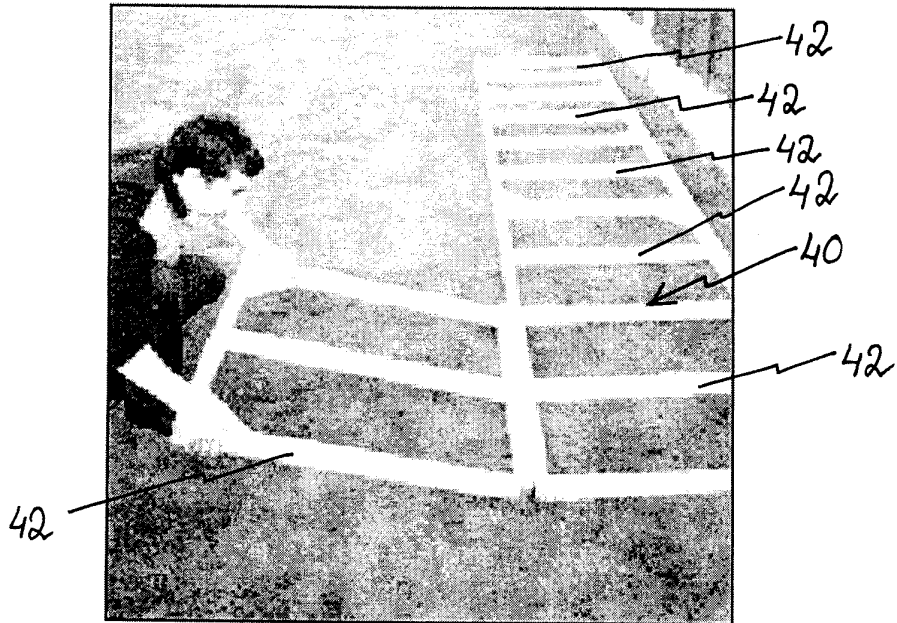


Figure 1

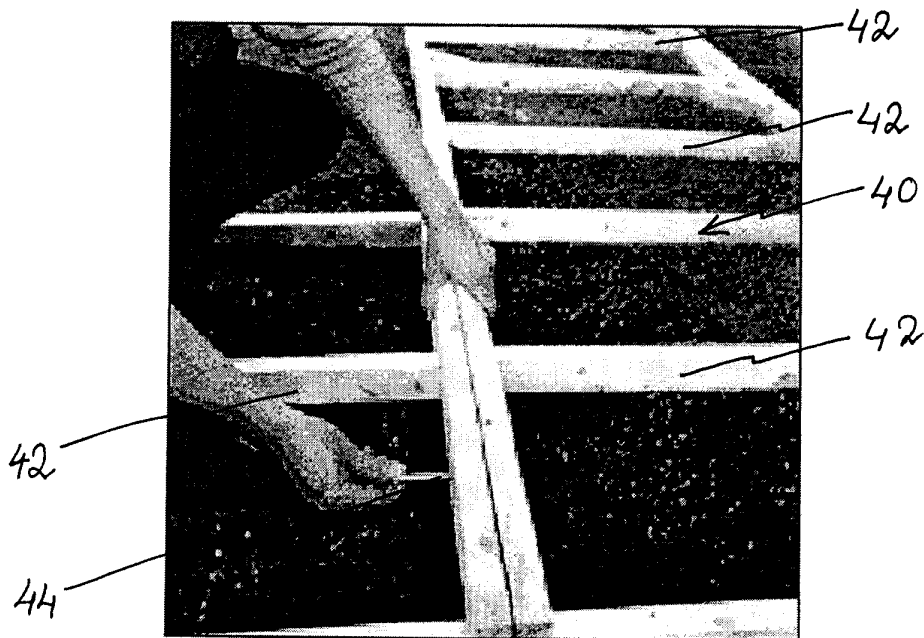


Figure 2

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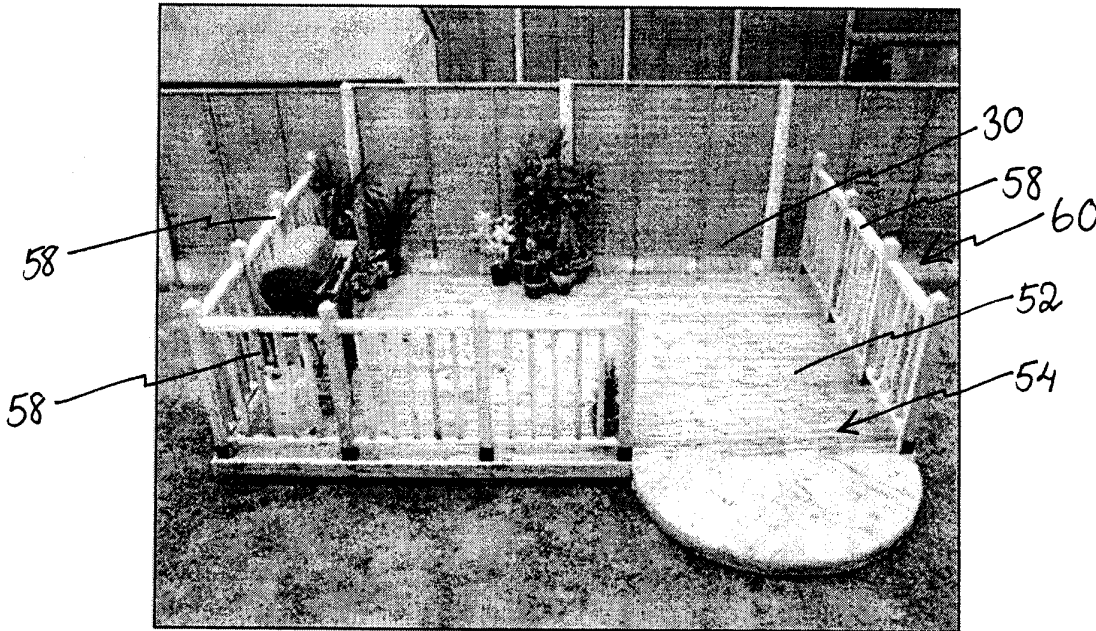


Figure 3

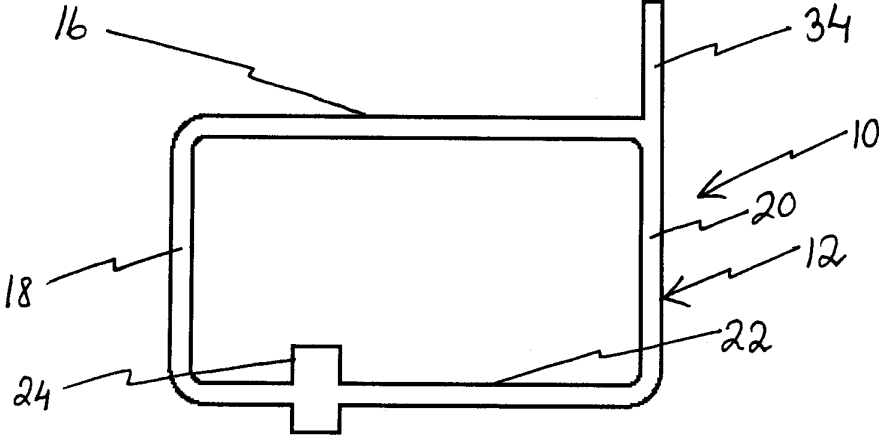


Figure 4

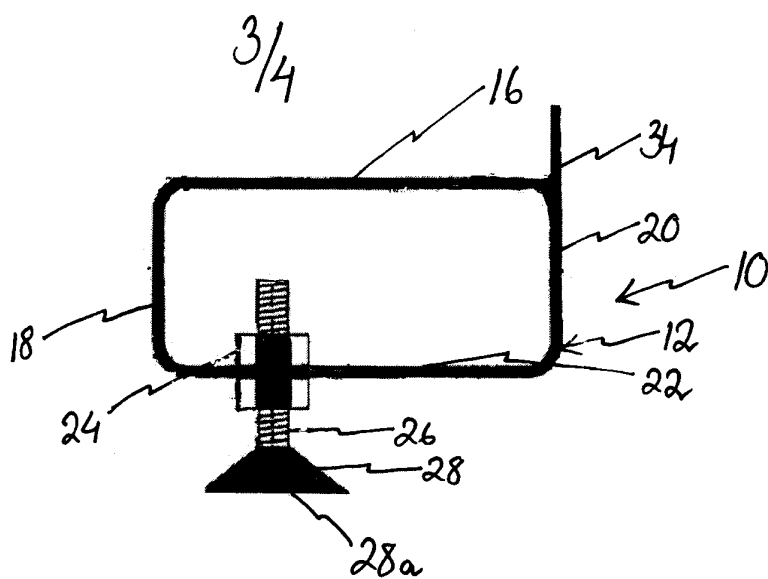


Figure 5

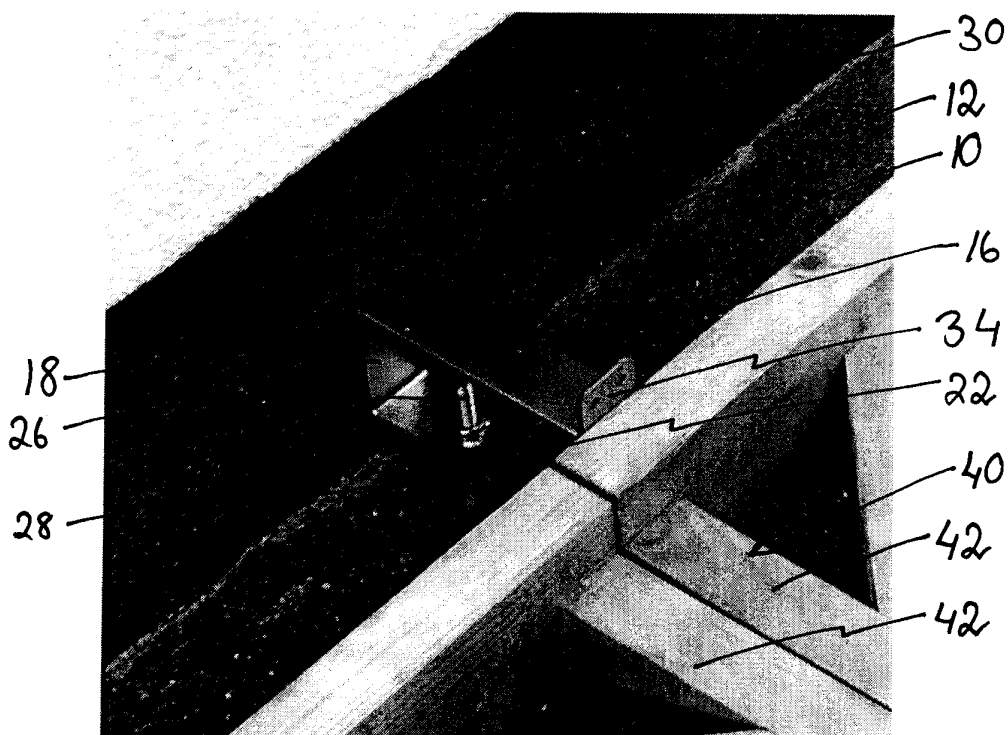


Figure 6

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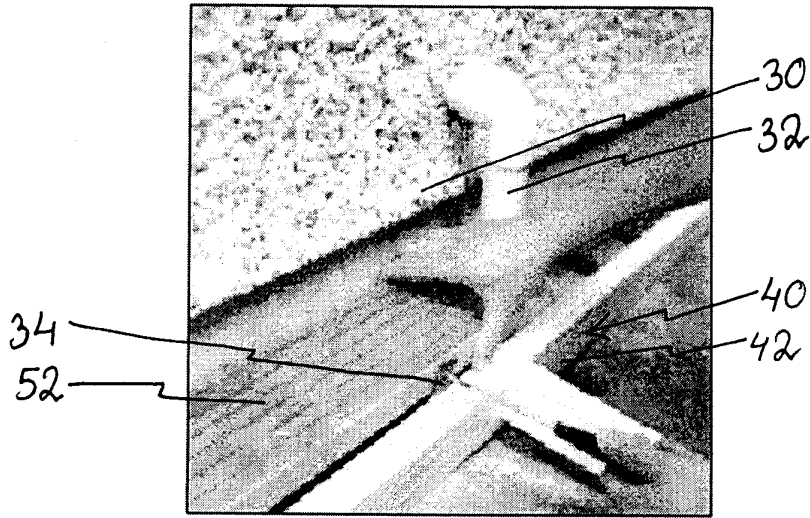


Figure 7



Figure 8