

Title (en)

RUNNING TRAINING MACHINE WITH THE VIRTUAL REALITY SYSTEM AND ITS MODE OF WORK

Title (de)

LAUFTRAININGSGERÄT MIT EINEM SYSTEM FÜR VIRTUELLE REALITÄT UND DESSEN ARBEITSWEISE

Title (fr)

MACHINE D'ENTRAÎNEMENT À LA COURSE AVEC LE SYSTÈME DE RÉALITÉ VIRTUELLE ET SON MODE DE TRAVAIL

Publication

EP 3693064 A1 20200812 (EN)

Application

EP 20156588 A 20200211

Priority

RU 2019103702 A 20190211

Abstract (en)

The real inventions group refers to training equipment made for musculature or joints development and strengthening with the help of exercises of overcoming the counteracting force with or without measuring instruments; to a person's movements in a virtual reality modeling system. Declared invention is a complex which consists of an originally constructed running training machine adapted to the current task and having two degrees of freedom at least, hardware and software equipment realizing the functions of user's positioning by controlling both the movement of the treadmill track and the slopes of the treadmill, depending on the terrain of the virtual underlying surface. Positioning system can be built using different sensors and feedback canals. Terrain reading from a virtual model is based on a computing device generating data arrays from the underlying surface elevation field, which can be built, for example, based on photogrammetry data and providing visualization of a three-dimensional model of the world, for example, through virtual reality glasses.

IPC 8 full level

A63B 22/00 (2006.01); **A63B 22/02** (2006.01); **A63B 22/16** (2006.01); **A63B 24/00** (2006.01); **A63B 71/06** (2006.01)

CPC (source: CN EP US)

A63B 22/0023 (2013.01 - EP US); **A63B 22/0242** (2013.01 - EP US); **A63B 22/025** (2015.10 - CN); **A63B 22/16** (2013.01 - EP); **A63B 24/0087** (2013.01 - CN EP US); **A63B 71/0622** (2013.01 - CN EP US); **A63B 22/18** (2013.01 - EP); **A63B 2022/0641** (2013.01 - EP); **A63B 2024/009** (2013.01 - CN); **A63B 2024/0093** (2013.01 - EP US); **A63B 2024/0096** (2013.01 - EP); **A63B 2071/0636** (2013.01 - CN); **A63B 2071/0638** (2013.01 - CN EP); **A63B 2071/0644** (2013.01 - US); **A63B 2071/065** (2013.01 - US); **A63B 2071/0666** (2013.01 - CN EP); **A63B 2071/068** (2013.01 - EP); **A63B 2220/13** (2013.01 - EP); **A63B 2220/803** (2013.01 - CN); **A63B 2220/833** (2013.01 - CN)

Citation (applicant)

KR 100483857 B1 20050415

Citation (search report)

- [I] KR 20180064794 A 20180615 - CHO MIN SU [KR]
- [I] WO 9808572 A1 19980305 - CARMEIN DAVID E E [US]
- [I] US 2007270285 A1 20071122 - GILL JAMES G [US], et al
- [X] US 2010304931 A1 20101202 - STUMPF JOHN F [US]
- [A] US 9586090 B2 20170307 - WATTERSON SCOTT R [US], et al

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

DOCDB simple family (publication)

EP 3693064 A1 20200812; CN 111558198 A 20200821; RU 2696754 C1 20190805; US 2020254300 A1 20200813

DOCDB simple family (application)

EP 20156588 A 20200211; CN 202010087813 A 20200211; RU 2019103702 A 20190211; US 202016787055 A 20200211