

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
26 April 2001 (26.04.2001)

PCT

(10) International Publication Number
WO 01/29103 A1

- (51) International Patent Classification⁷: C08F 290/04, C09D 167/00, 175/16, 3/00
- (21) International Application Number: PCT/EP00/10411
- (22) International Filing Date: 17 October 2000 (17.10.2000)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
99203431.4 19 October 1999 (19.10.1999) EP
- (71) Applicant: AKZO NOBEL N.V. [NL/NL]; Velperweg 76, NL-6824 BM Arnhem (NL).
- (74) Agent: SCHALKWIJK, Pieter, Cornelis; Akzo Nobel N.V., Intellectual Property Dept. (Dept. AIP), P.O. Box 9300, NL-6800 SB Arnhem (NL).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
- Published:
— With international search report.
- (72) Inventors: KJELLQVIST LINDELL, Ann, Kerstin, Birgitta; Linneg 131, S-216 18 Malmö (SE). KRUTHOF, Klass, Jan, Hendrik; Dubussystraat 3, NL-3906 BK Veenendaal (NL). SORESEN, Kent, Raabjerg; Ronnvagen 4, S-284 35 Perstorp (SE).
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: RADIATION CURABLE HOT MELT COMPOSITION AND A PROCESS FOR THE APPLICATION THEREOF

(57) Abstract: The invention relates to a radiation curable hot melt composition comprising: a) 20 to 100 wt.% of a radiation curable resin or a mixture of radiation curable resins having a viscosity in the range from 15 to 10,000 mPas in the temperature range from 40 to 150 °C, b) 0 to 50 wt.% of a hydroxyfunctional resin or oligomer or a mixture of hydroxyfunctional resins or oligomers, c) 0 to 10 wt.% of a photoinitiator, d) 0 to 50 wt.% of fillers and/or additives, and e) 0 to 40 wt.% of pigment, wherein the total amount of components a) to e) adds up to 100 wt.%. The invention further relates to a process for the coating of a substrate with such radiation curable hot melt composition. In this process the composition is heated to a temperature in the range from 40 to 150 °C, is applied to the substrate, and then the coated substrate is exposed to electromagnetic radiation having a wavelength $\lambda \leq 500$ nm.