

Title (en)  
USE OF A POLYMER REACTION PRODUCT

Title (de)  
VERWENDUNG EINES POLYMEREN UMSETZUNGSPRODUKTS

Title (fr)  
UTILISATION D'UN PRODUIT DE REACTION POLYMERE

Publication  
**EP 1294786 A2 20030326 (DE)**

Application  
**EP 01951584 A 20010613**

Priority  
• DE 10029694 A 20000616  
• EP 0106712 W 20010613

Abstract (en)  
[origin: DE10029694A1] A wide variety of uses is claimed for (A) products obtained by reaction under radical-forming conditions of a mixture containing a radically-convertible monomer and a specified radical; and (B) products obtained by reaction under radical-forming conditions of product (A) above in presence of a radically homo- or co-polymerizable monomer. Use is claimed as per (i)-(x) below of (A) products obtained by reaction under radical-forming conditions of a mixture containing a radically-convertible monomer and a radical of formula (I); and (B) products obtained by reaction under radical-forming conditions of product (A) above in presence of a radically homo- or co-polymerizable monomer. R1 - R3 = H, Me or a radical-stabilizing or sterically-suitable group comprising optionally substituted  $\backslash$ -2C alkyl, cycloalkyl, alcohol-, ether-, polyether-, amine- or aralkyl-residue, optionally substituted aromatic, heterocyclic or olefinic hydrocarbon, halogen, optionally substituted alkenyl or alkynyl, -C(O)R5, -C(O)OR5, -CR5R6-O-R7, -OC(O)R5, -CN, -O-CN, -S-CN, -OC:NR5, -SC:NR5, -O-CR5R6-CR7R8NR9R10, -NCO, -C:NR5, -CR5R6Hal, -C(S)R5, -CR5R6P(O)R7R8, -CR5R6-PR7R8, -CR5R6-NR7R8, -CR5R6(OR7)(OR8), -CR5R6(NR7)(NR8), -CR5R6(NR7)(NR8), an acid anhydride-, acetal-, ketal-, SO2R5- or amidine group, -NR5C(S)NR6, -NR5C(S)OR6, -NCS, -NO2, -N(R5):N(R6), -PR5R6R7, -OSiR5R6R7 or -SiR5R6R7, with  $\backslash$ -2 of R1 - R3 being such a radical-stabilizing or sterically-suitable group; and R5 - R10 = as for R1 - R4 (sic) as above or  $\backslash$ -2 of R1 - R4 (sic) = an optionally substituted 4-7C ring optionally containing one or more heteroatoms. The uses are as (i) components of coating materials (especially lacquers or paints), toners, cosmetics, resins, papermaking retention agents, pharmaceuticals or cosmetics solubilizers, disinfectants, elastomeric binders for printing plates, water-soluble adhesives, films, moldings, foams, fibers, solid or liquid adhesives, plastics for automobile construction, household or leisure goods, traffic signs, window profiles, lampshades, garden furniture, boats, surf-boards, children's toys, packaging, massage devices or housings for such devices, medical devices, information-processing and -transmitting devices, flat wall elements, transport containers, housings for electrical equipment, moldings for construction use or lattice coverings; (ii) incrustation inhibitors or soil-release polymers for detergents; (iii) filtration aids for purification or clarification; (iv) dispersants, especially for ink-jet pigments; (v) aids for tableting matrices and for cement flow; (vi) biodegradable polymers eg for use in implants, surgical thread or waste bags; (vii) adhesives for floor coverings; (viii) thickeners for (largely) aqueous systems; (ix) dye transfer inhibitors in solid or liquid formulations; or (x) materials for imparting a self-cleaning (ie lotus) effect to the surfaces of articles.

IPC 1-7  
**C08F 293/00**; **C08F 2/38**

IPC 8 full level  
**C08F 2/00** (2006.01); **C08F 4/00** (2006.01); **C08F 293/00** (2006.01)

CPC (source: EP US)  
**C08F 293/00** (2013.01 - EP US); **C08K 3/20** (2013.01 - US)

Citation (search report)  
See references of WO 0196408A2

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)  
**DE 10029694 A1 20011220**; AU 7247001 A 20011224; EP 1294786 A2 20030326; US 2003170306 A1 20030911; US 7008990 B2 20060307; WO 0196408 A2 20011220; WO 0196408 A3 20020404

DOCDB simple family (application)  
**DE 10029694 A 20000616**; AU 7247001 A 20010613; EP 0106712 W 20010613; EP 01951584 A 20010613; US 31137803 A 20030421