

## Measurement of Wood/Plant Cell or Composite Material Attributes with Computer Assisted Tomography

### **Disclosure Number**

200100934

### **Technology Summary**

A method for measuring cell dimensions, such as cell length, cell diameter and cell wall thickness, of wood and plant cells or other composite material using computer assisted tomography. The existing ORNL, rotating-state Micro CT imaging system has been modified and improved by modifying the x-ray tube focal spot size and the system geometry. The system and method of the invention are also used to obtain physical measures from reconstituted wood products such as oriented strand board, medium density fiber board and exuded wood products. The measured parameters relate to product quality and product performance. The method and system of the subject invention can be used in production settings to provide real-time quality information on wood and fiber-resin composite products. As such, it can be used in solid timber production facilities, reconstituted wood product facilities, and other fiber-resin production facilities.

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