Carbon Nanotechnologies Inc. (CNI) Announces the Issue of a Key Production Process Patent

- CNI patents include all process routes now considered practical for the production of single-wall carbon nanotubes.
- Carbon Nanotechnologies, Inc has over 100 patents and applications, 25 of which are issued or allowed, related to single-wall and other small diameter carbon nanotubes.

Houston, TX, USA - June 29, 2004, - Carbon Nanotechnologies, Inc (CNI) announced today the issue of a key production process patent for growing single-wall carbon nanotubes on supported catalyst. This patent (U.S. 6,692,717) provides CNI with a complete package of patent coverage for all process routes that are currently considered to have commercial scale-up potential for production of single-wall carbon nanotubes. This technology is part of the intellectual property developed by Nobel-Prizewinning scientist Dr. Richard Smalley and licensed exclusively to CNI by Rice University in 2001.

“This recently-issued patent, in conjunction with the entire patent portfolio, provides CNI with an exceptional intellectual property position in all the process routes currently considered to be practical for commercial production,” said Dr. Smalley, Chairman of CNI and University Professor at Rice University.

CNI has patent coverage for 3 other process routes to produce single-wall carbon nanotubes, two of which were developed in the early to mid-1990s. One route uses an electric arc between 2 electrodes, at least one of which is carbon, to form a carbon vapor or plasma. This patent was filed in late 1991. A second route utilizes the plasma formed when a laser beam impacts a carbon surface. CNI has 3 patents, 2 U.S. and 1 European, for this process route with filing dates of late 1991 and mid-1995. A third route is directed to a gas-phase process with high selectivity for single-wall carbon nanotubes. That route is described in a patent application (priority date 1998) for which CNI has received a notice of allowance from the U.S. Patent Office.

The supported catalyst patent application, which was filed in mid-1998, includes technology for producing other small diameter carbon nanotubes in addition to single-wall tubes.

“Single-wall and other small diameter carbon nanotubes offer great potential in applications ranging from electrically-conductive plastics to fuel cells and flat panel displays. CNI is currently scaling up production for multiple products designed to meet the requirements of specific end uses,” said Bob Gower, President and CEO of CNI.

Small-diameter carbon nanotubes are an example of a nanotechnology that is now reaching the commercial arena. These nanostructures comprise large molecules of carbon, cylindrical in form and are about 1-3 nanometers (billionths of a meter) in diameter and hundreds to thousands of nanometers long. As individual molecules,

single-wall carbon nanotubes have a tensile strength that is 100 times that of high-strength steel and about one-sixth the density of steel. They conduct electricity and heat extremely well, and many believe that they represent the next revolution in polymer technology.

CNI has over 100 patents and patent applications with a total of about 5000 claims in various stages of prosecution. Twenty-five of these with a total of about 900 claims have been issued or allowed. The portfolio of 100 patents and applications includes about 650 composition of matter claims, over 40 of which have been issued or allowed thus far.

CNI has several pilot plants to produce single-wall and other small-diameter carbon nanotubes in operation at its location in west Houston. The company is nearing completion of a facility with a design capacity of 100 pounds per day.

The company currently has close to 450 customers worldwide and has an exclusive relationship with Sumitomo Corporation for marketing and distribution of CNI products in Japan.

CNI Contact: Ray McLaughlin, Chief Financial Officer, +1 281-492-5821, mclaughlin@cnanotech.com

Sumitomo Contact: Nobuo Aoki, Senior Business Executive, +81 (3) 51664535, nobuo.aoki@em.sumitomocorp.co.jp