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(21) International Application Number: PCT/US96/09060 (22) International Filing Date: 4 June 1996 (04.06.96) (30) Priority Data: 08/476,356 7 June 1995 (07.06.95) ✓ US 08/581,249 29 December 1995 (29.12.95) US (71) Applicant: NOVUS INTERNATIONAL, INC. [US/US]; 530 Maryville Centre Drive, St. Louis, MO 63141 (US) ✓ (72) Inventors: BLACKBURN, Thomas, F.; 530 Maryville Centre Drive, St. Louis, MO 63141 (US). PELLEGRIN, Paul, F.; 530 Maryville Centre Drive, St. Louis, MO 63141 (US). KRANZ, Allen, H.; 530 Maryville Centre Drive, St. Louis, MO 63141 (US). (74) Agents: ROEDEL, John, K., Jr. et al.; Senniger, Powers, Leavitt & Roedel, 16th floor, One Metropolitan Square, St. Louis, MO 63102 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, 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, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, 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 With international search report.	
(54) Title: PROCESSES FOR THE PREPARATION OF 3-(METHYLTHIO)PROPANAL AND 2-HYDROXY-4-(METHYLTHIO)BUTANENITRILE			
(57) Abstract			
Catalytic processes for the preparation of 3-(methylthio)propanal and 2-hydroxy-4-(methylthio)butanenitrile using novel addition catalysts are disclosed. The novel addition catalysts include: triisopropanolamine, nicotinamide, imidazole, benzimidazole, 2-fluoropyridine, poly-4-vinylpyridine, 4-dimethylaminopyridine, picoline, pyrazine, trialkylamines having from three to eighteen carbon atoms in each of the alkyl substituents bonded to the nitrogen atom and tertiary amines having formula (I), wherein A is aryl, R₁ and R₂ are alkyl, and x, a, b and c are integers such that 0 ≤ x ≤ 3, 1 ≤ a ≤ 3, 0 ≤ b ≤ 2, 0 ≤ c ≤ 2 provided that a + b + c = 3.			
$\left[A-(CH_2)_x \right]_a - N \begin{matrix} (R_1)_b \\ (R_2)_c \end{matrix} \quad (I)$			