

Title (en)

FOOTWEAR FOR COOLING AND HEATING A USER'S FOOT

Title (de)

SCHUHWERK ZUM KÜHLEN UND HEIZEN DES FUSSES EINES NUTZERS

Title (fr)

CHAUSSURE POUR REFROIDIR ET CHAUFFER LE PIED D'UN UTILISATEUR

Publication

EP 3799754 B1 20220420 (EN)

Application

EP 20199948 A 20201002

Priority

PT 11581219 A 20191002

Abstract (en)

[origin: EP3799754A1] The present disclosure relates to a footwear for cooling and heating a user's foot having an insole, a sole and a control module, wherein the insole/sole assembly incorporates independent cooling and heating systems wherein the insole comprises the heating system and the cooling system, and said cooling system comprises a first thermally conductive layer; a second thermal insulating layer contacting the lower part of the thermally conductive layer, wherein the lower part of the insulating layer comprises a recess, positioned substantially in the center of the insole and a Peltier module inserted in the recess; a third heat dissipating layer to dissipate the heat generated by the Peltier module; wherein the heating system is printed; wherein the sole comprises a forced air mechanism; wherein the control module comprises a temperature sensor and a microcontroller configured to drive the Peltier module and/or the forced air mechanism.

IPC 8 full level

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