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(21) International Application Number: PCT/US98/13826 (22) International Filing Date: 2 July 1998 (02.07.98) (30) Priority Data: 60/051,658 3 July 1997 (03.07.97) US (71) Applicant: E.I. DU PONT DE NEMOURS AND COMPANY [US/US]; 1007 Market Street, Wilmington, DE 19898 (US). (72) Inventors: KOCH, Theodore, A.; 600 Cheltenham Road, Wilmington, DE 19808 (US). MEHDIZADEH, Mehrdad; 1117 Arundel Drive, Wilmington, DE 19808 (US). ASH- MEAD, James, W.; 458 Brickmill Road, Middletown, DE 19709 (US). BLACKWELL, Benny, E.; 111 Mute Swan Place, Newark, DE 19711 (US). KIRBY, Gregory, S.; 4 Caitlyn Court, Avondale, PA 19311 (US). SENGUPTA, Sourav, K.; 919-D Cloister Road, Wilmington, DE 19809 (US). (74) Agent: STEVENSON, Robert, B.; E.I. du Pont de Nemours and Company, Legal Patent Records Center, 1007 Market Street, Wilmington, DE 19898 (US).		(81) Designated States: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GW, HR, HU, ID, IL, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UZ, VN, YU, 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, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>
(54) Title: INDUCTIVELY HEATED CATALYTIC REACTOR		
(57) Abstract		
An improved gas phase reactor (10) for continuously conducting a catalyzed chemical reaction at elevated temperature involving a reactor vessel (11) wherein the gaseous reactant passing through the reactor makes contact with an inductively heated solid phase catalyst media (17). By placing the induction coil (14) used to inductively heat the catalyst (17) directly within the reactor in close proximity to the solid catalyst improved temperature control and uniform heating of the catalyst is achieved. Such a reactor is particularly useful for continuous production of hydrogen cyanide.		