

Title (en)

METHOD AND APPARATUS FOR CRACKING RESIDUAL OILS

Publication

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Application

EP 85904179 A 19850802

Priority

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- US 8501477 W 19850802

Abstract (en)

[origin: DE3590751C2] Residual oil is catalytically converted by (A) spraying the oil to a droplet size comparable to or smaller than catalyst particles, (B) introducing the droplets at a rate of 100-300, pref. 100 m/sec. into a riser to contact an upward flowing, hot catalyst particle suspension having a temp. at least equal to the pseudocritical temp. of the oil, (C) initially maintaining the contact temp. sufficiently high to split asphalt components in the oil and effect a thermal conversion of the sprayed oil to at least 50% and effect a catalytic conversion of the oil vapours in the upward flowing suspension with a drop in the temp. of the suspension, and (D) separating the vaporised hydrocarbon conversion products from the catalyst particles. The contact time between oil and catalyst in the riser is less than 2 sec., pref. 0.5-1.5 sec.. The contact rate between oil and catalyst is restricted to keep the drop of press in the riser to not more than 0.21 bar. The size not more than 100 microns..

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