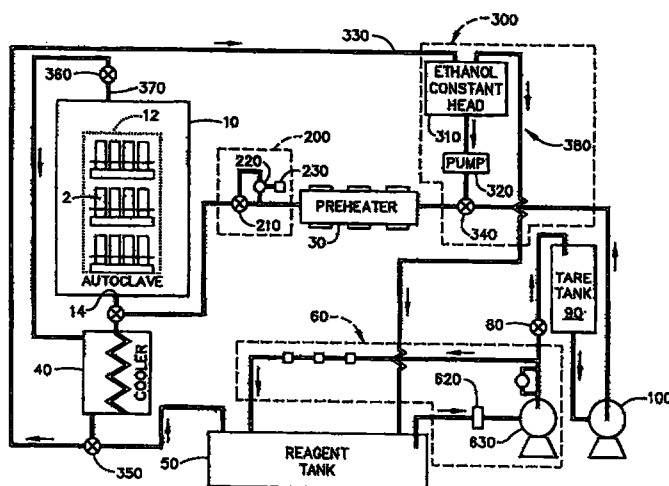




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7 : C23G 1/00		A2	(11) International Publication Number: WO 00/36184
			(43) International Publication Date: 22 June 2000 (22.06.00)
(21) International Application Number: PCT/US99/25962		(74) Agents: MITCHELL, James, W. et al.; General Electric Company, 3135 Easton Turnpike W3C, Fairfield, CT 06431 (US).	
(22) International Filing Date: 4 November 1999 (04.11.99)			
(30) Priority Data: 60/108,072 12 November 1998 (12.11.98) US 09/425,556 22 October 1999 (22.10.99) US		(81) Designated States: BR, JP, MX, SG, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).	
(71) Applicant: GENERAL ELECTRIC COMPANY [US/US]; 1 River Road, Schenectady, NY 12345 (US).		Published <i>Without international search report and to be republished upon receipt of that report.</i>	
(72) Inventors: FARR, Howard, John; 10167 Crosier Lane, Blue Ash, OH 45242 (US). BETSCHER, Keith, Humphries; 5448 Senour Drive, West Chester, OH 45069 (US). WORTHING, Richard, Roy, Jr.; 1637 Mandarin Court, Cincinnati, OH 45240 (US). SANGBETA, D.; 12126 B Sycamore Terrace, Cincinnati, OH 45249 (US). VAKIL, Himanshu, Bachubhai; 1305 Rosehill Boulevard, Niskayuna, NY 12309 (US). JOHNSON, Curtis, Alan; 379 Vly Road, Schenectady, NY 12309 (US). CARTIER, Thomas, Joseph, Jr.; 16 Socha Lane, Scotia, NY 12302 (US). STOKES, Edward, Brittain; 2631 Rosendale Road, Niskayuna, NY 12309 (US). JASTER, Heinz; 2929 Lower Gregg Road, Schenectady, NY 12306 (US).			

(54) Title: APPARATUS AND PROCESS TO CLEAN AND STRIP COATINGS FROM HARDWARE



(57) Abstract

Apparatus for stripping ceramic coatings from the surfaces of articles. The apparatus includes a dedicated pressure vessel, such as an autoclave, which is maintained at an elevated temperature. Caustic solution is preheated to a first elevated temperature before injecting it into the autoclave, and the caustic solution is filtered and cooled after use in the autoclave. The articles are stripped of coating by maintaining the articles at an elevated temperature and pressure for a predetermined time. Various options include the use of analytical equipment to maintain the chemistry of the caustic solution and use of a volatile organic solution to prepressurize the autoclave and shorten cycle time. The autoclave is maintained in a nitrogen chamber to minimize the risks associated with volatile components. The articles are transferred to a separate pressure vessel after completion of the stripping operation so that the autoclave used for stripping can be maintained at an elevated temperature, thereby shortening the cycle time for stripping of additional articles.