



(51) International Patent Classification:

A61K 31/485 (2006.01) A61K 31/33 (2006.01)
A61K 31/47 (2006.01)

(21) International Application Number:

PCT/US2024/033090

(22) International Filing Date:

07 June 2024 (07.06.2024)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/507,014	08 June 2023 (08.06.2023)	US
63/519,746	15 August 2023 (15.08.2023)	US
63/586,952	29 September 2023 (29.09.2023)	US
63/613,647	21 December 2023 (21.12.2023)	US
63/566,038	15 March 2024 (15.03.2024)	US
63/639,457	26 April 2024 (26.04.2024)	US

(71) Applicant: NIMBUS WADJET, INC. [US/US]; 22 Boston Wharf Road, 9th Floor, Boston, Massachusetts 02210 (US).

(72) Inventors: LI, Derun; c/o Nimbus Wadjet, Inc., 22 Boston Wharf Road, 9th Floor, Boston, Massachusetts 02210 (US). WEST, Angela V.; 18 Hunters Run, Franklin, Massachusetts 02038 (US). CARAVELLA, Justin; 121 Sciarappa St #3, Cambridge, Massachusetts 02141 (US). GENUNG, Nathan E.; c/o Nimbus Wadjet, Inc., 22 Boston Wharf Road, 9th Floor, Boston, Massachusetts 02210 (US). BARTELS, Florian; Pöwiesiner Weg 10d, 13581 Berlin (DE). DOW, Robert Lee; 234 Shore Avenue, Groton, Connecticut 06340 (US). LEIT DE MORADEI, Silvana Marcel; 74 Muller Road, Burlington, Massachusetts 01803 (US). SITNIKOV, Nikolay; c/o Nuvisan ICB GmbH, Muellerstr. 178, 13353 Berlin (DE).

(74) Agent: DIEZ, Peter S. et al.; c/o Dechert LLP, One International Place, 40th Floor, 100 Oliver Street, Boston, Massachusetts 02110-2605 (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, 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).

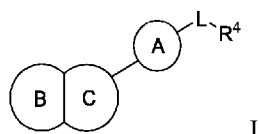
Published:

- with international search report (Art. 21(3))
- with sequence listing part of description (Rule 5.2(a))

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

30 January 2025 (30.01.2025)

(54) Title: WRN INHIBITORS



(57) Abstract: The present disclosure is directed to compounds of Formula I: (I) and pharmaceutically acceptable salts thereof, and compositions thereof, as well as methods of treatment of cancers such as those involving WRN protein.



INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 24/33090

A. CLASSIFICATION OF SUBJECT MATTER
 IPC - INV. A61K 31/485, A61K 31/47 (2024.01)
 ADD. A61K 31/33 (2024.01)

CPC - INV. A61K 31/485, A61K 31/47

ADD. A61K 31/33

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 See Search History document

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
 See Search History document

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 See Search History document

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2021/0163423 A1 (NEUPHARMA, INC.) 03 June 2021 (03.06.2021) para [0005];[0006];[0008];[0012]	1-12, 28
A	US 2006/0131761 A1 (CHAUHAN ET AL.) 22 June 2006 (22.06.2006) para [0006];[0008];[0010]-[0011]	1-12, 28
A	US2005/0234091 A1 (REGAN ET AL.) 20 October 2005 (20.10.2005)pg.6, table	1-12, 28
A	WO2021/178920 A1 (C4 THERAPEUTICS, INC.) 10 September 2021 (10.09.2021) pg. 135	1-12, 28

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:

“A” document defining the general state of the art which is not considered to be of particular relevance

“D” document cited by the applicant in the international application

“E” earlier application or patent but published on or after the international filing date

“L” document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

“O” document referring to an oral disclosure, use, exhibition or other means

“P” document published prior to the international filing date but later than the priority date claimed

“T” later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

“X” document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

“Y” document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

“&” document member of the same patent family

Date of the actual completion of the international search

02 August 2024 (02.08.2024)

Date of mailing of the international search report

SEP 06 2024

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US, Commissioner for Patents
 P.O. Box 1450, Alexandria, Virginia 22313-1450
 Facsimile No. 571-273-8300

Authorized officer

Kari Rodriguez

Telephone No. PCT Helpdesk: 571-272-4300

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 24/33090

Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.c of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of a sequence listing:
 - a. forming part of the international application as filed.
 - b. furnished subsequent to the international filing date for the purposes of international search (Rule 13ter.1(a)),
 accompanied by a statement to the effect that the sequence listing does not go beyond the disclosure in the international application as filed.
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, this report has been established to the extent that a meaningful search could be carried out without a WIPO Standard ST.26 compliant sequence listing.
3. Additional comments:

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 24/33090

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.: 13-27, 29-35
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.