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(71) Applicant: **NICOLET IMAGING SYSTEMS [US/US];**
Suite F, 8221 Arjons Drive, San Diego, CA 92126 (US).

(72) Inventor: **PATNAIK, Rohit;** 10764 Corte De Tiburon,
San Diego, CA 92130 (US).

(74) Agent: **SAMPSON, Matthew, J.; McDonnell Boehnen**
Hulbert & Berghoff, 300 S. Wacker Drive, Suite 3200,
Chicago, IL 60606 (US).

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(54) Title: **INSPECTION METHOD UTILIZING VERTICAL SLICE IMAGING**

(57) Abstract: An inspection method utilizing vertical slice imaging. A number of horizontal slice images, extending through an object of interest, are acquired. A vertical region of interest is defined from the data representing the horizontal slice images. A vertical slice image is constructed based upon the horizontal slice image data falling within the vertical region of interest. The vertical slice image data may be analyzed to detect defects. In addition, a method is provided to detect defects in a BGA joint. The method includes locating a center of the joint. The method may further include measuring a number of diameters through the center of the joint and applying a rule to compare the measured diameters to an expected diameter.

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