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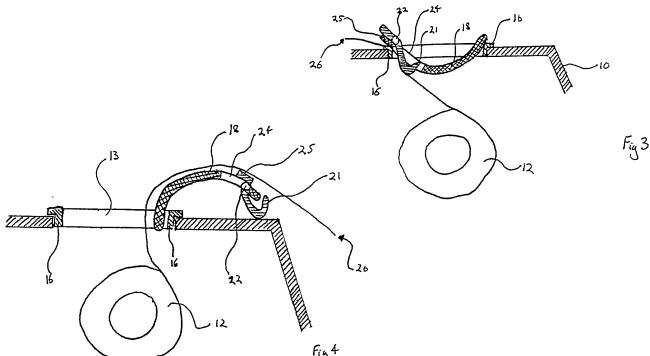
(52) UK CL (Edition K) **B4B** B70F **B8M** MB10 M6 M7 U1S S1574

(56) Documents cited EP 0279920 A1 GB 2173141 A

(58) Field of search UK CL (Edition K) B4B B70F, B8M MB10 INT CL5 A47K 10/34, B65H 35/00 35/04 35/06 35/08 Online databases: WPI

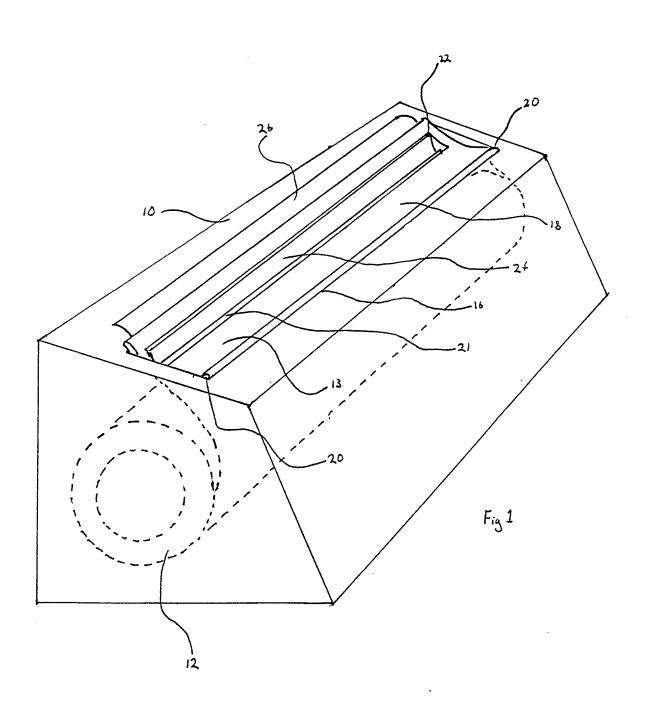
(54) Foil or film dispenser

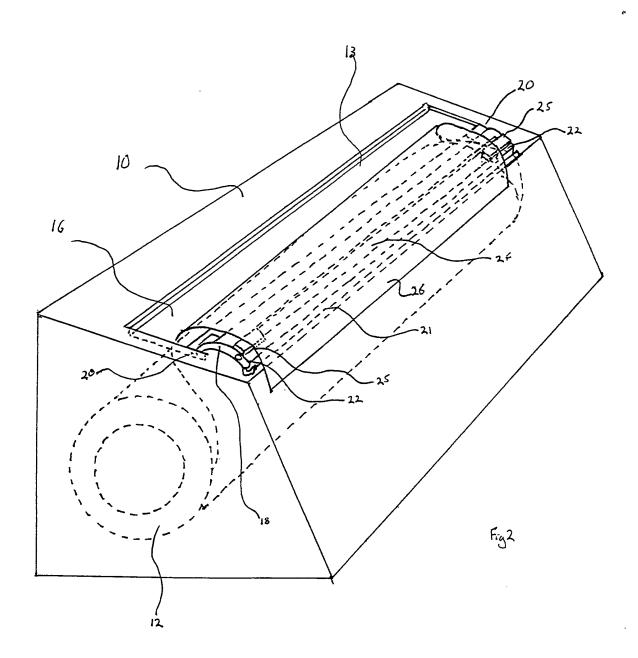
(57) A device for cutting kitchen foil or film or the like comprises a carton (10), which contains a roll of film or foil (12), a slot (13) on top of the carton, and a plastics cutting insert. The cutting insert comprises a surround (16) and a spring flap (18). A cutting blade (21) is attached to the flap (18) such that when the blade (21) is in use it is exposed: otherwise it is guarded by the flap (18). This reduces the risk of the device cutting the user.

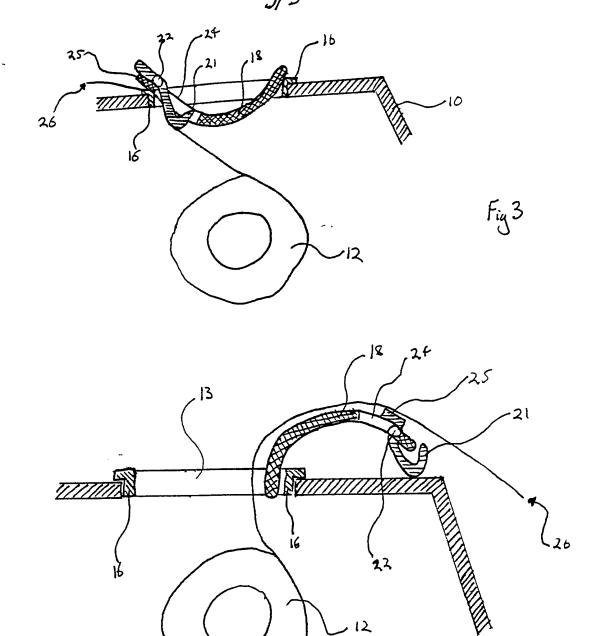


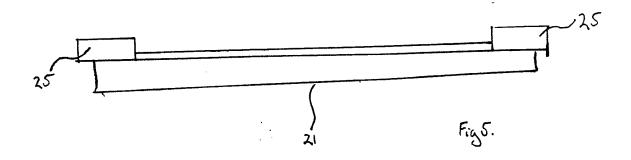
At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

The claims were filed later than the filing date within the period prescribed by Rule 25(1) of the Patents Rules 1990.









Device for cutting sheet material

The present invention relates to a device for cutting sheet material.

Hitherto an exposed edge of a carton which contains a roll of aluminium foil or cling film has been adapted for cutting the foil or film. A portion of the foil or film can be torn away from the roll by means of that edge.

Frequently users of a carton having this construction have cut themselves on such an edge.

An aim of the present invention is to reduce the risk of such injury.

Accordingly, the present invention is directed to a device for cutting sheet material, the device comprising a support member and a moveable member mounted on the support member, in which the moveable member is provided with a cutting part, and is moveable relative to the support member between a first position, in which the cutting part is retracted, and a second position, in which the cutting part is exposed, and in which the cutting part extends transversely of such movement so that, when the device is arranged for use on a container, which contains sheet material, with an aperture provided for withdrawal of the sheet material from the container, such withdrawal urges the moveable member into the said second position to cause the cutting part to be exposed and enable a portion of the sheet to be cut from the rest

of the sheet material by means of the cutting part.

Preferably, the moveable member is resiliently mounted on the support member so that it tends to rest in the said first position, whereby the cutting part is retracted after such a portion of sheet material has been cut. Alternatively or in addition, the device may be so constructed that the support member tends to rest in the said first position by the force of gravity when the device is in use.

Desirably, the cutting part is spaced from such an aperture when the moveable member is in the said second position so that some of the sheet material projects from the container after such a portion of sheet has been cut. This may be effected by so constructing the device that it provides a guarded blade attached by a pivot to a springy flap mounted on a carton for rolls of film, in which the blade is pivoted out from its guarded position when the film is pulled out of the container against the springy flap and once the sheet of film has been cut the blade is returned to its guarded position by the springy flap, the latter trapping the sheet material so that a portion of it protrudes from the carton to facilitate further withdrawal.

The blade may have a cutting edge which is angled, relative to the intended direction of pull, in such a way that when the device is used by a right-handed person, the angle compensates for slipping of the sheet material as the latter is pulled over the blade, as a

result of which the sheet material is cut or torn in a line which is substantially perpendicular to the sides of the sheet material.

An example of a device made in accordance with the present invention is shown in the accompanying drawings, in which:-

Figure 1 is a perspective view of a carton equipped with the device;

Figure 2 is the same view of the carton with a part of the device in an exposed position;

Figures 3 and 4 show respective cross-sectional views of the carton as shown in Figures 1 and 2; and

Figure 5 is a plan view of a part of the device shown in greater detail, in the position shown in Figures 2 and 4.

In all the above Figures, different respective numerals designate the same different features.

With reference to Figure 1, a cardboard carton 10 which contains a roll 12 of film or other sheet material so that the latter can be readily dispensed therefrom, is formed with a cut-out elongate slot 13 in an intended top wall of the carton 10. A plastics insert 14 is fitted into this slot 13. The plastics insert 14 comprises a surround 16 and a springy elongate flap 18. The flap 18 is pivoted on the surround 16 by pivots 20 provided on the surround 16 at the two ends of the flap. A cutting blade 21 is attached to the flap 18 by two respective pivots 22 at the two ends of the blade 21. A

slot 24 is cut in the flap 18 to receive the blade 21 in a retracted position. The blade 18 is free to pivot about the pivots 22 between its retracted position and exposed position, shown more clearly in Figure 4, in which abutment portions 25 of the blade 21, at the two ends thereof, abut side portions of the flap 18.

Figure 2 shows the device illustrated in Figure 1 when used to cut a portion of film. Thus, when an end 26 of the sheet material is pulled, to withdraw further film from the carton 10, the flap 18 is pivoted about the pivots 20 upwardly and then downwardly away from the slot 13 towards the top wall of the carton 10 so that the blade 21 pivots out of its slot 24 in an anticlockwise direction as viewed in Figures 2 to 4, until the abutment portions 25 abut side portions of the flap 18. In this position, the blade 21 is exposed so that its cutting edge will cut the film when the latter is brought down against it.

Figures 3 and 4 show this action more clearly. In Figure 3 the cutting blade 21 can be seen retracted in the slot 24 to protect the user against injury and a portion of film is trapped outside the carton 10 by the flap 18.

Once the sheet material has been cut, the resilience of the springy flap 18 returns the latter to the position in which it covers the slot 13 and the cutting blade 21 pivots back under gravity into its slot 24 in the flap 18. At the same time, since the cutting

edge of the blade 18 is spaced from the slot 13 when the film is cut, some of the film is trapped outside of the carton 10. Thus, the device is returned to the configuration shown in Figures 1 and 3.

The cutting blade 21, as shown in Figure 5, is angled, relative to the slot 13, to cut the film substantially perpendicularly to the sides of the film by compensating for slipage of the film across the cutting edge. Figure 5 further shows how the abutment portions 25 extend inwardly so that those portions are brought into contact with the film as the latter is withdrawn from the carton 10. Such contact further assists the pivoting of the blade 21 out of its slot 24, to reduce the likelihood of the blade 21 sticking in the slot 24.

Numerous variations and modifications to the illustrated device may be made without taking the resulting construction outside the scope of the present invention. To give one example only, the resilience of the flap 18 may be provided by leaf springs or coil springs at the two ends of the flap 18, rather than by any springiness in the material of the flap itself.

Claims

A device for cutting sheet material, the device comprising a support member and a moveable member mounted on the support member, in which the moveable member is provided with a cutting part, and is moveable relative to the support member between a first position, in which the cutting part is retracted, and a second position, in which the cutting part is exposed, and in which the cutting part extends transversely of such movement so that, when the device is arranged for use on a container, which contains sheet material, with an aperture provided for withdrawal of the sheet material from the container, such withdrawal urges the moveable member into the said second position to cause the cutting part to be exposed and enable a portion of the sheet to be cut from the rest of the sheet material by means of the cutting part.

- 2. A device for cutting sheet material according to claim 1, in which the moveable member is resiliently mounted on the support member so that it tends to rest in the said first position, whereby the cutting part is retracted after such a portion of sheet material has been cut.
- A device for cutting sheet material according to claim 1 or claim 2, in which the device is so constructed, that the support member tends to rest in the said first position by the force of gravity when the device is in use.

- A device for cutting sheet material according to any preceding claim, in which the cutting part is spaced from such an aperture when the moveable member is in the said second position so that some of the sheet material projects from the container after such a portion of sheet has been cut.
- A device for cutting sheet material according to claim 4, in which the device is so constructed that it provides a guarded blade attached by a pivot to a springy flap mounted on a carton for rolls of film, in which the blade is pivoted out from its guarded position when the film is pulled out of the container against the springy flap and once the sheet of film has been cut the blade is returned to its guarded position by the springy flap, the latter trapping the sheet material so that a portion of it protrudes from the carton to facilitate further withdrawal.
- A device for cutting sheet material according to any preceding claim, in which the blade has a cutting edge which is angled, relative to the intended direction of pull, in such a way that when the device is used by a right-handed person, the angle compensates for slipping of the sheet material as the latter is pulled over the blade, as a result of which the sheet material is cut or torn in a line which is substantially perpendicular to the sides.
- 7. A device for cutting sheet material substantially as described herein with reference to and as shown in the accompanying drawings.

Examiner's report to the Comptroller under Section 17 (The Search Report)

Application number

9102568.4 **Relevant Technical fields** Search Examiner (i) UK CI (Edition K) B4B (B70F); B8M (MB10) J A MULLEN (ii) Int CL (Edition) B65H (35/00, 35/04, 35/06, 35/08); A47K (10/34) 5 Databases (see over) Date of Search (i) UK Patent Office 8 JUNE 1992 (ii) ONLINE DATABASE: WPI

Documents considered relevant following a search in respect of claims

1 TO 7

Category (see over)	Identity of document and relevant passages	Relevant to claim(s)
Х	GB 2173141 A	1, 3 at least
X	EP 0279920 A1	1-4 at least

Category	Identity of document and relevant passages	Relevant to claim(s)

Categories of documents

X: Document indicating lack of novelty or of inventive step.

Y: Document indicating lack of inventive step if combined with one or more other documents of the same category.

A: Document indicating technological background and/or state of the art.

P: Document published on or after the declared priority date but before the filing date of the present application.

E: Patent document published on or after, but with priority date earlier than, the filing date of the present application.

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