



(51) International Patent Classification:

A61K 31/4184 (2006.01) *A61K 45/06* (2006.01)
A61K 31/437 (2006.01) *A61P 35/00* (2006.01)
A61K 31/5377 (2006.01)

(21) International Application Number:

PCT/EP2012/068072

(22) International Filing Date:

14 September 2012 (14.09.2012)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

11306172.5 16 September 2011 (16.09.2011) EP

(71) Applicant (for all designated States except US): **SANOFI**
[FR/FR]; 54, rue La Boétie, F-75008 Paris (FR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **GARCIA-ECHEVERRIA, Carlos** [ES/FR]; Sanofi Patent Department 54, rue La Boétie, F-75008 Paris (FR). **VINCENT, Loïc** [FR/FR]; Sanofi Patent Department 54, rue La Boétie, F-75008 Paris (FR). **VIRONE-ODDOS, Angela** [FR/FR]; Sanofi Patent Department 54, rue La Boétie, F-75008 Paris (FR).

(74) Agents: **DOMENEGO, Bertrand** et al.; Cabinet Lavoix,
2, place d'Estienne d'Orves, F-75009 Paris (FR).

(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, 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).

Published:

— with international search report (Art. 21(3))

(54) Title: COMPOSITIONS AND METHODS FOR TREATING CANCER USING PI3K BETA INHIBITOR AND MAPK PATHWAY INHIBITOR, INCLUDING MEK AND RAF INHIBITORS

(57) Abstract: The present invention relates to compositions comprising at least one MAPK pathway inhibitor including MEK and RAF inhibitors and at least one PI3K β inhibitor, and also to uses thereof for the treatment of cancer.

