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Petersen et al.

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(54) **METHOD FOR SEPARATING ANALYTE FROM A SAMPLE**

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Related U.S. Application Data

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(52) **U.S. Cl.** **436/178**; 435/6; 435/91.2; 435/287.2; 435/288.6; 435/259

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(57) **ABSTRACT**

An analyte is separated from a fluid sample by introducing the sample into a cartridge having an extraction chamber containing capture material for capturing the analyte. The sample is forced to flow through the extraction chamber to capture the analyte with the capture material in the extraction chamber. The captured analyte is then eluted from the extraction chamber by forcing an elution fluid to flow through the extraction chamber. The cartridge may optionally include a lysing region for lysing sample components (e.g., cells spores, or microorganisms), a waste chamber for storing waste fluid, and reaction or detection chambers for chemically reacting or detecting the eluted analyte.

86 Claims, 16 Drawing Sheets

