(19) LE GOUVERNEMENT
DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère de l'Économie

(11) N° de publication : **LU505021**

(12) **BREVET D'INVENTION** **B1**

(21) N° de dépôt: LU505021

(22) Date de dépôt: 29/08/2023

(51) Int. Cl.:
G06F 1/16, G07F 9/10

(30) Priorité:

(43) Date de mise à disposition du public: 29/02/2024

(47) Date de délivrance: 29/02/2024

(73) Titulaire(s):
TONGLING UNIVERSITY – 244061 Tongling, Anhui (Chine)

(72) Inventeur(s):
ZHANG Yan – Chine

(74) Mandataire(s):
IP SHIELD – 1616 Luxembourg (Luxembourg)

(54) **Supply chain financial service terminal.**

(57) The invention relates to a supply chain financial service terminal, which comprises a service terminal body, and a display screen is fixedly installed on the front of the service terminal body; a camera is fixedly arranged at the center of the front top of the service terminal body; the bottom of the service terminal body is provided with a fixed box; a base is fixed on the bottom surface of the fixed box; the service terminal body is provided with a protection mechanism for protecting the camera; the base is provided with a moving mechanism for improving the moving convenience of the supply chain financial service terminal. According to the invention, the protection mechanism is arranged, and the protection plate can be pushed to be inserted into the clamping groove and fixed by the threaded rod, so that the camera can be shielded by the protection plate when not in use, and the surface of the camera can be wiped by the cleaning gasket during the moving process, so that dust is prevented from adhering to the surface of the camera to affect the information identification process, and the camera can be protected at the same time.

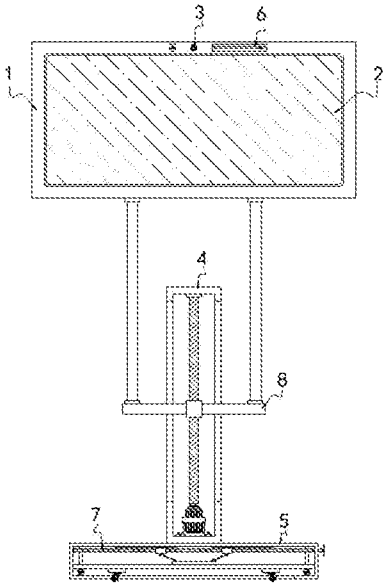

Fig. 1

Supply chain financial service terminal

Technical Field

The invention relates to the technical field of financial service terminals, and in particular to a supply chain financial service terminal.

Background Technology

Supply chain is a functional network chain structure that connects suppliers, manufacturers, distributors, retailers and end users as a whole by controlling information flow, logistics and capital flow, starting from purchasing raw materials, making intermediate products and final products, and finally delivering products to consumers through sales network. Factoring service system for supply chain enterprises generally consists of cloud platform data server, bank server, supply chain enterprise server and service provider server.

For example, China patent (CN213582397U) discloses a big data intelligent marketing financial service terminal, and when the technical scheme is used, when installing a fixed cabinet, the staff can move the cabinet through four moving wheels. When the cabinet is moved to a fixed position, the cabinet body is lifted, and the supporting plate and the fixed bracket are fixedly connected through the fixing bolts, so that the cabinet body can be stably installed on the base and stand on the ground, and in use, the temperature sensor and the humidity sensor send the data collected inside the cabinet body to the control circuit board, and then the control circuit board analyzes and judges whether the data is normal. If the data is abnormal, the control circuit board will immediately send the received data to the speaker, and the speaker will give an alarm and immediately start to work for cooling and dehumidification, and the heat generated by the terminal is conducted to the heat engine by the cabinet

to drive the fan to run, and the whole cabinet is cooled by the heat dissipation exhaust pipe and the water cooling pipe; the hotter the device is, the greater the power of the fan is, so that the whole heat of the cabinet is kept in a proper range. To sum up, the above technical scheme has the functions of moving and fixing, and can strictly control the temperature and humidity inside the cabinet body, and meanwhile, it also has the advantages of high heat dissipation efficiency, no extra power and low noise.

Usually, the financial server terminal needs to be practical with the camera, which is used to identify information. The camera in the above technical scheme is arranged on the front of the cabinet. Because the camera in the above technical scheme is always exposed, the surface of the camera is easy to be stained with dust, which leads to abnormal information identification, which leads to the abnormal use of the whole device. Manual cleaning of the camera increases the workload of the staff and has no protective effect on the camera.

Contents of Invention

Aiming at the shortcomings of the prior art, the invention provides a supply chain financial service terminal, which has the advantages of protecting the camera, being convenient to move, being convenient to adjust the height and the like, and solves the problem that the camera of the existing device can not normally identify information due to the dust and stains.

In order to achieve the above objective, the present invention provides the following technical scheme: a supply chain financial service terminal, including a service terminal body, and a display screen is fixedly installed on the front of the service terminal body; a camera is fixedly arranged at the center of the front top of the service terminal body; the bottom of the service terminal body is provided with a fixed box; a base is fixed on the bottom surface of the fixed box; the service

terminal body is provided with a protection mechanism for protecting the camera; the base is provided with a moving mechanism for improving the moving convenience of the supply chain financial service terminal; the fixed box is provided with an adjusting mechanism for adjusting the height of the service terminal body.

In addition, the protection mechanism comprises a protection box fixed on the right side of the front top of the service terminal body; a rectangular rod is fixed on the back between the left side and the right side in the protection box; the left side of the outer surface of the rectangular rod is movably sleeved with a return spring; the right side of the outer surface of the rectangular rod is connected with a movable plate in a sliding way; a protection plate is fixed on the front of the left side of the movable plate; a pull rod is fixed on the right side of the front of the protection plate; the left side of the front of the protection plate is provided with a clamping groove; the protection mechanism also comprises a fixed seat fixed on the left side of the front top of the service terminal body; the right side of the fixed seat is provided with a fixed groove, and the right side of the front of the fixed seat is connected with a threaded rod in a threaded way.

Further, the back of the side of the movable plate is provided with a rectangular hole; the rectangular rod penetrates through the rectangular hole and is connected with the rectangular hole in a sliding way; two ends of the return spring are respectively abutted between the left side of the inner wall of the protection box and the left side of the movable plate.

Further, a fixed hole is provided with in the middle of the front of the protection box, and the pull rod penetrates through the fixed hole and extends to the front of the protection box.

Further, the right side of the front of the fixed seat is provided with a threaded hole which is communicated with the fixed groove, the threaded rod penetrates through the threaded hole and is in threaded connection with the threaded hole, and a cleaning gasket is fixed on the back of the protection plate.

Further, the moving mechanism comprises circular rods fixed at four corners between the inner top wall and the inner bottom wall of the base, and the outer surfaces of four circular rods are connected with a lifting plate in a sliding way; the bottoms of the outer surface of the circular rods are movably sleeved with auxiliary springs; four corners of the bottom surface of the lifting plate are all fixed with moving wheels; the moving mechanism also comprises a screw which is rotatably connected with the center of the top of the left side of the inner wall of the base through a bearing; the left and right sides of the outer surface of the screw are both in threaded connection with movable blocks, the bottom surface of each of the movable blocks is hinged with a hinge rod; one end of each of the two hinged rods away from the movable block is hinged with a counterweight plate; a handwheel is fixed on the right side of the screw.

Further, four corners of the top surface of the lifting plate are all provided with circular holes, and four circular rods respectively penetrate through the four circular holes and are connected with the circular holes in a sliding way; the four corners of the bottom surface of the base are all provided with relief holes through which the moving wheel passes.

Further, the threads on the left and right sides of the outer surface of the screw are in opposite directions, and the side surfaces of two movable blocks are both provided with screw holes, and the screw penetrates through the two screw holes and is in threaded connection with the crew holes.

Further, the bottom surface of the counterweight plate is closely attached to the top surface of the lifting plate; the top surface of each of the movable blocks is fixed with a slider, and the top of the slider is slidably connected with a slide rail; the two slide rails are respectively fixed on the left and right sides of the middle position of the top wall in the base.

Further, the adjusting mechanism comprises an adjusting motor fixedly installed on the inner bottom wall of the fixed box; the output end of the adjusting motor is fixed with a screw rod which is rotatably connected with the inner top wall of the fixed box through a bearing; the middle position of the outer surface of the screw rod is in threaded connection with a moving block; connecting plates are fixed on the left and right sides of the moving block, and support rods fixed on the left and right sides of the bottom surface of the service terminal body are fixed on the top surfaces of the two connecting plates; the adjusting mechanism further comprises limiting holes arranged at the left and right sides of the fixed box.

Further, the top surface of the moving block is provided with a screw hole, the screw rod penetrates through the screw hole and is connected with the screw hole by screw thread, and the two connecting plates respectively penetrate through the two limiting holes and extend to the outside of the fixed box and are connected with the fixed box in a sliding way.

Compared with the prior art, the technical scheme of the application has the following beneficial effects.

1. The supply chain financial service terminal is provided with a protection mechanism, and the protection plate is arranged and can be pushed into the clamping groove and fixed by the threaded rod, so that the camera can be shielded by the protection plate when not in use. In addition, the protection plate can wipe the

surface of the camera through the cleaning gasket during the moving process, so as to prevent dust from adhering to the surface of the camera and affecting the information identification process, and to protect the camera.

2. The supply chain financial service terminal is provided with a moving mechanism, and the moving convenience of the device can be improved by setting the moving mechanism, and at the same time, the moving wheel can be automatically retracted into the base by setting the auxiliary springs, the screw, the movable blocks, the counterweight plate and the like, so that the convenience of the device in the placing process is improved and the operation is more convenient.

3. The supply chain financial service terminal is provided with an adjusting mechanism, and the adjusting motor can drive the screw rod to rotate, and during the rotation of the screw rod, the screw rod can drive the moving block to move up and down, and the supporting rod can drive the service terminal body to move up and down, so as to adjust the height and improve the practicability.

Explanation on Drawings

Fig. 1 is a schematic structural diagram of the present invention;

Fig. 2 is a schematic view of the external structure of the present invention;

Fig. 3 is a top view of the protection mechanism of the present invention;

Fig. 4 is a structural schematic diagram of the moving mechanism of the present invention;

Fig. 5 is a schematic structural diagram of the adjusting mechanism of the present invention.

In the figures: 1 service terminal body, 2 display screen, 3 camera, 4 fixed box, 5 base, 6 protection mechanism, 601 protection box, 602 rectangular rod, 603 return spring, 604 movable plate, 605 protection plate, 606 pull rod, 607 clamping groove,

608 fixed seat, 609 fixed groove, 610 threaded rod, 7 moving mechanism, 701 circular rod, 702 lifting plate, 703 auxiliary spring, 704 moving wheel, 705 screw, 706 movable block, 707 hinge rod, 708 counterweight plate, 709 handwheel, 8 adjusting mechanism, 801 adjusting motor, 802 screw rod, 803 moving block, 804 connecting plate, 805 supporting rod and 806 limiting hole.

Specific Implementation Method

In the following, the technical scheme in the embodiment of the invention will be clearly and completely described with reference to the attached drawings. Obviously, the described embodiment is only a part of the embodiment of the invention, but not the whole embodiment. Based on the embodiments in the present invention, all other embodiments obtained by ordinary technicians in the field without creative labor belong to the scope of protection of the present invention.

Please refer to Figs. 1-2. A supply chain financial service terminal in this embodiment includes a service terminal body 1, and a display screen 2 is fixedly installed on the front of the service terminal body 1; a camera 3 is fixedly arranged at the center of the front top of the service terminal body 1; the bottom of the service terminal body 1 is provided with a fixed box 4; a base 5 is fixed on the bottom surface of the fixed box 4; the service terminal body 1 is provided with a protection mechanism 6 for protecting the camera 3; the base 5 is provided with a moving mechanism 7 for improving the moving convenience of the supply chain financial service terminal; the fixed box 4 is provided with an adjusting mechanism 8 for adjusting the height of the service terminal body 1.

It should be noted that the protection mechanism 6 in the present invention can protect the camera 3 and improve the accuracy of information collection by the camera 3, wherein the service terminal body 1 is a device used for information

collection and processing in the supply chain financial service industry in the prior art.

Please refer to Figs. 1-3, in order to protect the camera 3, the protection mechanism 6 comprises a protection box 601 fixed on the right side of the front top of the service terminal body 1; a rectangular rod 602 is fixed on the back between the left side and the right side in the protection box 601; the left side of the outer surface of the rectangular rod 602 is movably sleeved with a return spring 603; the right side of the outer surface of the rectangular rod 602 is connected with a movable plate 604 in a sliding way; a protection plate 605 is fixed on the front of the left side of the movable plate 604; a pull rod 606 is fixed on the right side of the front of the protection plate 605; the left side of the front of the protection plate 605 is provided with a clamping groove 607; the protection mechanism 6 also comprises a fixed seat 608 fixed on the left side of the front top of the service terminal body 1; the right side of the fixed seat 608 is provided with a fixed groove 609, and the right side of the front of the fixed seat 608 is connected with a threaded rod 610 in a threaded way.

The back of the side of the movable plate 604 is provided with a rectangular hole, and the rectangular rod 602 passes through the rectangular hole and is connected with it in a sliding way, so that the movable plate 604 can be prevented from rotating on the outer surface of the rectangular rod 602, and can be quickly inserted into the fixed groove 609. The two ends of the return spring 603 are respectively abutted between the left side of the inner wall of the protection box 601 and the left side of the movable plate 604, and the movable plate 604 can be automatically reset by the elastic potential energy of the return spring 603, thus improving the convenience of use and reduce the operation steps.

At the same time, the middle position of the front of the protection box 601 is provided with a fixed hole, and the pull rod 606 penetrates through the fixed hole and extends to the front of the protection box 601, which is convenient for the pull rod 606 to move left and right and pushes the protection plate 605 to move left.

In addition, the right side of the front of the fixed seat 608 is provided with a threaded hole, which is communicated with the fixed groove 609, and the threaded rod 610 penetrates through the threaded hole and is in threaded connection with the threaded hole, so that it is convenient for the rotating threaded rod 610 to move into the fixed groove 609, and it is convenient for the protection plate 605 to be limited and fixed by the threaded rod 610. A cleaning gasket is fixed on the back of the protection plate 605, and the surface of the camera 3 can be wiped by the cleaning gasket when the protection plate 605 moves left and right, so as to wipe off the dust attached to the surface of the camera 3.

Please refer to Fig. 1 and Fig. 4, in order to improve the moving convenience convenience and the stability in the placing process of the device, the moving mechanism 7 comprises circular rods 701 fixed at four corners between the inner top wall and the inner bottom wall of the base 5, and the outer surfaces of four circular rods 701 are connected with a lifting plate 702 in a sliding way; the bottoms of the outer surface of the circular rods 701 are movably sleeved with auxiliary springs 703; four corners of the bottom surface of the lifting plate 702 are all fixed with moving wheels 704; the moving mechanism 7 also comprises a screw 705 which is rotatably connected with the center of the top of the left side of the inner wall of the base 5 through a bearing; the left and right sides of the outer surface of the screw 705 are both in threaded connection with movable blocks 706, the bottom surface of each of the movable blocks 706 is hinged with a hinge rod 707; one end of each of the two

hinged rods 707 away from the movable block 706 is hinged with a counterweight plate 708; a handwheel 709 is fixed on the right side of the screw 705.

It can be understood that the counterweight plate 708 is a metal plate, and the squeezing action on the lifting plate 702 can be improved by increasing the weight of the counterweight plate 708.

In addition, the four corners of the top surface of the lifting plate 702 are all provided with circular holes, and the four circular rods 701 respectively pass through the four circular holes and are connected with the circular holes in a sliding way, which can support and limit the lifting plate 702 without affecting the up-and-down movement process. The four corners of the bottom surface of the base 5 are all provided with relief holes for the moving wheel 704 to pass through, and the moving wheel 704 can move to the outside of the base 5 through the relief holes, thus facilitating the movement of the device. The moving wheel 704 can improve the stability of the device in the placing process by moving the relief holes to the inside of the base 5.

It should be emphasized that the screw threads on the left and right sides of the outer surface of the screw 705 are in opposite directions, and the side surfaces of the two movable blocks 706 are both provided with screw holes, and the screw 705 penetrates through the two screw holes and is connected with the screw threads. When the screw 705 rotates, the movable block 706 can move to the opposite side or the reverse side, and at the same time, the counterweight plate 708 is pulled or pushed up and down by the two hinge rods 707, and when the counterweight plate 708 moves up, the lifting plate 702 drives the moving wheel 704 to move to the inside of the base 5 under the action of the auxiliary springs 703, and when the counterweight plate 708 moves downward, it pushes the lifting plate 702 to move

downward and moves the moving wheel 704 to the outside of the base 5 through the squeezing action of the counterweight plate 708, thus improving the convenience of the device.

It should also be noted that the bottom surface of the counterweight plate 708 is closely attached to the top surface of the lifting plate 702; the top surface of each of the movable blocks 706 is fixed with a slider, and the top of the slider is slidably connected with a slide rail; the two slide rails are respectively fixed on the left and right sides of the middle position of the top wall in the base 5, and the slider and the slide rails can limit the movable blocks 706 to prevent the screw 705 from driving the movable blocks 706 to rotate together during the rotation.

Please refer to Figs. 1 and 5, in order to adjust the height of the service terminal body 1 to adapt to different usage scenarios and improve the user experience, the adjusting mechanism 8 comprises an adjusting motor 801 fixedly installed on the inner bottom wall of the fixed box 4; the output end of the adjusting motor 801 is fixed with a screw rod 802 which is rotatably connected with the inner top wall of the fixed box 4 through a bearing; the middle position of the outer surface of the screw rod 802 is in threaded connection with a moving block 803; connecting plates 804 are fixed on the left and right sides of the moving block 803, and support rods 805 fixed on the left and right sides of the bottom surface of the service terminal body 1 are fixed on the top surfaces of the two connecting plates 804; the adjusting mechanism 8 further comprises limiting holes 806 arranged at the left and right sides of the fixed box 4.

Finally, the top surface of the moving block 803 is provided with a screw hole, the screw rod 802 penetrates through the screw hole and is connected with the screw hole by screw thread, and the two connecting plates 804 respectively penetrate

through the two limiting holes 806 and extend to the outside of the fixed box 4 and are connected with the fixed box 4 in a sliding way. The limiting holes 806 can limit the connecting plates 804 and prevent the connecting rods 804 from rotating together under the rotation of the screw rod 802.

The working principle of the above embodiment is as follows:

When the invention is used, the service terminal body 1 can be used in the supply chain service industry, information data can be provided for consumers through information collection, and the camera 3 can be protected by the protection mechanism 6, and the camera 3 can be shielded by the protection mechanism 6 when the camera 3 is not used for a long time, so as to prevent the camera 3 from being exposed to the air for a long time and being contaminated by dust or stains in the air, thus affecting information identification; at the same time, the moving mechanism 7 can improve the moving convenience of the device and the stability after placement. In addition, the height of the service terminal body 1 can be adjusted by setting the adjusting mechanism 8, so as to be suitable for different use scenarios, which is more convenient.

Operation process of the protection mechanism 6: when it is necessary to shield the camera 3, the protection plate 605 can be pulled by the pull rod 606 to move to the left until the left side of the protection plate 605 is inserted into the fixed groove 609 provided on the fixed seat 608; then rotate the threaded rod 610 to move backward, and rotate the threaded rod 610 into the clamping groove 607, so that the protection plate 605 can be fixed on the front of the camera 3 for protection; when the camera 3 needs to be used, the screw rod 610 is rotated and moved to the front until the screw rod 610 is completely removed from the clamping groove 607. Because the protection plate 605 squeezes the return spring 603 in the process of

moving to the left, when the screw rod 610 is removed from the clamping groove 607, the protection plate 605 automatically moves to the right to the inside of the protection box 601 under the elastic potential energy of the return spring 603. In addition, the protection plate 605 can wipe the surface of the camera 3 through the cleaning gasket in the process of moving left and right, which has a cleaning function, and automatic cleaning is more convenient and beneficial to the information collection of the camera 3.

Operation process of the moving mechanism 7: the device can be moved quickly by the moving wheel 704, which is more convenient in the transportation process. After the device is moved to the designated position, the screw 705 is rotated by the handwheel 709, and the screw 705 drives the two movable blocks 706 to move to the opposite side during the rotation process, and the counterweight plate 708 is pulled upward by the hinge rods 707, and at this time, the lifting plate 702 pushes the lifting plate 702 to move upward under the elastic potential energy of the auxiliary spring 703, and drives the moving wheel 704 to move to the inside of the base 5, at this time, the base 5 is completely in contact with the ground, and the stability of the device in the placing process is improved by increasing the friction with the ground.

Operation process of the adjusting mechanism 8: the adjusting motor 801 can drive the screw 802 to rotate, and the screw 802 can drive the moving block 803 to move up and down in the rotating process, and the moving block 803 can drive the connecting plate 804 to move up and down in the moving process, and the supporting rods 805 can drive the service terminal body 1 to move up and down to adjust the height, so as to adapt to different use scenarios and improve the user experience.

It should be noted that in this paper, relational terms such as first and second are only used to distinguish one entity or operation from another entity or operation, and do not necessarily require or imply that there is any such actual relationship or order between these entities or operations. Moreover, the terms "including", "comprising" or any other variation thereof are intended to cover non-exclusive inclusion, so that a process, method, article or equipment including a series of elements includes not only those elements, but also other elements not explicitly listed or elements inherent to such process, method, article or equipment. Without further restrictions, an element defined by the phrase "including one" does not exclude the existence of other identical elements in the process, method, article or equipment including the element.

Although embodiments of the present invention have been shown and described, it will be understood by those skilled in the art that various changes, modifications, substitutions and variations can be made to these embodiments without departing from the principles and spirit of the present invention, the scope of which is defined by the appended claims and their equivalents.

Claims

1. A supply chain financial service terminal, comprising a service terminal body (1), characterized in that a display screen (2) is fixedly installed on the front of the service terminal body (1); a camera (3) is fixedly arranged at the center of the front top of the service terminal body (1); the bottom of the service terminal body (1) is provided with a fixed box (4); a base (5) is fixed on the bottom surface of the fixed box (4); the service terminal body (1) is provided with a protection mechanism (6) for protecting the camera (3); the base (5) is provided with a moving mechanism (7) for improving the moving convenience of the supply chain financial service terminal; the fixed box (4) is provided with an adjusting mechanism (8) for adjusting the height of the service terminal body (1);

in addition, the protection mechanism (6) comprises a protection box (601) fixed on the right side of the front top of the service terminal body (1); a rectangular rod (602) is fixed on the back between the left side and the right side in the protection box (601); the left side of the outer surface of the rectangular rod (602) is movably sleeved with a return spring (603); the right side of the outer surface of the rectangular rod (602) is connected with a movable plate (604) in a sliding way; a protection plate (605) is fixed on the front of the left side of the movable plate (604); a pull rod (606) is fixed on the right side of the front of the protection plate (605); the left side of the front of the protection plate (605) is provided with a clamping groove (607); the protection mechanism (6) also comprises a fixed seat (608) fixed on the left side of the front top of the service terminal body (1); the right side of the fixed seat (608) is provided with a fixed groove (609), and the right side of the front of the fixed seat (608) is connected with a threaded rod (610) in a threaded way.

2. The supply chain financial service terminal according to claim 1,

characterized in that the back of the side of the movable plate (604) is provided with a rectangular hole; the rectangular rod (602) penetrates through the rectangular hole and is connected with the rectangular hole in a sliding way; two ends of the return spring (603) are respectively abutted between the left side of the inner wall of the protection box (601) and the left side of the movable plate (604).

3. The supply chain financial service terminal according to claim 1, characterized in that a fixed hole is provided with in the middle of the front of the protection box (601), and the pull rod (606) penetrates through the fixed hole and extends to the front of the protection box (601).

4. The supply chain financial service terminal according to claim 1, characterized in that the right side of the front of the fixed seat (608) is provided with a threaded hole which is communicated with the fixed groove (609), the threaded rod (610) penetrates through the threaded hole and is in threaded connection with the threaded hole, and a cleaning gasket is fixed on the back of the protection plate (605).

5. The supply chain financial service terminal according to claim 1, characterized in that the moving mechanism (7) comprises circular rods (701) fixed at four corners between the inner top wall and the inner bottom wall of the base (5), and the outer surfaces of four circular rods (701) are connected with a lifting plate (702) in a sliding way; the bottoms of the outer surface of the circular rods (701) are movably sleeved with auxiliary springs (703); four corners of the bottom surface of the lifting plate (702) are all fixed with moving wheels (704); the moving mechanism (7) also comprises a screw (705) which is rotatably connected with the center of the top of the left side of the inner wall of the base (5) through a bearing; the left and right sides of the outer surface of the screw (705) are both in threaded connection

with movable blocks (706), the bottom surface of each of the movable blocks (706) is hinged with a hinge rod (707); one end of each of the two hinged rods (707) away from the movable block (706) is hinged with a counterweight plate (708); a handwheel (709) is fixed on the right side of the screw (705).

6. The supply chain financial service terminal according to claim 5, characterized in that four corners of the top surface of the lifting plate (702) are all provided with circular holes, and four circular rods (701) respectively penetrate through the four circular holes and are connected with the circular holes in a sliding way; the four corners of the bottom surface of the base (5) are all provided with relief holes through which the moving wheel (704) passes.

7. The supply chain financial service terminal according to claim 5, characterized in that the threads on the left and right sides of the outer surface of the screw (705) are in opposite directions, and the side surfaces of two movable blocks (706) are both provided with screw holes, and the screw (705) penetrates through the two screw holes and is in threaded connection with the crew holes.

8. The supply chain financial service terminal according to claim 5, characterized in that the bottom surface of the counterweight plate (708) is closely attached to the top surface of the lifting plate (702); the top surface of each of the movable blocks (706) is fixed with a slider, and the top of the slider is slidably connected with a slide rail; the two slide rails are respectively fixed on the left and right sides of the middle position of the top wall in the base (5).

9. The supply chain financial service terminal according to claim 1, characterized in that the adjusting mechanism (8) comprises an adjusting motor (801) fixedly installed on the inner bottom wall of the fixed box (4); the output end of the adjusting motor (801) is fixed with a screw rod (802) which is rotatably connected

with the inner top wall of the fixed box (4) through a bearing; the middle position of the outer surface of the screw rod (802) is in threaded connection with a moving block (803); connecting plates (804) are fixed on the left and right sides of the moving block (803), and support rods (805) fixed on the left and right sides of the bottom surface of the service terminal body (1) are fixed on the top surfaces of the two connecting plates (804); the adjusting mechanism (8) further comprises limiting holes (806) arranged at the left and right sides of the fixed box (4).

10. The supply chain financial service terminal according to claim 9, characterized in that the top surface of the moving block (803) is provided with a screw hole, the screw rod (802) penetrates through the screw hole and is connected with the screw hole by screw thread, and the two connecting plates (804) respectively penetrate through the two limiting holes (806) and extend to the outside of the fixed box (4) and are connected with the fixed box (4) in a sliding way.

Ansprüche

1. Ein Lieferketten-Finanzdienstleistungs-Terminal, einschließlich eines Serviceterminalkörpers (1), dadurch gekennzeichnet, dass: ein Anzeigebildschirm (2) fest auf der Vorderseite des Serviceterminalkörpers (1) angebracht ist, eine Kamera (3) fest in der Mitte des Oberteils der Vorderseite des Serviceterminalkörpers (1) angebracht ist, die Unterseite des Serviceterminalkörpers (1) mit einem Befestigungskasten (4) versehen ist, eine Basis (5) an der Unterseite des Befestigungskastens (4) befestigt ist, der Serviceterminalkörper (1) mit einem Schutzmechanismus (6) zum Schutz der Kamera (3) versehen ist, die Basis (5) mit einem beweglichen Mechanismus (7) zum Verbessern der Leichtigkeit der Bewegung der Vorrichtung versehen ist, und der Befestigungskasten (4) mit einem Einstellmechanismus (8) zum Einstellen der Höhe des Serviceterminalkörpers (1) versehen ist;

darüber hinaus der Schutzmechanismus (6) ein Schutzgehäuse (601) umfasst, das auf der rechten Seite des Oberteils der Vorderseite des Serviceterminalkörpers (1) befestigt ist, eine rechteckige Stange (602) an der Rückseite zwischen der linken und der rechten Seite innerhalb des Schutzgehäuses (601) befestigt ist, eine Rückstellfeder (603) beweglich auf der linken Seite der Außenfläche der rechteckigen Stange (602) verschachtelt angebracht ist, die rechten Seite der Außenfläche der rechteckigen Stange (602) mit einer beweglichen Platte (604) gleitend verbunden ist, eine Schutzplatte (605) auf der Vorderseite der linken Seite der beweglichen Platte (604) befestigt ist, eine Zugstange (606) auf der rechten Seite der Vorderseite der Schutzplatte (605) befestigt ist, ein Einbauschlitz (607) auf der linken Seite der Vorderseite der Schutzplatte (605) geöffnet ist, und der Schutzmechanismus (6) auch einen Befestigungssitz (608) umfasst, der auf der linken Seite des Oberteils der Vorderseite des Serviceterminalkörpers (1) befestigt ist, ein Befestigungsschlitz (609) auf der rechten Seite des Befestigungssitzes (608) geöffnet ist, und die rechte Seite der Vorderseite des Befestigungssitzes (608) mit einer Gewindestange (610) in einer Gewindeweise verbunden ist.

2. Das Lieferketten-Finanzdienstleistungs-Terminal gemäß Anspruch 1, dadurch gekennzeichnet, dass: ein rechteckiges Loch auf der Rückseite der Seite der beweglichen Platte (604) geöffnet ist, die rechteckige Stange (602) das rechteckige Loch durchdringt und gleitend damit verbunden ist, und die beiden Enden der Rückstellfeder (603) jeweils zwischen der linken Seite der Innenwand des Schutzgehäuses (601) und der linken Seite der beweglichen Platte (604) eingespannt sind.

3. Das Lieferketten-Finanzdienstleistungs-Terminal gemäß Anspruch 1, dadurch gekennzeichnet, dass: ein Befestigungsloch in der mittleren Position der Vorderseite des Schutzgehäuses (601) geöffnet ist, und die Zugstange (606) das Befestigungsloch durchdringt und sich zur Vorderseite des Schutzgehäuses (601) erstreckt.

4. Das Lieferketten-Finanzdienstleistungs-Terminal gemäß Anspruch 1, dadurch gekennzeichnet, dass: ein Gewindeloch auf der rechten Seite der Vorderseite des Befestigungssitzes (608) geöffnet ist, das Gewindeloch mit dem Befestigungsschlitz (609) verbunden ist, die Gewindestange (610) das Gewindeloch durchdringt und mit diesem in einer Gewindeweise verbunden ist, und eine Reinigungsdichtung auf der Rückseite der Schutzplatte (605) befestigt ist.

5. Das Lieferketten-Finanzdienstleistungs-Terminal gemäß Anspruch 1, dadurch gekennzeichnet, dass: der bewegliche Mechanismus (7) kreisförmige Stangen (701) umfasst, die an den vier Ecken zwischen der inneren oberen Wand und der inneren unteren Wand der Basis (5) befestigt sind, die Außenflächen der vier kreisförmigen Stangen (701) gleitend mit einer Hubplatte (702) verbunden sind, und Hilfsfedern (703) beweglich an der Unterseiten der Außenflächen der kreisförmigen Stangen (701) verschachtelt angebracht sind, alle vier Ecken der Unterseite der Hubplatte (702) mit beweglichen Rädern (704) befestigt sind, und der bewegliche Mechanismus (7) ferner eine Schraube (705) umfasst, die mittels eines Lagers drehbar mit der Mitte des Oberteils der linken Seite der Innenwand der Basis (5) verbunden ist, die linke und

rechte Seite der Außenfläche der Schraube (705) jeweils mit beweglichen Blöcken (706) in einer Gewindeweise verbunden sind, die Unterseiten der beweglichen Blöcken (706) gelenkig mit Gelenkstangen (707) verbunden sind, zwei der Gelenkstangen (707) an den von den beweglichen Blöcken (706) abgewandten Enden gelenkig mit einer Gegengewichtsplatte (708) verbunden sind, und ein Handrad (709) auf der rechten Seite der Schraube (705) befestigt ist.

6. Das Lieferketten-Finanzdienstleistungs-Terminal gemäß Anspruch 5, dadurch gekennzeichnet, dass: kreisförmige Löcher an der vier Ecken der Oberseite der Hubplatte (702) geöffnet sind, die vier kreisförmigen Stangen (701) jeweils die vier kreisförmigen Löcher durchdringen und gleitend damit verbunden sind, und durchgangslöcher an den vier Ecken der Unterseite der Basis (5) geöffnet sind, damit die beweglichen Räder (704) durchdringen können.

7. Das Lieferketten-Finanzdienstleistungs-Terminal gemäß Anspruch 5, dadurch gekennzeichnet, dass: Gewinde auf der linken und rechten Seite der Außenfläche der Schraube (705) in entgegengesetzte Richtungen verlaufen, und Schraubenlöcher auf den Seiten der beiden beweglichen Blöcke (706) geöffnet sind, und die Schraube (705) die beiden Schraubenlöcher durchdringen und mit ihnen in einer Gewindeweise verbunden ist.

8. Das Lieferketten-Finanzdienstleistungs-Terminal gemäß Anspruch 5, dadurch gekennzeichnet, dass: die Unterseite der Gegengewichtsplatte (708) eng auf der Oberseite der Hubplatte (702) anliegt, die Oberseite des beweglichen Blocks (706) mit einem Gleiter befestigt ist, die Oberseite des Gleiters gleitend mit einer Gleitschiene verbunden ist, und die beiden Gleitschienen jeweils auf der linken und rechten Seite in der mittleren Position der inneren oberen Wand der Basis (5) befestigt sind.

9. Das Lieferketten-Finanzdienstleistungs-Terminal gemäß Anspruch 1, dadurch gekennzeichnet, dass: der Einstellmechanismus (8) einen Einstellmotor (801) umfasst, der fest an der Bodenwand des Befestigungskastens (4) angebracht ist, das Ausgangsende des Einstellmotors (801) eine Schraube (802) aufweist, die mittels eines Lagers drehbar mit der

oberen Wand des Befestigungskastens (4) verbunden ist, die mittlere Position der Außenfläche der Schraube (802) mit einem beweglichen Block (803) in einer Gewindeweise verbunden ist, die linke und rechte Seite des beweglichen Blocks (803) mit Verbindungsplatten (804) befestigt sind, die Oberseiten der beiden Verbindungsplatten (804) mit Stützstangen (805) befestigt sind, die an der linken und rechten Seite der Unterseite des Serviceterminalkörpers (1) befestigt sind, der Einstellmechanismus (8) außerdem Begrenzungslöcher (806) umfasst, die links und rechts des Befestigungskastens (4) geöffnet sind.

10. Das Lieferketten-Finanzdienstleistungs-Terminal gemäß Anspruch 9, dadurch gekennzeichnet, dass: ein Schraubenloch auf der Oberseite des beweglichen Blocks (803) geöffnet ist, die Schraube (802) das Schraubenloch durchdringt und mit diesem in einer Gewindeweise verbunden ist, und zwei der Verbindungsplatten (804) jeweils zwei der Begrenzungslöcher (806) durchdringen, um sich zur Außenfläche des Befestigungskastens (4) zu erstrecken, und gleitend mit diesem verbunden sind.

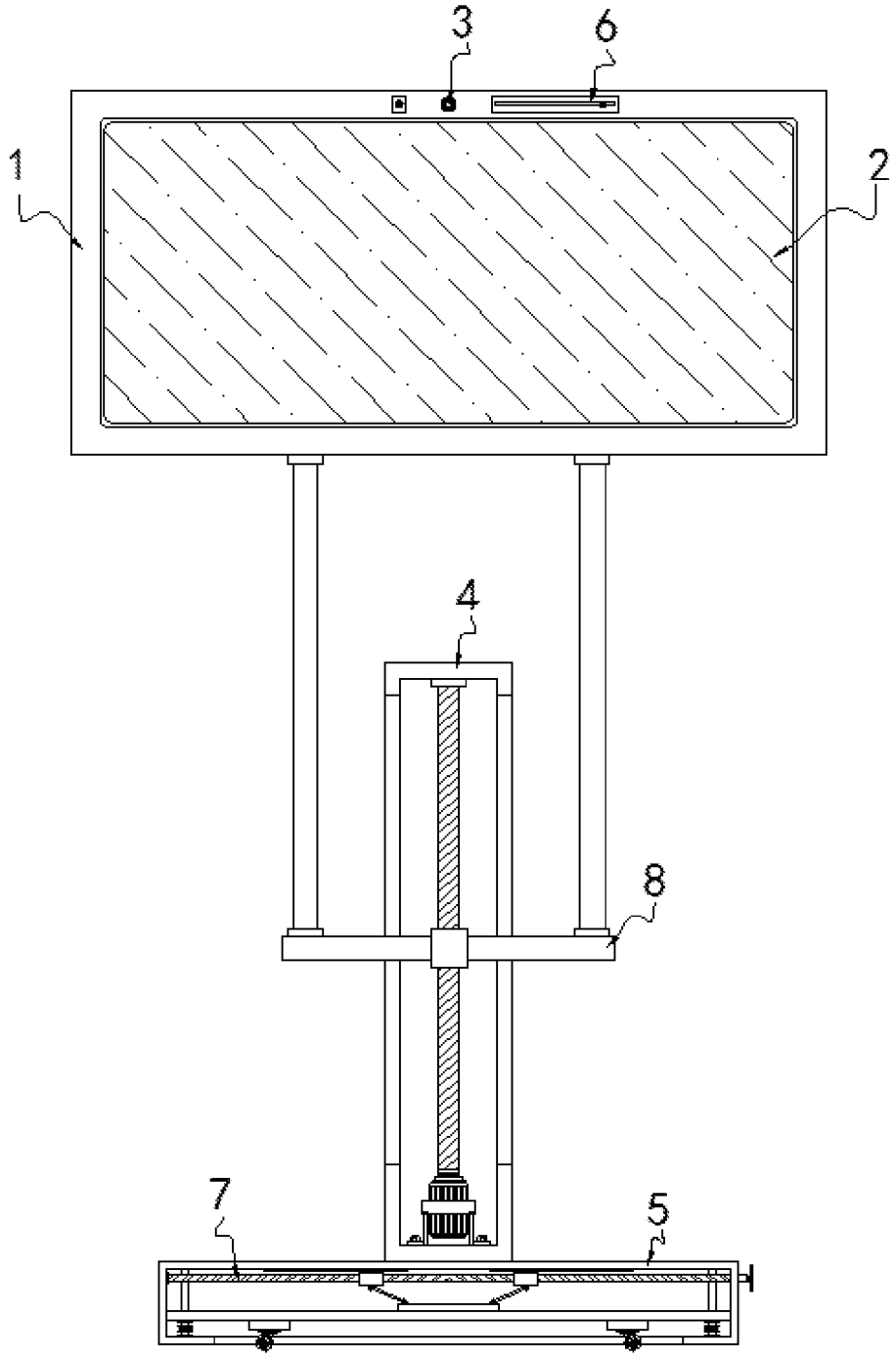

Fig. 1

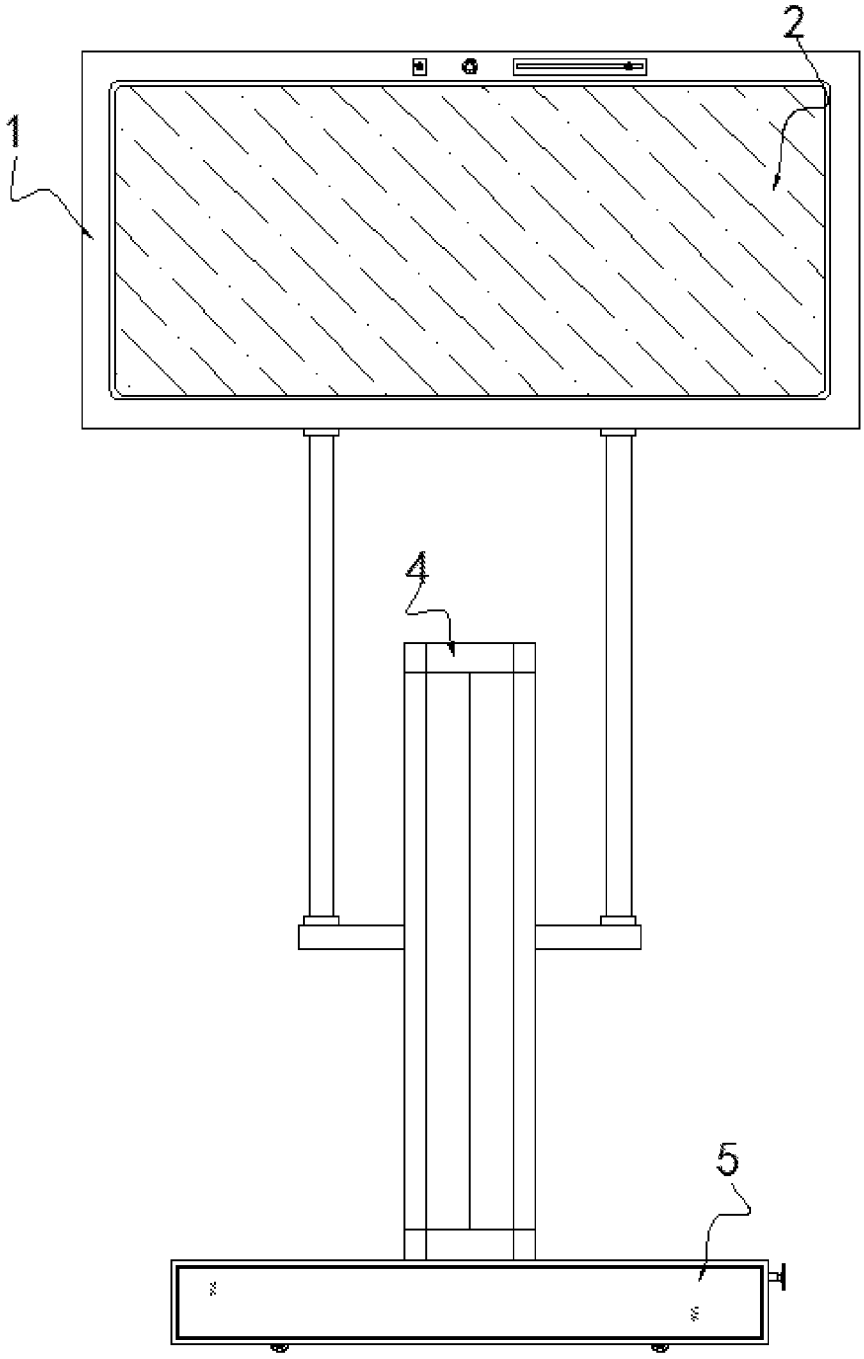

Fig. 2

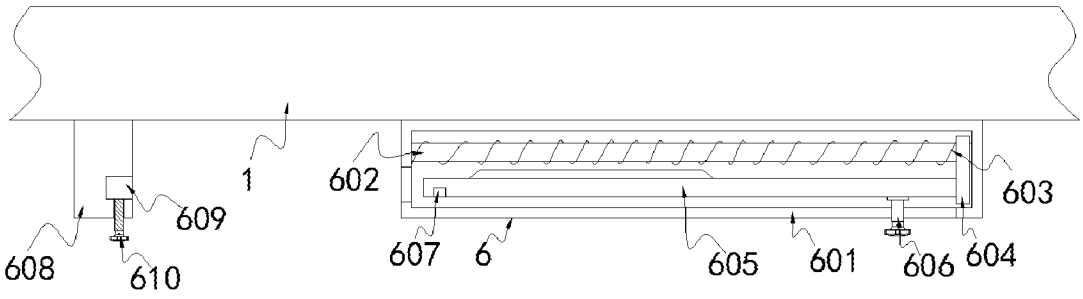
1
602
603
609
608
610
607
6
605
601
606
604

Fig. 3

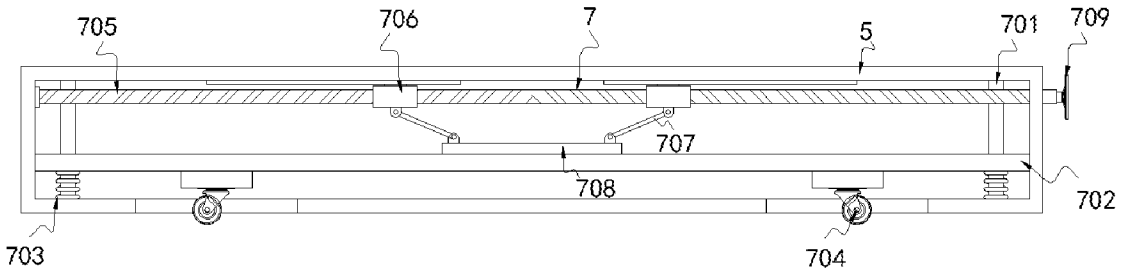
705
706
7
5
701
709
707
708
702
703
704

Fig. 4

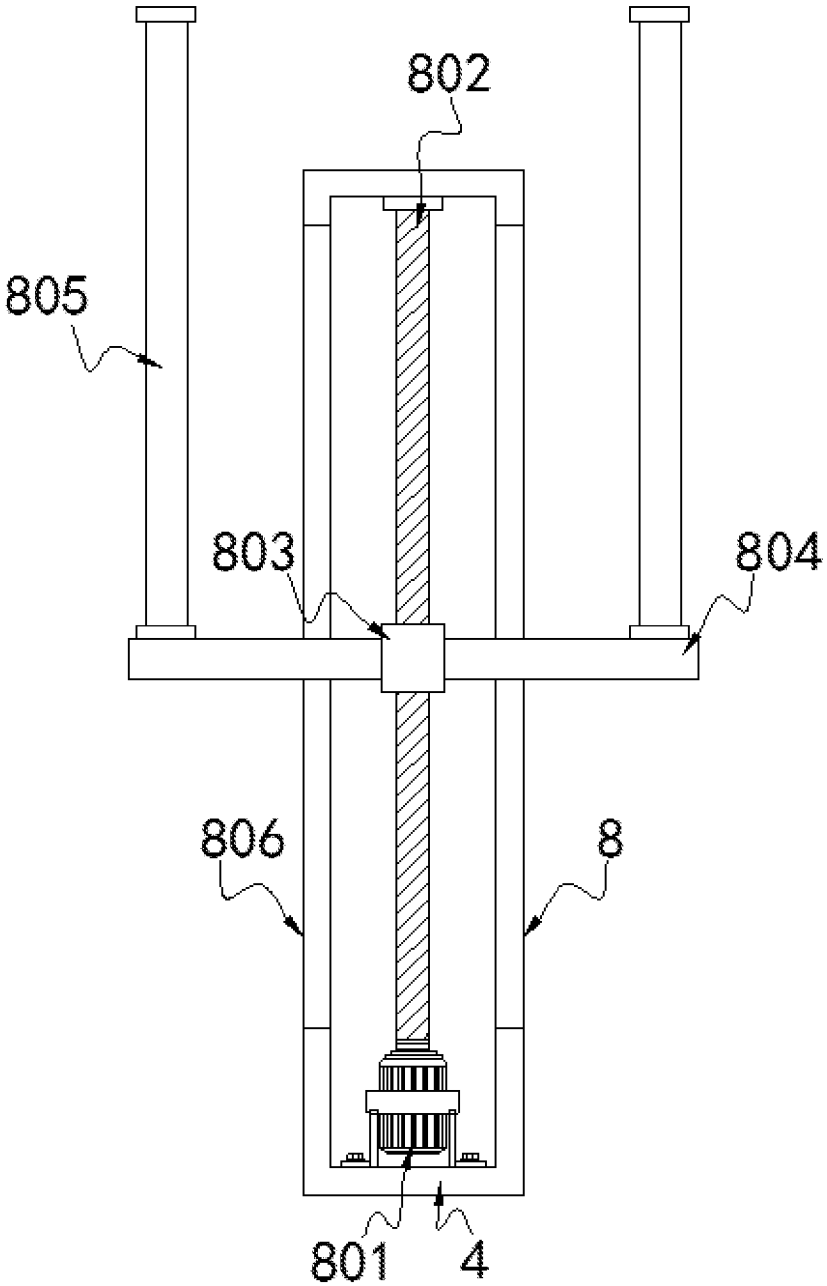

Fig. 5