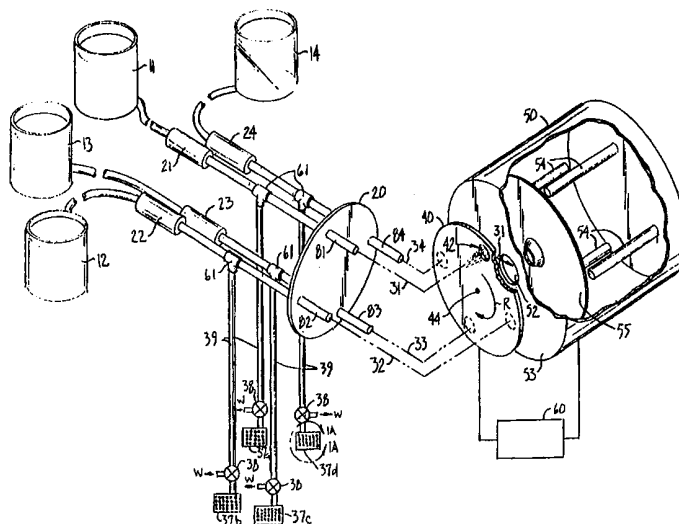




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<p>(21) International Application Number: PCT/US99/12905</p> <p>(22) International Filing Date: 8 June 1999 (08.06.99)</p> <p>(30) Priority Data: 60/088,665 9 June 1998 (09.06.98) US 09/185,450 3 November 1998 (03.11.98) US</p> <p>(63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Applications US 60/088,665 (CIP) Filed on 9 June 1998 (09.06.98) US 09/185,450 (CIP) Filed on 3 November 1998 (03.11.98)</p> <p>(71) Applicant (for all designated States except US): COM-BICHEM, INC. [US/US]; 9050 Camino Santa Fe, San Diego, CA 92121 (US).</p> <p>(72) Inventors; and (75) Inventors/Applicants (for US only): KASSEL, Daniel, B. [US/US]; 13322 Caminito Carmel, Del Mar, CA 92014 (US). WANG, Tao [CN/US]; 11715 Aspen View Drive, San Diego, CA 92128 (US). ZENG, Lu [CN/US]; 4227 Sturgeon Court, San Diego, CA 92130 (US).</p>	<p>(74) Agents: DOW, Karen, B. et al.; Townsend and Townsend and Crew LLP, 8th floor, Two Embarcadero Center, San Francisco, CA 94111 (US).</p> <p>(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p>Published <i>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.</i></p> <p>(88) Date of publication of the international search report: 3 February 2000 (03.02.00)</p>	

(54) Title: PARALLEL FLUID ELECTROSPRAY MASS SPECTROMETER



(57) Abstract

A method of analyzing each of a plurality of fluid samples (11-16), comprising, simultaneously spraying a plurality fluid samples (11-16) from electro spray needle array (20) towards mass spectrometer (50); positioning blocking device (40) to block all but one (32-34) of fluid samples (31-34) from reaching mass spectrometer (50); moving electro spray needle array (20) and blocking device (40) relative to one another to permit at least two of the plurality of fluid samples (31, 32) to reach mass spectrometer (50) one at a time; and analyzing the mass spectrum of fluid samples (31, 32, 33, 34) sequentially reaching mass spectrometer (50). A system for analyzing the composition of each of a plurality of fluid samples (31-34), comprising, mass spectrometer (50); multi-head electro spray needle array (20) for spraying fluid samples (31-34) towards mass spectrometer (50); and blocking device (40) positioned between electro spray needle array (20) and mass spectrometer (50), blocking device (40) dimensioned to block all but one (32-34) of fluid sample electro sprays (31-34) from reaching mass spectrometer (50).

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/12905

A. CLASSIFICATION OF SUBJECT MATTER
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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)

IPC 6 H01J

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

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 668 370 A (KATO YOSHIAKI ET AL) 16 September 1997 (1997-09-16) column 1, line 9 - line 17 column 4, line 27 - line 67 ---	1,18-20
X,P	WO 99 13492 A (ANALYTICA OF BRANFORD INC ;SANSONE MICHAEL A (US); ANDRIEN BRUCE A) 18 March 1999 (1999-03-18) page 28 -page 29 -----	1,18-20

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INTERNATIONAL SEARCH REPORT

information on patent family members

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