

Title (en)

Vibratory apparatus for ejecting items

Title (de)

Vibrationsgerät zum Auswerfen von Gegenständen

Title (fr)

Appareil à vibrations pour l'éjection d'objets

Publication

**EP 1661629 A3 20110803 (EN)**

Application

**EP 05110686 A 20051114**

Priority

IT PN20040020 U 20041125

Abstract (en)

[origin: EP1661629A2] A scrap ejector comprises a pneumatic motor imparting a vibratory motion by means of a first piston that is arranged to reciprocatingly slide within a first cavity of an outer body owing to the action of an elastic spring or an adjustable, but substantially constant pneumatic force acting on a side of said piston, and a pulsed pneumatic force acting on the other side thereof. This pulsed force is obtained by applying a pneumatic pressure onto said other side of the piston, while alternately cutting off and re-establishing said second force by means of a valve arrangement based on a second piston adapted to slidably reciprocate within a respective cavity, wherein the opening and closing stroke of this second piston for applying and exhausting the pressure acting upon said first piston is controlled, i.e. actuated in a direct manner in one direction, and in an indirect manner in the opposite direction, by the same reciprocating displacement of said first piston.

IPC 8 full level

**B06B 1/18** (2006.01)

CPC (source: EP)

**B06B 1/045** (2013.01); **B06B 1/183** (2013.01); **F15B 21/12** (2013.01)

Citation (search report)

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Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

**EP 1661629 A2 20060531**; **EP 1661629 A3 20110803**; **EP 1661629 B1 20120704**; ES 2391736 T3 20121129; IT PN20040020 U1 20050225

DOCDB simple family (application)

**EP 05110686 A 20051114**; ES 05110686 T 20051114; IT PN20040020 U 20041125