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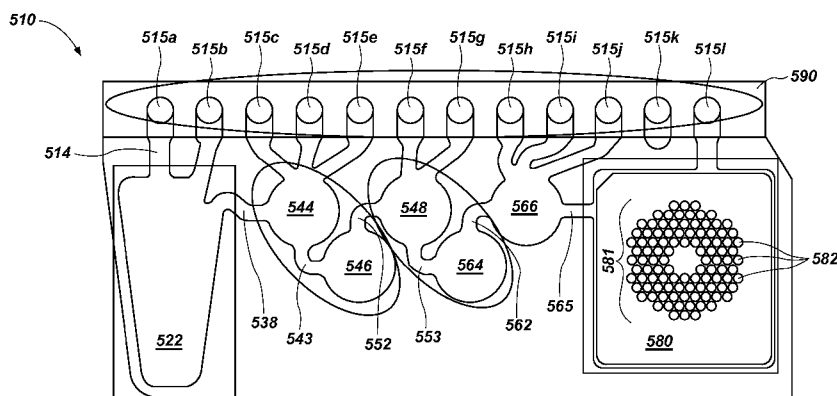
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(54) **Title:** MULTIPLE AMPLIFICATION CYCLE DETECTION

**FIG. 1**

(57) **Abstract:** Methods and devices are provided for simultaneously amplifying a plurality of sample wells for a predetermined amount of amplification, detecting whether amplification has occurred in a first set of the wells, amplifying for an additional amount of amplification and detecting whether amplification has occurred in a second set of the wells. Methods are also provided for analyzing a target nucleic acid sequence using melt curves that were generated in a plurality of amplification cycles.