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(54) Title: SYSTEMS AND METHODS FOR DETECTING MULTIPLE ANALYTES

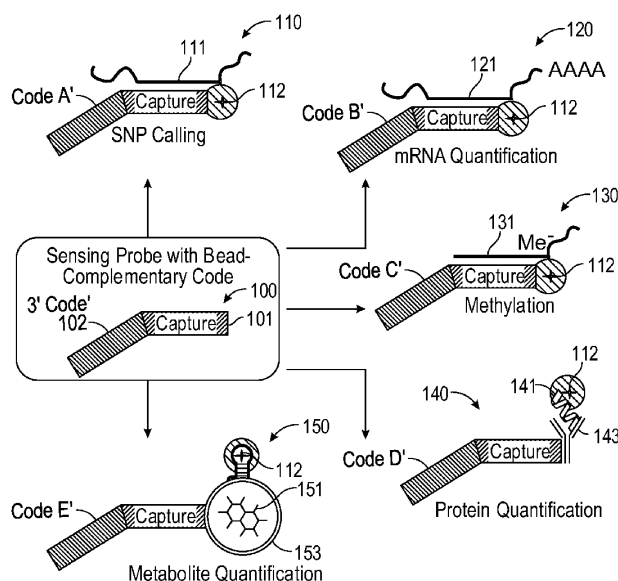


FIG. 1A

(57) Abstract: A method for detecting different analytes includes mixing different analytes with sensing probes, wherein at least some of the sensing probes are specific to respective ones of the analytes. The analytes respectively are captured by the sensing probes that are specific to those analytes. Fluorophores respectively are coupled to sensing probes that captured respective analytes. The sensing probes are mixed with beads, wherein the beads are specific to respective ones of the sensing probes, and wherein the beads include different codes identifying the analytes to which those sensing probes are specific. The sensing probes respectively are coupled to beads that are specific to those sensing probes. The beads are identified that are coupled to the sensing probes that captured analytes using at least fluorescence from the fluorophores coupled to those sensing probes. The analytes that are captured are identified.

[Continued on next page]

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