

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
27 February 2025 (27.02.2025)



(10) International Publication Number
WO 2025/040797 A1

(51) International Patent Classification:

C07K 14/54 (2006.01) C07K 14/55 (2006.01)
A61K 38/00 (2006.01)

(21) International Application Number:

PCT/EP2024/073705

(22) International Filing Date:

23 August 2024 (23.08.2024)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

23193068,6 23 August 2023 (23.08.2023) EP

(71) Applicant: **DEPTH CHARGE LTD** [IE/IE]; 1 Castlewood Avenue / Rathmines, Dublin 6, D06 H685 (IE).

(72) Inventors: **FINLAY, William JJ**; c/o DEPTH CHARGE LTD, 1 Castlewood Avenue / Rathmines, Dublin 6, D06 H685 (IE). **DE SMEDT, Thibaut**; c/o DEPTH CHARGE LTD, 1 Castlewood Avenue / Rathmines, Dublin 6, D06 H685 (IE). **TOWNSEND, Sue**; c/o DEPTH CHARGE LTD, 1 Castlewood Avenue / Rathmines, Dublin 6, D06 H685 (IE).

(74) Agent: **ICOSA**; 83 avenue Denfert-Rochereau, 75014 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, 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.

(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).

Declarations under Rule 4.17:

— of inventorship (Rule 4.17(iv))

(54) Title: INTERLEUKIN-2 VARIANT PROTEINS THAT FACILITATE COVALENT CHEMICAL CONJUGATION AND USES THEREOF

(57) Abstract: The present invention relates to mutational variants of the IL-2 protein that facilitate chemical conjugation and their potential use as treatments for cancer or inflammatory disease.

WO 2025/040797 A1