

Title (en)

Facade structure of a building with thermal insulation and method of producing an insulation.

Title (de)

Fassadenaufbau von Hochbauten in wärmedämmender Ausbildung und Verfahren zur Herstellung einer Wärmedämmung.

Title (fr)

Structure d'un front d'un bâtiment à isolation calorifuge et procédé pour produire une isolation.

Publication

EP 0377878 A1 19900718 (DE)

Application

EP 89123646 A 19891221

Priority

DE 3900857 A 19890113

Abstract (en)

[origin: JPH02232996A] PURPOSE: To prevent a ground building from causing impairment to the directivity section and an airport control radar system by a method wherein the building is covered with a heat insulating layer in which conductive material or magnetic material smaller in size than a specific value and smaller in vol.% than a specific value is inserted in formed plastics. CONSTITUTION: A heat insulating layer 2 composed of plane elements or belt-like pieces is provided to the wall 1 of a reinforced concrete building. The insulating layer 2 is formed of foamed plastic such as non-conductive polyurethane and loaded with conductive or magnetic material such as carbon particles or carbonyl iron powder. These materials are 1/1000 as small in size as the wavelength of electromagnetic waves which are absorbed by all the surface of the layer 2 and amount to 10vol.% or less of the heat insulating layer 2. A fire-resisting material layer 3 is provided to the surface of the heat insulating layer 2, an air layer 4 is provided, and a non- conductive coating 5 is provided to serve as an outermost wall. By this setup, reflected electromagnetic waves are attenuated, so that a ground reinforced concrete building can be prevented from causing an impairment to the directivity section and an airport control radar system.

Abstract (de)

Es ist vorgesehen, die Wärmedämmschicht (2) vor elektromagnetische Wellen reflektierenden Bauteilen (1) anzuordnen, um eine Reflexionsminderung herbeizuführen. Hierzu werden in ein Material (2) aus einem elektrischen Nichtleiter elektrisch und/oder magnetisch leitfähige Materialien zur Bildung von Leitfähigkeitsbereichen eingelagert. Die Abmessungen der Leitfähigkeitsbereiche sind in allen Ebenen mindestens 1000-fach geringer als die Wellenlänge der zu absorbierenden Wellen, wobei die elektrisch und/oder magnetisch leitfähigen Materialien einen Anteil von bis zu 10 % des Volumens der Wärmedämmschicht ausmachen. Dabei ist vorgesehen, die vorgeschaltete Abdeckung (5) aus einem elektrischen Nichtleiter auszubilden.

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IPC 8 full level

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CPC (source: EP US)

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- [A] EP 0121655 A2 19841017 - DORNIER GMBH [DE]
- [A] EP 0210803 A1 19870204 - AGENCY IND SCIENCE TECHN [JP], et al
- [A] DE 3131137 A1 19830224 - BUSCH DIETER, et al
- [A] CH 669628 A5 19890331 - WERNER G SIEGER
- [Y] IEEE TRANS. ON BROADCASTING

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