

Title (en)

SHOE WITH A SOLE CONSTRUCTION AND AN AIR PUMP APPARATUS FOR BLOWING AIR INTO THE INSIDE OF A SHOE

Title (de)

SCHUH MIT EINER SOHLENKONSTRUKTION UND EINER LUFTPUMPVORRICHTUNG ZUM EINBLASEN VON LUFT IN EINEN SCHUHINNENRAUM

Title (fr)

CHAUSSURE COMPRENANT UNE STRUCTURE DE SEMELLE ET UN DISPOSITIF DE POMPE À AIR DESTINÉ À INJECTER DE L'AIR DANS L'ESPACE INTÉRIEUR DE LA CHAUSSURE

Publication

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Application

EP 16197329 A 20161104

Priority

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Abstract (en)

[origin: US2018125151A1] A shoe has a sole structure (3) and an air pump device for blowing air into the shoe interior space (14). The air pump device comprises a bellows formed in a cavity (10) in a heel area of the sole structure (3), an intake channel coupled to the bellows for transporting air to the bellows from an intake opening, and an air supply device coupled to the bellows for forwarding air from the bellows into the shoe interior space (14). The sole structure (3) has a multilayer structure at least in the heel area, which comprises at least one cover layer (7) with a layer made from a bending stiff material arranged over the cavity (10), at least one intermediate layer (6) of a compressible material that includes the cavity (10), and at least one outsole layer (5) arranged below the cavity (10). The layer of bending stiff material forms a bending stiff plate (8) that overlaps the cavity (10). The cavity (10) has an average height of at least 4 mm and extends horizontally over most of the surface of the heel area, so that a support strip (16) of the compressible material of the at least one intermediate layer (6) remains between the cavity (10) and the outside edges of the sole structure (3) on the sides and at the heel, wherein the support strip (16) extends vertically over the full height of the cavity (10) and the average width of the support strip is not more than 20% of the maximum width of the heel area measured transversely to the walking direction. The compressible material has an average hardness between 30 and 55 Shore-A at least in the area of the support strip (16).

IPC 8 full level

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CPC (source: EP US)

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