(12) 按照专利合作条约所公布的国际申请

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201310088761.2 2013 年 3 月 19 日 (19.03.2013) CN

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(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。

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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

(54) **Title**: METHOD, SYSTEM, AND MOBILE TERMINAL FOR REALIZING BI-PASS BASED ON RADIO FREQUENCY DEVICE

(54) **发明名称** : 基于一套射频设备实现双通的方法、系统及移动终端

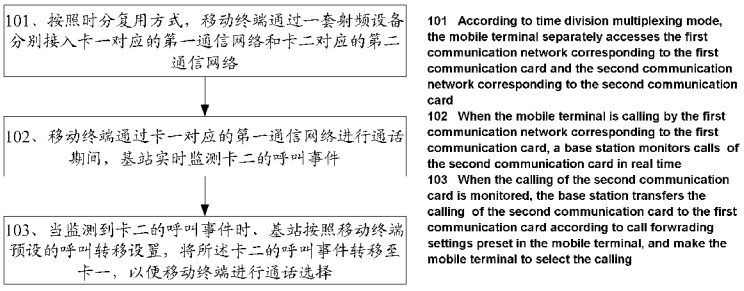


图 1/Fig. 1

(57) **Abstract**: A method, system, and mobile terminal for realizing bi-pass based on one radio frequency device is disclosed in the present invention relating to mobile communication field. The method includes the following steps: according to time division multiplexing mode, the mobile terminal separately accesses the first communication network corresponding to the first communication card and the second communication network corresponding to the second communication card by one radio frequency device. When the mobile terminal is calling by the first communication network corresponding to the first communication card, a base station monitors calls of the second communication card in real time. When the calling of the second communication card is monitored, the base station transfers the calling of the second communication card to the first communication card according to call forwarding settings preset in the mobile terminal, and make the mobile terminal to select the calling. The present invention enables dual-card, dual-standby, and bi-pass of the mobile terminal having only one radio device and simultaneously being inserted two cards into.

(57) **摘要**:

[见续页]

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本发明公开了一种基于一套射频设备实现双通的方法、系统及移动终端，涉及移动通信领域，所述方法包括：按照时分复用方式，移动终端通过一套射频设备分别接入第一通信卡对应的第一通信网络和第二通信卡对应的第二通信网络；移动终端通过第一通信卡对应的第一通信网络进行通话时，基站实时监测第二通信卡的呼叫事件；当监测到第二通信卡的呼叫事件时，基站按照移动终端预设的呼叫转移设置，将所述第二通信卡的呼叫事件转移至第一通信卡，使移动终端进行通话选择。本发明可以在只有一套射频设备的移动终端中同时插入两张卡，以实现双卡双待双通。

# INTERNATIONAL SEARCH REPORT

International application No.
**PCT/CN2013/078067**

**A. CLASSIFICATION OF SUBJECT MATTER**

H04W 4/16 (2009.01) i

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: H04B; H04L; H04W; H04Q

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, WPI, EPODOC: one, RF, radio frequency, single chip, dual-card, bi-pass, dual-standby, dual-mode, call, transfer

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|---|---|---|
| X | CN 102469426 A (SHENZHEN FUTAIHONG PRECISION INDUSTRY CO., LTD. et al.), 23 May 2012 (23.05.2012), description, paragraphs [0002]-[0029], and figures 1-2 | 1-12 |
| A | CN 101252730 A (JIAXING WINGTECH COMMUNICATION TECHNOLOGY CO., LTD.), 27 August 2008 (27.08.2008), the whole document | 1-12 |
| A | CN 101827463 A (SPREADTRUM COMMUNICATIONS (SHANGHAI) CO., LTD.), 08 September 2010 (08.09.2010), the whole document | 1-12 |
| A | US 2011280166 A1 (MEDIATEK INC.), 17 November 2011 (17.11.2011), the whole document | 1-12 |

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

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"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)

"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

"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

"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

"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

"&" document member of the same patent family

| Date of the actual completion of the international search | Date of mailing of the international search report |
|---|---|
| 29 November 2013 (29.11.2013) | **26 December 2013 (26.12.2013)** |
| Name and mailing address of the ISA/CN:<br>State Intellectual Property Office of the P. R. China<br>No. 6, Xitucheng Road, Jimenqiao<br>Haidian District, Beijing 100088, China<br>Facsimile No.: (86-10) 62019451 | Authorized officer<br>**LEI, Yongjun**<br>Telephone No.: (86-10) **62413442** |

# INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
**PCT/CN2013/078067**

| Patent Documents referred in the Report | Publication Date | Patent Family | Publication Date |
|---|---|---|---|
| CN 102469426 A | 23.05.2012 | None | |
| CN 101252730 A | 27.08.2008 | None | |
| CN 101827463 A | 08.09.2010 | None | |
| US 2011280166 A1 | 17.11.2011 | CN 102244919 A | 16.11.2011 |
| | | DE 102011000134 A1 | 29.03.2012 |
| | | INMUM 201003360 A | 07.09.2012 |
| | | TW 201203970 A | 16.01.2012 |

# 国际检索报告

国际申请号
**PCT/CN2013/078067**

**A. 主题的分类**

H04W 4/16 (2009.01) i

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: H04B; H04L; H04W; H04Q

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, WPI, EPODOC: 一个，一套，射频，单芯片，双通，双卡，双待，双模，呼叫，转移，one, RF, radio frequency, single chip, dual-card, bi-pass, dual-standby, dual-mode, call, transfer

**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 | CN 102469426 A (深圳富泰宏精密工业有限公司等) 23.5 月 2012 (23.05.2012) 说明书第[0002]-[0029]段，图 1-2 | 1-12 |
| A | CN 101252730 A (嘉兴闻泰通讯科技有限公司) 27.8 月 2008 (27.08.2008) 全文 | 1-12 |
| A | CN 101827463 A (展讯通信(上海)有限公司) 08.9 月 2010 (08.09.2010) 全文 | 1-12 |
| A | US 2011280166 A1 (MEDIATEK INC.) 17.11 月 2011 (17.11.2011) 全文 | 1-12 |

☐ 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）

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"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 | 国际检索报告邮寄日期 |
|---|---|
| 29.11 月 2013 (29.11.2013) | **26.12 月 2013 (26.12.2013)** |
| ISA/CN 的名称和邮寄地址：<br>中华人民共和国国家知识产权局<br>中国北京市海淀区蓟门桥西土城路 6 号 100088<br>传真号：　(86-10)62019451 | 受权官员<br>雷永俊<br>电话号码：(86-10) **62413442** |

# 国际检索报告
关于同族专利的信息

国际申请号
**PCT/CN2013/078067**

| 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 102469426 A | 23.05.2012 | 无 | |
| CN 101252730 A | 27.08.2008 | 无 | |
| CN 101827463 A | 08.09.2010 | 无 | |
| US 2011280166 A1 | 17.11.2011 | CN 102244919 A | 16.11.2011 |
| | | DE 102011000134 A1 | 29.03.2012 |
| | | IN MUM201003360 A | 07.09.2012 |
| | | TW 201203970 A | 16.01.2012 |