

(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

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2012 年 10 月 11 日 (11.10.2012)



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WO 2012/136170 A3

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H04W 48/18 (2009.01)
- (21) 国际申请号: PCT/CN2012/077523
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- (25) 申请语言: 中文
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- (30) 优先权:
201110221315.5 2011 年 8 月 3 日 (03.08.2011) CN
- (71) 申请人 (对除美国外的所有指定国): **华为终端有限公司 (HUAWEI DEVICE CO., LTD.)** [CN/CN]; 中国广东省深圳市龙岗区坂田华为基地 B 区 2 号楼, Guangdong 518129 (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, 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, KM, 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, 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, ML, MR, NE, SN, TD, TG)。

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: 2012 年 11 月 22 日

(54) Title: SINGLE-SIM-DUAL-STANDBY TERMINAL AND DATA SERVICE CONNECTION METHOD

(54) 发明名称: 单卡双待终端及数据业务连接方法

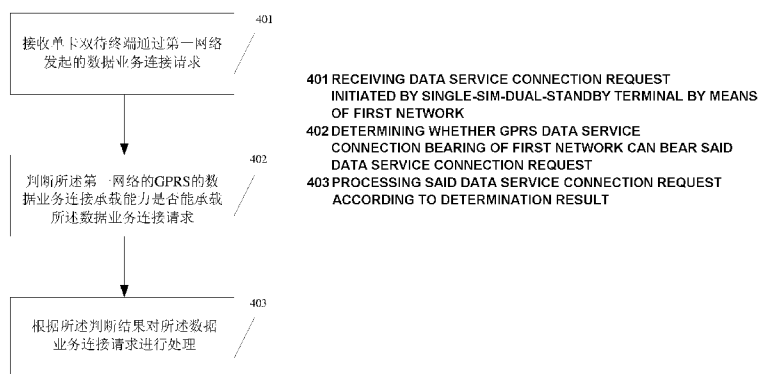


图 4 / Fig. 4

(57) Abstract: The present invention relates to the processing of establishing a PS connection for single-SIM-dual-standby terminals. As presented in embodiments of the present invention, a single-SIM-dual-standby terminal initiates a data service connection request by means of the access network the terminal currently uses; a data domain core network processes the data service connection request of the single-SIM-dual-standby terminal according to network resources and the status of the data service requested by the terminal, so that the PS connection bearing of the single-SIM-dual-standby terminal is established on an appropriate network, thereby fully utilizing existing network resources and reducing electricity consumption of the single-SIM-dual-standby terminal.

(57) 摘要: 本发明涉及单卡双待终端建立 PS 连接的处理。本发明实施例中, 单卡双待终端通过当前正在使用的接入网络发起数据业务连接请求, 数据域核心网根据网络资源和单卡双待终端所请求的数据业务的情况, 对终端的数据业务连接请求进行处理, 使得单卡双待终端的 PS 连接承载建立在合适的网络上, 充分利用现有网络资源, 且降低单卡双待终端的电能消耗。

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/CN2012/077523**A. CLASSIFICATION OF SUBJECT MATTER**

H04W 48/18 (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: H04W, H04Q 7/-, H04L

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)

WPI, EPODOC, CNKI, CNPAT, CNTXT: network, data, grouping, second generation, third generation; cover, bad, not good; single card, dual mode; double standby, select, firstly, priority, PS, 2G, 3G, GPRS, EDGE, signal, quality

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CN 102137459 A (HUAWEI TECHNOLOGIES CO., LTD.), 27 July 2011 (27.07.2011), description, paragraphs [0004], [0084]-[0126], and [0293]-[0355], and figures 1-12	1-14
A	CN 101765186 A (ZTE CORP.), 30 June 2010 (30.06.2010), the whole document	1-14
A	US 20070171893 A1 (HUAWEI TECHNOLOGIES CO., LTD.), 26 July 2007 (26.07.2007), the whole document	1-14

☐ 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 07 September 2012 (07.09.2012)	Date of mailing of the international search report 04 October 2012 (04.10.2012)
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 LIU, Yi Telephone No.: (86-10) 62413335

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

PCT/CN2012/077523

Patent Documents referred in the Report	Publication Date	Patent Family	Publication Date
CN 102137459 A	27.07.2011	WO 2012113214 A1	30.08.2012
CN 101765186 A	30.06.2010	None	
US 20070171893 A1	26.07.2007	WO 2007009348 A1	25.01.2007
		CN 1893683 A	10.01.2007
		CN 101161023 A	09.04.2008
		CN 100442865 C	10.12.2008
		CN 101161023 B	27.10.2010

国际检索报告

国际申请号
PCT/CN2012/077523

A. 主题的分类

H04W 48/18 (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: H04W, H04Q7/-, H04L

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))

WPI, EPODOC, CNKI, CNPAT, CNTXT: 选择, 优先, 网络, 数据, 分组, 第二代, 第三代; 覆盖, 信号, 不好, 不佳; 单卡, 双模, 双待; double standby, select, firstly, priority, PS, 2G, 3G, GPRS, EDGE, signal, quality

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 102137459 A (华为技术有限公司) 27.7 月 2011 (27.07.2011) 说明书第 [0004]、[0084]-[0126]、[0293]-[0355]段, 图 1-12	1-14
A	CN 101765186 A (中兴通讯股份有限公司) 30.6 月 2010 (30.06.2010) 全文	1-14
A	US 20070171893 A1 (HUAWEI TECHNOLOGIES CO.,LTD.) 26.7 月 2007 (26.07.2007) 全文	1-14

☐ 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

07.9 月 2012 (07.09.2012)

国际检索报告邮寄日期

04.10 月 2012 (04.10.2012)

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

刘毅

电话号码: (86-10) **62413335**

国际检索报告
关于同族专利的信息

国际申请号
PCT/CN2012/077523

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 102137459 A	27.07.2011	WO 2012113214 A1	30.08.2012
CN 101765186 A	30.06.2010	无	
US 20070171893 A1	26.07.2007	WO 2007009348 A1	25.01.2007
		CN 1893683 A	10.01.2007
		CN 101161023 A	09.04.2008
		CN 100442865 C	10.12.2008
		CN 101161023 B	27.10.2010