



(19)

Europäisches Patentamt

European Patent Office

Office européen des brevets



(11)

EP 0 903 086 A2

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:
24.03.1999 Bulletin 1999/12

(51) Int. Cl.⁶: **A42B 3/28**, A42B 3/12,
A42B 3/06

(21) Application number: **98117905.4**

(22) Date of filing: **22.09.1998**

(84) Designated Contracting States:
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE**
Designated Extension States:
AL LT LV MK RO SI

(30) Priority: **23.09.1997 IT MI970683 U**

(71) Applicants:
• **NEW MAX S.R.L.**
15040 Mirabello Monferrato (Alessandria) (IT)

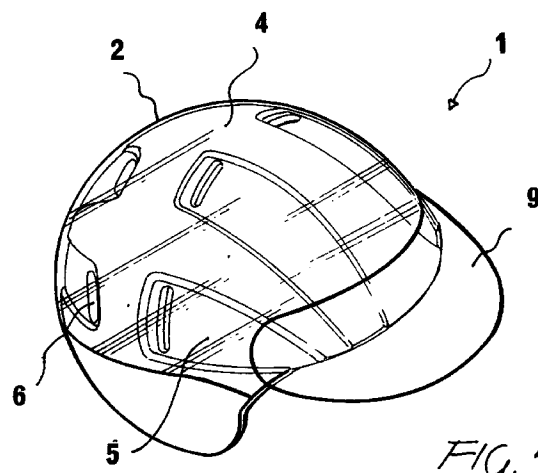
• **PIAGGIO & C. S.p.A.**
56025 Pontedera (Pisa) (IT)

(72) Inventor:
Spriano, Massimo
c/o NEW MAX S.R.L.
15040 Mirabello Monferrato (Alessandria) (IT)

(74) Representative: **Cicogna, Franco**
Ufficio Internazionale Brevetti
Dott.Prof. Franco Cicogna
Via Visconti di Modrone, 14/A
20122 Milano (IT)

(54) Motorcyclist helmet provided with ventilating channels

(57) The present invention relates to a motorcyclist helmet, comprising channels for the passage there-through of an air flow generated as the motorcycle is driven, said channels being defined by connecting a contoured inner construction to the outer cap of the helmet. To the contoured construction soft foamed material bands contacting the user head are applied. Each ventilating channel is provided with an air flow inlet, arranged on the front and at a lower position than the helmet visor, as well as with air flow outlets arranged at portions of the helmet which are not covered by the foamed material bands. The subject helmet is moreover provided with a transparent material covering element.



EP 0 903 086 A2

Description

BACKGROUND OF THE INVENTION

[0001] The present invention relates to a motorcyclist helmet provided with ventilating channels.

[0002] Motorcyclist helmets of very different patterns, designed depending on the specific user requirements, are already known.

[0003] In particular, prior helmets which can be used for driving small and middle power motorcycles conventionally comprise a helmet cap for protecting the user head, as well as a frontward projecting visor for protecting the user eyes against the atmospheric agents.

[0004] However, even if the use of these helmets is imposed by the law in the most part of countries, it is frequently a source of discomfort for the user, because of several reasons.

[0005] Firstly, mainly under high temperature conditions, the user is subjected to an excessive hot environment encompassing his/her head, thereby being so compelled to remove or wear only temporarily the helmet, with a consequent risk of serious damages in a falling event.

[0006] Secondly, the helmet itself is frequently considered by the user, in particular a woman, as a large size article limiting a proper road visibility and cancelling individual features of the driving user, since the helmet at least partially covers the user face.

[0007] Thus, frequently the user leaves his/her helmet unworn with consequent great risks of physical damages and administrative sanctions.

[0008] From the above it should be apparent that it would be very advantageous to provide a motorcyclist helmet allowing to overcome or greatly reduce the above mentioned problems.

SUMMARY OF THE INVENTION

[0009] Accordingly, the aim of the present invention is to provide such a motorcyclist helmet which allows an optimum air flow and ventilation of the user head to be obtained.

[0010] Within the scope of the above mentioned aim, a main object of the present invention is to provide such a motorcyclist helmet which allows to easily see its inner construction, and can be either decorated or colored according to the user preferences and the fashion trends, thereby providing a very good aesthetic aspect.

[0011] According to one aspect of the present invention, the above mentioned aim and objects are achieved by a motorcyclist helmet, characterized in that said helmet comprises at least a channel therethrough the air flow generated as the motorcycle is driven can be conveyed, said at least a channel being defined by coupling a contoured inner construction and the outer cap of said helmet.

[0012] According to a preferred embodiment of the

invention, the helmet comprises a first pair of air flow channels, which extend symmetrically through the middle portion of the helmet, and a second pair of air flow channels, each extending on the respective sides of the helmet.

[0013] Moreover, inside said contoured construction, soft foamed material bands are applied, for contacting the head of the helmet user, each said channel being provided with an air flow inlet, arranged on the front of and at a lower position than the helmet visor, as well as with air flow outlets, arranged at portions of said helmet not covered by said bands applied to said contoured construction.

[0014] According to a further embodiment of the present invention, the air flow inlets are formed by suitably deforming the front portion of said contoured construction.

[0015] Finally, the outer covering of the helmet is preferably made of a transparent or clear material.

BRIEF DESCRIPTION OF THE DRAWINGS

[0016] Further advantages and features of the present invention will become more apparent hereinafter from the following disclosure, given by way of an illustrative but not limitative example, with reference to the accompanying drawings, where:

Figure 1 is a perspective view of the motorcyclist helmet according to the present invention;

Figure 2 is a partial cross-sectioned view of the connection between the helmet outer cap, having a contoured construction, and clearly showing the path of an air channel;

Figure 3 is a perspective view of the contoured construction provided with air channels and slots;

and

Figure 4 is a further perspective view of the bottom of the helmet clearly showing the air flow inlets.

DESCRIPTION OF THE PREFERRED EMBODIMENT

[0017] In the following disclosure reference will be made to a preferred embodiment of the present invention which is illustrated as a not limitative example of several possible variations of the invention.

[0018] The motorcyclist helmet according to the invention, generally indicated by the reference number 1, substantially comprises a helmet outer cap 2, preferably made of a transparent material, and an inner contoured construction 4, to which soft foamed material bands 3 are applied, said bands being provided for contacting the helmet user as the helmet 1 is worn.

[0019] The outer surface of the contoured construction 4 is so designed as to provide several air channels 5, therethrough the air flow generated as the motorcycle is driven can pass, said channels being defined by coupling said contoured construction 4 and outer cap 2 of

the helmet 1.

[0020] More specifically, the helmet 1 comprises a first air flow channel pair, the channels of which symmetrically extend through the middle portion of the helmet, and a second pair of air flow channels each of which extends on a respective side of the helmet. 5

[0021] In order to provide said air flow as the motorcycle is driven, each of said channels is provided with an air flow inlet 8, arranged on the front of the helmet and at a lower position than the visor 9 of the helmet 1. 10

[0022] The air flow inlets 8, in particular, are formed by suitably deforming the front portion of said foamed material construction.

[0023] Moreover, the channels 5 end with air flow outlets 6, arranged at the portions of the helmet which are not covered by the mentioned bands applied to the foamed material construction. 15

[0024] The air flow outlets 6 have a substantially rectangular shape, with rounded corners.

[0025] As the motorcycle is driven, the air will be conveyed under the visor 9 and will enter, through the inlets 8, the channels 5. 20

[0026] Through said channels 5, the air will arrive at the outlets 6 and from said outlets it will contact the surface of the user head, thereby providing the desired refrigerating effect. 25

[0027] In this connection it should be apparent that it would be advantageous to provide a plurality of slots or outlets 6 in order to prevent air from concentrating on a reduced area of the user head. 30

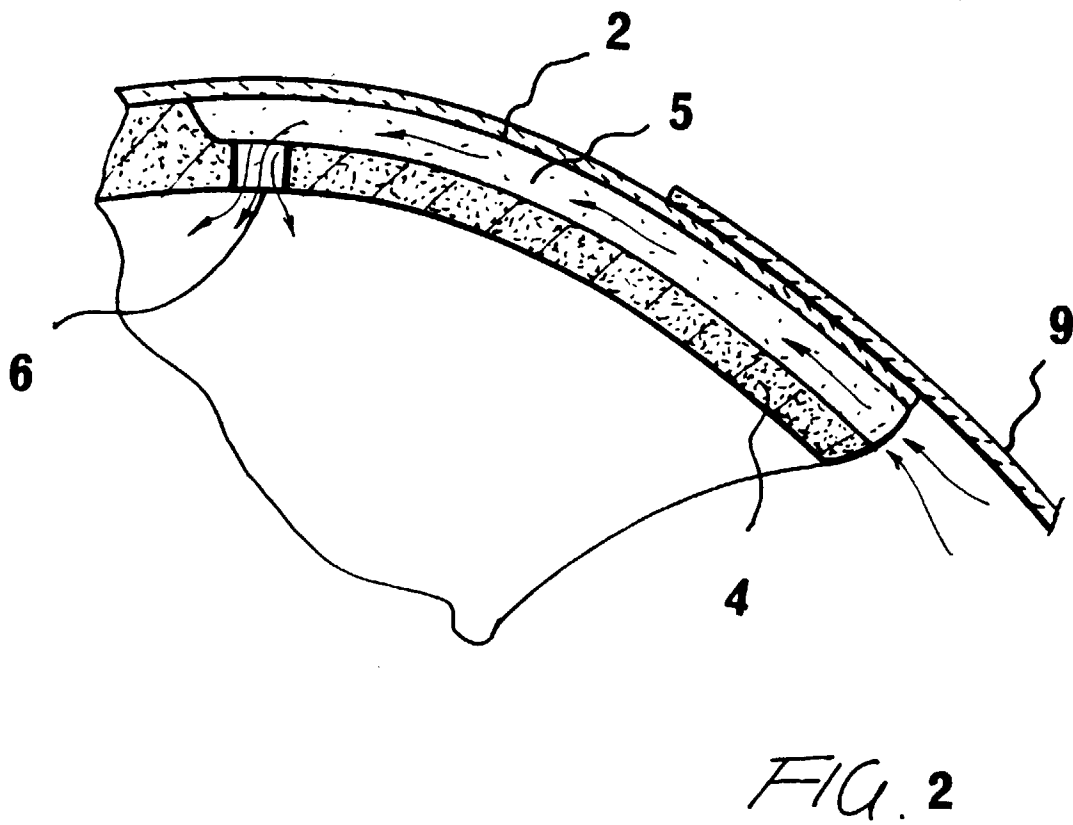
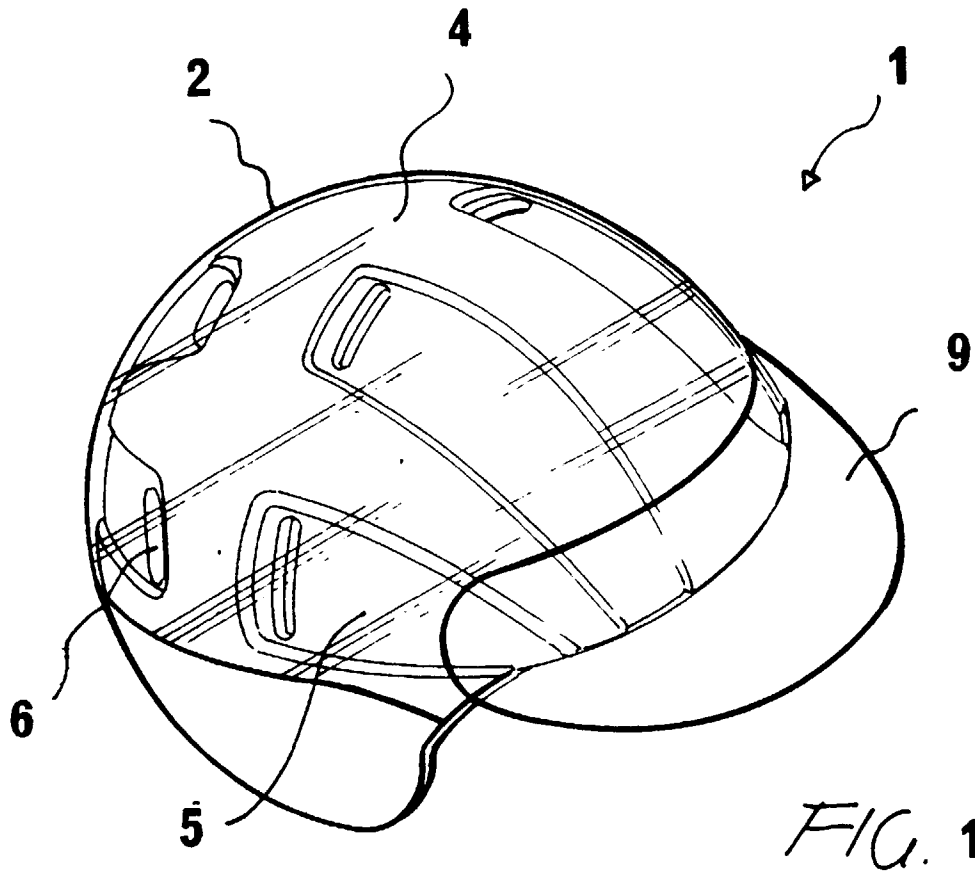
[0028] The outer cap 2 can be made of a transparent material, thereby allowing to see the inner contoured construction 4 which can be decorated or colored according to the user preferences and fashion trends. 35

Claims

1. A motorcyclist helmet, characterized in that said helmet comprises at least a channel therethrough air generated as said motorcycle is driven can pass, said at least a channel being defined by coupling an inner contoured construction and the outer cap of said helmet. 40
2. A motorcyclist helmet, according to Claim 1, characterized in that said helmet comprises a first pair of air flow channels, which symmetrically extend through the middle portion of the helmet, and a second pair of air flow channels, each of which extends on a respective sides of the helmet. 45 50
3. A motorcyclist helmet, according to Claims 1 or 2, characterized in that inside said contoured construction a plurality of soft foamed material bands are applied, said bands being designed for contacting the head of the user of said helmet. 55
4. A motorcyclist helmet, according to one or more of

the preceding claims, characterized in that each said channel is provided with an air flow inlet, arranged on the front of and at a lower position than the helmet visor, as well as with air flow outlets, arranged at portions of said helmet not covered by said bands applied to said contoured construction.

5. A motorcyclist helmet, according to one or more of the preceding claims, characterized in that said air flow inlets are formed by deforming the front portion of said contoured construction.
6. A motorcyclist helmet, according to one or more of the preceding claims, characterized in that said air flow outlets have a substantially rectangular shape with rounded corners.
7. A motorcyclist helmet, according to one or more of the preceding claims, characterized in that said outer cap is made of a transparent material.



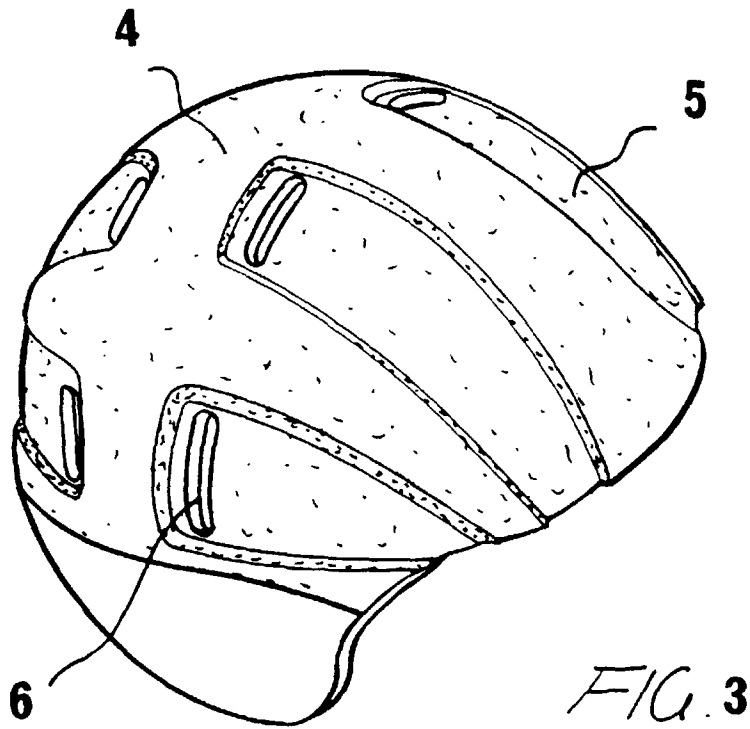


FIG. 3

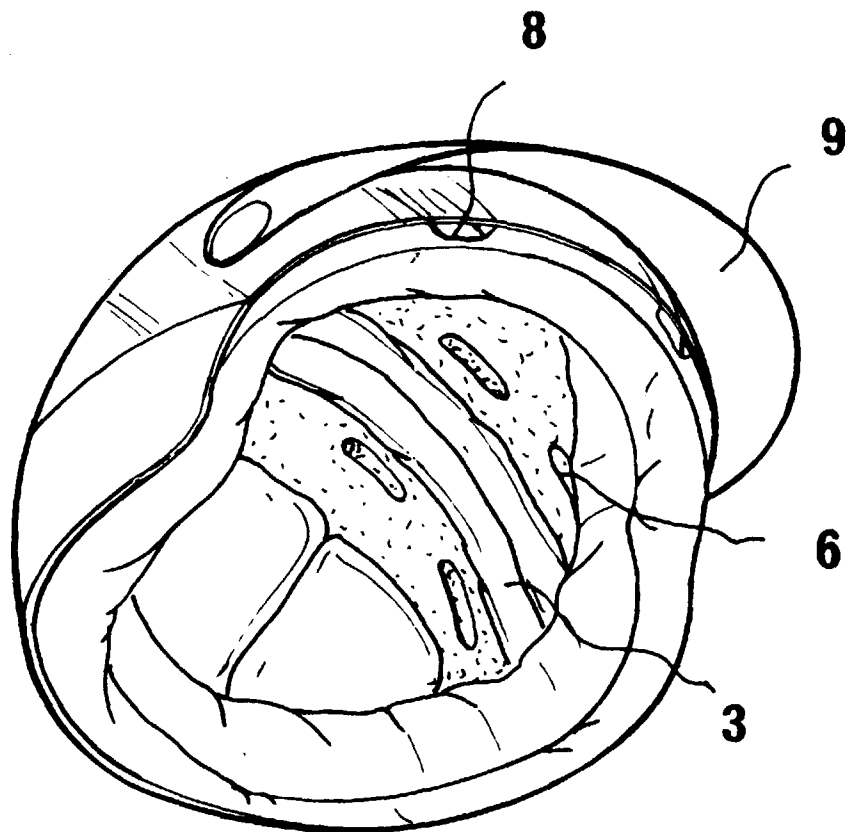


FIG. 4