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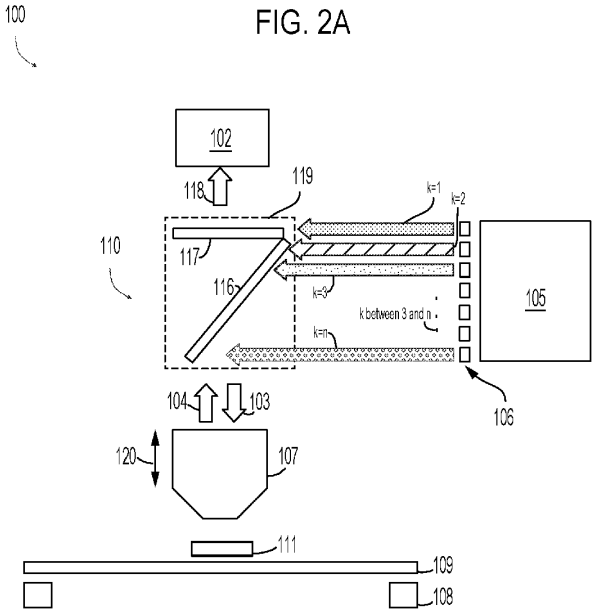
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(54) Title: SYSTEMS AND METHODS FOR BIOLOGICAL SAMPLE IMAGING AND ANALYSIS

FIG. 2A



(57) Abstract: Systems and methods for imaging and, in some instances, analyzing biological samples such as biological tissue are described. The systems and methods may be directed to the interrogation of biological samples labeled with multiple markers (e.g., fluorophores and/or chromophores) corresponding to various biomarkers and/or cellular or subcellular structures within the sample. Some such systems and methods may combine certain optics (e.g., configurationally-fixed optics for fluorescence imaging and/or actuatable filters for chromogenic imaging) with multi-color sensors (e.g., RGB sensors) to facilitate the imaging and analysis of a sample. The systems and methods may also promote advantageous techniques for segmenting images of components of the biological sample. In some instances, the methods can assist users (e.g., pathologists) in scoring samples for indications such as diseases. The systems and methods may, in some instances, promote economical, accurate, and/or higher-throughput imaging and analysis of the

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