

Title (en)
LEG MOVEMENT RAIL FOR THE REPETITIVE MOVEMENT OF THE KNEE AND HIP JOINT WITH ASSISTANCE FUNCTION FOR ACTIVE USE

Title (de)
BEINBEWEGUNGSSCHIENE ZUR REPETITIVEN BEWEGUNG DES KNIE- UND HÜFTGELENKS MIT ASSISTENZFUNKTION BEI AKTIVER NUTZUNG

Title (fr)
MOBILISATEUR DE MEMBRE INFÉRIEUR, POUR LES MOUVEMENTS RÉPÉTITIFS DE L'ARTICULATION DU GENOU ET DE LA HANCHE, AVEC FONCTION D'ASSISTANCE POUR UNE UTILISATION ACTIVE

Publication
EP 2271297 A1 20110112 (DE)

Application
EP 09741838 A 20090430

Priority
• EP 2009003126 W 20090430
• DE 102008023573 A 20080505

Abstract (en)
[origin: WO2009135619A1] A leg movement rail (10) for the repetitive movement of the knee and hip joint comprises a base (20), a motor and gearbox unit (204), and a motor control unit (205) on the base (20), a mounting (12, 13) on the femoral side that is fastened at one end thereof by means of a rotary joint (31) to the base, a mounting (14, 15) on the lower thigh that is fastened on the base (20) by means of a joint displaceably arranged along the base (20), and a joint mechanism (27) connecting the other end of the mounting (14, 15) on the lower thigh and the mounting (12, 13) on the femoral side. In order to be able to incrementally shift the movement exercises from a passive into an active form of therapy as a function of the gradual restoration of the patient's mobility, in addition to an adjustable continuously passive movement of the leg movement rail (10) by the motor and gearbox unit (204), according to the invention an active mobilization of the leg movement rail (10) by the patient, influencing said passive movement, can be brought about in that the pressure and/or tensile forces applied by the patient can be determined by sensors (206) and/or a measurement of the current/rotational speed. The measurement values thereof are fed to the motor control unit (205) and are forwarded as controlled variables for the motor and gearbox unit (204).

IPC 8 full level
A61H 1/02 (2006.01)

CPC (source: EP US)
A61H 1/0255 (2013.01 - EP US); **A61H 1/0262** (2013.01 - EP US); **A61H 2201/165** (2013.01 - EP US); **A61H 2201/5061** (2013.01 - EP US)

Citation (search report)
See references of WO 2009135619A1

Citation (examination)
US 2006293617 A1 20061228 - EINAV OMER [IL], et al

Designated contracting state (EPC)
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Designated extension state (EPC)
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DOCDB simple family (publication)
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