Title (en)
  SYSTEMS AND METHODS FOR RECYCLING PLASTIC

Title (de)
  RECYCLING-SYSTEME UND VERFAHREN FÜR KUNSTSTOFFE

Title (fr)
  SYSTÈMES ET PROCÉDÉS DE RECYCLAGE DE MATIÈRE PLASTIQUE

Publication
  EP 2553005 A4 20131225 (EN)

Application
  EP 10849161 A 20100628

Priority
  • US 35279310 P 20100608
  • US 75191110 A 20100331
  • US 2010040219 W 20100628

Abstract (en)
  [origin: WO2011123145A1] Systems and methods for recycling waste plastic can convert the waste plastic into a form of purified crude oil that includes one or more organic molecular species and that is free, or substantially free, of impurities such as acids and metals. In some systems and methods, the plastic is heated under vacuum conditions to effect depolymerization of the plastic, which yields a vapor, and the vapor is then directly contacted with a pH adjusted solution in a vapor treatment system. In some systems and methods, a continuous batch process is employed.

IPC 8 full level
  C08J 11/12 (2006.01); **B29B 17/02** (2006.01); **C08J 11/16** (2006.01); **C10B 53/07** (2006.01)

CPC (source: EP)
  C08J 11/12 (2013.01); **C10B 47/02** (2013.01); **C10B 53/07** (2013.01); **C10G 1/002** (2013.01); **C10G 1/10** (2013.01); **C10G 21/06** (2013.01); Y02P 20/143 (2015.11); Y02W 30/62 (2015.05)

Citation (search report)
  • [A] US 2005075521 A1 20050407 - WADA YOICHI [JP]
  • [A] JP 2007229660 A 20070913 - SUNAOSHI PURARI KK
  • [A] US 6060631 A 20000509 - JAMES JR ROBERT B [US], et al
  • [XI] DATABASE WPI Week 199934, Derwent World Patents Index; AN 1999-400388, XP002716485
  • [A] DATABASE WPI Week 200931, Derwent World Patents Index; AN 2009-H83147, XP002716486
  • See references of WO 2011123145A1

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 SE SI SK SM TR

DOCDB simple family (publication)
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  US 2010040219 W 20100628; BR 112012025603 A 20100628; CA 2794932 A 20100628; CN 201080067142 A 20100628; EP 10849161 A 20100628; JP 2013502553 A 20100628; MX 2012011432 A 20100628