

# (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  
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WO 2011/120466 A3

- (51) 国际专利分类号:  
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- (22) 国际申请日: 2011年5月9日 (09.05.2011)
- (25) 申请语言: 中文
- (26) 公布语言: 中文
- (71) 申请人 (对除美国外的所有指定国): **华为技术有限公司 (HUAWEI TECHNOLOGIES CO., LTD.)** [CN/CN]; 中国广东省深圳市龙岗区坂田华为总部办公楼, 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, RO, RS, RU, 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, SD, SL, SZ, TZ, UG, ZM, ZW), 欧亚 (AM, AZ, BY, KG, KZ, MD, 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4月5日

(54) Title: METHOD AND APPARATUS FOR NETWORK ACCESS

(54) 发明名称: 一种网络接入方法和装置

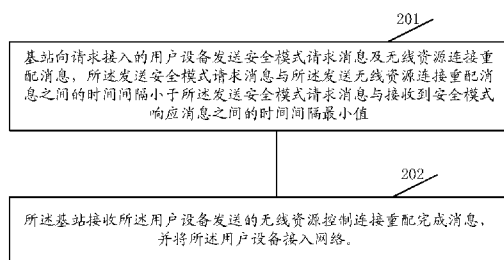


图 2 / Fig. 2

201 A BASE STATION (BS) TRANSMITS A SECURITY MODE COMMAND MESSAGE AND A RADIO RESOURCE CONTROL (RRC) CONNECTION RECONFIGURATION MESSAGE TO A USER EQUIPMENT (UE) THAT REQUESTS ACCESS, WHEREIN THE TIME INTERVAL BETWEEN THE TRANSMISSION OF THE SECURITY MODE COMMAND MESSAGE AND THE TRANSMISSION OF THE RRC CONNECTION RECONFIGURATION MESSAGE IS SMALLER THAN THE MINIMUM VALUE OF THE TIME INTERVAL BETWEEN THE TRANSMISSION OF THE SECURITY MODE COMMAND MESSAGE AND THE RECEPTION OF A SECURITY MODE RESPONSE MESSAGE

202 THE BS RECEIVES AN RRC CONNECTION RECONFIGURATION COMPLETE MESSAGE RETURNED FROM THE UE, AND ACCESSES THE UE INTO THE NETWORK.

(57) Abstract: The present invention discloses a method and an apparatus for network access. The method includes: a base station (BS) transmits a Security Mode Command message and a Radio Resource Control (RRC) Connection Reconfiguration message to a user equipment (UE) that requests access, wherein the time interval between the transmission of the Security Mode Command message and the transmission of the RRC Connection Reconfiguration message is smaller than the minimum value of the time interval between the transmission of the Security Mode Command message and the reception of a Security Mode Response message; the BS receives an RRC Connection Reconfiguration Complete message returned from the UE, and accesses the UE into the network. Thus it solves the problem that the delay for a UE to access a network is too long. The present invention also discloses an apparatus for network access.

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(57) 摘要:

本发明公开了一种网络接入方法和装置，该方法包括：基站向请求接入的用户设备发送安全模式请求消息及无线资源控制连接重配消息，所述发送安全模式请求消息与所述发送无线资源控制连接重配消息之间的时间间隔小于所述发送安全模式请求消息与接收到安全模式响应消息之间的时间间隔最小值；所述基站接收所述用户设备返回无线资源控制连接重配完成消息，将所述用户设备接入网络，以解决用户设备接入网络时延过长问题。本发明还公开了一种网络接入装置。

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CN2011/073809

## 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; H04B; H04L; H04M; H04J

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)

CPRSABS, CNKI, VEN, WPI, EPODOC, GOOGLE, 3GPP: security mode command, RRC connection reconfiguration, simultaneously, fail, failure, encrypt, access

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	EP2265077A1 (PANASONIC CORP.) 22 Dec. 2010 (22.12.2010) paragraphs [0092]-[0093] of the description, figure 8	1-2, 5-6, 11-12, 15-16 3-4, 7-10, 13-14, 17-20
X	WO2010038590A1 (NEC CORP.) 08 April 2010 (08.04.2010) paragraphs [0077]-[0078] of the description, figure 3	1, 5, 11, 15
X	US2010316034A1 (RES IN MOTION LTD.) 16 Dec. 2010 (16.12.2010) paragraph [0043] of the description, figure 4	1, 5, 11, 15
A	CN1764108A (HUAWEI TECHNOLOGIES CO., LTD.) 26 April 2006 (26.04.2006) the whole document	1-20

Further documents are listed in the continuation of Box C.

See patent family annex.

<p>* Special categories of cited documents:</p> <p>“A” document defining the general state of the art which is not considered to be of particular relevance</p> <p>“E” earlier application or patent but published on or after the international filing date</p> <p>“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)</p> <p>“O” document referring to an oral disclosure, use, exhibition or other means</p> <p>“P” document published prior to the international filing date but later than the priority date claimed</p>	<p>“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</p> <p>“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</p> <p>“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</p> <p>“&amp;” document member of the same patent family</p>
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Date of the actual completion of the international search  
03 Feb. 2012 (03.02.2012)

Date of mailing of the international search report  
**16 Feb. 2012 (16.02.2012)**

Name and mailing address of the ISA/CN  
The State Intellectual Property Office, the P.R.China  
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**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International application No.  
PCT/CN2011/073809

Patent Documents referred in the Report	Publication Date	Patent Family	Publication Date
EP2265077A1	22.12.2010	WO2010145799A1	23.12.2010
WO2010038590A1	08.04.2010	US2011176450A1	21.07.2011
		CN102172091A	31.08.2011
US2010316034A1	16.12.2010	WO2010146467A1	23.12.2010
CN1764108A	26.04.2006	CN100583751C	20.01.2010

<b>A. 主题的分类</b>		
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>B. 检索领域</b>		
检索的最低限度文献(标明分类系统和分类号)		
IPC: H04W; H04Q; H04B; H04L; H04M; H04J		
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))		
CPRSABS, CNKI, VEN, WPI, EPODOC, GOOGLE, 3GPP: 安全模式请求, 无线资源控制连接重配, RRC 连接重配, 同时, 失败, 加密, 接入, security mode command, RRC connection reconfiguration, simultaneously, fail, failure, encrypt, access		
<b>C. 相关文件</b>		
类 型*	引用文件, 必要时, 指明相关段落	相关的权利要求
X A	EP2265077A1 (松下电器产业株式会社) 22.12 月 2010 (22.12.2010) 说明书第[0092]- [0093]段, 图 8	1-2, 5-6, 11-12, 15-16 3-4, 7-10, 13-14, 17-20
X	WO2010038590A1 (日本电气株式会社) 08.4 月 2010 (08.04.2010) 说明书第[0077]-[0078]段、图 3	1, 5, 11, 15
X	US2010316034A1 (捷讯研究有限公司) 16.12 月 2010 (16.12.2010) 说明书第[0043]段, 图 4	1, 5, 11, 15
A	CN1764108A (华为技术有限公司) 26.4 月 2006 (26.04.2006) 全文	1-20
<input type="checkbox"/> 其余文件在 C 栏的续页中列出。 <input checked="" type="checkbox"/> 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 03.2 月 2012 (03.02.2012)		国际检索报告邮寄日期 <b>16.2 月 2012 (16.02.2012)</b>
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  <b>卢杉</b>  电话号码: (86-10) <b>62411346</b>

国际检索报告  
关于同族专利的信息

国际申请号  
**PCT/CN2011/073809**

检索报告中引用的 专利文件	公布日期	同族专利	公布日期
EP2265077A1	22.12.2010	WO2010145799A1	23.12.2010
WO2010038590A1	08.04.2010	US2011176450A1	21.07.2011
		CN102172091A	31.08.2011
US2010316034A1	16.12.2010	WO2010146467A1	23.12.2010
CN1764108A	26.04.2006	CN100583751C	20.01.2010