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(54) Slider pull tab

(57) A puller 2 attached to a pull-tab 4 of a slider 6 for a zip fastener 7 is made of surface fastener material

such as hook and loop fastener material. The puller 2 is cut to shape and one half 10 is fed through the pull-tab eye 4, and the halves 10, 12 pressed together.

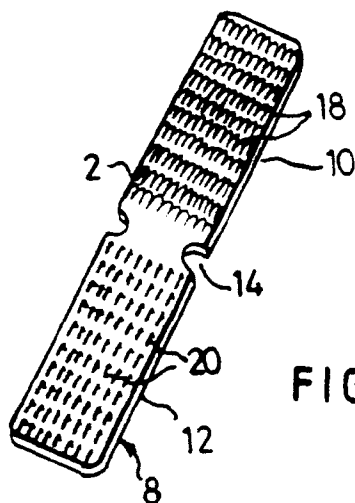


FIG.2

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Description

The present invention relates to a slide fastener and in particular to a puller for a pull-tab of a slide fastener such as a zip fastener.

To facilitate use of a slide fastener it is known to attach a puller to an eye at the end of the pull-tab on the slider. The puller can be readily gripped by the fingers, and it can carry a trade mark, logo or other design.

JP-63-592210 shows a puller which is looped through the eye which is usually provided at the end of the slider pull-tab, and secured by a rivet through the overlapping layers of puller material. This arrangement is expensive to manufacture, requiring separate parts, and a rivetting operation.

JP 63-59511 shows a puller moulded of plastics material and which incorporates an integral snap fastener to secure the puller to the slider pull-tab. This arrangement is more convenient in practice, but it is expensive to mould, and changing the puller shape requires a new mould.

The present invention provides a puller for a slide fastener, wherein the puller comprises a surface fastener. In a preferred embodiment the surface fastener is a hook and loop fastener.

Hook and loop fasteners are cheap to produce in large volume when the fastener is not required to operate under rigorous conditions or carry a high load. The fastener material is readily produced in large sheets or rolls with a fabric or flexible plastics backing on which the hooks and loops are formed. A puller of any desired shape can be readily cut from the sheets or rolls, for example by an ultrasonic cutting machine, and so the shape of the puller is easily varied. The backing material is easily printed on to display a trade mark or logo.

Also, the puller itself is easily replaced, for example if the particular logo or trade mark must be changed.

The invention will be further described by way of example with reference to the accompanying drawings, in which :-

Figure 1 shows a puller of the invention mounted on a pull-tab of a slider of a zip fastener,

Figure 2 shows a first embodiment of a puller according to the invention;

Figure 3 shows a second embodiment of a puller according to the invention;

Figure 4 shows the puller of the Figure 3 being fitted to a slider pull-tab; and

Figures 5a and 5b shows a strip of hook and loop fastener material for forming the embodiment of figure 3.

Figure 1 shows a puller 2 attached to the pull-tab 4

of a slider 6 of a zip fastener 7, by fitting it through an eye 5 of the pull-tab 4.

A face 8 of the puller 2 which is prominent to the user carries a printed trade mark or logo, such as "SPORTS".

Referring to figure 2, the puller of this embodiment has a woven backing material, for example, polypropylene, and is divided into a front half 10 and a back half 12 by a neck 14. Loops 18 are woven into one half of the puller 2, and hooks 20 are formed on the other half. The hooks can be formed, for example, by weaving relatively stiff nylon loops into the strip and cutting the loops. The production of such hook and loop fastener material is well known in the art.

The region of the neck 14 is left plain to accommodate the rim 22 of the eye 5 (see Figure 4).

The embodiment of Figure 3 differs from the embodiment of Figure 2 in that the hooks and loops 18, 20 are intermingled on the fastener material.

Referring to figure 4, to attach the puller 2 to the pull-tab 4, one half 10 is gathered and fed through the eye 5 to bring the neck 14 into registry with the rim 22. The puller 2 is then folded about the rim 22 to bring the halves 10, 12 together, when they are held by the hooks and loops 18, 20.

Figures 5a and 5b show top and bottom faces 8, 23 of a strip 24 of hook and loop fastener material suitable for forming the pullers 2. The bottom face of the strip is divided into two halves 26, 28 by a plain centre line region 30. Hooks and loops 18, 20 are formed on each half 26, 28, for forming the embodiment of Figure 3. Pullers 2 are illustrated in dotted outline on the plain top face 8, and are cut from the strip 24 by an ultrasonic cutting machine.

A logo or pattern may be printed on the plain face 8 of the strip 24 in register with the puller outline.

To allow greater flexibility in positioning the puller shapes on the strip 24, and reduce material wastage, the plain centre region may be omitted.

To form the embodiment of Figure 2, one half 26 of the strip is formed with only loops 18, and the other half with hooks 20.

The plain face 8 of the backing material is suitable for printing on, but another material layer may be bonded to it if desired.

When the eye of the pull-tab 4 is quite small, an additional, larger pull-tab may be secured to the first pull-tab, to provide a larger eye for receiving the puller.

Claims

1. A puller (2) for a slide fastener (7), wherein the puller comprises a surface fastener.
2. A puller as claimed in claim 1 wherein the surface fastener is a hook and loop fastener.

3. A puller as claimed in claim 2, comprising a strip of material having hooks and loops formed on one side, and arranged to be folded about a rim (22) of an eye (5) of a slider (6) of the slide fastener. 5
4. A puller as claimed in claim 1, 2 or 3, wherein the puller (2) comprises first and second portions (10, 12) separated by a neck region (14), the puller being foldable at the neck region to bring the first and second portions together. 10
5. A slide fastener in which the slider (6) has a pull-tab (4) with an eye (5) at one end, and a puller (2) is attached to the slider, wherein the puller is in the form of a strip which is folded over about a rim (22) of the eye (5) to form front and back portions (10, 12) which face each other, the opposing faces of the puller portions comprising surface fastener material. 15 20
6. A slide fastener as claimed in claim 5 wherein the surface fastener material is a hook and loop fastener, the puller portions being secured together by engaging the hooks and loops. 25
7. A fastener as claimed in claim 5 or 6, wherein the fastener is a zip fastener. 30

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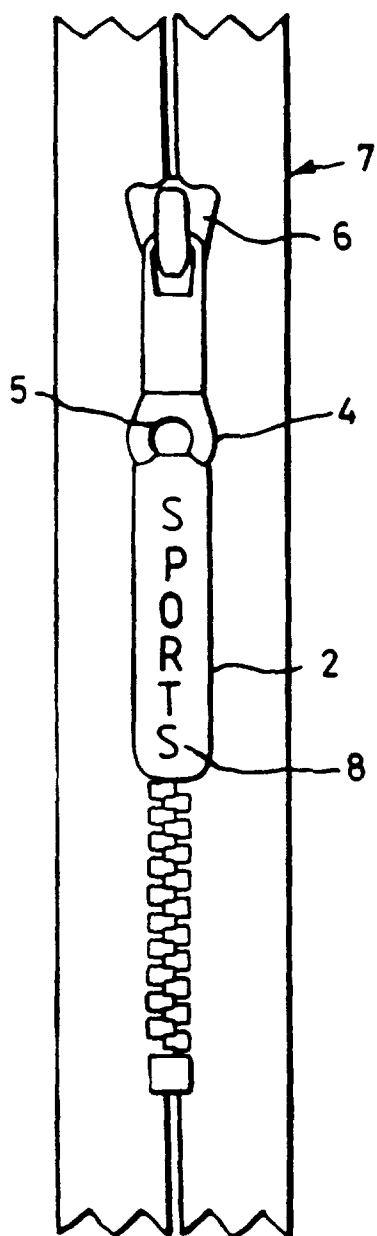


FIG.1

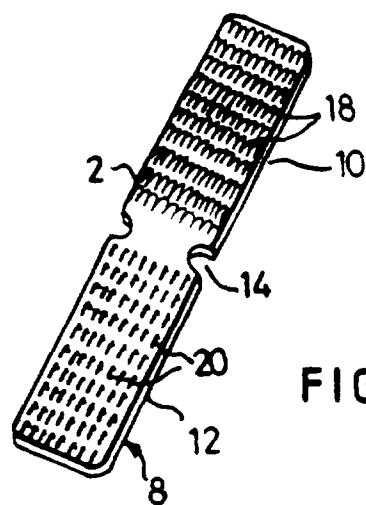


FIG.2

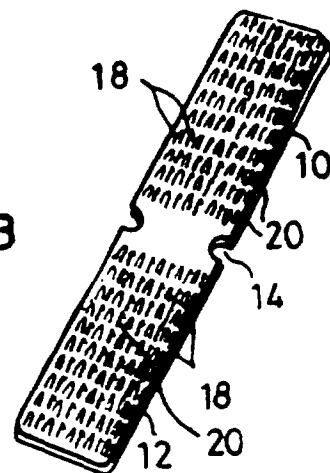


FIG.3

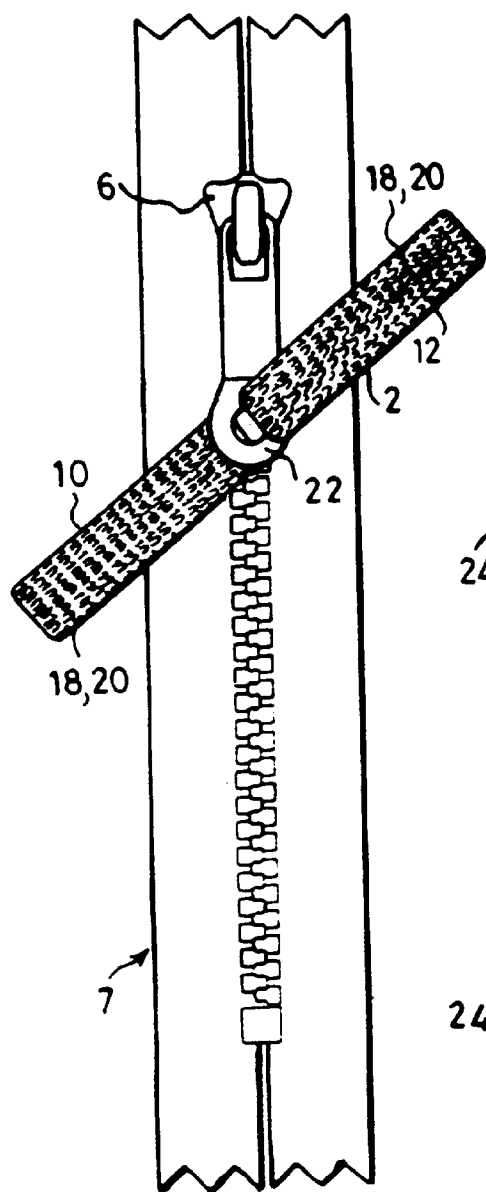


FIG. 4

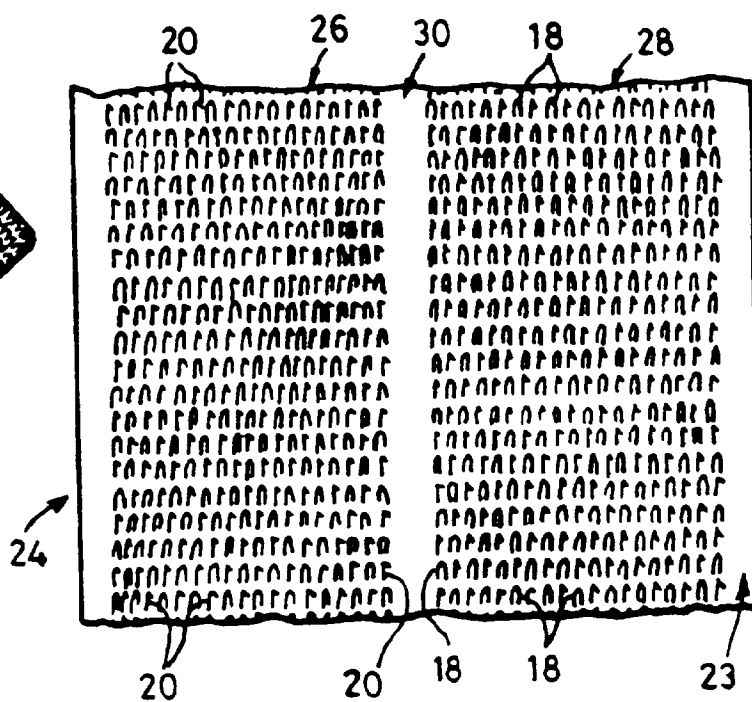


FIG. 5a

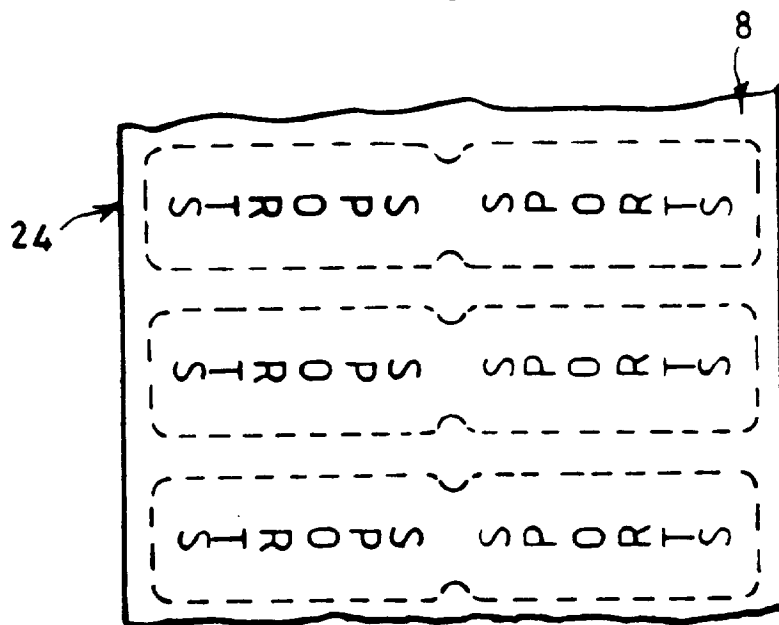


FIG. 5b



European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 96 30 5824

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A,D	JP-A-63 059 511 (-) * the whole document *	3-5,7	A44B19/26
A	GB-A-621 539 (UNITED-CARR FASTENER CORPORATION) * page 2, line 66 - line 101; figures 5-7 *	5,7	
A	EP-A-0 291 868 (HENKEL KG) * claims 1,3; figure 2 *	1,2,4	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			A44B
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		30 October 1996	Garnier, F
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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