

Title (en)

An improved process for removing heavy metals, sulfur and chlorinated compounds from used oil to generate clear fuel oils or lube stock and soft and/or hard asphalt with no acid sludge problem.

Title (de)

Verbessertes Verfahren zur Entfernung von schweren Metallen, Schwefel und chlorierten Verbindungen aus Altölen und Regenerierung sauberer Brennstofföle oder Schmieröle und weicher und/oder festen Bitumen ohne Säureharzproblem.

Title (fr)

Procédé amélioré pour l'élimination de métaux lourds, soufre et composés chlorés contenus dans une huile usagée afin de générer des huiles combustibles ou des huiles lubrifiantes propres et du bitume mou et/ou dur sans problème de boues acides.

Publication

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Application

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Priority

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Abstract (en)

A process for significantly decreasing the acid sludge settling time in waste oil recovery processes comprising the steps of heating used oil to a high temperature above 125 degrees Fahrenheit, cooling the heated oil, adding an oxidizing agent to the oil, allowing the acid sludge to settle within a period of approximately 24 to 72 hours, separating the acid-sludge-free oil from the acid sludge which settles out of solution as a result of addition of the oxidizing agent, providing said acid sludge to said process for converting acid sludge to asphalt products, and adding a polishing agent and separating the re-refined oil from the spent polishing agent. The process produces a high quality re-refined oil rapidly and economically. <IMAGE>

IPC 1-7

C10C 3/02; C10C 3/04; C10M 175/00

IPC 8 full level

C10C 3/02 (2006.01); **C10C 3/04** (2006.01); **C10M 175/00** (2006.01)

CPC (source: EP)

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Citation (search report)

- [X] GB 2267097 A 19931124 - SANTOS BENJAMIN SY [PH]
- [A] FR 2259895 A1 19750829 - INST FRANCAIS DU PETROLE [FR]
- [A] US 3565791 A 19710223 - URQUHART KENNETH, et al
- [DA] US 4029569 A 19770614 - IVEY JR HERBERT D
- [A] GB 448009 A 19360529 - BAENDER FREDERICK GOTTLIEB [GB]
- [A] US 4381992 A 19830503 - WOOD WILLIAM E, et al
- [A] GB 1594879 A 19810805 - BORENSTEIN L

Cited by

CN110565210A; CN108467775A; ES2131022A1; US8653210B2

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