

Title (en)

PROCESS FOR THE PREPARATION OF COPOLYMERS AND COATING COMPOSITIONS, SUCH AS BINDERS FOR LACQUERS, THAT ARE DISSOLVABLE IN ORGANIC SOLVENTS AND THAT CONTAIN HYDROXYL GROUPS

Publication

EP 0000608 B1 19810708 (DE)

Application

EP 78200107 A 19780718

Priority

DE 2732693 A 19770720

Abstract (en)

[origin: EP0000608A1] 1. A process for the manufacture of copolymers which contain hydroxyl groups and are soluble in organic solvents by copolymerisation in organic solvents of acrylic and/or methacrylic acid, alkyl acrylates and optionally additional ethylenically unsaturated copolymerisable monomers while simultaneously esterifying with glycidyl esters of alpha-alkylalkane-monocarboxylic acids and/or alpha,alpha-dialkylalkanemonocarboxylic acids of the general formula C12-14 H22-26 O3 by heating in the presence of a polymerisation initiator, characterized in that a mixture A), consisting of an inert organic solvent and a) 10 to 45% by weight of the glycidyl esters is heated to a temperature in the range from 90 to 200 degrees C, and reacted with a mixture B), consisting of b) 2 to 15% by weight of acrylic and/or methacrylic acid, c) 5 to 25% by weight of the hydroxyalkyl acrylates and/or hydroxyalkyl methacrylates, preferably containing 2 to 4 carbon atoms in the alkyl group d) 20 to 78% by weight of the alkyl acrylates and/or alkyl methacrylates, preferably containing 1 to 8 carbon atoms in the alkyl group, e) 5 to 30% by weight of unsaturated fatty acids with 11 to 22 carbon atoms and an iodine number of 90 to 240, optionally f) additional ethylenically unsaturated copolymerisable monomers, and g) 0 to 20% by weight, preferably 0 to 10% by weight of saturated fatty acids, the components a), b), c), d), e) and optionally f) and g) being employed in such quantities that their sum add up to 100% by weight.

IPC 1-7

C08F 220/32; **C09D 3/80**; **C08G 18/62**

IPC 8 full level

C08F 220/04 (2006.01); **C08F 220/12** (2006.01); **C08F 220/28** (2006.01); **C08F 220/32** (2006.01); **C08F 220/64** (2006.01); **C08G 18/62** (2006.01); **C09D 133/04** (2006.01)

CPC (source: EP)

C08F 220/04 (2013.01); **C08F 220/12** (2013.01); **C08F 220/64** (2013.01); **C08G 18/6254** (2013.01); **C08G 18/6258** (2013.01); **C09D 133/04** (2013.01); **C08F 220/20** (2013.01)

Cited by

US4988766A; US6136443A; EP0680977A1; EP0225809A3; US4818796A; GB2172292A; US4741932A; US6306505B1; EP0027931B1

Designated contracting state (EPC)

DE FR GB NL SE

DOCDB simple family (publication)

EP 0000608 A1 19790207; **EP 0000608 B1 19810708**; DE 2732693 A1 19790125; DE 2732693 B2 19790816; DE 2732693 C3 19800417; DE 2860820 D1 19811015

DOCDB simple family (application)

EP 78200107 A 19780718; DE 2732693 A 19770720; DE 2860820 T 19780718