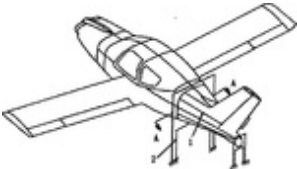
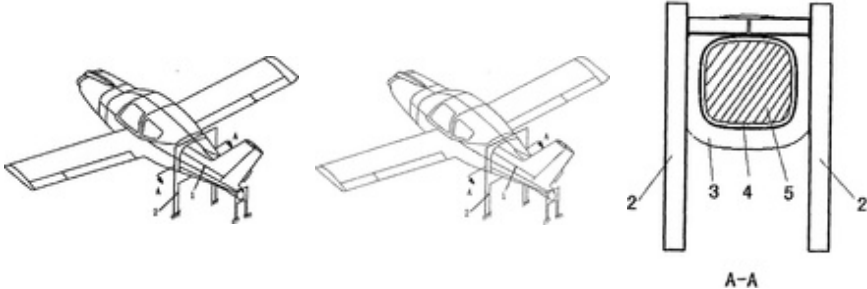
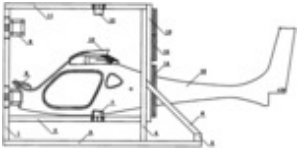
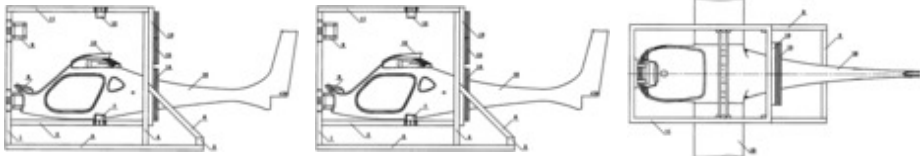


Patent families - 12 results

| #                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |   | Title                                                                      | Publication number | Publ. date | Applicant/Assignee                                                                   |       |  |                                                                                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|--------------------|------------|--------------------------------------------------------------------------------------|-------|--|-------------------------------------------------------------------------------------|
| 1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                     | Method for supporting <b>static</b> test for light-aircraft fore fuselages | CN101788397        | 2010-07-28 | <div><div>XI AN AIRCRAFT DESIGN INSTITUTE<br/>OF CHINA AVIATION INDUSTRY</div></div> | 100 % |  |  |
| <p>The invention relates to an aircraft supporting-fixing method in <b>static</b> strength test, in particular to an aircraft-supporting method in <b>static</b> strength test for fore fuselages. The method for supporting <b>static</b> test for light-aircraft fore fuselages comprises that: a straight frame of an aircraft rear fuselage is provided with two clamp hoops; the clamp hoops and the fuselage are tightly clamped; each clamp hoop is connected with two upright columns arranged on two sides of the fuselage; the width of a clamp-hoop edge strip is not greater than that of a fuselage edge strip where the clamp-hoop edge strip is arranged; one clamp hoop is arranged on the fuselage straight frame between aircraft wings and an aircraft horizontal tail, and the other clamp hoop is arranged at the aircraft tail end after the aircraft horizontal tail is detached; a longitudinal part is arranged on the fuselage between the two clamp hoops; and the longitudinal part is a long truss on the fuselage. The method for supporting <b>static</b> test for light-aircraft fore fuselages has the advantage of effectively solving the problem of supporting the whole fore fuselage of a light aircraft in <b>static</b> strength test, along with simple operation, little influence on test results, high <b>precision</b>, low cost and great practical application value.</p>                                     |                                                                                                                                                                     |                                                                            |                    |            |                                                                                      |       |  |                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                     |                                                                            |                    |            |                                                                                      |       |  |                                                                                     |
| 2.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                     | Light-weight motion aircraft complete machine <b>static</b> test bench     | CN209209066        | 2019-08-06 | <div><div>HEFEI BEIHANG TONGHANG<br/>INDUSTRY TECHNOLOGY</div></div>                 | 86 %  |  |  |
| <p>The utility model belongs to the general airplane ground guarantee technology, and relates to a light-weight moving airplane complete machine <b>static</b> test bench. an upright rod assembly 1 is supported by a machine head; the machine body supports the first horizontal rod assembly 2; test bench base 3, tail supporting vertical frame 4, the utility model discloses a reinforced upright rod assembly 5. A reinforced diagonal member assembly 6; the first fixing frame 7 is used for mounting the body; wherein the first fixing frame 8 is used for installing the machine head, the second fixing frame 9 is used for installing the machine head, the machine body supporting second horizontal rod assembly 11 is used for installing the machine body, the second fixing frame 12 is used for installing the machine body, the machine tail supporting vertical connecting frame 13 is used for installing the machine tail, the first fixing block assembly 14 is used for installing the machine tail, and the second fixing block assembly 15 is used for installing the machine tail. The utility model provides a <b>static</b> test bench for the whole machine of a light moving aircraft, which reduces the waste of manpower and material resources, shortens the working time, reduces the workload, improves the reliability of the test bench, and effectively reduces the probability that the aircraft is damaged.</p> |                                                                                                                                                                     |                                                                            |                    |            |                                                                                      |       |  |                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                     |                                                                            |                    |            |                                                                                      |       |  |                                                                                     |

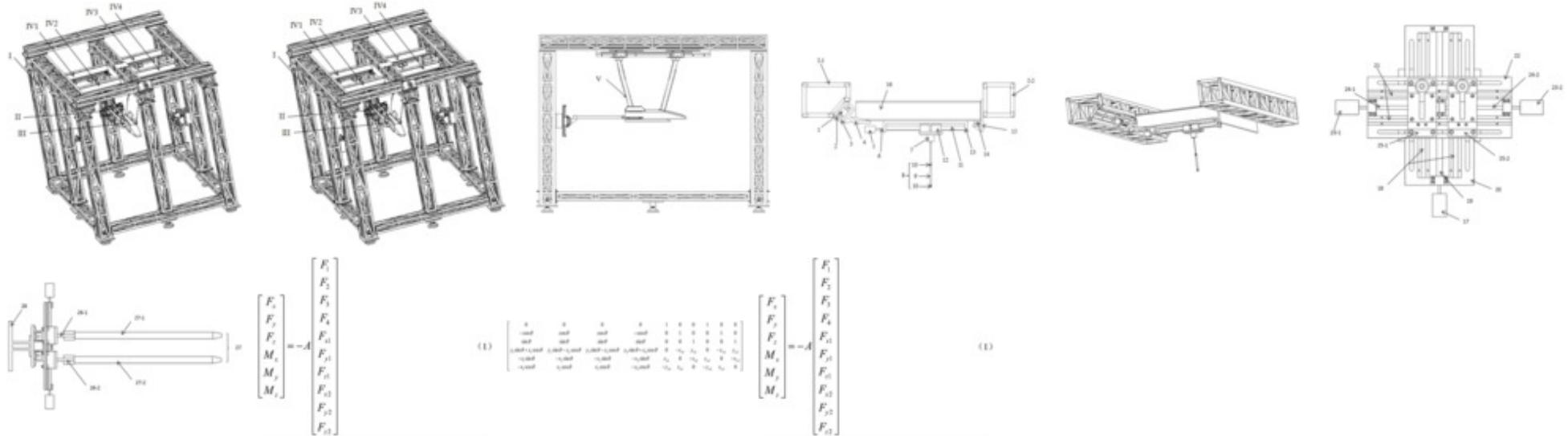
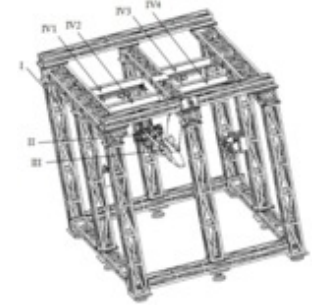
3. **Model support device and method based on double-tail support and bracing wire support** CN108414184

2018-08-17

DALIAN UNIVERSITY OF TECHNOLOGY

83 %

The invention belongs to the technical field of sensors and measurement and control, and relates to a model support device and method based on double-tail support and bracing wire support, for aircraft model space six-dimensional force measurement. The model support device based on double-tail support and bracing wire support includes a support frame, a double-tail support system and bracing wire support systems, wherein the support frame is a cube structure which is formed by a plurality of vertical crossbeams and vertical beams; the quantity of the bracing wire support systems is 4, and the bracing wire support systems are uniformly distributed between every two adjacent vertical crossbeams at the top of the support frame; each of the bottoms of the four bracing wire support systems is connected with one bracing wire, and the other end of the bracing wire is connected with the back of the aircraft model; the double-tail support system is arranged on the vertical beams of the support frame; two horizontal rigid rods are arranged on the double-tail support system; and the other end of each horizontal rigid rod is fixedly connected with the tail of the aircraft model, thus realizing tail double-rod support of the aircraft model. The model support device based on double-tail support and bracing wire support has the advantages of low bracing wire support pneumatic interference and high hard support system stability, and can effectively solve the problem that a narrow and long large-mass aircraft model encounters large vibration and instability in a single tail support mode.



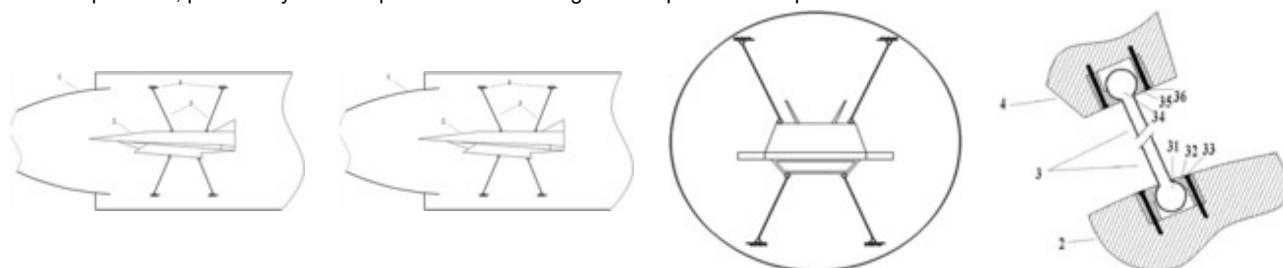
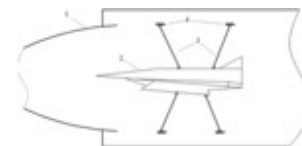
4. [Support method for aircraft model in wind tunnel experiment](#) CN107860550

2018-03-30

INSTITUTE OF MECHANICS CAS

66 %

The invention discloses a support method for an aircraft model in a wind tunnel experiment. The method includes the following steps: 1) a wind tunnel and an aircraft model in the wind tunnel are connected and fixed through a spatial rod system, and the wind tunnel is not in direct contact with the aircraft model; and 2) according to requirements of experimental measurement and support system design, the diameter, length, number, material and spatial distribution form of support rods in the spatial rod system are adjusted, thereby realizing optimization of rigidity of an aircraft model supportsystem. By adoption of the support method provided by the invention, the support system further adapts to and meets the requirements of wind tunnel experiment content and measurement, thereby achieving the purpose of improving **precision** and reliability of pneumatic experiment data, and effectively solving the problems of insufficient rigidity, large flow field interference and complicated system internal force of a support system in a traditional support method, and the support method provided by the invention has obvious advantages and potential of innovative development in the aspect of a wind tunnel experiment, particularly in the aspect of a full-size large-model pneumatic experiment.



$$K_i = \frac{\pi E_i d_i^2}{4 L_i} \quad (\text{式 } 1), \quad K_i = \frac{\pi E_i d_i^2}{4 L_i} \cos^2 \alpha_i \quad (\text{式 } 2),$$

$$K_s = \sum_{i=1}^n \frac{\pi E_i d_i^2}{4 L_i} \cos^2 \alpha_i \quad (\text{式 } 3),$$

5. [Wind tunnel test stand with unilateral aerodynamic force](#)

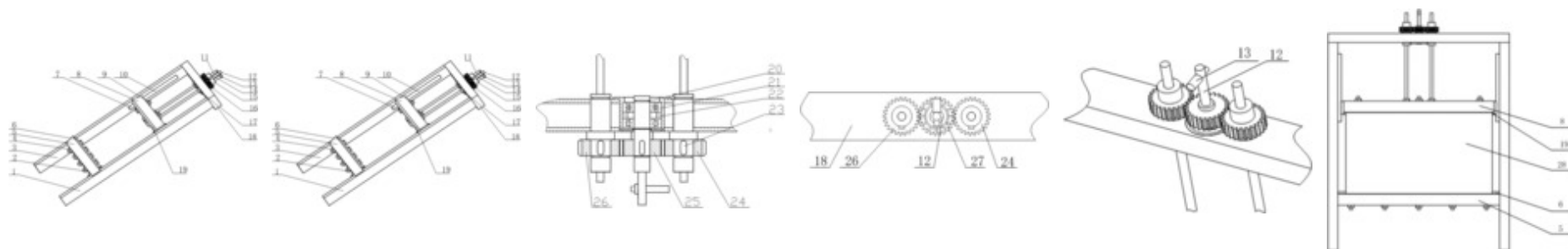
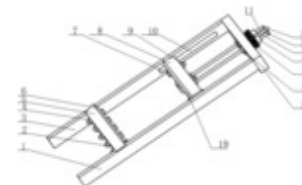
CN106768799

2017-05-31

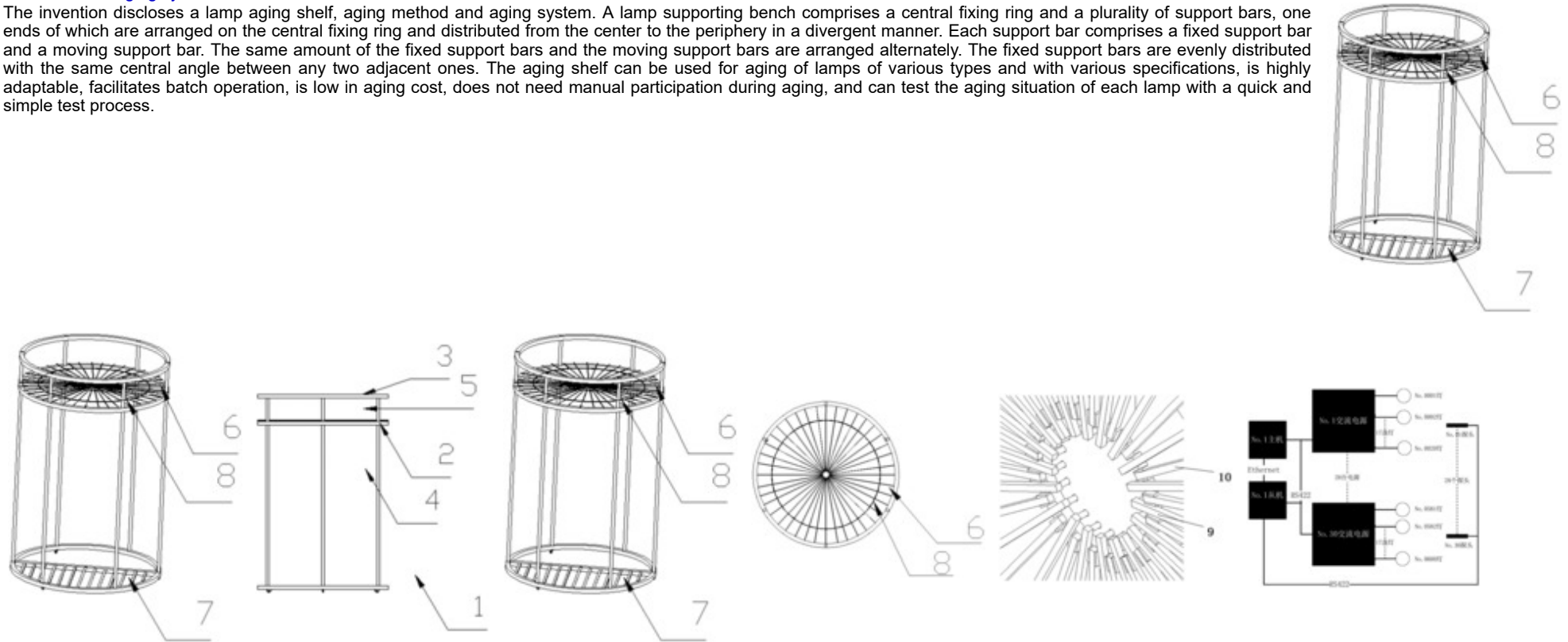
NANJING UNIVERSITY OF AERONAUTICS &amp; ASTRONAUTICS (NUAA)

62 %

The invention provides a wind tunnel test stand with a unilateral aerodynamic force. A handle is rocked to provide power; the handle is rocked, a middle gear drives a left gear and the right identical gear to rotate in the same direction, and rotation of the left gear and the right gear drives a first screw rod and a second screw rod to move forwardly; a rear flow guide clamping plate moves along a linear guide rail under pulling force effects of the first screw rod and the second screw rod; drawing of a thin plate is driven through the pulling force of the first screw rod and the second screw rod and the traction force of the linear guide rail; the rotation angles of the first screw rod and the second screw rod can be measured by a rotation disc; and the drawing distance of the thin plate can be obtained according to pitches of the first screw rod and the second screw rod. The wind tunnel test stand with the unilateral aerodynamic force has the advantages that reverse engagement of the gears controls movement of the first screw rod and the second screw rod to achieve high **precision** and high reliability, movement of the first screw rod and the second screw rod can be controlled only by rotating the handle, the operation is extremely simple, the overall structure is simple, the weight is light and the like.



The invention discloses a lamp aging shelf, aging method and aging system. A lamp supporting bench comprises a central fixing ring and a plurality of support bars, one ends of which are arranged on the central fixing ring and distributed from the center to the periphery in a divergent manner. Each support bar comprises a fixed support bar and a moving support bar. The same amount of the fixed support bars and the moving support bars are arranged alternately. The fixed support bars are evenly distributed with the same central angle between any two adjacent ones. The aging shelf can be used for aging of lamps of various types and with various specifications, is highly adaptable, facilitates batch operation, is low in aging cost, does not need manual participation during aging, and can test the aging situation of each lamp with a quick and simple test process.



7. A mobile communication terminal and its radio communication module EP1679913

2006-07-12

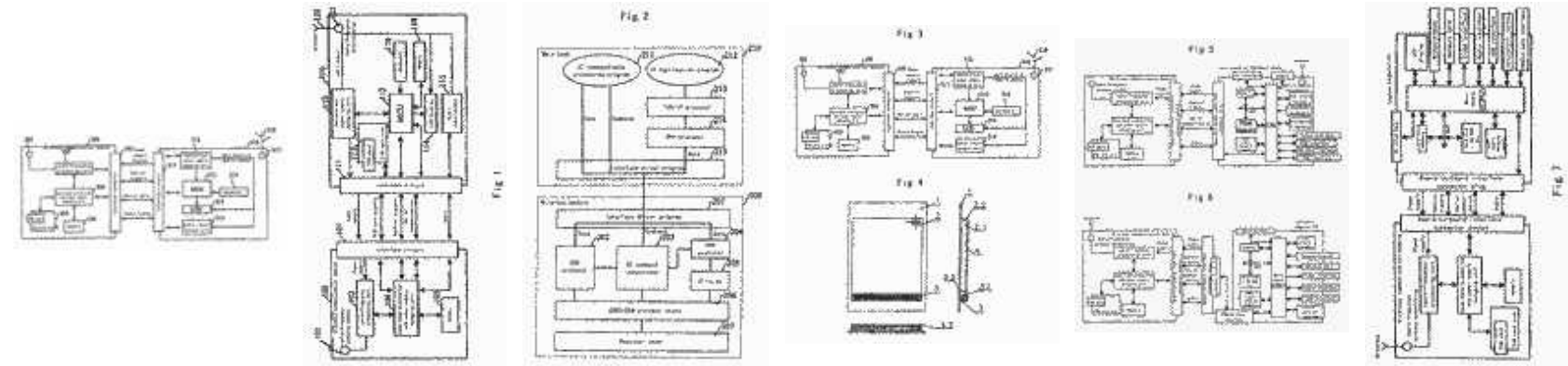
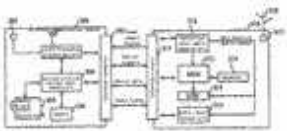
LENOVO

AEROSPACE NEW WEATHER TECHNOLOGY

LENOVO BEIJING

45 %

The present invention provides a mobile communication terminal comprising a wireless communication module and a host, wherein the wireless communication module further comprises a first interface connector and a module case; the host reserves positions for the insertion of the wireless communication module, and further comprises a second interface connector corresponding to the first interface connector positioned on the wireless communication module; the wireless communication module is connected to the host via the first interface connector and the second interface connector. The present invention also discloses a wireless communication module which is integrated with a SIM card unit. The present invention can reduce the waste in development and application, and shorten the development period of mobile communication terminals. Thus, the wireless communication module interface is simplified so that the wireless communication module interface is easy to use.



8. Method and apparatus of speed-control wing CN106467163

2017-03-01

SHAO BO

44 %

The invention discloses a method and an apparatus of a speed-control wing. According to the invention, a speed is taken as a controlled quantity for controlling a server through intelligent processing. The controlled server can change the aerofoil profile pneumatic characteristic according to an instruction, the pneumatic characteristics are large elevating force obtained during low speed flight and small resistance obtained during high speed flight, the problems that the pneumatic characteristics of the current wing cannot be regulated and controlled so that the elevating force is small during low speed flight and the gliding performance is poor can be solved; resistance during high speed flight is large, so that the speed is difficulty increased. By using the method and the apparatus thereof, the continuous departure interval of a shipboard aircraft is shortened, elevating force which is larger than the takeoff weight can be obtained through small power and no use of an ejector on a short runway on an aircraft carrier in a safe and reliable mode by half speed of critical warship leaving speed, fighting and unfighting fuel consumption rate is increased, tactical radius is enlarged, gliding performance is increased, airborne period while critical dynamics is prolonged, and a critical point of landing speed is reduced, landing is carried out with a lower critical speed, and the impact damage due to a tail hook and an undercarriage is mitigated to increase the airplane mobility.

