



(51) International Patent Classification:

C07D 209/12 (2006.01) **A61P 13/00** (2006.01)
C07D 209/18 (2006.01) **A61P 29/00** (2006.01)
A61K 31/404 (2006.01)

Babraham Research Campus, Cambridge Cambridgeshire
 CB22 3AT (GB).

(21) International Application Number:

PCT/GB2009/050787

(74) Agent: **MARKS & CLERK LLP**; 62-68 Hills Road,
 Cambridge Cambridgeshire CB2 1LA (GB).

(22) International Filing Date:

3 July 2009 (03.07.2009)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0812192.3 3 July 2008 (03.07.2008) GB

(71) Applicant (for all designated States except US): **LECTUS THERAPEUTICS LIMITED** [GB/GB]; Meditrina Building, Babraham Research Campus, Cambridge Cambridgeshire CB22 3AT (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, 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, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(72) Inventors; and

(75) Inventors/Applicants (for US only): **KHAN, Nawaz Mohammed** [GB/GB]; Lectus Therapeutics Limited, Babraham Research Campus, Cambridge Cambridgeshire CB22 3AT (GB). **BURCKHARDT, Svenja** [DE/GB]; Lectus Therapeutics Limited, Babraham Research Campus, Cambridge Cambridgeshire CB22 3AT (GB). **CANSFIELD, Julie Elaine** [FR/GB]; Lectus Therapeutics Limited, Babraham Research Campus, Cambridge Cambridgeshire CB22 3AT (GB). **VO, Ngoc-Tri** [FR/GB]; Lectus Therapeutics Limited, Babraham Research Centre, Cambridge Cambridgeshire CB22 3AT (GB). **ARMER, Richard Edward** [GB/GB]; Lectus Therapeutics Limited, Babraham Research Campus, Cambridge Cambridgeshire CB22 3AT (GB). **BOFFEY, Raymond John** [GB/GB]; Lectus Therapeutics Limited,

(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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

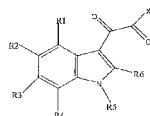
Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) Date of publication of the international search report:

11 November 2010

(54) Title: CALCIUM ION CHANNEL MODULATORS & USES THEREOF



(I)

(57) Abstract: Compounds of formula (I) and salts according to following formula; which are Cavx channel blockers and are of use in the treatment of various conditions including pain.