

Title (en)
HIGH-TEMPERATURE LUBRICANT FOR THE FOOD INDUSTRY

Title (de)
HOCHTEMPERATURSCHMIERSTOFF FÜR DIE LEBENSMITTELINDUSTRIE

Title (fr)
LUBRIFIANT HAUTE TEMPÉRATURE POUR L'INDUSTRIE ALIMENTAIRE

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Abstract (en)
[origin: WO2016096075A2] The invention relates to a food-grade high-temperature lubricant, in particular a high-temperature oil or a high-temperature grease comprising the following components: a) at least one oil selected from a trimellitic acid ester or a mixture of various trimellitic acid esters, alkyl aromates, preferably an aliphatically substituted naphthalene or estolidene; b) a hydrogenated or fully hydrogenated polyisobutylene or a mixture of hydrogenated or fully hydrogenated polyisobutylene; and c) additives, individually or in combination with each other. In the case of the high-temperature grease, a thickening agent is added.

Abstract (de)
Die Erfindung betrifft einen lebensmittelverträglichen Hochtemperaturschmierstoff, insbesondere ein Hochtemperaturöl und ein Hochtemperaturfett umfassend folgende Komponenten: a) mindestens ein Öl ausgewählt aus einem Trimellitsäureester oder einem Gemisch aus verschiedenen Trimellitsäureestern, Alkylaromaten, vorzugsweise ein aliphatisch substituiertes Naphthalin oder Estoliden; b) einem hydrierten oder vollhydrierten Polyisobutylen oder einer Mischung aus hydrierten oder vollhydrierten Polyisobutylen und; c) Additive einzeln oder in Kombination. Im Fall des Hochtemperaturfetts wird ein Verdickungsmittel zugegeben.

IPC 8 full level
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Citation (search report)

- [IY] DE 102011102540 A1 20121129 - KLUEBER LUBRICATION [DE]
- [Y] DE 102006043747 A1 20080327 - ADDINOL LUBE OIL GMBH [DE]
- [Y] US 3100808 A 19630813 - DYER ROBERT H
- [Y] EP 1154011 A1 20011114 - IDEMITSU KOSAN CO [JP]
- [Y] WO 2014142157 A1 20140918 - IDEMITSU KOSAN CO [JP] & EP 2975103 A1 20160120 - IDEMITSU KOSAN CO [JP]
- [Y] US 2008317964 A1 20081225 - BURGO ROCCO VINCENT [US], et al
- [Y] EP 0892038 A1 19990120 - KLUEBER LUBRICATION [DE], et al
- [Y] EP 0157583 A2 19851009 - BP CHEM INT LTD [GB]
- [Y] WO 9802510 A1 19980122 - CASTROL LTD [GB], et al
- [Y] US 4604491 A 19860805 - DRESSLER HANS [US], et al
- [Y] DE 102012015648 A1 20131017 - KLUEBER LUBRICATION [DE]
- [Y] CN 103343032 A 20131009 - CHINA PETROLEUM & CHEMICAL
- [Y] EP 2397537 A1 20111221 - KYODO YUSHI [JP], et al
- [Y] WO 0153247 A1 20010726 - US AGRICULTURE [US]
- [Y] US 2012322897 A1 20121220 - BREDSGUARD JAKOB [US], et al
- [Y] US 2012322707 A1 20121220 - BREDSGUARD JAKOB [US], et al
- [A] US 2014178547 A1 20140626 - FOREST JEREMY [US]
- [Y] SANDY REID-PETERS: "Alkylated Naphthalenes", 15 September 2011 (2011-09-15), XP055055374, Retrieved from the Internet <URL:http://web.archive.org/web/20111006015607/http://utsrus.com/documents/seminary_doklady/260911/exxon_mobil/5.0_uts_synesttic.pdf> [retrieved on 20130306]
- [Y] DATABASE WPI Week 199823, Derwent World Patents Index; AN 1998-254321, XP002759675

Cited by
WO2023179897A1; WO2023094322A1

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CN 107001968 B 20200717; DK 3375850 T3 20220117; EP 3234080 A2 20171025; EP 3375850 A1 20180919; EP 3375850 B1 20211027;
EP 3375851 A1 20180919; ES 2901414 T3 20220322; JP 2017538840 A 20171228; JP 6400211 B2 20181003; KR 101931511 B1 20190313;
KR 20170083612 A 20170718; MX 2017007681 A 20180123; PL 3375850 T3 20220131; US 2017321143 A1 20171109;
WO 2016096075 A2 20160623; WO 2016096075 A3 20160901

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EP 15804064 A 20151119; EP 18000086 A 20151119; EP 18000087 A 20151119; EP 2015002323 W 20151119; ES 18000086 T 20151119;
JP 2017533030 A 20151119; KR 20177016304 A 20151119; MX 2017007681 A 20151119; PL 18000086 T 20151119;
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