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(54) **Title:** METHODS FOR DETERMINING A PHOTODETECTOR GAIN CORRECTION FACTOR FOR OPTICAL SIGNALS
IN A FLOW CYTOMETER

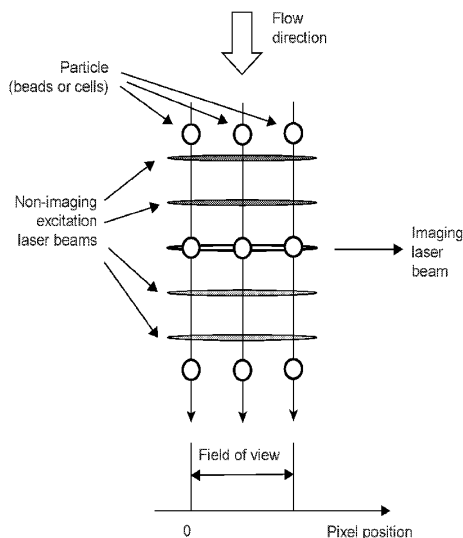


FIG. 2

(57) **Abstract:** Aspects of the present disclosure include methods for determining a photodetector gain correction factor for application to flow cytometer data. Methods according to certain embodiments include detecting light with a light detection system across a horizontal axis of a flow stream, generating data signals in a photodetector channel (e.g., an imaging photodetector channel) of the light detection system at a plurality of positions across the flow stream and calculating a detector gain correction factor for each position across the flow stream in response to the generated data signals. Methods also include applying a detector gain correction factor to data signals from a photodetector channel (e.g., non-imaging photodetector channels) to generate adjusted signal intensities. Systems (e.g., particle analyzers) having a light source and a light detection system that includes a photodetector (e.g., an imaging photodetector) for practicing the subject methods are also described. Non-transitory computer readable storage medium and integrated circuits (e.g., FPGAs) are also provided.

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