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(54) Title: SPATIALLY RESOLVED CYCLIC MULTIPLEXED DETECTION OF NUCLEIC ACIDS AND PROTEINS IN TISSUE

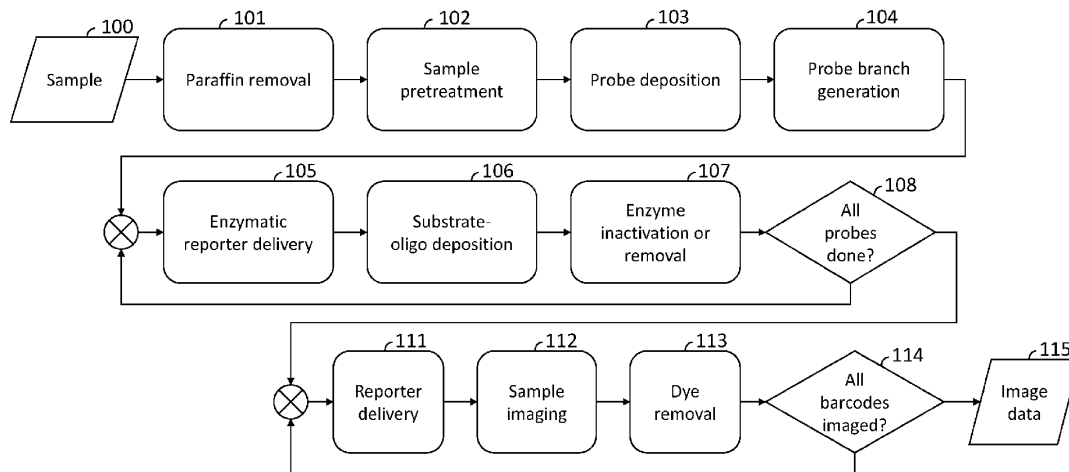


FIG. 7

(57) Abstract: Methods for detecting RNA in a sample include contacting the sample with a probe featuring a binding oligonucleotide sequence that hybridizes to at least a portion of an RNA in the sample and a probe identification oligonucleotide sequence associated with the portion of the RNA to which the probe hybridizes, contacting the sample with a catalytic reporter, contacting the sample with an anchoring reporter featuring a substrate conjugated to at least one barcode oligonucleotide sequence, where the substrate reacts with the catalytic moiety to deposit the anchoring reporter or a derivative thereof comprising the at least one barcode oligonucleotide sequence in the sample at a location in proximity to the probe, and contacting the sample with a reporter molecule.

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