

Title (en)  
An exercise device.

Title (de)  
Übungsgerät.

Title (fr)  
Appareil d'exercice.

Publication  
**EP 0335616 A2 19891004 (EN)**

Application  
**EP 89302959 A 19890323**

Priority  
GB 8807440 A 19880328

Abstract (en)  
An exercise device comprising a user operated air pump in the form of a piston and cylinder arrangement (20, 28) connected to pump air into an air receiver (22). The connection is made via a non-return valve (32) across which is connected a by-pass valve (36). A control unit (30) is connected to a pressure sensor (38) in the air receiver (22) and an operating member on the by-pass valve (36) so that when the pressure in the air receiver (22) reaches or exceeds a predetermined threshold value, as sensed by the pressure sensor (38), the control unit (30) opens the by-pass valve (36) to convert the air pump (20, 28) and air receiver (22) into an air spring.

IPC 1-7  
**A63B 21/00**

IPC 8 full level  
**A63B 21/008** (2006.01); **A63B 23/04** (2006.01)

CPC (source: EP)  
**A63B 21/00061** (2013.01); **A63B 21/00069** (2013.01); **A63B 21/0087** (2013.01); **A63B 21/4045** (2015.10); **A63B 22/0005** (2015.10);  
**A63B 22/0007** (2013.01); **A63B 21/008** (2013.01); **A63B 22/0002** (2013.01); **A63B 22/203** (2013.01); **A63B 22/205** (2013.01);  
**A63B 23/0417** (2013.01); **A63B 2208/0228** (2013.01); **A63B 2220/56** (2013.01)

Cited by  
IT201600087533A1; CN101966382A; EP3199210A4; US5312315A; FR3054138A1; US7416518B2; WO2004009173A3; WO9211066A1;  
WO2018015628A1

Designated contracting state (EPC)  
AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)  
**EP 0335616 A2 19891004; EP 0335616 A3 19900613**; GB 8807440 D0 19880505

DOCDB simple family (application)  
**EP 89302959 A 19890323**; GB 8807440 A 19880328