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(54) **Title:** PULSED LASER LIGHT SOURCE FOR PRODUCING EXCITATION LIGHT IN AN INTEGRATED SYSTEM

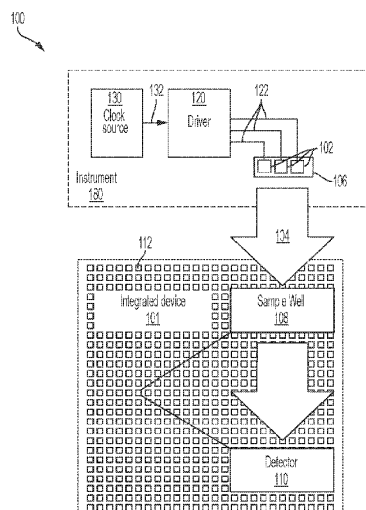


FIG. 1

(57) **Abstract:** Disclosed herein are aspects of a pulsed laser light source (106) for producing excitation light (104) in an integrated bioanalytical system (101). The light source (106) comprises one or more laser diodes (102) that produces pulsed light signals (104) synchronized with a common clock source (130) for excitation of samples within reaction chambers (108) on at least one chip (101). The light source (106) may be used to provide excitation for a system with a large sensor array with reduced cost, size and electrical power requirements.

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