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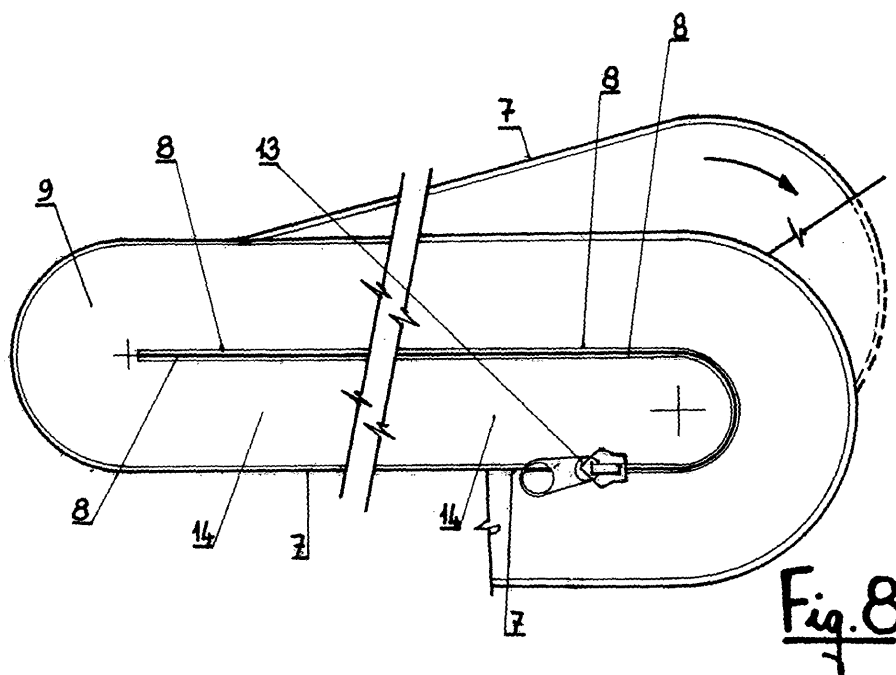
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(54) **Preparation method for products and artefacts, generally for garments, obtained through a lateral, external, double-zip band**

(57) Preparation method for products, generally garments, obtained by means of a lateral, external, double-zip band, which envisages a central band (6) to which small teeth (7, 8) are fitted on both lateral sides equal but opposing, in such way as to create two lateral sets of teeth (7, 8) on the same band (6), joined to the extremities by means of semicircular joints (9), where the extremity (9) of the band is folded onto itself at 180° on the starting band; where said strip of folded band (14) is fitted with its own slide fastener on one of the facing sides (7, 8);

where along the coinciding stretches of the folded band (14) and the starting band (6) a support is created for the two strips of zip (7, 7 - 8, 8); where the bodies of said strips of zip (7, 7 - 8, 8) are freed from the body of the zip (6) in such way as to be able to thread them into the slide fastener (13) and make it work; where blocking of the matching extremity is carried out by means (16); where the length of the stretch (14) folded by 180° determines the longitudinal dimension, whereas the band (6) determines the transversal dimension of the product.



Description

[0001] Zip fasteners also called "zippers" are commonly known and are useful for the joining of two edges of products, such as the borders of textiles and in particular to close jackets, pockets, etc..

[0002] Such zip fasteners are shown as an example in Fig. 1 where bands 1, 2 are fastened longitudinally to the edges to be joined, and the bands 1, 2 have on their opposing sides, small longitudinal teeth 3, 4 which, by means of the slide fastener 5, may be joined to one another in position 3 - 4 or separated from each other.

[0003] According to this invention, the function of the zip fastener is substantially modified and enormously enhanced, by means of a new function of the band that is fitted with double teeth placed on both of the external sides of the fastener.

[0004] According to this invention the new double-zip fastener is shown in Fig. 2 which foresees a central band on which similar but opposing teeth are fixed on both sides.

[0005] Said new fastener may also envisage a single central fastener fitted with two sets of teeth, as in Fig. 3, or may envisage two fasteners joined together, for instance by means of sewing, fitted with the respective opposing teeth, as in Fig. 4.

[0006] By means of this new band with opposing teeth on the two external longitudinal sides it is possible, according to the method concerned in this invention, to prepare various kinds of products, objects and artefacts, such as generally products for clothing, handbags, hats, pencil cases, rucksacks, aprons, jackets, dresses, etc., where said products may be made up in different ways of a particular band, even printed or coloured, and may be taken apart and put back together with different sizes and shapes.

[0007] The double-zip band according to this invention, is of considerable length, compatible with the length necessary to make the desired product or article. For instance a handbag of average dimensions, may require a band of about 30 metres, while other products may require much longer or shorter lengths.

[0008] This double-zip band is closed at both ends with semicircular sets of teeth that join the lower teeth to the facing upper teeth. On this double set of teeth there is a single slide fastener suitably orientated, as described in the following.

[0009] This longitudinal, lateral, double-zip band is the basic element of the method concerned in the invention. Indeed, according to this method, an extremity of suitable length (for instance the left hand end of the band), is folded back onto itself by 180° and is rested on the body of the band that continues toward the opposite end, as will be clarified in more detail below. The two facing zips of the band and of the parts folded by 180° are functionally joined to one another inside the slide fastener already present on the band.

[0010] In these conditions the double-zip band may be

perfectly wrapped around the other part folded by 180° and consequently fastened by means of the zips that are adjacent to one another.

[0011] Continuing with the winding by means of the sliding of the slide fastener, the double-zip band rests and fastens to the outside of the part previously put together and this operation goes on until completion of the body of the object to be obtained.

[0012] The invention concerned is clarified in the practical and model realisation of the above mentioned method, with reference to the attached drawings, where:

Fig. 1 shows the view from above of an example of a zip fastener of the well known and commonly used type,

Fig. 2 shows the view from above of the new band fitted with two lateral external zips,

Fig. 3 shows the section of the band of Fig. 2 in a single body,

Fig. 4 shows the section of the band in Fig. 2 with the body made up of two bands joined together,

Fig. 5 shows the view from above of the basic double-zip band and a single slide fastener with the extremities joining the two facing zips with a semicircular shape,

Fig. 6 shows the enlarged view of one end of the basic band,

Fig. 7 shows one end of the basic band folded by 180° back onto itself, as the first operation according to the method concerned in this invention,

Fig. 8 shows the following operation of winding of the double-zip band onto the end folded over by 180° and further windings,

Fig. 9 shows the view from above of the basic band folded by 180°,

Fig. 10 shows the view from above of the basic band folded by 180° with coupling of the internal facing zips of the band and the folds,

Fig. 11 shows the view from above of the basic band with the start of the winding operations by means of the slide fastener,

Figs. 12 and 13 show the lateral view of an example of a handbag,

Figs. 14 and 15 show the lateral view of another example of a handbag.

[0013] With reference to these drawings, Fig. 1 shows a zip fastener of the well known type, which shows two strips 1, 2 fixed at the two edges to be joined, where said strips have small teeth longitudinally opposed 3, 4 on the two facing edges, which by means of the slide fastener 5 can be joined together in positions 3-4, or may be separated from one another.

[0014] According to this invention, a band 6 is envisaged, which is fitted with double sets of teeth 7, 8 each envisaged on each longitudinal side of the band 6. These two sets of teeth 7, 8 are equal but opposing and are joined at the ends of the band 6 by means of semicircular

connectors 9.

[0015] This new band 6 may envisage a single central band fitted with both sets of teeth 7, 8, as in Fig. 3, or may envisage two bands 10, 11 joined together, for instance by means of sewing 12, fitted with the respective opposing zips 7, 8.

[0016] This band 6 is the double-zip band which acts as the base and body of the object to be produced with the method concerned in this invention. This band is shown in Fig. 5 and is fitted with a slide fastener mounted on the set of teeth. As said before, this band 6 acts as the base and body of the object and therefore must be of appropriate length, such as for instance 30 metres for a handbag and different lengths for other objects.

[0017] According to the method concerned in this invention, one continues with the following processing phases of the basic band 6 fitted with two longitudinal opposing zips 7, 8:

- 1st phase - Folding by 180° of one end 9 of the band 6 until the fold 14 rests with its zip 8 on the zip 8 of the band (see Fig. 7).
- 2nd phase - Slight notch 15 to free the slide fastener 13 which is at first only hooked onto the zip 8 of the base fold 14 at 180°, in such way as to free this slide fastener and place it over both internal zips 8 of the fold 14 and of the band 6. This mounting of the slide fastener 13 takes place by simply pushing the two heads of the zips 8 into the slide fastener 13 and moving said slide fastener for its effectiveness in the opening and closing of the zips 8 (see Figs. 9, 10 and 11).
- 3rd phase - Blocking of phases 1 and 2 generally by means of sewing 16.
- 4th phase - Thus having arranged the base element, it is possible, acting on the slide fastener 13, to wind the band 6 onto the base element and onto the band already wound and in particular zip 7 of the internal part on zip 8 of the new external parts, until completion of the object (see Figs. 7 and 8).

[0018] Examples of handbags are shown in Figs. 12 and 13 in which there is a handbag 17 with a handle 18 suitably surrounding an opening 19 created on the handbag. Another handbag is indicated in Figs. 14 and 15 in which the handle 20 is formed by the band 6, suitably lengthened by means of an opening 21 of separation envisaged within the upper band 6. For example, a rucksack has two bands, generally without zips that are joined at the top and bottom to the bands 6.

[0019] Obviously the base of the artefact may be extended as one wishes in width, carrying out a smaller or larger number of windings on the flat. When the windings are placed vertically or obliquely, the sides of the object are created vertically or obliquely.

[0020] Naturally through the body of the band 6 one may envisage notches, which allow one to arrange suitable pockets inside the object. Any possible accessories

may be attached to the body 6 of the band, for instance by means of sewing.

[0021] As already stated with the method according to the invention, a very wide range of products and objects, particularly useful but not exclusively articles of clothing, can be prepared.

[0022] According to the invention, there is then great freedom of choice to modify each object. Indeed, at the time of purchase the vendor will only have the bands and some sewing equipment, while exhibiting the various samples that can be reproduced. The purchaser chooses the sample and its sizes and the object is reproduced and ready in a few minutes. When the purchaser is fed up with a certain object, he/she may easily and directly unmake it at home and then remake it, for instance, in another shape. The length of the band 6 may be varied by removing or adding a part.

[0023] Besides different kinds of clothing, the products obtained with the method described here, may serve to create covers, wall coverings and upholstery, and fixed or temporary partitions. These products may obviously be fire-resistant and waterproof.

[0024] In the description, preparation of the base was envisaged by means of folding by 180° of the left end of the band, but the same effects may be obtained with the folding of the right end by means of the anti-clockwise winding of the band instead of the clockwise one. Obviously the size of the 180° fold 14 depends on the longitudinal size of the object to be produced, while, as said before, the width of the tape 6 determines the transversal size.

Claims

1. Preparation method for products or artefacts, generally garments, obtained by means of a lateral, external, double-zip band, **characterised by** that it envisages a central band (6) to which small teeth (7, 8) are fitted on both lateral sides equal but opposing, in such way as to create two lateral sets of teeth (7, 8) on the same band (6), joined to the extremities by means of semicircular joints (9), where said band (6) is single or made up of two bands (10, 11) joined to one another with external sets of teeth, and held together for instance by sewing (12), where said band (6) is used with a suitable method to obtain products or artefacts on the basis of the sample requested or for unmaking and remaking with a different possible shape of the product or artefact itself and where said band (6) creates the whole of the product of artefact.
2. Method according to claim 1, **characterised by** that it envisages the preliminary availability of the double-zip band (6) in the length necessary to create the product or artefact and the method envisage (5) the following processing phases:

one end (9) of the band (6) is folded back by 180° onto the starting band; said strip of folded band (14) is fitted with its own slide fastener interlocking on one of the two facing edges (7, 8); along the matching strips of the folded band (14) and of the starting band (6) a rest is created for the two strips of zip (7, 7-8, 8); the bodies of these strips of zip (7, 7 - 8, 8) are freed from the body of the band (6), so as to be able to thread them into the slide fastener (13) and make it operative; this joining extremity of the zips is blocked in the modified state for example by means of sewing (16), where the length of the strip (14) folded by 180° determines the longitudinal size while the band (6) determines the transversal size of the product or artefact.

3. Method according to claims 1 and 2, **characterised by** that the slide fastener (13) is able to join or free the zip (7 or 8) of the band (6) to and from the zip (7 or 8) of the strip folded by 180°, ensuring the winding or unwinding of said band (6) on and from said strip folded by 180° in a clockwise and anti-clockwise way according to the orientation of the slide fastener (13).
4. Method according to claims 1,2 and 3, **characterised by** that the slide fastener (13) allows one to wind the zip (7 or 8) and the band (6) on the previous windings already carried out, until completion of the product and artefact.
5. Method according to claim 1 and the following, **characterised by** that the product or artefact may have accessory elements such as handles (18, 20) suitably fixed to the band (6).
6. Method according to claim 1 and the following, **characterised by** that it allows the creation from the band (6) of products or artefacts of different types, such as handbags, rucksacks, hats, garments, various aprons, jackets, dresses, various cases, as well as upholstery, covers, partitions, etc., possibly fire-resistant and waterproofed.
7. Method according to claim 1, **characterised by** that the product or artefact is requested on the basis of a sample chosen at the moment of purchase and is made directly, requiring only manual labour and a sewing machine.
8. Method according to claims 1 and 7, **characterised by** that where the product or artefact may be unmade and remade for instance with another shape, possibly subtracting or adding the length of the band (6) and the size of the strip (14) folded by 180°.

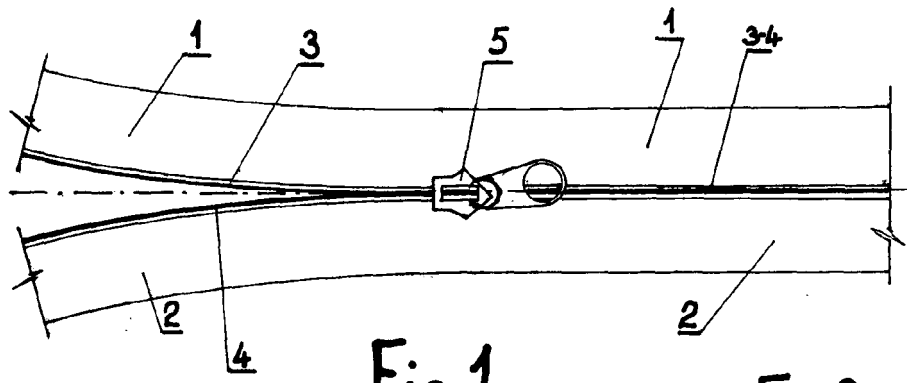


Fig. 1

Fig. 3

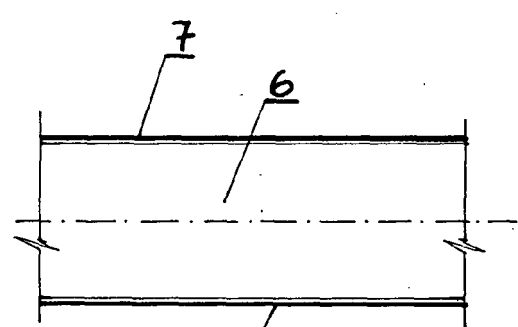


Fig. 2

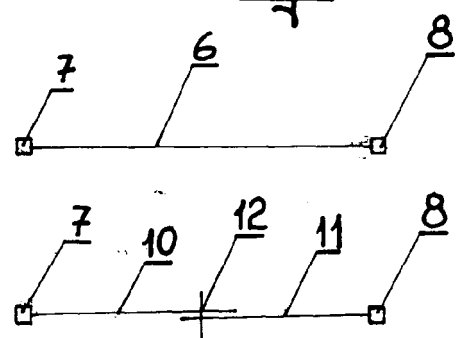


Fig. 4

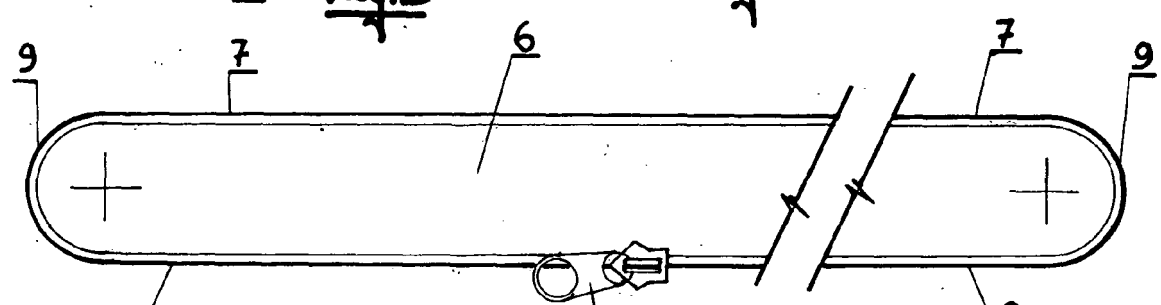


Fig. 5

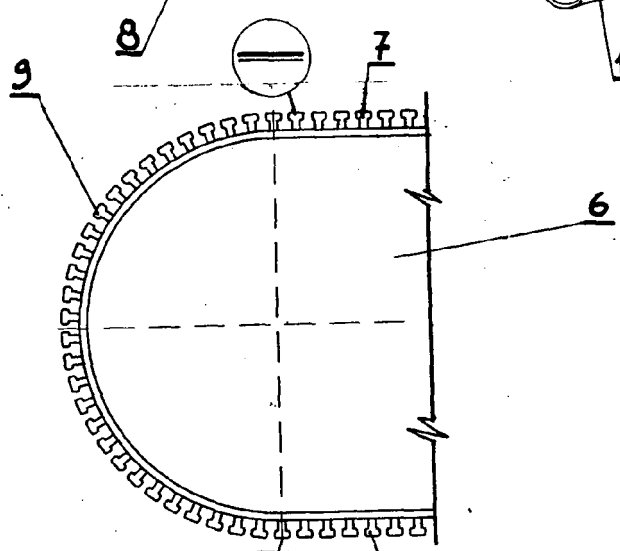
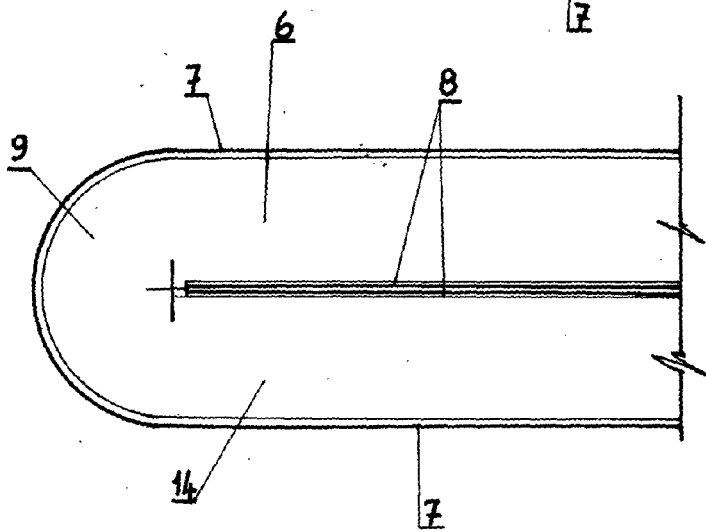
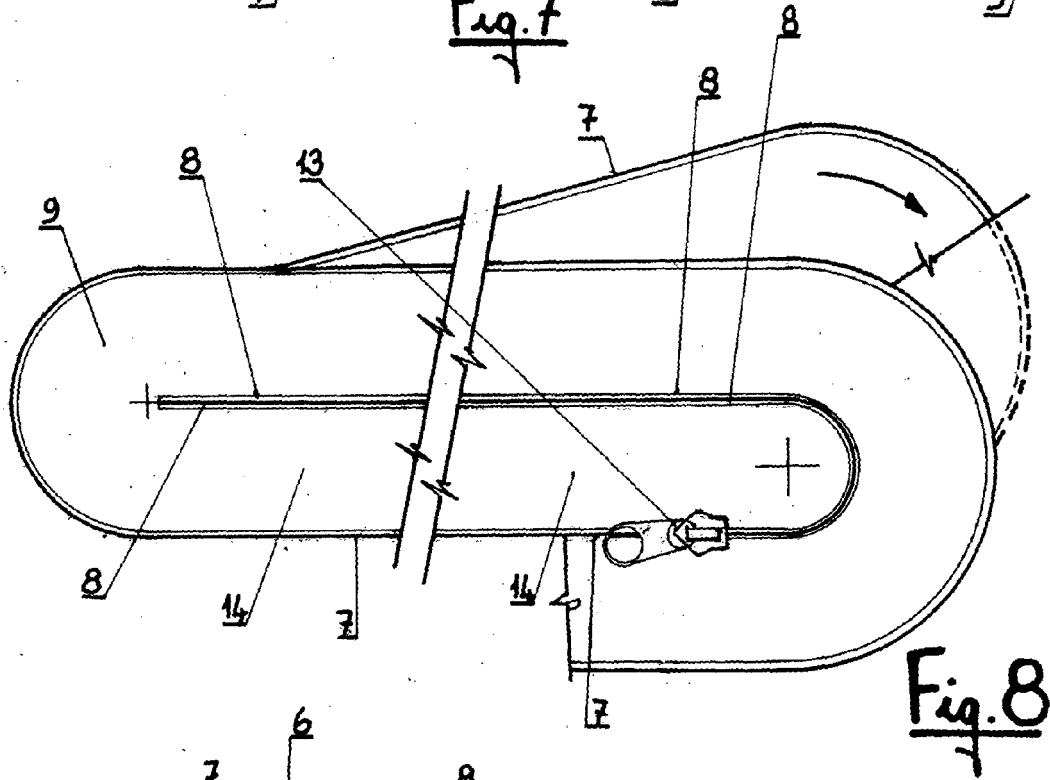
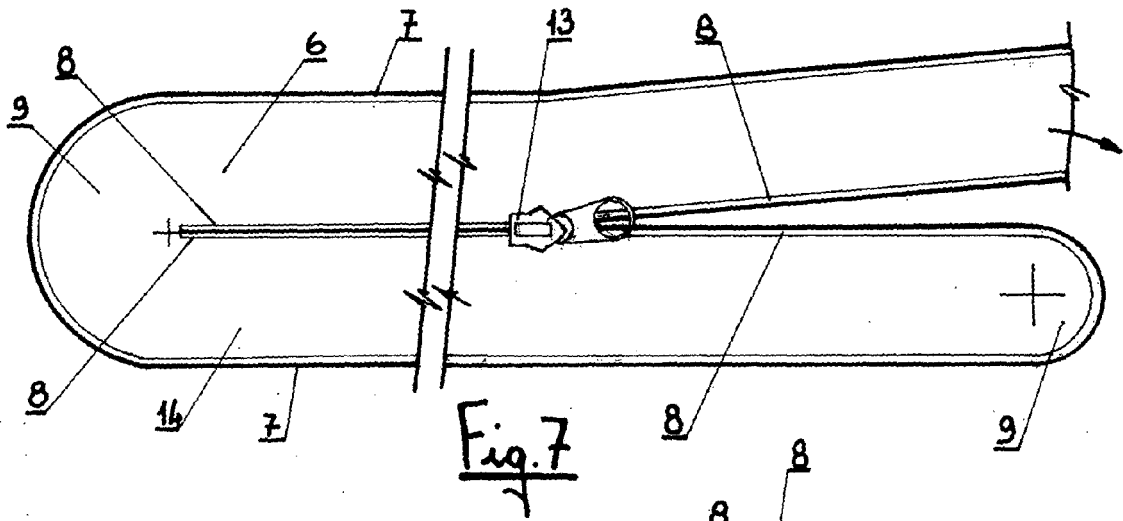
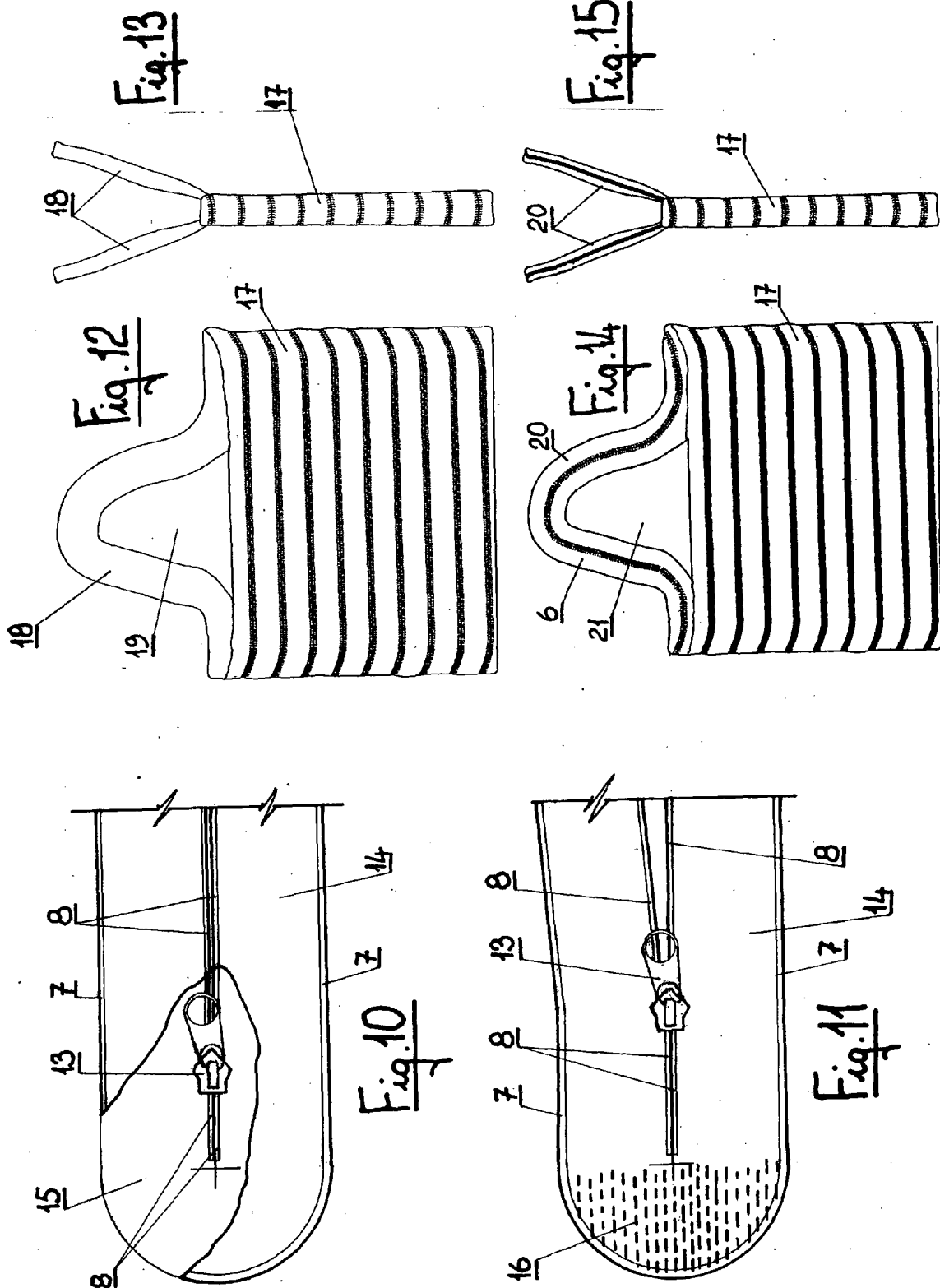


Fig. 6







European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 05 02 3351

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	EP 0 922 403 A (YKK CORPORATION) 16 June 1999 (1999-06-16) * column 4, paragraph 21 - column 5, paragraph 30; figures 1-3 *	1-8	A44B19/42
A	US 4 607 425 A (TERASAWA ET AL) 26 August 1986 (1986-08-26) * column 4, line 23 - column 6, line 14; figures 1-10 *	1-8	
A	BE 510 205 A (F.W.DIEKERMANN) 15 April 1952 (1952-04-15) see the whole document	1-8	
A	FR 565 200 A (EUSIBIO QUAGLINA ET MARIO BAGGIO) 21 January 1924 (1924-01-21) see the whole document	1-8	
			TECHNICAL FIELDS SEARCHED (IPC)
			A44B
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 22 February 2006	Examiner Lendfers, P
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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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 05 02 3351

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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22-02-2006

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 0922403	A	16-06-1999	DE	69816006 D1	07-08-2003
			DE	69816006 T2	03-06-2004
			ES	2202763 T3	01-04-2004
			GB	2332238 A	16-06-1999
			US	6243926 B1	12-06-2001

US 4607425	A	26-08-1986	AU	554886 B2	04-09-1986
			AU	2164683 A	07-06-1984
			BR	8306669 A	17-07-1984
			CA	1226723 A1	15-09-1987
			DE	3375064 D1	11-02-1988
			DE	111233 T1	11-10-1984
			EP	0111233 A1	20-06-1984
			ES	8500027 A1	01-01-1985
			GB	2132689 A	11-07-1984
			HK	93488 A	25-11-1988
			KR	8501463 B1	10-10-1985
			MY	3288 A	31-12-1988
			SG	83187 G	15-04-1988

BE 510205	A		NONE		

FR 565200	A	21-01-1924	NONE		
