US010457984B2

(12) **United States Patent**
Ju et al.

(10) **Patent No.: US 10,457,984 B2**
(45) **Date of Patent: *Oct. 29, 2019**

(54) **MASSIVE PARALLEL METHOD FOR DECODING DNA AND RNA**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **16/150,180**

(22) Filed: **Oct. 2, 2018**

(65) **Prior Publication Data**

US 2019/0085015 A1 Mar. 21, 2019

Related U.S. Application Data

(60) Continuation of application No. 15/915,983, filed on Mar. 8, 2018, which is a continuation of application No. 14/670,748, filed on Mar. 27, 2015, which is a continuation of application No. 13/959,660, filed on Aug. 5, 2013, now Pat. No. 9,133,511, which is a continuation of application No. 13/672,437, filed on Nov. 8, 2012, now abandoned, which is a continuation of application No. 13/339,089, filed on Dec. 28, 2011, now abandoned, which is a continuation of application No. 12/804,284, filed on Jul. 19, 2010, now Pat. No. 8,088,575, which is a continuation of application No. 11/810,509, filed on Jun. 5, 2007, now Pat. No. 7,790,869, which is a continuation of application No. 10/702,203, filed on Nov. 4, 2003, now Pat. No. 7,345,159, which is a division of application No. 09/972,364, filed on Oct. 5, 2001, now Pat. No. 6,664,079, which is a continuation-in-part of application No. 09/684,670, filed on Oct. 6, 2000, now abandoned.

(60) Provisional application No. 60/300,894, filed on Jun. 26, 2001.

(51) **Int. Cl.**

C12Q 1/68	(2018.01)
C07H 19/14	(2006.01)
C12Q 1/6869	(2018.01)
C07H 21/00	(2006.01)
C12Q 1/686	(2018.01)
C12Q 1/6874	(2018.01)
C12Q 1/6876	(2018.01)
C40B 40/00	(2006.01)

(52) **U.S. Cl.**

CPC ***C12Q 1/6869*** (2013.01); ***C07H 19/10*** (2013.01); ***C07H 19/14*** (2013.01); ***C07H 21/00*** (2013.01); ***C12Q 1/68*** (2013.01); ***C12Q 1/686*** (2013.01); ***C12Q 1/6872*** (2013.01); ***C12Q 1/6874*** (2013.01); ***C12Q 1/6876*** (2013.01); *C07B 2200/11* (2013.01); *C12Q 2525/117* (2013.01); *C12Q 2525/186* (2013.01); *C12Q 2535/101* (2013.01); *C12Q 2535/122* (2013.01); *C12Q 2563/107* (2013.01); *C12Q 2565/501* (2013.01); *C40B 40/00* (2013.01)

(58) **Field of Classification Search**

CPC C12Q 1/6869; C07H 19/14
USPC 536/4.1; 435/6.1
See application file for complete search history.

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(57) **ABSTRACT**

This invention provides methods for attaching a nucleic acid to a solid surface and for sequencing nucleic acid by detecting the identity of each nucleotide analogue after the nucleotide analogue is incorporated into a growing strand of DNA in a polymerase reaction. The invention also provides nucleotide analogues which comprise unique labels attached to the nucleotide analogue through a cleavable linker, and a cleavable chemical group to cap the —OH group at the 3'-position of the deoxyribose.

2 Claims, 28 Drawing Sheets

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