



System And Method For Flow-Resolved Three-Dimensional Imaging

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The Invention

A system and method is provided for imaging a contrast agent. The system includes a power injector that delivers a contrast agent as a series of boluses using a known period, flow rate, or duration and with a rate of at least one or more separate boluses per cardiac cycle. An x-ray imaging system acquires a reference dataset of the subject before the contrast agent is delivered and acquires an imaging dataset as the series of boluses are delivered to the subject, wherein multiple images are acquired of the subject per bolus. A computer system receives the reference dataset and the imaging dataset from the x-ray imaging system and reconstructs the reference dataset and the imaging dataset using a reconstruction process that removes the subject from the images to generate time-resolved volumetric images of the contrast agent moving within a volume of the subject without the subject.

Additional Information

For More Information About the Inventors

- [Michael Speidel](#)

Tech Fields

- [Medical Imaging : X-ray](#)

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