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(54) Title: DYNAMIC OPTICAL SYSTEM CALIBRATION

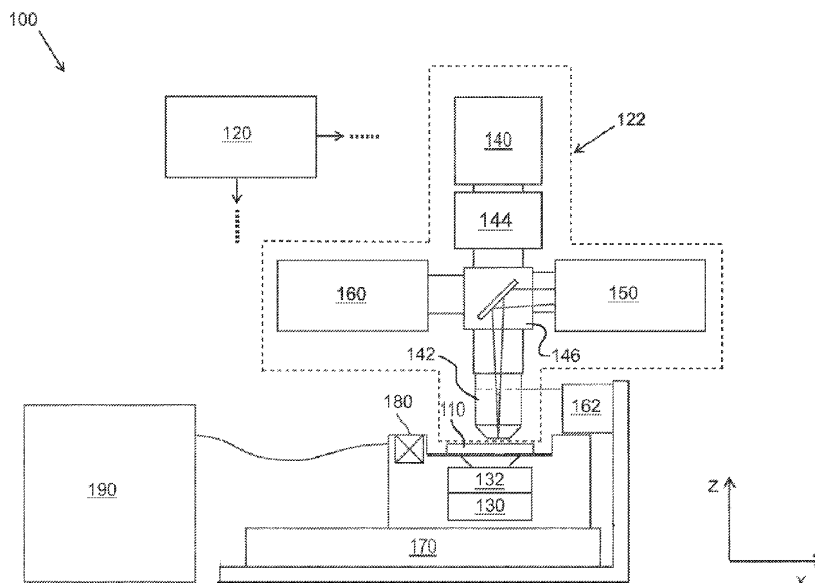


FIG. 1

(57) Abstract: An apparatus includes a flow cell, an imaging assembly, and a processor. The flow cell includes a channel and a plurality of reaction sites. The imaging assembly is operable to receive light emitted from the reaction sites in response to an excitation light. The processor is configured to drive relative movement between at least a portion of the imaging assembly and the flow cell along a continuous range of motion to thereby enable the imaging assembly to capture images along the length of the channel. The processor is also configured to activate the imaging assembly to capture one or more calibration images of one or more calibration regions of the channel, during a first portion of the continuous range of motion. The processor is also configured to activate the imaging assembly to capture images of the reaction sites during a second portion of the continuous range of motion.

[Continued on next page]

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