Santa Clara, CA - Multibeam Corporation announced the addition of another key patent to its portfolio. The U.S. Patent and Trademark Office granted US Patent # 7,941,237 to Multibeam Corporation on May 10, 2011. The patent covers a method to inspect substrates with multiple e-beam columns.

This patent highlights an important and unique feature of Multibeam's technology: every Multibeam electron-beam column includes built-in Scanning Electron Microscope (SEM) capability. This capability enables each column to operate as a high-resolution high-speed (SEM).

Electron beam systems are known for their slow speed. Multibeam solves this problem with an architecture that consists of multiple identical columns. To increase speed, more columns are added. This enables Multibeam to achieve the throughput necessary for high-volume manufacturing.

In Complementary E-Beam Lithography (CEBL), Multibeam's columns take advantage of the "SEM mode" to image local alignment marks to improve Overlay accuracy. This in-situ SEM alignment capability is possible because each column has only one beam. Then, Multibeam's columns are used in "Lithography mode" to pattern a substrate with high resolution, high precision and high speed. In-process re-registration corrects and maintains e-beam position.

Multibeam has 16 patents granted in the United States, as well as a pipeline of patents pending. In addition to Multibeam's patent portfolio, the company has completed substantial research, development and engineering in high-resolution low-cost e-beam columns, as well as multiple-column architectures.

About Multibeam Corporation

Multibeam is the technology leader in high-speed multiple-column E-Beam Lithography (EBL). In 2011, Multibeam introduced Complementary EBL (CEBL). CEBL extends Optical Lithography and enables the production of next-generation semiconductors in high volumes at reduced cost. Multibeam is led by Dr. David K. Lam, founder and former CEO of Lam Research Corporation.

More information is available at www.multibeamcorp.com.

Contact: Ted Prescop (408) 980-1800 x3 info@multibeamcorp.com