

Title (en)

SHOE WITH ENERGY STORAGE AND DELIVERY DEVICE

Title (de)

SCHUH MIT VORRICHTUNG ZUR ENERGIESPEICHERUNG UND -ABGABE

Title (fr)

CHAUSSURE AVEC DISPOSITIF D'ACCUMULATION ET DE RESTITUTION D'ENERGIE

Publication

EP 1418989 B1 20070214 (DE)

Application

EP 02760124 A 20020819

Priority

- DE 0203048 W 20020819
- DE 10140377 A 20010823

Abstract (en)

[origin: WO03018141A2] The invention relates to a shoe that comprises at least one extension spring element, disposed between a heel area of the shoe and a shaft area supported on the front of the shinbone, that extends during the pace phase. According to the invention, a tensioning device is provided and displaces the base of the extension spring element in the heel area away from the base in the shaft area when the shoe is placed on the ground, thereby extending the extension spring element.

[origin: WO03018141A2] The invention relates to a shoe that comprises at least one extension spring element (18), disposed between projections (44, 46) of a heel area (48) of the shoe (4) and a shaft area (46) supported on the front of the shinbone (50), that extends during the pace phase. According to the invention, a tensioning device (100) is provided and displaces the projection (44) of the extension spring element (18) in the heel area (48) away from the projection (46) in the shaft area when the shoe (4) is placed on the ground, thereby extending the extension spring element (18).

IPC 8 full level

A63B 25/10 (2006.01); **A43B 7/00** (2006.01); **A43B 13/14** (2006.01); **A43B 13/18** (2006.01)

CPC (source: EP US)

A43B 7/00 (2013.01 - EP US); **A43B 13/143** (2013.01 - EP US); **A43B 13/148** (2013.01 - EP US); **A43B 13/184** (2013.01 - EP US);
A63B 25/10 (2013.01 - EP US)

Cited by

DE102011007996A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

WO 03018141 A2 20030306; **WO 03018141 A3 20030710**; AT E353698 T1 20070315; AU 2002325806 A1 20030310;
DE 10140377 A1 20030313; DE 10293739 D2 20040722; DE 50209498 D1 20070329; DK 1418989 T3 20070611; EP 1418989 A2 20040519;
EP 1418989 B1 20070214; ES 2282450 T3 20071016; US 2005034327 A1 20050217; US 7510538 B2 20090331

DOCDB simple family (application)

DE 0203048 W 20020819; AT 02760124 T 20020819; AU 2002325806 A 20020819; DE 10140377 A 20010823; DE 10293739 T 20020819;
DE 50209498 T 20020819; DK 02760124 T 20020819; EP 02760124 A 20020819; ES 02760124 T 20020819; US 48729204 A 20040930