Title (en)

OUTSOLE WITH TANGENTIAL DEFORMATION

Title (de)

LAUFSOHLE MIT TANGENTIALER VERFORMBARKEIT

Title (fr)

SEMELLE D'USURE À DÉFORMATION TANGENTIELLE

Publication

EP 1858358 B1 20140813 (DE)

Application

EP 06705354 A 20060223

Priority

- CH 2006000114 W 20060223
- CH 3272005 A 20050224

Abstract (en)

[origin: WO2006089448A1] The invention relates to an outsole (1), especially for sports shoes (2), that can be formed with a large amount of elastic deformability even in the tangential direction towards the front and the back, enabling a good cushioning effect even when the tread of the foot is inclined and somewhat slipping. Beyond at least one critical deformation in the deformed region, the sole remains however essentially rigid in relation to tangential deformation. In this way, the runner has a secure footing on the respective tread point. The runner can then push off from the tread point without losing ground. A swimming effect on the sole is thus prevented. According to the invention, the elastic deformability of the sole also in the tangential direction is caused by at least one first element (3a), and the cited rigidity of the sole in relation to tangential deformation beyond said at least one critical deformation, in addition to the degree of the at least one critical deformation in the deformed region is due to at least one second element (3b). So that said first and second elements (3a, 3b) can be independently designed, dimensioned and produced, there are extensive structuring, formation and variation possibilities. Certain areas in the heel and/or the ball region of the sole can be varied by the at least one first element (3a), and certain areas by the at least one second element (3b), in the longitudinal direction.

IPC 8 full level

A43B 13/18 (2006.01); **A43B 13/26** (2006.01)

CPC (source: CN EP KR US)

A43B 5/06 (2013.01 - CN); **A43B 13/18** (2013.01 - KR); **A43B 13/181** (2013.01 - CN); **A43B 13/183** (2013.01 - EP US); **A43B 13/184** (2013.01 - EP US); **A43B 13/186** (2013.01 - EP US); **A43B 13/26** (2013.01 - EP KR US)

Cited by

CN104486960A; US9629415B2; US10595588B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2006089448 A1 20060831; CA 2597987 A1 20060831; CA 2597987 C 20111115; CN 101128131 A 20080220; CN 106923439 A 20170707; EP 1858358 A1 20071128; EP 1858358 B1 20140813; ES 2523886 T3 20141202; JP 2008531092 A 20080814; JP 5398144 B2 20140129; KR 101276771 B1 20130620; KR 20070106577 A 20071101; MX 2007011043 A 20071122; RU 2007135172 A 20090327; RU 2385140 C2 20100327; US 2008209766 A1 20080904; US 2012167412 A1 20120705

DOCDB simple family (application)

CH 2006000114 W 20060223; CA 2597987 A 20060223; CN 200680005720 A 20060223; CN 201611189293 A 20060223; EP 06705354 A 20060223; ES 06705354 T 20060223; JP 2007556477 A 20060223; KR 20077021706 A 20060223; MX 2007011043 A 20060223; RU 2007135172 A 20060223; US 201213418050 A 20120312; US 88502706 A 20060223