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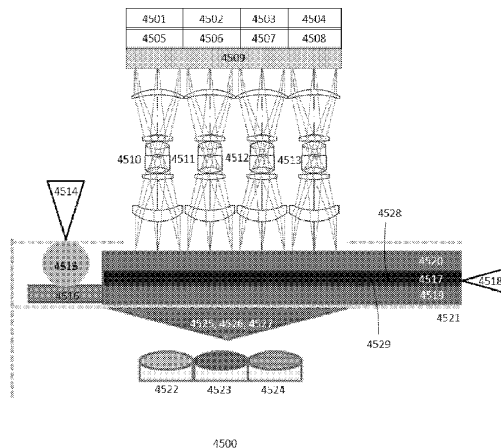


FIG. 45

(57) **Abstract:** Fluorescence imaging system designs are described that provide larger fields-of-view, increased spatial resolution, improved modulation transfer and image quality, higher spatial sampling frequency, faster transitions between image capture when repositioning the fields-of-view, improved imaging system duty cycle and a more compact system, and thus enable higher throughput image acquisition and analysis for genomics and other imaging applications at a lower cost.

[Continued on next page]

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