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(51) International patent classification ⁶ : C07C 253/00, 255/07	A1	(11) International publication number: MO 96/19439 (43) International publication date: 27 June 1996 (27.06.96)
(21) International application number: PCT/FR95/01644 (22) International filing date: 12 December 1995 (12.12.95) (30) Data relating to the priority: 94/15728 22 December 1994 (22.12.94) FR (71) Applicant (for all designated States except US): RHONE-POULENC FIBER AND RESIN INTERMEDIATES [FR/FR]: 25, quai Paul-Doumer, F-92408 Courbevoie (FR). (72) Inventors; and (75) Inventors/Applicants (US only): Anne-Marie LE GOVIC [FR/FR]: 122-124, quai de Jemmapes, F-75010 Paris (FR). Isabelle STORET [FR/FR]: 2, résidence du Hameau, F-38300 Les Eparres (FR). (74) Representative: Noël VIGNALLY; Rhône-Poulenc Chimie, Industrial Property Directorate, C.R.I.T. - Carrières, P.O. Box 62, F-69192 Saint-Fons Cédex (FR).		(81) Designated States: CA, CN, MX, SG, US, European Patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published With the International Search Report. Before expiry of the period provided for amending the claims, will be republished if such amendments are received.

As printed

(54) Title: PROCESS FOR PRODUCING PENTENE-NITRILES

(54) Titre: PROCEDE DE PREPARATION DE PENTENE-NITRILES

(57) Abstract

The present invention relates to a process for producing pentene-nitriles. The pentene-nitriles, more particularly 3-pentene-nitrile and 4-pentene-nitrile, may give adiponitrile by reaction with hydrogen cyanide. More particularly, the invention relates to a process for preparing pentene-nitriles by implementing in vapor phase 2-methylglutarimide or ethylsuccinimide in the presence of a solid acid catalyst. 2-methylglutarimide may be implemented directly or in the form of one of the precursors thereof, such as particularly 4-cyanovaleramide, 2-methyl 4-cyanobutyramide, 4-cyanovaleric acid, 2-methyl 4-cyanobutyric acid. Likewise, ethylsuccinimide may be implemented directly or in the form of one of the precursors thereof, such as particularly 3-cyanovaleramide, 2-ethyl 3-cyanopropionamide, 3-cyanovaleric acid, 2-ethyl 3-cyanopropionic acid.

(57) Abrégé

La présente invention concerne un procédé de préparation de pentène-nitriles. Les pentène-nitriles, plus particulièrement le 3-pentène-nitrile et le 4-pentène-nitrile, peuvent conduire à l'adiponitrile par réaction avec le cyanure d'hydrogène. Plus précisément, l'invention consiste en un procédé de préparation de pentène-nitriles par mise en œuvre en phase vapeur de 2-méthylglutarimide ou d'éthylsuccinimide, en présence d'un catalyseur solide acide. Le 2-méthylglutarimide peut être mis en œuvre directement ou sous la forme d'un de ses précurseurs, tels que notamment le 4-cyanovaléramide, le 2-méthyl 4-cyanobutyramide, l'acide 4-cyanovalérique, l'acide 2-méthyl 4-cyanobutyrique. De même, l'éthylsuccinimide peut être mis en œuvre directement ou sous la forme d'un de ses précurseurs, tels que notamment le 3-cyanovaléramide, le 2-éthyl 3-cyanopropionamide, l'acide 3-cyanovalérique, l'acide 2-éthyl 3-cyanopropionique.

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