

Title (en)  
Portable wireless machine

Title (de)  
Tragbares Funkgerät

Title (fr)  
Machine sans fil portable

Publication  
**EP 2053689 A1 20090429 (EN)**

Application  
**EP 09151532 A 20030626**

Priority  

- EP 03741127 A 20030626
- JP 2002210612 A 20020719
- JP 2003015675 A 20030124
- JP 2003167962 A 20030612

Abstract (en)  
A portable radio device includes a first casing (210), a second casing (211), a connection portion (212b) which connects the first casing with the second casing so as to freely rotate, a first antenna element (214) which is provided in the first casing, a second antenna element (221) which is provided in the second casing, and a feeding portion (220a,220b) which has one end electrically connected to the first antenna element through the connection portion and the other end electrically connected to the second antenna element. The connection portion has an electric conductivity, and the connection portion is arranged away from the second antenna element at a distance. The first antenna element, the connection portion and the second antenna element form a dipole antenna.

IPC 8 full level  
**H01Q 1/24** (2006.01); **H01Q 3/24** (2006.01); **H01Q 9/16** (2006.01); **H01Q 9/30** (2006.01); **H01Q 9/42** (2006.01); **H01Q 21/29** (2006.01);  
**H01Q 23/00** (2006.01)

CPC (source: EP)  
**H01Q 1/243** (2013.01); **H01Q 3/24** (2013.01); **H01Q 9/16** (2013.01); **H01Q 9/42** (2013.01); **H01Q 21/29** (2013.01); **H01Q 23/00** (2013.01)

Citation (applicant)  

- US 4471493 A 19840911 - SCHOBER EDWARD A [US]
- WO 0072406 A1 20001130 - MOTOROLA INC [US]

Citation (search report)  

- [XY] US 4471493 A 19840911 - SCHOBER EDWARD A [US]
- [XY] US 5561437 A 19961001 - PHILLIPS JAMES P [US], et al
- [X] WO 0203665 A1 20020110 - MATSUSHITA ELECTRIC IND CO LTD [JP], et al
- [XP] EP 1258943 A1 20021120 - MITSUBISHI ELECTRIC CORP [JP]
- [Y] US 5170173 A 19921208 - KRENZ ERIC L [US], et al
- [Y] WO 0129927 A1 20010426 - SIEMENS AG [DE], et al
- [Y] PATENT ABSTRACTS OF JAPAN vol. 1997, no. 08 29 August 1997 (1997-08-29)
- [Y] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 12 31 October 1998 (1998-10-31)

Citation (examination)  
WO 0072406 A1 20001130 - MOTOROLA INC [US]

Cited by  
CN110829039A

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**EP 1538694 A1 20050608; EP 1538694 A4 20060222; EP 1538694 B1 20100414;** AU 2003281595 A1 20040209; CN 100466376 C 20090304;  
CN 1682405 A 20051012; DE 60332126 D1 20100527; EP 2053689 A1 20090429; EP 2187475 A1 20100519; EP 2187475 B1 20120822;  
WO 2004010530 A1 20040129

DOCDB simple family (application)  
**EP 03741127 A 20030626;** AU 2003281595 A 20030626; CN 03821619 A 20030626; DE 60332126 T 20030626; EP 09151532 A 20030626;  
EP 10153972 A 20030626; JP 0308149 W 20030626