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(54) Title: RADIO FREQUENCY RECEPTION COIL NETWORKS FOR SINGLE-SIDED MAGNETIC RESONANCE IMAGING

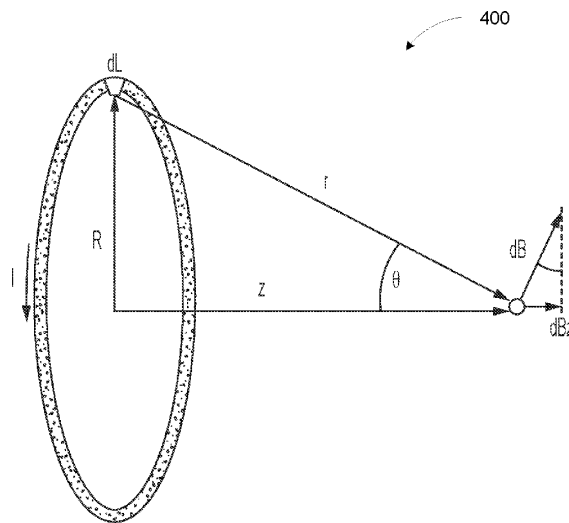


FIG. 7

(57) Abstract: Disclosed is a single-sided magnetic imaging apparatus, comprising a permanent magnet, wherein a Z axis is defined through the permanent magnetic into a field of view. The single-sided magnetic imaging apparatus further comprises an electromagnet, a gradient coil set, a radio frequency transmission coil, a radio frequency reception coil, and a power source. The power source is configured to generate an electromagnetic field in the field of view along the Z axis. The electromagnetic field comprises a field gradient in the field of view, wherein a tuning of the radio frequency transmission coil is configured to target a location within the field gradient in the field of view.

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