

Title (en)
PNEUMATIC FIRING DEVICE

Title (de)
PNEUMATISCHE ABSCHUSSVORRICHTUNG

Title (fr)
DISPOSITIF DE DÉCHARGEMENT PNEUMATIQUE

Publication
EP 3187814 A1 20170705 (EN)

Application
EP 15202786 A 20151228

Priority
EP 15202786 A 20151228

Abstract (en)
A pneumatic firing device (90) includes a rear section (20) engaging a cylinder (10), a solenoid valve (25) engaging the rear section (20) from under, an adjusting element (30) disposed inside the rear section (20), a piston (40) disposed inside the cylinder (10) to form a first chamber (10a) and a second chamber (10b), an airflow guiding element (50) engaging the cylinder (10) at the front thereof, a moving rod (60) having a tail end engaging the piston (40) and a front end stretching through the cylinder (10) into the airflow guiding element (50) for operation control of the airflow guiding element (50), and a front section (70) engaging the front of the airflow guiding element (50). The solenoid valve (25) holds control of the operation of a pressure release channel (32) to change the pressure difference between the first and second chamber (10a), (10b), making the pressured air (A) entering a first passage (53) from a first guiding hole (512) of the airflow guiding element (50), pushing the delivery tube (80) to a firing position, flowing into a second passage (54) from a second guiding hole (513), and then firing a pellet (102) with strong airflow.

IPC 8 full level
F41B 11/71 (2013.01); **F41B 11/723** (2013.01)

CPC (source: EP)
F41B 11/71 (2013.01); **F41B 11/723** (2013.01)

Citation (applicant)
• US 5727538 A 19980317 - ELLIS SHAWN [US]
• US 6516791 B2 20030211 - PERRONE ALDO [CA]
• US 6532949 B1 20030318 - MCKENDRICK JEFFREY D [US]
• US 6601780 B1 20030805 - SHENG CHIH-SHENG [TW]
• US 6925997 B2 20050809 - SHENG CHIH-SHENG [TW]

Citation (search report)
• [AD] US 6601780 B1 20030805 - SHENG CHIH-SHENG [TW]
• [A] WO 2006138136 A2 20061228 - SMART PARTS INC [US], et al
• [A] WO 2014205313 A2 20141224 - KEE ACTION SPORTS I LLC [US]

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

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