

Title (en)

SHOE SOLE LAYER HAVING SUPPORTING MEANS

Title (de)

SCHUHSOHLLENLAGE MIT STÜTZMITTELN

Title (fr)

COUCHE DE SEMELLE DE CHAUSSURE POURVUE DE MOYENS DE SUPPORT

Publication

**EP 4017309 B1 20231220 (DE)**

Application

**EP 20754281 A 20200817**

Priority

- CH 10442019 A 20190820
- EP 2020073006 W 20200817

Abstract (en)

[origin: WO2021032684A1] In a shoe sole (1) having a shoe sole layer (10) in which a plurality of supporting means (2) arranged in a plurality of channels (101) extending parallel to one another over the sole surface are introduced, the shoe sole layer (10) and the supporting means (2) should be easy to produce and, as a result of their interaction, should enable an optimised supporting or cushioning effect to be achieved in local regions of the sole surface. This is achieved in that the supporting means (2) are formed in at least two parts from parts that can be separated from one another, more particularly from a shell (20) and at least one core (21), and that the plurality of supporting means (2) are inserted into the plurality of channels (101) in the vertical direction (V), perpendicularly in relation to the sole longitudinal axis (L), in a manner such that they are retained with a form fit, the supporting means (2) at least partially filling out the channels (101) and the supporting means (2) having, depending on their position on the shoe sole layer (10), different supporting effects along the sole surface due to their total hardness.

IPC 8 full level

**A43B 7/14** (2022.01); **A43B 13/16** (2006.01); **A43B 13/18** (2006.01); **A43B 13/20** (2006.01); **A43B 13/22** (2006.01)

CPC (source: CH EP US)

**A43B 13/16** (2013.01 - EP); **A43B 13/181** (2013.01 - EP); **A43B 13/186** (2013.01 - CH EP US); **A43B 13/187** (2013.01 - EP); **A43B 13/188** (2013.01 - CH)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**WO 2021032684 A1 20210225**; CH 716514 A1 20210226; CH 716514 B1 20221215; CN 114340435 A 20220412; EP 4017309 A1 20220629; EP 4017309 B1 20231220; EP 4017309 C0 20231220; ES 2973218 T3 20240619; JP 2022545442 A 20221027; US 2022279894 A1 20220908

DOCDB simple family (application)

**EP 2020073006 W 20200817**; CH 10442019 A 20190820; CN 202080058784 A 20200817; EP 20754281 A 20200817; ES 20754281 T 20200817; JP 2022510954 A 20200817; US 202017635909 A 20200817