

Title (en)
Use of polymers as anti-misting additive in waterbased coolant lubricants

Title (de)
Verwendung von Polymeren als Anti-Nebel-Additiv in wasserbasierenden Kühlschmierstoffen

Title (fr)
Utilisation de polymères comme additifs anti-embruns dans les lubrifiants aqueux de refroidissement

Publication
EP 1067169 A1 20010110 (DE)

Application
EP 00113202 A 20000621

Priority
DE 19931219 A 19990706

Abstract (en)
The use of anti-misting agents in water-based cooling lubricants of 0.01-2 wt.% of copolymers containing units derived from N-vinyl acyl compounds and units derived from acrylamido sulfonic acids is new Use is claimed as anti-misting agents in water-based cooling lubricants of 0.01-2 wt.% of copolymers containing units derived from N-vinyl acyl compounds of formula (I) and units derived from acrylamido sulfonic acids of formula (II) R<1> and R<2> = H or 1-4C alkyl or form a 5-8-membered ring containing the N-CO group as well as other heteroatoms; R<3> = H or 1-4C alkyl; R<4> = 1-6C alkylene; and Y = alkali metal or ammonium

Abstract (de)
Verwendung von Copolymeren, welche Struktureinheiten enthalten, die sich aus den Verbindungen der Formeln 1 und 2 ableiten <IMAGE> worin R<1> und R<2>: H, C1-C4-Alkyl oder unter Einschluß der N-CO-Gruppe einen Ring von 5, 6, 7 oder 8 Ringatomen bilden, der neben der N-CO-Gruppe weitere Heteroatome umfassen kann, R<3>: H oder C1-C4-Alkyl, R<4>: einen verzweigten oder unverzweigten C1-C6-Alkylrest und; Y: ein Alkalimetall oder Ammonium bedeuten, in Mengen von 0,01 bis 2 Gew.-% zur Verhinderung der Nebelbildung in wasserbasierenden Kühlschmierstoffen.

IPC 1-7
C10M 173/00; **C10M 151/02**

IPC 8 full level
C08F 220/58 (2006.01); **C08F 226/02** (2006.01); **C08F 226/06** (2006.01); **C08F 246/00** (2006.01); **C10M 149/04** (2006.01); **C10M 149/06** (2006.01); **C10M 149/10** (2006.01); **C10M 151/02** (2006.01); **C10M 173/00** (2006.01); **C10N 10/02** (2006.01); **C10N 20/04** (2006.01); **C10N 30/00** (2006.01); **C10N 40/22** (2006.01)

CPC (source: EP US)
C10M 145/10 (2013.01 - EP US); **C10M 149/04** (2013.01 - EP US); **C10M 149/06** (2013.01 - EP US); **C10M 149/10** (2013.01 - EP US); **C10M 151/02** (2013.01 - EP US); **C10M 173/00** (2013.01 - EP US); **C10M 2201/02** (2013.01 - EP US); **C10M 2207/18** (2013.01 - EP US); **C10M 2209/08** (2013.01 - EP US); **C10M 2209/107** (2013.01 - EP US); **C10M 2215/042** (2013.01 - EP US); **C10M 2215/12** (2013.01 - EP US); **C10M 2215/222** (2013.01 - EP US); **C10M 2217/022** (2013.01 - EP US); **C10M 2217/024** (2013.01 - EP US); **C10M 2217/028** (2013.01 - EP US); **C10M 2221/02** (2013.01 - EP US); **C10M 2229/045** (2013.01 - EP US); **C10M 2229/046** (2013.01 - EP US); **C10M 2229/047** (2013.01 - EP US); **C10M 2229/048** (2013.01 - EP US); **C10N 2040/22** (2013.01 - EP US); **C10N 2050/01** (2020.05 - EP US)

Citation (search report)
• [XY] EP 0629649 A1 19941221 - SOFITECH NV [BE]
• [XY] EP 0483638 A1 19920506 - HOECHST AG [DE]
• [X] US 5693698 A 19971202 - PATEL BHARAT B [US], et al
• [X] US 4309523 A 19820105 - ENGELHARDT FRIEDRICH, et al
• [Y] US 4536539 A 19850820 - LUNDBERG ROBERT D [US], et al

Designated contracting state (EPC)
BE DE ES FR GB IT

DOCDB simple family (publication)
EP 1067169 A1 20010110; **EP 1067169 B1 20060823**; CA 2313568 A1 20010106; DE 19931219 A1 20010118; DE 19931219 C2 20010607; DE 50013346 D1 20061005; ES 2270761 T3 20070416; JP 2001059096 A 20010306; US 6462000 B1 20021008

DOCDB simple family (application)
EP 00113202 A 20000621; CA 2313568 A 20000705; DE 19931219 A 19990706; DE 50013346 T 20000621; ES 00113202 T 20000621; JP 2000203894 A 20000705; US 61101800 A 20000706