

Title (en)  
VARIABLE-RESISTANCE EXERCISE MACHINE WITH WIRELESS COMMUNICATION FOR SMART DEVICE CONTROL AND INTERACTIVE SOFTWARE APPLICATIONS

Title (de)  
ÜBUNGSMASCHINE MIT VARIABLEM WIDERSTAND UND DRAHTLOSER KOMMUNIKATION ZUR STEUERUNG INTELLIGENTER VORRICHTUNGEN UND INTERAKTIVER SOFTWAREANWENDUNGEN

Title (fr)  
MACHINE D'EXERCICE À RÉSISTANCE VARIABLE AVEC COMMUNICATION SANS FIL POUR UNE COMMANDE DE DISPOSITIF INTELLIGENT ET DES APPLICATIONS LOGICIELLES INTERACTIVES

Publication  
**EP 3452183 A4 20200115 (EN)**

Application  
**EP 17793193 A 20170502**

Priority  
• US 201662330642 P 20160502  
• US 201662330602 P 20160502  
• US 201615193112 A 20160627  
• US 201615219115 A 20160725  
• US 2017030697 W 20170502

Abstract (en)  
[origin: WO2017192628A1] A variable-resistance exercise machine with wireless communication for smart device control and interactive software applications, comprising a wireless network interface that receives input from a user device and provides output to a user device; a plurality of moving surfaces that each provide an independent degree of resistance to movement based on received input and that detect movement and provide output to a user device based on the movement; and a plurality of rigid rails that provide a rigid support for a human user to grasp, and that provide attachment points for a user to affix a variety of devices. A system for natural body interaction for mixed or virtual reality applications, comprising a composition server configured to receive input data from a plurality of hardware devices via a network, and configured to operate a virtual control stick, and configured to produce a plurality of operations of the virtual control stick based at least in part on at least a portion of the received input data, and configured to produce a composite data stream based at least in part on at least a portion of the received input data and the virtual control stick operations.

IPC 8 full level  
**A63B 21/00** (2006.01); **A63B 22/00** (2006.01); **A63B 22/02** (2006.01); **A63B 22/06** (2006.01); **A63B 22/20** (2006.01); **A63B 24/00** (2006.01); **A63B 69/00** (2006.01); **A63B 71/06** (2006.01); **G05G 1/52** (2008.04)

CPC (source: EP US)  
**A63B 22/0242** (2013.01 - EP); **A63B 22/0292** (2015.10 - EP); **A63B 22/0664** (2013.01 - EP); **A63B 24/0087** (2013.01 - EP); **A63B 69/0057** (2013.01 - EP US); **A63B 69/0059** (2013.01 - EP); **A63B 71/0622** (2013.01 - EP); **G05G 1/52** (2013.01 - EP); **A63B 22/0048** (2013.01 - EP); **A63B 22/0285** (2013.01 - EP); **A63B 2022/067** (2013.01 - EP); **A63B 2022/206** (2013.01 - EP); **A63B 2024/009** (2013.01 - EP); **A63B 2024/0096** (2013.01 - EP); **A63B 2071/0625** (2013.01 - EP); **A63B 2071/0638** (2013.01 - EP); **A63B 2071/0655** (2013.01 - EP); **A63B 2220/13** (2013.01 - EP); **A63B 2220/20** (2013.01 - EP); **A63B 2220/24** (2013.01 - EP); **A63B 2220/30** (2013.01 - EP); **A63B 2220/40** (2013.01 - EP); **A63B 2220/52** (2013.01 - EP); **A63B 2220/805** (2013.01 - EP); **A63B 2225/50** (2013.01 - EP); **A63B 2225/685** (2013.01 - EP); **A63F 2300/8082** (2013.01 - EP); **G08C 2201/93** (2013.01 - EP)

Citation (search report)  
• [Y] US 2005209061 A1 20050922 - CRAWFORD DOUGLAS A [US], et al  
• [Y] US 2014066201 A1 20140306 - HUANG CHARLES [US], et al  
• See references of WO 2017192628A1

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

DOCDB simple family (publication)  
**WO 2017192628 A1 20171109**; CN 107921303 A 20180417; EP 3452183 A1 20190313; EP 3452183 A4 20200115

DOCDB simple family (application)  
**US 2017030697 W 20170502**; CN 201780002997 A 20170502; EP 17793193 A 20170502