

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 A1 19900801 (EN)

Application

EP 90300632 A 19900122

Priority

US 30242789 A 19890126

Abstract (en)

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)

Citation (search report)

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DOCDB simple family (application)

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