

Title (en)

Microwave absorber employing acicular magnetic metallic filaments.

Title (de)

Mikrowellen-Absorbermaterial, das nadelförmige magnetische Metallfasern enthält.

Title (fr)

Matériau absorbant les micro-ondes contenant des filaments aciculaires métalliques et magnétiques.

Publication

EP 0380267 B1 19931027 (EN)

Application

EP 90300632 A 19900122

Priority

US 30242789 A 19890126

Abstract (en)

[origin: EP0380267A1] An electromagnetic radiation absorber is formed by dispersing into a dielectric binder acicular magnetic metallic filaments with an average length of about 10 μm or less, diameters of 0.1 μm or more, and aspect (length/diameter) ratios between 10:1 and 50:1. Preferably the average length is about 5 μm , the aspect ratios are between 10:1 and 25:1, and the dielectric binder is polymeric. The volume fraction of the filaments may be lower than 35% of the total and still provide satisfactory absorption. An absorbing paint is formed by dissolving the absorber in a base liquid. The absorber or absorbing paint may be applied to a conductive surface, such as a metallic wire, plate or foil. Impedance matching materials are preferred but not required.

IPC 1-7

G12B 17/02; **H05K 9/00**

IPC 8 full level

B32B 7/02 (2006.01); **H01Q 17/00** (2006.01); **H05K 9/00** (2006.01)

CPC (source: EP)

H01Q 17/005 (2013.01)

Cited by

CN110854545A; CN105670370A; EP0398672A1; AU632823B2; DE102007011590A1; DE102007011590B4; EP0504264A4; EP1675217A1; ES2274674A1; US6426380B1; WO9932538A1; EP0785557B1

Designated contracting state (EPC)

DE FR GB IT NL

DOCDB simple family (publication)

EP 0380267 A1 19900801; **EP 0380267 B1 19931027**; AU 4708889 A 19900802; AU 615817 B2 19911010; CA 2005198 A1 19900726; DE 69004109 D1 19931202; DE 69004109 T2 19940511; JP H02235396 A 19900918

DOCDB simple family (application)

EP 90300632 A 19900122; AU 4708889 A 19891221; CA 2005198 A 19891212; DE 69004109 T 19900122; JP 1592890 A 19900125