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(54) **Fabric construction for making floor and stairs covering carpets**

(57) A fabric construction for making a carpet, specifically designed for covering floors, stairs steps and

the like, characterized in that it comprises braided warp threads (2) and weft threads (3), said warp threads (2) and weft threads (3) comprising rope elements (4).

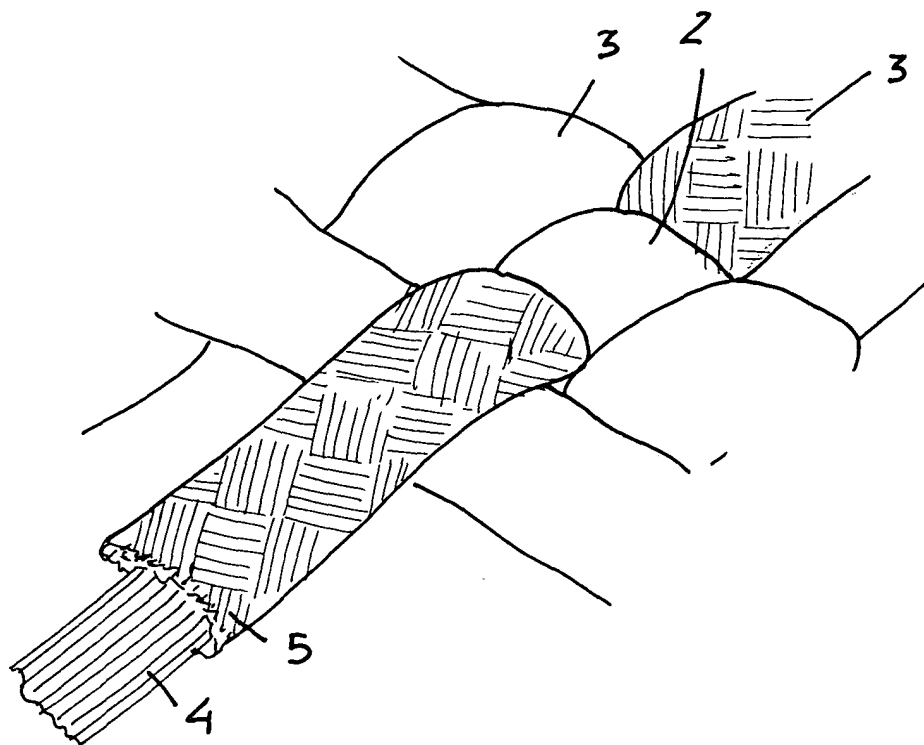


FIG. 3

## Description

### BACKGROUND OF THE INVENTION

[0001] The present invention relates to a fabric construction, which has been specifically designed for making carpets, in particular for covering floors, stairs steps and the like.

[0002] Several materials for covering floorings, either inside or outside, such as carpets, moquettes, mats and the like are already known.

[0003] Some of the above mentioned materials or products comprise braided textile composite materials.

[0004] However, the need is at present felt of a textile product which has improved characteristics with respect to prior products designed for the same or similar applications.

### SUMMARY OF THE INVENTION

[0005] Accordingly, the aim of the present invention is to provide such a fabric or carpet construction, specifically adapted to cover floors, stairs steps and the like, which has a very high mechanical strength and a long duration and, in the meanwhile, is very inexpensive.

[0006] Within the scope of the above mentioned aim, a main object of the present invention is to provide such a fabric construction which is adapted for making a carpet having very good anti-slipping features.

[0007] Yet another object of the present invention is to provide such a fabric construction which is very flexible in operation, and can be used for making covering elements for covering comparatively large areas and, in the meanwhile, is adapted for making small carpets and mats.

[0008] 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 fabric construction for making carpets, specifically for covering floors, stairs steps and the like, characterized in that said fabric construction comprises braided warp threads and weft threads, said braided warp threads and weft threads comprising rope elements.

### BRIEF DESCRIPTION OF THE DRAWINGS

[0009] Further characteristics and advantages of the present invention will become more apparent hereinafter from the following detailed disclosure of a preferred, though not exclusive, embodiment of the invention, which is illustrated, by way of an indicative, but not limitative example, in the accompanying drawings, where:

Figure 1 is a top plan view of a length of the fabric construction according to the present invention;

Figure 2 is an elevation cross-sectional view, of a portion of the fabric construction according to the

invention; and

Figure 3 is a perspective view, on an enlarged scale and partially broken away, illustrating the fabric construction according to the present invention.

### DESCRIPTION OF THE PREFERRED EMBODIMENT

[0010] With reference to the number references of the above mentioned figures, the fabric construction according to the invention, which has been generally indicated by the reference number 1, comprises warp threads 2 and weft threads 3 which are so braided with one another so that the warp forming rope elements are parallel to one another.

[0011] The weft forming rope elements, on the other hand, have a sinusoidal pattern, and alternatively pass above and under the warp forming rope elements.

[0012] According to the present invention, the weft threads 3 and/or the warp threads 2 comprise, as stated, rope elements.

[0013] Each rope element, in turn, comprises, as is clearly shown in figure 3, a core element 4 thereon are wound threads 5 which are braided according to a spiral pattern.

[0014] The core element 4, in turn, comprises parallel threads or wires.

[0015] The core threads 4 and braided threads 5 are advantageously constituted by synthetic fibers, for example the well known Dracon, Terital, Nylon fibers, polypropylene fibers or any other plastic material fibers as conventionally used for making cables, ropes and cords, for example for nautical applications.

[0016] In this connection, it should be pointed out that polypropylene, in particular, does not generate molds, has antibacterial properties and consequently being anallergic.

[0017] The use of the above mentioned rope elements for making the subject fabric construction, provides the fabric with a very high mechanical strength and long duration.

[0018] Moreover, the braided rope elements provide the great advantage that the carpet construction has anti-slipping properties, both with respect to the surface on which the carpet is supported and with respect to the user shoe soles.

[0019] Furthermore, by braiding rope elements of different types and colors, it is possible to provide the fabric construction of the invention with a very pleasant aesthetic aspect, deriving from any desired combinations of selected colors.

[0020] Furthermore, since the above mentioned rope elements comprise a plurality of thread elements, they can be made with a very broad range of colors and color combinations.

[0021] Yet another advantage of the carpet or fabric construction according to the invention, is constituted by its light weight, together with a high mechanical strength, typical of the used synthetic fibers.

[0022] Yet another advantage of the fabric construction of the invention is that it can be easily operated and cut, thereby the carpet can be easily and quickly assembled and installed and disassembled, for example for washing or replacing purposes.

[0023] The mechanical characteristics of the carpet construction according to the present invention make it very suitable for outside uses or applications, and for heavily trampled on areas.

[0024] Owing to the above disclosed characteristics, it is also very advantageous for covering floorings, used, for example, for child playing applications.

[0025] Yet another advantageous feature of the carpet or fabric construction according to the invention, is that it is very resistant to scratches by domestic animals.

[0026] It has been found that the invention fully achieves the intended aim and objects.

[0027] In fact, the invention has provided a fabric construction ideally suited for covering floorings, stairs steps and the like, and having a very high mechanical strength and long duration.

[0028] In practicing the invention, the used materials, and the contingent size and elements thereof, can be any, depending on the requirements and status of the art.

ties.

6. A fabric construction, according to one or more of the preceding claims, **characterized in that** it comprises a plurality of parallel rope elements, forming the warp of said fabric, and a further plurality of parallel rope elements arranged in a sinusoidal pattern by alternatively passing above and under the warp rope elements, so as to provide the weft of said fabric construction.

7. A fabric construction, according to one or more of the preceding claims, **characterized in that** said fabric construction comprises one or more of the disclosed and/ or illustrated characteristics.

## Claims

1. A fabric construction for making carpets, specifically for covering floors, stairs steps and the like, **characterized in that** said fabric construction comprises braided warp threads and weft threads, said braided warp threads and weft threads comprising rope elements.

2. A fabric construction, according to Claim 1, **characterized in that** each said rope element comprises a core on which are wound braided threads in a spiral pattern.

3. A fabric construction, according to Claim 1 or 2, **characterized in that** said core threads and braided threads comprise synthetic fibers.

4. A fabric construction, according to one or more of the preceding claims, **characterized in that** said synthetic fibers are selected from known fibers, such as Dacron, Terital, Nylon fibers, polypropylene fibers or any other synthetic fibers as conventionally used for making cables, ropes and cords, for example for a nautical use.

5. A fabric construction, according to one or more of the preceding claims, **characterized in that** said threads forming the core of each rope element comprise threads arranged parallel to one another so as to provide the carpet with good softness proper-

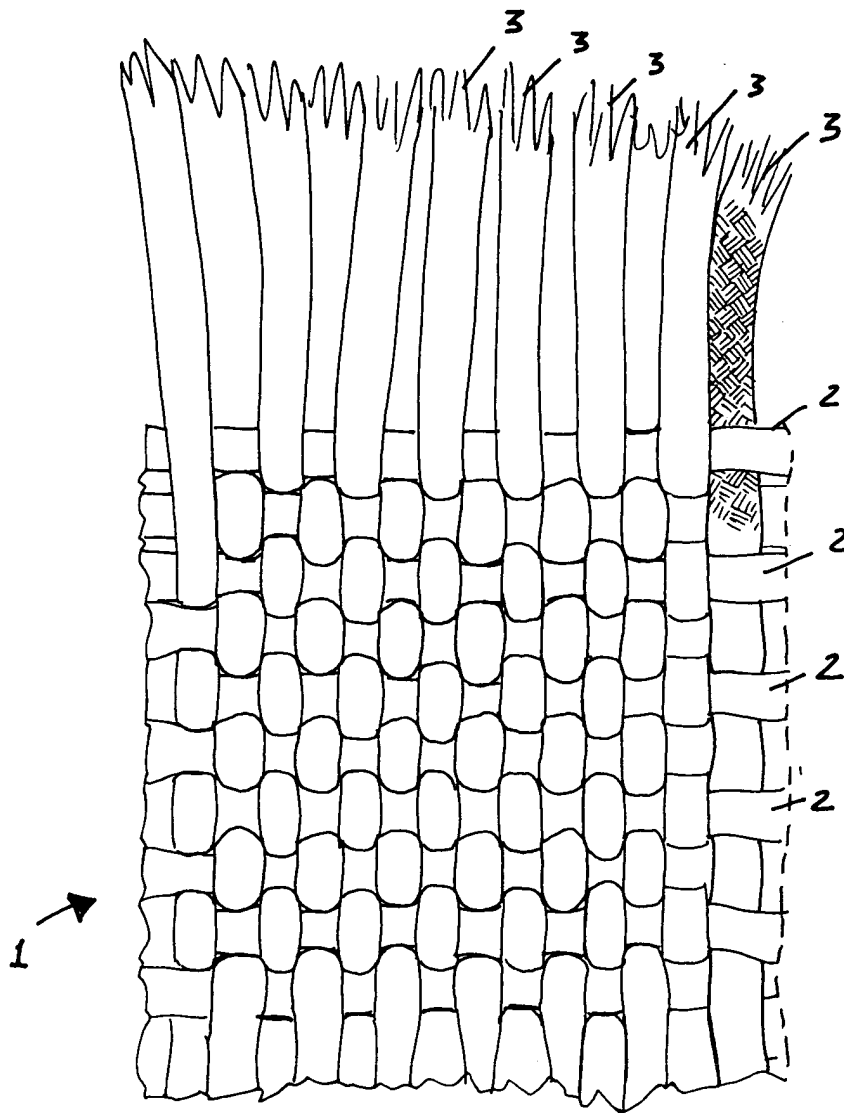


FIG. 1

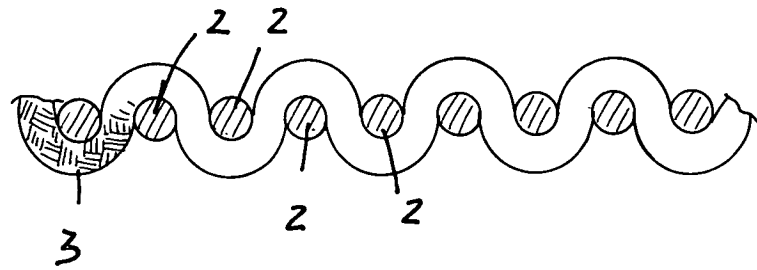


FIG. 2

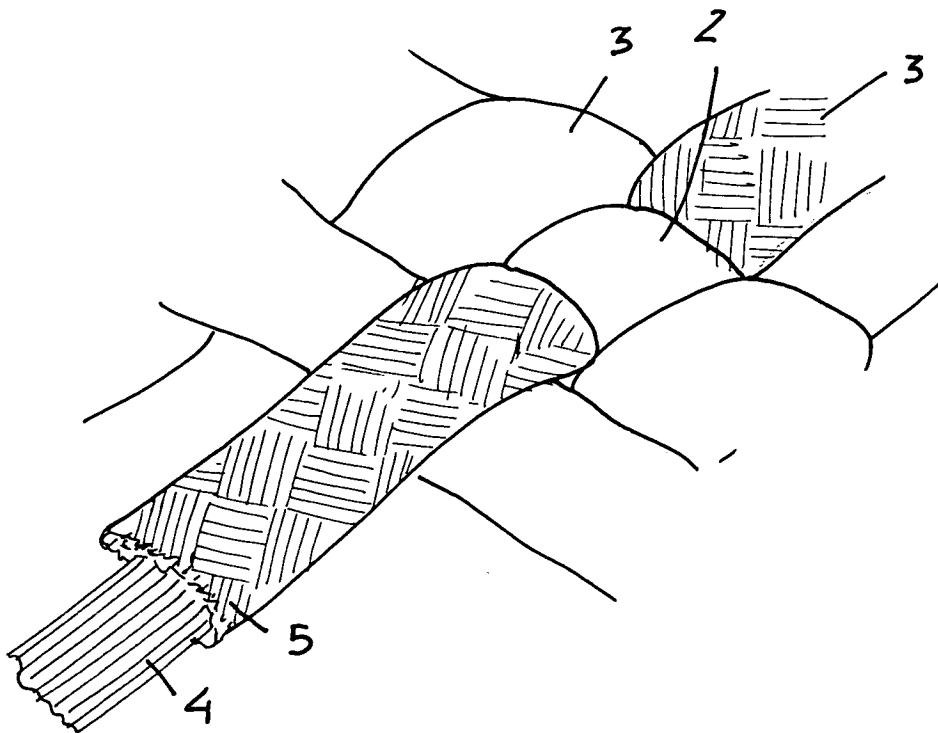


FIG. 3