

Title (en)

METHOD FOR UV CURING OF WATER-BASED POLYURETHANE PAINT DISPERSIONS WITHOUT UV-C-ACTIVATABLE SURFACE INITIATORS

Title (de)

VERFAHREN ZUR UV-HÄRTUNG VON WÄSSRIGEN POLYURETHANLACKDISPERSIONEN OHNE UV-C-AKTIVIERBARE OBERFLÄCHENINITIATOREN

Title (fr)

PROCÉDÉ DE SÉCHAGE UV DE DISPERSIONS DE PEINTURE DE POLYURÉTHANE À BASE D'EAU SANS INITIATEURS DE SURFACE POUVANT ÊTRE ACTIVÉS PAR UV-C

Publication

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Application

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Abstract (en)

[origin: WO2022043180A1] The invention relates to a method for producing a paint coating on a substrate by UV curing of a water-based paint formulation comprising an aqueous dispersion of urethane (meth)acrylates, said method comprising the steps in the sequence (i) to (iv): (i) applying the paint formulation comprising the aqueous dispersion of urethane (meth)acrylates to the substrate; (ii) drying the paint formulation; (iii) curing the dried paint formulation by irradiating with UV-C radiation in the 180 to 280 nm wavelength range, affording an at least partially cured paint film; (iv) optionally irradiating the at least partially cured paint film with UV radiation having a wavelength of ≥ 350 nm for further curing of the paint film; wherein the total content in the paint formulation of photoinitiators activatable by UV radiation having a wavelength of < 350 nm is $< 0.01\%$ by weight based on the solids content of the paint formulation.

IPC 8 full level

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CPC (source: EP)

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