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International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : G01N 33/50, 33/483, 35/00, 27/26, C12M 15/10 — A1

(11) International Publication Number: WO 96/15450

(43) International Publication Date: 23 May 1996 (23.05.96)

(21) International Application Number: PCT/US95/14589

(22) International Filing Date: 9 November 1995 (09.11.95)

(30) Priority Data:
08/338,703 10 November 1994 (10.11.94) US

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(81) Designated States: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KG, KP, KR, KZ, LK, LR, LT, LV, MD, MG, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TT, UA, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG), ARIPO patent (KE, LS, MW, SD, SZ, UG).

Published
With international search report.
Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

SG 9701985-5

(54) Title: A PARTITIONED MICROELECTRONIC DEVICE ARRAY

(57) Abstract

A system for processing a plurality of tests or syntheses in parallel comprising a sample channel for moving samples into a microlaboratory array of a plurality of wells connected by one or more channels for the testing or synthesis of samples, a station for housing the array and an optical system comprising at least one light source and at least one light detector for measuring the samples in the array, and a means of electrically connecting said array to an apparatus capable of monitoring and controlling the flow of fluids into the array. Samples are loaded from a common loading channel into the array, processed in the wells and measurements taken by the optical system. The array can process many samples, or synthesize many compounds in parallel, reducing the time required for such processes.

