

PCT请求书

打印件(原件为电子形式)

0	由受理局填写	
0-1	国际申请号	
0-2	国际申请日	
0-3	受理局名称和“PCT国际申请”	
0-4	PCT/RO/101表 PCT请求书	
0-4-1	软件版本	PCT-SAFE 版本 3. 51. 055. 231 MT/FOP 20120701/0. 20. 5. 19
0-5	请求 下列签字人请求按照专利合作条约的规定处理本国际申请	
0-6	申请人指定的受理局	中华人民共和国国家知识产权局 (RO/CN)
0-7	申请人或代理人的档案号	zzg2013002
I	发明名称	通信信息传输方法和系统
II	申请人	
II-1	该人是	申请人 (applicant only)
II-2	是对下列国家的申请人	除美国以外的所有指定国 (all designated States except US)
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II-7	居所	中国 CN
II-8	电话号码	86- 0750-8928888
II-9	传真号码	86-0757-83394376
II-10	电子邮箱	cnfspatent@126.com
II-10(a)	电子邮件授权 授权受理局、国际检索单位、国际局和国际初步审查单位, 如果其愿意, 使用本电子邮件地址发送有关本国际申请的通知书:	作为随后纸件通知书的预送本

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III-1	申请人和/或发明人	申请人和发明人 (applicant and inventor) 美国 (US only) 王 国芳 WONG, Kwok fong 中国广东省江门市 鹤山市共和镇新材料基地 (鹤山市世逸电子科技有限公司H座) 529728 Block H, He shan World Fair Electronics Technology Limited New Material Base Gonghe Town, Heshan City Jiangmen, Guangdong 529728 China 中国 CN
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III-1-2	是对下列国家的申请人	
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III-1-4 en	Name (LAST, First):	
III-1-5 zh	地址	
III-1-5 en	Address	
III-1-6	国籍	
III-1-7	居所	
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III-2-2	是对下列国家的申请人	
III-2-4 zh	姓名:	
III-2-4 en	Name (LAST, First):	
III-2-5 zh	地址	
III-2-5 en	Address	
III-2-6	国籍	
III-2-7	居所	

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打印件(原件为电子形式)

IV-1	代理人, 共同代表或通信地址 下列人员被委托/已经被委托为代表申请人在主管国际单位办理事务的名称	代理人 (agent) 佛山东平知识产权事务所 (普通合伙)
IV-1-1zh		
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IV-1-3	电话号码	86-757-83394427
IV-1-4	传真号码	86-757-83394376
IV-1-5	电子邮址	cnfspatent@126.com
IV-1-5(a)	电子邮件授权 授权受理局、国际检索单位、国际局和国际初步审查单位, 如果其愿意, 使用本电子邮件地址发送有关本国际申请的通知书:	作为随后纸件通知书的预送本
IV-1-6	代理人登记号	44307
V	国家的指定	
V-1	根据细则4.9(a), 提交本请求书即为, 指定在国际申请日受PCT约束的所有成员国, 以要求获得可以获得的所有保护类型, 适用情况下, 要求获得地区专利和国家专利。	
VI-1	要求在先国家申请的优先权	
VI-1-1	申请日	2012年 11月 07日 (07.11.2012)
VI-1-2	号码	201210437850.9
VI-1-3	国家	中国 CN
VI-2	优先权文件请求 请受理局准备并向国际局送交上述在先申请中标号如下的在先申请的证明副本:	VI-1
VI-3	援引加入: 如果条约11(1)(iii)(d)或(e)规定的国际申请的某一项目, 或者细则20.5(a)规定的说明书, 权利要求书或附图的某一部分不包含在本国际申请中, 但是全部包含在一个在先申请中, 并且在受理局首次收到条约11(1)(iii)规定的一个或多个项目之日要求了该在先申请的优先权, 则该项目或该部分可以依据细则20.6确认, 为细则20.6的目的援引加入到该国际申请中。	
VII-1	选定的国际检索单位	中华人民共和国国家知识产权局 (ISA/CN)

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打印件(原件为电子形式)

VIII	声明	声明数目	
VIII-1	关于发明人身份的声明	—	
VIII-2	关于申请人在国际申请日有权申请和被授予专利的声明	—	
VIII-3	关于申请人在国际申请日有权要求在先申请的优先权的说明	—	
VIII-4	发明人资格声明(仅为指定美国目的)	—	
VIII-5	关于不影响新颖性的公开或缺乏新颖性的例外的声明	—	
IX	清单	页数	附以电子文档
IX-1	请求书(包括声明页)	4	✓
IX-2	说明书	10	✓
IX-3	权利要求	5	✓
IX-4	摘要	1	✓
IX-5	附图	5	✓
IX-7	共计	25	
	附件	附以纸件	附以电子文档
IX-8	费用计算页	—	✓
IX-9	单独委托书原件	—	✓
IX-18	PCT-SAFE 物理载体	—	—
IX-20	应与摘要一起公布的附图图号	1	
IX-21	国际申请所用语言	中文	
X-1	申请人, 代理人或共同代表的签字	(PKCS7数字签字)	
X-1-1	名称	佛山东平知识产权事务所(普通合伙) 詹仲国 代理人	
X-1-2	签字人姓名		
X-1-3	还要注明此人是以什么名义签字的		

由受理局填写

10-1	据称的国际申请文件的实际收到日期	
10-2	附图:	
10-2-1	收到	
10-2-2	未收到	
10-3	由于随后在期限内收到补充国际申请的文件或附图, 更改的实际收到日期	
10-4	在期限内收到根据PCT第11(2)条所进行的改正的日期	
10-5	国际检索单位	ISA/CN
10-6	检索本的传送推迟到缴纳检索费后	

由国际局填写

11-1	国际局收到登记本日期	
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PCT (附件-费用计算页)

打印件(原件为电子形式)
(本页不是国际申请的组成部分, 也不计作国际申请的一页)

0	由受理局填写			
0-1	国际申请号			
0-2	受理局日期章			
0-4	PCT/RO/101表(附件) PCT费用计算页			
0-4-1	软件版本		PCT-SAFE 版本 3. 51. 055. 231 MT/FOP 20120701/0. 20. 5. 19	
0-9	申请人或代理人的档案号		zzg2013002	
2	申请人		鹤山世达光电科技有限公司	
12	计算应缴费用	费用数额/数目	总额 (CNY)	总额 (EQF)
12-1	传送费 T	⇄	500	
12-2-1	检索费 S	⇄	2100	
12-2-2	进行国际检索的单位	CN		
12-3	国际费 (前30页) i1	1330 EQF		
12-4	超过30页的页数	0		
12-5	附加费数额 (X)	0 EQF		
12-6	附加费总额 i2	0 EQF		
12-7	i1 + i2 = i	1330 EQF		
12-12	电子申请(完全)减免 R	EQF-300		
12-13	国际申请费总额(i-R) I	⇄		1030
12-14	优先权文件费 要求提供的优先权文件数	1		
12-15	每份文件应缴费用 (X)	150 CNY		
12-16	优先权文件费总额: P	⇄	150	
12-17	恢复优先权请求费 恢复优先权请求的数量 RP	0		
	恢复优先权请求费的总额			
12-19	应缴费用总额 (T+S+I+P+RP)	⇄	2750	1030
12-21	缴费方式	银行汇款		

Claims

1. A type of communication information transmitting process, characterized in that said process comprises:

Communication information transmitting terminal acquires selected fingerprint
5 information of communication information receiving terminal, makes use of said fingerprint information of communication information receiving terminal to conduct identity authentication of said communication information receiving terminal;

After identity authentication of communication information receiving terminal is successfully completed, said communication information transmitting terminal
10 acquires communication information input by the user; wherein, said communication information comprises E-mail or SMS;

Said communication information transmitting terminal transmits said communication information to FingerQ Information Exchange Platform, which encrypts said communication information, and transmits encrypted communication
15 information to said communication information receiving terminal.

2. The said process according to Claim 1, characterized in that said communication information transmitting terminal acquires selected fingerprint information of communication information receiving terminal, comprising:

20 Said communication information transmitting terminal selects corresponding communication information receiving terminal, said communication information transmitting terminal is registered on said FingerQ Information Exchange Platform, and notifies said communication information receiving terminal to be registered on said FingerQ Information Exchange Platform;

25 Said communication information transmitting terminal acquires registration information of said communication information receiving terminal, which comprises fingerprint information of said communication information receiving terminal.

3. The said process according to Claim 1, characterized in that after identity

authentication of said communication information receiving terminal is successfully completed and before said communication information transmitting terminal acquires communication information input by the user, the process also comprises:

Through said FingerQ Information Exchange Platform, said communication
5 information transmitting terminal transmits secret key exchange request and secret key of said communication information transmitting terminal to said communication information receiving terminal;

Said communication information transmitting terminal receives confirmation
message of secret key exchange transmitted by said communication information
10 receiving terminal through said FingerQ Information Exchange Platform and secret key of said communication information receiving terminal;

Accordingly, said communication information transmitting terminal transmits
said communication information to FingerQ Information Exchange Platform, which
encrypts said communication information, transmits encrypted communication
15 information to communication information receiving terminal, i.e.:

Said communication information transmitting terminal transmits said
communication information to FingerQ Information Exchange Platform, which
makes use of secret key of said communication information transmitting terminal to
encrypt said communication information, then transmits encrypted communication
20 information to said communication information receiving terminal.

4. The said process according to Claim 1, characterized in that after said
FingerQ Information Exchange Platform encrypts said communication information
and transmits encrypted communication information to said communication
25 information receiving terminal, the process also comprises:

Said communication information receiving terminal receives and decrypts the
encrypted communication information, so as to acquire and display decrypted
communication information.

30 5. The said process according to Claim 4, characterized in that before said

communication information receiving terminal receives and decrypts the encrypted communication information, so as to acquire and display decrypted communication information, the process also comprises:

5 Said communication information receiving terminal acquires fingerprint information of said communication information transmitting terminal, makes use of it to conduct identity authentication;

After identity authentication of said communication information transmitting terminal is successfully completed, said communication information receiving terminal executes the step of receiving and decrypting encrypted communication
10 information.

6. A type of communication information transmitting system, characterized in that said system comprises: communication information transmitting terminal and FingerQ Information Exchange Platform, connection between said communication
15 information transmitting terminal and said FingerQ Information Exchange Platform;

Wherein, said communication information transmitting terminal comprises:

Transmitting terminal fingerprint sensor is used to acquire selected fingerprint information of communication information receiving terminal, make use of said fingerprint information to conduct identity authentication of said communication
20 information receiving terminal;

Communication information acquirer, connecting to said transmitting terminal fingerprint sensor, is used to acquire communication information input by the user after identity authentication of said communication information receiving terminal is successfully completed by transmitting terminal fingerprint sensor; wherein, said
25 communication information comprises E-mail or SMS;

Communication information transmitter, connecting to said communication information acquirer, is used to transmit communication information acquired by said communication information acquirer to said FingerQ Information Exchange Platform;

30 Accordingly, wherein, said FingerQ Information Exchange Platform comprises:

Communication information receiver, connecting to said communication information transmitter, is used to receive communication information transmitted by said communication information transmitter;

5 Communication information processor, connecting to said communication information receiver, is used to encrypt communication information received by communication information receiver, transmit encrypted communication information to said communication information receiving terminal.

7. The said system according to Claim 6, characterized in that said
10 communication information transmitting terminal also comprises:

Transmitting terminal processor, connecting to said transmitting terminal fingerprint sensor, is used to select corresponding communication information receiving terminal, make said communication information transmitting terminal registered on said FingerQ Information Exchange Platform, and notify said
15 communication information receiving terminal to be registered on said FingerQ Information Exchange Platform;

Accordingly, said FingerQ Information Exchange Platform also comprises:

Registration information acquirer, connecting to said transmitting terminal processor, is used to acquire registration information of said communication
20 information transmitting terminal on said FingerQ Information Exchange Platform and registration information of said communication information receiving terminal on said FingerQ Information Exchange Platform;

Accordingly, said transmitting terminal fingerprint sensor, connecting to said registration information acquirer, is used to acquire registration information of said
25 communication information receiving terminal through said registration information acquirer, wherein, registration information of said communication information receiving terminal comprises fingerprint information of said communication information receiving terminal.

30 8. The said system according to Claim 6, characterized in that said

communication information transmitting terminal also comprises:

Secret key transmitter, respectively connecting to said transmitting terminal fingerprint sensor and said communication information acquirer, is used to transmit secret key exchange request and secret key of said communication information transmitting terminal to said FingerQ Information Exchange Platform after identity authentication of said communication information receiving terminal is successfully completed by said transmitting terminal fingerprint sensor and before said communication information acquirer acquires communication information input by the user;

10 Accordingly, said FingerQ Information Exchange Platform also comprises:

Transmitting terminal secret key repeater, connecting to said secret key transmitter, is used to receive secret key exchange request transmitted by said secret key transmitter and secret key of said communication information transmitting terminal, transmit said information to said communication information receiving terminal;

15 Receiving terminal secret key repeater, connecting to said communication information transmitter, is used to receive confirmation message of secret key exchange transmitted by said communication information receiving terminal and secret key of said communication information receiving terminal, transmit said information to said communication information transmitting terminal;

20 Accordingly, said communication information transmitting terminal also comprises:

Secret key receiver, connecting to said receiving terminal secret key repeater, is used to receive confirmation message of secret key exchange transmitted by said receiving terminal secret key repeater and secret key of said communication information receiving terminal;

25 Accordingly, said communication information processor comprises:

Communication information sub-processor, respectively connecting to said transmitting terminal secret key repeater and said communication information receiver, makes use of secret key of communication information transmitting terminal

30

acquired by said transmitting terminal secret key repeater to encrypt communication information received by said communication information receiver, transmits encrypted communication information to said communication information receiving terminal.

5

9. The said system according to Claim 6, characterized in that it also comprises: said communication information receiving terminal, connection between said communication information receiving terminal and said FingerQ Information Exchange Platform;

10 Wherein, said communication information receiving terminal comprises:

Receiving terminal processor, connecting to communication information processor, is used to receive encrypted communication information transmitted by said communication information processor, decrypt the encrypted communication information, acquire and display decrypted communication information.

15

10. The said system according to Claim 9, characterized in that said communication information receiving terminal also comprises:

Receiving terminal fingerprint sensor, is used to acquire fingerprint information of said communication information transmitting terminal, make use of said fingerprint information to conduct identity authentication of said communication information transmitting terminal;

Notifier, respectively connecting to said receiving terminal fingerprint sensor and said receiving terminal processor, is used to notify said receiving terminal processor to execute the step of receiving encrypted communication information transmitted by said communication information processor after identity authentication of said communication information transmitting terminal is successfully completed by said receiving terminal fingerprint sensor.

Specification

Communication Information Transmitting Process and System

Technical Field

5 The invention relates to the filed of communication technology, particularly to a type of communication information transmitting process and system.

Background Art

10 With the development of communication technology, it becomes more and more convenient to transmit and receive E-mail, SMS, etc., which is important means for people to exchange information. Currently, the process for transmitting E-mail and SMS is as follows: the user inputs E-mail at transmitting terminal of E-mail or input short message at transmitting terminal of short message, transmitting terminal of E-mail acquires the user's transmitting instructions and directly transmits the E-mail
15 to corresponding receiving terminal of E-mail or transmitting terminal of short message acquires the user's transmitting instructions and directly transmits the short message to corresponding receiving terminal of short message.

 However, in the realization of invention, the inventor finds that current technology has at least the following problem:

20 In current technology, transmitting terminal of E-mail directly transmits the E-mail to corresponding receiving terminal of E-mail or transmitting terminal of short message directly transmits the short message to corresponding receiving terminal of short message, the content of E-mail or short message will be easily acquired by a third party; the privacy of E-mail or short message cannot be protected and the
25 technology for transmission has very low degree of safety.

Summary of the Invention

 To solve the problem in current technology, the embodiments of this invention provide a type of communication information transmitting process and system. Below

is the said technical proposal:

In one aspect, a type of communication information transmitting process is provided, comprising:

Communication information transmitting terminal acquires selected fingerprint
5 information of communication information receiving terminal, makes use of said fingerprint information to conduct identity authentication of said communication information receiving terminal;

After identity authentication of communication information receiving terminal is successfully completed, said communication information transmitting terminal
10 acquires communication information input by the user; wherein, said communication information comprises E-mail or SMS;

Said communication information transmitting terminal transmits said communication information to FingerQ Information Exchange Platform, which encrypts said communication information, and transmits encrypted communication
15 information to said communication information receiving terminal.

In a further aspect, a type of communication information transmitting system is provided, comprising: communication information transmitting terminal and FingerQ Information Exchange Platform, connection between said communication information transmitting terminal and said FingerQ Information Exchange Platform;

20 Wherein, said communication information transmitting terminal comprises:

Transmitting terminal fingerprint sensor is used to acquire selected fingerprint information of communication information receiving terminal, make use of said fingerprint information to conduct identity authentication of said communication information receiving terminal;

25 Communication information acquirer, connecting to said transmitting terminal fingerprint sensor, is used to acquire communication information input by the user after identity authentication of said communication information receiving terminal is successfully completed by said transmitting terminal fingerprint sensor; wherein, said communication information comprises E-mail or SMS;

30

Communication information transmitter, connecting to said communication information acquirer, is used to transmit communication information acquired by said communication information acquirer to said FingerQ Information Exchange Platform;

5 Accordingly, Wherein, said FingerQ Information Exchange Platform 包括:

Communication information receiver, connecting to said communication information transmitter, is used to receive communication information transmitted by said communication information transmitter;

Communication information processor, connecting to said communication
10 information receiver, is used to encrypt communication information received by communication information receiver, transmit encrypted communication information to said communication information receiving terminal.

The beneficial effects brought by technical proposal of this invention's embodiments comprise:

15 The process to acquire and make use of fingerprint information of communication information receiving terminal to conduct identity authentication of communication information receiving terminal, encrypt communication information and transmit encrypted information to communication information receiving terminal makes sure that only communication information receiving terminal with identity
20 authentication can acquire communication information, so that communication information will not easily be acquired by a third party; moreover acquired communication information is encrypted that privacy of communication information can be well protected with high degree of safety.

25 **Description of the Drawings**

In order to illustrate more clearly technical proposal of this invention's embodiments, below is a simple description of the drawings to be used in the embodiments. Obviously, the drawings in the description below are only some
30 embodiments of this invention, for ordinary technicians in this field, without contributing creative labour, they are able to acquire other drawings on the basis of

these drawings.

Figure 1 is a flowchart of communication information transmitting process provided by Embodiment 1 of this invention;

5 Figure 2 is a flowchart of communication information transmitting process provided by Embodiment 2 of this invention;

Figure 3 is a schematic view of the first type of communication information transmitting system provided by Embodiment 3 of this invention;

Figure 4 is a schematic view of the second type of communication information transmitting system provided by Embodiment 3 of this invention;

10 Figure 5 is a schematic view of the third type of communication information transmitting system provided by Embodiment 3 of this invention;

Figure 6 is a schematic view of the fourth type of communication information transmitting system provided by Embodiment 3 of this invention;

15 Figure 7 is a schematic view of the fifth type of communication information transmitting system provided by Embodiment 3 of this invention.

Detailed Description of the Preferred Embodiments

To make clearer the purpose, technical proposal and advantages of the invention, below is a more detailed description of this invention in combination with the
20 accompanying figures and embodiments.

Embodiment 1

As shown in Figure 1, Embodiment 1 of this invention provides a type of communication information transmitting process, comprising:

25 101: Communication information transmitting terminal acquires selected fingerprint information of communication information receiving terminal, makes use of said fingerprint information to conduct identity authentication of communication information receiving terminal.

102: After identity authentication of communication information receiving terminal is successfully completed, communication information transmitting terminal
30 acquires communication information input by the user; wherein, said communication

information comprises E-mail or SMS.

103: Communication information transmitting terminal transmits communication information to FingerQ Information Exchange Platform, which encrypts communication information, and transmits encrypted communication
5 information to communication information receiving terminal.

Preferably, communication information transmitting terminal acquires selected fingerprint information of communication information receiving terminal, comprising:

Communication information transmitting terminal selects corresponding
10 communication information receiving terminal, and communication information transmitting terminal is registered on FingerQ Information Exchange Platform, notifies communication information receiving terminal to be registered on said FingerQ Information Exchange Platform;

Communication information transmitting terminal acquires registration
15 information of communication information receiving terminal, which comprises fingerprint information of communication information receiving terminal.

Preferably, after identity authentication of communication information receiving terminal is successfully completed and before communication information transmitting terminal acquires communication information input by the user, the
20 process also comprises:

Through FingerQ Information Exchange Platform, communication information transmitting terminal transmits secret key exchange request and secret key of communication information transmitting terminal to communication information receiving terminal;

25 Communication information transmitting terminal receives confirmation message of secret key exchange transmitted by communication information receiving terminal through FingerQ Information Exchange Platform and secret key of communication information receiving terminal;

Accordingly, communication information transmitting terminal transmits
30 communication information to FingerQ Information Exchange Platform, which

encrypts communication information, transmits encrypted communication information to communication information receiving terminal, i.e.:

Communication information transmitting terminal transmits communication information to FingerQ Information Exchange Platform, which makes use of secret key of communication information transmitting terminal to encrypt communication information, then transmits encrypted communication information to communication information receiving terminal.

Preferably, after FingerQ Information Exchange Platform encrypts communication information and transmits encrypted communication information to communication information receiving terminal, the process also comprises:

Communication information receiving terminal receives and decrypts the encrypted communication information, so as to acquire and display decrypted communication information.

Preferably, before communication information receiving terminal receives and decrypts the encrypted communication information, the process also comprises:

Communication information receiving terminal acquires fingerprint information of communication information transmitting terminal, makes use of said fingerprint information to conduct identity authentication of communication information transmitting terminal;

After identity authentication of communication information transmitting terminal is successfully completed, communication information receiving terminal executes the step of receiving and decrypting encrypted communication information.

For the said communication information transmitting process in the embodiment of this invention, the process to acquire and make use of fingerprint information of communication information receiving terminal to conduct identity authentication of communication information receiving terminal, encrypt communication information and transmit encrypted information to communication information receiving terminal makes sure that only communication information receiving terminal with identity authentication can acquire communication information, so that communication information will not easily be acquired by a third party; moreover acquired

communication information is encrypted that privacy of communication information can be well protected with high degree of safety.

It needs to be noted that, the said communication information transmitting process in the embodiment of this invention can be applied in terminals such as computer, and also in mobile terminals such as mobile phone, which prescribes no limit to this.

Embodiment 2

As shown in Figure 2, Embodiment 2 of this invention provides a type of communication information transmitting process, comprising:

201: Communication information transmitting terminal selects corresponding communication information receiving terminal, and communication information transmitting terminal is registered on FingerQ Information Exchange Platform, and notifies communication information receiving terminal to be registered on FingerQ Information Exchange Platform.

Specifically, communication information transmitting terminal is registered on FingerQ Information Exchange Platform, so as to form registration information of communication information transmitting terminal, which comprises fingerprint information of communication information transmitting terminal, registered name of communication information transmitting terminal, account number of communication information transmitting terminal, etc.

Specifically, it is possible to install transmitting terminal fingerprint sensor at communication information transmitting terminal, which extracts fingerprint information of the user corresponding to communication information transmitting terminal so as to acquire fingerprint information of communication information transmitting terminal. In addition, it is possible to install a storer at communication information transmitting terminal, which stores fingerprint information of the user corresponding to communication information transmitting terminal.

Specifically, communication information receiving terminal is registered on FingerQ Information Exchange Platform, so as to form registration information of

communication information receiving terminal, which comprises fingerprint information of communication information receiving terminal, registered name of communication information receiving terminal, account number of communication information receiving terminal, etc.

5 Specifically, it is possible to install receiving terminal fingerprint sensor at communication information receiving terminal, which extracts fingerprint information of the user corresponding to communication information receiving terminal so as to acquire fingerprint information of communication information receiving terminal. In addition, it is possible to install a storer at communication
10 information receiving terminal, which stores fingerprint information of the user corresponding to communication information receiving terminal.

202: Communication information transmitting terminal acquires registration information of communication information receiving terminal, which comprises fingerprint information of communication information receiving terminal.

15 Specifically, communication information transmitting terminal visits FingerQ Information Exchange Platform, from which it acquires registration information of communication information receiving terminal.

In addition, it is possible to install a storer at communication information transmitting terminal, which stores registration information of communication
20 information receiving terminal.

203: Communication information transmitting terminal makes use of fingerprint information of communication information receiving terminal to conduct identity authentication of communication information receiving terminal; judge whether identity authentication of communication information receiving terminal is
25 successfully completed, if it is successful, execute 204; otherwise, terminate the process.

204: Through FingerQ Information Exchange Platform, communication information transmitting terminal transmits secret key exchange request and secret key of communication information transmitting terminal to communication
30 information receiving terminal;

Specifically, communication information transmitting terminal transmits secret key exchange request and secret key of communication information transmitting terminal to FingerQ Information Exchange Platform, which transmits said information to communication information receiving terminal.

5 205: Communication information receiving terminal receives secret key exchange request and secret key of communication information transmitting terminal, verifies whether to execute secret key exchange with communication information transmitting terminal; if exchange is confirmed, execute 206; otherwise, terminate the process.

10 Specifically, communication information receiving terminal can store secret key of communication information transmitting terminal into the storer of communication information receiving terminal.

206: Through FingerQ Information Exchange Platform, communication information receiving terminal transmits to communication information transmitting terminal confirmation message of secret key exchange and secret key of communication information receiving terminal.

Specifically, communication information receiving terminal transmits confirmation message of secret key exchange and secret key of communication information receiving terminal to FingerQ Information Exchange Platform, which transmits confirmation message of secret key exchange and secret key of communication information receiving terminal transmitted by communication information receiving terminal to communication information transmitting terminal.

207: Communication information transmitting terminal receives confirmation message of secret key exchange and secret key of communication information receiving terminal transmitted by communication information receiving terminal through FingerQ Information Exchange Platform.

208: Communication information transmitting terminal acquires communication information input by the user; wherein, communication information comprises E-mail or SMS.

30 Specifically, after communication information transmitting terminal receives

confirmation message of secret key exchange and secret key of communication information receiving terminal transmitted by communication information receiving terminal through FingerQ Information Exchange Platform, it can notify the user to input communication information.

5 209: Communication information transmitting terminal transmits communication information to FingerQ Information Exchange Platform.

210: FingerQ Information Exchange Platform makes use of secret key of communication information transmitting terminal to encrypt communication information and transmits encrypted communication information to communication
10 information receiving terminal.

211: Communication information receiving terminal acquires fingerprint information of communication information transmitting terminal, makes use of said fingerprint information to conduct identity authentication of communication information transmitting terminal; judge whether identity authentication of
15 communication information transmitting terminal is successfully completed, if it is successful, execute 212; otherwise, terminate the process.

Specifically, communication information receiving terminal visits FingerQ Information Exchange Platform, from which it acquires registration information of communication information transmitting terminal, then acquires fingerprint
20 information of communication information transmitting terminal from the registration information.

212: Communication information receiving terminal receives and decrypts the encrypted communication information, so as to acquire and display decrypted communication information, then the process ends.

25 For the said communication information transmitting process in the embodiment of this invention, the process to acquire and make use of fingerprint information of communication information receiving terminal to conduct identity authentication of communication information receiving terminal, encrypt communication information and transmit encrypted information to communication information receiving terminal
30 makes sure that only communication information receiving terminal with identity

authentication can acquire communication information, so that communication information will not easily be acquired by a third party; moreover acquired communication information is encrypted that privacy of communication information can be well protected with high degree of safety.

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Embodiment 3

As shown in Figure 3, Embodiment 3 of this invention provides a type of communication information transmitting system, comprising: communication information transmitting terminal 30 and FingerQ Information Exchange Platform 40,
10 connection between communication information transmitting terminal 30 and FingerQ Information Exchange Platform 40;

Wherein, communication information transmitting terminal 30 comprises:

Transmitting terminal fingerprint sensor 301, is used to acquire selected fingerprint information of communication information receiving terminal 50, make
15 use of said fingerprint information to conduct identity authentication of communication information receiving terminal 50;

Communication information acquirer 302, connecting to transmitting terminal fingerprint sensor 301, is used to acquire communication information input by the user after identity authentication of communication information receiving terminal 50
20 is successfully completed by transmitting terminal fingerprint sensor 301; wherein, communication information comprises E-mail or SMS;

Communication information transmitter 303, connecting to communication information acquirer 302, is used to transmit communication information acquired by communication information acquirer 302 to FingerQ Information Exchange Platform
25 40;

Accordingly, wherein, FingerQ Information Exchange Platform 40 comprises:

Communication information receiver 401, connecting to communication information transmitter 303, is used to receive communication information transmitted by communication information transmitter 303;

30 Communication information processor 402, connecting to communication

information receiver 401, is used to encrypt communication information received by communication information receiver 401, transmit encrypted communication information to communication information receiving terminal 50.

Preferably, as shown in Figure 4, communication information transmitting terminal 30 also comprises:

Transmitting terminal processor 304, connecting to transmitting terminal fingerprint sensor 301, is used to select corresponding communication information receiving terminal, make communication information transmitting terminal 30 registered on FingerQ Information Exchange Platform 40, and notify communication information receiving terminal 50 to be registered on FingerQ Information Exchange Platform 40;

Accordingly, FingerQ Information Exchange Platform 40 also comprises:

Registration information acquirer 403, connecting to transmitting terminal processor 304, is used to acquire registration information of communication information transmitting terminal 30 on FingerQ Information Exchange Platform 40 and registration information of communication information receiving terminal 50 on FingerQ Information Exchange Platform 40;

Accordingly, transmitting terminal fingerprint sensor 301, connecting to registration information acquirer 403, is used to acquire registration information of communication information receiving terminal 50 through registration information acquirer 403, wherein, registration information of communication information receiving terminal 50 comprises fingerprint information of communication information receiving terminal 50.

Preferably, as shown in Figure 5, communication information transmitting terminal 30 also comprises:

Secret key transmitter 305, respectively connecting to transmitting terminal fingerprint sensor 301 and communication information acquirer 302, is used to transmit secret key exchange request and secret key of communication information transmitting terminal 30 to FingerQ Information Exchange Platform 40 after identity authentication of communication information receiving terminal 50 is successfully

completed by transmitting terminal fingerprint sensor 301 and before communication information acquirer 302 acquires communication information input by the user;

Accordingly, FingerQ Information Exchange Platform 40 also comprises:

Transmitting terminal secret key repeater 404, connecting to secret key transmitter 305, is used to receive secret key exchange request transmitted by secret key transmitter 305 and secret key of communication information transmitting terminal 30, transmit said information to communication information receiving terminal 50;

Receiving terminal secret key repeater 405, connecting to communication information transmitter 30, is used to receive confirmation message of secret key exchange transmitted by communication information receiving terminal 50 and secret key of communication information receiving terminal 50, transmit said information to communication information transmitting terminal 30;

Accordingly, communication information transmitting terminal 30 also comprises:

Secret key receiver 306, connecting to receiving terminal secret key repeater 405, is used to receive confirmation message of secret key exchange transmitted by receiving terminal secret key repeater 405 and secret key of communication information receiving terminal 50;

Accordingly, communication information processor 402 comprises:

Communication information sub-processor 4021, respectively connecting to transmitting terminal secret key repeater 404 and communication information receiver 401, makes use of secret key of communication information transmitting terminal 30 acquired by transmitting terminal secret key repeater 404 to encrypt communication information received by communication information receiver 401, transmits encrypted communication information to communication information receiving terminal 50.

Preferably, as shown in Figure 6, the system also comprises: communication information receiving 50, connection between communication information receiving 50 and FingerQ Information Exchange Platform 40;

Wherein, communication information receiving 50 comprises:

Receiving terminal processor 501, connecting to communication information processor 402, is used to receive encrypted communication information transmitted by communication information processor 402, decrypt the encrypted communication
5 information, acquire and display decrypted communication information.

Preferably, as shown in Figure 7, communication information receiving 50 also comprises:

Receiving terminal fingerprint sensor 502, is used to acquire fingerprint information of communication information transmitting terminal 30, make use of said
10 fingerprint information to conduct identity authentication of communication information transmitting terminal 30;

Notifier 503, respectively connecting to receiving terminal fingerprint sensor 502 and receiving terminal processor 501, is used to notify receiving terminal processor 501 to execute the step of receiving encrypted communication information
15 transmitted by communication information processor 402 after identity authentication of communication information transmitting terminal 30 is successfully completed by receiving terminal fingerprint sensor 502.

It needs to be noted that, a storer can be installed in both communication information transmitting terminal 30 and communication information receiving
20 terminal 50 to store respective fingerprint information and secret key, or mutual fingerprint information and secret key.

It needs to be noted that, various types of equipment in the embodiments of this invention are connected in wired mode, wireless mode or other ways, which can be set according to actual conditions of application and should prescribe no limit to this.

For the said communication information transmitting system in the embodiment of this invention, the process to acquire and make use of fingerprint information of communication information receiving terminal to conduct identity authentication of communication information receiving terminal, encrypt communication information and transmit encrypted information to communication information receiving terminal
30 makes sure that only communication information receiving terminal with identity

authentication can acquire communication information, so that communication information will not easily be acquired by a third party; moreover acquired communication information is encrypted that privacy of communication information can be well protected with high degree of safety.

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The serial number of above embodiments of this invention is only for description, not representing merit ranking of the embodiments.

Ordinary technicians in this field can comprehend that all or parts of the steps to realize above embodiments can be achieved through hardware, or be achieved in the way that relevant process instructs relevant hardware, said process can be stored in a type of readable storage medium of computer, which comprises read-only memory, magnetic disk or optical disk, etc.

Described above solely for the purpose of the present invention are preferred embodiments only, not intended to limit the present invention, where any modifications made within the spirit and principle of the present invention, equivalent substitutions, and improvements, etc., should be included in the protection of the invention range.