

Title (en)  
Rolling hammer drill

Title (de)  
Wälzbohrhammer

Title (fr)  
Marteau perforateur à roulement

Publication  
**EP 1614507 A2 20060111 (EN)**

Application  
**EP 05012334 A 20050608**

Priority  
CA 2475001 A 20040708

Abstract (en)  
A hammer drill with rolling contact at the contact surfaces for transmission of axial force between a drive shaft (18) and wave race (42). By using roller bearings (38), line contact is obtained. The area of contact is thus close to zero as opposed to a relatively large area in engagement systems using toothed surfaces. Use of point or line contact reduces heat generation and reduces energy loss due to friction.

IPC 8 full level  
**B25D 11/10** (2006.01); **B25D 17/00** (2006.01)

CPC (source: EP KR)  
**B25D 11/104** (2013.01 - EP KR); **B25D 17/005** (2013.01 - EP KR); **B25D 2211/064** (2013.01 - EP KR)

Cited by  
FR3145500A1; CN103381589A; FR3145501A1; US9486908B2; WO2024160602A1

Designated contracting state (EPC)  
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**EP 1614507 A2 20060111; EP 1614507 A3 20090325**; AU 2005202301 A1 20060119; BR PI0502201 A 20060221; CA 2475001 A1 20060108;  
CN 1718375 A 20060111; EA 007401 B1 20061027; EA 200500838 A1 20060224; JP 2006021317 A 20060126; KR 100706119 B1 20070412;  
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EA 200500838 A 20050616; JP 2005191669 A 20050630; KR 20050050032 A 20050610; TW 94118182 A 20050602