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(71) Applicant (for all designated States except US):
CHEVRON U.S.A. INC. [US/US]; Building T, Third
Floor, 6001 Bollinger Canyon Road, San Ramon, CA
94583 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **DAHL, Jeremy, E.**
[US/US]; 977 Cottrell Way, Palo Alto, CA 94305 (US).

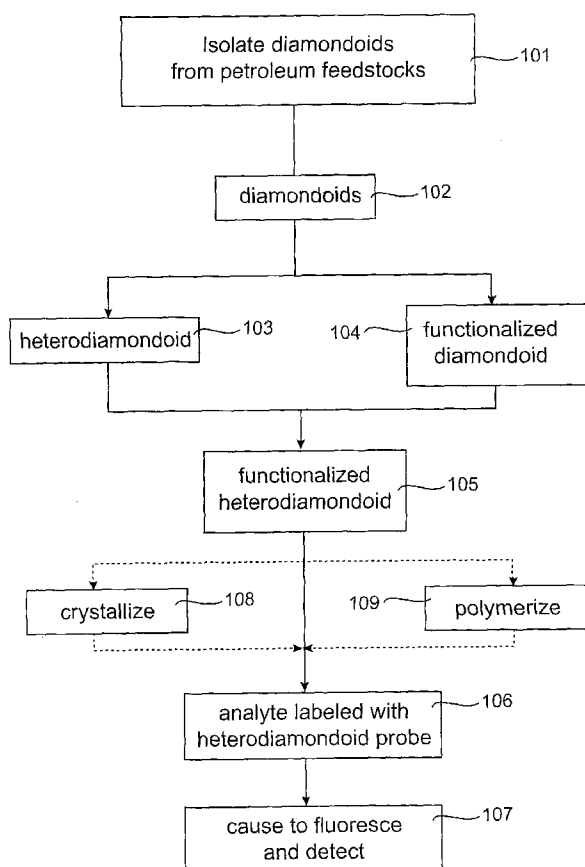
CARLSON, Robert, M. [US/US]; 3775 Roblar Road,
Petaluma, CA 94952 (US). **LIU, Shenggao** [CN/US]; 536
Rosewood Lane, Hercules, CA 94547 (US). **BOKHARI,**
Wasiq [PK/US]; 3915 Fair Oaks Avenue, Menlo Park, CA
94025 (US).

(74) Agents: **GESS, E., Joseph** et al.; Burns, Doane, Swecker
& Mathis, LLP, P. O. Box 1404, Alexandria, VA 22313-
1404 (US).

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(54) Title: PHOTOLUMINESCENT HETERODIAMONDOIDS AS BIOLOGICAL LABELS



(57) Abstract: Novel biological labels are disclosed herein. The label comprises a functionalized heterodiamondoid functioning as a biological probe, the probe having an affinity for a target analyte molecule. Upon absorption of incident excitation radiation, color center(s) located within the heterodiamondoid are caused to luminesce. The photoemitted light may be detected and analyzed to yield information about the analyte. The color centers in the heterodiamondoid will typically comprise nitrogen-vacancy and/or nitrogen-pore complexes, but may also comprise a dopant impurity atom such as a rare earth or transition metal element.

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