

Nanogen Issued Patent for Ligation-Based Strand Displacement Amplification Technologies for DNA Analysis

March 16 2005

Nanogen, Inc., developer of advanced diagnostic products, announced today that it was issued U.S. Patent No. 6,864,071, "Multiplex amplification and separation of nucleic acid sequences using ligation-dependent strand displacement amplification and bioelectronic chip technology," by the U.S. Patent and Trademark Office. The '071 patent relates to amplifying and analyzing multiple samples of nucleic acid using ligation-based strand displacement amplification (SDA) technologies. The intellectual property pertains to research Nanogen conducted in collaboration with Becton Dickinson and increases Nanogen's portfolio of technologies for multiplex amplification on a chip.

The combination of SDA and Nanogen chip technologies makes it possible to conduct multiplex amplification, detection and analysis of multiple samples within a single electronic microarray. Unlike techniques that rely on thermal cycling, SDA is an isothermal amplification process that utilizes a series of primers, DNA polymerase and a restriction enzyme to exponentially amplify the target nucleic acid sequence. The devices and methods of Nanogen's invention may be useful in a variety of applications, including disease diagnostics, genetic analyses, drug discovery, pharmacogenomics, and agricultural and environmental applications.

This new patent expands Nanogen's intellectual property portfolio to

include 113 patents issued in the U.S.

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