

Title (en)  
Pneumatic striking mechanism

Title (de)  
Pneumatisches Schlagwerk

Title (fr)  
Mécanisme de percussion pneumatique

Publication  
**EP 2213423 B1 20170621 (DE)**

Application  
**EP 09179004 A 20091214**

Priority  
DE 102009008190 A 20090130

Abstract (en)  
[origin: EP2213423A1] The mechanism (5) has a striking surface (27) limiting movement of a flying piston (13) along a striking axis (8). An exciting piston (12) limits the movement of the flying piston along the axis opposite to a striking direction (99). A primary drive (3) e.g. electrical motor, is provided for periodic movement of the exciting piston with a stroke longitudinal to the axis, where aspect ratio of maximum length of the exciting piston to the stroke is less than 1:55. The flying piston is excited to periodic movement between the striking surface and minimal approximation to the exciting piston.

IPC 8 full level  
**B25D 11/12** (2006.01)

CPC (source: EP US)  
**B25D 11/125** (2013.01 - EP US); **B25D 2250/245** (2013.01 - EP US)

Citation (opposition)  
Opponent : Black & Decker Inc.  
DE 3910598 A1 19901004 - BOSCH GMBH ROBERT [DE]

Cited by  
CN113165151A

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 MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)  
**EP 2213423 A1 20100804; EP 2213423 B1 20170621**; DE 102009008190 A1 20100805; ES 2640245 T3 20171102;  
US 2010224383 A1 20100909; US 8616301 B2 20131231

DOCDB simple family (application)  
**EP 09179004 A 20091214**; DE 102009008190 A 20090130; ES 09179004 T 20091214; US 69705110 A 20100129