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(54) **MICROFLUIDIC DEVICES AND METHODS INCLUDING POROUS POLYMER MONOLITHS**

(75) Inventors: **Anson V. Hatch**, Tracy, CA (US); **Gregory J. Sommer**, Livermore, CA (US); **Anup K. Singh**, Danville, CA (US); **Ying-Chih Wang**, Pleasanton, CA (US); **Vinay V. Abhyankar**, Dublin, CA (US)

(73) Assignee: **Sandia Corporation**, Albuquerque, NM (US)

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(52) **U.S. Cl.**
USPC **422/69**; 422/527; 502/402

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USPC 422/69, 527; 502/402
See application file for complete search history.

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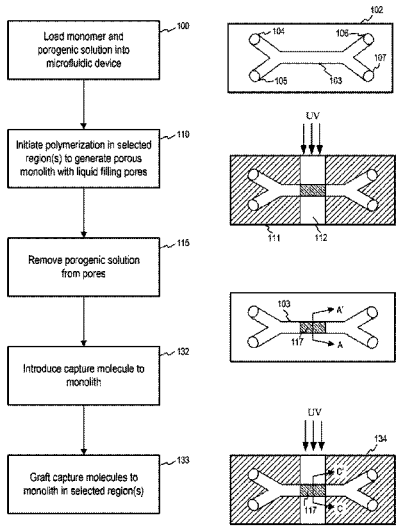
Primary Examiner — Paul Hyun
(74) *Attorney, Agent, or Firm* — Dorsey & Whitney LLP

(57) **ABSTRACT**

Microfluidic devices and methods including porous polymer monoliths are described. Polymerization techniques may be used to generate porous polymer monoliths having pores defined by a liquid component of a fluid mixture. The fluid mixture may contain iniferters and the resulting porous polymer monolith may include surfaces terminated with iniferter species. Capture molecules may then be grafted to the monolith pores.

22 Claims, 9 Drawing Sheets