

CORPORATE ENGAGEMENT & COMMERCIALIZATION



Perching Attachment for Unmanned Aircraft

UND Technology 15-10
Patent Number US 10,081,421
Date of Issuance: September 25, 2018

Summary

The University of North Dakota has patented an aerial vehicle system. The system includes an attachment mechanism secured to a protective framework and configured to selectively attach to a structure to provide stable perching of an aerial vehicle. The attachment mechanism is an electro-permanent magnet device or a talon-like grip. The flight system is at least partially enclosed by the protective framework.

Advantages

- Allows for rotor-type Unmanned Aerial Vehicles (UAVs) to land and attach to any surface in a stable configuration to perform local robotic operations.
- Reduces use of propeller and motors operational time.
- Ideal for long duration surveillance and monitoring, performing material inspections, measuring air flow, and many other applications.

Inventors

Dr. William Semke Dr. Weston Swetich



