

Title (en)

BODY MOVEMENT ASSISTANCE DEVICE

Title (de)

VORRICHTUNG ZUR UNTERSTÜTZUNG DER KÖRPERBEWEGUNG

Title (fr)

DISPOSITIF D'AIDE AU MOUVEMENT CORPOREL

Publication

**EP 3646843 A4 20200624 (EN)**

Application

**EP 18823136 A 20180625**

Priority

- KR 20170082706 A 20170629
- KR 20170111093 A 20170831
- KR 2018007174 W 20180625

Abstract (en)

[origin: EP3646843A1] An apparatus for assisting physical movement is provided. The apparatus for assisting physical movement includes a body wearing unit put on a specific body of a user, a strap linked to one side of the body wearing unit, a strain sensor provided on the strap to measure a tension applied to the strap, and a strap driving unit linked to the strap to wind or unwind the strap depending on rotation. The strap driving unit rotates in a stationary state such that a reference tension having a specific intensity is applied to the strain sensor, and rotates in a specific direction as the applied tension to the strap becomes higher or lower the reference tension depending on movement of a user.

IPC 8 full level

**A61H 1/02** (2006.01); **A61H 3/00** (2006.01)

CPC (source: EP KR US)

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**A61H 1/0285** (2013.01 - EP); **A61H 1/0288** (2013.01 - EP KR US); **A61H 2001/0203** (2013.01 - US); **A61H 2001/0207** (2013.01 - KR);  
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**A61H 2201/5061** (2013.01 - EP KR US); **A61H 2201/5064** (2013.01 - EP); **A61H 2201/5069** (2013.01 - EP); **A61H 2201/5097** (2013.01 - EP)

Citation (search report)

- [XA] US 2016213548 A1 20160728 - JOHN STEPHEN WILLIAM [JP], et al
- [XA] KR 20130045775 A 20130506 - UNIV SOGANG IND UNIV COOP FOUN [KR]
- [A] US 2015164732 A1 20150618 - HA TAE SIN [KR], et al
- [A] WO 2009111378 A2 20090911 - BONUTTI RES INC [US], et al
- See references of WO 2019004676A1

Cited by

EP4088880A1; WO2023072652A1

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)

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DOCDB simple family (publication)

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