

Title (en)
Integrated antenna and solar cell assembly and apparatus incorporating same

Title (de)
Integrierte Antenne und Solarzellenanordnung und damit ausgestattetes Gerät

Title (fr)
Antenne intégrée et ensemble de cellule solaires et appareil comportant ceux-ci

Publication
EP 1575124 A1 20050914 (EN)

Application
EP 04445025 A 20040311

Priority
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Abstract (en)
The invention relates to an integrated antenna and solar cell assembly (2) and an apparatus (1A) provided with such an integrated antenna and solar cell assembly, e.g. a laptop computer or a mobile phone having such an assembly arranged on the outside. The antenna and solar cell assembly comprises at least one antenna patch and at least one solar cell panel being integrated as one multilayer element. <IMAGE>

IPC 1-7
H01Q 1/44; **H01L 31/042**

IPC 8 full level
H01L 31/042 (2006.01); **H01Q 1/44** (2006.01); **H01Q 21/06** (2006.01)

CPC (source: EP)
H01Q 1/44 (2013.01); **H01Q 21/065** (2013.01)

Citation (search report)

- [XA] EP 0982795 A1 20000301 - ICO SERVICES LTD [GB]
- [XA] EP 1308824 A2 20030507 - TOSHIBA KK [JP]
- [XY] VACCARO S ET AL: "Integrated solar panel antennas", ELECTRONICS LETTERS, IEE STEVENAGE, GB, vol. 36, no. 5, 2 March 2000 (2000-03-02), pages 390 - 391, XP006014911, ISSN: 0013-5194
- [X] TANAKA M ET AL: "Microstrip antenna with solar cells for microsatellites", ELECTRONICS LETTERS, IEE STEVENAGE, GB, vol. 31, no. 1, 5 January 1995 (1995-01-05), pages 5 - 6, XP006002269, ISSN: 0013-5194
- [YA] HENZE N., BENDEL C., FRÜCHTING H., KIRCHHOF J.: "Application of photovoltaic solar cells in planar antenna structures", TWELFTH INTERNATIONAL CONFERENCE ON ANTENNAS AND PROPAGATION ICAP 2003, IEE CONF. PUBL. INTERNATIONAL CONFERENCE ON ANTENNAS AND PROPAGATION ICAP 2003, EXETER, UK 31 MARCH-3 APRIL 2003, vol. 2, 3 April 2003 (2003-04-03), UK, pages 731 - 734, XP009032451

Cited by
ITTE20100003A1; CN110797629A; CN111525259A; CN102934237A; CN117712714A; US9570795B1; US8922454B2; WO2011116463A1; WO2016086199A1

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

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