

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
18 March 2004 (18.03.2004)

PCT

(10) International Publication Number
WO 2004/022060 A2

(51) International Patent Classification⁷: **A61K 31/496**,
31/551, 31/439, 31/4184, C07D 235/16, 471/04, 413/06,
417/06

Chandravadan, R. [US/US]; 14213 Dalhousie Road,
San Diego, CA 92129 (US). **VENABLE, Jennifer, D.**
[US/US]; 12825 Caminito Del Canto, Del Mar, CA 92014
(US).

(21) International Application Number:
PCT/US2003/027461

(74) Agents: **JOHNSON, Philip, S.**, et al.; Johnson & Johnson,
1 Johnson & Johnson Plaza, New Brunswick, NJ 09833
(US).

(22) International Filing Date:
4 September 2003 (04.09.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/408,569 6 September 2002 (06.09.2002) 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, 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, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(71) Applicant (*for all designated States except US*):
JANSSEN PHARMACEUTICA, N.V. [BE/BE]; Turn-
houtseweg 30, B-B-B-2340 Beerse (BE).

(84) Designated States (*regional*): ARIPO patent (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).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **CARRUTHERS,**
Nicholas, I., [US/US]; 14370 Silver Heights Road, Poway,
CA 92064 (US). **DVORAK, Curt, A.** [US/US]; 7657
Angeleno Road, San Diego, CA 92126 (US). **EDWARDS,**
James, P. [US/US]; 8723 Hesby Court, San Diego, CA
92129 (US). **GRICE, Cheryl, A.** [US/US]; 3449 Camino
Corte, Carlsbad, CA 92009 (US). **JABLONOWSKI, Jill,**
A. [US/US]; 13651 Freeport Road, San Diego, CA 92129
(US). **LY, Kiev, S.** [US/US]; 10620 Dabney Drive, #172,
San Diego, CA 92126 (US). **PIO, Barbara, A.** [US/US];
3 Langden Close, Hillsborough, NJ 08844 (US). **SHAH,**

Published:

— without international search report and to be republished
upon receipt of that report

*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: HETEROCYCLIC COMPOUNDS

(57) Abstract: Certain thienopyrrolyl and furanopyrrolyl compounds are disclosed as useful to treat or prevent disorders and conditions mediated by the histamine H₄ receptor, including allergic rhinitis.

WO 2004/022060 A2