

Title (en)
FOOT BALANCING DEVICE

Title (de)
FUSSAUSGLEICHSVORRICHTUNG

Title (fr)
DISPOSITIF D'ÉQUILIBRAGE DE PIED

Publication
EP 3053470 A1 20160810 (EN)

Application
EP 16152843 A 20160126

Priority
US 201514613711 A 20150204

Abstract (en)
A foot balancing device includes a shoe insert (10), a main balancing element (20), three auxiliary force-transferring elements (31, 32, 33), and three auxiliary balancing elements (41, 42, 43). The main balancing element (20) is provided in an arch region (14) of the shoe insert (10) and serves as a fulcrum on the shoe insert (10) for the front part of the sole of one of the user's feet and the heel of the foot. The auxiliary force-transferring elements (31, 32, 33) are provided in the arch region (14) of the shoe insert (10) so that the pressure center of the sole will displace along an ideal line. The auxiliary balancing elements (41, 42, 43) are located forward of and on two lateral sides of the main balancing element (20) respectively to support a transverse arch, inner arch, and outer arch of the foot respectively. Thus, the user's body weight can distribute evenly over the sole while the user is standing or walking, thereby preventing injury resulting from improper posture.

IPC 8 full level
A43B 7/14 (2006.01)

CPC (source: CN EP)
A43B 7/143 (2013.01 - EP); **A43B 7/146** (2013.01 - EP); **A43B 17/00** (2013.01 - CN)

Citation (search report)
• [XY] EP 2508092 A2 20121010 - RAPHA SHOES INTERNAT CO LTD [TW]
• [Y] US 2009038179 A1 20090212 - CHEN SUNG-HO [TW]
• [A] US 2014033565 A1 20140206 - ARUIN ALEXANDER [US], et al
• [A] WO 2004014171 A1 20040219 - BELJON JOHN JACOB PETER [ZA]
• [A] WO 9703583 A1 19970206 - VINDRIIS SOEREN [DK]

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

Designated extension state (EPC)
BA ME

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EP 3053470 A1 20160810; CN 105831879 A 20160810; JP 2016140765 A 20160808; TW 201628518 A 20160816; TW I574640 B 20170321; TW M520825 U 20160501

DOCDB simple family (application)
EP 16152843 A 20160126; CN 201610023807 A 20160114; JP 2016016316 A 20160129; TW 104129430 A 20150904; TW 104214420 U 20150904