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| <b>(51) International Patent Classification <sup>6</sup> :</b><br><b>C01B 21/20</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>A1</b> | <b>(11) International Publication Number:</b> <b>WO 99/03780</b><br><b>(43) International Publication Date:</b> 28 January 1999 (28.01.99)                                                                                                                                                                                                                                                                                                               |
| <b>(21) International Application Number:</b> PCT/US98/10445<br><b>(22) International Filing Date:</b> 21 May 1998 (21.05.98)<br><b>(30) Priority Data:</b><br>08/895,361 16 July 1997 (16.07.97) US<br><b>(71) Applicant:</b> ASHLAND INC. [US/US]; P.O. Box 2219, Columbus, OH 43216 (US).<br><b>(72) Inventors:</b> RIDDLE, Floyd, L.; 1020 Macuncie Avenue, Emmaus, PA 18049 (GB). MICHELOTTI, Francis, W.; 3560 Southwood Drive, Easton, PA 18042 (US).<br><b>(74) Agents:</b> CONNAUGHTON, Martin; Ashland Inc., P.O. Box 219, Columbus, OH 43216 (US) et al. |           | <b>(81) Designated States:</b> AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, 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, TJ, TM, TR, TT, UA, UG, UZ, VN, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).<br><br><b>Published</b><br><i>With international search report.</i> |
| <b>(54) Title:</b> PURIFICATION OF HYDROXYLAMINE<br><br><b>(57) Abstract</b><br><br>The invention provides a method for purification of hydroxylamine so as to have a substantial reduction of cations and anions. The method involves passing a solution of hydroxylamine through at least one strong acid ion exchange bed and then through at least one strong base anion exchange resin bed. The strong acid ion exchange bed is preconditioned with dilute hydrochloric acid.                                                                                  |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                          |