

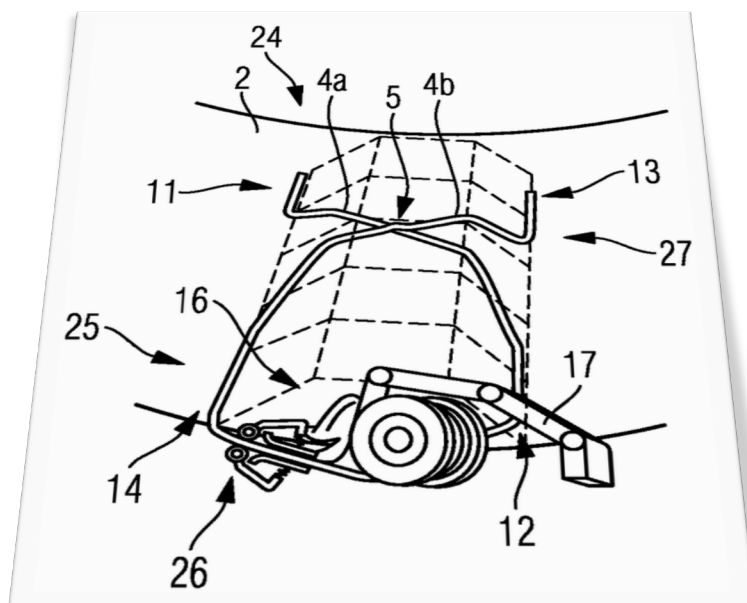
Method for forming a structural component for an airframe of an aircraft or spacecraft and structural component for an airframe of an aircraft or spacecraft

Patent No: US20190344908

Date of publication: 2019-11-14

Applicant(s): Heltsch Norbert, Linde Peter, Cole John, airbus operations

A method for forming a structural component for an airframe of an aircraft or spacecraft, includes: providing a prefabricated shell element comprising a thermoplastic substrate; and applying a stiffening structure to the shell element by additive manufacturing, wherein a plurality of continuous thermoplastic filaments filled with reinforcing fibers are continuously heated and three dimensionally formed such that the filaments are crossing and bonded to each other at a plurality of crossing points to form a three dimensional grid truss integrally formed on the shell element. A corresponding structural component and an aircraft or spacecraft including such a structural component are also described.



Soft-balloon aeroenergostat

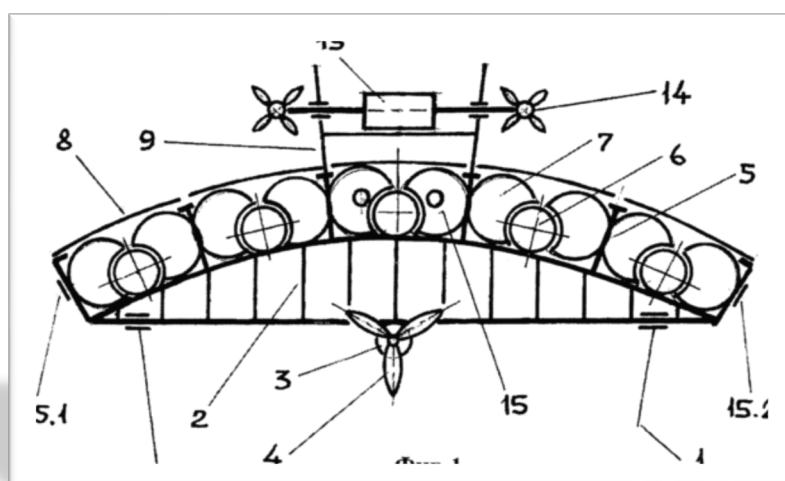
Patent No: RU2703098

Date of publication: 2019-10-15

Applicant(s): GUBANOV ALEKSANDR VLADIMIROVIC

The invention relates to wind-driven power plants, radial-blade turbines of which have axes of rotation coinciding with direction of wind. Soft-balloon aeroenergostat comprises aeronautical module of deltoid contour in horizontal projection, consisting of arched-bridge truss perpendicular to direction of wind, cylindrical cylinders filled with light gas, a wind-powered unit from a nacelle with an internal electric generator and a radial-vane turbine, whose axis of rotation, as well as longitudinal axes of the cylinders, coincides with the direction of the wind, vertically raised tail fins. Module is connected by flexible attachment elements with mooring assembly, in which there is concrete pedestal with central axis of rotation, around it rope-cable coil is rotated together with program-controlled drive mechanism. [...]

The invention is aimed at reduction of own weight of aeroenergostat aerostatic module, providing high strength and rigidity of module, sufficient for lifting to height of high-speed winds of massive wind-power unit of large industrial power.



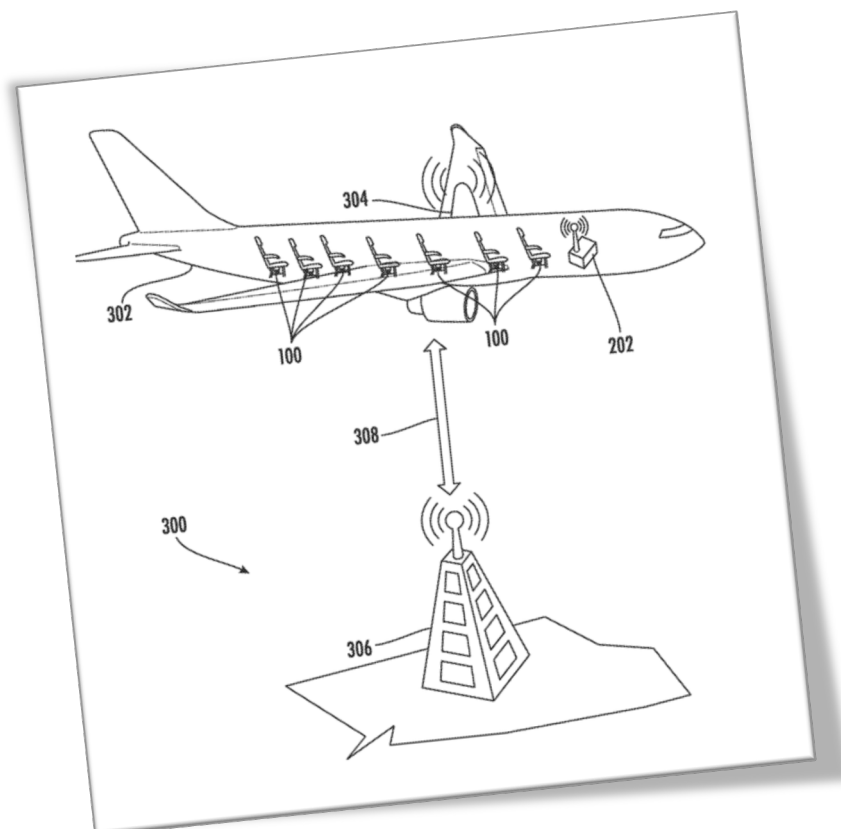
Aircraft area having a textile display, aircraft passenger seat having a textile display, and aircraft including an aircraft area

Patent No: EP3546355

Date of publication: 2019-10-02

Applicant(s): JOURDAN NICOLAS, QUATMANN FRANK, airbus operations

Described as an aircraft area (5) comprising an interior component (20), a textile display (10) disposed on the interior component (20) and including at least one textile fiber (31) capable of changing a color at at least one section (32) of the textile fiber (31), and a controller (11) operatively coupled to the textile display (10) and configured to change the color of the at least one section (32) of the textile fiber (31), such that the textile display (10) displays information. Further described is an aircraft passenger seat (21) comprising a back rest (8), a seat pan (9), and a textile display (10) integrated into a seat cover covering the backrest (8) and/or the seat pan (9), wherein the textile display (10) includes at least one textile fiber (31) capable of changing a color at at least one section (32) of the textile fiber (31). An aircraft (1) may comprise one or more aircraft areas (5) and/or one or more aircraft passenger seats (21).



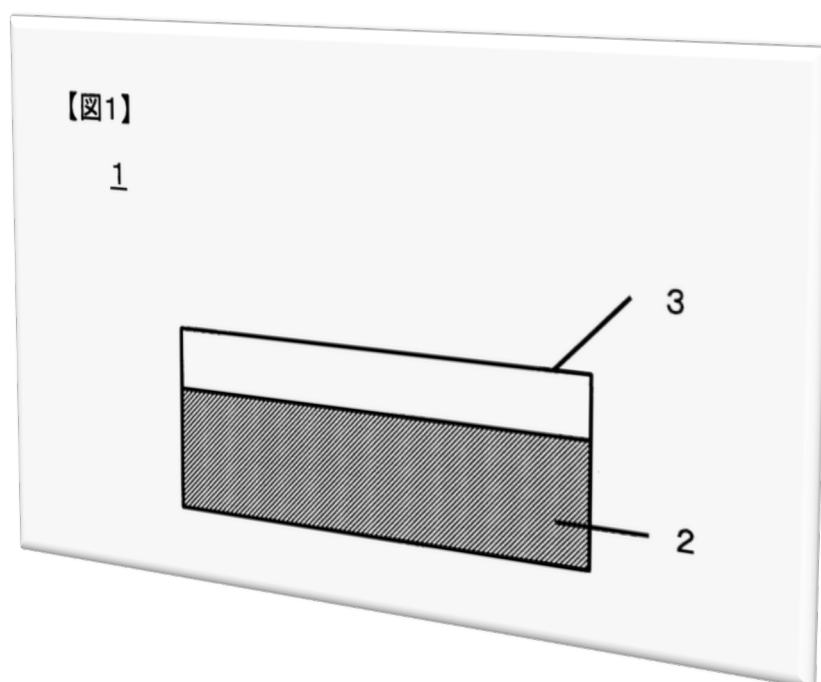
Antistatic dustproof fabric and protective clothing using same

Patent No: WO2019/171995

Date of publication: 2019-09-12

Applicant(s): SHIBATA Yu, HAYASHI Yuichiro, XU, Jie, Toray industries

The present invention addresses the problem of providing a dustproof fabric which comprises an antistatic dustproof fabric (1) having excellent antistatic properties, a high air permeability and high-level dustproof properties. The antistatic dustproof fabric (1), which comprises two or more fiber layers, is characterized in that: at least one of the two or more fiber layers is a first fiber layer (2) containing an antistatic agent wherein the polarity of the antistatic agent is opposite to the polarity of the zeta potential of the fiber layer; and at least one of the two or more fiber layers is a second fiber layer (3) which is electrically charged.



Seating pad with woven cover

Patent No: US20190269255

Date of publication: 2019-09-05

Applicant(s): LEEDS RICHARD M, Comfort Concept

A seat assembly includes a seat with a hip/thigh support, a back support and at least one gap between the hip/thigh support and the back support. A seating pad assembly is positioned removably on the seat and has a foam cushion made at least partly of a viscoelastic foam and having a dimensionally stable woven fabric cover. Pelvic and upper back areas of a person sitting on the seat deform the viscoelastic foam significantly to provide a comfortable support and to define anchors for the seating pad assembly. The outer cover extends between those anchors for effectively supporting and cradling the lumbar back area of the person in the seat.

Composite pipe material for insulating joystick and preparation method therefor

Patent No: WO2019/047401

Date of publication: 2019-03-05

Applicant(s): YANG WEI, ZHANG ZHUO, YIN LI, YU FAN, XING ZHAOLIANG, ZHANG CHONG, CHEN XIN, XIAO YU, SHI XIAONING, CHEN YUN, XU XIANGQIAN

Provided in the embodiments of the present invention are a composite pipe material for insulating a joystick and a preparation method therefor, the pipe material being made of a resin and fibre fabric composite, the resin comprising epoxy resin and the fibre fabric being cross-overlapped and wound into a roll. The embodiments of the present invention solve the problem of impregnation of traditional resin and fibre fabric by means of the winding composition of the fibre fabric and the design of the winding method, ensuring the effective infiltration of the epoxy resin system into the fibre fabric, effectively increasing the dipping amount of the composite material, improving the problem of the impregnation of the resin into the fibre fabric, and being able to ensure that the composite material tube has excellent mechanical properties and electrical insulation properties whilst effectively reducing the weight of the composite material tube.

Fabric for airbag, coated fabric for airbag, and airbag using same

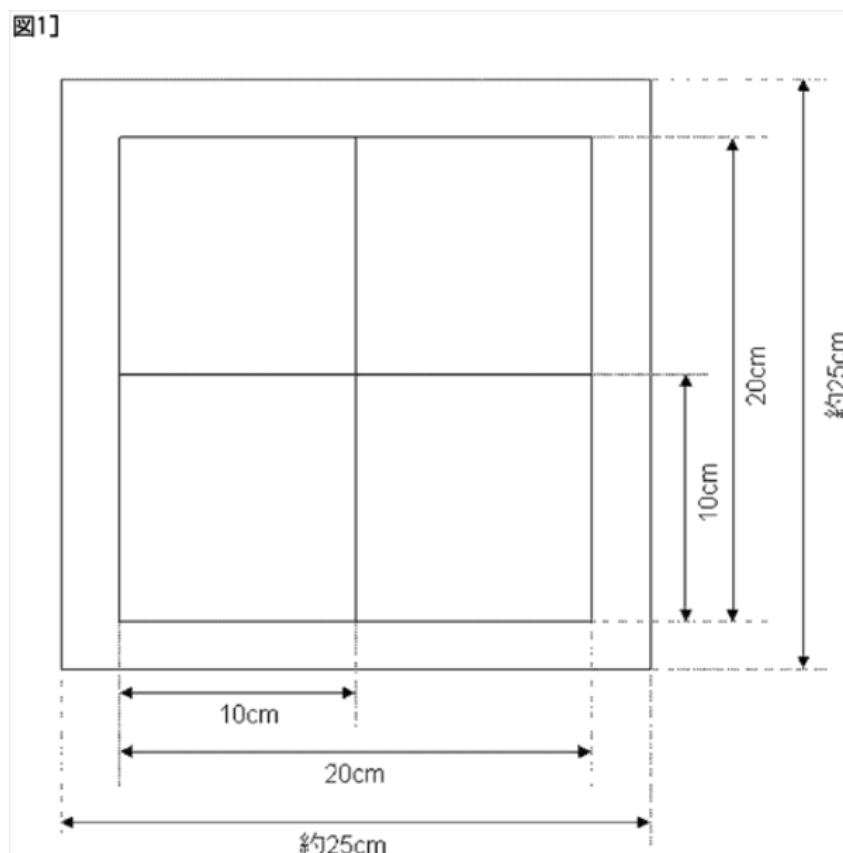
Patent No: WO2019/039396

Date of publication: 2019-02-28

Applicant(s): KAMIMURA, Ryuji AKECHI, Tsutomu, TOYOBO

[Problem] To provide fabric for an airbag and coated fabric for an airbag that are light weight and compact while maintaining the tensile strength required for an airbag, can mitigate damage to sewn parts of the airbag when deployed, and can allow stable airbag deployment.

[Solution] The fabric for an airbag, which is formed from synthetic fibers, is characterized in that: the fibers constituting the fabric have a total fineness of 200 – 400 dtex; the average value for sliding resistance retention in the warp and weft directions after heating to 210°C for 30 seconds is 60% or greater; and residual shrinkage in the warp and weft directions is 1.5% or less.



Aircraft occupant seat for aircraft occupant health, safety, and comfort management

Patent No: EP3141482

Date of publication: 2017-03-09

Applicant(s): SHARMA ANURAG, AIRBUS

An aircraft occupant seat for providing health, safety, and comfort management to aircraft occupants is disclosed. In one embodiment, an aircraft occupant, seated in an aircraft occupant seat in an aircraft, is monitored for health, safety and comfort information using at least one sensor disposed in the aircraft occupant seat. Further, background auditory, electrical noise, temperature and mechanical vibration associated with the aircraft occupant seat is measured using the at least one sensor. The health, safety and comfort information associated with the aircraft occupant is then obtained using the monitored health safety and comfort information and the measured background electrical noise and mechanical vibration. Health, safety and comfort of the aircraft occupant are then managed based on the obtained health, safety and comfort information.

