

(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 27 日 (27.12.2013)



(10) 国际公布号
WO 2013/189391 A3

- (51) 国际专利分类号:
H04W 48/06 (2009.01)
- (21) 国际申请号: PCT/CN2013/081914
- (22) 国际申请日: 2013 年 8 月 20 日 (20.08.2013)
- (25) 申请语言: 中文
- (26) 公布语言: 中文
- (30) 优先权:
201310211765.5 2013 年 5 月 29 日 (29.05.2013) 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, SA, 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)。

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(54) Title: NETWORK ACCESS CONTROL METHOD AND MOBILE TERMINAL

(54) 发明名称: 一种网络接入控制方法及移动终端

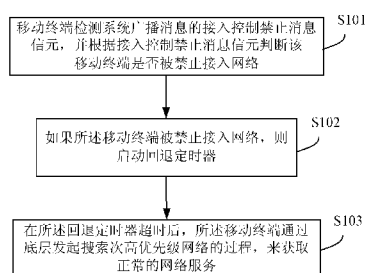


图 2 /FIG. 2

S101 A mobile terminal detects an access control forbidden message information element of a system broadcast message, and determines whether the mobile terminal is forbidden to access a network according to the access control forbidden message information element
S102 If the mobile terminal is forbidden to access the network, start a back-off timer
S103 When the back-off timer times out, the mobile terminal initiates a process of searching for a second top priority network through a bottom layer to acquire a normal network service

(57) Abstract: A network access control method and a mobile terminal. The method comprises: a mobile terminal detecting an access control forbidden message information element of a system broadcast message, and determining whether the mobile terminal is forbidden to access a network according to the access control forbidden message information element; if the mobile terminal is forbidden to access the network, starting a back-off timer; and when the back-off timer times out, the mobile terminal initiating a process of searching for a second top priority network through a bottom layer to acquire a normal network service. In parallel and collaborative network environment, when a failure occurs in a network or a network system is overloaded, the method and the mobile terminal enable a low priority mobile terminal to access a network as soon as possible in such a network environment to acquire a normal network service, thereby reducing the load of a network system, enhancing user experience, and guaranteeing a long battery life of a mobile terminal.

(57) 摘要: 一种网络接入控制方法及移动终端, 其中, 所述方法包括: 移动终端检测系统广播消息的接入控制禁止消息信元, 并根据所述接入控制禁止消息信元判断所述移动终端是否被禁止接入网络; 如果所述移动终端被禁止接入网络, 则启动回退定时器; 在所述回退定时器超时后, 所述移动终端通过底层发起搜索次高优先级网络的过程, 来获取正常的网络服务。所述方法及移动终端在并行协作网络环境下某个网络出现故障或者网络系统负载过重时, 使得低优先级的移动终端在这样的网络环境下能在最短的时间内接入网络从而获取正常的网络服务, 减少了网络系统的负载, 提高了用户体验, 保证了移动终端的续航能力。



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))

- 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。

本国际公布:

- 包括国际检索报告(条约第 21 条(3))。

(88) 国际检索报告公布日期: 2014 年 5 月 1 日

INTERNATIONAL SEARCH REPORT

International application No.

PCT/CN2013/081914

A. CLASSIFICATION OF SUBJECT MATTER

H04W 48/06 (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

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: access control prohibition, access 6d prohibition, timer, back-off timer, access, control, forbid+, prohibit+, search+, select+, network, another, other, priority, multimode

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	CN 101494925 A (LEADCORE TECHNOLOGY CO., LTD. et al.), 29 July 2009 (29.07.2009), description, page 4, paragraph 2 to page 5, paragraph 5	1-8
Y	CN 102469519 A (DATANG MOBILE COMMUNICATIONS EQUIPMENT CO., LTD.), 23 May 2012 (23.05.2012), description, paragraphs [0063]-[0069] and [0082]	1-8
Y	CN 1610422 A (HUAWEI TECHNOLOGIES CO., LTD.), 27 April 2005 (27.04.2005), description, page 5, paragraph 6 to page 6, paragraph 3	1-8
A	CN 101056455 A (ZTE CORP.), 17 October 2007 (17.10.2007), 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 30 January 2014 (30.01.2014)	Date of mailing of the international search report 13 March 2014 (13.03.2014)
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 TIAN, Linlin Telephone No.: (86-10) 61648260

International application No.
PCT/CN2013/081914

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

国际检索报告

国际申请号

PCT/CN2013/081914

A. 主题的分类

H04W 48/06 (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; 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: 接入控制禁止, 接入 6d 禁止, 搜索, 选择, 网络, 其他, 其它, 优先级, 多模, 定时器, 回退定时器, access, control, forbid+, prohibit+, search+, select+, network, another, other, priority, multimode

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
Y	CN 101494925 A (联芯科技有限公司等) 29.7 月 2009 (29.07.2009) 说明书第 4 页第 2 段至第 5 页第 5 段	1-8
Y	CN 102469519 A (大唐移动通信设备有限公司) 23.5 月 2012 (23.05.2012) 说明书第[0063]-[0069]段, 第[0082]段	1-8
Y	CN 1610422 A (华为技术有限公司) 27.4 月 2005 (27.04.2005) 说明书第 5 页第 6 段至第 6 页第 3 段	1-8
A	CN 101056455 A (中兴通讯股份有限公司) 17.10 月 2007 (17.10.2007) 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

30.1 月 2014 (30.01.2014)

国际检索报告邮寄日期

13.3 月 2014 (13.03.2014)

ISA/CN 的名称和邮寄地址:

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国际检索报告
关于同族专利的信息

国际申请号
PCT/CN2013/081914

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 101494925 A	29.07.2009	无	
CN 102469519 A	23.05.2012	无	
CN 1610422 A	27.04.2005	无	
CN 101056455 A	17.10.2007	无	