



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

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (51) International Patent Classification <sup>6</sup> :<br><b>B41C 1/14</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>A1</b> | (11) International Publication Number: <b>WO 99/02344</b><br>(43) International Publication Date: 21 January 1999 (21.01.99)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <p>(21) International Application Number: <b>PCT/GB97/01881</b></p> <p>(22) International Filing Date: 11 July 1997 (11.07.97)</p> <p>(71) Applicant (for all designated States except US): <b>AUTOTYPE INTERNATIONAL LIMITED [GB/GB];</b> Grove Road, Wantage, Oxfordshire OX12 7BX (GB).</p> <p>(72) Inventors; and<br/>(75) Inventors/Applicants (for US only): <b>FOSTER, David, Joseph [GB/GB];</b> 47 Wootton Bassett Road, Swindon, Wiltshire SN1 4NQ (GB). <b>HARRIS, Anna, Jane [GB/GB];</b> 5 Grosvenor Terrace, Challow Road, Wantage, Oxfordshire OX12 9DX (GB).</p> <p>(74) Agent: <b>ACKROYD, Robert; W.P. Thompson &amp; Co.,</b> Eastcheap House, Central Approach, Letchworth, Hertfordshire SG6 3DS (GB).</p>                                                                                                                                                                                                                                                               |           | <p>(81) Designated States: <b>AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, 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).</b></p> <p>Published<br/>With international search report.</p> |
| <p>(54) Title: <b>SCREEN PRINTING STENCIL PRODUCTION</b></p> <div data-bbox="331 1220 1324 1534"> </div> <p>(57) Abstract</p> <p>A screen printing stencil is produced chemically by application of a chemical agent (4) to a carrier (2) having an image-receiving layer (1). The chemical agent (4) is applied dropwise using a computer-controlled ink-jet printer. The carrier is then brought into contact with a stencil-forming agent (6) on a screen printing mesh (5), whereby the chemical agent reacts with the stencil-forming agent to harden the stencil in areas which remain upon subsequent wash-out. The stencil so produced can be used for screen printing in the usual way. In a variant, the chemical agent reacts with the carrier and excess chemical agent remains to react with the stencil-forming agent. A part of the carrier is thereby incorporated into the stencil improving its profile. The method avoids the use of safe light and actinic radiation.</p> |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |