Title (en)

ELECTROMAGNETIC WAVE ABSORPTION PANELS AND MATERIALS FOR SAME

Title (de)

PLATTEN UND MATERIAL ZUR ABSORBTION ELEKTROMAGNETISCHER WELLEN

Title (fr)

PANNEAUX ABSORBANT LES ONDES ELECTROMAGNETIQUES ET MATERIAUX DESTINES A CES DERNIERS

Publication

EP 0900458 B1 20061122 (EN)

Application

EP 98901750 A 19980112

Priority

- US 9800406 W 19980112
- US 78293497 A 19970113
- US 78293897 A 19970113

Abstract (en)

[origin: WO9831072A1] An electromagnetic wave absorption panel (100) for use in building construction includes an absorber layer (106) that utilizes novel materials such as layered superlattice materials, garnets, magnetoresistive materials, conducting oxides, such as LSM, magnetoplumbites, signet magnetics, Fe3O4, Ni0.4Zn0.6Fe2O4, and polymer composites of the above materials. The absorber layer is preferably a multi-component structure such as a layer of a ferrite (114) combined with one or more of the above materials. The invention also includes: a multi-component absorber element (106) having an effective real part of the permitivity, ELEMENT 'eff, and an effective real part of the permeability, mu 'eff, such that (ELEMENT 'eff mu 'eff)<1/2> SIMILAR 1/f over said range of frequencies, where f is the frequency of the incident wave; and a multi-component absorber element (106) having an effective real part of the permitivity, ELEMENT 'eff, that decreases with frequency.

IPC 8 full level

E04B 1/62 (2006.01); **E04B 1/92** (2006.01); **H01Q 17/00** (2006.01); **H05K 9/00** (2006.01)

CPC (source: EP KR)

E04B 1/92 (2013.01 - EP); **H01Q 17/00** (2013.01 - EP KR); **H01Q 17/004** (2013.01 - EP); **H01Q 17/007** (2013.01 - EP); **H01Q 17/008** (2013.01 - EP)

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

WO 9831072 A1 19980716; CN 1128485 C 20031119; CN 1216166 A 19990505; DE 69836457 D1 20070104; DE 69836457 T2 20070913; EP 0900458 A1 19990310; EP 0900458 B1 20061122; JP 2000507400 A 20000613; JP 3852619 B2 20061206; KR 20000064579 A 20001106

DOCDB simple family (application)

US 9800406 W 19980112; CN 98800025 A 19980112; DE 69836457 T 19980112; EP 98901750 A 19980112; JP 53112298 A 19980112; KR 19980707160 A 19980911