

Title (en)  
THERMOLYSIS OF ORGANIC WASTE IN A BALL FURNACE

Title (de)  
THERMOLYSE VON ORGANISCHEM ABFALL IN EINEM KUGELOFEN

Title (fr)  
THERMOLYSE DE DECHETS ORGANIQUES EN FOUR A BILLES

Publication  
**EP 1660248 A2 20060531 (FR)**

Application  
**EP 04767811 A 20040729**

Priority  
• FR 2004002032 W 20040729  
• FR 0309592 A 20030804

Abstract (en)  
[origin: FR2858570A1] The organic waste is heated in a fixed or rotating furnace (1) in an atmosphere deprived of oxygen, by intimately mixing previously superheated steel balls or pellets with the waste as it enters the furnace. For thermolysis the steel balls enter the furnace at a temperature of between 600 and 1100 deg. C and leave at a temperature between 500 and 850 deg. C. For drying, the steel balls enter the furnace at a temperature of between 500 and 600 deg. C and leave at a temperature of between 120 and 140 deg. C. The balls are superheated in a gas, induction or electric furnace (10) and are between 20 and 50mm diameter. An independent claim is made for an installation to carry out the above process, with a fixed or rotating furnace into which the waste and steel balls are channeled; means of feeding in the wastes; means of recovering volatile products from the treatment; means of recovering solid residues from the treatment; means of recovering the steel balls for recirculation and a furnace for heating the balls. A further INDEPENDENT CLAIM considers submitting a solid, powdered or paste material to a thermal treatment (heating or cooling) to alter its physical or chemical properties by mixing with steel balls or pellets which have previously been taken to a temperature such that at the outlet from the treatment the treated material and the balls are at the desired temperature.

IPC 1-7  
**B09B 3/00**; F23G 5/027; F23G 5/20

IPC 8 full level  
**B09B 3/00** (2006.01); **C10B 49/16** (2006.01); **C10B 53/00** (2006.01); **F23G 5/027** (2006.01); **F23G 5/20** (2006.01)

CPC (source: EP US)  
**B09B 3/00** (2013.01 - EP US); **B09B 3/40** (2022.01 - EP US); **C10B 49/16** (2013.01 - EP US); **C10B 53/00** (2013.01 - EP US); **F23G 5/027** (2013.01 - EP US); **F23G 5/20** (2013.01 - EP US); **F23G 2900/50801** (2013.01 - EP US)

Citation (search report)  
See references of WO 2005018841A2

Citation (examination)  
• FR 2668774 A1 19920507 - INST FRANCAIS DU PETROLE [FR]  
• US 1712082 A 19290507 - HEINRICH KOPPERS

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)  
**FR 2858570 A1 20050211**; **FR 2858570 B1 20061117**; AU 2004266869 A1 20050303; AU 2004266869 A2 20050303;  
AU 2004266869 B2 20100211; BR PI0413322 A 20061010; CA 2576071 A1 20050303; CA 2576071 C 20130611; CN 1863606 A 20061115;  
CN 1863606 B 20101103; EP 1660248 A2 20060531; RU 2007106710 A 20080827; RU 2381081 C2 20100210; US 2009218209 A1 20090903;  
WO 2005018841 A2 20050303; WO 2005018841 A3 20050506; WO 2005018841 B1 20050707

DOCDB simple family (application)  
**FR 0309592 A 20030804**; AU 2004266869 A 20040729; BR PI0413322 A 20040729; CA 2576071 A 20040729; CN 200480029026 A 20040729;  
EP 04767811 A 20040729; FR 2004002032 W 20040729; RU 2007106710 A 20040729; US 65912304 A 20040729