



Biological Imaging using a CMOS or CCD Image Sensor

Technology No. z01174

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.

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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.

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