

(19)



Europäisches Patentamt  
European Patent Office  
Office européen des brevets



(11)

**EP 0 750 867 A2**

(12)

## EUROPEAN PATENT APPLICATION

(43) Date of publication:  
**02.01.1997 Bulletin 1997/01**

(51) Int Cl.<sup>6</sup>: **A47B 13/08, A47B 96/18**

(21) Application number: **96304634.7**

(22) Date of filing: **21.06.1996**

(84) Designated Contracting States:  
**BE DE DK FR GB IE LU NL SE**

(30) Priority: **29.06.1995 GB 9513278**

(71) Applicant: **FLEXIFORM BUSINESS FURNITURE  
LIMITED**  
**Bradford, West Yorkshire BD3 7AE (GB)**

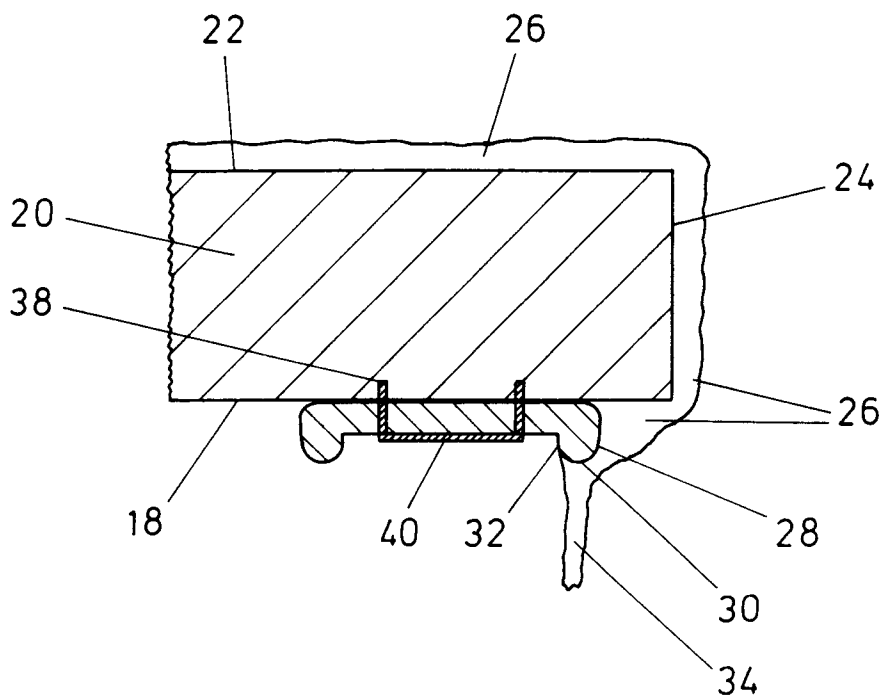
(72) Inventors:  
• **Law, Andrew Jonathan**  
**Leeds, LS12 1VN West Yorkshire (GB)**  
• **Wilson, Timothy Stephen George**  
**Leeds, LS12 2PH West Yorkshire (GB)**

(74) Representative: **Sherrard-Smith, Hugh**  
**Appleyard, Lees & Co.**  
**15 Clare Road**  
**Halifax, HX1 2HY West Yorkshire (GB)**

### (54) Improvements in and relating to furniture and other installations

(57) A barrier 10 is stapled to the underside of a desk top 20. Spilt liquid 26 flows over the upper surface 22, down the edge 24 and then starts to flow across the un-

dersurface 18 where it encounters a wall 28. Liquid then builds up on the narrow strip 30 and then drips off that edge 30.



**FIG. 3**

**EP 0 750 867 A2**

## Description

### Field of the Invention

This invention relates to a barrier for preventing or hindering the progress of spilt liquids. It is particularly, but not exclusively, concerned with an anti-spill barrier for furniture and office installations.

Office workers often have drinks whilst working at their desks or around an office. It is not uncommon for a drink to be knocked over during the course of work. Although this is a nuisance, it can also be dangerous since many desks and office installations now have a number of power cables and other electricity carrying cables distributed about them.

### Summary of the Invention

According to a first aspect the invention provides a barrier adapted to be attached to an undersurface of a desk or office installation, in which the barrier comprises at least one ridge region providing an obstacle to the flow of liquid across that undersurface.

Conveniently the barrier is elongate, preferably in the form of a strip.

More particularly the barrier may be adapted to be attached to the undersurface of a working surface, for example a desk or table top. The barrier may be attached to a peripheral region of the under surface. However, the barrier may be placed around an area to be "protected" from liquid, for example cable or wire trunking.

In use the ridge region extends away from the undersurface.

The barrier may be attached to the undersurface by staples, tacks or glue. By providing a barrier which can be readily attached onto a surface it can be retro-fitted to existing pieces of furniture and installations. Therefore it is not necessary to have such an anti-spill barrier included during construction of furniture or installations.

Preferably the or each ridge region is present along substantially the entire length of the barrier.

In one embodiment the barrier comprises two ridge regions. The ridge regions may be substantially at opposing edges of the barrier. Preferably the ridge regions are separated by a substantially planar region. The planar region may be a part of the barrier which is thinner than each ridge region.

The planar region provides a suitable region to which tacks and staples can be applied. Not only does a planar region provide a flat surface with which the heads of tacks or staples can be flush but the ridge regions serve to isolate, to some extent, the heads of tacks and staples from contact with external bodies passing by the barrier. This can help prevent clothing of a worker being torn or damaged. It can also help prevent injury to such a worker.

Although the barrier serves the purpose of being a

physical barrier to the flow of liquid, it also encourages liquid to drip away from the undersurface rather than flow across it. In this respect the ridge serves to concentrate and build up liquid onto a relatively small and narrow region. As liquid builds up it drips or flows off the or each ridge region.

A particular use of the barrier is to protect wire and cable trunking on, in or under a desk. If liquid flows across the undersurface of desk, it can encounter cables which may be mounted on the backframe of the desk. If liquid encounters the cables it can cause an electrical hazard or damage to equipment.

According to a second aspect, the invention provides a desk or other piece of furniture or installation comprising a barrier according to the first aspect of the invention.

### Description of the Drawings

A barrier in accordance with the present invention will now be described, by way of example only, with reference to the accompanying drawings, in which:

Figure 1 shows a perspective view of a barrier for hindering the progress of spilt liquids;

Figure 2 shows a cross sectional view of the barrier of Figure 1; and

Figure 3 shows the barrier in operation.

### Description of the Preferred Embodiment

Figure 1 shows a barrier 10 adapted to be attached to an undersurface 18 of a desk or office installation in which the barrier 10 comprises at least one ridge or ridge region 12, 14 providing an obstacle to the flow of liquid across that undersurface 18.

The barrier 10 is an anti-spill strip for hindering the progress of liquid across the undersurface of a desk. In this embodiment two substantially parallel ridges 12, 14 are provided separated by a planar region 16. The barrier 10 is also shown in Figure 2.

Figure 3 shows the barrier 10 in use. The barrier 10 is stapled to the under surface 18 of a desk top 20. It forms a substantially continuous barrier running along the under surface of the top in a region close to the periphery of the desk or table top. If liquid is spilt on the upper surface 22 of the desk top 20 it may flow across the upper surface and over an edge 24 then start to flow across the under surface 18. If there is no barrier, the liquid 26 could flow right across the under surface and reach regions of the desk which could be kept liquid free. For example, it may flow into regions which contain metal and potentially cause problems with metal corrosion. More significantly, it may flow into regions of the desk at which cables carrying electrical power are located. Apart from potential problems of corrosion, this could be

a major electrical hazard.

In Figure 3, spilt liquid 26 flowing across the under-surface 18 encounters a wall 28 which acts as an initial barrier. As liquid 26 builds up, it may threaten to overflow over the barrier. For this reason, ridge 12 is provided. Any liquid 26 which begins to travel over the ridge 12, is constrained along a narrow strip 30 which is the peak of the ridge. As liquid 26 builds up on the narrow strip 30, rather than flow over a second wall 32 of the ridge 12, and thus upwards against gravity, it drips or runs off the ridge 12. Therefore, not only does the barrier 10 provide a physical barrier to the progress of liquid, but also has a draining function causing the liquid 26 to drip off or run away from the under surface 18.

Whilst the barrier can be provided around the whole of the under surface of the desk, near the desk periphery, it may be desirable simply to protect particular areas of the desk under surface 18. Therefore, the barrier 10 can be placed strategically around areas which need protection, for example areas carrying cables.

In the embodiment of the barrier described, two ridges 12, 14 are provided. Having two ridges is advantageous for two reasons. If there is a large liquid spillage sufficient for the liquid to overcome ridge 12, ridge 14 gives a second barrier. Furthermore, as can be seen from Figure 2, in cross section the strip is symmetrical about mirror plane 36 and thus it is not "handed". It does not matter in which orientation the strip is attached to the under surface 18.

The planar region 16 provides a convenient fixing point to attach the barrier 10 to the desk top 20. The barrier 10 can be stapled to the under surface 18 and the planar region provides a suitable flat area for the heads of staples to nestle against. A staple 38 attaching the barrier 10 to the desk top 20 is shown in Figure 3. In this arrangement, the ridges 12, 14 have an additional function in that they surround the staple head 40 thus restricting the likelihood of it coming into contact with articles which might brush across the barrier 10, for example parts of clothing or parts of people. By enclosing the staple 38 between the ridges 12, 14, the possibility of the staple head 40 causing damage is limited.

4. A barrier as claimed in any preceding claim in which the ridge region is arranged, in use, to extend away from the undersurface.

5 5. A barrier as claimed in any preceding claim arranged to be attached to the undersurface by staples (40).

10 6. A barrier as claimed in any preceding claim in which the or each ridge region is present along substantially the entire length of the barrier.

7. A barrier as claimed in any preceding claim including two ridge regions.

15 8. A barrier as claimed in Claim 7 in which the ridge regions are substantially at opposing edges of the barrier.

20 9. A barrier as claimed in either of Claims 7 to 8 in which the ridge regions (12, 14) are separated by a substantially planar region (16).

25 10. A desk or office installation including a barrier as claimed in any of Claims 1 to 9.

## Claims

45

1. A barrier (10) adapted to be attached to an under-surface (18) of a desk or office installation in which the barrier comprises at least one ridge region (12, 14) providing an obstacle to the flow of liquid (26) across that undersurface (18).

50

2. A barrier as claimed in Claim 1 in which the barrier (10) is elongate.

55

3. A barrier as claimed in any preceding claim arranged to be attached to a peripheral region of the undersurface.

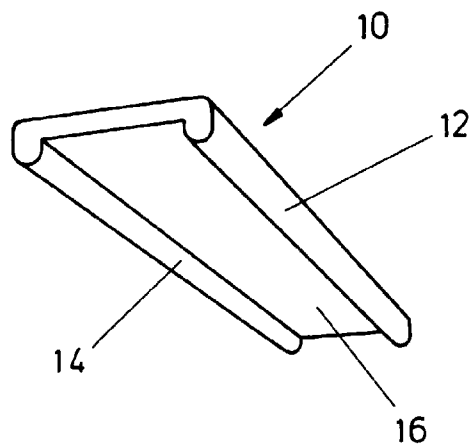


FIG. 1

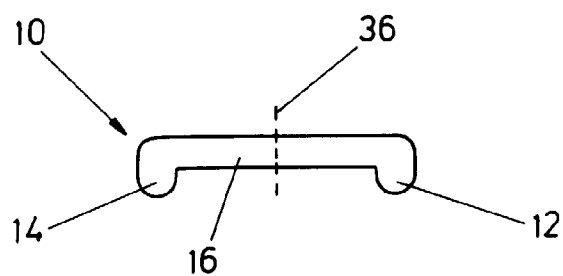


FIG. 2

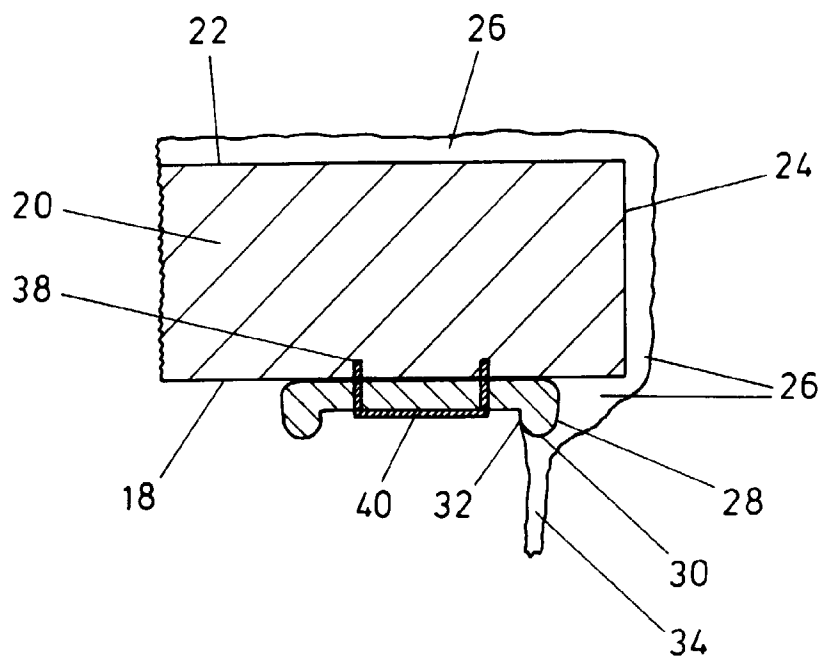


FIG. 3