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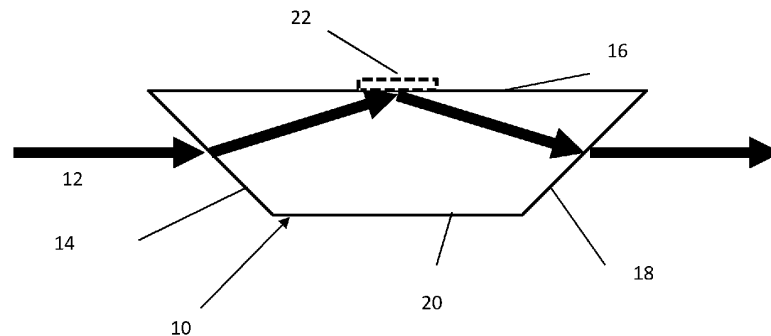


Figure 1

(57) Abstract: An assay cartridge for detecting a target component in a fluid is provided. The assay cartridge including an optical element comprising: a light pathway comprising an input surface, reflective surface and output surface configured to enable light to enter, reflect and create an evanescent field in the vicinity of the reflective surface and exit the element; a plurality of capture components deposited on the reflective surface in the vicinity of the evanescent field; and a transmission surface configured to enable emissions from the evanescent field to exit the element; wherein the assay cartridge is a single use cartridge.

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