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Carbon Design Innovations, Inc. Receives U.S. Patent for  
Fabrication of a Carbon Nanotube (CNT) Device

*Method used for producing CNT atomic force microscopy (AFM) probes*

Burlingame, Calif., November 3, 2009 – [Carbon Design Innovations, Inc.](#) (C|D|I) today announced that they have received a key technology patent for the fabrication of carbon nanotube (CNT) devices. The United States Patent #7,601,650 was issued on October 13, 2009 for a variety of methods and techniques for fabricating an improved CNT device such as an AFM probe.

“This patent confirms one of the unique fabrication techniques that C|D|I is applying to the manufacture of CNT AFM probes,” said Vance J. Nau, CEO Carbon Design Innovations. “The invention covered by this patent allows us to reliably produce longer CNTAFM probes than has been previously possible. As a result, AFM users are now able to obtain high-resolution images of extremely high-aspect ratio samples (1- >3 $\mu$  z-range).”

The invention, a process for coating CNT's, gives C|D|I the ability to make stronger, stiffer and more durable AFM Probes that are less likely to break if they “crash” during a scan. And, longer probe lifetime means that customers can achieve more consistent scan-to-scan images, spend less time changing and aligning tips or normalizing the results between scans to allow for probe changes.

C|D|I CNT AFM probes offer customers the imaging flexibility, performance and reproducibility that will enable them to make significant advances in AFM research. CNTs from C|D|I may be attached to most AFM cantilevers thus providing customers an easy path for improving AFM performance without making a substantial investment in new instrumentation.

The company currently offers two CNT AFM probe types. The standard CCHAR (carbon core high-aspect ratio) and CCHR (carbon core high-resolution) probes are available now. CDI's proprietary coatings and other custom processes can be adapted to almost any cantilever and to a wide variety of applications.

#### About Carbon Design Innovations

Carbon Design Innovations develops and manufactures carbon nanotube devices based on a patented, deterministic methodology. The company's initial focus is on manufacturing AFM probes.

The company was founded by AFM and CNT industry veteran and company president, Ramsey M. Stevens in January, 2008. Vance J. Nau, Ph.D. joined the company as CEO in July 2008. Nau has over 25 years experience in management at scientific instrumentation companies and recently led AFM manufacturer Molecular Imaging for five years until its successful acquisition by Agilent Technologies.

More information about Carbon Design Innovations is available at [www.carbondesigninnovations.com](http://www.carbondesigninnovations.com), by sending an e-mail inquiry to [info@cdi-nano.com](mailto:info@cdi-nano.com), or by calling +1 650.697.7070.