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(54) **Improved front visor for helmets in general**

(57) The present invention relates to an improved front visor for helmets in general, comprising a front element of a plastics material, at the rear of which is firmly coupled a laminar plate element supporting snap operating push-buttons.

The front element and laminar plate element are firmly coupled to one another by a foamed plastic material filling.

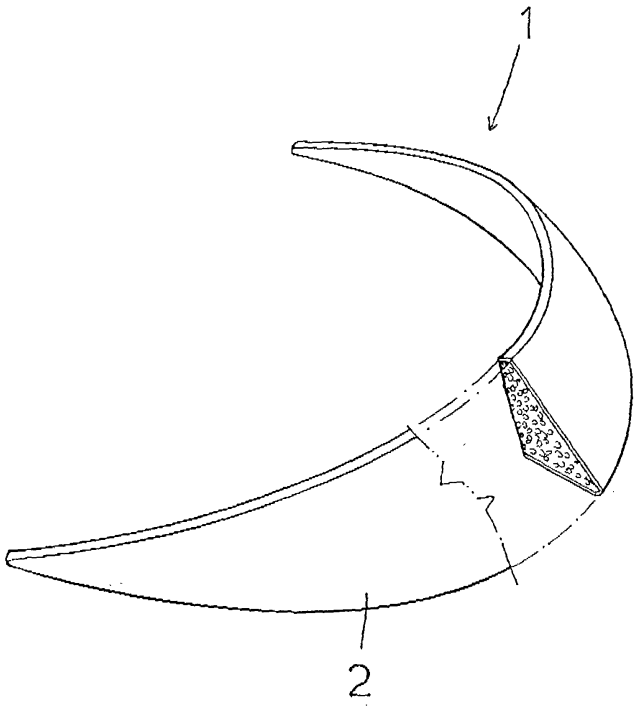

FIG 1

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Description

BACKGROUND OF THE INVENTION

[0001] The present invention relates to an improved front visor for helmets in general.

[0002] As is known, prior front visors, as typically used for motorcycle helmets and the like, comprise a front element, which is made of a substantially rigid plastics material defining the protective element.

[0003] The latter must be coupled to the helmet, so as to be easily removed therefrom as required.

[0004] In prior helmet constructions, the coupling means are usually very complex and, moreover, since the front element is substantially rigid, it can be brittle, and can be easily broken during coupling and uncoupling operations for coupling/removing it to/from the visor, and, moreover, it can also represent a dangerous element in the use of the helmet proper, with the possibility of damaging the user.

SUMMARY OF THE INVENTION

[0005] Accordingly, the aim of the present invention is to overcome the above mentioned problems, by providing an improved front visor for helmets in general which can be easily and quickly applied to the helmet, without any risks of breaking it.

[0006] Within the scope of the above mentioned aim, a main object of the invention is to provide such a front visor which, in addition to operating as a sun beam shading element, is also adapted to operate as an impact protective element.

[0007] Another object of the present invention is to provide such a front visor which can be made by a novel and improved method, allowing to greatly reduce the making cost of the visor.

[0008] Yet another object of the present invention is to provide such a front visor which, owing to its specifically designed constructional features, is very reliable and safe in operation.

[0009] 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 an improved front visor for helmets in general, characterized in that said front visor comprises a plastics material front element, at the rear of which is rigidly coupled a laminar element supporting snap operating push-buttons, said front element and laminar element being made rigid with one another through a foamed plastic material filling.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] 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 an improved front visor for helmets in general, which is illustrated, by way of an indicative, but not limitative, example, in the accompanying drawings, where:

Figure 1 is a schematic perspective view, as partially broken away, showing the front visor according to the present invention;

Figure 2 is a bottom plan view showing the visor according to the present invention:

Figure 3 is a rear elevation view showing the visor according to the present invention;

Figure 4 shows the mutual arrangement of the front element and laminar element of the visor; and

Figure 5 is a cross-sectional view, substantially taken along the cross-line V-V of figure 2.

DESCRIPTION OF THE PREFERRED EMBODIMENT

[0011] with reference to the number references of the above mentioned figures, the improved front visor for helmets in general, according to the present invention, which has been generally indicated by the reference number 1, comprises a front element 2 which is advantageously made of a plastics material and, preferably, of a polycarbonate material and by a thermoforming method.

[0012] The shape of said front element 2 can be of any desired shape, depending on the making requirements.

[0013] At the rear of the front element 2 is rigidly coupled a laminar element 3, made of a die-cut polyethylene material, on which are provided a plurality of snap-operating push-button elements 4, which are made by arranging on the laminar element 3 a male rivet 5, engaging with a female rivet 6 forming the female element of- the snap operating push-button, whereas the male element is obviously coupled to the helmet.

[0014] A main feature of the present invention is that the laminar element 3 is made rigid with said front element 2 by a foamed plastic material filling 10, preferably comprising foamed polystyrene.

[0015] The latter is molded inside the thermoformed front element, thereby providing a monolithic body between the laminar element 3 and front element 2.

[0016] with such an arrangement, the visor, in addition to being easily and quickly applied to the helmet, also operates as a protective element, since it provides a resiliently yieldable body, which, owing to its specifically designed features, can absorb, at least in a partial manner, the exerted impacts.

[0017] From the above disclosure it should be apparent that the invention fully achieves the intended aim and objects.

[0018] In particular, the fact is to be pointed out that the invention provides an improved and novel method for making the above mentioned front visor.

[0019] In fact, the latter is constituted by a monolithic body firmly holding the snap operating push-buttons 4 for clamping the visor to the helmet while providing a further protective element, in addition to also provide a

shield against the sun beams.

[0020] In practicing the invention, the used materials, provided that they are compatible to the intended application, as well as the contingent size and shapes, can be any, according to requirements.

Claims

1. An improved front visor for helmets in general, **characterized in that** said front visor comprises a plastics material front element, at the rear of which is rigidly coupled a laminar element supporting snap operating push-buttons, said front element and laminar element being made rigid with one another through a foamed plastic material filling.

2. A front visor, according to the preceding claim, **characterized in that** said front element is made of a thermoformed plastics material.

3. A front visor, according to the preceding claims, **characterized in that** said front element is made of a polycarbonate material.

4. front visor, according to one or more of the preceding claims, **characterized in that** said laminar element comprises die-cut polyethylene.

5. A front visor, according to one or more of the preceding claims, **characterized in that** said filling comprises foamed polystyrene.

6. A method for making a front visor for helmets in general, **characterized in that** said method comprises the steps of providing, by thermoforming, a plastics material front element, providing a pre-cut plastics material laminar element supporting a plurality cf snap-operating push-button elements, arranging the laminar element at a rear portion of said front element and performing a foamed plastics material molding to rigidly connect said laminar element to said front element.

7. An improved front visor for helmets in general, and method for making said visor, **characterized in that** they comprise one or more of the disclosed and/or illustrated characteristics.

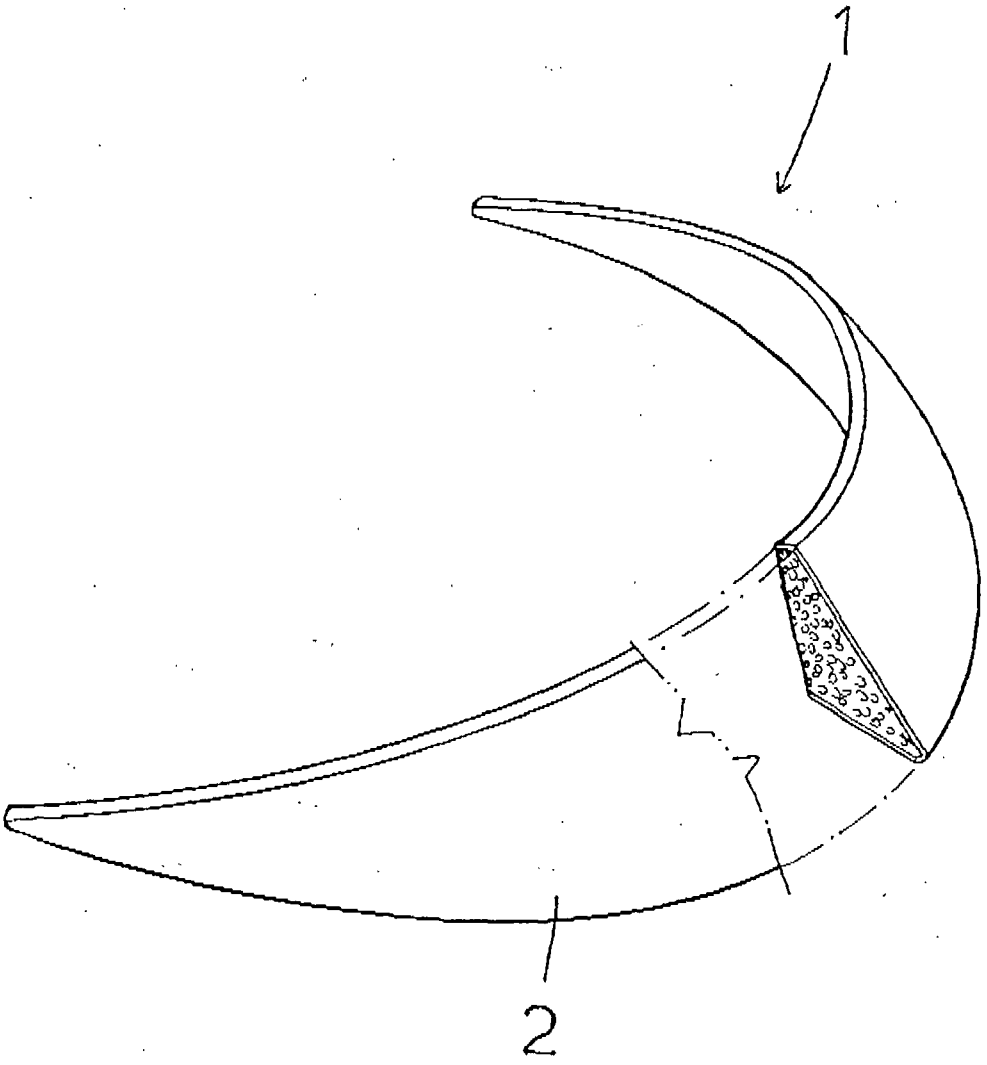

FIG 1

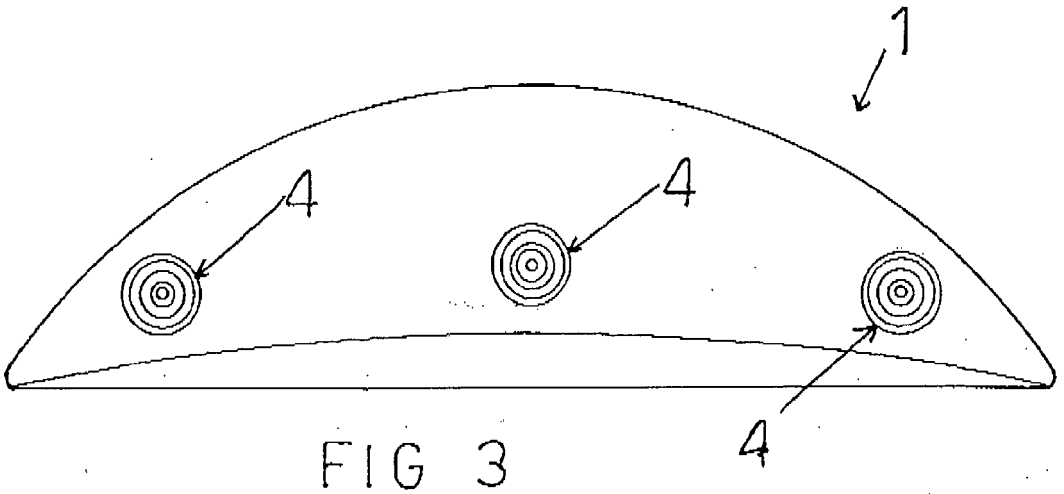

FIG 3

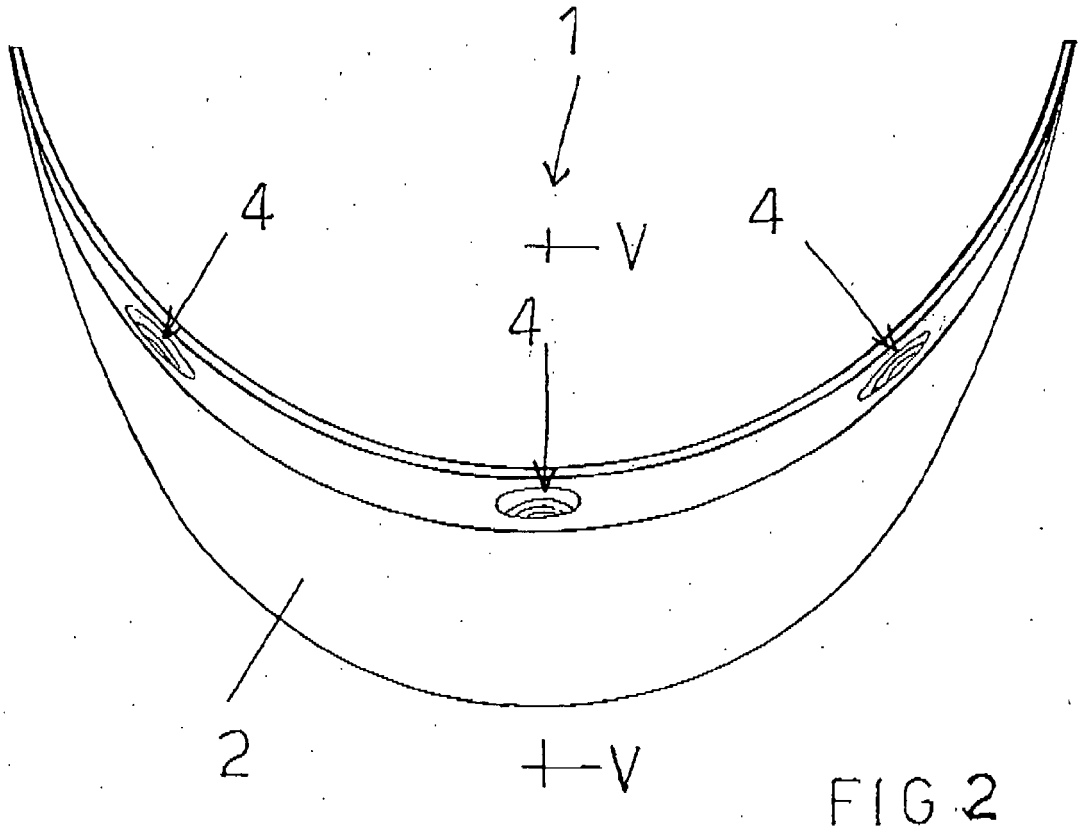

FIG 2

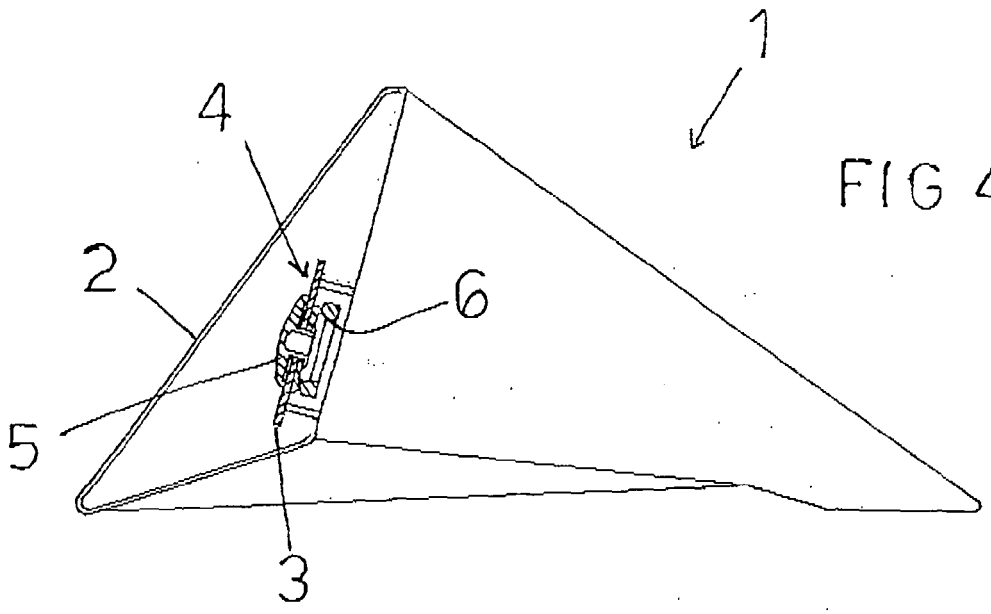

FIG 4

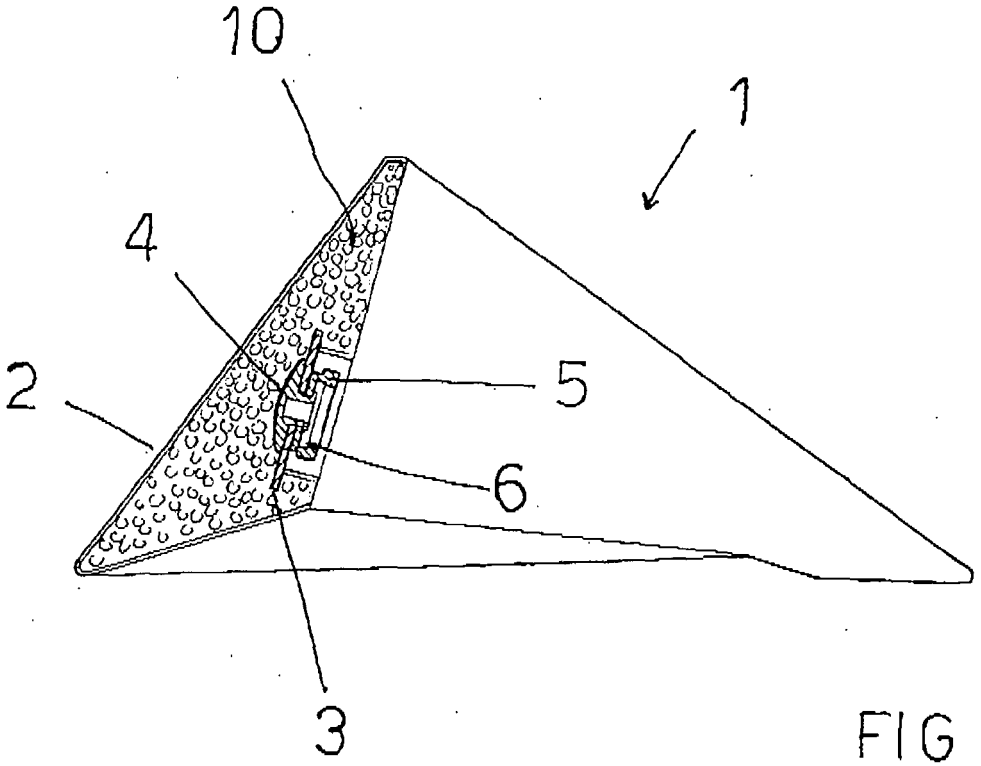

FIG 5