

Title (en)  
DEVICE FOR COMMUNUTING EMPTY CONTAINERS

Title (de)  
VORRICHTUNG ZUM ZERKLEINERN LEERER BEHÄLTER

Title (fr)  
DISPOSITIF DE CONCASSAGE DES CONTENANTS VIDES

Publication  
**EP 1687091 B1 20190508 (DE)**

Application  
**EP 04797851 A 20041112**

Priority  
• EP 2004012841 W 20041112  
• DE 10353188 A 20031113

Abstract (en)  
[origin: WO2005046876A1] The invention relates to a device for comminuting empty containers, particularly beverage bottles or cans made of plastic, particularly of PET or of tinplate, comprising a housing provided with a filling opening and with a discharge opening, and comprising a cutting unit mounted inside the housing and means for driving and controlling the cutting unit. Said cutting unit contains at least two cutting rollers, which are mounted at a distance from one another with regard to their rotation axes, and the cutting mechanism containing the cutting rollers is a document shredder cutting mechanism.

IPC 8 full level  
**B02C 18/14** (2006.01); **B02C 18/18** (2006.01); **B02C 18/22** (2006.01); **B02C 19/00** (2006.01); **B30B 9/32** (2006.01)

CPC (source: EP US)  
**B02C 18/142** (2013.01 - EP US); **B02C 18/182** (2013.01 - EP US); **B02C 18/2275** (2013.01 - EP US); **B02C 19/0081** (2013.01 - EP US); **B30B 9/325** (2013.01 - EP US); **B30B 9/301** (2013.01 - EP)

Citation (examination)  
• US 4669673 A 19870602 - LODOVICO FRANK J [US], et al  
• DE 3412021 A1 19851003 - EHINGER ADOLF JUN  
• AT 401893 B 19961227 - BACHER HELMUT [AT], et al  
• GB 2096017 A 19821013 - SCHWELLING HERMANN  
• US 4923126 A 19900508 - LODOVICO FRANK J [US], et al  
• US 5178336 A 19930112 - LODOVICO FRANK J [US], et al

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

Designated extension state (EPC)  
LT LV

DOCDB simple family (publication)  
**DE 10353188 A1 20050616**; **DE 10353188 B4 20200130**; EP 1687091 A1 20060809; EP 1687091 B1 20190508; JP 2007511341 A 20070510; JP 5199577 B2 20130515; NO 20062764 L 20060613; NO 331122 B1 20111010; PL 1687091 T3 20191031; US 2007080251 A1 20070412; US 7556213 B2 20090707; WO 2005046876 A1 20050526

DOCDB simple family (application)  
**DE 10353188 A 20031113**; EP 04797851 A 20041112; EP 2004012841 W 20041112; JP 2006538803 A 20041112; NO 20062764 A 20060613; PL 04797851 T 20041112; US 57927204 A 20041112