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A method of mounting an appliance to a bracket

This invention relates to an assembly of an appliance and a bracket usable for mounting an article, appliance or fitting relative to another surface, fitting or bracket.

5 An object of the invention is to provide a method and apparatus for mounting an article, appliance or fitting relative to another surface, fitting or bracket which allows for simple and easy disengagement or engagement thereof from or to each other when necessary.

10 A further object of the invention is to provide a method and apparatus for mounting an appliance, article or fitting relative to another surface, fitting or bracket which offers to the public a useful alternative choice.

15 According to a first aspect of the present invention there is provided an assembly of an appliance and a bracket including:

a bracket including at least one male engaging member;
and

an appliance including

20 (i) a frame with at least one female recess for receiving the male engaging member,

(ii) a locking ledge connected to the frame and extending into the female recess to engage the male engaging member and hold the appliance locked to the bracket,

25 (iii) a releasing member extending through an aperture in the frame to push the male engaging member away from the ledge and unlock the appliance from the bracket, and

(iv) spring means connecting the releasing member to the frame and biasing the releasing member away from the male engaging member.

5 According to a second aspect of the present invention there is provided an assembly of an appliance and a bracket including:

an appliance including at least one male engaging member; and

a bracket including

10 (i) a frame with at least one female recess for receiving the male engaging member,

(ii) a locking ledge connected to the frame and extending into the female recess to selectively engage the male engaging member and hold the appliance locked to the
15 bracket,

(iii) a releasing member extending through an aperture in the frame to push the male engaging member away from the ledge and unlock the appliance from the bracket, and

(iv) spring means connecting the releasing member to
20 the frame and biasing the releasing member away from the male engaging member.

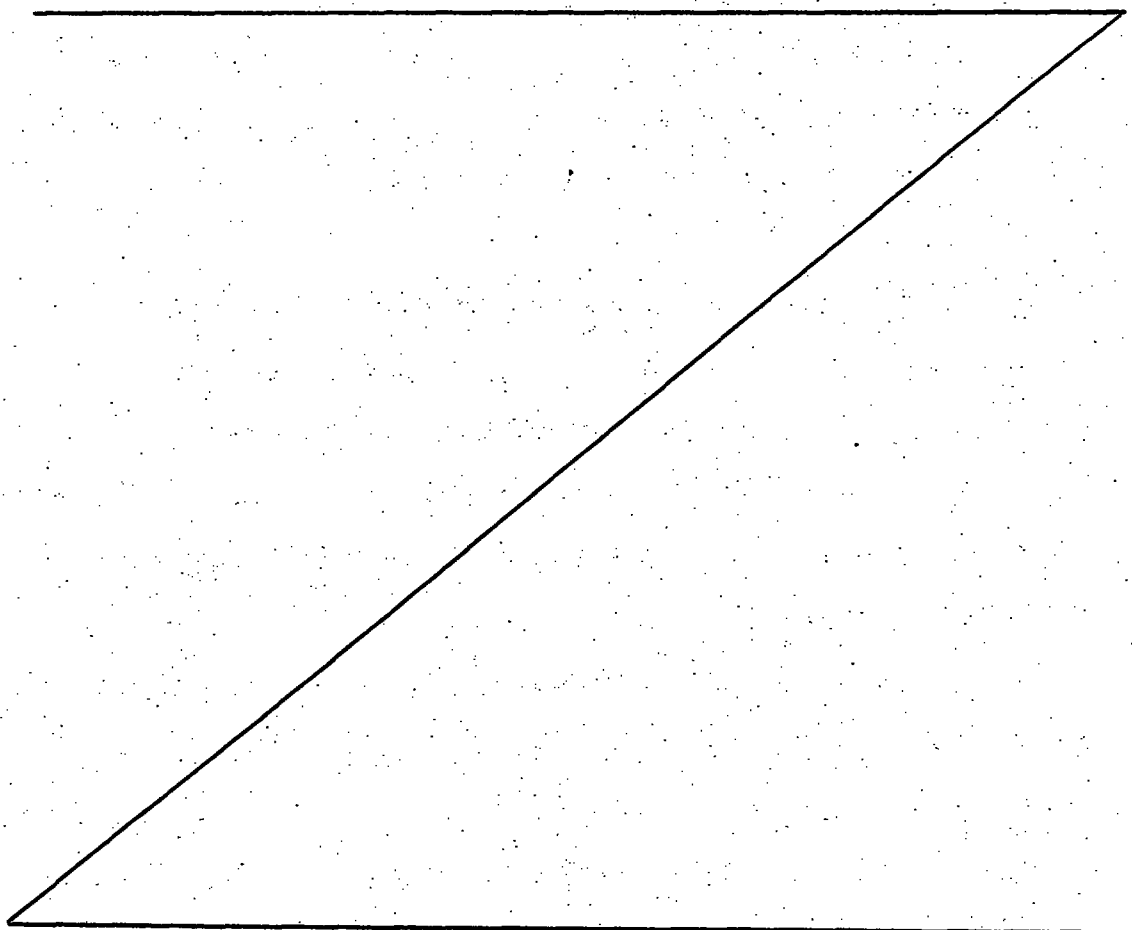
The bracket and appliance fitting can be a mounting bracket manufactured in an injection moulding machine from a plastics material. The mounting bracket can be formed with
25 a pair of male engaging members engageable with a pair of female recesses formed in the body of an electrical or the like appliance or fitting.

(12)

Further aspects of the present invention which should be considered in all its novel aspects will become apparent in the following description which is given by way of example only.

5 An example of the present invention will now be described with reference to the accompanying drawings in which:

Figure 1: shows a vertical cross section through an appliance body and mounting bracket



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incorporating the present invention;
Figure 2: shows a perspective view from above
the front of the appliance body and
mounting bracket shown in Figure 1
5 wherein the appliance body and bracket
are shown exploded apart for clarity
and wherein part of the appliance body
has been ghosted for clarity; and
Figure 3: shows a front view of the mounting
10 bracket shown in Figures 1 and 2 with
part of the appliance body ghosted
thereon.

The example of the invention will be described
with regard to an appliance body which is mounted to a
15 bracket designed for fastening as a wall bracket.

The appliance body shown in the drawing is a
fitting including a plurality of electrical sockets
which can include control switches and/or a contact
breaker. The fitting which is generally indicated by
20 arrow 1 can include a circuit breaker (not shown) and
has a cord and plug (not shown) which extend from one
end for engagement to a power source.

The fitting has incorporated therein, during
manufacture, one or more female recesses. In the example
25 the appliance 1 has a pair of female recesses 2 positioned
near to the top 3 and bottom 4 of the appliance body 1
respectively. The opening to each recess 2 is in a rear
wall 5 of the appliance 1.

At least one of the recesses and in the example both of the recesses have in association therewith a locking means with an associated releasing means. In the example both of the recesses 2 have locking means and releasing means associated therewith. Each locking means is a ledge 6 formed toward an inner end 7 of the recess 2. The ledge 6 has associated therewith a release button 8 which extends through an aperture 9 in the wall of the appliance body 1. The release button 8 is biased by a biasing member 10 to its outward position i.e. the position shown in Figure 1.

The appliance body 1 is adapted for engagement with a mounting bracket which incorporates a corresponding number of male engaging members positioned to engage in the female recesses incorporated in the appliance body 1. In the example the mounting bracket is generally indicated by arrow 11 and includes a pair of male engaging members 12. The bracket 11 has a central aperture incorporated so that the bracket 11 constitutes rectangular peripheral frame.

Each male engaging member 12 or at least part thereof is formed from a resilient material and includes a tongue 13 with a flange 14 near the end thereof. The flange 14 cooperates with the ledge 6 of the recess to lock the appliance body 1 relative to the mounting bracket 11. In the example the male engaging members 12 have a guide arm 15 as well as the member 12 to contact the opposite side 16 of the recess 2 to that with the

ledge 6 to firmly locate the appliance to the bracket 11.

5 The mounting bracket 11 can include fixing means to enable it to be attached to a wall or counter surface 17 on which it is to be mounted. The fixing means can be a pair of holes 18 formed near to each end of the bracket 11.

10 The rear wall 5 of the appliance 1 can include stabilising legs 19 so that, in use, when the fitting is used without the bracket 11 i.e. by placing same on a counter or bench it adopts a stable platform.

15 In use the appliance can be manufactured from any suitable material and preferably from a rigid plastic material in an injection moulding machine. The bracket can be manufactured from a similar material or fabricated and have at least the male members 12 formed from a resilient material to allow the appliance 1 to be clipped onto the bracket 11 with the members 12 locked into the recesses 2. In this position the stabilising
20 legs 19 extend through the aperture 21 to contact the surface 17 on which the bracket 11 is mounted. In order to release the appliance 1 the release buttons 8 are pressed inward in the direction of the arrows 20 to allow the flange 14 on the tongue 13 to disengage from
25 the ledge 6. The appliance 1 can then be slid from in association with the members 12 and 15.

It is to be appreciated that, if desired, the appliance body can have the male engaging members formed

integrally therewith, which members are engaged in recesses formed in the bracket.

It is to be appreciated that with minor modifications thereto the present invention can be adapted to support any appliance, apparatus or fitting relative to any other surface, fitting or bracket. For example, the appliance can be mounted to the bracket on the rear wall of a cabinet or the appliance can be a kitchen appliance adapted to be held in position on a bench or similar surface.

Thus by this invention there is provided a method and apparatus for mounting an application, article or fitting relative to an other surface, fitting or bracket which engagement provides for a simple and relatively easy disengagement of the appliance article or fitting from the said other surface, fitting or bracket when necessary.

A particular example of the present invention has been described herein by way of example and it is to be appreciated that improvements and modifications thereto can take place without departing from the scope of the appended claims.

CLAIMS

1. An assembly of an appliance and a bracket including:
a bracket including at least one male engaging member;
and

an appliance including

5 (i) a frame with at least one female recess for
receiving the male engaging member,

(ii) a locking ledge connected to the frame and
extending into the female recess to engage the male engaging
member and hold the appliance locked to the bracket,

10 (iii) a releasing member extending through an aperture
in the frame to push the male engaging member away from the
ledge and unlock the appliance from the bracket; and

(iv) spring means connecting the releasing member to
the frame and biasing the releasing member away from the
15 male engaging member.

2. An assembly as claimed in claim 1 wherein the bracket
includes a second male engaging member, and the appliance
includes a second female recess for receiving the second
male engaging member.

20 3. An assembly of an appliance and a bracket including:
an appliance including at least one male engaging
member; and

a bracket including

25 (i) a frame with at least one female recess for
receiving the male engaging member,

(ii) a locking ledge connected to the frame and
extending into the female recess to selectively engage the



male engaging member and hold the appliance locked to the bracket,

(iii) a releasing member extending through an aperture in the frame to push the male engaging member away from the ledge and unlock the appliance from the bracket, and

(iv) spring means connecting the releasing member to the frame and biasing the releasing member away from the male engaging member.

4. An assembly as claimed in claim 3 wherein the appliance includes a second male engaging member, and the bracket includes a second female recesses for receiving the second male engaging member.

5. An assembly as claimed in any one of the preceding claims wherein the bracket is a mounting bracket manufactured in an injection moulding machine from a plastics material, and the appliance is moulded from a plastics material.

6. An assembly as claimed in any one of the preceding claims wherein the appliance is a power board including a series of electrical sockets, switches and a circuit breaker.

7. An assembly as claimed in any one of the preceding claims wherein the mounting bracket includes fixing means to facilitate fixing the bracket to a surface.

8. An assembly as claimed in claim 7 wherein the bracket includes a generally planar rectangular peripheral frame, and the fixing means include a pair of holes respectively formed in opposite ends of the peripheral frame.

9. An assembly as claimed in claim 8 wherein the male



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engaging member(s) extend(s) away from the peripheral frame at a right angle thereto.

10. An assembly of an appliance and a bracket comprising:
a bracket including

5 (i) a generally planar rectangular frame,
(ii) a pair of male engaging members connected to the frame, and

(iii) fixing means located at opposite ends of the frame to facilitate fixing the frame to a surface; and
10 an appliance including

(i) a frame with a rear wall, upper and lower edges, and a pair of female recesses respectively near to the upper and lower edges for receiving the male engaging member,

(ii) stabilizing legs connected to and extending from
15 the rear wall,

(iii) a locking ledge connected to the frame and extending into each female recess to selectively engage its male engaging member and hold the appliance locked to the bracket,

20 (iv) a releasing member in the upper end and lower edges of the frame and extending through an aperture in the frame to push its male engaging member away from the ledge and unlock the appliance from the bracket, and

25 (v) a plastics leaf spring connecting each releasing member to the frame and biasing the releasing member away from its male engaging member.

11. An assembly of an appliance and a bracket substantially as hereinbefore described with reference to the accompanying drawings.

