

Title (en)

GUIDED LAUNCHING DEVICE FOR FIREWORK CASINGS

Title (de)

VORRICHTUNG FÜR DEN GESTEUERTEN START VON FEUERWERKSKÖRPERN

Title (fr)

NAVETTE DE LANCEMENT ORIENTABLE POUR BOMBES PYROTECHNIQUES

Publication

EP 2535887 A2 20121219 (EN)

Application

EP 10803934 A 20100730

Priority

- ES 200901760 A 20090731
- ES 2010000336 W 20100730

Abstract (en)

This invention comprises a launching device (1) for firework casings (13), the tubes (2) are guided by means of a computerized system. This system allows for precision guiding of the ballistic path in 3D of the discharged casings through a CNC system (computer numerical controlled) to achieve the positioning of said casings over specific spatial coordinates (X1 Y, Z) in a predetermined time in order to trace words and/or drawings (12) in space through properly synchronized fireworks. The operator (11) controlling the launch (1) is able to program any desired word, or draw the outline of any object on the monitor screen (9.1). When the discharged device is activated, the same words or drawings from the monitor are seen in the sky, creating a fireworks show never before seen in pyrotechnics. There are no risks when using this device, not even for the operator or the public watching the show.

IPC 8 full level

G09F 13/46 (2006.01); **F42B 4/24** (2006.01)

CPC (source: EP ES)

F41A 27/06 (2013.01 - EP); **F41A 27/20** (2013.01 - EP); **F41A 27/28** (2013.01 - EP); **F41F 1/06** (2013.01 - EP); **F41F 1/08** (2013.01 - EP); **F42B 4/06** (2013.01 - EP); **F42B 4/20** (2013.01 - EP); **F42B 4/24** (2013.01 - ES); **G09F 13/46** (2013.01 - EP ES)

Cited by

US2013192486A1; DE102015215893A1; US10147233B2; WO2018195575A1

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 SE SI SK SM TR

DOCDB simple family (publication)

EP 2535887 A2 20121219; ES 2356457 A1 20110408; ES 2356457 B1 20120907; WO 2011012743 A2 20110203; WO 2011012743 A3 20110714

DOCDB simple family (application)

EP 10803934 A 20100730; ES 200901760 A 20090731; ES 2010000336 W 20100730