

Title (en)  
DEVICE FOR GRINDING UP NON-METALLIC PIECES

Title (de)  
VORRICHTUNG ZUM ZERMAHLEN VON NICHTMETALLTEILEN

Title (fr)  
APPAREIL DE BROYAGE DE PIECES NON METALLIQUES

Publication  
**EP 1633485 B1 20070704 (FR)**

Application  
**EP 04741488 A 20040429**

Priority  
• EP 2004050636 W 20040429  
• FR 0307213 A 20030616

Abstract (en)  
[origin: US2006079101A1] A grinding device including at least one motor-driven rotating shaft near the bottom of a receptacle for receiving non-metallic pieces to grind up. The shaft has teeth, which shred and grind the non-metallic pieces and which are radially arranged in rows on the periphery of the shaft. The shaft teeth cooperate with teeth of at least one fixed comb, which is attached to a receptacle and divides the receptacle into an upper part situated above the comb and a lower part located underneath the comb. The fixed comb includes an electrically conductive base brought to a specified potential. An electrically conductive surface, which is oriented toward the upper part of the receptacle, is electrically separated from the base, and is brought to a potential that is different from that of the base, in order to detect the presence of metallic pieces by the completion of the electrical circuit created thereby.

IPC 8 full level  
**B02C 18/18** (2006.01); **B02C 18/14** (2006.01); **B02C 18/16** (2006.01); **B02C 18/24** (2006.01); **B02C 23/04** (2006.01)

CPC (source: EP US)  
**B02C 18/148** (2013.01 - EP US); **B02C 18/16** (2013.01 - EP US); **B02C 18/18** (2013.01 - EP US); **B02C 18/24** (2013.01 - EP US); **B02C 23/04** (2013.01 - EP US); **B02C 2018/168** (2013.01 - EP US); **B02C 2018/188** (2013.01 - EP US)

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**US 2006079101 A1 20060413; US 7163164 B2 20070116**; AT E366141 T1 20070715; AU 2004247419 A1 20041223; AU 2004247419 B2 20070419; CA 2527840 A1 20041223; CA 2527840 C 20110419; CN 100569379 C 20091216; CN 1842373 A 20061004; DE 602004007386 D1 20070816; DE 602004007386 T2 20080306; EP 1633485 A1 20060315; EP 1633485 B1 20070704; ES 2287743 T3 20071216; FR 2855986 A1 20041217; FR 2855986 B1 20051118; JP 2006527648 A 20061207; JP 4504978 B2 20100714; MX PA05013519 A 20060309; PL 1633485 T3 20071231; RU 2006101230 A 20060727; RU 2335343 C2 20081010; WO 2004110630 A1 20041223

DOCDB simple family (application)  
**US 29036105 A 20051130**; AT 04741488 T 20040429; AU 2004247419 A 20040429; CA 2527840 A 20040429; CN 200480016957 A 20040429; DE 602004007386 T 20040429; EP 04741488 A 20040429; EP 2004050636 W 20040429; ES 04741488 T 20040429; FR 0307213 A 20030616; JP 2006516104 A 20040429; MX PA05013519 A 20040429; PL 04741488 T 20040429; RU 2006101230 A 20040429