ARCTIC ROBOT SHELL DESIGN PATENT

DESIGN PATENT SPECIFICATION

PATENT APPLICATION NO. 29/875,392

TITLE: PROTECTIVE SHELL ENCLOSURE FOR CO

Filed: September 15, 2023

Applicant: Polar Dynamics Robotics, Inc.

Inventors: Marcus Chen, Dr. James Barrett, Robert Kovalev

Assignee: Polar Dynamics Robotics, Inc.

DESCRIPTION

Field of the Design

[0001] The present design patent application relates to an ornamental design a protective shell enclosure specifically engineered for autonomous mobile robots operating in extreme cold environments.

Background

[0002] The claimed design represents a novel and non-obvious industrial des for robotic shell enclosures that combines both aesthetic and functional elements optimized for sub-zero operating conditions.

Brief Description of the Drawings

[0003] FIG. 1 is a front perspective view of the protective shell enclosure;

[0004] FIG. 2 is a rear perspective view thereof;

[0005] FIG. 3 is a top plan view thereof;

[0006] FIG. 4 is a bottom plan view thereof;

[0007] FIG. 5 is a right side elevation view thereof;

[0008] FIG. 6 is a left side elevation view thereof;

[0009] FIG. 7 is a front elevation view thereof;

[0010] FIG. 8 is a rear elevation view thereof;

[0011] FIG. 9 is an exploded perspective view thereof.

Detailed Description

[0012] The protective shell enclosure exhibits a distinctive hexagonal prisma
form factor with chamfered edges and integrated thermal management featur

overall dimensions measure approximately 1200mm in length, 800mm in wi
600mm in height when assembled.

[0013] The front face incorporates a sweeping curved surface with integrated
sensor ports arranged in a distinctive triangular pattern. Recessed areas along
the sides accommodate modular attachment points while maintaining the she
clean lines and minimalist aesthetic.

[0014] The top surface features a raised central spine with aerodynamic cont
that taper toward both ends. This design element houses environmental senso
while contributing to the enclosure's modern industrial appearance.

[0015] The rear section includes geometrically arranged ventilation ports tha
form a repeating diamond pattern. These elements serve both functional and
ornamental purposes while maintaining visual consistency with the overall d
language.

[0016] The ornamental design for a protective shell enclosure for cold-environment robotic systems, as shown and described.

DECLARATION

I hereby declare that:

(a) I am the original inventor of the design described above;

(b) I have reviewed and understand the contents of the above-identified specification;

(c) I acknowledge the duty to disclose information material to patentability a defined in 37 CFR §1.56;

(d) All statements made herein of my own knowledge are true and correct.

I hereby claim foreign priority benefits under 35 U.S.C. §119 of any foreign application(s) for design patent or inventor's certificate listed below and have also identified below any foreign application for design patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Applications: None

I declare that all statements made herein of my own knowledge are true and t all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or b under 18 U.S.C. §1001.

SIGNATURES

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