

2-substituted 4,6-diamino-5-cyanopyrimidines of formula (I) wherein R₁ is hydrogen, C₁-C₆alkyl, C₂-C₆alkenyl or C₂-C₆alkynyl and R₂ is hydrogen, C₁-C₁₀alkyl or C₃-C₆cycloalkyl or R₁ and R₂ together are a radical, selected from the group of radicals, consisting of -(CH₂)₃-, -(CH₂)₄- and -(CH₂)₅-, are prepared by a process which comprises reacting a dialkyl cyanimidocarbonate of formula (V), wherein R₃ is C₁-C₄alkyl, with an alkali metal salt of malononitrile or with malononitrile and an alkali metal base, at a temperature of -10 to +40°C, to give a 1-alkoxy-1-cyanomino-2,2-dicyanoethylene alkali metal salt of the formula (IV), wherein R₃ is C₁-C₄alkyl and M⁺ is an alkali metal cation, reacting this compound with an excess of ammonia at a temperature of 60 to 110°C to give a 1-amino-1-cyanamino-2,2-dicyanoethylene alkali metal salt of formula (II), wherein M⁺ is an alkali metal cation, reacting this salt with excess hydrogen chloride in a secondary alcohol, water or a mixture thereof as solvent to give 2-chloro-4,6-diamino-5-cyanopyrimidine, and then reacting this compound with an amine of the formula R₁R₂NH to give the final product.

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP 94/02312

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 C07D239/48

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 6 C07D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Y	CHEM. BER., vol.101, no.4, 1968 pages 1244 - 1249 E. ALLENSTEIN, R. FUCHS '5-Cyan-pyrimidin-Derivate durch Cyclisierung von 1-Cyanamino-2.2-dicyan-aethylen' cited in the application * page 1245, formulae 4, 5; page 1247 * --- -/--	1-21

☒ Further documents are listed in the continuation of box C.

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Date of the actual completion of the international search

23 February 1995

Date of mailing of the international search report

17. 03. 95

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INTERNATIONAL SEARCH REPORT

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PCT/EP 94/02312

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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Information on patent family members

International Application No

PCT/EP 94/02312

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