

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(10) International Publication Number
WO 2021/255244 A1

(43) International Publication Date
23 December 2021 (23.12.2021)

(51) International Patent Classification:
C12Q 1/6813 (2018.01)

Published:

- with international search report (Art. 21(3))
- with sequence listing part of description (Rule 5.2(a))

(21) International Application Number:
PCT/EP2021/066620

(22) International Filing Date:
18 June 2021 (18.06.2021)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PCT/EP2020/067010
18 June 2020 (18.06.2020) EP
63/127,910 18 December 2020 (18.12.2020) US
63/129,942 23 December 2020 (23.12.2020) US

(71) Applicant: **RESOLVE BIOSCIENCES GMBH**
[DE/DE]; Alfred-Nobel-Str. 10, 40789 Monheim am Rhein
(DE).

(72) Inventors: **GEIPEL, Andreas**; Weimarer Str. 47, 40822
Mettmann (DE). **REINECKE, Frank**; Heidehang 9, 45134
Essen (DE). **KORFHAGE, Christian**; Sepp-Herberger Str.
6c, 40764 Langenfeld (DE).

(74) Agent: **ROTH, Andy Stefan**; Kaistr. 5, 40221 Düsseldorf
(DE).

(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, IT, 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, ST, SV, SY, TH, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, 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).

(54) Title: MULTIPLEX METHOD FOR DETECTING DIFFERENT ANALYTES IN A SAMPLE

(57) Abstract: The technology provided herein relates to multiplex methods and kits for detecting different analytes in a sample in parallel by sequential signal-encoding of said analytes, as well as in vitro methods for screening, identifying and/or testing a substance and/or drug and in vitro methods for diagnosis of a disease, and an optical multiplexing system.

WO 2021/255244 A1