

Title (en)  
Ceiling tile transmitter and receiver system

Title (de)  
Deckenfliese mit einem Sender-Empfängersystem

Title (fr)  
Carreau pour plafonds comportant un dispositif émetteur/récepteur

Publication  
**EP 1081506 B1 20031217 (EN)**

Application  
**EP 00116401 A 20000728**

Priority  
US 14806099 P 19990810

Abstract (en)  
[origin: EP1081506A1] A ceiling tile transmitter and receiver system having at least one transmitter/receiver device located in a ceiling panel either during or after the ceiling panel fabrication process. In one embodiment one or more pockets of variable size and shape are created on a surface of the ceiling panel during or after the ceiling panel manufacturing process and then a transmitter/receiver device, such as an RF antenna, is rigidly fixed in the pocket. In another embodiment, the transmitter/receiver device is embedded in the front side (lower surface) of the ceiling tile and a "scrim" covering is placed over it to secure it in place. The transmitter/receiver device can also be embedded inside the ceiling tile or rigidly fixed on an upper, lower or side surface of the ceiling tile. The transmitter/receiver device can be encased on the front surface of the ceiling tile, where the transmitter adds to, or integrates into, the overall aesthetics of the ceiling tile. Various combinations of these embodiments can be used with a single ceiling tile. A high temperature resistant "place holding" structure that can withstand the ceiling tile treatments can be provided and later removed to allow the installation of the transmitter/receiver device. <IMAGE>

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**E04B 9/04** (2006.01); **H01Q 1/00** (2006.01); **H01Q 1/12** (2006.01); **H01Q 1/22** (2006.01); **H01Q 1/24** (2006.01); **H01Q 1/40** (2006.01); **H01Q 1/44** (2006.01); **H01Q 23/00** (2006.01)

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