

Title (en)
UNIVERSAL SWING TRAINING APPARATUS

Title (de)
UNIVERSELLE SCHWUNGTRAININGSVORRICHTUNG

Title (fr)
APPAREIL D'ENTRAÎNEMENT D'ÉLAN UNIVERSEL

Publication
EP 3283183 B1 20191113 (EN)

Application
EP 16780716 A 20160414

Priority
• US 201514690309 A 20150417
• US 201514880224 A 20151010
• US 2016027469 W 20160414

Abstract (en)
[origin: WO2016168418A1] A universal swing training apparatus is provided that includes a sports-related implement and a slide mechanism. The implement includes a proximal section and a distal section that are spaced apart to form a gap there-between. The slide mechanism is inserted within this gap and is connected to the upper end of the proximal section and the lower end of the distal section. The slide mechanism includes a rail guide, a plurality of front ball bearings, a plurality of rear ball bearings, and a sliding rail assembly that are cooperatively configured to insure that this upper end and this lower end are coaxial when the sliding rail assembly is situated in a coaxial position on the rail guide, and permit a lateral shift of this lower end relative to this upper end during a swinging of the implement.

IPC 8 full level
A63B 59/58 (2015.01); **A63B 15/00** (2006.01); **A63B 59/50** (2015.01); **A63B 59/80** (2015.01); **A63B 60/00** (2015.01); **A63B 69/00** (2006.01); **A63B 69/36** (2006.01); **A63B 71/06** (2006.01); **A63B 102/02** (2015.01); **A63B 102/18** (2015.01); **A63B 102/32** (2015.01)

CPC (source: CN EP KR US)
A63B 15/00 (2013.01 - EP); **A63B 53/10** (2013.01 - CN); **A63B 59/50** (2015.10 - CN EP KR); **A63B 60/00** (2015.10 - CN EP KR); **A63B 60/0081** (2020.08 - CN EP); **A63B 60/16** (2015.10 - CN); **A63B 60/24** (2015.10 - CN); **A63B 69/0002** (2013.01 - CN KR); **A63B 69/3623** (2013.01 - CN EP KR US); **A63B 69/3635** (2013.01 - CN EP); **A63B 69/38** (2013.01 - CN); **A63B 2069/0008** (2013.01 - CN EP KR); **A63B 2071/0602** (2013.01 - CN EP); **A63B 2071/0625** (2013.01 - CN EP); **A63B 2071/0655** (2013.01 - CN EP); **A63B 2102/02** (2015.10 - CN EP KR); **A63B 2102/18** (2015.10 - CN EP KR); **A63B 2102/32** (2015.10 - CN EP KR); **A63B 2208/0204** (2013.01 - CN); **A63B 2225/09** (2013.01 - CN EP KR)

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

DOCDB simple family (publication)
WO 2016168418 A1 20161020; AU 2016250189 A1 20171012; CA 2982768 A1 20161020; CN 107466245 A 20171212; CN 107466245 B 20190712; EP 3283183 A1 20180221; EP 3283183 A4 20181107; EP 3283183 B1 20191113; IL 254484 A0 20171130; JP 2018511432 A 20180426; JP 6689879 B2 20200428; KR 102018969 B1 20190905; KR 20170136534 A 20171211; MX 2017013391 A 20180130; SG 11201707894Q A 20171129; TW 201642937 A 20161216; TW I669146 B 20190821

DOCDB simple family (application)
US 2016027469 W 20160414; AU 2016250189 A 20160414; CA 2982768 A 20160414; CN 201680022121 A 20160414; EP 16780716 A 20160414; IL 25448417 A 20170913; JP 2017554021 A 20160414; KR 20177029302 A 20160414; MX 2017013391 A 20160414; SG 11201707894Q A 20160414; TW 105111653 A 20160414