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(54) Title: A MULTI-INDEX DETECTION MICROFLUIDIC CHIP AND METHODS OF USE

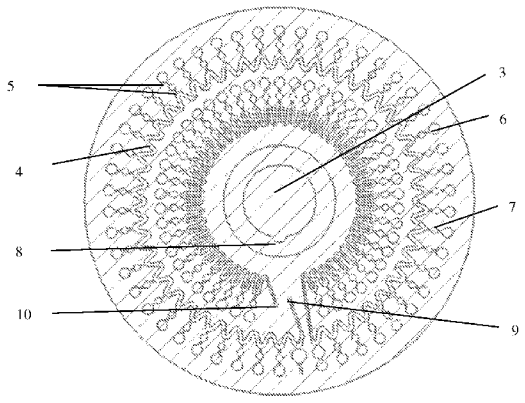


Figure 1

(57) Abstract: A multi-index detection microfluidic chip is provided. A bottom plate (1) and a cover plate (2) that matches the bottom plate (1) and seals it are provided in the microfluidic chip. The center of the microfluidic chip has a through-hole (3). The bottom plate (1) has one or more wave-shaped main channel (s) (4), one end of each of the main channel (4) connected to a sample injection hole (9) on the bottom plate (1), and the other end connected to an exhaust hole (10) on the bottom plate (1). The valley on the main channel (1) is distal to the through-hole (3), and the peak is proximal to the through-hole (3). Each valley of the main channel (1) is connected to a reaction chamber (6) by a linking channel (5). The linking channel (5) comprises one or more buffering chambers (7). The microfluidic chip can be used in detection by fluorescence, turbidity, color, detection equipment, and/or direct observation by the naked eyes. The detection is real-time as the reaction occurs or after the reaction.

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