

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
13 February 2025 (13.02.2025)



(10) International Publication Number
WO 2025/031923 A1

(51) International Patent Classification:

C07D 487/04 (2006.01) A61P 35/00 (2006.01)
A61K 47/68 (2017.01) A61K 31/4985 (2006.01)
C07K 16/18 (2006.01)

RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS,
ZA, ZM, ZW.

(21) International Application Number:

PCT/EP2024/071774

(22) International Filing Date:

01 August 2024 (01.08.2024)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

23306335.3 04 August 2023 (04.08.2023) EP

(71) Applicant: SANOFI [FR/FR]; 46 avenue de la Grande Armée, 75017 PARIS (FR).

(72) Inventors: BRUN, Marie-Priscille; c/o Sanofi, Patent Department, 46 avenue de la Grande Armée, 75017 PARIS (FR). ZHANG, Jidong; c/o Sanofi, Patent Department, 46 avenue de la Grande Armée, 75017 PARIS (FR). FERRIER BERTHELOT, Alexandra; c/o Sanofi, Patent Department, 46 avenue de la Grande Armée, 75017 PARIS (FR). DECARY, Stéphanie; c/o Sanofi, Patent Department, 46 avenue de la Grande Armée, 75017 PARIS (FR). TROMBE, Marc; c/o Sanofi, Patent Department, 46 avenue de la Grande Armée, 75017 PARIS (FR). LAHOUTE, Charlotte; c/o Sanofi, Patent Department, 46 avenue de la Grande Armée, 75017 PARIS (FR). LARGET, Ronan; c/o Sanofi, Patent Department, 46 avenue de la Grande Armée, 75017 PARIS (FR).

(74) Agent: CABINET NONY; 11 rue Saint-Georges, 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, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MU, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO,

(84) Designated States (unless otherwise indicated, for every kind of regional protection available):

ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, SD, SL, ST, 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, ME, 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))
- with sequence listing part of description (Rule 5.2(a))
- in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE

(54) Title: IMIDAZO[4,5-D]PYRIDAZINE COMPOUNDS AND CONJUGATES THEREOF, THEIR PREPARATION, AND THEIR THERAPEUTIC APPLICATIONS

(57) Abstract: The present invention relates to a compound of formula (I) A-L1-RCG1 (I) wherein A is of formula (A), R₁ is H, an optionally substituted alkyl, alkenyl, alkynyl, R₂ is halogen, alkyl, alkenyl, alkynyl, alkylthio, alkylthioalkyl, alkyl-S(O)-, alkyl-S(O)₂-; alkyl-S(O)-alkyl-, alkyl-S(O)₂-alkyl-, alkoxy, alkoxyalkyl, haloalkoxyalkyl, cycloalkyl-O-alkyl, alkyl-NH- alkyl, (alkyl)₂-N-alkyl, alkyl-NH; and (alkyl)₂N; R₃ is deuterium, H, alkyl, alkenyl, alkynyl, alkylthio, -OR₆, -NR₇R₈, heterocycloalkyl, heteroaryl, aryl, cycloalkyl; L1 is a linker, RCG₁ is a reactive chemical group. The present invention also relates to a compound of formula A- L1-G-BA (II) wherein G is the product of reaction between RCG₁ and a reactive group RCG₂ and BA is a binding agent, a pharmaceutical composition comprising it and its therapeutic uses, for instance for treating cancer.



WO 2025/031923 A1