Apple's Self-Deploying Screen Protector: Never Crack Your Screen Again

Active screen protection for electronic device

Patent number: US9715257

Date of publication: 2017-07-25

Applicant(s): Apple

Abstract

An electronic device includes one or more screens, multiple screen protectors moveable between a retracted position and extended position where they extend above the screen to create a gap, and one or more sensors. When the sensor detects a drop event, the screen protectors move from the retracted to extended position, functioning as a shock absorber and preventing the screen from connecting with a surface that the electronic device contacts. In some implementations, the screen protectors may be multiple tabs that may be moved between the retracted and extended positions by one or more motors and/or other actuators coupled to one or more pinions. Such tabs may be formed of various flexible and/or rigid materials such as plastic, plastic film, polyethylene terephthalate or other polymers, metal, thin film metal, combinations thereof, and/or other such materials.
Amazon's Super Drone: The Future of Online Deliveries

Collective unmanned aerial vehicle configurations

Patent number: EP3259648
Date of publication: 2017-12-27
Applicant(s): Amazon

Abstract

This disclosure describes a collective UAV in which multiple UAVs may be coupled together to form the collective UAV. A collective UAV may be used to aerially transport virtually any size, weight or quantity of items, travel longer distances, etc. For example, rather than using one large UAV to carry a larger or heavier item, multiple smaller UAVs may couple together to form a collective UAV that is used to carry the larger or heavier item.
Airbus' 3D-Printed Plane: Changing How We Build Aircraft

Manufacturing of components of a vehicle using additive layer manufacturing

Patent number: US20160136891
Date of publication: 2016-05-19
Applicant(s): Airbus

Abstract

This relates to a method for manufacturing a shell-like structural component for a vehicle using additive layer manufacturing. In a step of the method, a first material is applied to a region of the shell-like structural component. In another step of the method, the region of the shell-like structural component is heated by a laser beam such that the first material is added to the shell-like structural component. The shell-like structural component comprising the first material is cooled in another step such that an internal stress is generated within the shell-like structural component resulting in a bending of the shell-like structural component. This further relates to a shell-like structural component which is manufactured by a method using additive layer manufacturing.
IBM’s Futuristic Comfort Wear: Clothes That Adapt to You and Your Surroundings

Garment Optimization

Patent number: US20170357274
Date of publication: 2017-12-14
Applicant(s): IBM

Abstract

A garment being worn by a user is optimized by altering a feature of a garment including texture, shape and size, while the garment is still being worn by the user.
The Future of Wind Turbines

Wind turbine and building having such a wind turbine

Patent number: US9951628
Date of publication: 2018-04-24
Applicant(s): Geert Devisch

Abstract

Wind turbine (1) comprising a rotor (2) around a rotation shaft (3), having a plurality of blades (4) at a distance around the rotation shaft (3), in which the blades (4) can drive the rotor (2); a cavity (10) which extends between the ends (15) of the blades (4) closest to the rotation shaft (3); a plurality of vanes (5) around the rotor (2) for guiding wind to the blades (4), in which the vanes (5) extend from the ends (14) of the blades (4) furthest from the rotation shaft (3) to a second end (16) of the vanes (5). The vanes (5) and blades (4) merge into each other at the same curvature mathematically tangentially in a plane at right angles to the rotation shaft (3) and the curvature of the vanes (5) is described by a part of a logarithmic spiral.
IBM’s Futuristic Comfort Wear: Clothes That Adapt to You and Your Surroundings

Garment Optimization

Patent number: US20170357274
Date of publication: 2017-12-14
Applicant(s): IBM

Abstract

A garment being worn by a user is optimized by altering a feature of a garment including texture, shape and size, while the garment is still being worn by the user.
The Sound of the Future – Music generated by Artificial Intelligence

Generating audio using neural networks

Patent number: WO2018048934
Date of publication: 2018-03-15
Applicant(s): Deepmind

Abstract

Methods, systems, and apparatus, including computer programs encoded on computer storage media, for generating an output sequence of audio data that comprises a respective audio sample at each of a plurality of time steps. One of the methods includes, for each of the time steps: providing a current sequence of audio data as input to a convolutional subnetwork, wherein the current sequence comprises the respective audio sample at each time step that precedes the time step in the output sequence, and wherein the convolutional subnetwork is configured to process the current sequence of audio data to generate an alternative representation for the time step; and providing the alternative representation for the time step as input to an output layer, wherein the output layer is configured to: process the alternative representation to generate an output that defines a score distribution over a plurality of possible audio samples for the time step.
**Toyota’s Flying cars of the future**

**Dual mode vehicle with wheel rotors**

Patent number: US20180257447

Date of publication: 2018-09-13

Applicant(s): Toyota

**Abstract**

A dual-mode vehicle, wheels for the vehicle, and a method of transitioning the vehicle from a land mode to a flight mode. In the land mode, the method includes rotating a pair of spaced wheel arms about a central pivot to lower a body of the dual-mode vehicle to a ground surface. Each wheel arm extends from the central pivot to a wheel. The method also includes rotating the central pivot about a longitudinal vehicle axis to raise the wheel arms and the wheels above the ground surface. After raising the wheel arms and wheels above the ground surface, the method includes rotating the wheel arms about the central pivot to position the wheels for use as rotors in the flight mode. In the flight mode, the method includes rotating the wheels in order to extract rotor blades positioned within the wheels to extend beyond the wheels.