

Title (en)

DERIVATIZED POLYMERS OF ALPHA-OLEFIN-MALEIC ANHYDRIDE ALKYL HALF-ESTER OR FULL ACID

Title (de)

POLYMERDERIVATE DER ALPHA-OLEFIN-MALEINSÄURE-ANHYDRID-HALBESTER ODER DER VOLLEN SÄURE

Title (fr)

POLYMERES DERIVATISES D'ALKYL-SEMI-ESTER D'ANHYDRIDE ALPHA-OLEFINE-MALEIQUE OU DE L'ACIDE TOTAL

Publication

EP 1098877 A4 20050112 (EN)

Application

EP 99920192 A 19990429

Priority

- US 9909430 W 19990429
- US 10338698 A 19980624
- US 10385698 A 19980624
- US 10430998 A 19980624

Abstract (en)

[origin: WO9967216A1] What is described herein are derivatized polymers of alpha -olefin-maleic anhydride alkyl half-ester or full acid, preferably the isobutylene compound, optionally with repeat units of maleamic acid and/or its corresponding maleimide therein. These polymers are useful as fixatives in personal care products, such as hair spray compositions, particularly as one-phase, low VOC formulations in pump and aerosol systems, and in anhydrous, alcoholic, aqueous-alcoholic and in high hydrocarbon tolerant solvent formulations. In use, these hair spray compositions dry down to form clear, continuous and defectless films.

IPC 1-7

C07D 207/40; **A61K 7/06**; **A61K 31/74**; **C08F 8/32**

IPC 8 full level

C07D 207/40 (2006.01); **A61K 8/00** (2006.01); **A61K 31/74** (2006.01); **A61Q 5/00** (2006.01); **A61Q 5/02** (2006.01); **C08F 8/32** (2006.01); **C08F 22/02** (2006.01); **C08F 22/16** (2006.01); **C08F 22/40** (2006.01)

CPC (source: EP)

A61K 8/8164 (2013.01); **A61Q 5/06** (2013.01); **C08F 8/32** (2013.01)

Citation (search report)

- [X] EP 0654486 A2 19950524 - TOSOH CORP [JP]
- [X] EP 0154177 A2 19850911 - BAYER AG [DE]
- [A] DE 3319014 A1 19841129 - BAYER AG [DE]
- [A] DE 2416117 A1 19751030 - TEXACO DEVELOPMENT CORP
- [A] DE 3644656 A1 19870702 - UBE INDUSTRIES [JP]
- [PX] US 5886194 A 19990323 - ULMER HERBERT W [US], et al
- See references of WO 9967216A1

Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 9967216 A1 19991229; AU 3774999 A 20000110; CA 2334307 A1 19991229; EP 1098877 A1 20010516; EP 1098877 A4 20050112; JP 2002518554 A 20020625

DOCDB simple family (application)

US 9909430 W 19990429; AU 3774999 A 19990429; CA 2334307 A 19990429; EP 99920192 A 19990429; JP 2000555870 A 19990429