

Title (en)

LUBRICANTS FOR CHAIN BELT CONVEYORS AND THEIR USE.

Title (de)

KETTENTRANSPORTBAND-SCHMIERMITTEL UND IHRE VERWENDUNG.

Title (fr)

LUBRIFIANTS POUR BANDES TRANSPORTEUSES COMMANDEES PAR CHAINE ET LEUR UTILISATION.

Publication

**EP 0629234 B1 19951115 (DE)**

Application

**EP 93904003 A 19930222**

Priority

- DE 4206505 A 19920302
- EP 9300412 W 19930222

Abstract (en)

[origin: WO9318120A1] Clear water-soluble lubricants for chain belt conveyors contain a combination of: (a) at least one or several compounds having the general formula (1), in which R<1> stands for a saturated, mono- or polyunsaturated, linear or branched-chain alkyl residue with 6 to 22 C atoms, that may if required be substituted by -OH, -NH<sub>2</sub>, -NH-, -CO-, halogen or a carboxyl residue; R<2> stands for a carboxyl residue with 2 to 7 C atoms; M stands for hydrogen, an alkali metal, ammonium, an alkyl residue with 1 to 4 C atoms or a benzyl residue; and n stands for an integer in the range from 1 to 6; (b) at least one organic carboxylic acid selected among monobasic or multibasic, saturated, monounsaturated or polyunsaturated carboxylic acids having 2 to 22 C atoms; (c) water and additives and/or adjuvants, if required.

IPC 1-7

**C10M 173/02**

IPC 8 full level

**C10M 173/02** (2006.01); **C10N 10/02** (2006.01); **C10N 20/02** (2006.01); **C10N 30/16** (2006.01); **C10N 30/20** (2006.01)

CPC (source: EP US)

**C10M 129/28** (2013.01 - EP US); **C10M 133/06** (2013.01 - EP US); **C10M 173/02** (2013.01 - EP US); **C10M 2201/02** (2013.01 - EP US); **C10M 2207/12** (2013.01 - EP US); **C10M 2207/121** (2013.01 - EP US); **C10M 2207/122** (2013.01 - EP US); **C10M 2207/125** (2013.01 - EP US); **C10M 2207/129** (2013.01 - EP US); **C10M 2215/04** (2013.01 - EP US); **C10M 2215/042** (2013.01 - EP US); **C10M 2215/26** (2013.01 - EP US); **C10N 2040/00** (2013.01 - EP US); **C10N 2040/30** (2013.01 - EP US); **C10N 2040/32** (2013.01 - EP US); **C10N 2040/34** (2013.01 - EP US); **C10N 2040/36** (2013.01 - EP US); **C10N 2040/38** (2020.05 - EP US); **C10N 2040/40** (2020.05 - EP US); **C10N 2040/42** (2020.05 - EP US); **C10N 2040/44** (2020.05 - EP US); **C10N 2040/50** (2020.05 - EP US); **C10N 2050/01** (2020.05 - EP US)

Cited by

US6677280B2; US6780254B1; US6809068B1; US6962897B2; US6653263B1; EP3508563A1

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB IT LI NL SE

DOCDB simple family (publication)

**WO 9318120 A1 19930916**; AT E130360 T1 19951215; AU 3498493 A 19931005; AU 662604 B2 19950907; BR 9306004 A 19971021; CA 2131388 A1 19930916; CA 2131388 C 20020723; CZ 209694 A3 19941215; DE 59300966 D1 19951221; DK 0629234 T3 19960325; DK 0629234 T4 20001204; EP 0629234 A1 19941221; EP 0629234 B1 19951115; EP 0629234 B2 20000126; ES 2079965 T3 19960116; ES 2079965 T5 20000401; FI 943995 A0 19940831; FI 943995 A 19940831; JP H07504451 A 19950518; NO 942135 D0 19940608; NO 942135 L 19940608; RU 94041745 A 19960810; SK 103694 A3 19950208; US 6372698 B1 20020416

DOCDB simple family (application)

**EP 9300412 W 19930222**; AT 93904003 T 19930222; AU 3498493 A 19930222; BR 9306004 A 19930222; CA 2131388 A 19930222; CZ 209694 A 19930222; DE 59300966 T 19930222; DK 93904003 T 19930222; EP 93904003 A 19930222; ES 93904003 T 19930222; FI 943995 A 19940831; JP 51528393 A 19930222; NO 942135 A 19940608; RU 94041745 A 19940930; SK 103694 A 19930222; US 29575494 A 19940901