

SPORTS FOOTWEAR WITH ITS VAMP OF ARAMID FIBRE FABRIC

This invention relates to sports footwear, in particular a football boot, in accordance with the introduction to the main claim.

Sports footwear is known, in particular football boots, constructed of the most various materials, usually of leather or plastics. Footwear is also known having a plastic vamp which, at the points of greatest mechanical stress such as the toe, is clad with portions of composite material such as carbon, aramid or similar fibres. Such footwear usually has a relatively rigid vamp representing for the footwear a weight which is not negligible and, in the case of football boots, such as not to allow optimum control of the ball.

An object of of this invention is to provide sports footwear which is improved compared with known footwear.

A particular object of the invention is to provide sports footwear which is lightweight and offers considerable resistance to use.

A further object of the invention is to provide footwear, in particular a football boot, which results in less fatigue to the athlete during use and allows optimum control of the ball.

These and further objects which will be apparent to the expert of the art are attained by footwear in accordance with the accompanying claims.

The invention will be more apparent from the accompanying drawing, which is provided by way of non-limiting example and on which:

Figure 1 is a perspective view of footwear according to the invention; and

Figure 2 is a section on the line 2-2 of Figure 1.

With reference to said figures, a football boot according to the invention is indicated overall by 1 and comprises a vamp 2 and a sole unit 3 on which there is positioned a usual insole 3A. The sole unit is provided with studs 4.

According to the invention, at least most of the vamp is constructed of fabric formed from aramid fibres (known by the commercial name of kevlar) having a very small thickness (for example 0.3-0.7 mm) and high resistance to use.

More particularly, the outer surface 5 of the aramid fibre fabric vamp has considerable roughness, with widespread uniformly distributed projections (possibly accentuated by depression lines 6). On its opposite surface 7 (ie on that facing the boot interior 8), the fabric is associated with a plastic film 9 able to make the vamp impermeable so that external moisture and/or atmospheric water or water present on the ground is unable to penetrate into the boot. As an alternative or addition to said film 9, the surface 5 can be coated with usual water-repellent coatings. This characteristic of impermeability is important. In this respect, the aramid fibre fabric absorbs (but without retaining) water and moisture to a considerable extent, hence it is opportune to ensure that this latter cannot penetrate into the boot. By virtue of this fabric covering and/or waterproofing, the footwear cannot become heavy with use and creates no problem for the athlete wearing it.

Finally, with the film 9 there is associated usual padding 10 positioned inside the boot on the wall 8A of its hollow interior.

Preferably the edges 12 of usual boot closure flaps 13 and 14 are clad with or directly formed of material at least partly semi-rigid, such as hide, leather, plastic material or the like. This is to enable usual laces to be arranged along said edges.

This same material is preferably used to form not only a rear footwear part 15, which has to be rigid to support the foot, but also any insert or embellishment present on the vamp.

The sole unit 3 can be of any material, for example plastic. However it can also be of aramid fibres or other composite material. In this case the rear part 15 of the boot can also be formed as an upward prolongation of the sole unit. Likewise, other front or lateral reinforcement parts of the vamp can also be formed of composite material as upward prolongations of the sole unit 3. In these cases, the fixing of the vamp to the sole unit and to the aforesaid reinforcement parts (effected by usual gluing) is facilitated compared with the case in which the sole unit is of plastic material and the reinforcements of plastic material, hide, leather or the like.

Footwear formed in accordance with the invention is lightweight, abrasion resistant and, by virtue of the roughness of the surface 5 (intrinsic, and deriving from the use of aramid fibre fabric), allows optimum ball control.

A football boot has been described, however any other footwear with the characteristics claimed hereinafter falls within the scope of this invention.



Claims:

1. Sports footwear, in particular a football boot, comprising a vamp (2) and a sole unit (3) possibly provided with studs (4), characterised in that most of the vamp is formed from aramid fibre fabric.
2. Footwear as claimed in claim 1, characterised in that the vamp comprises structural parts, such as a usual rear stiffening portion (15) and the free edges (12) of the closure flaps (13, 14) with which the vamp is provided, constructed of at least partly semi-rigid material.
3. Footwear as claimed in claim 2, characterised in that at least some of the structural parts of the vamp are of composite material, preferably of aramid fibres.
4. Footwear as claimed in claim 1, characterised in that the vamp (2) has an outer surface (5) comprising widespread projections.
5. Footwear as claimed in claim 1, characterised in that the vamp (2) comprises recesses (6) at least on a front part of the footwear.