CLAIMS

1. A multilayer insole (1) to be fitted in a footwear or shoe (2), extending along a major-extension surface (1a) and comprising: at least one damper element (7) adapted to damp the impact of said shoe (2) on the ground, characterised in that said damper element (7) is an open-cell foam made of damping microcellular polyurethane material; substantially extends over the whole of said insole (1) in the direction of said major-extension surface (1a) and is placed in the upper part of said insole (1).

2. A multilayer insole (1) as claimed in claim 1, wherein said material of said damper element (7) is characterised by a 90%-compression recovery time included between 0.3 s and 2.5 s.

3. A multilayer insole (1) as claimed in one or more of the preceding claims, wherein said material of said damper element (7) has a resiliency equal to a value of about 4 if measured by an "ASTM D2632-92, Vertical Rebound" test.

4. A multilayer insole (1) as claimed in one or more of the preceding claims, wherein said material of said damper element (7) is adapted to enable passage of an airflow through said damper element (7) in a direction at right angles to said major extension surface (1a).

5. A multilayer insole (1) as claimed in one or more of the preceding claims, wherein said material of said damper element (7) has a thickness included between 2 mm and 6 mm.

6. A multilayer insole (1) as claimed in one or more of the preceding claims, comprising an airbag (11), placed in the lower part of said insole (1) and having two plates (11a) adapted to define an air-containing sealed bladder and a third plate (11b) placed between said two plates (11a), which is adapted to divide said

bladder into two sub-bladders and is provided with through holes (11c) designed to enable passage of air between said two sub-bladders.

7. A multilayer insole (1) as claimed in one or more of the preceding claims, comprising a lower layer (9) placed between said damper element (7) and airbag (11), adapted to come into contact with said shoe (2) and comprising a flange (10) placed on at least part of the perimeter of said insole (1) and suitable to improve a user's stability.

8. A multilayer insole (1) as claimed in claim 7, wherein said lower layer (9) comprises a cavity (9a) suitable to enable passage of said airflow between said damper element (7) and airbag (11).

9. A multilayer insole (1) as claimed in claim 7 or 8, wherein said lower layer (9) is made of ethylene vinyl-acetate.

10. A multilayer insole (1) as claimed in one or more of the preceding claims, comprising an upper layer (8) made of natural leather and suitable to be placed on top of said damper element (7) and to define the rest surface of a foot in said shoe (2).

11. A footwear or shoe (2) comprising a multilayer insole (1) as claimed in one or more of the preceding claims.

CLAIMS

1. A multilayer insole (1) to be fitted in a footwear or shoe (2), extending along a major-extension surface (1a) and comprising: at least one damper element (7) adapted to damp the impact of said shoe (2) on the ground, substantially extending over the whole of said insole (1) in the direction of said major-extension surface (1a) and being placed in the upper part of said insole (1), characterised in that said damper element (7) is an open-cell foam made of damping microcellular polyurethane material with a 90%-compression recovery time included between 0.3 s and 2.5 s.

2. A multilayer insole (1) as claimed in the preceding claim, wherein said material of said damper element (7) has a resiliency equal to a value of about 4 if measured by an "ASTM D2632-92, Vertical Rebound" test.

3. A multilayer insole (1) as claimed in one or more of the preceding claims, wherein said material of said damper element (7) is adapted to enable passage of an airflow through said damper element (7) in a direction at right angles to said major extension surface (1a).

4. A multilayer insole (1) as claimed in one or more of the preceding claims, wherein said material of said damper element (7) has a thickness included between 2 mm and 6 mm.

5. A multilayer insole (1) as claimed in one or more of the preceding claims, comprising an airbag (11), placed in the lower part of said insole (1) and having two plates (11a) adapted to define an air-containing sealed bladder and a third plate (11b) placed between said two plates (11a), which is adapted to divide said bladder into two sub-bladders and is provided with through holes (11c) designed to enable passage of air between said two sub-bladders.

6. A multilayer insole (1) as claimed in one or more of the preceding claims, comprising a lower layer (9) placed between said damper element (7) and airbag (11), adapted to come into contact with said shoe (2) and comprising a flange (10) placed on at least part of the perimeter of said insole (1) and suitable to improve a user's stability.

7. A multilayer insole (1) as claimed in claim 6, wherein said lower layer (9) comprises a cavity (9a) suitable to enable passage of said airflow between said damper element (7) and airbag (11).

8. A multilayer insole (1) as claimed in claim 6 or 7, wherein said lower layer (9) is made of ethylene vinyl-acetate.

9. A multilayer insole (1) as claimed in one or more of the preceding claims, comprising an upper layer (8) made of natural leather and suitable to be placed on top of

said damper element (7) and to define the rest surface of a foot in said shoe (2).

10. A footwear or shoe (2) comprising a multilayer insole (1) as claimed in one or more of the preceding claims.