

Title (en)  
Radiating high-frequency cable

Title (de)  
Strahlende Hochfrequenzleitung

Title (fr)  
Ligne haute fréquence rayonnante

Publication  
**EP 0547574 B1 19961009 (FR)**

Application  
**EP 92121385 A 19921216**

Priority  
FR 9115803 A 19911219

Abstract (en)  
[origin: US5291164A] The present invention concerns a high frequency radiating line for radiating electromagnetic energy in a frequency band and comprising at least one tubular conductor (23) surrounding a longitudinal axis (X) and having a plurality of apertures formed into a series of identical patterns (M1) repeated periodically with a period P along said line, characterized in that, when the operating frequency band is of the type  $(fr, (N+1)fr)$ , where fr is a given frequency and N is a positive integer greater than 1, each of said patterns (M1) comprises N apertures 0 to N-1 and satisfying the following equations: (\* CHEMICAL STRUCTURE \*) (\* CHEMICAL STRUCTURE \*) where: the index k is an integer such that  $1 \leq k \leq N-1$  and refers to the k'th aperture of one of said patterns (M1),  $z_k$  is the distance between said k'th aperture and first aperture (F0) of the pattern,  $a_k$  is the polarizability of the k'th aperture,  $a_0$  is the polarizability of the first aperture, (\* CHEMICAL STRUCTURE \*) (\* CHEMICAL STRUCTURE \*) where E(x) designates the integer part of x,  $p_k$  is an integer such that  $1 \leq p_k \leq N+1$ , said integers  $p_k$  being pairwise distinct, such that  $p_k < p_{k+1}$ , and different from  $p'$  and  $p''$ .

IPC 1-7  
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IPC 8 full level  
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Cited by  
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**EP 0547574 A1 19930623; EP 0547574 B1 19961009**; AU 2999892 A 19930624; AU 658028 B2 19950330; BR 9205051 A 19930622; DE 69214408 D1 19961114; DE 69214408 T2 19970220; FI 925725 A0 19921216; FI 925725 A 19930620; FR 2685549 A1 19930625; FR 2685549 B1 19940128; JP 2561786 B2 19961211; JP H06125219 A 19940506; US 5291164 A 19940301

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