

Title (en)

PROCESS FOR COATING OBJECTS USING RADIATION-HARDENABLE POWDER COATINGS

Title (de)

VERFAHREN ZUR LACKIERUNG VON GEGENSTÄNDEN UNTER VERWENDUNG STRAHLUNGSHÄRTBARER PULVERLACKE

Title (fr)

PROCEDE DE MISE EN PEINTURE D'OBJETS AU MOYEN DE PEINTURES EN POUDRE DURCISSANT AUX RAYONNEMENTS

Publication

EP 0873196 A1 19981028 (DE)

Application

EP 96944676 A 19961230

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- EP 9605864 W 19961230

Abstract (en)

[origin: DE19600147A1] The invention relates to a process for coating objects using polymer-containing powder coatings which are applied to the surface of the substrate, melted and cross-linked by exposure to UV radiation. The polymers used are copolymers containing the following: (a) at least one monomer of general formula (I) $\text{CH}_2=\text{C}(\text{R}_{<1>})-\text{CO}-\text{OR}_{<2>}$, in which $\text{R}_{<1>}$ is H or CH_3 and $\text{R}_{<2>}$ is H, $\text{C}_n\text{H}_{2n+1}$, n being 1-30, an alicyclic, araliphatic or heterocyclic group or hydroxyalkyl, alkoxyalkyl, glycidyl or aminoalkyl group, or of general formula (II) $\text{CH}_2=\text{C}(\text{R}_{<1>})-\text{CO}-\text{NR}_{<3>\text{R}_{<4>}}$, in which $\text{R}_{<1>}$ is H or CH_3 , $\text{R}_{<3>}$ and $\text{R}_{<4>}$ can be identical or different and stand for H, CH_2OH or $\text{C}_n\text{H}_{2n+1}$, n being 1-30, or $\text{CH}_2\text{OR}_{<5>}$, $\text{R}_{<5>}$ being $\text{C}_m\text{H}_{2m+1}$ and m being 1-12; and (b) at least one copolymerisable ethylenically unsaturated organic compound of general formula (A), in which R' and R'' can be identical or different and stand for H, $\text{C}_p\text{H}_{2p+1}$, p being 1-6, cycloalkyl, aryl or aralkyl and R''' stands for an acryloyl, methacryloyl, ethacryloyl or cinnamoyl group, this compound being partially replaceable by one or more other copolymerisable ethylenically unsaturated organic compounds different from (a).

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