(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 11 月 28 日 (28.11.2013)

WIPO | PCT

(10) 国际公布号
WO 2013/174318 A3

(51) 国际专利分类号:
H04M 1/02 (2006.01)

(21) 国际申请号: PCT/CN2013/079779

(22) 国际申请日: 2013 年 7 月 22 日 (22.07.2013)

(25) 申请语言: 中文

(26) 公布语言: 中文

(30) 优先权:
201310090125.3 2013 年 3 月 20 日 (20.03.2013) 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: **房稳 (FANG, Wen)**; 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)。 **李英 (LI, Ying)**; 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)。

(74) 代理人: **北京康信知识产权代理有限责任公司 (KANGXIN PARTNERS, P.C.)**; 中国北京市海淀区知春路甲 48 号盈都大厦 A 座 16 层, Beijing 100098 (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。

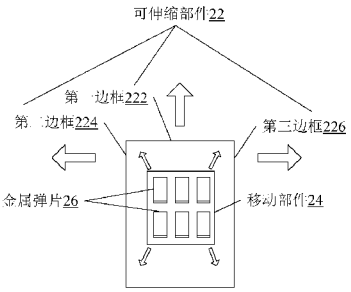
(84) 指定国 (除另有指明，要求每一种可提供的地区保护): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), 欧亚 (AM, AZ, BY, KG, KZ, RU, TJ, TM), 欧洲 (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI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

本国际公布:
— 包括国际检索报告(条约第 21 条(3))。

[见续页]

(54) **Title**: CARD SLOT FOR SUBSCRIBER IDENTITY MODULE SIM CARD AND MOBILE TERMINAL

(54) **发明名称** : 用户识别模块 SIM 卡卡槽及移动终端



22 TELESCOPIC COMPONENT
24 MOVING COMPONENT
26 METAL SHRAPNEL
222 FIRST EDGE FRAME
224 SECOND EDGE FRAME
226 THIRD EDGE FRAME

图 2 / FIG. 2

(57) **Abstract**: Disclosed are a card slot for a subscriber identity module SIM card and a mobile terminal. The card slot comprises: a telescopic component, the telescopic component comprising a first edge frame, a second edge frame and a third edge frame, wherein the second edge frame and the third edge frame are arranged at the two sides of the first edge frame in parallel and connected to the first edge frame, and the first edge frame, the second edge frame and the third edge frame are respectively set into a telescopic structure; and a moving component which is arranged on the underside of a metal shrapnel and connected to the telescopic component, and used for controlling the degree of closeness of the arrangement of various contacts in the metal spring leaf. The size and shape of the card slot in the present invention can change with a SIM card inserted in the card slot, and can automatically change the distribution of the metal shrapnel connected to the SIM card in a mobile terminal to ensure the normal use of the SIM card, thereby being effectively compatible with SIM cards of different standards so that a user can freely replace a cell phone without taking into account the difference between SIM cards. Using the card slot mentioned above is beneficial to expanding the market compatibility of mobile terminal products.

(57) **摘要**:

[见续页]

WO 2013/174318 A3

(88) 国际检索报告公布日期: 2014 年 2 月 20 日

— 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。

本发明公开了一种用户识别模块 SIM 卡卡槽及移动终端，其中，该卡槽包括：可伸缩部件，该可伸缩部件包括第一边框、第二边框和第三边框，其中，第二边框和第三边框平行设置于第一边框两侧且与第一边框相连，第一边框、第二边框和第三边框均设置为可伸缩结构；移动部件，设置在金属弹片下侧且与可伸缩部件连接，用于控制金属弹片中的各个触点排列的紧密程度。本发明中卡槽的大小形状可以随着插入卡槽的 SIM 卡变化，并且可以自动改变移动终端与 SIM 卡连接的金属弹片的分布，保证 SIM 卡正常使用，从而有效兼容不同标准的 SIM 卡，使用户不必考虑 SIM 卡的不同，随意更换手机，采用上述卡槽，有利于扩大移动终端产品的市场兼容性。

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CN2013/079779

A. CLASSIFICATION OF SUBJECT MATTER

H04M 1/02 (2006.01) 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: H04M, H01R

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; CPRS; CNKI: mini-SIM, micro-SIM, nano-SIM, SIM, Subscriber Identity Module, flex+, stretch+, slot+, clipping groove, activity, telescopic, frame

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	CN 202424802 U (HEADQUARTER PROCONN TECHNOLOGY CO., LTD.), 05 September 2012 (05.09.2012), see the whole document	1-8
A	CN 102510416 A (HONG FU JIN PRECISION INDUSTRY (SHENZHEN) CO., LTD.), 20 June 2012 (20.06.2012), see the whole document	1-8
A	CN 102694319 A (ACER INC.), 26 September 2012 (26.09.2012), see the whole document	1-8
A	US 8308514 B1 (CHENG UEI PRECISION INDUSTRY CO., LTD.), 13 November 2012 (13.11.2012), see the whole document	1-8

☐ 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
11 December 2013 (11.12.2013)	**26 December 2013 (26.12.2013)**
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 **WEN, Rui** Telephone No.: (86-10) **62412083**

Form PCT/ISA/210 (second sheet) (July 2009)

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/CN2013/079779

Patent Documents referred in the Report	Publication Date	Patent Family	Publication Date
CN 202424802 U	05.09.2012	None	
CN 102510416 A	20.06.2012	None	
CN 102694319 A	26.09.2012	None	
US 8308514 B1	13.11.2012	None	

国际检索报告

国际申请号
PCT/CN2013/079779

A. 主题的分类

H04M 1/02 (2006.01) 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: H04M, H01R

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; CPRS; CNKI:

mini-SIM, micro-SIM, nano-SIM, SIM, Subscriber Identity Module, flex+, stretch+, slot+, 用户识别模块，卡槽，伸缩，活动，弹性，边框

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
A	CN202424802U (钜航科技股份有限公司) 05.9 月 2012 (05.09.2012) 参见全文	1-8
A	CN102510416A (鸿富锦精密工业（深圳）有限公司) 20.6 月 2012 (20.06.2012) 参见全文	1-8
A	CN102694319A (宏碁股份有限公司) 26.9 月 2012 (26.09.2012) 参见全文	1-8
A	US8308514B1 (Cheng Uei Precision Industry Co., Ltd.) 13.11 月 2012 (13.11.2012) 参见全文	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	国际检索报告邮寄日期
11.12 月 2013 (11.12.2013)	**26.12 月 2013 (26.12.2013)**
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 温睿 电话号码：(86-10) **6241 2083**

国际检索报告

关于同族专利的信息

国际申请号
PCT/CN2013/079779

检索报告中引用的专利文件	公布日期	同族专利	公布日期
CN202424802U	05.09.2012	无	
CN102510416A	20.06.2012	无	
CN102694319A	26.09.2012	无	
US8308514B1	13.11.2012	无	