



(51) International Patent Classification:

G06N 3/04 (2023.01) G06N 5/00 (2023.01)
G06N 99/00 (2019.01) G06N 3/0464 (2023.01)
G16C 20/00 (2019.01)

(21) International Application Number:

PCT/EP2023/057243

(22) International Filing Date:

21 March 2023 (21.03.2023)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2203955.6 21 March 2022 (21.03.2022) GB

(71) Applicant: THE UNIVERSITY COURT OF THE
UNIVERSITY OF GLASGOW [GB/GB]; Gilbert Scott

Building, University Avenue, Glasgow Strathclyde G21 8QQ (GB).

(72) Inventors: **CRONIN, Leroy**; School of Chemistry, University of Glasgow, Glasgow Strathclyde G12 8QQ (GB).
SHARMA, Abhishek; School of Chemistry, University of Glasgow, Glasgow Strathclyde G12 8QQ (GB).

(74) Agent: **MEWBURN ELLIS LLP**; Aurora Building, Counterslip, Bristol 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,

(54) Title: HYBRID CHEMICAL COMPUTER

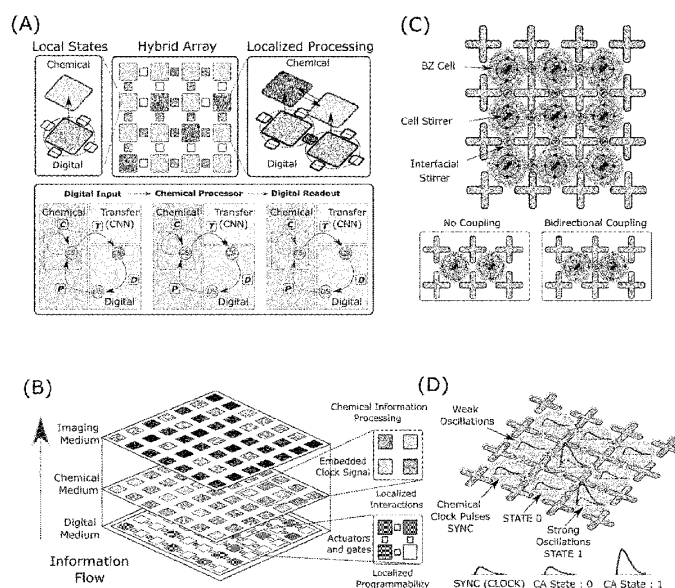


Fig. 1

(57) **Abstract:** The present invention provides a chemical computer comprising a matrix, an input device and an analytical device. The matrix comprises a plurality of interconnected reaction spaces holding a reaction mixture, and the reaction spaces are interconnected by fluid channels. The input device is for independently addressing each of a plurality of reaction spaces within the matrix, and to independently address one or more fluid channels. The analytical device has a sensor to analyse a reaction characteristic of a reaction mixture in one or more reaction spaces. Also provided the use of the chemical computer as such, and methods of computing using the chemical computer, where such methods comprise the step of addressing the reaction spaces, optionally addressing the fluid channels, and analysing a reaction characteristic of a reaction mixture in a reaction space.

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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).

Published:

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