

Title (en)

Antenna for wireless communication terminal device

Title (de)

Antenne für funkbetriebene Kommunikationsendgeräte

Title (fr)

Antenne pour terminaux de radiocommunication sans fil

Publication

EP 0986130 B1 20040804 (DE)

Application

EP 99117720 A 19990908

Priority

DE 19841011 A 19980908

Abstract (en)

[origin: EP0986130A2] The antenna has its structure formed by a conducting track of any shape applied to a circuit board. A multilayer circuit board is used with a different antenna structure or some other electrical element on each layer. The multilayer circuit board can be in the form of one or more multilayer boards, whereby the individual circuit boards each have at least three layers. The individual antenna structures can be formed into a radiator and the individual layers can adopt any position with respect to each other.

IPC 1-7

H01Q 1/24; **H01Q 1/36**; **H01Q 9/28**; **H01Q 1/38**

IPC 8 full level

H01Q 1/24 (2006.01); **H01Q 1/36** (2006.01); **H01Q 1/38** (2006.01); **H01Q 5/385** (2015.01); **H01Q 9/28** (2006.01)

CPC (source: EP)

H01Q 1/243 (2013.01); **H01Q 1/38** (2013.01); **H01Q 5/385** (2015.01)

Cited by

EP2008340A4; EP1764862A1; EP1239539A3; EP1609209A4; KR101284128B1; EP1237224A1; DE10108859A1; EP1475859A1; US7057560B2; US10355346B2; US6963309B2; US7777689B2; US9905940B2; US9755314B2; US6909911B2; US7423592B2; US7439919B2; WO03075398A1; WO03026064A1; WO2010029304A1; WO2004057701A1; WO2004082072A1; US7358902B2; US9761934B2; US10056682B2; EP1250723B1; US7675470B2; US7403164B2; US7411556B2; US7940218B2; US9899727B2; US10644380B2; US11031677B2; US11349200B2; US11735810B2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

EP 0986130 A2 20000315; **EP 0986130 A3 20001213**; **EP 0986130 B1 20040804**; AT E272898 T1 20040815; CN 1249546 A 20000405; DE 59910116 D1 20040909; DK 0986130 T3 20040906; ES 2226252 T3 20050316

DOCDB simple family (application)

EP 99117720 A 19990908; AT 99117720 T 19990908; CN 99118587 A 19990908; DE 59910116 T 19990908; DK 99117720 T 19990908; ES 99117720 T 19990908