

Biological Imaging using a CMOS or CCD Image Sensor

IP Status: Pending US Patent; Application #: 09/852,375

DNA Fluorescence Detection

A method has been developed to acquire digital images and maps of biological samples using an electronic light detector array, for example a CCD or CMOS image sensor. The biological sample may include biological holding structures such as a DNA spot array on a DNA chip and protein bands in a 2D gel. The array allows imaging methods such as fluorescence detection from a biological sample to be analyzed.

MN-IP Try and Buy

- Try
- Trial period up to 18 months. \$5000/6 months.
- Fee waived if MN operating company or if sponsoring \$50,000+ in research.

Buy

- Exclusive license for a \$20,000 conversion payment.
- No U.S. patent expenses.
- 1.5% Royalty (1.0% for MN companies) after \$1 million in product sales.

Low Cost Biological Sample Analysis

Current methods of biological sample imaging involve placing a DNA chip on a microscope and moving the stage into focus. Such equipment is expensive and generally requires a high degree of skill and training to operate and maintenance to keep operational. The described technology allows for a less expensive, lower maintenance alternative spot detection method and apparatus for biological sample analysis.

BENEFITS OF BIOLOGICAL IMAGING USING AN ELECTRONIC LIGHT DETECTOR:

- Simpler biological imaging using an electronic light detector.
- Less expensive and less maintenance than current technology.
- Typical analysis includes DNA Chips, DNA spots and fluorescence analysis

Phase of Development Proof of concept. Demonstrated in laboratory.

Researchers: Martin Blumenfeld, PhD Emeritus faculty, Genetics, Cell Biology and Development Department, College of Biological Sciences

Technology ID

z01174

Category

Life Sciences/Diagnostics & Imaging Life Sciences/Research Tools

Learn more

