

Title (en)
DEVICE AND METHOD FOR SUPPLEMENTING MUSCLE STRENGTH

Title (de)
VORRICHTUNG UND VERFAHREN ZUR MUSKELKRAFTUNTERSTÜTZUNG

Title (fr)
DISPOSITIF ET PROCÉDÉ POUR SOUTENIR LA FORCE MUSCULAIRE

Publication
EP 3547969 A1 20191009 (DE)

Application
EP 17840550 A 20171122

Priority
• DE 102016123153 A 20161130
• DE 2017101006 W 20171122

Abstract (en)
[origin: CA3043430A1] A device is described for supplementing muscle strength. The device comprises a flexible supporting structure configured to be worn on the body of a user during use of the device, and an actuator unit configured to apply a tensile force to a first tensile element of the flexible supporting structure in order to supplement muscle strength when a first body part is moved. The first tensile element extends to the actuator unit along a first path through a guide band of the flexible supporting structure, the actuator unit delimiting a section of the first path transversely to the longitudinal direction of the path. The first tensile element is further configured to be fastened to the first body part during use of the device.

IPC 8 full level
A61F 5/01 (2006.01); **B25J 9/00** (2006.01)

CPC (source: EP KR US)
A61B 5/11 (2013.01 - KR); **A61F 5/013** (2013.01 - EP KR US); **A61F 5/042** (2013.01 - KR); **A61H 1/0237** (2013.01 - US); **A61H 1/0288** (2013.01 - KR US); **B25J 9/0006** (2013.01 - EP KR US); **A61F 2005/0155** (2013.01 - KR); **A61F 2005/0179** (2013.01 - KR); **A61H 2201/14** (2013.01 - US); **A61H 2201/1638** (2013.01 - US); **A61H 2201/1642** (2013.01 - US); **A61H 2201/165** (2013.01 - US); **A61H 2201/5061** (2013.01 - KR US); **A61H 2230/065** (2013.01 - KR US); **A61H 2230/605** (2013.01 - KR US)

Citation (examination)
US 2013219585 A1 20130829 - BERGELIN BRYAN J [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)
DE 102016123153 A1 20180530; AU 2017368718 A1 20190711; BR 112019011076 A2 20191001; CA 3043430 A1 20180607; CN 110062612 A 20190726; EP 3547969 A1 20191009; JP 2019535438 A 20191212; KR 20190090837 A 20190802; US 11369541 B2 20220628; US 2019282426 A1 20190919; WO 2018099512 A1 20180607

DOCDB simple family (application)
DE 102016123153 A 20161130; AU 2017368718 A 20171122; BR 112019011076 A 20171122; CA 3043430 A 20171122; CN 201780074285 A 20171122; DE 2017101006 W 20171122; EP 17840550 A 20171122; JP 2019528440 A 20171122; KR 20197018898 A 20171122; US 201716465065 A 20171120