

Title (en)  
PHASED-ARRAY ANTENNA WITH ELECTRONIC CONTROL

Publication  
**EP 0144867 B1 19911211 (DE)**

Application  
**EP 84114140 A 19841122**

Priority  
DE 3342698 A 19831125

Abstract (en)  
[origin: EP0144867A2] The systematic addition of the radiation components produced by the individual radiating elements (6) arranged in columns and lines, in the quantisation and grating lobe region, is prevented in the vertical plane by a statistical vertical shift of the columns with effect to one another, and/or is prevented in the horizontal plane by a statistical horizontal shift of the lines with respect to one another. In this arrangement, a phase correction must be carried out on the individual columns and lines such that the signals of the individual columns and lines add in the respectively directed main-beam direction. The invention is suitable, for example, as a means of reducing side-lobes in phased-array radar antennas.  
<IMAGE>

IPC 1-7  
**H01Q 3/38**

IPC 8 full level  
**H01Q 3/38** (2006.01); **H01Q 21/22** (2006.01)

CPC (source: EP)  
**H01Q 3/38** (2013.01); **H01Q 21/22** (2013.01)

Citation (examination)  
Johnson et al, Antenna Engineering Handbook, McGraw-Hill Books, Kap. 32, Seiten 21-22

Cited by  
DE102015226026A1; DE102015223482A1; DE102015223482B4; EP2237373A1; US8085209B2; WO2018112675A1; US10996309B2

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