

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
22 July 2004 (22.07.2004)

PCT

(10) International Publication Number
WO 2004/060853 A1

(51) International Patent Classification⁷: **C07C 209/48**

(21) International Application Number:
PCT/US2003/039447

(22) International Filing Date:
12 December 2003 (12.12.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/327,765 23 December 2002 (23.12.2002) US
10/731,733 9 December 2003 (09.12.2003) US

(71) Applicant: **SOLUTIA INC.** [US/US]; 575 Maryville
Centre Drive, St. Louis, MO 63141 (US).

(72) Inventors: **WARD, Gregory, J.**; 1152 Jaguar Circle, Gulf
Breeze, FL 32563 (US). **BLANCHARD, Bryan, C.**; 6202
Huntsman Pass, Milton, FL 32570 (US).

(74) Agent: **LUNDELL, Craig, M.**; Howrey Simon Arnold &
White, LLP, 750 Bering Drive, Houston, TX 77057-2198
(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, EG, 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, MZ, NI, NO, NZ, OM, PG, PH, PL, PT,
RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,
TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (BW, GH,
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA,
GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: LOW PRESSURE PROCESS FOR MANUFACTURE OF 3-DIMETHYLAMINOPROPYLAMINE (DMAPA)

(57) Abstract: An improved process for the production of 3-dimethylaminopropylamine in high purity from N,N-dimethylamino-
propionitrile utilizing a low pressure hydrogenation process is described. The basic process comprises contacting the nitrile with
hydrogen at low pressure in the presence of a catalyst under conditions sufficient to effect the conversion of the nitrile to the primary
amine product.



WO 2004/060853 A1