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(54) **Method for making a ladderproof knitted elastomeric polyamide fabric.**

(57) The present invention relates to a method for making a ladderproof knitted elastomeric polyamide fabric. The method comprises the steps of: threading the polyamide yarn on the bottom comb of the loom, threading the elastomeric yarn on the top comb of the loom, knitting the fabric and then subjecting the made fabric to a further raising step on its right side.

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BACKGROUND OF THE INVENTION

The present invention relates to a method for making a ladderproof knitted elastomeric polyamide fabric, and also relates to the thus made fabric.

As is known, for making ladderproof elasticized fabrics, which are for example used for making bath costumes and the like, there are conventionally used knitted fabrics consisting of a polyamide yarn and an elastomeric yarn.

The elastomeric yarn is threaded on the bottom comb or bar of the loom, whilst the polyamide yarn is threaded on the top bar or comb of the loom.

Upon knitting, the made fabric is subjected to a raising step, which is carried out on the back or reverse of the fabric.

Knitted fabrics made by this method, even if they are broadly used, have been found to be susceptible to improvements, mainly with respect to their outer aspects and their touch or hand characteristics.

SUMMARY OF THE INVENTION

Accordingly, the aim of the present invention is to solve the above mentioned problem, by providing a method for making such a knitted elastomeric-polyamidic fabric which has a "hide" aspect, and which is particularly pleasant to touch while having satisfactory resiliency properties.

Within the scope of the above mentioned aim, a main object of the present invention is to provide such a method which can be carried out without the need of performing substantial modifications in the textile machines, which are conventionally used for making elasticized or resilient fabrics.

Another object of the present invention is to provide such a method which can be quickly and easily carried out and can provide a knitted fabric with novel characteristics and which moreover has a very reduced cost.

According to one aspect of the present invention, the above mentioned aim and objects, as well as yet other objects, which will become more apparent hereinafter, are achieved by a method for making an elastomeric polyamide knitted fabric, characterized in that said method comprises the steps of: threading the polyamide yarn on the bottom comb of a loom or textile machine, threading the elastomeric yarn on the top comb of said loom, and knitting said fabric.

Further characteristics and advantages of the invention will become more apparent hereinafter from the following detailed disclosure of a preferred, though not exclusive, embodiment thereof.

DESCRIPTION OF THE PREFERRED EMBODIMENT

According to the invention, the method for making an elasticized ladderproof knitted fabric has the main feature that said method comprises the steps of threading the elastomeric yarn on the top comb of a ladderproof chain loom and threading the polyamide yarn on the bottom comb of said loom, which is just the reverse of the conventionally used methods.

Upon the yarn engaging steps, the loom or textile machine is operated in a conventional way so as to provide a knitted fabric: then on the thus made knitted fabric there is carried out a further raising step which, according to the invention, and contrarily to known procedures, is carried out on the right side of the knitted fabric.

Thus, a knitted fabric is obtained which has a "hide" type of aspect, which is particularly pleasant to touch and has a very broad range of applications.

By way of a merely indicative example, it is indicated that very satisfactory results have been obtained by using a ladderproof chain loom with a loom fineness from 32 E to 28 E and with a binding or weave value at the bottom comb of 10/34 and a binding value at the top comb of 10/12, with a raw loop stitch number of substantially 28/cm.

The used polyamide yarn was of the (40/36 filament denier) type, and the elastomeric yarn was of the 40/1 denier type.

The obtained finished knitted fabric consists of 18 % elastomeric material, 82% polyamide material and is made with a height of about 150 centimeters, a weight of 245 grams/m² and 370 grams for linear meter ($\pm 10\%$).

The number of loop stitches for centimeter, through the piece length, is of about 35/40, whereas the number of wefts or quills, in the height direction, is of 26.5.

From the above disclosure it should be apparent that the present invention fully achieves the intended aim and objects.

In particular the fact is to be pointed out that a knitted fabric making method has been provided

which, by reversing conventional making procedures, provides a knitted elasticized fabric having greatly improved characteristics, both with respect to the aesthetic aspect and with respect to the touch sensitivity.

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While the invention has been disclosed and illustrated with reference to a preferred embodiment thereof, it should be apparent that the disclosed embodiment is susceptible to many modifications and variations all of which will come within the scope and spirit of the appended Claims.

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Claims

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1. A method for making a ladderproof elastomeric-polyamide knitted fabric, characterized in that said method comprises the steps of threading a polyamide yarn on the bottom comb of a loom, threading an elastomeric yarn on the top comb of the loom, and knitting the fabric.

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2. A method for making an elastomeric-polyamide ladderproof knitted fabric, according to Claim 1, characterized in that said method further comprises the step of raising said fabric on the right side thereof.

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3. An elasticized ladderproof elastomeric-polyamide knitted fabric made by the method according to any of the preceding Claims, characterized in that the elastomeric yarn of said fabric is knitted by the top comb of said loom and the polyamide yarn of said fabric is knitted by the bottom comb of the loom.

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5. A fabric according to Claim 3, characterized in that the right side of said fabric is raised.

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5. A fabric according to Claims 3 and 4, characterized in that said fabric has a hide type of aspect.

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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)
A	US-A-3931721 (ADAMSON) * column 4, line 66 - column 5, line 35; figures 3, 6a, 6b *	1, 3	D04B21/18
A	US-A-2996906 (ICHIBE)		
A	CH-A-107176 (THE GEWEK TRADING COMPANY LTD.)		
A	FR-A-2295150 (CIFRAN-SOTTA)		
A	GB-A-1204384 (FARBENFABRIKEN BAYER AKTIENGESELLSCHAFT)		
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			D04B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 09 MARCH 1990	Examiner VAN GELDER P.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			