

Title (en)

ELECTROMAGNETIC WAVE ABSORPTION PANELS AND MATERIALS FOR SAME

Title (de)

PLATTEN UND MATERIAL ZUR ABSORPTION ELEKTROMAGNETISCHER WELLEN

Title (fr)

PANNEAUX ABSORBANT LES ONDES ELECTROMAGNETIQUES ET MATERIAUX DESTINES A CES DERNIERS

Publication

**EP 0900458 A1 19990310 (EN)**

Application

**EP 98901750 A 19980112**

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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, Fe<sub>3</sub>O<sub>4</sub>, Ni<sub>0.4</sub>Zn<sub>0.6</sub>Fe<sub>2</sub>O<sub>4</sub>, 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 permittivity, 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 permittivity, ELEMENT 'eff, that decreases with frequency.

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