

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
17 November 2005 (17.11.2005)

PCT

(10) International Publication Number
WO 2005/107762 A3

(51) International Patent Classification:
C07C 233/65 (2006.01) *A61K 31/165* (2006.01)

(21) International Application Number:
PCT/US2005/015666

(22) International Filing Date: 6 May 2005 (06.05.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/569,510 6 May 2004 (06.05.2004) US
11/121,709 3 May 2005 (03.05.2005) US

(71) Applicants (for all designated States except US): **CYTOKINETICS, INC.** [US/US]; 280 East Grand Avenue, South San Francisco, CA 94080 (US). **SMITHKLINE BEECHAM CORPORATION** [US/US]; One Franklin Plaza, Philadelphia, PA 19103 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **QIAN, Xiangping** [CA/US]; 280 East Grand Avenue, South San Francisco, CA 94080 (US). **MCDONALD, Andrew, I.** [US/US]; 280 East Grand Avenue, South San Francisco, CA 94080 (US). **ZHOU, Han-Jie** [CN/US]; 280 East Grand Avenue, South San Francisco, CA 94080 (US). **ASHCRAFT, Luke, W.** [US/US]; 280 East Grand Avenue, South San Francisco, CA 94080 (US). **YAO, Bing** [CN/US]; 280 East Grand Avenue, South San Francisco, CA 94080 (US). **JIANG, Hong** [US/US]; 280 East Grand Avenue, South San Francisco, CA 94080 (US). **HUANG, Jennifer, Kuo, Chen** [—/US]; 280 East Grand Avenue, South San Francisco, CA 94080 (US). **WANG, Jianchao** [CA/US]; 280 East Grand Avenue, South San Francisco, CA 94080 (US). **MORGANS, David, J., Jr.** [US/US]; 280 East Grand Avenue, South San Francisco, CA 94080 (US). **MORGAN, Bradley, P.** [US/US]; 280 East Grand Avenue, South San Francisco, CA 94080 (US). **BERGNES, Gustave** [US/US]; 280 East Grand Avenue, South San Francisco, CA 94080 (US). **DHANAK, Dashyant** [GB/US]; 1250 S. Collegeville Road, Collegeville, PA 19426 (US).

KNIGHT, Steven, D. [US/US]; 1250 S. Collegeville Road, Collegeville, PA 19426 (US). **ADAMS, Nicholas, D.** [US/US]; 1250 S. Collegeville Road, Collegeville, PA 19426 (US). **PARRISH, Cynthia, A.** [US/US]; 1250 S. Collegeville Road, Collegeville, PA 19426 (US). **DUFFY, Kevin** [GB/US]; One Franklin Plaza, Philadelphia, PA 19103 (US). **FITCH, Duke** [US/US]; One Franklin Plaza, Philadelphia, PA 19103 (US). **TEDESCO, Rosanna** [IT/US]; One Franklin Plaza, Philadelphia, PA 19103 (US).

(74) Agents: **GARRETT, Arthur, S.** et al.; Finnegan, Henderson, Farabow, Garrett & Dunner, LLP, 901 New York Avenue, NW, Washington, DC 20001-4413 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(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, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

(88) Date of publication of the international search report:
17 August 2006

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CERTAIN CHEMICAL ENTITIES, COMPOSITIONS, AND METHODS

(57) Abstract: Compounds useful for treating cellular proliferative diseases and disorders by modulating the activity of one or more mitotic kinesins are disclosed.

WO 2005/107762 A3