

Title (en)

Lubricant composition suitable for engines fueled by alternate fuels

Title (de)

Schmiermittelzusammensetzung, die für Motoren geeignet ist, die mit alternativen Kraftstoffen angetrieben werden

Title (fr)

Composition lubrifiante adaptée pour des moteurs alimentés par des combustibles alternatifs

Publication

EP 2072611 A1 20090624 (EN)

Application

EP 08168853 A 20081111

Priority

US 95595607 A 20071213

Abstract (en)

A lubricant composition suitable for use in engines fueled by gasoline or biorenewable fuels or both, comprising an oil of lubricating viscosity and a dispersant system is disclosed herein. Also disclosed is an emulsion composition comprising a biorenewable fuel, an oil of lubricant viscosity, and a dispersant system. A method of reducing aqueous separation in an emulsion composition is also disclosed.

IPC 8 full level

C10M 133/04 (2006.01); **C10M 133/56** (2006.01); **C10M 149/16** (2006.01); **C10N 40/04** (2006.01); **C10N 60/14** (2006.01)

CPC (source: EP US)

C10M 133/04 (2013.01 - EP US); **C10M 133/56** (2013.01 - EP US); **C10M 149/16** (2013.01 - EP US); **C10M 2215/02** (2013.01 - EP US); **C10M 2215/28** (2013.01 - EP US); **C10M 2217/022** (2013.01 - EP US); **C10M 2217/043** (2013.01 - EP US); **C10N 2040/04** (2013.01 - EP US); **C10N 2050/01** (2020.05 - EP US); **C10N 2060/14** (2013.01 - EP US)

Citation (applicant)

- US 3018247 A 19620123 - ANDERSON ROBERT G, et al
- US 3018250 A 19620123 - ANDERSON ROBERT G, et al
- US 3018291 A 19620123 - ANDERSON ROBERT G, et al
- US 3172892 A 19650309
- US 3185704 A 19650525 - KAHN DONALD J, et al
- US 3219666 A 19651123
- US 3272746 A 19660913 - LE SUER WILLIAM M, et al
- US 3361673 A 19680102 - STUART FRANK A, et al
- US 4234435 A 19801118 - MEINHARDT NORMAN A, et al
- US 3576743 A 19710427 - WIDMER ROBERT, et al
- US 4873009 A 19891010 - ANDERSON RONALD L [US]
- US 3368972 A 19680213 - OTTO FERDINAND P
- US 3413347 A 19681126 - WORREL CALVIN J
- US 3539633 A 19701110 - PIASEK EDMUND J, et al
- US 3697574 A 19721010 - PIASEK EDMUND J, et al
- US 3725277 A 19730403 - WORREL C
- US 3725480 A 19730403 - TRAISE T, et al
- US 3726882 A 19730410 - TRAISE T, et al
- US 3798247 A 19740319 - PIASEK E, et al
- US 3803039 A 19740409 - PIASEK E, et al
- US 3985802 A 19761012 - PIASEK EDMUND J, et al
- US 4231759 A 19801104 - UDELHOFEN JOHN H, et al
- US 4142980 A 19790306 - KARLL ROBERT E, et al
- US 3275554 A 19660927 - HENDRIK WAGENAAR ADRIAAN
- US 3438757 A 19690415 - HONNEN LEWIS R, et al
- US 3454555 A 19690708 - VOORT HENRICUS G P VAN DER, et al
- US 3565804 A 19710223 - HONNEN LEWIS R, et al
- US 4235435 A 19801125 - LAWRENCE FREDERICK J [US]
- US 3676089 A 19720711 - MORRIS HERBERT C, et al
- US 5454964 A 19951003 - BLACKBOROW JOHN R [GB], et al
- US 5620486 A 19970415 - CHERPECK RICHARD E [US]
- US 5393309 A 19950228 - CHERPECK RICHARD E [US]
- US 4863623 A 19890905 - NALESNIK THEODORE E [US]
- US 5075383 A 19911224 - MIGDAL CYRIL A [US], et al
- US 5634951 A 19970603 - COLUCCI WILLIAM J [US], et al
- US 5725612 A 19980310 - MALFER DENNIS J [US], et al
- US 5789353 A 19980804 - SCATTERGOOD ROGER [GB]
- US 5137980 A 19920811 - DEGONIA DAVID J [US], et al
- US 2459112 A 19490111 - OBERRIGHT EDWARD A
- US 2962442 A 19601129 - ANDRESS JR HARRY J
- US 2984550 A 19610516 - CHAMOT WALTER M
- US 3036003 A 19620522 - ARTHUR VERDOL JOSEPH
- US 3166516 A 19650119 - KIRKPATRICK WILLARD H, et al
- US 3236770 A 19660222 - MATSON HOWARD J, et al
- US 3442808 A 19690506 - TRAISE THORNTON P, et al
- US 3448047 A 19690603 - TRAISE THORNTON P, et al
- US 3454497 A 19690708 - WITTNER EUGENE
- US 3459661 A 19690805 - SCHLOBOHM ROLAND T
- US 3493520 A 19700203 - VERDOL JOSEPH A, et al
- US 3558743 A 19710126 - VERDOL JOSEPH A, et al
- US 3586629 A 19710622 - OTTO FERDINAND P, et al

- US 3591598 A 19710706 - TRAISE THORNTON P, et al
- US 3600372 A 19710817 - UDELHOFEN JOHN H, et al
- US 3634515 A 19720111 - PIASEK EDMUND J, et al
- US 3649229 A 19720314 - OTTO FERDINAND P
- US 3703536 A 19721121 - PIASEK EDMUND J, et al
- US 3704308 A 19721128 - PIASEK EDMUND J, et al
- US 3736357 A 19730529 - PIASEK E, et al
- US 3751365 A 19730807 - PIASEK E, et al
- US 3756953 A 19730904 - PIASEK E, et al
- US 3793202 A 19740219 - PIASEK E, et al
- US 3798165 A 19740319 - PIASEK E, et al
- US 3872019 A 19750318 - CULBERTSON GEORGE S, et al
- US 3904595 A 19750909 - PLONSKER LARRY, et al
- US 3957746 A 19760518 - MALEC ROBERT E
- US 3980569 A 19760914 - PINDAR JOHN FRANCIS, et al
- US 4006089 A 19770201 - CHIBNIK SHELDON
- US 4011380 A 19770308 - WEST CHARLES T, et al
- US 4025451 A 19770524 - PLONSKER LARRY, et al
- US 4058468 A 19771115 - MALEC ROBERT E
- US 4083699 A 19780411 - CHIBNIK SHELDON
- US 4090854 A 19780523 - DAVIS KIRK EMERSON
- US 4354950 A 19821019 - HAMMOND KENNETH G, et al
- US 4485023 A 19841127 - SERRES CARL [US], et al
- US 3329658 A 19670704 - FIELDS JOSEPH E
- US 3449250 A 19690610 - FIELDS JOSEPH E
- US 3519565 A 19700707 - COLEMAN LESTER E
- US 3666730 A 19720530 - COLEMAN LESTER E
- US 3687849 A 19720829 - ABBOTT FRANKLIN PAUL
- US 3702300 A 19721107 - COLEMAN LESTER E
- US 6103099 A 20000815 - WITTENBRINK ROBERT J [US], et al
- US 6180575 B1 20010130 - NIPE RICHARD N [US]
- US 4943672 A 19900724 - HAMNER GLEN P [US], et al
- US 6096940 A 20000801 - WITTENBRINK ROBERT JAY [US], et al
- US 5882505 A 19990316 - WITTENBRINK ROBERT J [US], et al
- US 6013171 A 20000111 - COOK BRUCE R [US], et al
- US 6080301 A 20000627 - BERLOWITZ PAUL J [US], et al
- US 6165949 A 20001226 - BERLOWITZ PAUL J [US], et al

Citation (search report)

- [X] EP 1471130 A1 20041027 - ETHYL PETROLEUM ADDITIVES LTD [GB]
- [X] US 5861363 A 19990119 - WILLIS JR WILLIAM W [US], et al
- [X] EP 0592956 A1 19940420 - LUBRIZOL CORP [US]
- [X] US 2004235684 A1 20041125 - COOK STEPHEN J [GB], et al
- [PX] GB 2446277 A 20080806 - AFTON CHEMICAL CORP [US]

Cited by

EP2915871A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

EP 2072611 A1 20090624; CN 101457170 A 20090617; JP 2009144151 A 20090702; JP 2013213228 A 20131017;
US 2009156445 A1 20090618; US 2012108478 A1 20120503

DOCDB simple family (application)

EP 08168853 A 20081111; CN 200810186302 A 20081215; JP 2008302368 A 20081127; JP 2013154385 A 20130725;
US 201213344157 A 20120105; US 95595607 A 20071213