

Title (en)

OMNIDIRECTIONNAL PRINTED CYLINDRICAL ANTENNA AND MARINE RADAR TRANSPONDER USING SUCH ANTENNAS

Title (de)

Rundstrahlende, gedruckte Zylinderantenne und Seeradar-Antwortgerät mit derartigen Antennen

Title (fr)

ANTENNE CYLINDRIQUE IMPRIMEE OMNIDIRECTIONNELLE ET REPONDEUR RADAR MARITIME UTILISANT DE TELLES ANTENNES

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Application

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Abstract (en)

[origin: WO9217915A1] Omnidirectional printed cylindrical antenna consisting of a cylindrical substrate (1) in a dielectric material, the internal wall of which is coated with a metallic layer (2) forming a ground plane and the external wall of which receives the array elements (3), the latter being arranged in plurality of identical parallel sub-arrays (Ri) equidistant on a periphery of the substrate (1). The sub-arrays (Ri) are supplied in-phase, each sub-array (Ri) consisting of a rectilinear supply line (LR) which, on the cylindrical substrate (1) of the antenna is located on a generatrix of said cylinder, and a plurality of array elements (3) located alternately on either side of said supply line (LR) and supplied by said supply line (LR) so as to be able to transmit in-phase waves. The distance on the cylinder's periphery which separates the two adjacent sub-arrays (Ri and Ri+1) being at most equal to twice the maximum dimension on the periphery of the cylinder bearing the array elements (3). The said elements on one side of a sub-array are interlaced with the array elements (3) on the opposite side of an adjacent sub-array. The invention also concerns a marine radar transponder using such antennas.

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