(12) UK Patent Application (19) GB (11) 2 242 000 (13) A

(43) Date of A publication 18.09.1991

(21) Application No 9006041.9

(22) Date of filing 16.03.1990

(51) INT CL[5]
H02G 3/04, F16L 7/00, H01B 7/00

(52) UK CL (Edition K)
F2P PC14 P1A18A
H2C CAA CCF

(56) Documents cited
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(58) Field of search
UK CL (Edition K) F2P PC14 PF1 PR, H2C CCF CCL CCM
INT CL[5] H02G 3/04

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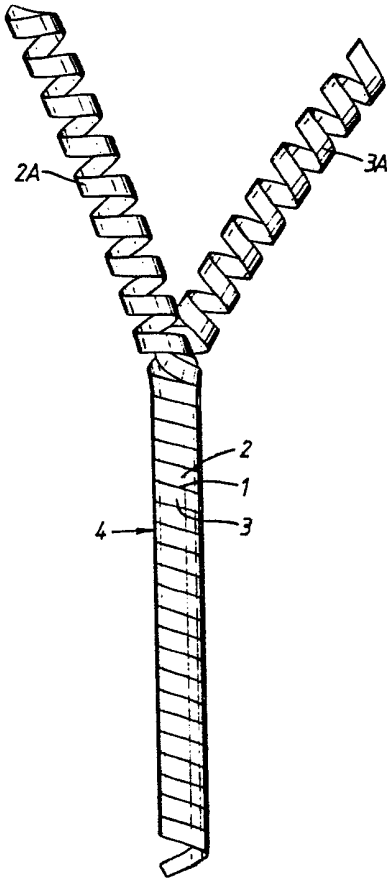
(54) Improvements relating to flexible tubing

(57) A flexible tube is created as a tightly-formed spirally-extending strip. This strip is then cut along its centre line 1 to create two separate interlocked sub-spirals 2 and 3. By this means the flexibility of the tube is increased. Furthermore the sub-spirals 2 and 3 may be unwound from one another to form the open spiral branches 2A and 3A respectively, thus creating a branched tubing member e.g. to hold electrical cables.



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.

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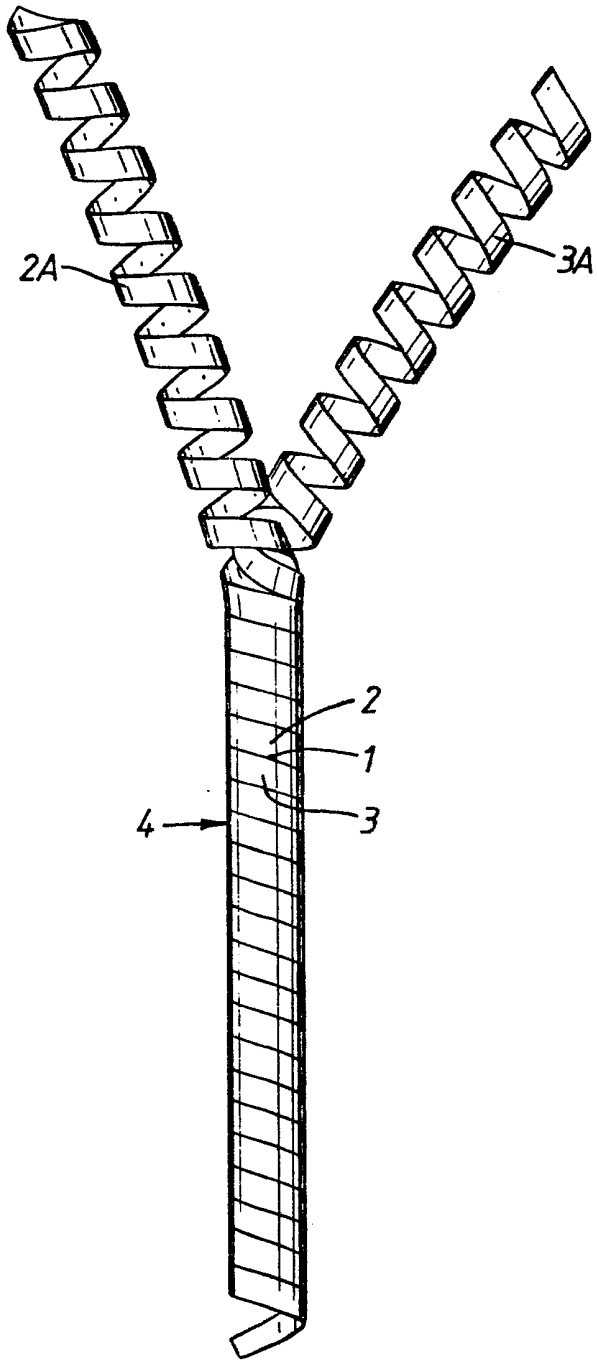
2A
3A
2
1
3
4

Improvements Relating to Flexible Tubing

It is an object of this invention to enhance the flexibility of a spirally-defined tube. Tubing of this nature is particularly suited for use to act as a binding for electrical cables as it can be bent to follow a desired path. Also it can be stretched temporarily to create gaps into which the cables can be pressed in a progressive manner.

According to the present invention there is provided a flexible tube comprising a tightly-formed spirally-extending strip, the strip being cut along a line or lines along its length to create a plurality of sub-spirals interlocked with one another.

The additional cut or cuts substantially enhance the flexibility of the tube. Furthermore the sub-spirals can be fully unwound from one another to create an open spiral tube whose flexibility is still further enhanced.

In a particularly advantageous arrangement the sub-spirals are unwound from one another along part of their length only to create a branched tubing member.

The invention further extends to a method of forming a flexible tube comprising a plurality of interlocked spirals wherein a tightly formed spirally-extending strip is created and the strip is then cut along its

length to define a plurality of interlocked sub-spirals.

The spirally-extending strip may be formed by cutting a tube along a spiral path down the length of the tube. Alternatively a flat strip may be wound along a spiral path about a former of circular cross-section and the strip is then heat-set to conform to the shape of the former.

The invention may be performed in various ways but one preferred embodiment will now be described with reference to the accompanying drawing which illustrates a branched trunking tube member.

A flexible tube is created as a tightly-formed spirally-extending strip. This strip is then cut along its centre line 1 to create two separate interlocked sub-spirals 2 and 3. By this means the flexibility of the tube is increased. Furthermore the sub-spirals 2 and 3 may be unwound from one another to form the open spiral branches 2A and 3A respectively, thus creating a branched trunking member. Electrical cables fed through the main limb 4 can then be distributed in differing directions through the branches 2A and 3A. It will be appreciated that the spirally-extending strip (or a section thereof) could be subjected to two or more cuts along the length of the strip, thus enabling multiple branching or sub-branching to be created.

CLAIMS

1. A flexible tube comprising a tightly-formed spirally-extending strip, the strip being cut along a line or lines along its length to create a plurality of sub-spirals interlocked with one another.

2. A tube according to Claim 1, wherein the sub-spirals are fully unwound from one another to create an open spiral tube whose flexibility is still further enhanced.

3. A tube according to Claim 1, wherein the sub-spirals are unwound from one another along part of their length only to create a branched tubing member.

4. A method of forming a flexible tube comprising a plurality of interlocked spirals wherein a tightly formed spirally-extending strip is created and the strip is then cut along its length to define a plurality of interlocked sub-spirals.

5. A method according to claim 4, wherein the tube is cut along a spiral path down the length of the tube.

6. A method according to claim 4, wherein a flat strip is wound along a spiral path about a former of circular cross-section, the strip is then heat-set to conform to the shape of the former.

7. A flexible tube or a method of forming such a tube and substantially as hereinbefore described with reference to the accompanying drawings.

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