

Title (en)
EXERCISE MACHINE WITH OVER CENTER LOCKING MECHANISM

Title (de)
ÜBUNGSMASCHINE MIT VERRIEGELUNGSMECHANISMUS ÜBER TOTPUNKT

Title (fr)
MACHINE D'EXERCICE AVEC MÉCANISME DE VERROUILLAGE DÉCENTRÉ

Publication
EP 3067099 A1 20160914 (EN)

Application
EP 16159010 A 20160307

Priority
• US 201514643823 A 20150310
• US 201514643792 A 20150310

Abstract (en)
An exercise machine, such as indoor cycle, including a multi-function wheel brake actuator. A braking force is induced on a wheel, such as through eddy currents or frictionally, by finely or coarsely adjusting the brake actuator. The brake actuator may thus include a knob whereby a user may finely adjust the braking force on the wheel and a lever to actuate interval settings whereby the brake actuator provides set positions of braking resistance. The exercise machine may further include a pop-pin assembly with an over-center cam mechanism to clamp members together. The pop-pin assembly also includes a fine adjustment to adjust the clamping force. So, for example, the seat stem may be clamped to the seat tube, or the handlebar stem clamped to the head tube, with a lever actuating the over center mechanism.

IPC 8 full level
A63B 22/08 (2006.01)

CPC (source: EP)
A63B 21/00069 (2013.01); **A63B 22/0046** (2013.01); **A63B 22/0605** (2013.01); **A63B 21/0051** (2013.01); **A63B 21/225** (2013.01); **A63B 2225/09** (2013.01); **A63B 2225/093** (2013.01)

Citation (applicant)
US 8827871 B2 20140909 - GOLESH ERIC [US], et al

Citation (search report)
• [XI] DE 202013104706 U1 20140129 - GIANT LION CO [TW]
• [XI] CN 104383665 A 20150304 - KUNSHAN SWORDSMAN FITNESS COMPANY
• [X] US 2012161480 A1 20120628 - LU TAI-YANG [US], et al
• [X] US 5007675 A 19910416 - MUSTO MARIO S [US], et al

Cited by
US11524198B2; CN110585660A; CN113633929A; CN110075480A

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3067097 A1 20160914; **EP 3067097 B1 20200909**; EP 3067099 A1 20160914; EP 3067099 B1 20210526

DOCDB simple family (application)
EP 16159035 A 20160307; EP 16159010 A 20160307