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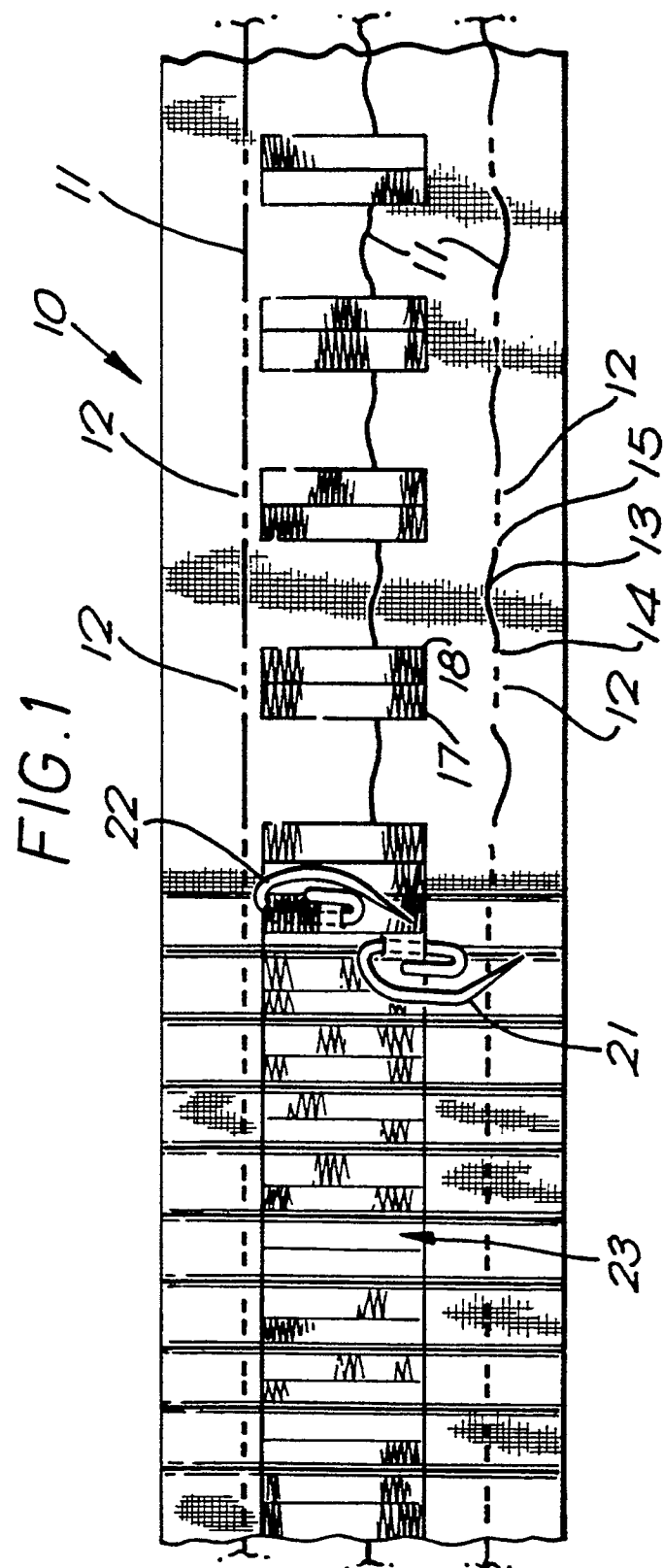
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(54) **Heading tape for curtains.**

(57) A heading tape, for example for a curtain, comprises a length of tape 10, at least one draw cord 11 extending along the tape, such that tightening of the draw cord causes the tape to bunch up into a series of pleats, the tape having reinforced portions 17, 18 which cause or assist the formation of neat, spaced apart pleats. In a preferred embodiment, the reinforced portions are provided by regions of floating yarns, each region 17, 18 of floating yarns being such that curtain hooks 21, 22 or the like can be inserted into the region at at least two separate location.

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## TAPES

The invention relates to heading tapes, for example curtain heading tapes.

Heading tapes are used with textile articles, such as curtains, to provide pleats therein. Such tapes are provided with draw cords which can be pulled tight to bunch up the tape, and hence any textile article attached thereto, causing pleats in the textile article.

Such tapes may also be provided with pockets into which curtain hooks or the like can be fitted, for the purpose of hanging the textile article such as a curtain.

I have now developed a particularly versatile heading tape.

According to a first aspect of the invention, a heading tape is provided comprising a length of tape, at least one draw cord extending along the tape, such that tightening of the draw cord causes the tape to bunch up into a series of pleats, the tape having reinforced portions which cause or assist the formation of neat, spaced-apart pleats.

According to a second aspect of the invention, there is provided a length of tape and at least one draw cord extending along the length of the tape, tightening of the draw cord causing the tape to bunch up into a series of pleats, the tape having regions of floating yarns adjacent to the pleats, each region of floating yarns being such that curtain hooks or the like can be inserted into the region at at least two separate locations.

Each region may comprise yarns which float for at least a short distance in the longitudinal direction, there being a plurality of such yarns in the region spaced apart across the width of the tape, so that a curtain hook or the like can be inserted at at least two locations spaced apart across the width of the tape.

Each region may comprise two sections of yarns which float in the longitudinal direction of the tape, the sections being arranged side-by-side in the longitudinal direction of the tape, so that a curtain hook or the like may be inserted at at least two locations which are spaced apart along the length of the tape.

Alternatively, or in addition, each region may comprise two sections of yarn which float in a longitudinal direction of the tape, the sections being arranged side-by-side across the width of the tape, so that a curtain hook or the like can readily be insertable at at least two locations which are spaced apart across the width of the tape.

The floating yarns of the second aspect of the invention may form the dual function of providing the stiffening of the first aspect of the invention.

The floating yarns may be formed from a bulked yarn.

Preferably the tape is a woven tape, and the floating yarns preferably comprise warp yarns.

The regions of floating yarn are preferably such that, although spaced apart in the unpleated tape, they are positioned such that when the tape has been bunched up to form pleats which project from one side of the tape, the other side of the tape presents a substantially continuous area of floating yarns, so that, for example, curtain hooks or the like can be inserted in a variety of different positions, spaced apart along the length of the tape and across the width of the tape.

The floating yarns may be such that they provide a surface which is particularly suitable for attachment to a support surface, for example using adhesive or other gripping material.

The invention includes a textile article fitted with a tape according to the invention.

By way of example, a specific embodiment of the invention will now be described, with reference to the accompanying drawings, in which :-

Figure 1 is a view of one side of an embodiment of tape according to the invention;

Figure 2 is a view of the other side of the tape shown in Figure 1;

Figure 3 is an edge view of a pleated portion of the tape; and

Figure 4 is a side view of an alternative embodiment of tape, unpleated.

The tape shown in Figures 1 to 3 comprises an extensive length of woven tape indicated generally by the reference numeral 10.

The tape has three longitudinally extending draw cords 11 which are fairly closely woven in at spaced apart regions 12 but are allowed to float therebetween, for example as illustrated by reference numeral 13. It can be seen that when the draw cords 11 are tightened, the points 14 and 15, for example, will be pulled into contact with one another. Thus, the regions of tape over which the floating portions 13 pass, in the flat tape, will be bunched up into pleats, such as those best seen at 16 in Figure 3.

According to the special feature of this embodiment, regions of floating warp yarn are provided, in longitudinal register with the woven in regions 12 of the draw cords.

In each of these regions, there are two separate sections 17 and 18 of floating warp. These sections have a dual function.

Firstly, the two sections 17 and 18, which are formed from bulked yarn, have a reinforcing or stiffening effect in the regions between the pleats. These stiffened regions are illustrated at, for example, 19 and 20 in Figure 3, and it will be seen that these reinforced regions space the pleats apart in a neat and uniform manner.

The second function is that of providing location points for curtain hooks or the like, such as those

shown at 21 and 22 in Figure 1. Because there are a plurality of floating yarns extending for a substantial distance across the width of the tape, hooks can be inserted at various locations across the width of the tape, and hooks 21 and 22 are positioned at two significantly spaced apart locations, by way of demonstration. This makes it possible to provide fine adjustment of the vertical position of a curtain, to which the tape is attached, with respect to a curtain rail.

Furthermore, since each region comprises two adjacent sections 17 and 18, spaced apart along the length of the tape, fine adjustment is also possible in the longitudinal spacing of the hooks, and it will be seen that to illustrate the versatility of the tape, the hooks 21 and 22 are located respectively in two separate sections of one region of floating yarns.

The sections 17 and 18 of each region are provided using a bulked yarn, but the bulked properties are only apparent in the floating regions, on the side of the tape shown in Figure 1.

Figure 2 shows the reverse side of the tape, on which the bulked yarn is closely woven in, and it is not therefore significantly visible. All that is clearly evident on the reverse side of the tape is the woven in regions 12 of the draw cords.

The right hand side of Figure 1 shows a flat portion of the tape. The left hand portion of Figure 1 shows the pleated tape, and the neat spacing of the pleats, by means of the reinforced areas, is again evident.

It will be seen that although the floating regions are spaced apart in the flat portion of the tape, the relationship between the draw cords, and the regions of floating yarn is such that when the draw cords are tightened and the pleats are formed, there is a substantially continuous area 23 of floating yarn, giving a user of the tape almost an infinite choice of locations, within that area, for insertion of curtain hooks or the like.

Because of the nature of the areas of floating yarn, they also provide a particularly effective attachment area for use in attaching the tape to a support.

Where it is desired to use the tape with curtains, which are required to be drawn open and closed, then the tape will normally be provided with curtain hooks so that the tape, and any attached textile article, can be suspended from a curtain rail.

If however it is desired to use the tape to attach a pelmet then a wooden pelmet or like support surface could be provided with an outwardly facing adhesive tape or like connecting device, onto which the area 23 can be pressed. Floating bulked yarns provide a particularly effective surface to which a length of adhesive or like material can key or bond.

The warp yarns are preferably made of polyester, including the bulked yarn, and the weft is preferably

of polypropylene for stiffening purposes.

The regions of bulked yarn shown in Figure 1 may be arranged in any desired manner. The regions may for example be arranged to extend over a greater width of the tape than shown, or may be arranged nearer to, or even adjacent to, the top edge.

The top edge of the bulked regions may be arranged to coincide with a marker thread woven into the tape.

Turning now to Figure 4, a second embodiment of tape is shown, which has many similarities to the tape shown in Figure 1, and like reference numerals are used for like parts.

There are two principle differences. Firstly, regions 24 of floating yarn extend across substantially the entire width of the tape 10. Each region is grouped into four sections 25 to 28, arranged side-by-side with slight gaps therebetween. The presence of the slight gaps makes it easier to insert the curtain hooks 21 and 22 at any desired position.

The reader's attention is directed to all papers and documents which are filed concurrently with or previous to this specification and which are open to public inspection with this specification, and the contents of all such papers and documents are incorporated herein by reference.

All of the features disclosed in this specification (including any accompanying claims, abstract and drawings), and/or all of the steps of any method or process so disclosed, may be combined in any combination, except combinations where at least some of such features and/or steps are mutually exclusive.

Each feature disclosed in this specification (including any accompanying claims, abstract and drawings), may be replaced by alternative features serving the same, equivalent or similar purpose, unless expressly stated otherwise. Thus, unless expressly stated otherwise, each feature disclosed is one example only of a generic series of equivalent or similar features.

The invention is not restricted to the details of the foregoing embodiment(s). The invention extends to any novel one, or any novel combination, of the features disclosed in this specification (including any accompanying claims, abstract and drawings), or to any novel one, or any novel combination, of the steps of any method or process so disclosed.

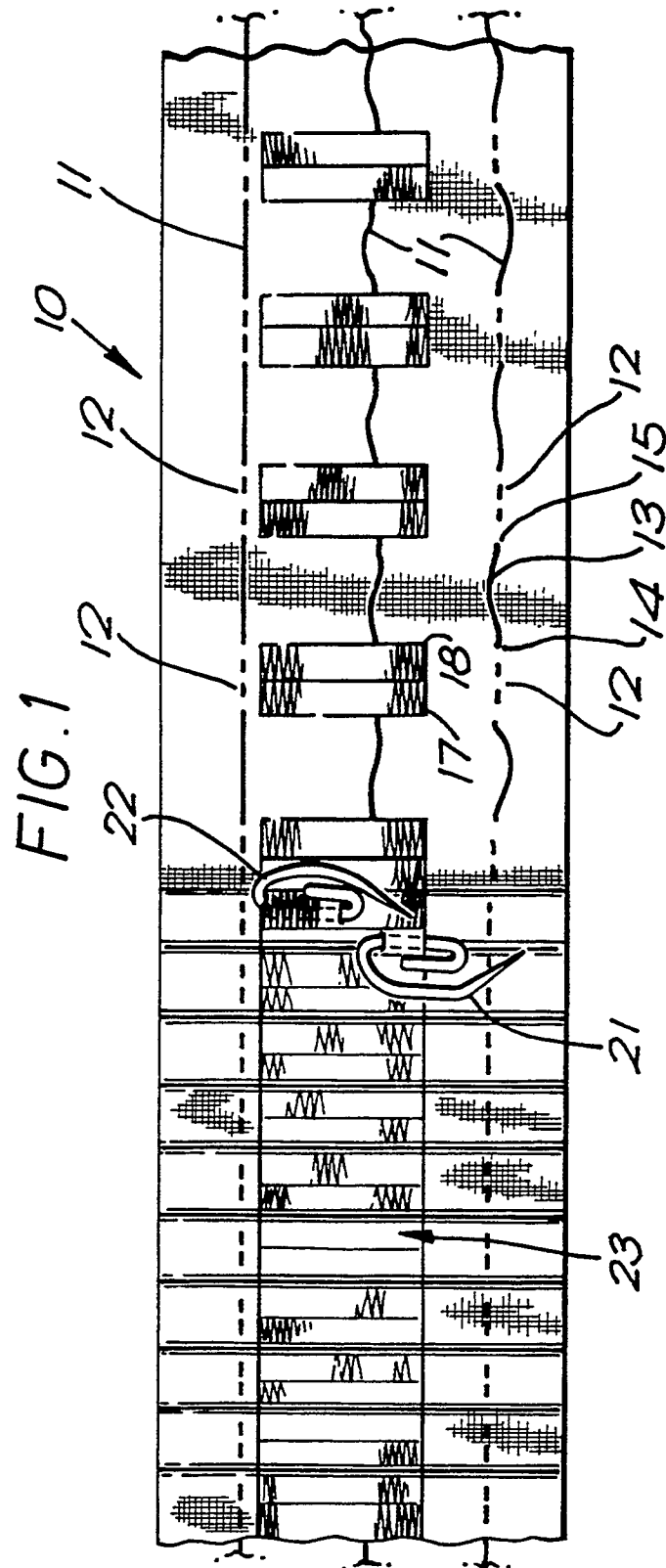
## Claims

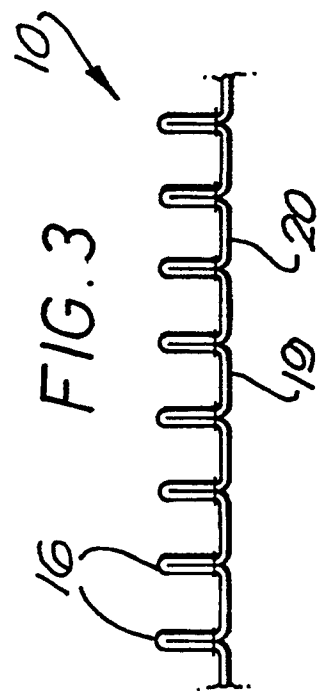
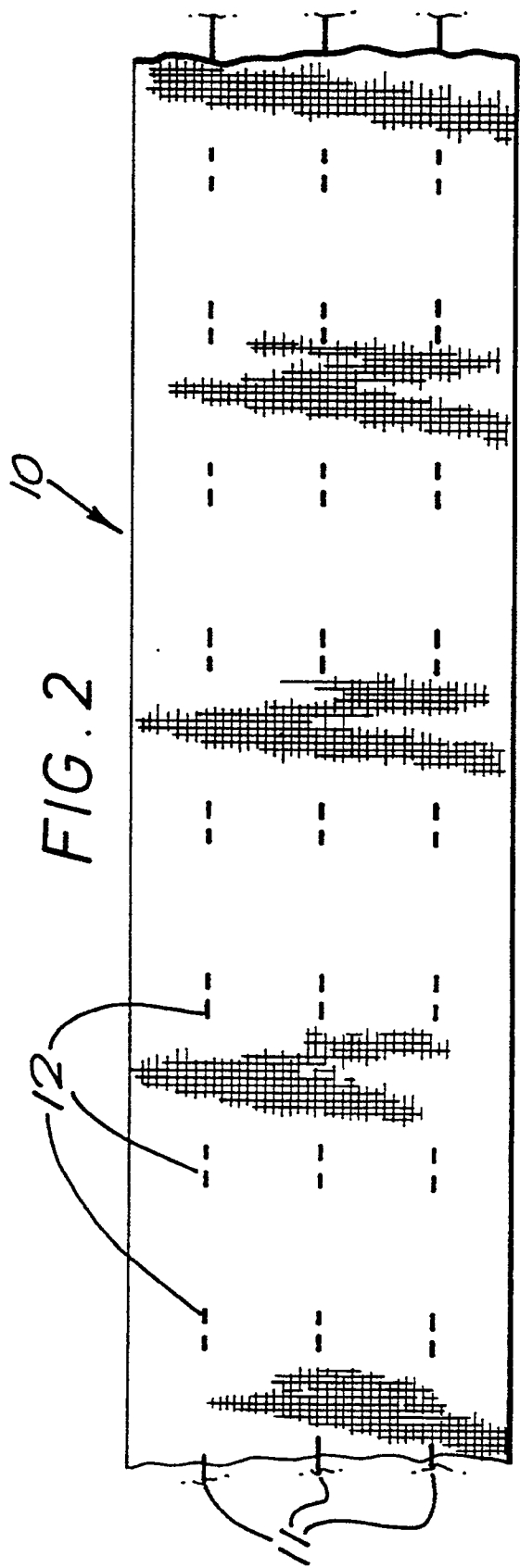
1. A heading tape comprising a length of tape, at least one draw cord extending along the tape, such that tightening of the draw cord causes the tape to bunch up into a series of pleats, the tape having reinforced portions which cause or assist the formation of neat, spaced-apart pleats.

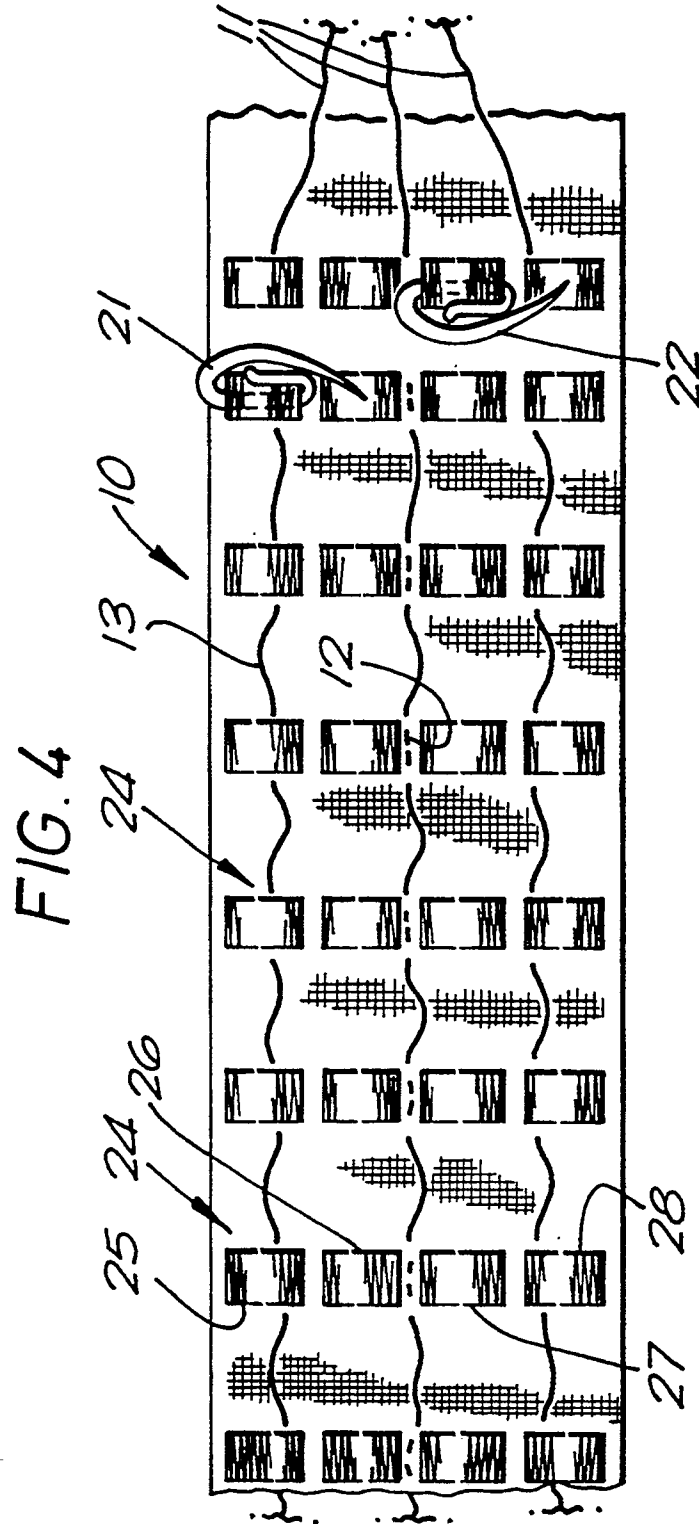
2. A heading tape comprising a length of tape and at least one draw cord extending along the length of the tape, tightening of the draw cord causing the tape to bunch up into a series of pleats, the tape having regions of floating yarns adjacent to the pleats, each region of floating yarns being such that curtain hooks or the like can be inserted into the region at at least two separate locations. 5
3. A heading tape as claimed in Claim 2, in which each region comprises yarns which float for at least a short distance in the longitudinal direction, there being a plurality of such yarns in the region spaced apart across the width of the tape, so that a curtain hook or the like can be inserted at at least two locations spaced apart across the width of the tape. 10 15
4. A heading tape as claimed in Claim 3, in which each region comprises two sections of yarns which float in the longitudinal direction of the tape, the sections being arranged side-by-side in the longitudinal direction of the tape, so that a curtain hook or the like may be inserted at at least two locations which are spaced apart along the length of the tape. 20 25
5. A heading tape as claimed in Claim 3 or Claim 4, in which each region comprises two sections of yarn which float in the longitudinal direction of the tape the sections being arranged side-by-side across the width of the tape, so that a curtain hook or the like can readily be insertable at at least two locations which are spaced apart across the width of the tape. 30 35
6. A heading tape as claimed in any one of Claim 2 to 5, in which the floating yarns provide reinforced portions which cause or assist the formation of neat, spaced-apart pleats. 40
7. A heading tape as claimed in any one of Claims 2 to 6, in which the floating yarns are formed from bulked yarn. 45
8. A heading tape as claimed in any one of Claims 2 to 7, in which the tape is a woven tape.
9. A heading tape as claimed in Claim 8, in which the floating yarns comprise warp yarns. 50
10. A heading tape as claimed in any one of Claims 2 to 9, in which the regions of floating yarn are such that, although spaced apart in the unpleated tape, they are positioned such that when the tape has been bunched up to form pleats which project from one side of the tape, the other side of the tape presents a substantially continuous area of

floating yarns, so that, for example, curtain hooks or the like can be inserted in a variety of different positions, spaced apart along the length of the tape and across the width of the tape.

11. A heading tape as claimed in any one of Claims 2 to 10, in which the floating yarns are such that they provide a surface which is particularly suitable for attachment to a support surface, for example using adhesive or other gripping material.
12. A heading tape constructed and arranged substantially as herein described, with reference to Figures 1 to 3 of the accompanying drawings.
13. A heading tape constructed and arranged substantially as herein described, with reference to Figure 4 of the accompany drawings.
14. A textile article fitted with a tape as claimed in any one of the preceding Claims.











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# EUROPEAN SEARCH REPORT

Application Number

EP 91 30 1782

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.5)
X	EP-A-0 064 108 (SPANTAPE SERVICES LTD)  * page 6, line 8 - page 7, line 12 * * page 9, line 17 - page 9, line 21 * * figures 1-4 *	1-3, 5-9, 13, 14	A47H13/16
Y	---	10, 11	
X	FR-A-2 310 433 (SOCIETE V. LOUISON ET CIE) * page 2, line 15 - page 3, line 6; figures 6-9 *	1	
Y	---	10, 11	
X	GB-A-492 298 (T. FRENCH & SONS)  * page 2, line 88 - page 3, line 24; figures 1-9 *	2-4, 7-9, 12	
A	DE-A-2 808 720 (GUTH & WOLF GMBH) ---		
A	GB-A-2 177 909 (DRAPERITE LTD) -----		
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			A47H
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 07 JUNE 1991	Examiner KAPPOS A.
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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