LICENSING OPPORTUNITY: MAPPING PROBE FOR REAL-TIME SIGNAL SAMPLING AND RECOVERY FROM ENGINEERED ELECTROMAGNETIC INTERFERENCE

DESCRIPTION

Problem

It solves problems involving localization, mapping, and imaging of unknown, not line-of-sight environments, such as firefighters or victims inside burning or collapsed buildings.

Invention

The invention is a probing instrument that can recover a signal (normally a signal would be a 3D environment, such as a room, a building, a city, etc.) by illuminating the signal with electromagnetic radiation structured in space and time according to the excitation signals applied to the corresponding antennas of the transmitters and detecting reflections with a set of receivers.

BENEFITS

Potential Commercial Applications

For first-responder applications, there simply is no non-invasive commercial solution that provides real-time localization and mapping.

Competitive Advantage

There is no system that performs localization and imaging using electromagnetic wave interference in real time.

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