

Title (en)

Converter provided with built-in patch antennas for receiving direct broadcasting by satellite

Title (de)

Konverter mit eingebauten Patchantennen für den Empfang von Direktübertragungssatelliten

Title (fr)

Convertisseur avec antennes à plaque incorporée pour réception de radiodiffusion directe par satellite

Publication

**EP 1033779 A3 20040107 (EN)**

Application

**EP 00301243 A 20000217**

Priority

JP 5715099 A 19990304

Abstract (en)

[origin: EP1033779A2] The object of the present invention is to provide a converter (1) for receiving satellite broadcasting wherein a radio wave from a satellite can be received without using a die-cast frame and the cost can be reduced. A printed circuit board (19) and an antenna member provided to the printed circuit board for receiving a radio wave from a satellite via a parabolic reflector are provided, the antenna member is composed of patch antennae (21) made of conductive foil and is formed on one surface of the printed circuit board (19). <IMAGE>

IPC 1-7

**H01Q 1/24**; **H01Q 1/42**; **H01Q 21/06**

IPC 8 full level

**H01Q 1/24** (2006.01); **H01Q 1/42** (2006.01); **H01Q 21/06** (2006.01); **H01Q 23/00** (2006.01); **H04B 1/08** (2006.01)

CPC (source: EP KR)

**H01Q 1/247** (2013.01 - EP KR); **H01Q 1/42** (2013.01 - EP KR); **H01Q 21/065** (2013.01 - EP KR)

Citation (search report)

- [XY] GB 2242316 A 19910925 - FUNAI ELECTRIC ENGINEERING COM [JP]
- [Y] US 5625365 A 19970429 - TOM PAUL K W [US], et al
- [X] EP 0346125 A2 19891213 - NEC CORP [JP]
- [X] EP 0516981 A1 19921209 - SUMITOMO ELECTRIC INDUSTRIES [JP]
- [A] GB 2296385 A 19960626 - NORTHERN TELECOM LTD [CA]

Cited by

US7068238B2; CN108987944A; EP1132997A1; CN105634248A; EP1633015A1; US7129906B2; EP1519443A1; US11962066B2; US11527812B2; US6326920B1; US9595760B2; US7528793B2; US7800551B2; US8085214B2

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DOCDB simple family (publication)

**EP 1033779 A2 20000906**; **EP 1033779 A3 20040107**; CN 1186854 C 20050126; CN 1266293 A 20000913; JP 2000261336 A 20000922; JP 3626618 B2 20050309; KR 100342778 B1 20020704; KR 20000062726 A 20001025; TW 447172 B 20010721

DOCDB simple family (application)

**EP 00301243 A 20000217**; CN 00102845 A 20000303; JP 5715099 A 19990304; KR 20000010622 A 20000303; TW 89100756 A 20000118