



## System And Method For Reconstructing Image Volumes From Sparse Two-Dimensional Projection Data

[View U.S. Patent Application Publication No. US-2020-0094074 in PDF format.](#)

**WARF: P180372US02**

Inventors: Guang-Hong Chen, Juan Montoya, Thomas Grist

### The Invention

A system and method for acquiring medical images of a subject includes performing two-dimensional (2D) scan of a subject using a medical imaging system to acquire 2D data from at least two view angles and generating a three-dimensional (3D) model of the subject from the 2D data. The method also includes extracting desired images of the subject from the 3D model. The desired images are at view angles different from the at least two view angles. The method further includes prescribing an imaging study of the subject using the desired images of the subject to control at least one of a signal-to-noise ratio of data acquired using the imaging study or a dose of ionizing radiation delivered to the subject during the imaging study. The method also includes performing the imaging study using the medical imaging system to acquire imaging data from the subject and reconstructing images of the subject from the imaging data.

### Additional Information

#### For More Information About the Inventors

- [Guang-Hong Chen](#)
- [Thomas Grist](#)

#### Tech Fields

- [Medical Imaging : CT](#)

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