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(71) Applicant: **THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY** [US/US];
Building 170, Third Floor, Main Quad, P.O. Box 20386,
Stanford, CA 94305-2038 (US).

(72) Inventors: **CHABON, Jacob, J.**; 6985 Owens St., Arvada, CO 80004 (US). **KURTZ, David, M.**; 1311 Eaton Ave., San Carlos, CA 94070 (US). **DIEHN, Maximilian**; 159 Mesa Verde Way, San Carlos, CA 94070 (US). **ALIZADEH, Arash, Ash**; 407 Nevada Avenue, San Mateo, CA 94402 (US).

(74) Agent: **THOMAS, Charles, A.**; KPPB LLP, 2190 S. Towne Centre Place, Suite 300, Anaheim, CA 92806 (US).

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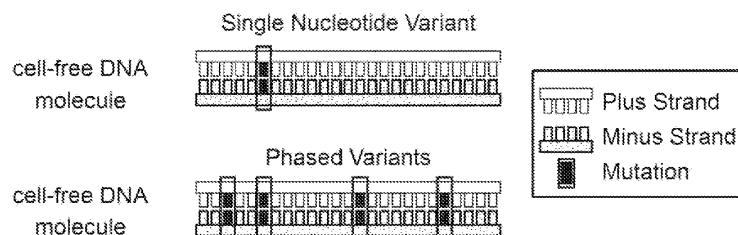


FIG. 1A

(57) Abstract: Processes and materials to detect cancer, transplant rejection, or fetal genetic abnormalities from a biopsy are described. In some cases, nucleic acid molecules, such as cell-free nucleic acids, can be sequenced, and the sequencing result can be utilized to detect sequences indicative of a neoplasm, transplant rejection, or fetal genetic abnormality. Detection of somatic variants occurring in phase and/or insertions and deletions (indels) can indicate the presence of cancer, transplant rejection, or fetal genetic abnormalities in a diagnostic scan, and a clinical intervention can be performed.

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