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(54) Title: TILE LOCATION AND/OR CYCLE BASED WEIGHT SET SELECTION FOR BASE CALLING

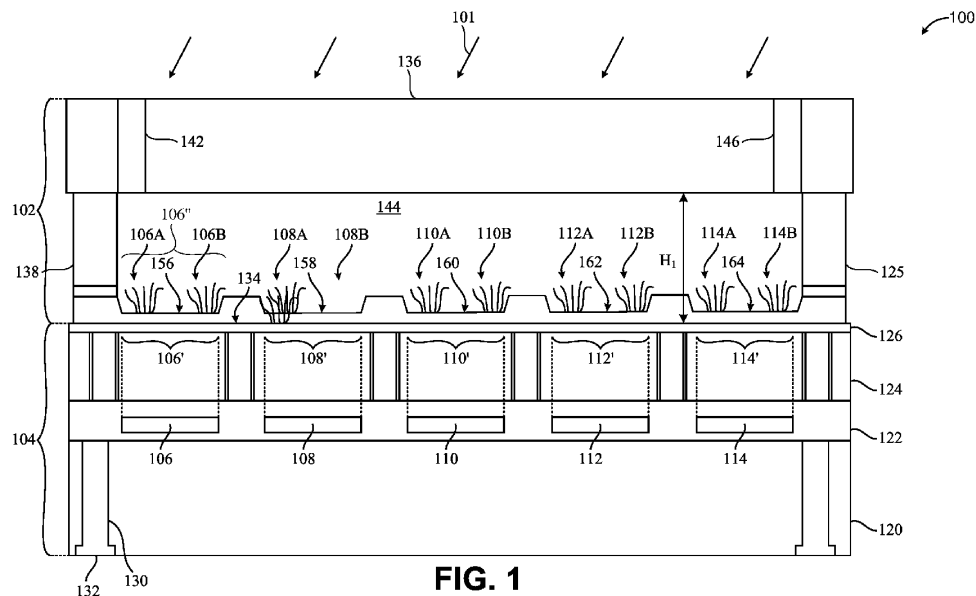


FIG. 1

(57) Abstract: A system for base calling includes memory storing a topology of a neural network, a plurality of weights sets, and sensor data for a series of sensing cycles. Sequencing events span temporal progression of the base calling operation through subseries of sensing cycles, and spatial progression of the base calling operation through locations on a biosensor. A configurable processor is configured to load the topology on the configurable processor, select a weight set in dependence upon a subject subseries of sensing cycles and/or a subject location on the biosensor, load subject sensor data for the subject subseries of sensing cycles and the subject location on the processing elements, configure the topology using the selected weight set, and cause the neural network to process the subject sensor data to produce base call classification data for the subject subseries and the subject location.

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