molded articles can be made that show very good adhesion of the foam to the reinforced layer and better resistance against wear issues from extensive use of the molded article.

In a second aspect, there is provided a process for making the laminate which comprises the following steps:

(a) immersing the fiber reinforcement into the resin matrix,

(b) impregnating the reinforcement,

(c) optionally applying an adhesive to a foam or the impregnated reinforcement, and

(d) attaching the impregnated reinforcement to the foam.

These steps can be performed with conventional equipment in a simple way.

In a third aspect, there is provided a process for making a molded article which comprises the following steps:

(a) exposing the laminate ~~according to the invention~~ as defined herein to a mold of well-defined shape,

(b) applying a pressure to the laminate, and

(c) curing the laminate.

In a fourth aspect, there is provided a molded article that is obtainable by molding a laminate ~~according to the invention~~ as defined herein or by molding a laminate obtainable by any of the processes ~~according the invention~~as defined herein.

Advantageously, such molded articles are of lighter weight when showing the same stability than known molded articles. Therefore they can be used in applications where light weight and high stability are needed. If the molded article is used as a light-weight body brace, it will reduce fatigue to the wearers of the brace who often need to walk long distances or exercise daily.

In addition, the molded article can have holes that are drilled or punctured in it to allow for good ventilation in applications where this is desirable (e.g. braces in sport applications). The holes can be also used for fastening or

joining with other articles. Even with holes the molded articles show enough structural integrity and mechanical strength to be used.

The molded article are further showing significant improvements with regard to the adhesion of the foam to the reinforced layer, especially if an adhesive layer is used according to a preferred embodiment of the ~~invention~~disclosure.

In a fifth aspect, there is provided the method of use of the molded articles as a brace for scoliosis, a prosthetic, a sport protector or a safety device. Such devices are showing improved mechanical strength, ability to be punctured with holes and a more resistant against problems of extensive wear.

Definitions

The following words and terms used herein shall have the meaning indicated:

The term "laminate" as used herein refers to a composite material consisting of at least two layers. The layers of a laminate can usually be permanently assembled by heat, pressure, welding, or adhesives.

As used herein, the term "molding" refers to a process of manufacturing by shaping liquid or pliable raw materials, such as laminates, using a rigid frame called a mold or a matrix.

As used herein, the term "pre-preg" refers to "pre-impregnated" composite fibers where a matrix material, such as epoxy, is already present. The matrix is only partially cured. As such the pre-preg is called B-Stage material and requires cold storage to prevent complete curing. Hence, composite structures built of pre-pregs will mostly require an oven or autoclave to fully cure them.

As used herein, the term "about", in the context of concentrations of components of the formulations, typically means +/- 5% of the stated value, more typically +/- 4% of the