

Title (en)  
LUBRIFICATION AGENT FOR TEXTILE FIBRES

Publication  
**EP 0312677 B1 19921125 (DE)**

Application  
**EP 88102420 A 19880219**

Priority  
DE 3734931 A 19871015

Abstract (en)  
[origin: JPH01111065A] PURPOSE: To obtain a smoothing composition for textile fibers, capable of remarkably reducing frictions between fibers and fibers and between fibers and metals without relating to the properties of a fiber base material by using a specific aliphatic polyether singly or together with one or more known smoothing agents in the form of a solution, an emulsion or a dispersion. CONSTITUTION: This smoothing composition for textile fibers contains an aliphatic polyether of the formula (R<1> , R<2> are each a 6-24C alkyl; X is a 2-6C alkylene oxide polymer having a degree of polymerization of 1-25) singly or together with one or more known smoothing agents such as paraffin, polyethylene, aliphatic esters, silicones and/or polyalkylene glycols in the form of a solution, an emulsion or a dispersion. The smoothing composition can remarkably reduce frictions between fibers and fibers and between fibers and metals without relating to the properties of a fiber base material and further remarkably lower needle penetration resistance in sewing works.

IPC 1-7  
**D06M 13/165**

IPC 8 full level  
**D06M 13/02** (2006.01); **D06M 13/165** (2006.01); **D06M 13/224** (2006.01); **D06M 13/51** (2006.01); **D06M 13/513** (2006.01); **D06M 15/53** (2006.01)

CPC (source: EP KR US)  
**D06M 15/53** (2013.01 - EP KR US); **Y10T 428/2933** (2015.01 - EP US); **Y10T 428/2938** (2015.01 - EP US); **Y10T 428/2964** (2015.01 - EP US); **Y10T 428/2969** (2015.01 - EP US); **Y10T 428/2971** (2015.01 - EP US)

Cited by  
WO2004063456A1

Designated contracting state (EPC)  
CH DE ES FR GB IT LI

DOCDB simple family (publication)  
**EP 0312677 A2 19890426**; **EP 0312677 A3 19900418**; **EP 0312677 B1 19921125**; BR 8800843 A 19890523; CA 1322623 C 19930928; DE 3734931 A1 19890503; DE 3876210 D1 19930107; ES 2043698 T3 19940101; JP H01111065 A 19890427; KR 890006911 A 19890616; TR 24322 A 19910912; US 4883604 A 19891128

DOCDB simple family (application)  
**EP 88102420 A 19880219**; BR 8800843 A 19880226; CA 559851 A 19880225; DE 3734931 A 19871015; DE 3876210 T 19880219; ES 88102420 T 19880219; JP 4734188 A 19880227; KR 880002046 A 19880227; TR 15488 A 19880226; US 15962188 A 19880223