

Title (en)

SHOE WITH AN AIR PUMP DEVICE WITH A SPRING ELEMENT WHICH SURROUNDS A BELLOW

Title (de)

SCHUH MIT EINER LUFTPUMPEINRICHTUNG MIT EINEM EINEN BALG UMGREIFENDEN FEDERELEMENT

Title (fr)

CHAUSSURE COMPRENANT UN DISPOSITIF DE POMPE À AIR AYANT UN ÉLÉMENT DE RESSORT ENTOURANT UN SOUFFLET

Publication

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Application

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Priority

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Abstract (en)

[origin: US2018192734A1] A shoe has an air pump device for blowing air into the interior of a shoe comprising a bellows formed in the sole structure and surrounding a cavity, an intake channel for transporting air from an intake opening into the bellows, an air supply device formed in the sole structure for forwarding air from the bellows into the interior of the shoe, and a V-shaped or U-shaped spring element which clasps the bellows. An upper leg of the spring element comprises an upper pressure plate arranged above the bellows and below an insole of the sole structure, and a lower leg comprises a lower pressure plate arranged under the bellows and above an outsole layer, so that a connecting section that connects the two legs is arranged beside the bellows in the sole structure. The air pump device is arranged in such manner that when the sole structure is placed under load during a walking movement, the spring element is deformed elastically by pressing the pressure plates together, wherein the deformation takes place substantially at or close to the connecting section, so that the pressure plates substantially keep their shape, and the bellows is compressed.

IPC 8 full level

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CPC (source: EP US)

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