

12 SEP 2003

2003050820

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
10 October 2002 (10.10.2002)

PCT

(10) International Publication Number
WO 02/079566 A1

(51) International Patent Classification⁷: **D06P 1/16**

(21) International Application Number: PCT/US02/09784

(22) International Filing Date: 29 March 2002 (29.03.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/823,290 29 March 2001 (29.03.2001) US
10/084,262 26 February 2002 (26.02.2002) US

(71) Applicant (for all designated States except US): **FRESCO PLASTICS LLC** [US/US]; 5680 Carmel Valley Road, P.O. Box 22757, Carmel Valley, CA 93923 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MAGEE, Ted, N.** [US/US]; 303 Brush Creek Road, Warrendale, PA 15086 (US). **DRAKE, Jonathan, C.** [US/US]; P.O. Box 4628, Carmel, CA 93921 (US). **ESSERT, Rick** [US/US]; 124 Belle Drive, Marina, CA 93933 (US). **SHAW, Robert, W.** [US/US]; Shaw-Almex USA, Inc., 3529-H Church Street, Clarkston, GA 30021 (US).

(74) Agent: **OLYNICK, Mary, R.**; BEYER WEAVER & THOMAS, LLP, P.O. Box 778, Berkeley, CA 94704-0778 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, 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, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, 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, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- entirely in electronic form (except for this front page) and available upon request from the International Bureau

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.



162162



ACTION

WO 02/079566 A1

(54) Title: METHOD AND APPARATUS FOR CONTINUOUSLY FORMING DYE SUBLIMATION IMAGES IN SOLID SUBSTRATES

(57) Abstract: A method for forming a dye sublimation image in a substrate with a dye carrier having an image formed thereon of a sublimatic dyestuff is provided. The image of the dye carrier is placed against a first surface of the substrate. The substrate and dye carrier are conveyed along a path with a first part and a second part. A continuous pressure is provided against the first surface of the substrate in the first part and second part of the path and therebetween. The dye carrier is heated to a sublimation temperature in the first part of the path. The dye carrier is then cooled to a depressure temperature in the second part of the path.