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- (54) **Title:** FLUORESCENCE-BASED DETECTION OF PROBLEMATIC CELLULAR ENTITIES

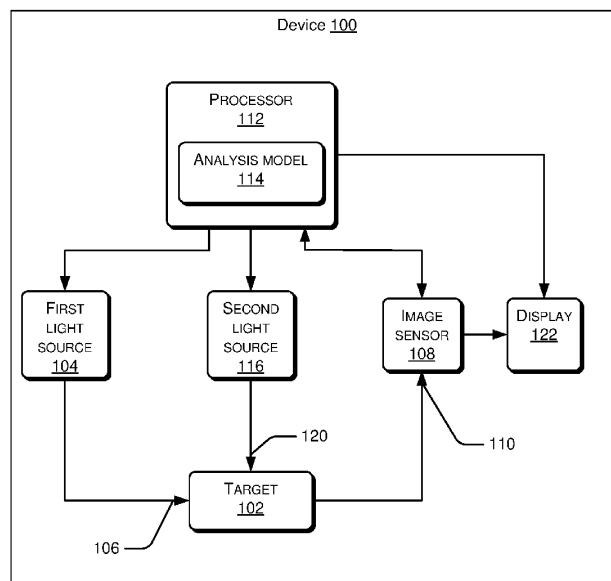


Fig. 1

- (57) **Abstract:** Techniques for detecting presence of a problematic cellular entity in a target are disclosed. In an example, using an analysis model, a fluorescence-based image is analyzed. The analysis model is trained using a plurality of reference fluorescence-based images for detecting the presence of problematic cellular entities in targets. Based on the analysis, a problematic cellular entity is present in the target is detected. To perform the detection, the analysis model is trained to differentiate between the fluorescence in the fluorescence-based image emerging from the problematic cellular entity and the fluorescence in the fluorescence-based image emerging from regions other than the problematic cellular entity.

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