

Title (en)

Method of manufacturing a microwave reflective surface

Title (de)

Verfahren und Herstellung für eine elektromagnetische wellen reflektierende Oberfläche

Title (fr)

Surface réfléchissant les ondes électromagnétiques et procédé pour sa réalisation

Publication

**EP 1052725 A1 20001115 (FR)**

Application

**EP 00401204 A 20000502**

Priority

FR 9905901 A 19990510

Abstract (en)

The coated and woven structure provides a sufficiently rigid structure with a very lightweight design. The rigid reflecting surface for electromagnetic waves consists of interlaced electrical conductors (2,3) which are formed superficially of a stable metallic diffusion alloy. This ensures the solid fastening together of the structure with the conductors held together, and also the rigidity of the resultant surface. The electrical conductors may either be woven together, or knitted together in order to form this mesh. The transverse dimension of the conductors in at least one direction is less than 20 microns. The mesh may be supported on an insulating reinforcing layer, which may comprise a polymerised composite fibre matrix. The thickness of the metal surface coating forming the conductors may be between 10 Angstroms and 20 microns.

Abstract (fr)

La présente invention concerne une surface rigide réfléchissant les ondes électromagnétiques, notamment pour réflecteur d'antenne, blindage électromagnétique et guide d'ondes. Selon l'invention, cette surface est constituée d'un entrelacs (7) de fils électriquement conducteurs (2, 3) qui sont constitués superficiellement d'un alliage métallique stable de diffusion assurant la solidarisation desdits fils entre eux et la rigidité de ladite surface. <IMAGE>

IPC 1-7

**H01Q 15/14**

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

- [A] US 4926910 A 19900522 - WADE WILLIAM D [US]
- [A] GB 2256529 A 19921209 - MARCONI ELECTRONIC DEVICES [GB], et al
- [A] US 5771027 A 19980623 - MARKS JOHN [US], et al
- [A] US 4609923 A 19860902 - BOAN BOBBY J [US], et al
- [A] FR 2275359 A1 19760116 - GREZE ANDRE [BI]

Cited by

FR2821491A1; EP1458052A1; FR2821490A1; FR2821488A1; US6791486B2; WO02069441A1

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