

## Search history

| Search step | Result(s) | Query                                                                                                                                                                                                                  |
|-------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 13          | 5         | ( (CARD AND (RELOAD+ OR RECHARG+ OR ATM OR PAYMENT+) AND READER+ AND CAMERA+)/TI/AB/CLMS AND (SIM AND (BILL+ OR BANKNOTE+) AND REAR DOOR)/TI/AB/CLMS/DESC/ODES ) AND PD <= 2019-10-03                                  |
| 12          | 4         | ( (CARD AND (RELOAD+ OR RECHARG+ OR PAYMENT+) AND READER+ AND CAMERA+)/TI/AB/CLMS AND (SIM AND (BILL+ OR BANKNOTE+) AND REAR DOOR)/TI/AB/CLMS/DESC/ODES ) AND PD <= 2019-10-03                                         |
| 11          | 2         | ( (CARD AND (RELOAD+ OR RECHARG+ OR PAYMENT+) AND READER+ AND CAMERA+)/TI/AB/CLMS AND (SIM AND (BILL+ OR BANKNOTE+) AND BACK DOOR)/TI/AB/CLMS/DESC/ODES ) AND PD <= 2019-10-03                                         |
| 10          | 0         | ( (CARD AND (RELOAD+ OR RECHARG+ OR PAYMENT+) AND READER+ AND CAMERA+)/TI/AB/CLMS AND (SIM AND (BILL+ OR BANKNOTE+) AND "BACK DOOR")/TI/AB/CLMS/DESC/ODES ) AND PD <= 2019-10-03                                       |
| 9           | 37        | ( (CARD AND (RELOAD+ OR RECHARG+ OR PAYMENT+) AND READER+ AND CAMERA+)/TI/AB/CLMS AND (SIM AND (BILL+ OR BANKNOTE+) AND DOOR)/TI/AB/CLMS/DESC/ODES ) AND PD <= 2019-10-03                                              |
| 8           | 21        | ( (CARD AND (RELOAD+ OR RECHARG+ OR PAYMENT+) AND READER+ AND CAMERA+)/TI/AB/CLMS AND (SAM AND (BILL+ OR BANKNOTE+))/TI/AB/CLMS/DESC/ODES ) AND PD <= 2019-10-03                                                       |
| 7           | 2         | ( (CARD AND (RELOAD+ OR RECHARG+) AND READER+ AND CAMERA+)/TI/AB/CLMS AND (SAM AND DOOR AND (BILL+ OR BANKNOTE+))/TI/AB/DESC/ODES/CLMS ) AND PD <= 2019-10-03                                                          |
| 6           | 2         | ( (CARD AND (RELOAD+ OR RECHARG+) AND READER+ AND CAMERA+)/TI/AB/CLMS AND (SAM AND DOOR AND (BILL+ OR BANKNOTE+))/DESC/ODES ) AND PD <= 2019-10-03                                                                     |
| 5           | 2         | (CARD AND (RELOAD+ OR RECHARG+) AND READER+ AND CAMERA+ AND SAM AND BILL+)/TI/AB/CLMS AND PD <= 2019-10-03                                                                                                             |
| 4           | 10        | "BEIJING GUOWANG SHENGYUAN INTELLIGENT TERMINAL SCIENCE & TECHNOLOGY"/FPAN                                                                                                                                             |
| 3           | 18        | (CARD AND (RELOAD+ OR RECHARG+) AND READER+ AND CAMERA+)/TI/AB AND PD <= 2019-10-03                                                                                                                                    |
| 2           | 1483      | (CARD AND RELOADING AND MACHINE)/BI/SA/KEYW/IN/PA                                                                                                                                                                      |
| 1           | 8000      | ..SEMSEARCH "AUDIT CAMERA" 84 "BILL VALIDATOR" 86 "CARD READER" 80 "CARD VALIDATOR" 86 "CONTACTLESS CARD" 87 "CONTROLLER" 79 "FRONT" 72 "METAL CABINET" 80 "REAR DOOR LOCK" 86 "SAM MODULE" 82 "WALLET MOUTHPIECE" 100 |

## 5 Documents

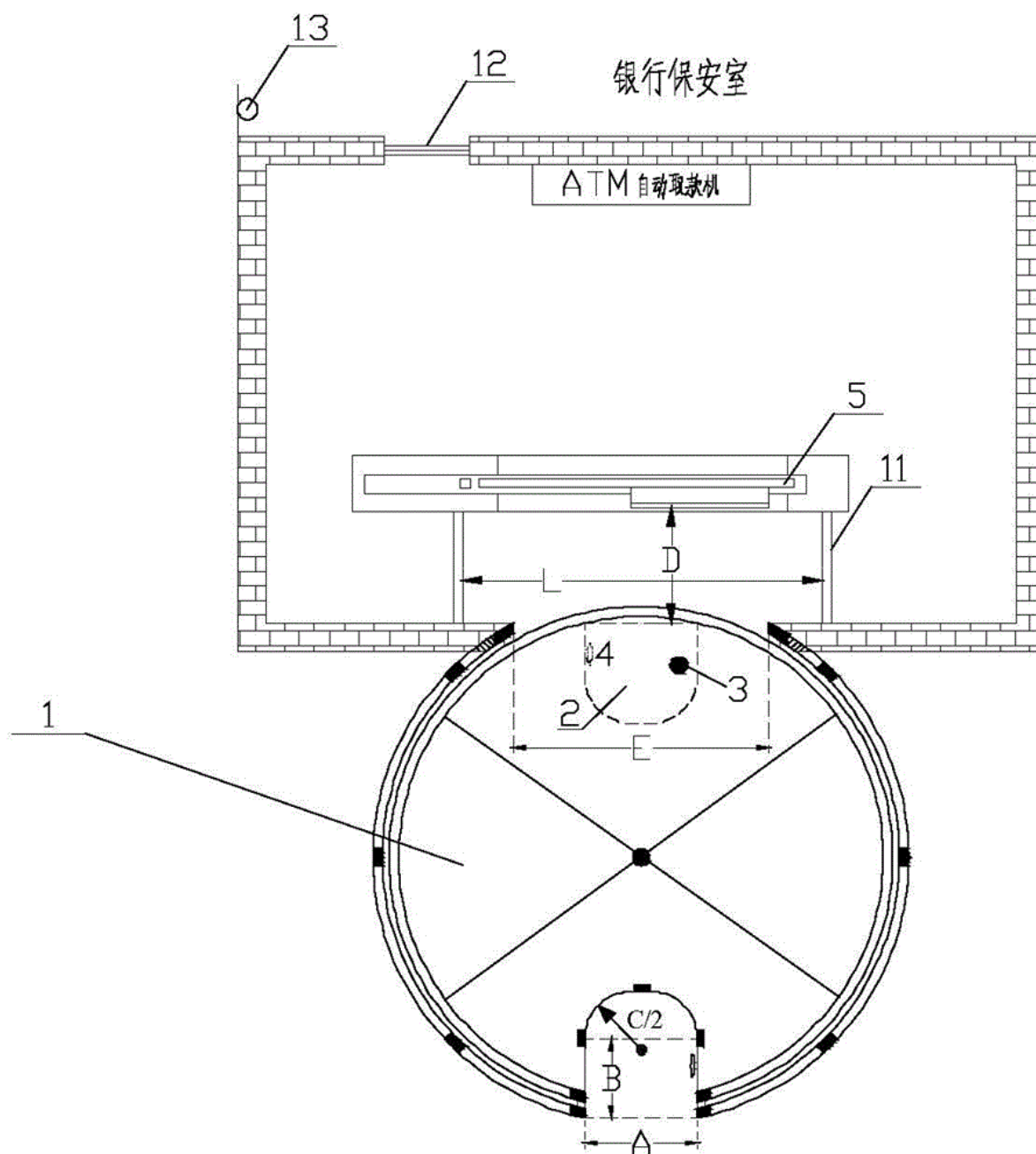
| Publication numbers            | Title                                                                                                                                               | Current assignees                          |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| <a href="#">CN104574694 A</a>  | <b>ATM</b> (automatic teller machine) automatic safety device and method for implementing protection measures of <b>ATM</b> automatic safety device | LIU SHENGXU                                |
| <a href="#">EP3040250 A1</a>   | Railway train with length exceeding that of platform and configuration system therefor                                                              | XIAN SHIYUN<br>TRANSPORTATION<br>EQUIPMENT |
| <a href="#">CN202584268U U</a> | Multifunctional self-service fee-paying and change-making service terminal                                                                          | NANJING SINO DEVICE<br>TECHNOLOGY          |
| <a href="#">CN102568089 A</a>  | Multifunctional self-service pavement and change service terminal                                                                                   | NANJING SINO DEVICE<br>TECHNOLOGY          |
| <a href="#">EP3251293 A1</a>   | Secure dynamic communication network and protocol                                                                                                   | LISTAT                                     |

Family 1/5 - FAMPAT - ©Questel

**Title**

(CN104574694)

**ATM** (automatic teller machine) automatic safety device and method for implementing protection measures of **ATM** automatic safety device

**Images****Publication numbers with kind code & date**

|             |   |            |              |
|-------------|---|------------|--------------|
| CN104574694 | B | 2017-04-12 | CN104574694B |
| CN104574694 | A | 2015-04-29 | CN104574694  |

**Abstract**

(CN104574694)

The invention provides an **ATM** (automatic teller machine) automatic safety device and a method for implementing protection measures of the **ATM** automatic safety device. The **ATM** automatic safety device comprises an operation room surrounded by a rotating **door**, a safety **door** and connecting walls; and an identity recognizer and a visual checking device are arranged in the operation room. The method comprises the following steps of recording videos and checking authorization by using the visual checking device after a doer enters the operation room through the rotating **door**; leaving information of an identity **card**, fingerprints or iris of the doer by using the identity recognizer so that initial verification on

legality of the doer is finished; judging legality of a **card** inserting behavior of the doer according to the information of a bank **card** and the information obtained before the doer enters the **ATM** room after the doer inserts the bank **card** in an **ATM** successfully; and whether an alarming behavior is carried out or not is judged according to a judgment result. By the **ATM** automatic safety device and the method for implementing the protection measures of the **ATM** automatic safety device, confirmation on the identities of actual users of bank cards is strengthened effectively, most of criminal behaviors about the bank cards can be actively prevented and stopped, and legal interests of legal holders of the bank cards can be protected. The **ATM** automatic safety device and the method for implementing the protection measures of the **ATM** automatic safety device have the advantages of convenience in use, safety, reliability and the like.

**Inventors**

LIU SHENGXU

GONG YUXIA

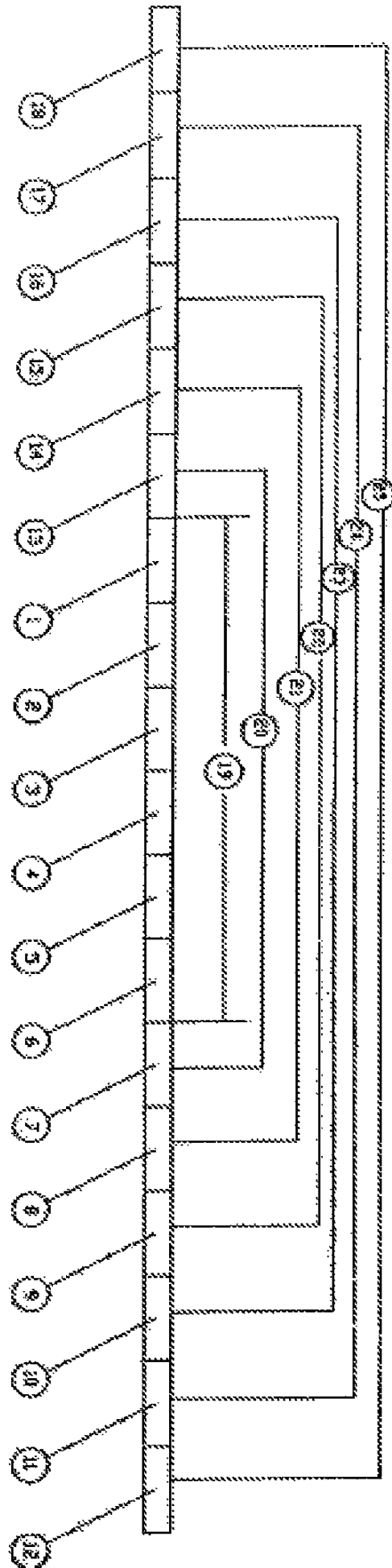
Family 2/5 - FAMPAT - ©Questel

**Title**

(EP3040250)

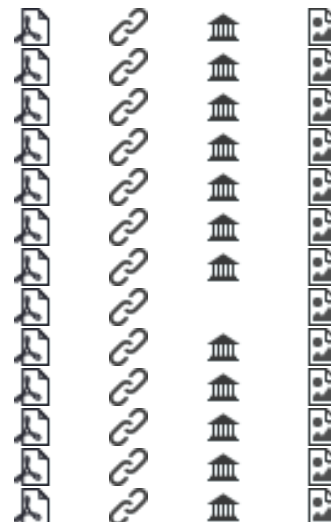
Railway train with length exceeding that of platform and configuration system therefor

**Images**



**Publication numbers with kind code & date**

|               |    |            |               |
|---------------|----|------------|---------------|
| CN104925067   | B  | 2019-11-19 | CN104925067B  |
| US20190308643 | A1 | 2019-10-10 | US20190308643 |
| US10399577    | B2 | 2019-09-03 | US10399577    |
| EP3040250     | A4 | 2017-06-21 | EP3040250     |
| JP2016536203  | A  | 2016-11-24 | JP2016536203  |
| US20160200327 | A1 | 2016-07-14 | US20160200327 |
| EP3040250     | A1 | 2016-07-06 | EP3040250     |
| HK1212304     | A1 | 2016-06-10 | HK1212304     |
| CN104925067   | A  | 2015-09-23 | CN104925067   |
| CN104760595   | A  | 2015-07-08 | CN104760595   |
| WO2015/027356 | A1 | 2015-03-05 | WO201527356   |
| WO2015/027658 | A1 | 2015-03-05 | WO201527658   |
| WO2015/027666 | A1 | 2015-03-05 | WO201527666   |

**Abstract**

(EP3040250)

A railroad train marshaling system or marshaling method is disclosed. The railroad train includes cars within platform area which are made up of several cars; **door**-free cars which are connected with the cars within platform area at both ends or one end and made up of at least one car with no side **door** for passengers to get on and off the train. When the railroad train stops at the platform, the cars within platform area are arranged to stop within the area of platform or corresponding to the platform, the **door**-free car is arranged to stop beyond platform area and passengers in the **door**-free car will get to the platform directly from the car within platform area. The sum of length of **door**-free car and cars within platform area is more than that of the platform.

**Inventors**

LIU JIAN

**Latest standardized assignees - inventors removed**

XIAN SHIYUN TRANSPORTATION EQUIPMENT

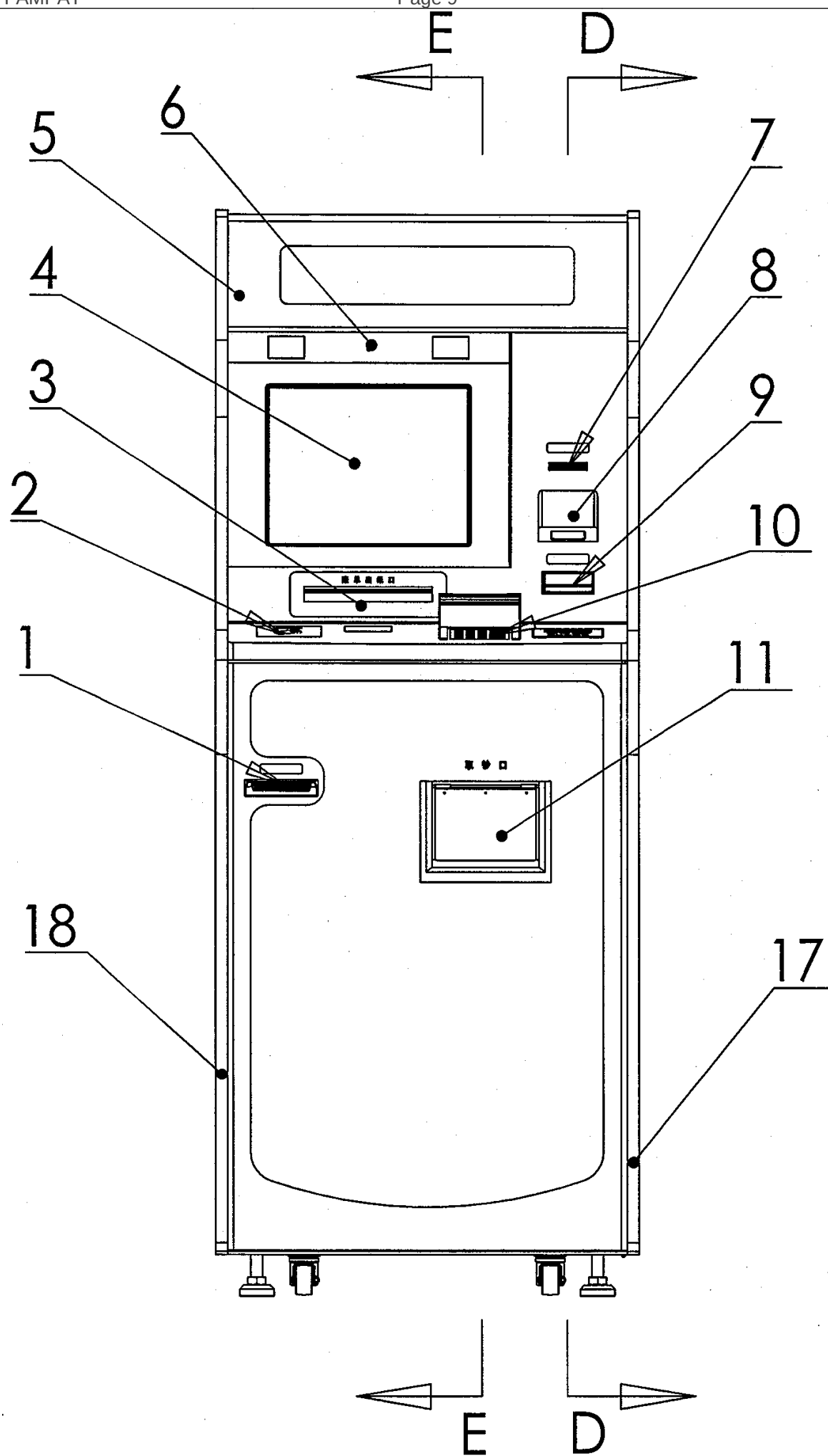
Family 3/5 - FAMPAT - ©Questel

**Title**

(CN202584268U)

Multifunctional self-service fee-paying and change-making service terminal

**Images**



**Publication numbers with kind code & date**

CN202584268

U

2012-12-05

CN202584268U

**Abstract**

(CN202584268)

The utility model mainly relates to a multifunctional self-service fee-paying and change-making service terminal, comprising a cabinet, wherein right above the cabinet there is provided a front side monitoring camera, at the right side of the cabinet above the cabinet there is provided a coin-fed monitoring camera, below the front side monitoring camera there are provided a touch screen and a display, below the touch screen and the display there are respectively provided a second generation identity card reader, a bill printer and a metal cipher keyboard, the right side of the touch screen and the display is equipped with an IC card containing reader, a bar code scanning head, a multifunctional banknote device, the front door of the cabinet is provided with a change-making currency output port and a bill printer paper output port, the lower and middle portion inside the cabinet is provided with a cipher safety cabinet, inside the cipher safety cabinet there is provided a banknote output module, a coin output module and a multifunctional banknote device, and an industrial control computer is mounted at the lower portion inside the cabinet. The multifunctional self-service fee-paying and change-making service terminal can realize recharging fee-paying through using cash, Unionpay cards and IC cards, is provided with a coin/banknote change-making function, is wide in application range and is suitable to popularization and application.

**Inventors**

WU CHUNBIAO

JIAN YINGJUN

WANG CHENG Dong

**Latest standardized assignees - inventors removed**

NANJING SINO DEVICE TECHNOLOGY

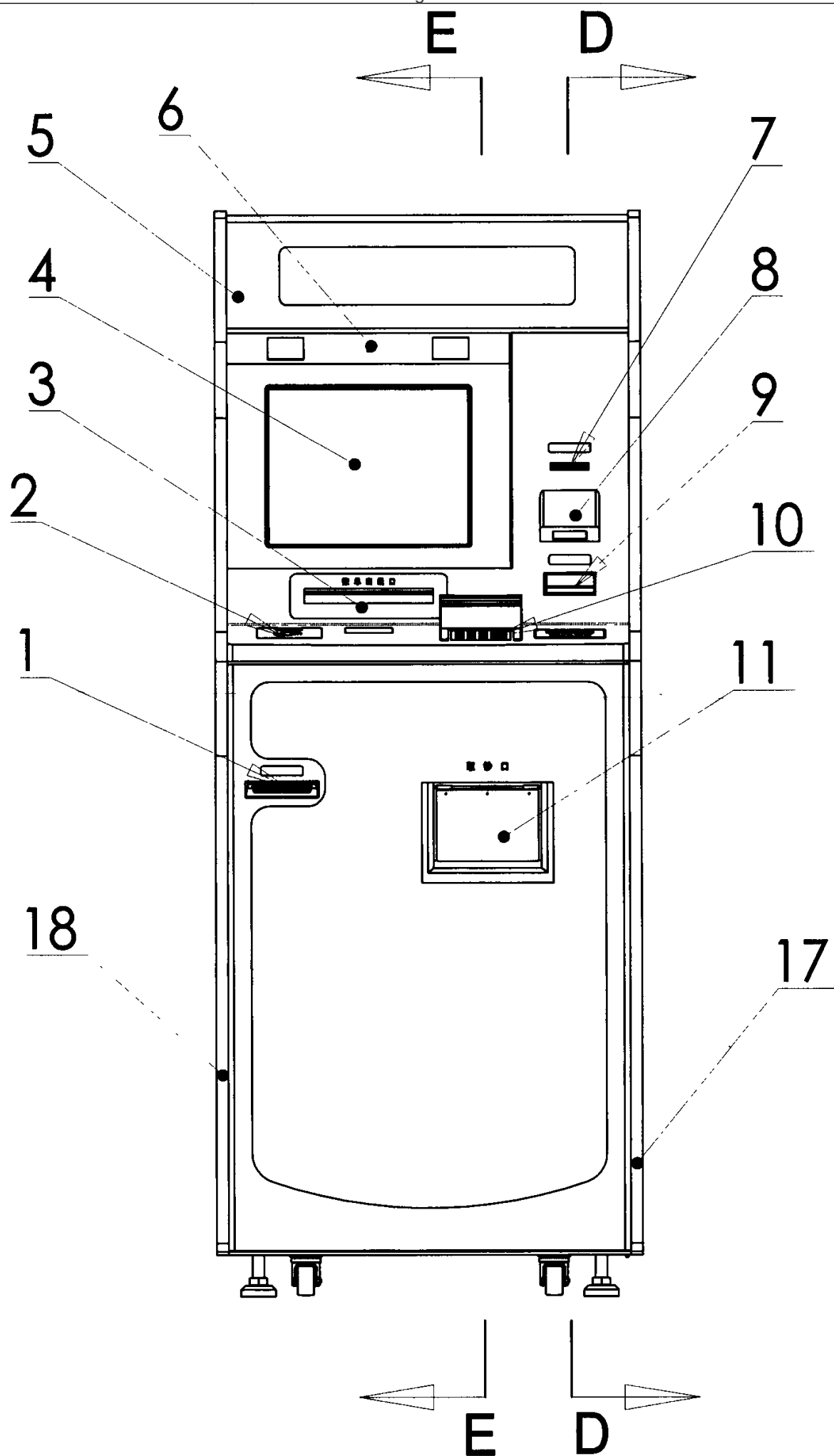
Family 4/5 - FAMPAT - ©Questel

**Title**

(CN102568089)

Multifunctional self-service pavement and change service terminal

**Images**



**Publication numbers with kind code & date**

CN102568089

A

2012-07-11

CN102568089

**Abstract**

(CN102568089)

The patent refers to the field of 'handling of coins, paper currency securities, bonds, or similar valuable papers'. The invention mainly relates to a multifunctional self-service pavement and change service terminal, which comprises a cabinet. A front-side monitoring camera is arranged right above the cabinet; a coin monitoring camera is arranged at the right upper part of the cabinet; a touch screen and a display are arranged below the front-side monitoring camera; a second-generation identification card reader, a bill printer and a metal password keyboard are respectively arranged below the touch screen and the display; an IC (Integrated Circuit) card retaining and reading device, a bar code scanning head and a multifunctional note device are arranged on the right of the touch screen and the display; a charge outlet and a bill printer paper outlet are arranged on a front door of the cabinet; a password safety box is arranged at the lower middle position inside the cabinet; a note outlet module, a coin outlet module and the multifunctional note device are arranged inside the password safety box; and an industrial personal computer is arranged at the lower part inside the cabinet. The multifunctional self-service pavement and change service terminal can be used for implementing recharge and payment of cashes, China Union Pay Cards and IC cards, has a coin/note charge function, has wide application range and is suitable to popularize and apply.

**Inventors**

WU CHUNBIAO

JIAN YINGJUN

WANG CHENG Dong

**Latest standardized assignees - inventors removed**

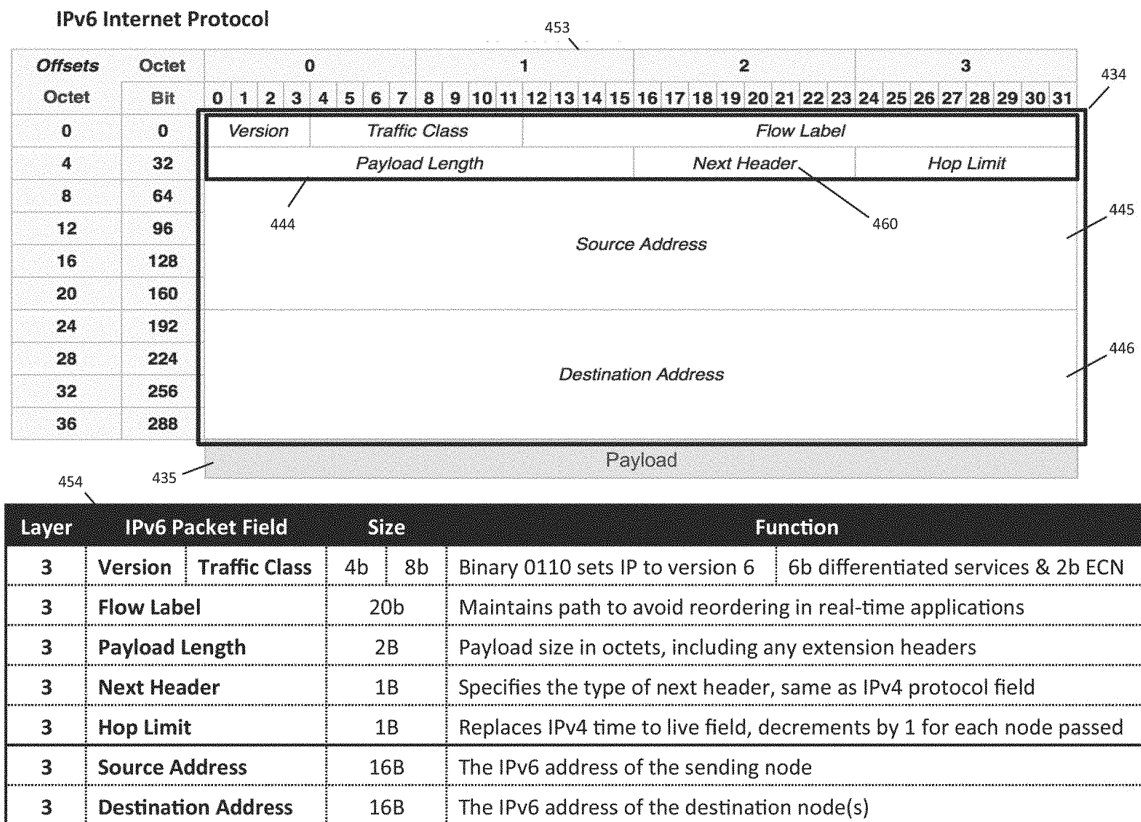
NANJING SINO DEVICE TECHNOLOGY

Family 5/5 - FAMPAT - ©Questel

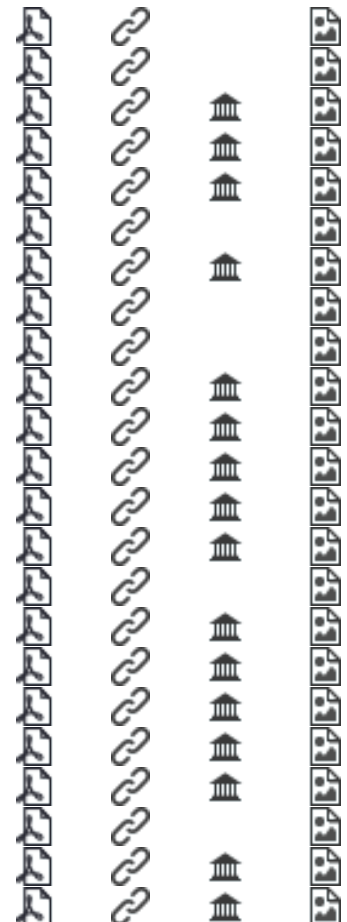
**Title**

(EP3251293)

Secure dynamic communication network and protocol

**Images****Publication numbers with kind code & date**

|                                |    |            |                                |
|--------------------------------|----|------------|--------------------------------|
| <a href="#">RU2707715</a>      | C2 | 2019-11-28 | <a href="#">RU2707715</a>      |
| <a href="#">SG10201909329T</a> | A  | 2019-11-28 | <a href="#">SG10201909329T</a> |
| <a href="#">US10491575</a>     | B2 | 2019-11-26 | <a href="#">US10491575</a>     |
| <a href="#">BR112017016047</a> | A2 | 2019-10-01 | <a href="#">BR112017016047</a> |
| <a href="#">AU2016266557</a>   | A8 | 2019-08-08 | <a href="#">AU2016266557</a>   |
| <a href="#">RU2017130148</a>   | A3 | 2019-06-11 | <a href="#">RU2017130148</a>   |
| <a href="#">TWI661691</a>      | B  | 2019-06-01 | <a href="#">TWI661691</a>      |
| <a href="#">RU2019102706</a>   | A  | 2019-03-04 | <a href="#">RU2019102706</a>   |
| <a href="#">RU2017130148</a>   | A  | 2019-02-28 | <a href="#">RU2017130148</a>   |
| <a href="#">US20180241727</a>  | A1 | 2018-08-23 | <a href="#">US20180241727</a>  |
| <a href="#">EP3251293</a>      | A4 | 2018-07-11 | <a href="#">EP3251293</a>      |
| <a href="#">US9998434</a>      | B2 | 2018-06-12 | <a href="#">US9998434</a>      |
| <a href="#">JP2018512099</a>   | A  | 2018-05-10 | <a href="#">JP2018512099</a>   |
| <a href="#">CN107750441</a>    | A  | 2018-03-02 | <a href="#">CN107750441</a>    |
| <a href="#">KR20170140157</a>  | A  | 2017-12-20 | <a href="#">KR20170140157</a>  |
| <a href="#">EP3251293</a>      | A1 | 2017-12-06 | <a href="#">EP3251293</a>      |
| <a href="#">IN201717030184</a> | A  | 2017-12-01 | <a href="#">IN201717030184</a> |
| <a href="#">IL253679</a>       | A  | 2017-09-28 | <a href="#">IL-253679</a>      |
| <a href="#">WO2016/190912</a>  | A8 | 2017-09-14 | <a href="#">WO2016190912</a>   |
| <a href="#">AU2016266557</a>   | A1 | 2017-09-07 | <a href="#">AU2016266557</a>   |
| <a href="#">SG11201706093T</a> | A  | 2017-08-30 | <a href="#">SG11201706093T</a> |
| <a href="#">TW201701605</a>    | A  | 2017-01-01 | <a href="#">TW201701605</a>    |
| <a href="#">CA2975105</a>      | A1 | 2016-12-01 | <a href="#">CA2975105</a>      |



|                               |    |            |               |
|-------------------------------|----|------------|---------------|
| <a href="#">CA2975105</a>     | A1 | 2016-12-01 | CA2975105     |
| <a href="#">WO2016/190912</a> | A1 | 2016-12-01 | WO2016190912  |
| <a href="#">US20160219024</a> | A1 | 2016-07-28 | US20160219024 |

**Abstract**

(EP3251293)

In a secure cloud for transmitting packets of digital data, the packets may be repeatedly scrambled (i.e., their data segments reordered) and then unscrambled, split and then mixed, and/or encrypted and then decrypted as they pass through media nodes in the cloud. The methods used to scramble, split, mix and encrypt the packets may be varied in accordance with a state such as time, thereby making the task of a hacker virtually impossible inasmuch as he or she may be viewing only a fragment of a packet and the methods used to disguise the data are constantly changing.

**Inventors**

WILLIAMS RICHARD K

VERZUN IEVGEN

HOLUB OLEKSANDR

**Latest standardized assignees - inventors removed**

LISTAT