

Title (en)
De-ashing lubricating oils.

Title (de)
Entfernen von Asche aus Schmierölen.

Title (fr)
Elimination des cendres d'huiles lubrifiantes.

Publication
EP 0028409 A1 19810513 (EN)

Application
EP 80106712 A 19801031

Priority
• US 9018379 A 19791101
• US 9213879 A 19791107

Abstract (en)
A process for the production of an essentially ash-free oil stock from a lubricating oil containing ash-forming components comprising (a) contacting said lubricating oil with an aqueous ammonium salt treating agent; (b) removing a major portion of the water from the mixture resulting from combining said aqueous solution and said lubricating oil; (c) heating at least a portion of the product resulting from step (b) at a temperature in the range of about 320 DEG to about 420 DEG C for a period of time sufficient to decompose at least a portion of any ammonium salts of sulfonic acid and dialkyldithiophosphoric acid that are contained therein; (d) cooling the product from step (c) to a temperature in the range of about 150 DEG to about 180 DEG C; and (e) separating the solids from the product of step (d), optionally with subsequent hydrotreating and stripping of the oil thus obtained.

IPC 1-7
C10M 11/00

IPC 8 full level
C10G 19/02 (2006.01); **C10G 29/00** (2006.01); **C10M 175/00** (2006.01)

CPC (source: EP)
C10M 175/0016 (2013.01); **C10G 2400/10** (2013.01)

Citation (search report)
• NL 7805206 A 19781120 - PHILLIPS PETROLEUM CO
• FR 2391271 A1 19781215 - PHILLIPS PETROLEUM CO [US]
• DE 2821159 A1 19781221 - PHILLIPS PETROLEUM CO
• US 3879282 A 19750422 - JOHNSON MARVIN M
• US 4151072 A 19790424 - JOHNSON MARVIN M [US], et al
• US 3930988 A 19760106 - JOHNSON MARVIN M

Cited by
TR26396A; WO9007566A1; WO9100329A1

Designated contracting state (EPC)
AT BE CH DE FR IT LI NL SE

DOCDB simple family (publication)
EP 0028409 A1 19810513; **EP 0028409 B1 19840801**; DE 3068812 D1 19840906; DK 464980 A 19810502; ES 496476 A0 19820116; ES 8202057 A1 19820116; FI 803415 L 19810502; GB 2064578 A 19810617; GB 2064578 B 19830824; GR 70787 B 19830323; PL 227595 A1 19810710; PT 72009 A 19801101; PT 72009 B 19810831; YU 278980 A 19830930

DOCDB simple family (application)
EP 80106712 A 19801031; DE 3068812 T 19801031; DK 464980 A 19801031; ES 496476 A 19801031; FI 803415 A 19801031; GB 8032312 A 19801007; GR 800163254 A 19801030; PL 22759580 A 19801031; PT 7200980 A 19801031; YU 278980 A 19801031