



(51) International Patent Classification:

C12M 1/34 (2006.01) C12M 1/00 (2006.01)  
G01N 33/483 (2006.01) C12M 1/02 (2006.01)  
G06K 9/00 (2006.01)

(21) International Application Number:

PCT/US2017/060930

(22) International Filing Date:

09 November 2017 (09.11.2017)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/420,470 10 November 2016 (10.11.2016) US

(71) Applicant: **BECTON, DICKINSON AND COMPANY**  
[US/US]; 1 Becton Drive, Franklin Lakes, NJ 07417 (US).

(72) Inventors: **NICOLSON, Street, Roger**; 1 Becton Drive, Franklin Lakes, NJ 07417 (US). **SEHGAL, Rajeev**; 1 Becton Drive, Franklin Lakes, NJ 07417 (US).

(74) Agent: **FULLER, Michael, L.**; Knobbe, Martens, Olson & Bear LLP, 12790 El Camino Real #100, San Diego, CA 92130 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ,

CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(88) Date of publication of the international search report:

06 June 2019 (06.06.2019)

(54) Title: SYSTEM AND METHOD FOR CONSULTING ON CULTURE PLATE READINGS

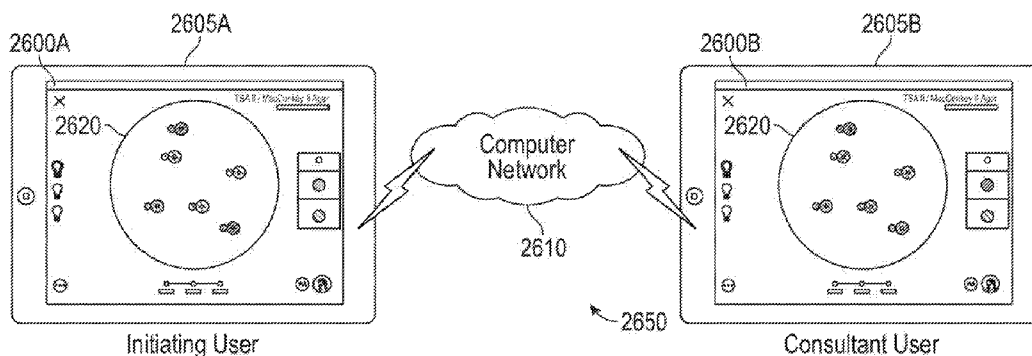


FIG. 26

(57) Abstract: Systems and methods are provided for selecting colony locations. Selecting colony locations can include determine a location of a selection tool on a culture plate image, determining a location of a potential source of error on the culture plate image, comparing the location of the selection tool to the location of the potential source of error; and determining an error when the location of the selection tool overlays the location of the potential source of error.



## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2017/060930

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - C12M 1/34; G01N 33/483; G06K 9/00; C12M 1/00; C12M 1/02 (2017.01)

CPC - G06K 9/00147; C12M 23/10; C12M 41/36; C12M 41/48; G06T 2207/30024 (2018.08)

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

See Search History document

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

USPC - 435/3; 435/34; 435/286.200; 435/288.700; 435/288.400 (keyword delimited)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

See Search History document

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2016/0210411 A1 (UNIVERSITY OF MARYLAND BALTIMORE COUNTY) 21 July 2016 (21.07.2016), entire document	1-25
Y	US 2016/0145562 A1 (AT MEDICAL LTD.) 26 May 2016 (26.05.2016), entire document	1-25
Y	US 2003/0147099 A1 (HEIMENDINGER et al) 07 August 2003 (07.08.2003), entire document	13, 14, 25
A	US 2015/0086971 A1 (BD Kiestra B.V.) 26 March 2015 (26.03.2015), entire document	1-25
A	US 2014/0227774 A1 (GUTHRIE et al) 14 August 2014 (14.08.2014), entire document	1-25
A	WO 2016/172388 A2 (ROBINSON et al) 27 October 2016 (27.10.2016), entire document	1-25
A	WO 2015/169499 A1 (UNISENSE FERTILITECH A/S) 12 November 2015 (12.11.2015), entire document	1-25

 Further documents are listed in the continuation of Box C. See patent family annex.

## \* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family

Date of the actual completion of the international search

27 December 2017

Date of mailing of the international search report

22 JAN 2018

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US, Commissioner for Patents  
P.O. Box 1450, Alexandria, VA 22313-1450

Facsimile No. 571-273-8300

Authorized officer

Blaine R. Copenheaver

PCT Helpdesk: 571-272-4300  
PCT OSP: 571-272-7774