

POLYMERIC-COATED FABRIC LAYER MEANS,
PRODUCT UTILIZING THE LAYER, METHOD OF
MAKING THE SAME, AND METHOD OF, AND APPARATUS FOR,
MAKING A FLEXIBLE REINFORCING STRIP OR THE LIKE

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Technical Field

This invention relates to a polymeric-coated fabric layer means
10 and a polymeric product utilizing such fabric layer means, as well as
to a method for making such a fabric layer means, and method of, and
apparatus for, making a flexible reinforcing strip or the like having
a layer of fabric means.

15 Background Art

It is known in the art to provide a polymeric-coated fabric layer
means for being secured to a surface of a polymeric product. The
fabric layer means comprises a fabric layer having opposed sides, and
20 a layer of polymeric material which is secured to one of the sides of
the fabric layer and has an outer surface facing away from the fabric
layer for being secured to the surface of the product. For example,
see the U.S. Patent to Long, No. 4,062,989, and the U.S. Patent to
Long et al, No. 4,205,559.

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Disclosure of the Invention

It is one feature of this invention to provide an improved
polymeric-coated fabric layer means which can be secured to a surface
30 of a polymeric product, such as an endless transmission belt
construction and the like.

In particular, one of the major problems in the making of a
polymeric-coated fabric layer means for use in V-belt constructions
35 has been to provide sufficient building tack; currently, such systems
employ various resins, rosins, or oils to impart the necessary tack.

However, it is believed according to the teachings of this invention that the tack of a polymeric-coated fabric layer means may be greatly improved, without the use of tackifying additives, by placing the polymeric material on the fabric layer for better conformability of the surface of the resulting fabric layer means to the surface of the polymeric product when the two surfaces are brought into contact with each other for securement therebetween.

It is believed that such positioning of the polymeric material on the surface of the fabric layer can be accomplished by applying a foamed polymeric layer on the surface of the fabric layer; this foamed layer, due to its cellular structure, allows for excellent surface conformability of its surface with a surface of the polymeric product. The foamed polymeric layer is utilized by itself, or is filled with an overcoating of polymeric material which provides a uniform surface that tends to smooth out surface irregularities in the fabric layer and thus allows for better polymeric contact when its surface is brought against the surface of the polymeric product.

According to the present invention there is provided a method of making a flexible reinforcing strip or the like having a layer of fabric means, and polymeric layer means secured on at least one side of said layer of fabric means, said method comprising the steps of providing said layer of fabric means on a tenter frame means, applying said polymeric layer means in liquid form to said layer of fabric means at a single coating station while said layer of fabric means is on said tenter frame means, and then drying said polymeric layer means that has been applied to said layer of fabric means, said method comprising the steps of transversely stretching said layer of fabric means with said tenter frame after said polymeric layer means has been applied thereto and before said polymeric layer means has been dried thereon.

Further according to the present invention there is provided a polymeric-coated fabric layer means made by the method of the immediately preceding paragraph which is adapted to securement to a

surface of a polymeric product by a heat curing or vulcanization operation, said fabric layer means comprising a fabric layer and a layer of polymeric material secured to one side of said fabric layer, which polymeric layer is also, in use, secured through adhesion to
5 said surface of said polymeric product by a heat curing or vulcanization operation; and in which said polymeric layer comprises a foamed polymeric layer, whereby an outer surface of the polymeric layer is adapted to readily conform to said surface of said polymeric product to improve adhesion therebetween when said surfaces are
10 brought into contact with each other for securement during said heat curing or vulcanization operation.

The method may comprise making a polymeric-coated fabric layer means which is adapted to be secured to a surface of a polymeric
15 product, said method comprising the steps of forming said fabric layer means to comprise a fabric layer, securing a layer of polymeric material to one side of said fabric layer, and forming said layer of polymeric material for securement, in use, through adhesion to said surface of said product by a heat curing or vulcanisation operation on
20 said product and said layer; and comprising the step of forming said polymeric layer to comprise a foamed polymeric layer, whereby the outer surface thereof is adapted to readily conform to said surface of said product to improve said adhesion therebetween when said surfaces are brought into contact with each other for securement during said
25 heat curing or vulcanization operation.

Still further according to the present invention there is provided a polymeric product having a polymeric-coated fabric layer means, made by the method of the first statement of invention, secured
30 to a surface of said polymeric product, said fabric layer means comprising a fabric layer, and a layer of polymeric material secured to one side of said fabric layer and to said surface of said product by a heat curing or vulcanization operation; and in which said polymeric layer comprises a foamed polymeric layer, whereby an outer
35 surface thereof readily conforms to said surface of said product to improve adhesion therebetween during said heat curing or vulcanization

operation.

The polymeric-coated fabric layer means, method of making said layer means or polymeric product according to the associated one of the four immediately preceding paragraphs may have one or more of the novel features as hereinafter shown or described.

Brief Description of the Drawings

The features of the invention and its technical advantages, can be seen from the following description of preferred embodiments, together with the claims and the accompanying drawings, in which:

FIGURE 1 is a broken away cross-sectional perspective view of the polymeric-coated fabric layer means of this invention;

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FIGURE 2 is a cross-sectional view of an endless power transmission belt construction or the like utilizing the layer means of this invention that is illustrated in FIGURE 1;

FIGURE 3 is a schematic view illustrating the method and apparatus of this invention, for making the polymeric-coated fabric layer means for FIGURE 1; and

FIGURE 4 is a schematic, fragmentary, reduced top view of the apparatus of FIGURE 3.

10 Mode for Carrying Out the Invention

While the various features of this invention are hereinafter illustrated and described as being particularly adapted to provide a polymeric-coated fabric layer means for making particular products, it is to be understood that the various features of this invention can be utilized singly or in various combinations thereof to provide a polymeric-coated fabric layer means for other uses and/or for other products as desired.

20 Therefore, this invention is not to be limited to only the embodiment illustrated in the drawings, because the drawings are merely utilized to illustrate one of the wide variety of uses of this invention.

25 Referring now to FIGURE 1, the improved polymeric-coated fabric layer means of this invention is generally indicated by the reference numeral 10, and comprises a suitable fabric layer 11 of a type well known in the art, such as a bias fabric layer, having opposed sides 12 and 13, and a layer 14 of polymeric

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material. The layer 14 is secured to the side 12 of the fabric layer 11 in a manner hereinafter set forth to define an outer, substantially flat surface 15 which can be secured to a surface of a polymeric product, as will be hereinafter described. The polymeric layer 14 of this invention comprises a foamed polymeric layer, such as a foamed latex layer, which has an open cellular structure throughout the same, as represented generally by the reference numeral 16 in FIG. 1. It is believed that such cellular structure 16 of the foamed polymeric layer 14 permits the surface 15 thereof to readily conform to the surface of the polymeric product to which the layer means 10 is to be secured when the surface 15 thereof is brought into contact with the surface of the polymeric product for securement therebetween; it is believed that the layer 14 need not have a tackifying additive provided therein for this securement purpose, as is the case in some prior known polymeric-coated fabric layer means.

For example, see U.S. Patent 4,501,771 issued 2-26-85 of Delmar D. Long, one of the co-inventors of this invention, wherein a tacky layer is provided for such securement purposes. Since this patent describes the various uses of polymeric-coated fabric layer means, and a method and apparatus for making the same which is similar to this invention, as will be apparent hereinafter, this patent is being incorporated into this disclosure by this reference thereto.

In addition, the aforementioned U.S. Patents, No. 4,062,989 to Long and No. 4,205,559 to Long et al, are also being incorporated into this disclosure by this reference thereto, as such U.S. Patents disclose other types of polymeric-coated fabric layer means for uses similar to the uses of the polymeric-coated fabric layer means 10 of this invention.

If desired, another layer 17 of polymeric material, such as a latex, can be secured to the other side 13 of the fabric layer 11 so as to define an outside surface 18 thereof, which will subsequently provide an outside surface of the product utilizing such layer means 10.

Also, it is believed according to the teachings of this invention that the foamed layer 14 can have its outside surface 15 overcoated with polymeric material 19, such as a suitable latex, that substantially fills the open cells or openings 16 in the surface 15 as illustrated in FIG. 1. Such overcoating 19 can even extend outwardly beyond the surface 15 to completely coat the same in addition to filling the openings 16 thereof, if desired, with such overcoating 19 defining the outer surface 19' as illustrated in FIG. 1.

However, it is to be understood that the overcoating 19 need not be applied to the surface 15 of the foamed layer 14, as it is believed that the surface 15 of the layer 14, with or without the overcoating 19, allows for better conformability of the contacting surface of the fabric layer means 10 to a

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surface of a polymeric product utilizing such layer means 10 without the use of a tactifying additive in the fabric layer means 10 of this invention.

For example, reference is now made to FIG.

5 2, wherein a product of this invention is generally indicated by the reference numeral 20, and comprises an endless power transmission belt of a typical "V" type. The polymeric body 21 of the belt has a substantially trapezoidal cross-sectional configuration
10 which is defined by a pair of opposed flat parallel top and bottom surfaces 22 and 23, with a pair of angled side surfaces 24 and 25 disposed therebetween. The belt construction 20 has the conventional tension section 26, compression section 27, and load-carrying
15 section 28 disposed intermediate the tension section 26 and compression section 27 in a manner well known in the art.

As is conventional in the art, the opposed angular surfaces 24 and 25 of the belt construction 20
20 are each adapted to have a friction layer, which comprises a fabric that is impregnated with a polymeric composition, and which is secured thereon by such friction layer either being disposed only on the surfaces 24 and 25 thereof, or by having the entire outside
25 surface of the belt body 21 wrapped with the friction layer.

In any event, it can be seen that the belt construction 20 illustrated in FIG. 2 is completely wrapped by a strip of the polymeric-coated fabric
30 layer means 10 of this invention in such a way that

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the opposed ends 29 and 30 of the layer means 10 are disposed and secured in overlapping relation, such as on the top surface 22 of the belt construction 20 as illustrated in FIG. 2; this is conventional in the belt making art.

When utilizing the layer means 10 of this invention for forming the belt construction 20 of FIG. 2, it can be seen that the side or surface 15 or 19' of the layer means 10 is disposed in contact with the outer surfaces 22, 23, 24, and 25 of the polymeric body 21 of the belt construction 20 so as to readily conform to such surfaces 22, 23, 24, and 25 during a subsequent heat curing or vulcanizing of the belt construction 20 after the layer means 10 has been wrapped on the belt body 21 in a manner well known in the art of making belt constructions.

It is believed that by utilizing the foamed layer 14 of this invention, whether the same has the overcoating 19 or not, excellent adhesion will be provided between the layer 14 and the belt body 21 during the subsequent vulcanizing or curing operation of the belt construction 20, since the cellular construction 16 of the foamed layer 14 readily permits the layer 14 to conform to the surfaces 22, 23, 24, and 25 of the belt body 21 not only during the wrapping of the layer means 10 against the belt body 21, but also during the subsequent heat curing and vulcanizing operation.

As illustrated in FIG. 2, the outer surface 18 of the layer 17 provides the contact facing of the belt construction 20 at the driving or driven sides 24

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and 25 thereof, as is conventional in the art.

While the layer means 10 of this invention has been previously described as forming an outside surface of a belt product, it is to be understood that the layer means 10 of this invention can provide not only an outside surface thereof, but also in addition thereto, or in lieu thereof, could form part of an inner layer of the belt product if desired. In fact, the layer 17 could also be a foamed polymeric layer in a manner similar to the layer 14 so as to provide good conformability on both sides of the fabric layer 11 of the layer means 10 if desired.

Also, while the layer means 10 of this invention has been previously described as forming a part or parts of a belt construction or the like, it is to be understood that there are other products that can utilize the layer means 10 of this invention. For example, the layer means 10 can provide part of a printing blanket, part of a hose construction, as well as be utilized for making the entire hose construction, gasket means, etc., whereby it can be seen that the layer means 10 of this invention can be utilized as a product itself, or with other products not disclosed in this application, because it is believed that the same is readily adapted to be utilized where any such polymeric-coated fabric layer means is presently being used, or where such polymeric-coated fabric layer means could possibly be used.

While the layer means 10 of this invention is hereinafter illustrated and described as being formed

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by a particular method and apparatus as illustrated in FIGS. 3 and 4, it is to be understood that this invention is not to be limited to the specific method and apparatus illustrated in FIGS. 3 and 4, as the same is merely being disclosed as a believed-to-be possible method and apparatus for making the layer means 10 of this invention.

Therefore, reference is now made to FIGS. 3 and 4, wherein a method and apparatus of this invention for forming the layer means 10 of FIG. 1 is generally indicated by the reference numeral 31, and will now be described.

As illustrated in FIG. 3, the fabric layer 11 is fed from a supply roll 32 thereof through a liquid 33 that impregnates and lubricates the threads thereof so that the same can be readily stretched on a tenter frame 34 in a direction transverse to the longitudinal direction of the fabric sheet 11. Thereafter, the foamed polymeric material 14, in liquid form, is applied to the top surface 12 of the fabric sheet, while simultaneously the polymeric material 17, in liquid form, is applied to the bottom surface 13 of the fabric sheet 11. Respective coating units generally indicated by the reference numerals 35 and 36 in FIG. 3, are used. The liquid materials 14 and 17 are respectively doctored by suitable doctor member 37 and 38 disposed on opposite sides of the now coated fabric sheet 11 to produce the coated fabric layer means of this invention, which is generally indicated by the reference numeral 10 in FIG. 3. The coatings

14 and 17 are sufficiently liquid to impregnate the fiber bundles of the fabric layer 11 so as to provide good adhesion of the layers 14 and 17 to the fabric layer 11.

5 The coated sheet 11 is now passed through a heating unit, generally indicated by the reference numeral 39, for substantially drying the coatings 14 and 17, without curing the same, so that the polymeric-coated fabric layer means 10 can be wound into a supply
10 roll 40 thereof, with a sheet 41 wound therewith to prevent the wound polymeric-coated fabric layer means 10 of this invention from securing to itself in the roll 40, as is well known in the art.

 The method and apparatus 31 of this
15 invention is also adapted to provide the overcoat 19 on the foamed layer 14 of the polymeric-coated fabric layer means 10 if desired. For example, such overcoating 19 can be applied in liquid form by a suitable applicator (generally indicated by the reference numer-
20 al 42 in FIG. 3), and can be doctored by suitable doctor member 43 which either provides a thickness to the overcoating 19 above the entire surface 15 of the foamed layer, or merely causes the coating 19 to just
25 fill the openings 16 in the side 15 of the foamed layer 14, as desired.

 In any event, after the overcoating 19 is ap-
plied to the side 15 of the foamed layer 14, the poly-
meric-coated fabric layer means 10 is passed through a
heating unit 44 which substantially dries the over-
30 coating 19, without curing the coatings 14, 17, and 19, before the polymeric-coated fabric layer means 10 of

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this invention is wound into the supply roll 40 thereof.

Therefore, it can be seen that when it is desired to utilize the layer means 10 of this invention, a sufficient quantity thereof can be dispensed from the supply roll 40 thereof to be utilized either by itself, after subsequent curing thereof, or remaining uncured or in combination with a polymeric product, such as by forming the belt construction 20 in the manner previously described, whereby it can be seen that this invention provides an improved polymeric-coated fabric layer means 10 for being secured to a surface of a polymeric product, the fabric layer means 10 comprising a fabric layer 11 having opposed sides 12 and 13, and a layer of polymeric material 14 secured to the side 12 of fabric layer 11 and having an outer surface 15 facing away from the fabric layer 11 for being secured to the surface of the product, the polymeric layer 14 comprising a foamed polymeric layer, whereby the outer surface 15 thereof is adapted to readily conform to the surface of the product when the surfaces are brought into contact with each other for securement therebetween.

While the layer means 10 of this invention has been previously described as having open cells or openings 16 in the surface 15 of the foamed layer 14, it is to be understood that other types of suitable foamed polymeric materials can be utilized for making the layer means 10 of this invention. For example, a foamed polymeric material, such as a foamed latex, can be provided for the layer 14, wherein the outer



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surface 15 thereof is substantially free of openings 16 so as to be substantially impervious, as is illustrated in FIG. 1 between the areas of the openings 16. Such layer means 10 can have the substantially impervious outer surface 15 of the foamed layer 14 disposed in contact with the desired surface of a polymeric product, or such impervious surface 15 can be first overcoated with the polymeric layer 19 as previously described. In any event, it is believed that such layer means 10, with the substantially impervious outer surface 15 of the foamed layer 14, will be adapted to readily conform to the surface of a polymeric product, when the surface 15 or 19' of the layer means 10 is brought into contact therewith, because of the cellular structure, whether open, closed, or in various combinations thereof, of the foamed layer 14 as previously described, and for the same purposes.

Accordingly, it can be seen that this invention not only provides an improved polymeric-coated fabric layer means, and method of making the same, but also this invention provides an improved product utilizing such a layer means.

While the forms and methods of this invention now preferred have been illustrated and described as required, it is to be understood that other forms and method steps can be utilized and still fall within the scope of the appended claims.



Still further according to the present invention there is provided an apparatus for making a flexible reinforcing strip or the like having a layer of fabric means and a polymeric layer means secured on at least one side of said layer of fabric means, said apparatus comprising a tenter frame means, means for providing said layer of fabric means on said tenter frame means, means for applying said polymeric layer means in liquid form to said layer of fabric means at a single coating station while said layer of fabric means is on said tenter frame means, and means for then drying said polymeric layer means that has been applied to said layer of fabric means, and comprising means for transversely stretching said layer of fabric means with said tenter frame means after said polymeric layer means has been applied thereto and before said polymeric layer means has been dried thereon.

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Reference is made to G.B. Patent Application No. 8630920.

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CLAIMS

1. A method of making a flexible reinforcing strip or the like having a layer of fabric means, and polymeric layer means secured on
5 at least one side of said layer of fabric means, said method comprising the steps of providing said layer of fabric means on a tenter frame means, applying said polymeric layer means in liquid form to said layer of fabric means at a single coating station while said layer of fabric means is on said tenter frame means, and then drying
10 said polymeric layer means that has been applied to said layer of fabric means, said method comprising the steps of transversely stretching said layer of fabric means with said tenter frame after said polymeric layer means has been applied thereto and before said polymeric layer means has been dried thereon.
- 15 2. A method as set forth in Claim 1 in which said step of applying said polymeric layer means includes applying said polymeric layer means while employing a reverse roll coating means.
- 20 3. A method as set forth in Claim 2 wherein the step of applying said polymeric layer means comprises the step of applying said polymeric layer means so that said polymeric layer means is disposed on both sides of said layer of fabric means.
- 25 4. A method as set forth in Claim 2 and including the step of moving said layer of fabric means in one direction with said tenter frame means as said polymeric layer means is being applied thereto.
5. A method as set forth in Claim 2 and including the step of also
30 transversely stretching said layer of fabric means with said tenter frame means before the step of applying said polymeric layer means in liquid form thereto.
6. A method as set forth in Claim 2 wherein the step of drying said
35 polymeric layer means takes place while said layer of fabric means is still on said tenter frame means.



7. A method as set forth in Claim 2 wherein said polymeric layer means is applied to said layer of fabric means with a roll coater.
8. A method as set forth in Claim 2 wherein said polymeric layer means is applied on said layer of fabric means with applying means that forces said polymeric layer means through said one side of said layer of fabric means to the other side thereof so that said polymeric layer means is disposed on both sides of said layer of fabric means.
9. A method as set forth in Claim 2 and including the step of applying another polymeric layer means to said layer of fabric means after the step of drying.
10. A method as set forth in Claim 9 wherein said other polymeric layer means is applied on the first mentioned polymeric layer means.
11. A method as set forth in Claim 9 wherein the step of applying another polymeric layer means takes place while said layer of fabric means is still on said tenter frame means.
12. A polymeric-coated fabric layer means made by the method of Claim 1, which fabric layer means is adapted for securement to a surface of a polymeric product by a heat curing or vulcanization operation, said fabric layer means comprising a fabric layer and a layer of polymeric material secured to one side of said fabric layer, which polymeric layer is also, in use, secured through adhesion to said surface of said polymeric product by a heat curing or vulcanization operation; and in which said polymeric layer comprises a foamed polymeric layer, whereby an outer surface of the polymeric layer is adapted to readily conform to said surface of said polymeric product to improve adhesion therebetween when said surfaces are brought into contact with each other for securement during said heat curing or vulcanization operation.
13. A layer means as set forth in Claim 12, in which said foamed polymeric layer comprises a foamed latex layer.



14. A layer means as set forth in Claim 12, in which said foamed layer has a plurality of openings in said outer surface thereof.
15. A layer means as set forth in Claim 14, having an overcoating of polymeric material on said outer surface that fills said openings thereof.
16. A layer means as set forth in Claim 12, having a further layer of polymeric material secured to the other side of said fabric layer.
17. A layer means as set forth in Claim 12, in which said fabric layer comprises a bias fabric layer.
18. A layer means as set forth in Claim 12, in which said foamed layer has a substantially impervious outer surface.
19. A layer means as set forth in Claim 18, having an overcoating of polymeric material on said outer surface of said foamed layer.
20. A method as claimed in Claim 1 comprising making a polymeric-coated fabric layer means which is adapted to be secured to a surface of a polymeric product, said method comprising the steps of forming said fabric layer means to comprise a fabric layer, securing a layer of polymeric material to one side of said fabric layer, and forming said layer of polymeric material for securement, in use, through adhesion to said surface of said product by a heat curing or vulcanisation operation on said product and said layer; and comprising the step of forming said polymeric layer to comprise a foamed polymeric layer, whereby the outer surface thereof is adapted to readily conform to said surface of said product to improve said adhesion therebetween when said surfaces are brought into contact with each other for securement during said heat curing or vulcanization operation.
21. A method as set forth in Claim 20, further comprising the step of applying an overcoating of polymeric material on an outer surface of



said foamed polymeric layer.

22. A method of making a layer means as set forth in Claim 20,
further comprising the step of securing a further layer of polymeric
5 material to the other side of said fabric layer.

23. A polymeric product having a polymeric-coated fabric layer means
made by the method of Claim 1 secured to a surface of said polymeric
product, said fabric layer means comprising a fabric layer, and a
10 layer of polymeric material secured to one side of said fabric layer
and to said surface of said product by a heat curing or vulcanization
operation; and in which said polymeric layer comprises a foamed
polymeric layer, whereby an outer surface thereof readily conforms to
said surface of said product to improve adhesion therebetween during
15 said heat curing or vulcanization operation.

24. A product as set forth in Claim 23, having a further layer of
polymeric material secured to the other side of said fabric layer,
said other layer defining an outside surface of said product.

20 25. A product as set forth in Claim 23, in which said product
comprises an endless transmission belt construction.

26. A product as set forth in Claim 25, in which said fabric layer
25 means defines at least part of the outside surface of said belt
construction.

27. A polymeric-coated fabric layer means substantially as herein
described with reference to FIGURE 1 of the accompanying drawings.

30 28. A method as claimed in Claim 12 and substantially as herein
described with reference to FIGURES 3 and 4 of the accompanying
drawings.

35 29. A polymeric product having a polymeric-coated fabric layer means
secured to a surface of said polymeric product substantially as herein



(45)

described with reference to FIGURE 2 of the accompanying drawings.

30. An apparatus for making a flexible reinforcing strip or the like having a layer of fabric means and a polymeric layer means secured on at least one side of said layer of fabric means, said apparatus comprising a tenter frame means, means for providing said layer of fabric means on said tenter frame means, means for applying said polymeric layer means in liquid form to said layer of fabric means at a single coating station while said layer of fabric means is on said tenter frame means, and means for then drying said polymeric layer means that has been applied to said layer of fabric means, and comprising means for transversely stretching said layer of fabric means with said tenter frame means after said polymeric layer means has been applied thereto and before said polymeric layer means has been dried thereon.

31. An apparatus as set forth in Claim 30 wherein said means for applying said polymeric layer means is adapted to apply said polymeric layer means so that said polymeric layer means is disposed on both sides of said layer of fabric means.

32. An apparatus as set forth in Claim 30 and including means for moving said layer of fabric means in one direction with said tenter frame means as said polymeric layer means is being applied thereto.

33. An apparatus as set forth in Claim 30 and including means for also transversely stretching said layer of fabric means with said tenter frame means before said means applies said polymeric layer means in liquid form thereto.

34. An apparatus as set forth in Claim 30 wherein said means for drying said polymeric layer means is adapted to dry said polymeric layer means while said fabric layer means is still on said tenter frame means.

35. An apparatus as set forth in Claim 30 wherein said means for



applying said polymeric layer means to said layer of fabric means comprises a roll coater.

36. An apparatus as set forth in Claim 30 wherein said means for
5 applying said polymeric layer means to said layer of fabric means is
adapted to apply said polymeric layer means to said one side of said
layer of fabric means and force said polymeric layer means through
said layer of fabric means to the other side thereof so that said
polymeric layer means is disposed on both sides of said layer of
10 fabric means.

37. An apparatus as set forth in Claim 30 and including means for
applying another polymeric layer means to said layer of fabric means
after said means has dried the first mentioned polymeric layer means.

15 38. An apparatus as set forth in Claim 36 wherein said means for
applying said other polymeric layer means is adapted to apply said
other polymeric layer means on the first mentioned polymeric layer
means.

20 39. An apparatus as set forth in Claim 36 wherein said means for
applying another polymeric layer means is adapted to apply said other
polymeric layer means while said layer of fabric means is still on
said tenter frame means.

25 40. An apparatus as claimed in Claim 30 wherein said means for
applying said polymeric layer means to said layer of fabric means
comprises a reverse roll coater.

30 41. Apparatus as claimed in Claim 30 and substantially as herein
described with reference to FIGURES 3 and 4 of the accompanying
drawings.

35 42. A method of making a flexible reinforcing strip or the like
having fabric layer means, and polymeric layer means secured on at
least one side of said fabric layer means, said method comprising the



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steps of providing said fabric layer means on a tenter frame means, applying said polymeric layer means in liquid form to said fabric layer means while said fabric layer means is on said tenter frame means, and then drying said polymeric layer means that has been applied to said fabric layer means, the method comprising the step of transversely stretching said fabric layer means with said tenter frame after said polymeric layer means has been applied thereto and before said polymeric layer means has been dried thereon and which method has one or more of the following features:-

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a) only a single coating station is provided at which said layer of fabric means is coated or two coating stations are provided for coating said layer of fabric means with polymeric material to provide two polymeric layer means

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b) only a single coating station is provided at which said layer of fabric means is coated or two coating stations are provided in which at the second coating station a coating is applied to the layer of fabric means from overhead or non-roll coating applicator means

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c) the layer of fabric means is only coated with polymeric material

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d) no further layers of non-similar polymeric material are introduced onto the layer of fabric means

e) the layer of fabric means and polymeric material are dried, without curing, so that the layer of fabric means can be wound into a supply roll thereof

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f) the polymeric material is a foamed polymeric material, preferably, of open cellular form.

43. Apparatus for making a flexible reinforcing strip or the like having fabric layer means and a polymeric layer means secured on at least one side of said fabric layer means, said apparatus comprising a

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tenter means frame, means for providing said fabric layer means on
said tenter frame means, means for applying said polymeric layer means
in liquid form to said fabric layer means while said fabric layer
means is on said tenter frame means, and means for then drying said
5 polymeric layer means that has been applied to said fabric layer
means, the apparatus having means for transversely stretching said
fabric layer means with said tenter frame means after said polymeric
layer means has been applied thereto and before said polymeric layer
means has been dried thereon and which apparatus has one of the
10 following features:-

- a) only a single coating station is provided at which said layer of
fabric means is coated or two coating stations are provided for
coating said layer of fabric means with polymeric material to
15 provide two polymeric layer means
 - b) only a single coating station is provided at which said layer of
fabric means is coated or two coating stations are provided in
which at the second coating station a coating is applied to the
20 layer of fabric means from overhead or non-roll coating
applicator means.
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