

PCT

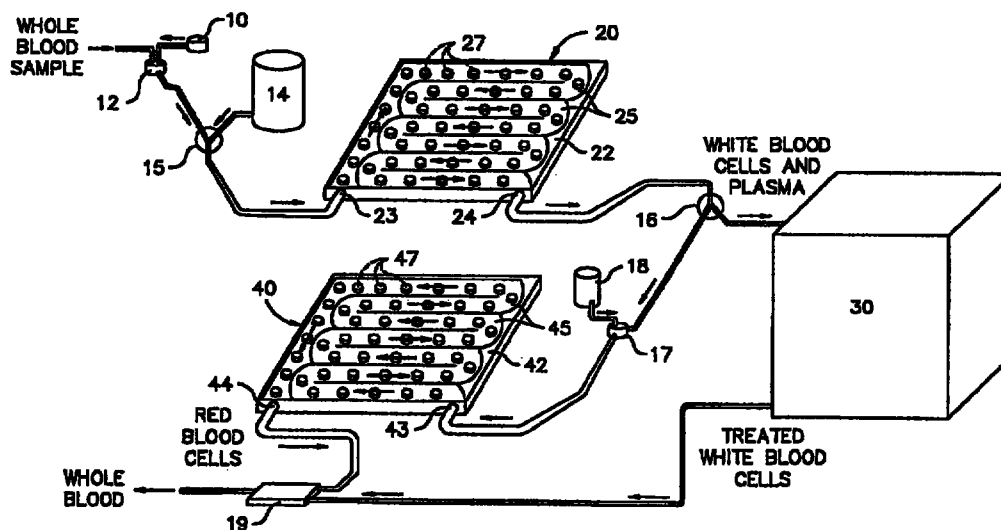
WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : B03C 1/035, G01N 33/543	A1	(11) International Publication Number: WO 99/42219 (43) International Publication Date: 26 August 1999 (26.08.99)
(21) International Application Number: PCT/US99/03579 (22) International Filing Date: 19 February 1999 (19.02.99) (30) Priority Data: 09/027,084 20 February 1998 (20.02.98) US (71) Applicant: FLORIDA STATE UNIVERSITY [US/US]; 2525 Pottsdamer Street, Tallahassee, FL 32310 (US). (72) Inventors: CHEN, Ching-Jen; 4643 Highgrove Road, Tallahassee, FL 32308 (US). HAIK, Yousef; 1817 Aaron Road, Tallahassee, FL 32303 (US). PAI, Vinay, M.; 410 Victory Garden Drive, #104, Tallahassee, FL (US). (74) Agent: DIEHL, R., Anthony; Reed Smith Shaw & McClay LLP, 2500 One Liberty Place, Philadelphia, PA 19103-7301 (US).	(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, 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, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, 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). 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>	

(54) Title: **CONTINUOUS MAGNETIC SEPARATION OF COMPONENTS FROM A MIXTURE**



(57) Abstract

A magnetic system and apparatus having a multi-dimensional gradient for continuous, on-line separation of components from a mixture of chemical entities which comprises at least one separation chamber with a plurality of channels and a plurality of magnets, and a method is provided for continuously and magnetically separating and treating components of a mixture of chemical entities using a multi-dimensional gradient.