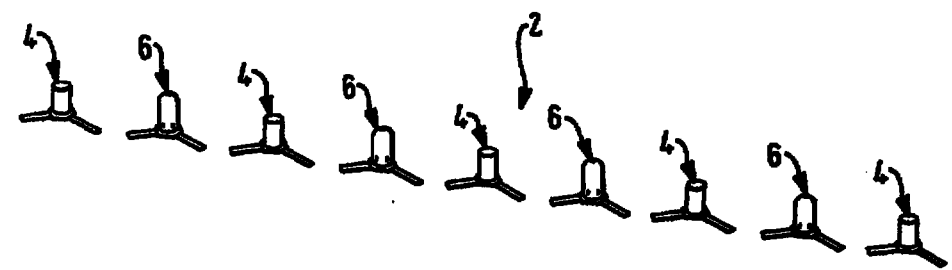


9900683-5

PCTWORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : G01V 3/08	A1	(11) International Publication Number: WO 98/58276 (43) International Publication Date: 23 December 1998 (23.12.98)
(21) International Application Number: PCT/GB98/01750 (22) International Filing Date: 16 June 1998 (16.06.98) (30) Priority Data: 9712521.5 16 June 1997 (16.06.97) GB (71) Applicant (for all designated States except US): ULTRA ELECTRONICS LIMITED [GB/GB]; Bridport Road, Greenford, Middlesex UB6 8UA (GB). (72) Inventor; and (75) Inventor/Applicant (for US only): WEBB, Geoffrey, John [GB/GB]; 26 Waterside Court, Gnosall, Stafford ST20 0AR (GB). (74) Agent: HOGG, Jeffrey, Keith; Withers & Rogers, 4 Dyer's Buildings, Holborn, London EC1N 2JT (GB).	(81) Designated States: AU, SG, US, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>	
(54) Title: ELECTRICAL POLARISATION DISTRIBUTION OF A VESSEL  (57) Abstract The invention relates to apparatus and method for determining the electric polarisation distribution of a vessel including a plurality of electric field or electric potential sensors (6) which are positioned in use underwater beneath the vessel, and processor means (48) operative to process electric measurements by the sensors (6) to determine the electric polarisation distribution of the vessel. The plurality of sensors (6), preferably between three and eight sensors, are arranged in a row, for example on the sea- or harbour- bed. The apparatus can be part of an electromagnetic range including a plurality of magnetic field sensors (4). The electric field sensors (6) and magnetic field sensors (4) are preferably arranged so as to be equidistant and in an alternating series along a row. The electric potential sensors (22) and magnetic field sensors (18) are preferably arranged along a row an electric potential sensor (22) mounted on each magnetic field sensor (18). A corrosion related magnetic (CRM) field is preferably determined from the electric polarisation deduced for the vessel.		