

Docket #: S10-211

MRI - I1-denoised autocalibrating parallel imaging

A computer implemented method for magnetic resonance imaging is provided. A 3D Fourier Transform acquisition is performed with two phase encode directions, wherein phase code locations are chosen so that a total number of phase encodes is less than a Nyquist rate, and closest distances between phase encode locations takes on a multiplicity of values. Readout signals are received through a multi-channel array of a plurality of receivers. An autocalibrating parallel imaging interpolation is performed and a noise correlation is generated. The noise correlation is used to weight a data consistency term of a compressed sensing iterative reconstruction. An image is created from the autocalibration parallel imaging using the weighted data consistency term. The image is displayed.

Patents

- Published Application: [20120092009](#)
- Issued: [8,638,096 \(USA\)](#)

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