

Title (en)
UNIVERSAL SOLE

Title (de)
UNIVERSALSOHLE

Title (fr)
SEMELLE UNIVERSELLE

Publication
EP 1991079 A2 20081119 (FR)

Application
EP 07731061 A 20070228

Priority
• FR 2007000359 W 20070228
• FR 0602046 A 20060303

Abstract (en)
[origin: WO2007099226A2] Universal sole designed to help a user adapt his walking or running gait to the surface over which he is moving or to the peculiarities of his individual leg/foot system by individually adjusting the hardness and thickness of several areas of the sole. Each area consists of one or more layers of a flat coil of elastic extensible airtight and optionally reinforced rubber tube which may be flattened or inflated beyond its nominal diameter as a function of the pressure introduced by the action, as the user walks, of a small pump located inside the sole underneath the user's heel and adjustments and isolations performed manually with a system of valves built into the thickness of the sole. The coils, the valve system and the pumping system are either located and bonded between layers of foam containing the impression of the coils and filling the spaces between laces or placed in a mould or in a sole in the shape of a boat, a filling material then being introduced to fill the empty spaces. The resulting soles or sole elements can be used on all kinds of shoes.

IPC 8 full level
A43B 13/20 (2006.01)

CPC (source: EP US)
A43B 13/203 (2013.01 - EP US); **A43B 13/206** (2013.01 - EP US)

Citation (search report)
See references of WO 2007099226A2

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)
FR 2898017 A1 20070907; **FR 2898017 B1 20080509**; AT E437582 T1 20090815; DE 602007001792 D1 20090910; EP 1991079 A2 20081119; EP 1991079 B1 20090729; US 2012084998 A1 20120412; WO 2007099226 A2 20070907; WO 2007099226 A3 20071018

DOCDB simple family (application)
FR 0602046 A 20060303; AT 07731061 T 20070228; DE 602007001792 T 20070228; EP 07731061 A 20070228; FR 2007000359 W 20070228; US 28132407 A 20070228