

(19) World Intellectual Property Organization
International Bureau



G00001

(43) International Publication Date
7 December 2000 (07.12.2000)

PCT

(10) International Publication Number
WO 00/73202 A1

- (51) International Patent Classification⁷: C01B 21/22 (74) Agent: LUNDELL, Craig, M.; Arnold White & Durkee, 750 Bering Drive, Houston, TX 77057-2198 (US).
- (21) International Application Number: PCT/US99/25597
- (22) International Filing Date:
1 November 1999 (01.11.1999)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
09/320,077 26 May 1999 (26.05.1999) US
- (71) Applicant: SOLUTIA INC. [US/US]; 575 Maryville Center Drive, St. Louis, MO 63141 (US).
- (72) Inventors: NOTTE, Patrick; 412 Kilkenny Way, Cantonment, FL 32533 (US). BOWMAN, Barry, L.; 6059 Forest Green Road, Pensacola, FL 32505 (US). OPPENHEIM, Judith, P.; 13 Port Royal Way, Pensacola, FL 32501 (US). NOSKOV, Alexandr, Stepanovich; pr. Tsetnoi 9-14, Novosibirsk, 630090 (RU). CHANDRASEKHAR, Ramoorthy; 100 Birchleaf Lane, Greer, SC 29650 (US). CROCE, Greg; 4490 Deerberry Ct., Concord, CA 94521 (US).
- (81) Designated States (*national*): AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, 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, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, 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), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— With international search report.
- 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 00/73202 A1

(54) Title: PROCESS FOR NITROUS OXIDE PURIFICATION

(57) Abstract: A method for purification of a nitrous oxide gas by feeding the nitrous oxide gas and a reducing agent into a de-oxidation reactor, performing de-oxidation by reacting the reducing agent with oxygen using a catalyst in order to deplete the oxygen in the nitrous oxide gas, while limiting the amount of nitrous oxide removed from the nitrous oxide gas.



162162