Method For Accelerating Mri/ct Scans Using Reconstruction With A Priori Information

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Inventors: Alexey Samsonov, Walter Block, Huimin Wu

The Invention

An image reconstruction method applicable to a number of different imaging modalities including magnetic resonance imaging (MRI), x-ray computed tomography (CT), positron emission tomography (PET), and single photon emission computed tomography (SPECT) is disclosed. A sparsifying image is reconstructed from a series of acquired undersampled data to provide a priori knowledge of a subject being imaged. An iterative reconstruction process is further employed to iteratively determine a correction image for a given image frame that, when subtracted from the sparsifying image, produces a quality image for the image frame.

Additional Information

For More Information About the Inventors

- Walter Block

Tech Fields

- Medical Imaging : MRI

For current licensing status, please contact Jeanine Burmania at jeanine@warf.org or 608-960-9846