



## System And Method Of Quantitative Angiography

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**WARF: P180044US01**

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### The Invention

Methods and systems are provided for generating quantitative computed tomography (CT) angiographic images using imaging systems that acquire a set of projection views forming CT angiographic image data of a patient using a projection duration of less than 50 milliseconds. The method may include producing a composite image from the CT angiographic image data that indicates an attenuation value at each composite image pixel of the patient, backprojecting each projection view in the CT angiographic image data and weighting a value backprojected into at image pixel by an attenuation value of a corresponding pixel in the composite image and summing backprojected values for each image pixel to produce a CT image of the patient. The method may further include performing a scatter correction and determining at least one of a flow direction or a velocity of flow with a vessel in the patient to provide the quantitative CT angiographic images.

### Additional Information

#### For More Information About the Inventors

- [Charles Mistretta](#)

#### Tech Fields

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

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