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(21) International Application Number: PCT/US99/15752 (22) International Filing Date: 13 July 1999 (13.07.99) (30) Priority Data: 60/092,551 13 July 1998 (13.07.98) US (63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Application US 60/092,551 (CON) Filed on 13 July 1998 (13.07.98) (71) Applicant (for all designated States except US): PARKER SYSTEMS [US/US]; Unit D, 2821 E. Philadelphia Avenue, Ontario, CA 91761 (US). (72) Inventor; and (75) Inventor/Applicant (for US only): BALISKY, Todd, A. [US/US]; Parker Systems, Unit D, 2821 E. Philadelphia Avenue, Ontario, CA 91761 (US). (74) Agents: ROHM, Benita, J. et al.; Rohm & Monsanto, P.L.C., Suite 1525, 660 Woodward Avenue, Detroit, MI 48226 (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, 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, 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). Published <i>With international search report.</i> (88) Date of publication of the international search report: 16 November 2000 (16.11.00)	
(54) Title: PACED CHEMICAL REPLENISHMENT SYSTEM (57) Abstract A method of controlling the content of a chemical bath includes the steps of: determining a replenishment condition for the chemical bath; defining a unit of the replenishment condition; establishing a pacing factor corresponding to a replenishment volume of a replenishment medium per unit of the replenishment condition; and defining a replenishment threshold corresponding to the product of a predetermined number of the defined units of the replenishment condition and the pacing factor. The rate of continued replenishment of the predetermined constituent of the chemical bath is determined in response to the replenishment condition, which may be elapsed time, ampere-hours (or coulombs), number of product loads, product surface area, line speed over time, etc. The method replenishes constituents as they actually are consumed. It also prevents depletion (or buildup in the case of decanting a by-product) and the associated time delay related to detection and correction. The system permits the operator to set the replenishment delivery calculations. Once these settings are established, the system will automatically adjust the replenishment amount based on the replenishment condition by analysis of the plating bath.		

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/15752

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C25D21/14

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 7 C25D

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)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 182 131 A (HASHIMOTO SHIGEO ET AL) 26 January 1993 (1993-01-26) abstract column 2, line 1 - line 52 column 3, line 12 - line 32 example claim	1,6,7
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Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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Date of the actual completion of the international search

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Int. Patent Application No.
PCT/US 99/15752

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