Device and method for detecting and imaging conductive objects

Value Proposition
- Our device can detect and image electrically conductive objects.
- The method is non-destructive. The device is placed at a distance from the object to be imaged.
- Key features: improved signal-to-noise ratio and high sensitivity => fast detection of high and low conductivity objects.

Commercial Perspectives
Detection, imaging and characterisation of conductive objects is of interest for
- industry, for detecting cracks or defects in surfaces of metals or other high-conductivity materials
- geophysics, for underground exploration and localisation of hidden objects
- bio-medical devices, for imaging biological tissue (including the heart), potentially a tool for medical diagnostics.

Technology Summary
The device works by inducing and detecting eddy currents in the conductive object to be imaged. Our invention gives high sensitivity, which leads to fast detection/imaging of high conductivity objects (such as metals) and makes it possible to detect low conductivity objects (such as biological tissue).

Current State
Laboratory proof-of-principle demonstration of the ability of the device and method to detect metals (copper, aluminum, titanium) and low-conductivity objects (salt-water).

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Seeking
- Licensee
- Partner/Research Collaboration

A patent application is in draft