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

REVISED VERSION

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
7 June 2012 (07.06.2012)

WIPO | PCT

(10) International Publication Number
WO 2012/074126 A9

(51) International Patent Classification:
C07D 401/04 (2006.01) *A61K 31/423* (2006.01)
C07D 405/04 (2006.01) *A61K 31/416* (2006.01)
C07D 413/04 (2006.01) *A61P 9/00* (2006.01)
C07D 417/04 (2006.01)

(21) International Application Number:
PCT/JP2011/078010

(22) International Filing Date:
29 November 2011 (29.11.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2010-266097 30 November 2010 (30.11.2010) JP
2011-175330 10 August 2011 (10.08.2011) JP

(71) Applicant *(for all designated States except US)*: **TAKEDA PHARMACEUTICAL COMPANY LIMITED** [JP/JP]; 1-1, Doshomachi 4-chome, Chuo-ku, Osaka-shi, Osaka, 5410045 (JP).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **YASUMA, Tsuneo** [JP/JP]; c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 17-85, Jusohonmachi 2-chome, Yodogawa-ku, Osaka-shi, Osaka, 5320024 (JP). **KAMATA, Makoto** [JP/JP]; c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa, 2510012 (JP). **YAMASHITA, Tohru** [JP/JP]; c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa, 2510012 (JP). **HIROSE, Hideki** [JP/JP]; c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa, 2510012 (JP). **MURAKAMI, Masataka** [JP/JP]; c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa, 2510012 (JP). **KINA, Asato** [JP/JP]; c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa, 2510012 (JP). **YONEMORI, Kazuko** [JP/JP]; c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa, 2510012 (JP). **MIZOJIRI, Ryo** [JP/JP]; c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa, 2510012 (JP). **FUJIMORI, Ikuo** [JP/US]; c/o Takeda San Diego, Inc., 10410 Science Center Drive, San Diego, California, 92121 (US). **FUJIMOTO, Takuya** [JP/JP]; c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa, 2510012 (JP). **IKEDA, Zenichi** [JP/JP]; c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa, 2510012 (JP).

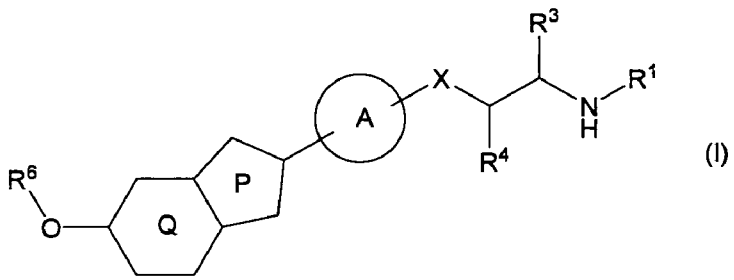
(74) Agent: **TAKASHIMA, Hajime**; Meiji Yasuda Seimei Osaka Midosuji Bldg., 1-1, Fushimimachi 4-chome, Chuo-ku, Osaka-shi, Osaka, 5410044 (JP).

(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, 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, 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, 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, MD, 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,

[Continued on next page]

(54) Title: BICYCLIC COMPOUND



(I)

(57) Abstract: The present invention provides a compound having an ACC inhibitory action, which is useful as an agent for the prophylaxis or treatment of obesity, diabetes and the like, and having superior efficacy. The present invention relates to a compound represented by the formula (I): wherein each symbol is as defined in the specification, or a salt thereof.

WO 2012/074126 A9

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).

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))*

— *with sequence listing part of description (Rule 5.2(a))*

(88) Date of publication of the revised international search report:

22 November 2012

(15) Information about Correction:
see Notice of 22 November 2012