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⑤④ **Method for the production of articles of clothing having the aspect of old used clothes.**

⑤⑦ The method for the production of articles of clothing having the aspect of old, worn-out garments, consists of obtaining discolorings localized according to worn-out areas corresponding to a pre-determined design, where the discoloring is obtained through the first phase of the corrosion-printing process and directly either on the bolt of cloth which is yet to be cut, or on each individual piece of the garment after it has been cut.

The localized corrosion can be obtained either through repeated applications with a screen or continuously by means of a printing drum.

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"METHOD FOR THE PRODUCTION OF ARTICLES OF CLOTHING HAVING THE ASPECT OF OLD, USED CLOTHES"

The invention concerns a method for the production of articles of clothing made of colored cloth, particularly of the type used for jeans, or so-called denim, said method being suitable to obtain new articles having the aspect of old, used articles of clothing.

As it is known, a certain type of fashion catering to a special taste is becoming more and more popular. That is the fashion which considers as particularly elegant, or, at any rate, in-vogue clothes made of jeans denim having a worn-out aspect, such as the one that an old piece of clothing would have, that has been worn for a long period of time and which would have undergone a natural discoloring process in those parts which are more liable to be worn out.

At present, the market demand is so strong and determined, that most manufacturers of pants, jackets, skirts and other articles made of jeans cloth have perfected some methods which could be defined as artificial aging processes of the manufactured articles, and which have the purpose of discoloring the cloth in an irregular way, so as to reproduce the real worn-out conditions of the article.

A known method, which for simplicity sake will be called artificial aging from now on, consists in washing repeatedly the finished manufactured articles, sometimes adding to the water some chemical products which attack the more superficial part of the cloth, thus determining a general discoloring of the dye.

A method which is even more recent than the above-mentioned one, consists in washing the finished articles of clothing by adding in the industrial washing machine, besides the water and the chemical products, some cubes of pumice-stone or other abrasive substances as well, which, by rubbing repeatedly on the articles, cause at the same time the discoloring

and also a certain amount of wearing out of the cloth.

Therefore, the two methods which have just been described create a certain aging aspect of the article, the first one by discoloring the article, the second one by performing an even more penetrating action both of discoloring and of real wearing out.

The most obvious limit of these two techniques is that both treat the whole article in all of its parts and uniformly, rather than with an aimed technique.

This result, however, does not correspond to what happens in reality: in fact, if one observes any used piece of clothing, it can be noticed that there are some definite parts of the article, which are more worn out than others; in pants, for instance, they will be the knees, the edges of the pockets, the front part, the crotch, the seat; or in a jacket, the elbows, the parts that are buttoned, etc.

Therefore, the present artificial aging technique is not suited to reproduce garments appearing old and worn out, as they are in reality, since it can not produce wearing and discoloring localized in the parts that usually are worn and discolored.

The purpose of the present invention is that of creating a method for the production of new garments, particularly those made of denim cloth, of the type used for jeans, having localized discolorings in certain pre-determined areas and according to pre-set designs, so as to make actually old and worn-out garments practically liable to be confused with and indistinguishable from new garments presenting this effect on purpose.

Another purpose of the invention is that of obtaining the aging effect by means of a method giving constant results. Yet another purpose is that of creating the desired aging

effect with a method being both economical and easy to apply.

The above-mentioned purposes are obtained by a production method as it is described in the claims and which is characterized by the fact that it consists in obtaining localized
5 discolorings in pieces of cloth having been already cut but not having been sewn together yet, according to worn-out areas corresponding to a pre-determined pattern and being obtained through the first phase of the corrosion printing procedure. A preferred form of execution, given by way of example only,
10 but which is not meant to limit the scope of the invention, is described here below.

An actually worn-out and, therefore, discolored garment is unstitched and all its pieces are taken apart. The individual pieces are then placed on a flat panel in such a way, as to
15 reproduce the actual arrangement of the cuts which will be made on the cloth.

Thereafter, patterns of areas having a different intensity in color, which reproduce exactly the discolorings being present on the single pieces of garment, are reproduced on another
20 panel by means of an aerographic procedure or of a similar procedure, with the same arrangement mentioned above.

In this phase it is important that the color areas corresponding to the worn-out parts of the sample-garment be drawn beyond the limits of the seams, so as to avoid that subsequent
25 imperfections in the cutting of the pile in the industrial procedure may uncover some interruptions of discoloring.

The panel having been thus designed is then photographed and the negative of said photograph is subsequently projected on a screenholder having been appropriately prepared with
30 a film of photo-sensitive material.

A subsequent attack by means of acids according to the known technique of preparation of the printing screens permits to obtain a screenholder being ready to perform the corrosion

printing according to the pre-determined pattern, which corresponds completely to the shapes of the discolored areas which one wants to reproduce.

5 As an alternative, the photographic negative can be projected on a metal plate, also having been treated with a photo-sensitive material, which, after having been treated, is applied to the surface of a printing drum.

10 Therefore, depending on the type of installation available, either the screenholder or the thus prepared printing drum can be used to obtain the corrosion printing on the denim cloth.

15 After the corrosion printing has been performed on the entire cloth being worked, said printing consisting of the removal of the color from the areas where the screen is open or from the areas having come in contact with the printing drum, all the discolored areas are present on the cloth following the corresponding patterns, intensity and shades, said patterns corresponding to and being localized in the areas belonging to the single pieces of the garment, which will then be cut.

20 At this point it is possible to form the pile for the multiple cutting of the single pieces of the garment, and after that, the processing, the sewing and the finishing of the garments proceed according to the known technique.

25 If the just described artificial aging process is used for the production of a limited number of articles, for instance on an artisan scale, it may become more convenient to perform the corrosion printing directly on the single pieces of the garment having already been cut but not sewn together. In fact, by printing each piece it is possible to use screens

30 having reduced dimensions and also simpler photographic equipment.

It is necessary to point out that, while the known technique uses the corrosion printing system in order to dye the cloth or to remove the color from it, according to a pre-set design,

that is to say, in order to obtain a bolt of cloth having a uniform design, from which garments also presenting a uniform design will then be obtained, in this case the corrosion printing system is used in its first stage, that is, only for
5 the purpose of removing the color in order to solve the problem of the artificial aging of the articles of clothing.

CLAIMS

- 1) A method for the production of articles of clothing having the aspect of old, worn-out garments, characterized by the fact that it obtains discolorings which appear on the finished garment and are localized according to pre-determined areas, coinciding with the actual naturally worn-out areas, said discolorings being achieved by means of the corrosion-printing process.
- 2) A method according to claim 1), characterized by the fact that the corrosion printing process creates a design on the bolt of cloth yet to be cut, which repeats all the discolored areas being present on the parts constituting a complete and worn-out article of clothing, said areas being arranged on the bolt according to the cutting pattern.
- 3) A method according to claim 1) characterized by the fact that the corrosion printing process is applied on each piece of the garment having been already cut.
- 4) A method according to the claim. 1) ,characterized by the fact that the corrosion printing is obtained by applying the screen on the bolt of cloth.
- 5) A method according to the claim. 1) , characterized by the fact that the corrosion printing is obtained by means of a printing drum.