

**PCT**WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶: H01F 27/32, 5/02, 19/08	A1	(11) International Publication Number: WO 99/63556 (43) International Publication Date: 9 December 1999 (09.12.99)
(21) International Application Number: PCT/GB99/01492 (22) International Filing Date: 28 May 1999 (28.05.99) (30) Priority Data: 9811545.4 30 May 1998 (30.05.98) GB (71) Applicant (for all designated States except US): ELECTRONIC TECHNIQUES (ANGLIA) LIMITED [GB/GB]; 10 Betts Avenue, Martlesham Heath, Ipswich IP5 3RH (GB). (72) Inventor; and (75) Inventor/Applicant (for US only): McGRANE, Kevin [GB/GB]; 121 Westley Road, Bury St. Edmunds IP33 3SA (GB). (74) Agents: COPP, David, Christopher et al.; Dummett Copp, 25 The Square, Martlesham Heath, Ipswich IP5 3SL (GB).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, 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, 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, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, 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, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>
(54) Title: SAFETY ISOLATING TRANSFORMER		
(57) Abstract		
The present invention relates to a miniature safety isolating transformer (30), and in particular to a telephone line matching transformer suitable for bi-directional data transfer up to at least 56 kbps. The miniature safety isolating transformer (30), comprises a magnetic core (2) and a first winding (34) and a second winding (35) separated and electrically insulated by solid insulating means (29, 39) from each other and the core (2), in which a minimum of a separation (38) between the windings and a separation (28, 36, 37) from the first winding (34) to the core (2) defines a safety isolating distance (28, 36, 37, 38), the separation (31, 32, 33) from the second winding (35) to the core (2) being less than said safety isolating distance (28, 36, 37, 38).		