

Title (en)

Method for quality improvement of crude oil with electromagnetic waves

Title (de)

Verfahren zur Qualitätsverbesserung von Rohöl mit elektromagnetische Wellen

Title (fr)

Méthode d'amélioration de la qualité d'huile brute avec des ondes électromagnétiques

Publication

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Application

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Priority

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Abstract (en)

A method which uses electronic or electromechanical technology for the qualitative upgrade of crude oil causing before its refinement processing a quantitative diversification of its refinement products through a proportionate increase of the lower volatility fractions and a corresponding proportionate decrease of the higher volatility fractions. Sending towards the space occupied by the volume of crude oil (1) an emission of electromagnetic waves (6) of multiple frequencies, generated by electronic or electromechanical devices (3) and occupying one or more wide frequency ranges of the electromagnetic spectrum, frequencies from 1Hz to 300GHz, the emission manner of the electromagnetic waves themselves or together with their emission as a whole being either pulsatory or temporally interruptible, or pulsatory and temporally interruptible. <IMAGE>

IPC 1-7

C10G 15/08; **C10G 32/02**

IPC 8 full level

C10G 15/08 (2006.01); **C10G 32/02** (2006.01)

CPC (source: EP)

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Citation (search report)

- [X] US 5055180 A 19911008 - KLAILA WILLIAM J [US]
- [E] EP 1099745 A1 20010516 - NIKOLAOU ATHANASIOS [GR]
- [A] DE 2619022 A1 19761125 - KUREHA CHEMICAL IND CO LTD
- [A] GB 486902 A 19380613 - STANDARD OIL DEV CO
- [A] US 5824203 A 19981020 - REMO JOHN L [US]
- [A] GB 2157307 A 19851023 - WALLS JOHN RAYMOND

Cited by

WO2011086522A1; CN102264883A; AU2009332316B2; EP2371936A4; US9428699B2

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