

Title (en)  
RECOIL SHOCK DEVICE IN TOY GUN

Title (de)  
RÜCKSTOSSVORRICHTUNG IN SPIELZEUGPISTOLE

Title (fr)  
DISPOSITIF DE CHOC DE REcul DANS UNE ARME-JOUET

Publication  
**EP 2113736 B1 20130807 (EN)**

Application  
**EP 07737355 A 20070216**

Priority  
JP 2007053439 W 20070216

Abstract (en)  
[origin: EP2113736A1] There is provided a recoil shock device capable of obtaining the same recoil shock as that in a case where the weight of a piston is increased, without increasing the weight of the piston by separately providing a movable part and a weight of a piston/cylinder. There is also provided a recoil shock device capable of obtaining a recoil shock similar to that in a real gun, without damaging the outer appearance of a gun. In order to drive a weight to obtain imitated recoil, i.e., a recoil shock by operation of a movable part in a piston/cylinder which generates compressed air, a communicating part 31 which is moved in its retreating direction by the movable part 13 is provided, and a recoil spring 35 which receives a force transmitted to the weight 33 via the communicating part 31 by the movable part 13 so as to be in a compressed state is provided. A reaction that accompanies movement of the weight 33 when the recoil spring 35 is compressed and the recoil spring 35 is then extended by its resilient force is transmitted to a main body 37 of the gun.

IPC 8 full level  
**F41B 11/644** (2013.01); **F41A 33/06** (2006.01); **F41B 11/55** (2013.01); **F41B 11/646** (2013.01)

CPC (source: EP)  
**F41A 33/06** (2013.01); **F41B 11/55** (2013.01); **F41B 11/644** (2013.01); **F41B 11/646** (2013.01)

Cited by  
EP2388547A3; CN109059623A; EP2472213A1; EP2503278A3; EP3663698A1; US9791236B2; US10132591B2; US8449346B2; US10604122B2; US10801804B2; US11293718B2; US11920887B2

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