(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
24 September 2015 (24.09.2015)

WIPO | PCT

(10) International Publication Number
WO 2015/143380 A1

(51) International Patent Classification:
*A61K 31/416* (2006.01)

(21) International Application Number:
PCT/US2015/021847

(22) International Filing Date:
20 March 2015 (20.03.2015)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/968,350 20 March 2014 (20.03.2014) US

(71) Applicant: **SAMUMED, LLC** [US/US]; 9381 Judicial Drive, Suite 160, San Diego, California 92121 (US).

(72) Inventors; and

(71) Applicants : **HOOD, John** [US/US]; 5124 Seagrove Court, San Diego, California 92130 (US). **KC, Sunil Kumar** [US/US]; 10504 Clasico Court, San Diego, California 92127 (US). **WALLACE, David Mark** [US/US]; 6448 Peinado Way, San Diego, California 92121 (US). **MITTAPALLI, Gopi Kumar** [IN/US]; 4158 Decoro Street #47, San Diego, California 92122 (US). **HOFILENA, Brian Joseph** [US/US]; 4049 Florida Street #1, San Diego, California 92104 (US). **MAK, Chi Ching** [CN/US]; 12057 World Trade Drive, Unit #3, San Diego, California 92128 (US). **BOLLU, Venkataiah** [IN/US]; 10715 Wexford St. #6, San Diego, California 92131 (US). **EASTMAN, Brian** [CA/US]; 10518 Caminito Pollo, San Diego, California 92126 (US).

(74) Agents: **FOLLETT, Angela D.** et al.; Fish & Richardson P.C., PO Box 1022, Minneapolis, Minnesota 55440-1022 (US).

(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, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, 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, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU,

*[Continued on next page]*

(54) Title: 5-SUBSTITUTED INDAZOLE-3-CARBOXAMIDES AND PREPARATION AND USE THEREOF

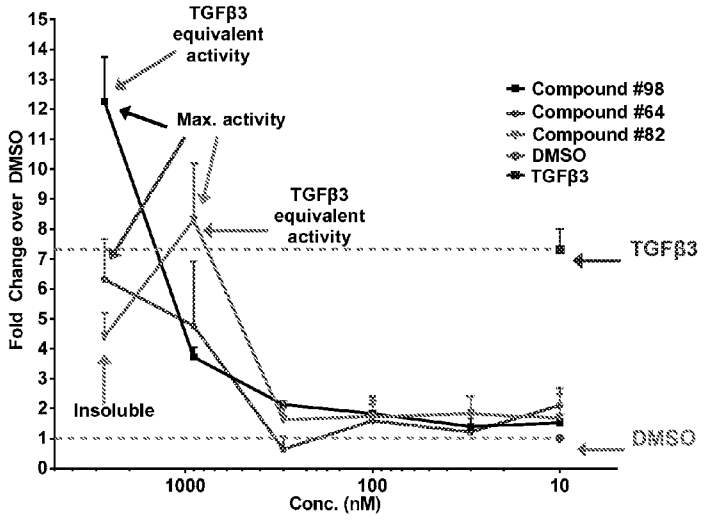



FIG. 1

(57) Abstract: Indazole compounds for treating various diseases and pathologies are disclosed. More particularly, the present disclosure concerns the use of an indazole compound or analogs thereof, in the treatment of disorders characterized by the activation of Wnt pathway signaling (e.g., cancer, abnormal cellular proliferation, angiogenesis, Alzheimer's disease, lung disease, fibrotic disorders, cartilage (chondral) defects, and osteoarthritis), the modulation of cellular events mediated by Wnt pathway signaling, and neurological conditions/disorders/diseases linked to overexpression of DYRK1A.

WO 2015/143380 A1

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))*

— *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))*