



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶: B41M 5/30, G03C 1/73, G03F 7/004	A1	(11) International Publication Number: WO 95/29068 (43) International Publication Date: 2 November 1995 (02.11.95)
(21) International Application Number: PCT/US95/05130 (22) International Filing Date: 25 April 1995 (25.04.95) (30) Priority Data: 08/232,725 25 April 1994 (25.04.94) US (71) Applicant: POLAROID CORPORATION [US/US]; 549 Technology Square, Cambridge, MA 02139-3589 (US). (72) Inventors: GAUDIANA, Russell, A.; 2 Penrose Lane, Merrimack, NH 03054 (US). HADDOCK, Robert, W.; 128 Hawthorne Street, Malden, MA 02148 (US). MARSHALL, John, L.; 26 Gorham Street, Somerville, MA 02144 (US). TAKIFF, Larry, C.; 14 Trowbridge Street, Arlington, MA 02174 (US). TELFER, Stephen, J.; 74 Windsor Street, Arlington, MA 02174 (US). YOUNG, Michael, A.; 22 Farm Hill Road, Natick, MA 01760 (US). (74) Agent: COLE, David, John; Polaroid Corporation, 549 Technology Square, Cambridge, MA 02139-3589 (US).		(81) Designated States: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TT, UA, UG, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG), ARIPO patent (KE, MW, SD, SZ, UG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
(54) Title: IMAGING MEDIUM AND PROCESS (57) Abstract A process for producing an image uses an imaging medium comprising an acid-generating layer or phase comprising a mixture of a superacid precursor, a sensitizing dye and a secondary acid generator, and a color-change layer comprising an image dye. The sensitizing dye has first and second forms, the first form having substantially greater substantial absorption in a first wavelength range than the second form. The superacid precursor is capable of being decomposed to produce superacid by radiation in a second wavelength range, but is not, in the absence of the sensitizing dye, capable of being decomposed by radiation in the first wavelength range. The secondary acid generator is capable of acid-catalyzed thermal decomposition by unbuffered superacid to form a secondary acid. While at least part of the sensitizing dye is in its first form, the medium is imagewise exposed to radiation in the first wavelength range, thereby causing, in the exposed areas of the acid-generating layer, the formation of unbuffered superacid. The medium is then heated to cause, in the exposed areas, acid-catalyzed thermal decomposition of the secondary acid generator and formation of the secondary acid. The components of the acid-generating and color-change layers or phases are then mixed so that the secondary acid causes a change in color of the image dye, and the sensitizing dye is converted to its second form. The acid-generating layer or phase desirably includes a cosensitizer which is a reducing agent less basic than the secondary acid generator.		

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