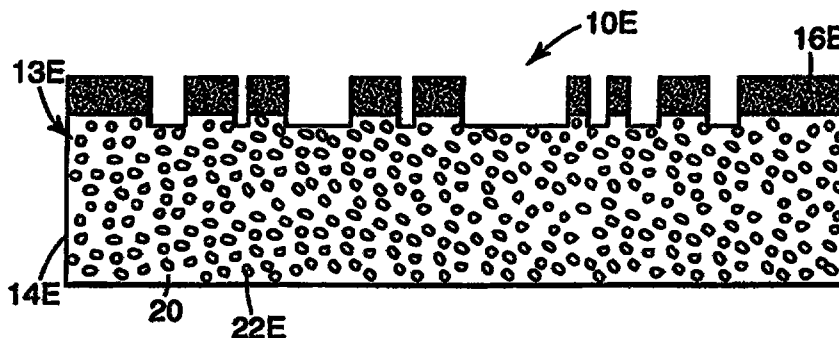




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : G09F 3/02	A1	(11) International Publication Number: WO 99/36901 (43) International Publication Date: 22 July 1999 (22.07.99)
(21) International Application Number: PCT/US98/10300 (22) International Filing Date: 20 May 1998 (20.05.98) (30) Priority Data: 09/007,531 15 January 1998 (15.01.98) US (71) Applicant: MINNESOTA MINING AND MANUFACTURING COMPANY [US/US]; 3M Center, P.O. Box 33427, Saint Paul, MN 55133-3427 (US). (72) Inventors: MOH, Kyung, H.; P.O. Box 33427, Saint Paul, MN 55133-3427 (US). LOCAYE, Daniel; P.O. Box 33427, Saint Paul, MN 55133-3427 (US). SUEOSS, Bernardus, M.; P.O. Box 33427, Saint Paul, MN 55133-3427 (US). (74) Agents: FEULNER, Gregory, J. et al.; Minnesota Mining and Manufacturing Company, Office of Intellectual Property Counsel, P.O. Box 33427, Saint Paul, MN 55133-3427 (US).	(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, 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, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, 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, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>	

(54) Title: MULTILAYER, TEMPERATURE RESISTANT, COMPOSITE LABEL



(57) Abstract

A composite material suitable for labeling a substrate. The composite material, which is preferably a ceramic composite, comprises a fired ceramic body and a layer thereon. The fired ceramic body includes a base layer that comprising a glassy phase and a refractory phase, the glassy phase being capable of wetting a substrate at an application temperature. There is sufficient color contrast between the top layer and the fired ceramic body such that a code pattern (e.g., a bar code) present (or formed) is optically discernible. Methods of making and using the same are also taught.