

# ON THE MOVE MILLIMETER WAVE INTERROGATION SYSTEM WITH A HALLWAY OF MULTIPLE TRANSMITTERS AND RECEIVERS

INV-14050

**INVENTORS:** Borja Gonzalez Valdes, Carey Rappaport, Jose Martinez

## Description

The use of millimeter-wave imaging techniques/systems is well known in prior art. Current techniques/systems generally use portal configuration and/or monostatic radar technology. The images generated using such systems often have reconstructed artifacts, such as dihedral effects, misrepresenting sudden indentations and protrusions. These artifacts in turn lead to undesirable false alarms. **This invention discloses a novel, on the move millimeter wave interrogation system that combines multiple wave transmitters and receivers to create real-time, high resolution images for personnel security screening, potentially overcoming prior art limitations and/or unmet needs.**

## Value Proposition

The system:

- Is highly cost effective
- Enables a larger throughput as compared to current systems
- Enables a better detection probability and a lower false alarm rate
- Allows for an increased image resolution as compared to current imaging systems
- Allows for collection of data from different angles so as to inspect the whole body on the move
- Enables an effective synchronization between all transmitters and receivers to create a high resolution image of an object under screening
- Requires reduced number of receivers to form high resolution images as compared to conventional systems
- Would be commercially useful for scanning and imaging in airports, transportation venues, secure facilities, government buildings, and building entrances

## Intellectual Property Status

Provisional Application 61/912,630

## License Status

Available for license

