

Title (en)

TRAINING MACHINE WITH AUTOMATIC CONTROL OF A GRAVITATIONAL LOAD

Title (de)

TRAININGSMASCHINE MIT AUTOMATISCHER STEUERUNG EINER GRAVITATIONSLAST

Title (fr)

APPAREIL D'ENTRAÎNEMENT PHYSIQUE COMPORTANT UNE COMMANDE AUTOMATIQUE D'UNE CHARGE GRAVITATIONNELLE

Publication

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Application

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Abstract (en)

[origin: WO2012176165A2] The present invention concerns a training machine, in particular a muscular strength machine, with automatic control of a gravitational load, including a gravitational load (10, 10') coupled to force transmission means (20, 30, 40, 50, 60, 70), by means of which the gravitational load (10, 10') is movable by a user exerting a force on said force transmission means (20, 30, 40, 50, 60, 70), the training machine being characterised in that it further comprises a first shaft (80), rotatably coupled to said transmission means (20, 30, 40, 50, 60, 70) and to a first end of a torsion spring (90), and an electric motor (110) having a rotatable second shaft (100) coupled to a second end of the torsion spring (90), the training machine also comprising first rotation angle sensing means (120) sensing a rotation angle (B) of the first shaft (80) and second rotation angle sensing means (130) sensing a rotation angle (A) of the second shaft (100), the training machine also comprising processing means (200) receiving sensed data (A, B) from said first and second rotation angle sensing means (120, 130) and controlling the electric motor (110) on the basis of said sensed data (A, B). The present invention further concerns the related process performed by the processing means (200) of such a training machine and the tools that may be used for performing the process.

IPC 8 full level

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