

Title (en)  
FRICTIONAL ENERGY ACCUMULATION AND ACCELERATION YO-YO

Title (de)  
JO-JO MIT REIBUNGSENERGIEAKKUMULATION UND BESCHLEUNIGUNG

Title (fr)  
YO-YO À ACCUMULATION D'ÉNERGIE PAR FROTTEMENT ET ACCÉLÉRATION

Publication  
**EP 3037147 A1 20160629 (EN)**

Application  
**EP 15819779 A 20150117**

Priority  
• CN 201410575183 A 20141025  
• CN 2015070951 W 20150117

Abstract (en)  
The present invention discloses a yo-yo ball with friction motion energy storage and acceleration functions, comprising two rotating bodies and a connecting shaft, where either of the rotating bodies includes a disk body and a side cover, either of the disk bodies is internally provided with a friction motion energy storage mechanism, one end of which is connected to the disk body and the other end is connected to the side cover, by pinching the side cover, the disk bodies are in contact with an external contact surface to realize energy storage for the friction motion energy storage mechanism by means of friction rolling. After the energy storage, the disk bodies are out of contact with the external contact surface, and the friction motion energy storage mechanism releases the energy to drive the disk bodies to synchronously rotate, at the moment, the side cover is released to realize rotation of the whole yo-yo ball, so that the ball body can rotate at high speed after being thrown even though a rope is too short, which is not affected by an acceleration region after the ball body is thrown down. Therefore, even though a player who is shorter may enjoy playing with the yo-yo ball to the fullest, and complete various fancy moves. Requirements of players at different ages and different heights can be met. Compared with an existing yo-yo ball, the yo-yo ball with friction motion energy storage and acceleration functions increases a new operation mode and a new playing method, is more fun, and more diversified in playing methods.

IPC 8 full level  
**A63H 1/30** (2006.01); **A63H 29/02** (2006.01)

CPC (source: EP KR RU US)  
**A63B 67/16** (2013.01 - KR); **A63H 1/30** (2013.01 - EP KR RU US); **A63H 29/02** (2013.01 - EP KR US); **A63H 31/04** (2013.01 - KR); **A63H 31/08** (2013.01 - 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

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3037147 A1 20160629; EP 3037147 A4 20170419; EP 3037147 B1 20190227**; AU 2015291798 A1 20160519; AU 2015291798 B2 20161222; CA 2917006 A1 20160425; CA 2917006 C 20170718; CN 104324502 A 20150204; CN 104324502 B 20160914; ES 2721764 T3 20190805; JP 2016539772 A 20161222; JP 6121636 B2 20170426; KR 101811745 B1 20171222; KR 20160061957 A 20160601; MX 2016000648 A 20170320; MY 175382 A 20200623; RU 2016100435 A 20170717; RU 2635779 C2 20171115; SG 11201600559S A 20160530; TR 201905893 T4 20190521; US 2016325192 A1 20161110; WO 2016061918 A1 20160428

DOCDB simple family (application)  
**EP 15819779 A 20150117**; AU 2015291798 A 20150117; CA 2917006 A 20150117; CN 201410575183 A 20141025; CN 2015070951 W 20150117; ES 15819779 T 20150117; JP 2016554790 A 20150117; KR 20167001221 A 20150117; MX 2016000648 A 20150117; MY PI2016700385 A 20150117; RU 2016100435 A 20150117; SG 11201600559S A 20150117; TR 201905893 T 20150117; US 201514903236 A 20150117