

Title (en)

Energy absorbing exercising and training machine.

Title (de)

Energiespeicherndes Übungsgerät.

Title (fr)

Appareil d'entraînement et d'exercice à absorption d'énergie.

Publication

**EP 0411892 A2 19910206 (EN)**

Application

**EP 90308400 A 19900731**

Priority

US 38811689 A 19890801

Abstract (en)

An energy-absorbing exercising and training machine for exercising a person's ability to accelerate a portion of his body through a path of motion comprises a flywheel (16) rotatably connected to a frame (12) by means of a pair of journal bearings (52). A harness assembly (20) is provided for connection to the portion of the person's body to be exercised. An over-running clutch (68) is provided for interconnecting the flywheel (16) and the harness assembly (20), allowing the flywheel (16) rigidly to engage with the harness assembly (20) on acceleration of the harness assembly (20) relative to the flywheel (16) in a first direction along the path of motion of the body portion being exercised. The clutch (68) also allows the flywheel (16) to disengage and freely rotate relative to the harness assembly (20) on deceleration of the harness assembly (20) relative to the flywheel (16).

IPC 1-7

**A63B 21/22; A63B 23/02**

IPC 8 full level

**A63B 69/36** (2006.01); **A63B 21/22** (2006.01); **A63B 23/12** (2006.01); **A63B 69/00** (2006.01); **A63B 23/00** (2006.01); **A63B 23/02** (2006.01)

CPC (source: EP)

**A63B 21/225** (2013.01); **A63B 23/0211** (2013.01); **A63B 2023/003** (2013.01); **A63B 2208/0204** (2013.01)

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

**EP 0411892 A2 19910206; EP 0411892 A3 19910710; EP 0411892 B1 19960320**; AT E135593 T1 19960415; AU 5874190 A 19910207; AU 632143 B2 19921217; CA 2020183 A1 19910202; CA 2020183 C 20000523; DE 69026001 D1 19960425; DE 69026001 T2 19961010; JP 2908537 B2 19990621; JP H03139373 A 19910613

DOCDB simple family (application)

**EP 90308400 A 19900731**; AT 90308400 T 19900731; AU 5874190 A 19900705; CA 2020183 A 19900629; DE 69026001 T 19900731; JP 19320190 A 19900723