

Title (en)

TRANSVERSE-FLOW PYROCATALYTIC REACTOR FOR CONVERSION OF WASTE PLASTIC MATERIAL AND SCRAP RUBBER

Title (de)

QUERSTROM-PYROKATALYSEREAKTOR ZUR UMWANDLUNG VON KUNSTSTOFF- UND KAUTSCHUKABFÄLLEN

Title (fr)

REACTEUR PYROCATALYTIQUE A FLUX TRANSVERSAL UTILISE DANS LA CONVERSION DE DECHETS DE MATERIAUX PLASTIQUES ET DE CAOUTCHOUC

Publication

EP 1841837 A1 20071010 (EN)

Application

EP 05806524 A 20050929

Priority

- US 2005035071 W 20050929
- US 96836904 A 20041019

Abstract (en)

[origin: WO2006044157A1] A pyrolysis reactor wherein plastic and rubber waste is catalytically converted into hydrocarbons which are recovered as vapor issuing from a molten lead bath. The waste is mixed with a unique catalyst as the mixture is moved along the molten lead along the length of the bath to a residue-discharged end. Vapors of hydrocarbons generated within the reactor, which vapors are readily condensable in a cold water heat exchanger, are recovered. The recovered, condensed hydrocarbons are refined for use as diesel fuel, gasoline and heating oil; and the non-condensable hydrocarbons, along with carbon monoxide and carbon dioxide are preferably recycled as a gaseous recycle stream to provide fuel for burners used to generate hot gases to heat the bath.

IPC 8 full level

C10B 53/00 (2006.01)

CPC (source: EP KR)

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