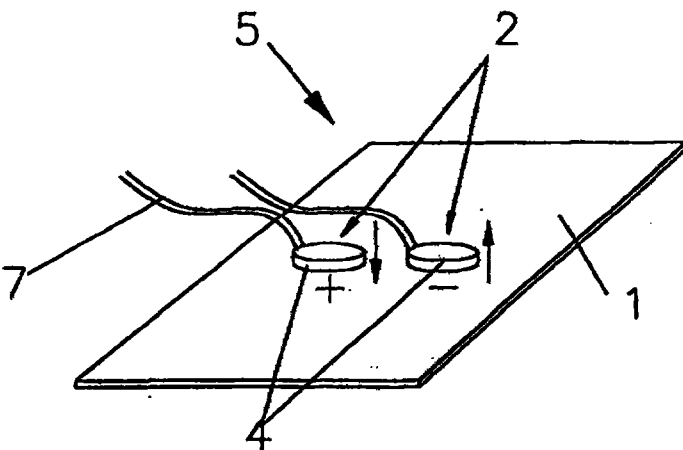


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| <b>(51) International Patent Classification <sup>7</sup>:</b><br><b>H04R 17/00; 7/04, 9/06</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>A1</b> | <b>(11) International Publication Number:</b> <b>WO 00/13464</b><br><b>(43) International Publication Date:</b> 9 March 2000 (09.03.00)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>(21) International Application Number:</b> PCT/GB99/02640<br><b>(22) International Filing Date:</b> 24 August 1999 (24.08.99)<br><br><b>(30) Priority Data:</b><br>9818719.8 28 August 1998 (28.08.98) GB<br><br><b>(71) Applicant (for all designated States except US):</b> NEW TRANSDUCERS LIMITED [GB/GB]; Ixworth House, 37 Ixworth Place, London SW3 3QH (GB).<br><br><b>(72) Inventors; and</b><br><b>(75) Inventors/Applicants (for US only):</b> BANK, Graham [GB/GB]; 1 Boartree Way, Huntingdon, Cambridgeshire PE18 6GL (GB). HARRIS, Neil [GB/GB]; 9 Davey Crescent, Great Shelford, Cambridge CB2 5JF (GB). MORECROFT, Denis [GB/GB]; 18 Dartmoor Drive, Huntingdon, Cambridgeshire PE18 8XT (GB).<br><br><b>(74) Agent:</b> MAGUIRE BOSS; 5 Crown Street, St Ives, Cambridgeshire PE17 4EB (GB). |           | <b>(81) Designated States:</b> AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, 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, NR, SN, TD, TG).<br><br><b>Published</b><br><i>With international search report.</i><br><i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> |
| <b>(54) Title:</b> LOUDSPEAKERS COMPRISING A RESONANT PANEL-FORM MEMBER<br><br><b>(57) Abstract</b><br><p>A loudspeaker comprising a resonant panel-form member adapted to produce an acoustic output and a vibration exciting system on the panel-form member and adapted to apply bending wave energy thereto, characterised in that the vibration exciting system is adapted to apply a bending couple to the panel-form member.</p>                                                                                                                                                                                                                                                                                        |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |