

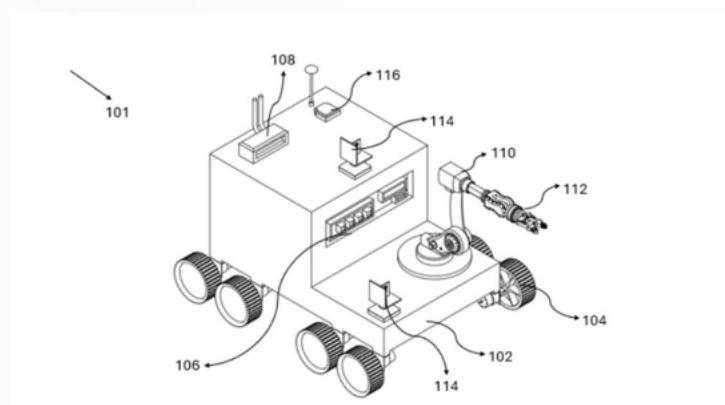
DEVICE, SYSTEM, AND METHOD OF DETECTING AND MAPPING MINES

Seeking parties interested in licensing and commercialization of technology.

Technology Brief

An automated mobile demining system and method designed to detect, locate, and map landmines and hazardous objects to enhance the safety, efficiency, and reliability of clearance operations. The mobile platform is equipped with wheels, multi-sensor suites, an onboard camera, an integrated GPS module, and a rotating sweeping arm carrying a scanner to thoroughly analyze target areas. Controlled via an input unit, a server-based processing unit creates terrain-aware grid paths tailored to surface conditions and elevation profile. Field data collected during autonomous navigation is transmitted to the server to generate high-precision 2D and 3D operational maps, providing detailed situational analysis for safe demining.

Block Diagram



Technical Applications

This technology enables automated, high-precision landmine detection and geotagging in hazardous environments using a multi-sensor sweeping platform. By generating real-time 2D and 3D threat maps, it supports autonomous clearance operations and risk assessment, keeping field personnel safe during high-risk terrain surveying.

Salient Features

- ✓ Multi-Sensor & Automated Sweeping
- ✓ Terrain-Aware Navigation & Geotagging
- ✓ Intelligent Mapping & Threat Analysis

Glimpse of the Technology



REFERENCE NUMBER

iTNT-TECH-0176



TECHNOLOGY SECTOR

Enterprise Applications



IP STATUS

Patent Granted



APPLICATION NUMBER

202441036279



TECHNOLOGY READINESS LEVEL

TRL - 3

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