

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

(19) World Intellectual Property  
Organization  
International Bureau

(43) International Publication Date  
10 April 2025 (10.04.2025)



(10) International Publication Number  
**WO 2025/076131 A1**

(51) International Patent Classification:

C07K 16/22 (2006.01) A61K 39/395 (2006.01)  
A61K 39/00 (2006.01) A61P 27/02 (2006.01)

(21) International Application Number:

PCT/US2024/049655

(22) International Filing Date:

02 October 2024 (02.10.2024)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

|            |                               |    |
|------------|-------------------------------|----|
| 63/587,623 | 03 October 2023 (03.10.2023)  | US |
| 63/608,015 | 08 December 2023 (08.12.2023) | US |
| 63/642,534 | 03 May 2024 (03.05.2024)      | US |
| 63/667,432 | 03 July 2024 (03.07.2024)     | US |

(71) Applicant: **REVOPSIS THERAPEUTICS, INC.**  
[US/US]; 4109 Chandlerwood Road, Springfield, IL 62711 (US).

(72) Inventors: **BHANDARI, Ramanath**; 4109 Chandlerwood Road, Springfield, IL 62711 (US). **XU, Li**; 4109 Chandlerwood Road, Springfield, IL 62711 (US). **BHATT, Ramesh**; 4109 Chandlerwood Road, Springfield, IL 62711 (US). **PALANKI, Ram, Prashanth**; 4109 Chandlerwood Road, Springfield, IL 62711 (US). **KURTZMAN, Aaron**; 4109 Chandlerwood Road, Springfield, IL 62711 (US).

(74) Agent: **WHEELER, Matthew, C.** et al.; Wilson Sonsini Goodrich & Rosati, 650 Page Mill Road, Palo Alto, CA 94304 (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, 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,

(54) Title: COMPOSTIONS OF MULTISPECIFIC ANTIGEN BINDING POLYPEPTIDES AND METHODS OF USE

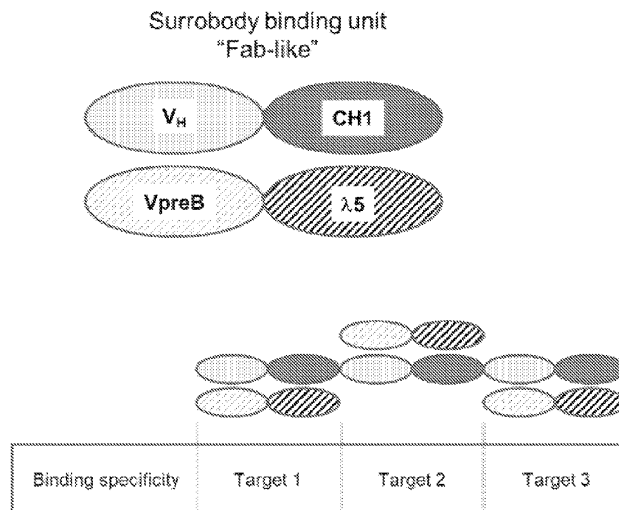


FIG. 1

(57) Abstract: Described herein are multispecific antigen binding polypeptides comprising at least three antigen binding moieties, wherein each of the three antigen binding moieties is paired to a universal light chain polypeptide. Also described herein are multispecific antigen binding polypeptide comprising a first antigen binding moiety and a second antigen binding moiety, wherein a C terminus of the CH1 of the first antigen binding moiety is coupled to an N-terminus of the heavy chain variable region of the second antigen binding moiety.

[Continued on next page]

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:**

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *of inventorship (Rule 4.17(iv))*

**Published:**

- *with international search report (Art. 21(3))*