



## System And Method For Stimulated Echo Based Mapping (Stem) Using Magnetic Resonance Imaging (Mri)

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### The Invention

A system and method are provided for acquiring a plurality of differently-weighted images of a subject using a single pulse sequence. The method includes determining imaging parameters for a pulse sequence that includes a diffusion weighted module and an anatomical imaging module. The imaging parameters include at least a repetition time (TR), a mixing time (TM), an echo time (TE), and a diffusion weighting b-value, with at least two different values of at least TM, TE, and diffusion weighting b-value. The method also includes performing a pulse sequence using the imaging parameters to acquire MR image data from a subject. The different values of at least TM, TE, and diffusing weighting b-value are used to acquire the MR image data. Furthermore, the method includes reconstructing, from the MR image data, a plurality of images of the subject, including at least a T1-weighted image, a T2-weighted image, and a diffusion-weighted image.

### Additional Information

#### For More Information About the Inventors

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#### Tech Fields

- [Medical Imaging : MRI](#)

For current licensing status, please contact Jeanine Burmania at [jeanine@warf.org](mailto:jeanine@warf.org) or 608-960-9846