



(51) International Patent Classification:

B41M 1/12 (2006.01) **B42D 15/00** (2006.01)
B41M 3/00 (2006.01) **D21H 21/42** (2006.01)
B41M 3/14 (2006.01)

(21) International Application Number:

PCT/EP2011/053148

(22) International Filing Date:

3 March 2011 (03.03.2011)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

PCT/IB2010/000435 3 March 2010 (03.03.2010) IB

(71) Applicant (for all designated States except US): **SICPA HOLDING SA** [CH/CH]; Avenue de Florissant 41, CH-1008 Prilly (CH).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **DEGOTT, Pierre** [FR/CH]; Chemin des Falaises 15, CH-1023 Crissier (CH). **DESPLAND, Claude-Alain** [CH/CH]; Chemin de la Cure 8, CH-1008 Prilly (CH). **SCHMID, Mathieu** [CH/CH]; Rue du Vallon 10, CH-1005 Lausanne (CH). **RITTER, Gebhard** [DE/CH]; Chemin A.-Pidou 3, CH-1007 Lausanne (CH). **MÜLLER, Edgar** [CH/CH]; Rue P.-A. de Faucigny 7, CH-1700 Fribourg (CH).

(74) Agent: **BUBLAK, Wolfgang**; Bardehle Pagenberg Dost Altenburg Geissler, Galileiplatz 1, 81679 München (DE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

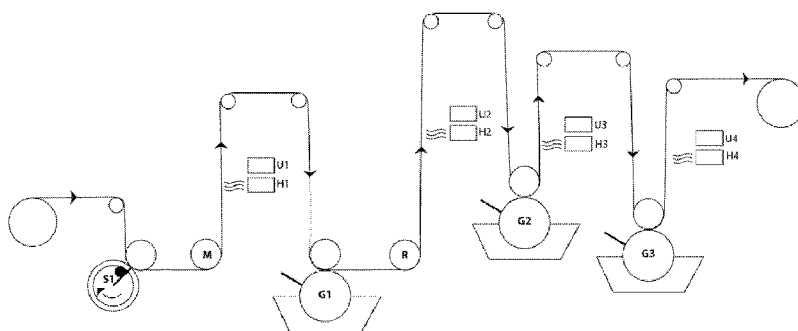
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: SECURITY THREAD OR STRIPE COMPRISING ORIENTED MAGNETIC PARTICLES IN INK, AND METHOD AND MEANS FOR PRODUCING SAME

Figure 5



(57) Abstract: The present invention concerns a security thread or stripe for the incorporation into or onto a value-document or currency substrate, as well as a method and means of making such thread or stripe. The thread or stripe comprises a plastic foil which carries a hardened coating comprising oriented magnetic or magnetizable pigment particles, the orientation of said pigment particles representing graphic information. Preferred are optically variable magnetic or magnetizable pigment particles. Said hardened coating may also be comprised between a first and a second plastic foil. Said graphic information is a repetitive seamless pattern of suitable repetition length, which is produced using a magnetic orienting cylinder having a corresponding repetitive seamless magnetic field pattern. A magnetic orienting cylinder and a process for producing such magnetic orienting cylinder are also disclosed. The process comprises the coating of a cylindrical support body with a polymer material comprising a high-coercivity permanent-magnetic powder as a filler material, and magnetizing or engraving the seamless outer cylinder surface to form on the cylinder a repetitive seamless magnetic field pattern.