

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
26 September 2002 (26.09.2002)

PCT

(10) International Publication Number  
WO 02/075939 A3

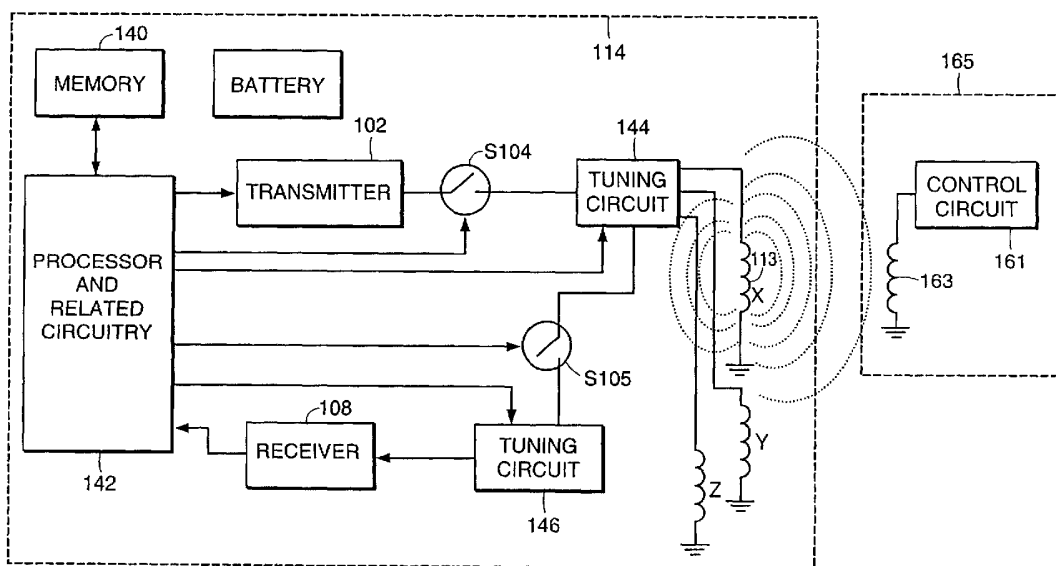
- (51) International Patent Classification<sup>7</sup>: H04B 5/00, 17/00
- (21) International Application Number: PCT/US02/08118
- (22) International Filing Date: 15 March 2002 (15.03.2002)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
 

60/276,398	16 March 2001 (16.03.2001)	US
60/296,229	6 June 2001 (06.06.2001)	US
09/942,372	29 August 2001 (29.08.2001)	US
10/004,989	3 December 2001 (03.12.2001)	US
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- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:  
— with international search report

[Continued on next page]

(54) Title: WIRELESS COMMUNICATION OVER A TRANSDUCER DEVICE



(57) Abstract: One aspect of the present invention is generally directed towards a system and method of tuning a transducer for transmitting and receiving a wireless signal. In an illustrative embodiment, a single transducer (113) is coupled to a first or second circuit (144, 146) for either transmitting or receiving, respectively. Generally, electrical characteristics of the first circuit are adjusted to increase a magnetic field generated by the transducer. Conversely, electrical characteristics of the second circuit are adjusted to increase a signal generated by the transducer for receiving a magnetic field. Accordingly, a single transducer device can be tuned for either transmitting or receiving a corresponding wireless signal.



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**(88) Date of publication of the international search report:**  
13 March 2003

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/US02/08118

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : H04B 5/00, 17/00  
 US CL : 455/41, 67.2

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
 U.S. : 455/41, 67.2

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,701,121 A (MURDOCH) 23 December 1997 (23.12.1997), abstract; col. 15, line 62-col. 16, line 33; col. 19, line 49-col. 20, line 61.	1-84
Y	US 5,124,699 A (TERVOERT et al.) 23 June 1992 (23.06.1992), entire document.	1-84
Y	US 3,864,662 A (DAVID et al.) 04 February 1975 (04.02.1975), abstract; fig. 1, element 16; col. 5, lines 44-45.	9, 11, 14, 20, 31-37, 64, 66, 77 and 84
Y	US 5,321,668 A (ROUQUETTE) 14 June 1994 (14.06.1994), fig. 1; abstract; col. 4, line 35-col. 6, line 64; col. 7, line 34-col. 10, line 8.	1-84
A	US 5,787,174 A (TUTTLE) 28 July 1998 (28.07.1998), entire document.	1-84

Further documents are listed in the continuation of Box C.  See patent family annex.

* Special categories of cited documents:	"T"
"A" document defining the general state of the art which is not considered to be of particular relevance	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 23 August 2002 (23.08.2002)	Date of mailing of the international search report <b>15 NOV 2002</b>
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