

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
28 February 2008 (28.02.2008)

PCT

(10) International Publication Number  
**WO 2008/023333 A3**

(51) International Patent Classification:  
**C07D 215/42** (2006.01)

(21) International Application Number:  
PCT/IB2007/053334

(22) International Filing Date: 21 August 2007 (21.08.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
1886/DEL/2006 22 August 2006 (22.08.2006) IN

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (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

(88) Date of publication of the international search report:  
15 May 2008

(54) Title: PROCESS FOR THE PREPARATION OF 4-(ISOBUTYLAMINO)-3-AMINO-QUINOLINE

(57) Abstract: The invention relates to a process for the preparation of 4-isobutylamino-3- aminoquinoline. This compound is a useful pharmaceutical intermediate for the preparation of 1-(2-methylpropyl)-1H-imidazo[4,5-c]quinoline-4-amine - a compound known generically as imiquimod, an immune response modifier.



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## INTERNATIONAL SEARCH REPORT

International application No  
PCT/IB2007/053334

A. CLASSIFICATION OF SUBJECT MATTER  
INV. C07D215/42

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)  
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)

EPO-Internal, BEILSTEIN Data, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4 689 338 A (GERSTER JOHN F [US]) 25 August 1987 (1987-08-25) cited in the application column 4, line 22 - column 6, line 44 example 16 column 10; table II	1-10
Y	US 4 988 815 A (ANDRE JEAN-DENIS [US] ET AL) 29 January 1991 (1991-01-29) column 6, line 54 - column 7, line 5 example 13 ----- -/--	1-10

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

☒ See patent family annex.

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Date of the actual completion of the international search

18 February 2008

Date of mailing of the international search report

03/03/2008

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## INTERNATIONAL SEARCH REPORT

International application No  
PCT/IB2007/053334

## C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JOHN F. GERSTER ET AL: "Synthesis and Structure - Activity - Relationships of 1H-Imidazo[4,5-c]quinolines that Induce Interferon Production" JOURNAL OF MEDICINAL CHEMISTRY, vol. 48, 2005, pages 3481-3491, XP002450996 cited in the application page 3488; example 12 scheme 2	1-10
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Y	----- US 2003/055087 A1 (SHINKAI HISASHI [JP] ET AL) 20 March 2003 (2003-03-20) paragraph [0206] paragraph [0216] - paragraph [0218] -----	1-10

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