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PATENT SPECIFICATION

DRAWINGS ATTACHED

Inventors: KURT STREICHER and JOSEF RUHRMANN

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COMPLETE SPECIFICATION

Improvements in or relating to Sliding Clasp Fasteners

I, JOSEF RUHRMANN, trading as Dr. Ing. Josef Ruhrmann, of 24, Bahnhofstrasse, Stuttgart-Vaihingen, Germany, a Citizen of the Federal Republic of Germany, do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:—

The invention relates to sliding clasp fasteners. A slide fastener of the kind having complementary interlocking coil fastener elements, each of which is ~~suitable~~ suitably attached to a stringer, the coils being capable of being interlocked and disengaged by the action of a slider movable longitudinally thereon has been suggested which comprises a pair of stringer tapes, a fastener coil attached to an edge portion of each tape, a slider movable longitudinally of the coils and continuous or substantially continuous flexible guide strips secured to the outer surface of each of said tapes on at least one side thereof to prevent the slider from becoming disengaged from either of said coils.

The present invention consists in a method of making a sliding clasp fastener, interlocking members of which are made of plastics and are interconnected to form a string of interlocking members, comprising the steps of placing a covering strip over the string of interlocking members, and welding or gluing the covering strip to the string and/or through interstices between adjacent interlocking members to a tape or other support carrying the string, thereby to protect and support the interlocking members.

The invention also consists in method of making a sliding clasp fastener, comprising the steps of making a string of plastic interlocking members, each member being of substantial U-shape and one end of each member (except for the extreme members at each end of the fastener) being connected only to the succeeding and the other end only to the preceding member by bridge portions, placing a covering strip over the string of interlocking members, and welding or gluing the covering strip to the string and/or through interstices between adjacent interlocking members to a tape or other support carrying the string, thereby to protect and support the interlocking members.

The covering strip may be made entirely of plastic material. Alternatively, the covering strip may be coated or impregnated at its side facing the string with weldable plastic material.

Additionally or alternatively the covering strip may be welded or glued to links of the U-shaped interlocking members.

The invention also embraces a sliding clasp fastener when made by a method as hereinbefore defined.

To make the invention clearly understood reference will now be made to the accompanying drawings, which are given by way of example and in which:—

Fig. 1 illustrates a sliding clasp fastener in plan view;

Fig. 2 illustrates a section along the line A—A of Fig. 1 on a larger scale; and

Fig. 3 illustrates a section of a modification of the fasteners of Figs. 1 and 2.

The sliding clasp fastener of Figs. 1 and 2 comprises two tapes 1, each carrying a string of substantially U-shaped interlocking members 2, one end of each member 2 (except for the extreme members at each end of the fastener) being connected only to the succeeding and the other end only to the preceding member by bridge portions. Limbs 3 of the members 2 serve for attaching the members 2 to the respective tape 1 by stitches 11. A

[*Price* 4s. 6d.]

covering strip 4 is extended through interstices between adjacent limbs 3, and the so extended portions of the covering strip 4 are fixed at areas 5 to the respective tape 1 by plastic welding. From Fig. 2 it will be seen that the portion of the covering strip 4 betwen each pair of adjacent areas 5 forms a channel 6 by which the respective limb 3 is held in position on the respective tape 1. The covering strip 4 is coated with a layer 7 of weldable plastic material so that the strip 4 can be fixed by heat and pressure to the tape 1.

Modifications are possible. For example, instead of providing the covering strip 4 with the layer 7 it may be impregnated with, or entirely made of, weldable plastic material. Instead of welding, the strip 4 may be fixed by gluing. In addition to fixing the strip to the tape 1 it may be fixed by welding or gluing also to the limbs 3 of the fastener members.

A further modified fastener is illustrated in Fig. 3, in which the covering strip 8 is welded or glued solely to the limbs 3 at the areas 9. Again, the covering strip 8 is provided with a layer 10 of weldable plastic material, and the interlocking members are additionally held in position by the respective cover strip 8. The limbs 3 of the interlocking elements are attached to the respective tape 1 by stitches 11.

WHAT I CLAIM IS:—

1. A method of making a sliding clasp fastener, interlocking members of which are made of plastics and are interconnected to form a string of interlocking members, comprising the steps of placing a covering strip over the string of interlocking members, and welding or gluing the covering strip to the string and/or through interstices between adjacent interlocking members to a tape or other support carrying the string, thereby to protect and support the interlocking members.

2. A method of making a sliding clasp fastener, comprising the steps of making a string of plastic interlocking members, each member being of substantial U-shape and one end of each member (except for the extreme members at each end of the fastener) being connected only to the succeeding and the other end only to the preceding member by bridge portions, placing a covering strip over the string of interlocking members, and welding or gluing the covering strip to the string and/or through interstices between adjacent interlocking members to a tape or other support carrying the string, thereby to protect and support the interlocking members.

3. A method as claimed in Claim 1 or 2, wherein the covering strip is made entirely of plastic material.

4. A method as claimed in Claim 1 or 2, wherein the covering strip is coated or impregnated at its side facing the string with weldable plastic material.

5. A method as claimed in Claim 2 or 4, wherein the covering strip is welded or glued to links of the U-shaped interlocking members.

6. Methods of making sliding clasp fasteners substantially as hereinbefore described with reference to the accompanying drawings.

7. A sliding clasp fastener when made by a method as claimed in any one of Claims 1 to 6.

WALTHER WOLFF,
78, Woodlands, London, N.W.11,
Chartered Patent Agent.

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2. A method of making a sliding clasp fastener, comprising the steps of making a string of plastic interlocking members, each member being of substantial U-shape and one end of each member (except for the extreme members at each end of the fastener) being connected only to the succeeding and the other end only to the preceding member by bridge portions, placing a covering strip over the string of interlocking members, and welding or gluing the covering strip to the string and/or through interstices between adjacent interlocking members to a tape or other support carrying the string, thereby to protect and support the interlocking members.

3. A method as claimed in Claim 1 or 2, wherein the covering strip is made entirely of plastic material.

4. A method as claimed in Claim 1 or 2, wherein the covering strip is coated or impregnated at its side facing the string with weldable plastic material.

5. A method as claimed in Claim 2 or 4, wherein the covering strip is welded or glued to links of the U-shaped interlocking members.

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