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(54) **ISOLATION DEVICE AND METHOD OF TRANSMITTING A SIGNAL ACROSS AN ISOLATION MATERIAL USING WIRE BONDS**

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(57) **ABSTRACT**

An isolation system and isolation device are disclosed. An illustrative isolation device is disclosed to include a transmitter circuit to generate a first current in accordance with a first signal, a first elongated conducting element to generate a magnetic field when the first current flows through the first elongated conducting element, a second elongated conducting element adjacent to the first elongated conducting element so as to receive the magnetic field. The second elongated conducting element is configured to generate an induced current when the magnetic field is received. The receiver circuit is configured to receive the induced current as an input, and configured to generate a reproduced first signal as an output of the receiver circuit.