

(12) 按照专利合作条约所公布的国际申请

(19) 世界知识产权组织
国际局

(43) 国际公布日
2013 年 12 月 12 日 (12.12.2013)



(10) 国际公布号
WO 2013/182160 A3

- (51) 国际专利分类号:
H01Q 1/22 (2006.01) *H02J 7/00* (2006.01)
H02J 17/00 (2006.01)
- (21) 国际申请号: PCT/CN2013/079847
- (22) 国际申请日: 2013 年 7 月 23 日 (23.07.2013)
- (25) 申请语言: 中文
- (26) 公布语言: 中文
- (30) 优先权:
201320165914.4 2013 年 4 月 3 日 (03.04.2013) CN
- (71) 申请人: 中兴通讯股份有限公司 (ZTE CORPORATION) [CN/CN]; 中国广东省深圳市南山区高新技术产业园科技南路中兴通讯大厦, Guangdong 518057 (CN)。
- (72) 发明人: 文园 (WEN, Yuan); 中国广东省深圳市南山区高新技术产业园科技南路中兴通讯大厦中兴通讯股份有限公司转交, Guangdong 518057 (CN)。
- (74) 代理人: 北京安信方达知识产权代理有限公司 (AFD CHINA INTELLECTUAL PROPERTY LAW OFFICE); 中国北京市海淀区学清路 8 号 B 座 1601A, Beijing 100192 (CN)。

(81) 指定国 (除另有指明, 要求每一种可提供的国家保护): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW。

(84) 指定国 (除另有指明, 要求每一种可提供的地区保护): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), 欧亚 (AM, AZ, BY, KG, KZ, RU, TJ, TM), 欧洲 (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG)。

根据细则 4.17 的声明:

- 关于申请人有权申请并被授予专利(细则 4.17(ii))
- 发明人资格(细则 4.17(iv))

[见续页]

(54) Title: WIRELESS MULTIFUNCTIONAL APPARATUS AND ELECTRONIC DEVICE

(54) 发明名称: 一种无线多功能装置及电子设备

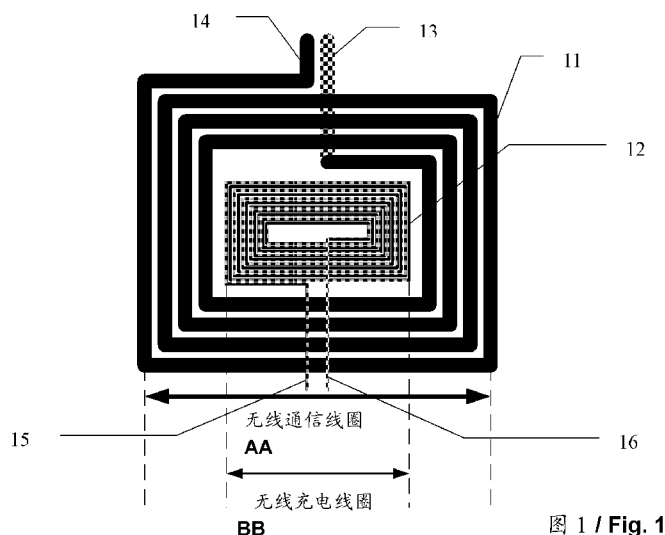


图 1 / Fig. 1

AA WIRELESS COMMUNICATION COIL
BB WIRELESS CHARGING COIL

(57) Abstract: Embodiments of the present invention provide a wireless multifunctional apparatus and an electronic device comprising the apparatus. The apparatus comprises a near field communication apparatus and a wireless charging apparatus. The near field communication apparatus comprises a wireless communication coil, and the wireless charging apparatus comprises a wireless charging coil. The wireless charging coil is arranged inside the wireless communication coil, and a first plane where the wireless communication coil is positioned and a second plane where the wireless charging coil is positioned are the same plane or are two planes in parallel to each other.

(57) 摘要: 本发明实施例提供了一种无线多功能装置和包含该装置的电子设备, 所述装置包括近距离无线通信装置和无线充电装置, 其中: 所述近距离无线通信装置包括一无线通信线圈; 所述无线充电装置包括一无线充电线圈; 所述无线充电线圈设置在所述无线通信线圈内部, 并且所述无线通信线圈所在的第一平面与所述无线充电线圈所在的第二平面为同一平面或为相互平行的两个平面。

**本国际公布:**

— 包括国际检索报告(条约第 21 条(3))。

— 在修改权利要求的期限届满之前进行, 在收到该修改后将重新公布(细则 48.2(h))。

— 根据申请人的请求, 在条约第 21 条(2)(a)所规定的期限届满之前进行。

(88) 国际检索报告公布日期: 2014 年 2 月 20 日

INTERNATIONAL SEARCH REPORT

International application No.

PCT/CN2013/079847**A. CLASSIFICATION OF SUBJECT MATTER**

See the extra sheet

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)

IPC: H01Q 1/22, H01Q 1/00, H02J 17/00, H02J 7/00

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)

CNPAT, CNKI: antenna, coil, communicate, charge, feed, circuit, chip, cell phone, mobile phone

WPI, EPODOC: antenna?, coil?, communicat+, charg+, feed+, circuit?, chip?, phone?

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CN 202797268 U (BYD CO., LTD.), 13 March 2013 (13.03.2013), description, paragraphs [0018]-[0031], and figure 3	1, 4-6
Y		2-3, 7-8
Y	CN 102984348 A (ZTE CORP.), 20 March 2013 (20.03.2013), description, paragraphs [0048]-[0050], and figure 3	2-3, 7-8
A	CN 201663491 U (DONGGUAN YULONG COMMUNICATION TECHNOLOGY CO., LTD.), 01 December 2010 (01.12.2010), the whole document	1-8

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

* Special categories of cited documents:	“T” 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
“A” document defining the general state of the art which is not considered to be of particular relevance	“X” document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
“E” earlier application or patent but published on or after the international filing date	“Y” document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
“L” document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	“&” document member of the same patent family
“O” document referring to an oral disclosure, use, exhibition or other means	
“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 17 December 2013 (17.12.2013)	Date of mailing of the international search report 02 January 2014 (02.01.2014)
Name and mailing address of the ISA/CN: State Intellectual Property Office of the P. R. China No. 6, Xitucheng Road, Jimenqiao Haidian District, Beijing 100088, China Facsimile No.: (86-10) 62019451	Authorized officer YANG, Qi Telephone No.: (86-10) 62413649

International application No.
PCT/CN2013/079847

Form PCT/ISA/210 (patent family annex) (July 2009)

INTERNATIONAL SEARCH REPORT

International application No.

PCT/CN2013/079847

CONTINUATION: CLASSIFICATION OF SUBJECT MATTER

H01Q 1/22 (2006.01) i

H02J 17/00 (2006.01) i

H02J 7/00 (2006.01) i

国际检索报告

国际申请号

PCT/CN2013/079847

A. 主题的分类

参见附加页

按照国际专利分类(IPC)或者同时按照国家分类和 IPC 两种分类

B. 检索领域

检索的最低限度文献(标明分类系统和分类号)

IPC: H01Q1/22, H01Q1/00, H02J17/00, H02J7/00

包含在检索领域中的除最低限度文献以外的检索文献

在国际检索时查阅的电子数据库(数据库的名称, 和使用的检索词(如使用))

CNPAT、CNKI: 天线, 线圈, 通信, 通讯, 充电, 馈电, 电路, 芯片, 手机, 移动电话

WPI、EPODOC: antenna?, coil?, communicat+, charg+, feed+, circuit?, chip?, phone?

C. 相关文件

类 型*	引用文件, 必要时, 指明相关段落	相关的权利要求
X	CN202797268U (比亚迪股份有限公司) 13.3 月 2013 (13.03.2013) 说明书[0018]-[0031]段以及附图 3	1、4-6
Y		2-3、7-8
Y	CN102984348 A (中兴通讯股份有限公司) 20.3 月 2013 (20.03.2013) 说明书[0048]-[0050]段以及附图 3	2-3、7-8
A	CN201663491 U (东莞宇龙通信科技有限公司) 01.12 月 2010 (01.12.2010) 全文	1-8



其余文件在 C 栏的续页中列出。



见同族专利附件。

* 引用文件的具体类型:

“A” 认为不特别相关的表示了现有技术一般状态的文件

“E” 在国际申请日的当天或之后公布的在先申请或专利

“L” 可能对优先权要求构成怀疑的文件, 或为确定另一篇引用文件的公布日而引用的或者因其他特殊理由而引用的文件(如具体说明的)

“O” 涉及口头公开、使用、展览或其他方式公开的文件

“P” 公布日先于国际申请日但迟于所要求的优先权日的文件

“T” 在申请日或优先权日之后公布, 与申请不相抵触, 但为了理解发明之理论或原理的在后文件

“X” 特别相关的文件, 单独考虑该文件, 认定要求保护的发明不是新颖的或不具有创造性

“Y” 特别相关的文件, 当该文件与另一篇或者多篇该类文件结合并且这种结合对于本领域技术人员为显而易见时, 要求保护的发明不具有创造性

“&” 同族专利的文件

国际检索实际完成的日期

17.12 月 2013(17.12.2013)

国际检索报告邮寄日期

02.1 月 2014 (02.01.2014)

ISA/CN 的名称和邮寄地址:

中华人民共和国国家知识产权局

中国北京市海淀区蓟门桥西土城路 6 号 100088

传真号: (86-10)62019451

受权官员

杨祺

电话号码: (86-10) **62413649**

国际检索报告
关于同族专利的信息

国际申请号
PCT/CN2013/079847

检索报告中引用的 专利文件	公布日期	同族专利	公布日期
CN 202797268 U	13.03.2013	无	
CN 102984348 A	20.03.2013	WO 2013/174340 A2	28.11.2013
CN 201663491 U	01.12.2010	无	

续：主题的分类

H01Q1/22 (2006.01) i

H02J17/00 (2006.01) i

H02J7/00 (2006.01) i