

Title (en)  
Toy rifle backlash vibration structure

Title (de)  
Spielzeuggewehr-Rückschlagvibrationsstruktur

Title (fr)  
Structure de vibration de recul de fusil jouet

Publication  
**EP 2177862 A1 20100421 (EN)**

Application  
**EP 08360037 A 20081016**

Priority  
EP 08360037 A 20081016

Abstract (en)  
A toy rifle (air soft rifle, BB-rifle) backlash vibration structure (a) which has a weight (3) directly stopped against the rear side of a piston spring (11) at the rear side of the piston (1) of the toy rifle to avoid piston damage while providing a backlash vibration to simulate a reaction force upon firing of a bullet, and a buttcap spacer (5) detachably fastened to the rear side of a receiver extension (2) and mounted with an adjustment rod (6) that is rotatable forwards/backwards to adjust the backlash vibration within a predetermined range from zero to the maximum.

IPC 8 full level  
**F41A 33/06** (2006.01); **F41B 11/644** (2013.01)

CPC (source: EP)  
**F41B 11/644** (2013.01)

Citation (applicant)  
TW 200708712 A 20070301 - TOKYO MARUI CO LTD [JP]

Citation (search report)  
• [A] US 2008155875 A1 20080703 - IWASAWA TATSUO [JP]  
• [A] US 6618975 B1 20030916 - SHIH PAO-TUNG [CN]

Cited by  
EP2472213A1; EP2503278A3; US8449346B2; JP2013245878A

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

Designated extension state (EPC)  
AL BA MK RS

DOCDB simple family (publication)  
**EP 2177862 A1 20100421**; **EP 2177862 B1 20101222**; AT E492781 T1 20110115; DE 602008004166 D1 20110203; DK 2177862 T3 20110411

DOCDB simple family (application)  
**EP 08360037 A 20081016**; AT 08360037 T 20081016; DE 602008004166 T 20081016; DK 08360037 T 20081016