



(11) **EP 3 401 680 A1**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
14.11.2018 Bulletin 2018/46

(51) Int Cl.: **G01N 33/53** (2006.01) **G01N 33/542** (2006.01)
C12P 19/34 (2006.01)

(21) Application number: **18179228.4**

(22) Date of filing: 11.03.2014

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB
GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO
PL PT RO RS SE SI SK SM TR

(30) Priority: 13.03.2013 US 201361779177 P
13.03.2013 US 201313802461

(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC:
14779477.0 / 2 972 354

(71) Applicant: **Geneweave Biosciences Inc.**
Los Gatos, CA 95032 (US)

(72) Inventors:

- REY, Diego Ariel
San Francisco, CA 94107 (US)
- ROY, Shaunak
Sunnyvale, CA 94089 (US)

(74) Representative: **Gill Jennings & Every LLP**
The Broadgate Tower
20 Primrose Street
London EC2A 2ES (GB)

Remarks:

This application was filed on 22-06-2018 as a divisional application to the application mentioned under INID code 62.

(54) **CONTAINER ASSEMBLY WITH FIRST AND SECOND ACTUATOR**

(57) Systems and methods for detecting and/or identifying target cells (e.g., bacteria) using engineered transduction particles are described herein. In some embodiments, a method includes mixing a quantity of transduction particles within a sample. The transduction particles are associated with a target cell. The transduction particles are non-replicative, and are engineered to include a nucleic acid molecule formulated to cause the target cell to produce a series of reporter molecules. The sample and the transduction particles are maintained to express the series of the reporter molecules when target cell is present in the sample. A signal associated with a quantity of the reporter molecules is received. In some embodiments, a magnitude of the signal is independent from a quantity of the transduction particle above a predetermined quantity.

Fig. 92

