Conformal and Configurable Millimeter-Wave Integrated Array Radar in a Compact Package for Non-Destructive Testing and Remote Sensing

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Description

Currently used sensing approaches such as ground-radar type systems are limited by their bulky hardware requirements. Moreover, such procedures are not suitable for providing quick estimates. Past approaches such as optical techniques require substantial and expensive data processing. Such approaches are further associated with false positives due to the presence of artifacts. **The proposed novel sensing system comprises a conformal and configurable millimeter-wave integrated array radar for various non-destructive testing and remote sensing applications.**

Value Proposition

The sensing system:

- Is multi-layered and autonomous
- Is highly compact and cost effective with a high-frequency transmit
- Is accurate, reliable and robust with a high manufacturing flexibility
- Is capable of operating at a variety of distances, speeds, and resolutions
- Allows for multiple modes of operation (multifunctional), reducing the complexity of the output data with simplified processing
- Would be commercially useful for various applications such as perimeter defense, traffic safety, vehicle radars, scanner system for pavements, skid resistance, airport runway sensors, level detectors, and road infrastructure monitoring

Intellectual Property Status

PCT Application PCT/US13/33538

License Status

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