

Title (en)

METHOD AND DEVICE FOR REFINING WASTE PLASTIC PYROLYSIS OIL

Title (de)

VERFAHREN UND VORRICHTUNG ZUR RAFFINATION VON KUNSTSTOFFABFALLPYROLYSEÖL

Title (fr)

PROCÉDÉ ET DISPOSITIF POUR RAFFINER DE L'HUILE DE PYROLYSE DE PLASTIQUE RÉSIDUAIRE

Publication

**EP 4368685 A1 20240515 (EN)**

Application

**EP 23207945 A 20231106**

Priority

KR 20220151305 A 20221114

Abstract (en)

The present invention provides a method and device for refining waste plastic pyrolysis oil, the method including: (S1) subjecting a waste plastic pyrolysis oil feedstock to a heat treatment by charging the waste plastic pyrolysis oil feedstock into a rotary kiln reactor and increasing a temperature of the rotary kiln reactor; (S2) recovering a gas component from a product in the step (S1); (S3) separating a high boiling point wax component from the recovered gas component and re-supplying the separated high boiling point wax component to the rotary kiln reactor in the step (S1); and (S4) recovering refined oil from the gas component from which the high boiling point wax component is removed.

IPC 8 full level

**C10G 1/10** (2006.01); **C10G 9/00** (2006.01)

CPC (source: EP KR US)

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Citation (search report)

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- [X] KR 20190055975 A 20190524 - KOREA INST ENERGY RES [KR]
- [A] KYONG-HWAN LEE ET AL: "Effect of heating rate on pyrolysis of low-grade pyrolytic oil", KOREAN JOURNAL OF CHEMICAL ENGINEERING, SPRINGER US, BOSTON, vol. 28, no. 6, 5 May 2011 (2011-05-05), pages 1468 - 1473, XP019912230, ISSN: 1975-7220, DOI: 10.1007/S11814-011-0065-X

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