



Europäisches Patentamt
European Patent Office
Office européen des brevets



Publication number:

0 387 445 A3

12

EUROPEAN PATENT APPLICATION

21 Application number: **89311450.4**

51 Int. Cl.⁵: **H01Q 9/38**

22 Date of filing: **06.11.89**

30 Priority: **16.03.89 US 324431**

43 Date of publication of application:
19.09.90 Bulletin 90/38

84 Designated Contracting States:
AT BE CH DE ES FR GB GR IT LI NL SE

88 Date of deferred publication of the search report:
20.03.91 Bulletin 91/12

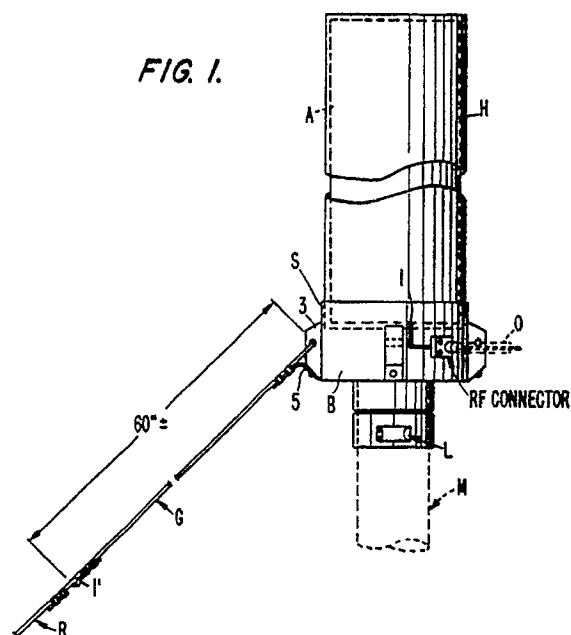
71 Applicant: **CHU ASSOCIATES INC**
P O Box 2387 Witcomb Avenue
Littleton Massachusetts(US)

72 Inventor: **Faigen, Ivan**
19 Highgate Road
Wayland MA(US)
Inventor: **Creaser, Charles**
South Merrimack Road
Hollis New Hampshire(US)

74 Representative: **Allsop, John Rowland**
Rowland Allsop & Co. Black Boy Yard 15
High Street
West Wycombe High Wycombe, Bucks. HP14
3AE(GB)

54 **Monopole antenna.**

57 An azimuthal omnidirectional communications mast-mounted antenna in which the monopole antenna (A) is encased in a dielectric cylinder (H) which is received in a conductive base cylinder (B), having a plurality of metallic conductive guy wires (G) of appropriate length, in turn extended by rope guy wires for support of the mast structure (M), and disposed about and radially depending at an acute angle from the outer surface of the base cylinder to form not only guying functions, but simultaneously to serve as an elevated radial ground plane for the antenna.



EP 0 387 445 A3



European
Patent Office

EUROPEAN SEARCH REPORT

Application Number

EP 89 31 1450

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
A	CH-A-4 741 64 (THOMSON HOUSTON) * Colum 1, lines 7-13,29-38; column 2, lines 7-11; main claim; subclaims 1,3; fig. * - - -	1,2,4	H 01 Q 9/38
A	NHK LABORATORIES NOTE, no. S-2, June 1965, pages 1-44; K. ENDO et al.: "A method of exciting a medium-wave broadcast antenna with arbitrarily desired current distribution" * Page 1, lines 5-7; page 2, lines 1-16; page 37, lines 6-9 * - - -	1,2	
A	PATENT ABSTRACTS OF JAPAN, vol. 5, no. 74 (E-57)[746], 16th May 1981; & JP-A-56 24 818 (DENKI KOGYO K.K.) 10-03-1981 * Whole article * - - -	1,4	
A,D	US-A-4 598 296 (I. FAIGEN et al.) * Column 2, lines 48-62; column 4, lines 6-19; claim 1; figures 1,2 * - - - - -	1,5	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			H 01 Q
Place of search		Date of completion of search	Examiner
The Hague		18 December 90	BUTLER N.A.
CATEGORY OF CITED DOCUMENTS			
X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document T: theory or principle underlying the invention		E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons ----- &: member of the same patent family, corresponding document	