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(71) Applicant: SPECTRAL THERAPEUTICS, INC.
[US/US]; 9276 Scranton Road, Suite 500, San Diego, California 95121 (US).

(72) Inventors: PRICE, Alexander; c/o Spectral Therapeutics, Inc., 9276 Scranton Road, Suite 500, San Diego, California 95121 (US). LYDA, Brent; c/o Spectral Therapeutics, Inc., 9276 Scranton Road, Suite 500, San Diego, California 95121 (US). WADE, Warren; c/o Spectral Therapeutics, Inc., 9276 Scranton Road, Suite 500, San Diego, California 95121 (US). RAMJI, Ramesh; c/o Spectral Therapeutics,

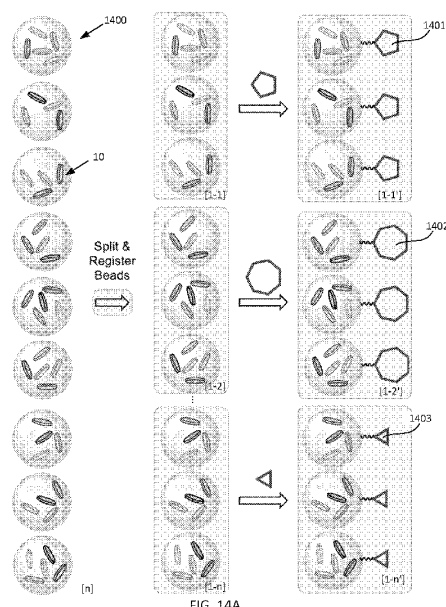
Inc., 9276 Scranton Road, Suite 500, San Diego, California 95121 (US).

(74) Agent: CHOI, Jaime D.; Sheppard, Mullin, Richter & Hampton LLP, 12275 El Camino Real, Suite 100, San Diego, California 92130 (US).

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(54) Title: COMPOSITE PARTICLES FOR USE IN GENERATING SPECTRALLY ENCODED LIBRARIES OF CHEMICAL COMPOUNDS, AND METHODS OF MAKING AND USING THE SAME



(57) Abstract: A method of detecting binding between different chemical compounds and a target includes incubating a first target with composite particles. At least some composite particles include the same chemical compound as one another, and at least some include different chemical compounds than one another. The first target binds differently to different ones of the chemical compounds. Unbound first target is removed from the composite particles. The composite particles, with the first target bound to different ones of the chemical compounds, are irradiated with excitation light. Emission spectra are obtained from the optically detectable particles of respective composite particles. Signals are obtained respectively indicating whether the first target binds to the chemical compounds of respective composite particles. The emission spectra and signals are used to (i) identify the chemical compound coupled to at least some of the composite particles and (ii) determine whether the first target binds to that chemical compound.

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