

Title (en)
REACTOR AND METHOD FOR THE AT LEAST PARTIAL DECOMPOSITION, IN PARTICULAR DEPOLYMERIZATION, AND/OR PURIFICATION OF PLASTIC MATERIAL

Title (de)
REAKTOR UND VERFAHREN ZUM ZUMINDEST TEILWEISEN ZERSETZEN, INSBESONDERE DEPOLYMERISIEREN, UND/ODER REINIGEN VON KUNSTSTOFFMATERIAL

Title (fr)
RÉACTEUR ET PROCÉDÉ PERMETTANT DE DÉCOMPOSER AU MOINS PARTIELLEMENT, EN PARTICULIER DE DÉPOLYMÉRISER ET/OU DE PURIFIER UNE MATIÈRE PLASTIQUE

Publication
EP 2635656 A1 20130911 (DE)

Application
EP 11810786 A 20111101

Priority
• DE 102010050152 A 20101102
• DE 2011001975 W 20111101

Abstract (en)
[origin: CA2816477A1] The invention relates to a reactor for gasifying and/or purifying, in particular depolymerizing, plastic material (12), comprising a reactor vessel (14) for holding the plastic material (12) and a heater (18) for heating the plastic material (12) in the reactor vessel (14), the reactor vessel being at least partially filled with a metal bath (26). According to the invention, a deceleration device (24, 32) is provided in an interior (22) of the reactor vessel (14) to decelerate a flow of liquefied plastic material (12) in the reactor vessel (14), said deceleration device (24, 32) having a plurality of elements (25) that are movably arranged in the interior (22).

IPC 8 full level
C10B 19/00 (2006.01); **B01J 8/02** (2006.01); **C10B 49/14** (2006.01); **C10B 53/07** (2006.01); **C10G 1/10** (2006.01); **C10J 3/57** (2006.01)

CPC (source: EP RU US)
B01J 8/008 (2013.01 - RU US); **B01J 8/0285** (2013.01 - EP RU US); **C10B 19/00** (2013.01 - EP US); **C10B 49/14** (2013.01 - EP US); **C10B 53/07** (2013.01 - EP US); **C10G 1/10** (2013.01 - EP US); **B01J 2208/00469** (2013.01 - EP RU US); **B01J 2208/0053** (2013.01 - EP US); **B01J 2208/00884** (2013.01 - EP US); **Y02P 20/143** (2015.11 - EP RU US)

Citation (search report)
See references of WO 2012059091A1

Citation (examination)
• US 5435982 A 19950725 - WILKINSON MARK A [US]
• "Kirk-Othmer Encyclopedia of Chemical Technology", 12 March 2010, WILEY, USA, ISBN: 978-0-471-23896-6, article MARK J. CHAGNON: "BISMUTH AND BISMUTH ALLOYS", pages: 1 - 14, XP055342422

Designated contracting state (EPC)
AL 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 RS SE SI SK SM TR

DOCDB simple family (publication)
DE 102010050152 A1 20120503; **DE 102010050152 B4 20160211**; AU 2011325551 A1 20130530; BR 112013010906 A2 20160913; CA 2816477 A1 20120510; CN 103282462 A 20130904; CN 103282462 B 20151125; EP 2635656 A1 20130911; JP 2014500343 A 20140109; MX 2013004884 A 20131017; RU 2013125465 A 20141210; RU 2587184 C2 20160620; US 2013303810 A1 20131114; WO 2012059091 A1 20120510

DOCDB simple family (application)
DE 102010050152 A 20101102; AU 2011325551 A 20111101; BR 112013010906 A 20111101; CA 2816477 A 20111101; CN 201180053046 A 20111101; DE 2011001975 W 20111101; EP 11810786 A 20111101; JP 2013537001 A 20111101; MX 2013004884 A 20111101; RU 2013125465 A 20111101; US 201113883022 A 20111101