

09/01/02
2002001220



162162

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
15 November 2001 (15.11.2001)

PCT

(10) International Publication Number
WO 01/85603 A3

- (51) International Patent Classification⁷: C01B 21/083
- (21) International Application Number: PCT/JP01/03963
- (22) International Filing Date: 11 May 2001 (11.05.2001)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
2000-139846 12 May 2000 (12.05.2000) JP
60/230.792 7 September 2000 (07.09.2000) US
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, 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, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
- (71) Applicant (*for all designated States except US*): SHOWA DENKO K. K. [JP/JP]; 13-9, Shiba Daimon 1-chome, Minato-ku, Tokyo 105-8518 (JP).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): OHNO, Hiromoto [JP/JP]; C/O KAWASAKI PLANT, SHOWA DENKO K. K., 5-1, Ogimachi, Kawasaki-ku, Kawasaki-shi, Kanagawa 210-0867 (JP). OHI, Toshio [JP/JP]; C/O KAWASAKI PLANT, SHOWA DENKO K. K., 5-1, Ogimachi, Kawasaki-ku, Kawasaki-shi, Kanagawa 210-0867 (JP).
- (74) Agents: ISHIDA, Takashi et al.; A. AOKI, ISHIDA & ASSOCIATES, Toranomon 37 Mori Building, 5-1, Toranomon 3-chome, Minato-ku, Tokyo 105-8423 (JP).
- Published:
— with international search report
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report:
18 April 2002
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

WO 01/85603 A3

(54) Title: PROCESS FOR PRODUCING NITROGEN TRIFLUORIDE AND USE THEREOF

(57) Abstract: F₂ gas is reacted with NH₃ gas in a gaseous phase at 80°C or less in the presence of a diluting gas to produce NF₃. Thus, NF₃ is produced with good safety, efficiency and profitability.



ACTION