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[Continued on nextpage]

(54) Title: SCANNING REAL-TIME MICROFLUIDIC THERMOCYCLER AND METHODS FOR SYNCHRONIZED THERMOCYCLING AND SCANNING OPTICAL DETECTION

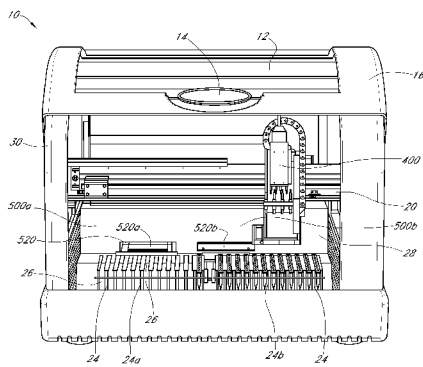


FIG. 1A

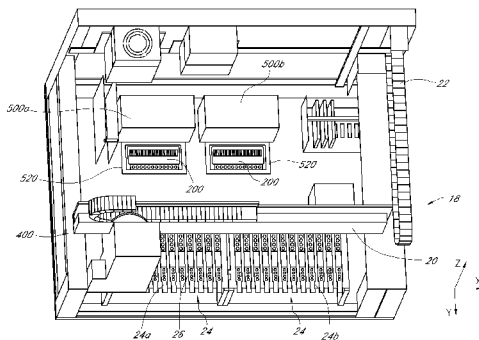


FIG. 1B

(57) Abstract: Systems and methods for performing simultaneous nucleic acid amplification and detection. The systems and methods comprise methods for managing a plurality of protocols in conjunction with directing a sensor array across each of a plurality of reaction chambers. In certain embodiments, the protocols comprise thermocycling profiles and the methods may introduce offsets and duration extensions into the thermocycling profiles to achieve more efficient detection behavior.

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