PCT WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 :
C07D 401/14, A61K 31/445, 31/505

A1

(11) International Publication Number: WO 98/57963

(43) International Publication Date: 23 December 1998 (23.12.98)

(21) International Application Number: PCT/US98/11502

(22) International Filing Date: 15 June 1998 (15.06.98)

(30) Priority Data:
08/877,399 17 June 1997 (17.06.97) US

(71) Applicant: SCHERING CORPORATION [US/US]; 2000 Galloping Hill Road, Kenilworth, NJ 07033–0530 (US).

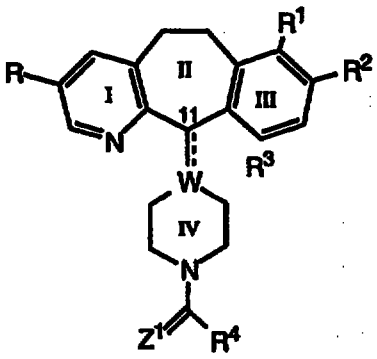
(72) Inventors: NJOROGE, F., George; 2597 Juliat Place, Union, NJ 07083 (US). VIBULBHAN, Bancha; 201 North 24th Street, Kenilworth, NJ 07033 (US). PINTO, Patrick, A.; 34 Battle Ridge Road, Morris Plains, NJ 07950 (US). GIRIJAVALLABHAN, Viyyoor, M.; 10 Maplewood Drive, Parsippany, NJ 07054 (US).

(74) Agents: MAGATTI, Anita, W. et al.; Schering–Plough Corporation, Patent Dept., K–6–1 1990, 2000 Galloping Hill Road, Kenilworth, NJ 07033–0530 (US).

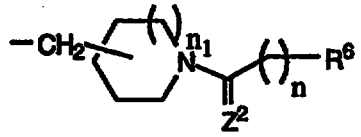
(81) Designated States: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CZ, EE, GE, GW, HU, ID, IL, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UZ, VN, YU, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).

Published
With international search report.

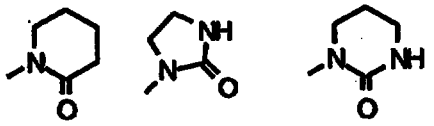
(54) Title: BENZO(5,6)CYCLOHEPTAPYRIDINE CYCLIC UREAS AND LACTAMS USEFUL AS FARNESYL PROTEIN TRANSFERASE INHIBITORS



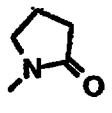
(I)



(II)



(III)



(IV)

(57) Abstract

Compounds of formula (I) useful for inhibiting Ras function and therefore inhibiting or treating the abnormal growth of cells are disclosed, or a pharmaceutically acceptable salt or solvate thereof, wherein: R and R^2 are halo; R^1 and R^3 are H and halo, provided that at least one is H; W is N, CH, or C when the double bond is present at the C–11 position; R^4 is $–(CH_2)_n–R^5$ or (II); R^5 is (III); R^6 is R^5 or (IV); Z^1 and Z^2 are indepen dently selected from the group consisting of =O and =S; n is 1–6; and n_1 is 0 or 1.