

Title (en)

DEVICE FOR ASSISTING JOINT EXERCISE

Title (de)

VORRICHTUNG ZUR UNTERSTÜTZUNG VON GELENKÜBUNGEN

Title (fr)

DISPOSITIF D'ASSISTANCE D'EXERCICE ARTICULAIRE

Publication

EP 2649976 B1 20160928 (EN)

Application

EP 12757662 A 20120314

Priority

- JP 2011057470 A 20110316
- JP 2012001792 W 20120314

Abstract (en)

[origin: EP2649976A1] Provided is a device having a novel configuration and adapted to assist joint exercise. A device for assisting joint exercise (10) that assists bending and extending of a joint including: a flexible assist force transmission section (12); a first mounting section (14) and a second mounting section (16), which are provided at both end portions of the assist force transmission section (12), the first mounting section (14) adapted to be mounted on one site and the second mounting section (16) adapted to be mounted on another site sandwiching a user's joint; a drive source (40) provided that exerts tensile force between the first mounting section (14) and the second mounting section (16) through the assist force transmission section (12), wherein at least a portion of the assist force transmission section (12) is elastically deformable in an acting direction of the tensile force by the drive source (40).

IPC 8 full level

A61H 3/00 (2006.01); **A61H 1/02** (2006.01); **A63B 21/00** (2006.01); **A63B 21/005** (2006.01); **A63B 21/068** (2006.01); **A63B 22/00** (2006.01);
A63B 23/035 (2006.01); **A63B 23/04** (2006.01); **A63B 23/08** (2006.01); **A63B 24/00** (2006.01); **A63B 69/00** (2006.01); **A63B 71/00** (2006.01)

CPC (source: EP US)

A61H 1/024 (2013.01 - EP US); **A61H 1/0244** (2013.01 - EP US); **A61H 3/00** (2013.01 - EP US); **A63B 21/00181** (2013.01 - EP US);
A63B 21/02 (2013.01 - US); **A63B 21/068** (2013.01 - EP US); **A63B 21/151** (2013.01 - EP US); **A63B 21/4009** (2015.10 - EP US);
A63B 21/4011 (2015.10 - EP US); **A63B 71/0009** (2013.01 - EP US); **A61H 2201/1215** (2013.01 - EP US); **A61H 2201/14** (2013.01 - EP US);
A61H 2201/149 (2013.01 - EP US); **A61H 2201/5071** (2013.01 - EP US); **A61H 2230/605** (2013.01 - EP US); **A63B 21/0058** (2013.01 - EP US);
A63B 21/4047 (2015.10 - EP US); **A63B 23/03541** (2013.01 - EP US); **A63B 23/0482** (2013.01 - EP US); **A63B 23/0494** (2013.01 - EP US);
A63B 69/0028 (2013.01 - EP US); **A63B 2022/0094** (2013.01 - EP US); **A63B 2220/51** (2013.01 - EP US); **A63B 2230/605** (2013.01 - EP US)

Cited by

EP3137035A4; US11014804B2; US10278883B2; US11498203B2; US11324655B2; US10864100B2; US10434030B2; US10427293B2;
US10843332B2; US11464700B2

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)

EP 2649976 A1 20131016; EP 2649976 A4 20141210; EP 2649976 B1 20160928; CN 103379887 A 20131030; CN 103379887 B 20150624;
JP 2012192013 A 20121011; JP 5868011 B2 20160224; US 2013288863 A1 20131031; WO 2012124328 A1 20120920

DOCDB simple family (application)

EP 12757662 A 20120314; CN 201280009101 A 20120314; JP 2011057470 A 20110316; JP 2012001792 W 20120314;
US 201313932553 A 20130701