

Title (en)
HETEROCYCLYL-CONDENSED BENZOYLGUANIDINES, THEIR PRODUCTION AND USE AS INHIBITORS OF THE CELLULAR Na⁺/H⁺-ANTIporter

Title (de)
HETEROCYCLYLKONDENSIERTE BENZOYLGUANIDINE, DEREN HERSTELLUNG UND DEREN VERWENDUNG ALS INHIBITOREN DES ZELLULÄREN Na⁺/H⁺-ANTIporters

Title (fr)
BENZOYLGUANIDINES HETEROCYCLYL-CONDENSEES, LEUR FABRICATION ET LEUR UTILISATION COMME INHIBITEURS DE L'ANTIport CELLULAIRE Na⁺/H⁺

Publication
EP 0873335 A1 19981028 (DE)

Application
EP 96943131 A 19961216

Priority

- DE 19548708 A 19951223
- EP 9605645 W 19961216

Abstract (en)
[origin: DE19548708A1] Cyclic sulphones of formula (I) are disclosed, in which: R<1> and R<2> each independently of one another stand for H, A, CF₃, CH₂F, CHF₂, C₂F₅, Hal, OH, OA, NH₂, NHA, NA₂, NO₂ or CN; X stands for CR<4>R<5>, C=Z, O, S, NH, NA or NR<3>; Y stands for CR<6>R<7>, C=Z, O, NH, NA, or NR<3>; Z stands for O, S, NH, NA, NOH, NOA, CH₂, CHA or CA₂; R<4>, R<5>, R<6> and R<7> each independently of one another stand for H, A, R<3>, Hal, OH, OA, SH, SA, NH₂, NHA or NA₂, or alternatively, R<5> and R<6> or R<7> and R<8> can together represent a bond, only one such bond being present in each molecule; R<4> and R<5> together can also stand for O-(CH₂)₂-O or O-(CH₂)₃-O; R<8> and R<9> each independently of one another stand for H or A; A stands for alkyl with 1-6 C atoms; Hal stands for F, Cl, Br or I; and R<3> stands for phenyl or benzyl which is unsubstituted or single-, double- or triple-substituted by A, OA, NH₂, NHA, NA₂, F, Cl, Br and/or CF₃; and n is 0 or 1. Also disclosed are the physiologically tolerable salts of these compounds. These compounds and their salts have anti-arrhythmic properties and act as inhibitors of the cellular Na⁺/H⁺-antiporter.

IPC 1-7
C07D 333/64; **A61K 31/38**; **C07D 493/10**; **C07D 333/66**; **C07D 333/54**; **C07D 335/06**; **C07D 327/06**; **A61K 31/39**

IPC 8 full level
A61K 31/00 (2006.01); **A61K 31/38** (2006.01); **A61K 31/381** (2006.01); **A61K 31/382** (2006.01); **A61K 31/39** (2006.01); **A61K 31/425** (2006.01); **A61K 31/428** (2006.01); **A61K 31/54** (2006.01); **A61K 31/548** (2006.01); **A61P 9/00** (2006.01); **A61P 9/06** (2006.01); **C07D 327/04** (2006.01); **A61P 9/10** (2006.01); **A61P 35/00** (2006.01); **A61P 43/00** (2006.01); **C07D 277/62** (2006.01); **C07D 277/64** (2006.01); **C07D 285/00** (2006.01); **C07D 327/06** (2006.01); **C07D 333/54** (2006.01); **C07D 333/62** (2006.01); **C07D 333/64** (2006.01); **C07D 333/66** (2006.01); **C07D 333/68** (2006.01); **C07D 335/06** (2006.01); **C07D 339/08** (2006.01); **C07D 495/10** (2006.01)

CPC (source: EP KR US)
A61P 9/00 (2018.01 - EP); **A61P 9/06** (2018.01 - EP); **A61P 9/10** (2018.01 - EP); **A61P 35/00** (2018.01 - EP); **A61P 43/00** (2018.01 - EP); **C07D 333/54** (2013.01 - EP KR US); **C07D 333/62** (2013.01 - EP KR US); **C07D 333/64** (2013.01 - EP KR US); **C07D 333/66** (2013.01 - EP KR US); **C07D 333/68** (2013.01 - EP KR US)

Designated contracting state (EPC)
AT BE CH DE DK ES FI FR GB GR IE IT LI LU NL PT SE

DOCDB simple family (publication)
US 6028069 A 20000222; AR 004402 A1 19981104; AU 1196097 A 19970717; AU 710048 B2 19990909; BR 9612200 A 19990713; CA 2241143 A1 19970703; CZ 199798 A3 19981014; DE 19548708 A1 19970626; EP 0873335 A1 19981028; HU P9802920 A2 20000528; HU P9802920 A3 20001228; JP 2000502663 A 20000307; KR 19990076675 A 19991015; MX 9804972 A 19980930; NO 982906 D0 19980622; NO 982906 L 19980622; PL 327186 A1 19981123; RU 2161616 C2 20010110; SK 81598 A3 19990111; TW 381091 B 20000201; WO 9723476 A1 19970703; ZA 9610724 B 19970626

DOCDB simple family (application)
US 9165299 A 19990330; AR P960105800 A 19961020; AU 1196097 A 19961216; BR 9612200 A 19961216; CA 2241143 A 19961216; CZ 199798 A 19961216; DE 19548708 A 19951223; EP 9605645 W 19961216; EP 96943131 A 19961216; HU P9802920 A 19961216; JP 52328197 A 19961216; KR 19980704787 A 19980622; MX 9804972 A 19980619; NO 982906 A 19980622; PL 32718696 A 19961216; RU 98114077 A 19961216; SK 81598 A 19961216; TW 85114208 A 19961119; ZA 9610724 A 19961219