



(51) International Patent Classification:

C07D 487/04 (2006.01) A61P 35/00 (2006.01)
A61K 31/407 (2006.01)

(21) International Application Number:

PCT/EP2013/002606

(22) International Filing Date:

30 August 2013 (30.08.2013)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

12006668.3 24 September 2012 (24.09.2012)

EP

(71) Applicant: MERCK PATENT GMBH [DE/DE]; Frankfurt
Strasse 250, 64293 Darmstadt (DE).(72) Inventors: STAEHLE, Wolfgang; Neuweg 14c, 55218
Ingelheim (DE). TSAKLAKIDIS, Christos; Im Langge-
wann 54, 69469 Weinheim (DE). LEUTHNER, Brigitta;
Rossoerfer Strasse 70, 64287 Darmstadt (DE). WIENKE,
Dirk; Goldparmaenenweg 2, 64297 Darmstadt (DE). CZA-
UDERNA, Frank; 153 LaGrange Street, West Roxbury,
MA 02132 (DE). WEGENER, Ansgar; Koenigsberger-
strasse 12, 63150 Heusenstamm (DE).

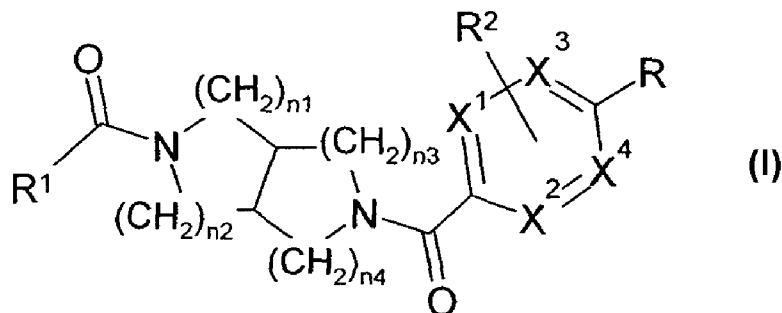
(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY,
BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA,
SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, 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, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ,
UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ,
TM), European (AL, 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, RS, SE, SI, SK, SM,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
KM, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: HYDROPYRROLOPYRROLE DERIVATIVES FOR USE AS FATTY ACID SYNTHASE INHIBITORS



(57) Abstract: Compounds of the formula (I) in which R¹, R², R, X¹, X², X³, X⁴, n₁, n₂, n₃ and n₄ have the meanings indicated in Claim 1, are inhibitors of Tankyrase, and can be employed, inter alia, for the treatment of diseases such as cancer, cardiovascular diseases, central nervous system injury and different forms of inflammation.