

Title (en)  
Upper and lower body exerciser

Title (de)  
Übungsgerät für den Ober- und Unterkörper

Title (fr)  
Appareil d'entraînement de la partie supérieure et de la partie inférieure du corps

Publication  
**EP 1815888 A1 20070808 (EN)**

Application  
**EP 06002079 A 20060201**

Priority  
• EP 06002079 A 20060201  
• US 18668605 A 20050721

Abstract (en)  
An exerciser includes an idle wheel rotatably supported on a base, two handles rotatably attached to a shaft of the base, two sector gears secured to the handles, and two rotatable gear-and-pinions engaged with the sector gears. A pivot pin is rotatably supported on the base and coupled to the idle wheel, two gears are attached onto the pivot pin with unidirectional bearings and meshed with the gear-and-pinion, and two pinions are also attached onto the pivot pin with unidirectional bearings and meshed with the sector gears. The idle wheel may be rotated continuously by the pivot pin, via the gears and the pinions when the handles are pushed and pulled in reciprocating action by the user.

IPC 8 full level  
**A63B 23/035** (2006.01); **A63B 21/005** (2006.01); **B62M 1/16** (2006.01)

CPC (source: EP US)  
**A63B 21/005** (2013.01 - EP US); **A63B 21/15** (2013.01 - EP US); **A63B 21/157** (2013.01 - EP US); **A63B 21/4047** (2015.10 - EP US); **A63B 22/001** (2013.01 - EP US); **A63B 22/0605** (2013.01 - EP US); **A63B 23/03575** (2013.01 - EP US); **A63B 21/0053** (2013.01 - EP US); **A63B 21/225** (2013.01 - EP US); **A63B 2022/0652** (2013.01 - EP US)

Citation (applicant)  
• US 5114391 A 19920519 - PITZEN GERALD [US], et al  
• US 5992253 A 19991130 - PETERSEN PAUL S [US]

Citation (search report)  
• [X] US 4503724 A 19850312 - WARD RUSSELL G [US]  
• [A] US 5836856 A 19981117 - MATTOO SUKHRAJ SINGH [GB], et al  
• [A] US 2003153436 A1 20030814 - HO SHOU-SHAN [TW]  
• [A] EP 1362782 A1 20031119 - CHUNG YUAN-FEN [TW]

Cited by  
CN113230601A; CN107226162A

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA HR MK YU

DOCDB simple family (publication)  
**US 2007021276 A1 20070125**; EP 1815888 A1 20070808

DOCDB simple family (application)  
**US 18668605 A 20050721**; EP 06002079 A 20060201