

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'' .

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H01Q 13/20

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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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