

Title (en)

Antenna switching apparatus selectively connecting antenna with transmitter or receiver.

Title (de)

Antennenumschaltanordnung zum Selektiven Verbinden einer Antenne mit einem Sender oder einem Empfänger.

Title (fr)

Dispositif de commutation d'antenne pour connecter sélectivement une antenne avec un émetteur ou un récepteur.

Publication

**EP 0578160 A1 19940112 (EN)**

Application

**EP 93110677 A 19930705**

Priority

JP 18084992 A 19920708

Abstract (en)

In an antenna switching apparatus for selectively connecting an antenna (100) through an antenna terminal (10) with either a transmitter (101) for transmitting a transmitting signal having a transmitting frequency through a transmitting terminal (9), or a receiver (102) for receiving a receiving signal having a receiving frequency different from the transmitting frequency through a receiving terminal (11), a receiving filter (8, 23) for passing therethrough a receiving signal is electrically connected between the antenna terminal (10) and the receiving terminal (11). An impedance adjusting element (6, 21, 32) is electrically connected with an input end of the receiving filter (8, 23), and has such an element value that an impedance when seen from the antenna terminal (10) toward the receiving filter (8, 23) becomes substantially infinity at the transmitting frequency. Further, a switching device (1, 38a, 46 and 38) is electrically connected between the antenna terminal (10) and the transmitting terminal (9), and is switched over in response to a control signal so that an impedance when seen from the antenna terminal (10) toward the transmitting terminal (9) becomes either substantially infinity or substantially zero. <IMAGE>

IPC 1-7

**H01Q 1/00; H01P 1/15**

IPC 8 full level

**H01P 1/15** (2006.01)

CPC (source: EP)

**H01P 1/15** (2013.01)

Citation (search report)

- [A] US 5023866 A 19910611 - DE MURO DAVID M [US]
- [A] GB 1149043 A 19690416 - RCA CORP [US]
- [A] IEICE TRANSACTIONS vol. E74, no. 6, June 1991, TOKYO JP pages 1556 - 1562 T. NISHIKAWA 'RF front end circuit components miniaturized using dielectric resonators for cellular portable telephones'

Cited by

EP1237222A1; GB2273821A; GB2273821B; FR2703536A1; US5513382A; EP1014592A3; US5784687A; EP0729239A1; EP0700169A3; EP1178608A3; EP1418679A1; EP0667684A1; US5521561A; AU689519B2; EP0921642A3; EP1443666A3; EP0964477A1; SG82616A1; EP0788185A1; US5777530A; GB2273820A; GB2273820B; EP0618635A3; US5634200A; WO0135530A3; WO0235644A1; WO9744913A1; US7005940B2; US6937846B1

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