



- (51) International Patent Classification:
C07D 403/12 (2006.01)
- (21) International Application Number:
PCT/IB2013/052604
- (22) International Filing Date:
1 April 2013 (01.04.2013)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
61/622,129 10 April 2012 (10.04.2012) US
- (71) Applicant: **PFIZER INC.** [US/US]; 235 East 42nd Street,
New York, New York 10017 (US).
- (72) Inventors: **BHATTACHARYA, Samit Kumar**; 2906 Stearns Hill Road, Waltham, Massachusetts 02451 (US).
CAMERON, Kimberly O'Keefe; 29 Wheeler Street, Unit 306, Cambridge, Massachusetts 02138 (US). **DOWLING, Matthew Scott**; 75 Cobblestone Drive, Groton, Connecticut 06340 (US). **EBNER, David Christopher**; 23 Westminster Street #2, Somerville, Massachusetts 02144 (US). **FERNANDO, Dilinie Prasadhini**; 15 Freedom Way, Unit #46, Niantic, Connecticut 06357 (US). **FILIPSKI, Kevin James**; 89 County Road, Reading, Massachusetts 01867 (US). **KUNG, Daniel Wei-Shung**; 289 Laurelwood Drive, Salem, Connecticut 06420 (US). **LEE, Esther Cheng Yin**; 100 Marion Street, Apartment 35, Brookline, Massachusetts 02446 (US). **SMITH, Aaron Christopher**; 74 Meridian Street, Providence, Rhode Island 02908 (US). **TU, Meihua Mike**; 6 Henley Road, Acton, Massachusetts 01720 (US).

ut 06340 (US). **EBNER, David Christopher**; 23 Westminster Street #2, Somerville, Massachusetts 02144 (US). **FERNANDO, Dilinie Prasadhini**; 15 Freedom Way, Unit #46, Niantic, Connecticut 06357 (US). **FILIPSKI, Kevin James**; 89 County Road, Reading, Massachusetts 01867 (US). **KUNG, Daniel Wei-Shung**; 289 Laurelwood Drive, Salem, Connecticut 06420 (US). **LEE, Esther Cheng Yin**; 100 Marion Street, Apartment 35, Brookline, Massachusetts 02446 (US). **SMITH, Aaron Christopher**; 74 Meridian Street, Providence, Rhode Island 02908 (US). **TU, Meihua Mike**; 6 Henley Road, Acton, Massachusetts 01720 (US).

(74) Agents: **KLEIMAN, Gabriel L.** et al.; Pfizer Inc., 235 East 42nd. Street, New York, New York 10017 (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, IS, JP, KE, KG, KM, KN, KP,

[Continued on next page]

(54) Title: INDOLE AND INDAZOLE COMPOUNDS THAT ACTIVATE AMPK

FIG. 1A

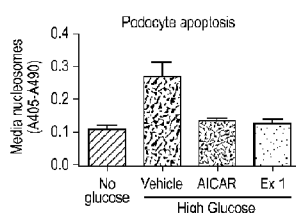


FIG. 1B

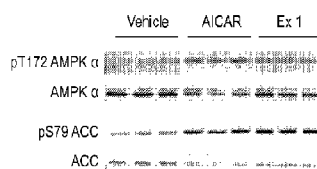


FIG. 1C

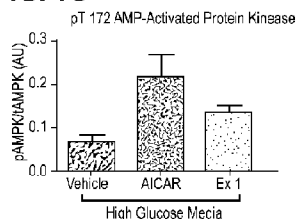
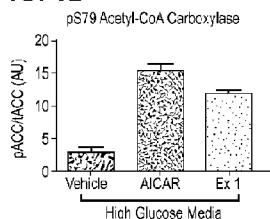
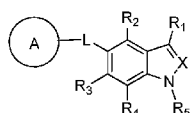


FIG. 1D



(57) Abstract: The present invention relates to indole and indazole compounds of Formula (I) that activate 5' adenosine monophosphate-activated protein kinase (AMPK). The invention also encompasses pharmaceutical compositions containing these compounds and methods for treating or preventing diseases, conditions, or disorders ameliorated by activation of AMPK.



Formula (I)



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, 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, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to the identity of the inventor (Rule 4.17(i))
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

- without international search report and to be republished upon receipt of that report (Rule 48.2(g))