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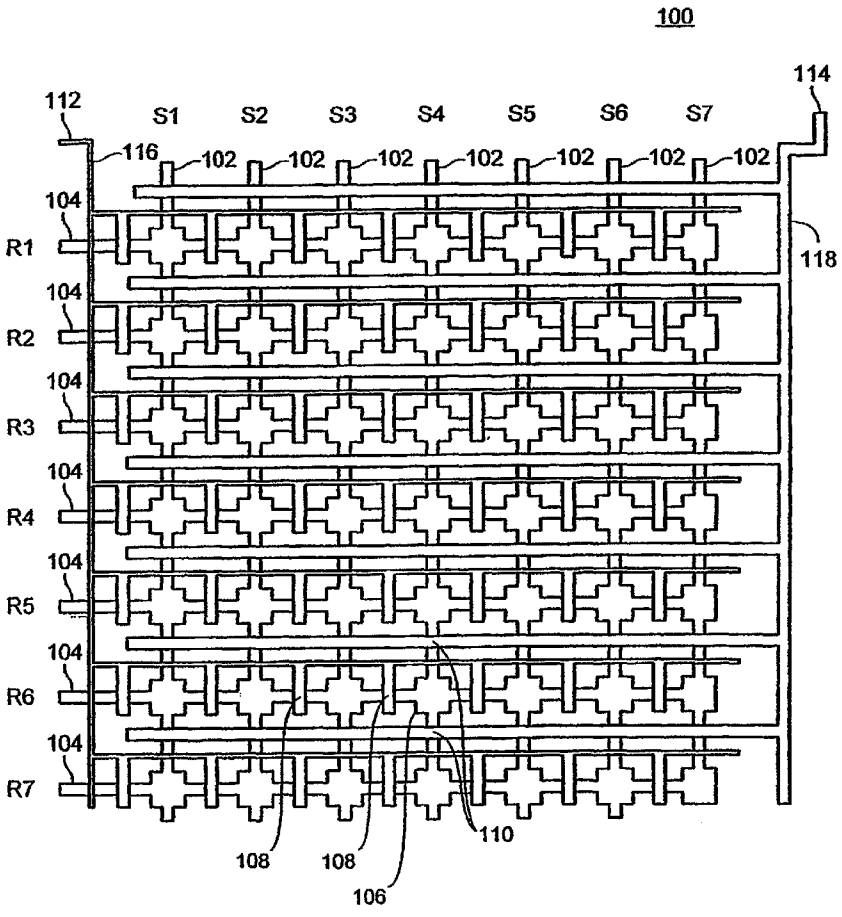
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(54) **Title:** THERMAL REACTION DEVICE AND METHOD FOR USING THE SAME



(57) **Abstract:** An MxN matrix microfluidic device for performing a matrix of reactions, the device having a plurality of reaction cells in communication with one of either a sample inlet or a reagent inlet through a via formed within an elastomeric block of the device. Methods provided include a method for forming vias in parallel in an elastomeric layer of an elastomeric block of a microfluidic device, the method comprising using patterned photoresist masks and etching reagents to etch away regions or portions of an elastomeric layer of the elastomeric block.

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