

Title (en)  
METHOD FOR CONTROLLING AN ARTIFICIAL KNEE JOINT

Title (de)  
VERFAHREN ZUM STEUERN EINES KÜNSTLICHEN KNIEGELENKES

Title (fr)  
PROCÉDÉ DE COMMANDE D'UNE ARTICULATION ARTIFICIELLE DU GENOU

Publication  
**EP 3979952 A1 20220413 (DE)**

Application  
**EP 20731042 A 20200604**

Priority

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Abstract (en)  
[origin: WO2020245261A1] The invention relates to a method for controlling an artificial knee joint (1) comprising: an upper part (10) having an anterior side (11) and a posterior side (12); a lower part (20) mounted on the upper part (10) so as to be pivotable about a knee axis (15) and having an anterior side (21) and a posterior side (22); a foot part (30) arranged on the lower part (20); at least one sensor (25, 51, 52, 53, 54); a control device (60) connected to the at least one sensor (25, 51, 52, 53, 54); and an actuator (40) which is coupled to the control device (60) and by means of which an achievable knee angle (K<sub>Amax</sub>) between the posterior side (12) of the upper part (10) and the posterior side (22) of the lower part (20) in the swing phase can be set by the control device (60). On the basis of sensor data from the at least one sensor (25, 51, 52, 53, 54), it is concluded that a height difference ( $\Delta H$ ) of the foot part (30) relative to a foot (33) or a foot part of the contralateral side of a patient in their standing phase, or relative to the immediately preceding standing phase of the foot part (30) during walking, has been overcome, and the knee angle (K<sub>Amax</sub>) achievable in the swing phase is adjusted.

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