

To the Whom It May Concern,

This letter is to confirm that the VANTAGE, Vantage Multi-Mission, Vantage Breacher Robot, and Mini Vantage robots and its chemical dispersion technologies (“Remote Burn Safe System”, “RBSS” or “Hot Gas Delivery System”) are patented and/or only sold by Transcend Robotics, Inc. (“Transcend”) at this time in the United States.

The robots are based on Transcend’s mobile technology by the name of “Mobile reconnaissance apparatus with articulating traction control” as described in Transcend’s U.S. numbered US8434576 and US8893832. This technology is critical to officer safety because of its high success rate climbing obstacles and stairs while not requiring the officer to manually control the robot to pre-position itself to climb an obstacle. Nearly all other solutions use a commodity flipper technology that often fails to climb obstacles due to operator error while under the pressure of the mission.

Here are the reasons Transcend’s unique and sole sourced products are critical to mission success:

1. Automatic stair and obstacle climbing in accordance with Transcend’s patents (as listed below) results in the elimination of manual pre-positioning of the robot’s limbs (aka “flippers”) before, during and/or after a stair or obstacle climb. This is significant to mission success because it removes a significant amount of operator error (failure to climb and get into a house and see what is happening) since Transcend’s patented technology removes manual intervention while driving over obstacles.
 - **Patent #1: US8434576**
 - **Patent #2: US8893832**
2. Deploy pyro-technic hot gas canisters from upon the mobile robot in a fully enclosed metal container that fully shields the flame from the outside environment. This is significant to mission success because:
 - The flame is shielded from interacting with the environment which significantly reduces the chances of setting a house on fire
 - Eliminates the absolute need for an officer to expose themselves while tossing a hot gas canister into a house and therefore keeping the officer out of harm’s way
 - Allows the officer to first recon a room before deploying a hot gas canister therefore significantly reducing chances of damages and litigation (make sure a baby or family pet is not in the room).
3. Ability to haul 30 lbs. upstairs (pending payload orientation and center of gravity) without any manual pre-positioning of the robot.
4. Intuitive end-point control of the robot arm via a automatic stair climbing robot base to retrieve and deliver objects and open doors.

Sincerely,

Phillip Walker February 23, 2024

