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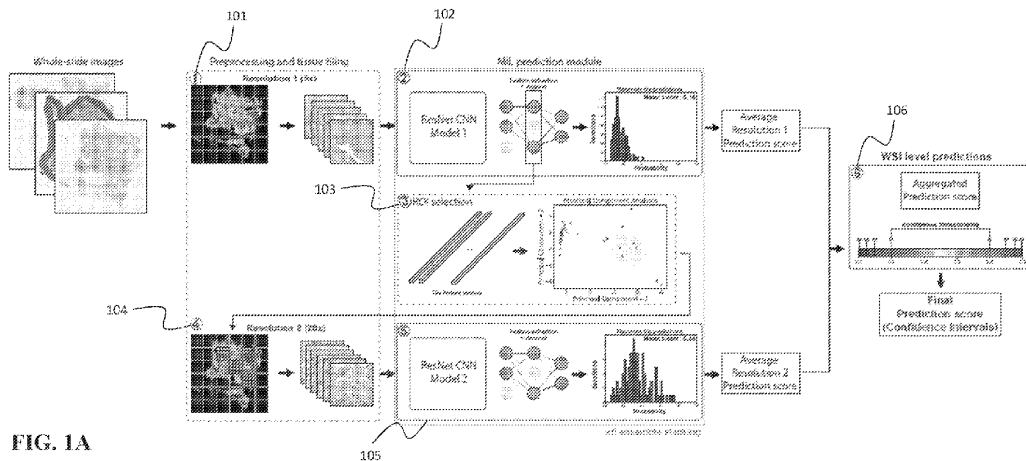


FIG. 1A

(57) Abstract: Methods and systems that pertain to predicting cancer biomarkers are disclosed. In some embodiments of the disclosed technology, a method of determining the presence of a biomarker of a biological sample includes providing a section of a biological sample, wherein the section of the biological sample has been treated with a stain, imaging one or more regions of the stained section of the biological sample at a first resolution and a second resolution thereby generating a first and second plurality of image data, reducing a parameter space of the first and second plurality of image data, thereby producing a reduced first and second plurality of image data, and determining the presence of a biomarker of the biological sample as an output of a trained predictive model when the trained predictive model is provided an input of the reduced first and second plurality of image data.

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