



(11) **EP 2 284 944 B8**

(12) **CORRECTED EUROPEAN PATENT SPECIFICATION**

(15) Correction information:  
**Corrected version no 1 (W1 B1)**  
**Corrections, see**  
**Bibliography INID code(s) 72**

(51) Int Cl.:  
**H01Q 1/24** <sup>(2006.01)</sup> **H01Q 9/04** <sup>(2006.01)</sup>  
**H01Q 13/10** <sup>(2006.01)</sup> **H01Q 21/28** <sup>(2006.01)</sup>  
**H04B 7/04** <sup>(2006.01)</sup>

(48) Corrigendum issued on:  
**23.09.2015 Bulletin 2015/39**

(86) International application number:  
**PCT/JP2009/002199**

(45) Date of publication and mention  
of the grant of the patent:  
**22.07.2015 Bulletin 2015/30**

(87) International publication number:  
**WO 2009/142000 (26.11.2009 Gazette 2009/48)**

(21) Application number: **09750362.7**

(22) Date of filing: **19.05.2009**

(54) **MIMO ANTENNA DEVICE AND WIRELESS COMMUNICATION DEVICE**

MIMO-ANTENNENVORRICHTUNG UND VORRICHTUNG ZUR DRAHTLOSEN KOMMUNIKATION  
DISPOSITIF D'ANTENNES MIMO ET DISPOSITIF DE COMMUNICATION SANS FIL

(84) Designated Contracting States:  
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR**  
**HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL**  
**PT RO SE SI SK TR**

(30) Priority: **22.05.2008 JP 2008133939**

(43) Date of publication of application:  
**16.02.2011 Bulletin 2011/07**

(73) Proprietor: **Panasonic Intellectual Property**  
**Corporation**  
**of America**  
**Torrance, CA 90503 (US)**

(72) Inventors:  
• **YAMAMOTO, Atsushi,**  
**Osaka-shi, Osaka 540-6207 (JP)**

- **IWAI, Hiroshi,**  
**Osaka-shi, Osaka 540-6207 (JP)**
- **AMARI, Satoru,**  
**Osaka-shi, Osaka 540-6207 (JP)**
- **SAKATA, Tsutomu**  
**Osaka-shi, Osaka 540-6207 (JP)**

(74) Representative: **Eisenführ Speiser**  
**Patentanwälte Rechtsanwälte PartGmbB**  
**Postfach 10 60 78**  
**28060 Bremen (DE)**

(56) References cited:  
**WO-A1-2004/102744 WO-A1-2008/047441**  
**JP-A- 8 097 760 JP-A- 2004 056 421**  
**JP-A- 2004 129 234 JP-A- 2006 166 261**  
**JP-A- 2008 060 907 US-A1- 2005 239 519**  
**US-A1- 2007 123 181 US-B1- 7 358 912**

Note: Within nine months of the publication of the mention of the grant of the European patent in the European Patent Bulletin, any person may give notice to the European Patent Office of opposition to that patent, in accordance with the Implementing Regulations. Notice of opposition shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European Patent Convention).

**EP 2 284 944 B8**