

Title (en)

Mobile wireless communications device including an electrically conductive director element and related methods

Title (de)

Mobilfunk-Kommunikationsgerät mit elektrisch leitendem Richtelement und entsprechendes Verfahren

Title (fr)

Appareil de communication mobile sans fil avec un directeur électroconducteur et méthode correspondante

Publication

**EP 1808929 A1 20070718 (EN)**

Application

**EP 06250180 A 20060113**

Priority

EP 06250180 A 20060113

Abstract (en)

A mobile wireless communications device may include a portable housing, a printed circuit board (PCB) carried by the portable housing, a wireless transceiver carried by the PCB, and an antenna connected to the transceiver and carried by the PCB. The mobile wireless communications device may further include at least one director element (30) for directing a beam pattern of the antenna. More particularly, the at least one director element may include an electrically conductive main branch carried by the portable housing, and an electrically conductive connector portion extending between the main branch and the PCB.

IPC 8 full level

**H01Q 1/24** (2006.01); **H01Q 19/22** (2006.01); **H01Q 19/28** (2006.01)

CPC (source: EP)

**H01Q 1/245** (2013.01); **H01Q 19/22** (2013.01); **H01Q 19/28** (2013.01)

Citation (applicant)

- DE 10248756 A1 20040318 - SIEMENS AG [DE]
- EP 1353401 A1 20031015 - FILTRONIC LK OY [FI]

Citation (search report)

- [XY] EP 1271688 A1 20030102 - TOSHIBA KK [JP]
- [X] DE 10248756 A1 20040318 - SIEMENS AG [DE]
- [X] EP 1353401 A1 20031015 - FILTRONIC LK OY [FI]
- [Y] US 2004046694 A1 20040311 - CHIANG BING [US], et al
- [Y] WO 2005004277 A1 20050113 - SK TELECOM CO LTD [KR], et al
- [A] US 2003151557 A1 20030814 - JOHNSON GREGORY F [US]

Cited by

US7983724B2; EP2262201A4; US10743116B2; TWI423522B

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

**EP 1808929 A1 20070718**; **EP 1808929 B1 20090909**; AT E442682 T1 20090915; CA 2571338 A1 20070320; CA 2571338 C 20080708; DE 602006009060 D1 20091022

DOCDB simple family (application)

**EP 06250180 A 20060113**; AT 06250180 T 20060113; CA 2571338 A 20070112; DE 602006009060 T 20060113