

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
29 February 2024 (29.02.2024)



(10) International Publication Number
WO 2024/041920 A1

(51) International Patent Classification:

G01N 29/02 (2006.01) G01N 29/22 (2006.01)
G01N 29/036 (2006.01)

(21) International Application Number:

PCT/EP2023/072372

(22) International Filing Date:

14 August 2023 (14.08.2023)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2212191.7 22 August 2022 (22.08.2022) GB

(71) Applicant: LAM RESEARCH AG [AT/AT]; SEZ-Strasse
1, 9500 Villach (AT).

(72) Inventors: KLEMM, Michael; c/o Lam Research AG,
SEZ-Strasse 1, 9500 Villach (AT). BRIEN, Daniel; c/o Lam
Research AG, SEZ-Strasse 1, 9500 Villach (AT).

(74) Agent: MEWBURN ELLIS LLP; Aurora Building, Coun-
terslip, Bristol BS1 6BX (GB).

(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, CV, CZ, DE, DJ, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG,
KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY,
MA, MD, MG, MK, MN, MU, 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, CV,
GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, 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, ME, 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).

Declarations under Rule 4.17:

— of inventorship (Rule 4.17(iv))

Published:

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

(54) Title: APPARATUS AND METHOD WITH QUARTZ CRYSTAL MICROBALANCE AND FLOW CELL

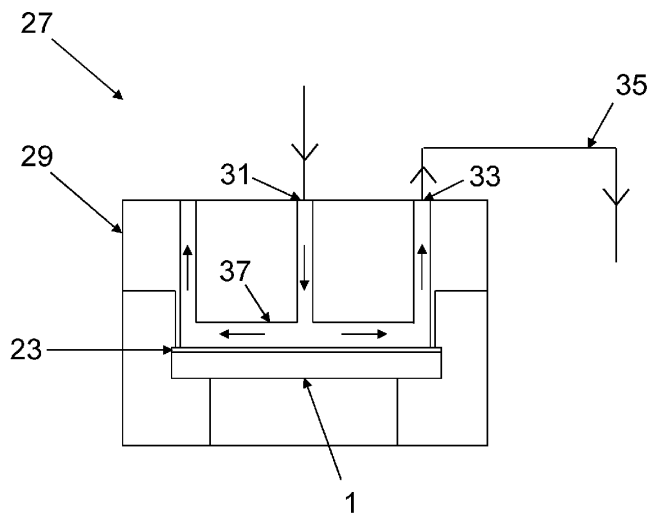


Fig. 5

(57) Abstract: An apparatus comprising: a quartz crystal microbalance comprising a quartz crystal resonator having a coating; and a flow cell arranged to flow a liquid over the coating.

WO 2024/041920 A1