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March 3, 2021

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Via Federal Express: Tracking No. 7843 1644 4661

Department of Intellectual Property
And Technology Transfer
ACADEMIA SINICA
128 Sec. 2, Academia Road
Nankang, Taipei 11529
TAIWAN (T: 886-2-2787-2587)

Re: Letters Patent
U.S. Patent No. 10,765,681
U.S. Patent Application No. 16/075,202 filed August 3, 2018
International Application No. PCT/US2017/016453 filed February 3, 2016
Title: Purine Compounds Possessing Anticancer Activity
Inventors: Wong, et al.
Our Ref: 103352-632893-70075US01
Your Ref: 28A-1041220

Dear Sir:

We are pleased to enclose the original Letters Patent, U.S. Patent No. 10,765,681 issued on September 8, 2020.

Please be advised that maintenance fees will be due as follows:

1st maintenance fee at 3.5 years: March 8, 2024
2nd maintenance fee at 7.5 years: March 8, 2028
3rd maintenance fee at 11.5 years: March 8, 2032

We understand Academia Sinica will handle the maintenance fees per your email instructions of March 2, 2021.

It has been our pleasure working with you on this application to issuance.



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Polsinelli PC, Polsinelli LLP in California



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Should you have any questions regarding the foregoing, please do not hesitate to contact us.

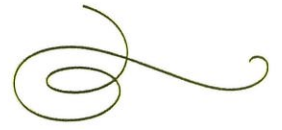
Best regards,

/Ron Galant, Ph.D./

Ron Galant, Ph.D.

RG:cmf
enc.

*United
States
of
America*



To Promote the Progress

of Science and Useful Arts

The Director

of the United States Patent and Trademark Office has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this United States

Patent

grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America, and if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States of America, products made by that process, for the term set forth in 35 U.S.C. 154(a)(2) or (c)(1), subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b). See the Maintenance Fee Notice on the inside of the cover.

Ander Lane

DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE



US010765681B2

(12) **United States Patent**
Wong et al.

(10) **Patent No.: US 10,765,681 B2**
(45) **Date of Patent: Sep. 8, 2020**

(54) **PURINE COMPOUNDS POSSESSING
ANTICANCER ACTIVITY**

(71) Applicants: **Academia Sinica, Taipei (TW);
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(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

(21) Appl. No.: **16/075,202**

(22) PCT Filed: **Feb. 3, 2017**

(86) PCT No.: **PCT/US2017/016453**

§ 371 (c)(1),
(2) Date: **Aug. 3, 2018**

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PCT Pub. Date: **Aug. 10, 2017**

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Related U.S. Application Data

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5, 2016.

(51) **Int. Cl.**
C07D 473/00 (2006.01)
A61K 31/522 (2006.01)
A61K 45/06 (2006.01)
A61K 31/337 (2006.01)
A61K 31/52 (2006.01)
A61K 31/506 (2006.01)
A61K 31/502 (2006.01)
A61K 31/167 (2006.01)
A61K 31/454 (2006.01)
A61K 38/05 (2006.01)
A61K 31/517 (2006.01)
A61K 31/4025 (2006.01)
A61K 31/5377 (2006.01)
A61K 31/69 (2006.01)

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(52) **U.S. Cl.**
CPC **A61K 31/522** (2013.01); **A61K 31/167**
(2013.01); **A61K 31/337** (2013.01); **A61K**
31/4025 (2013.01); **A61K 31/44** (2013.01);
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31/517 (2013.01); **A61K 31/52** (2013.01);
A61K 31/5377 (2013.01); **A61K 31/69**
(2013.01); **A61K 35/00** (2013.01); **A61K 38/05**
(2013.01); **A61K 45/06** (2013.01); **C07D**
473/00 (2013.01); **A61K 2300/00** (2013.01)

(58) **Field of Classification Search**
CPC **C07D 473/00**
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

9,206,164 B2 * 12/2015 Martyres **A61K 31/415**
2012/0071476 A1 3/2012 Nakayama et al.
(Continued)

FOREIGN PATENT DOCUMENTS

WO WO-2008051494 A1 * 5/2008 **C07D 473/00**
WO WO 2015/055071 4/2015

OTHER PUBLICATIONS

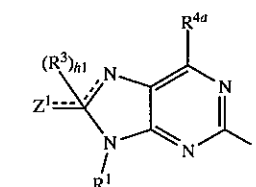
M-R Huang et al., 181 European Journal of Medicinal Chemistry
(2019) (Year: 2019).*

(Continued)

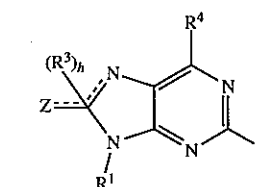
Primary Examiner — Alexander R Pagano
(74) *Attorney, Agent, or Firm* — Polsinelli PC

(57) **ABSTRACT**

The present disclosure provides compounds of Formulas (I') and (I), and pharmaceutically acceptable salts thereof. The compounds described herein may be useful in treating and/or preventing proliferative diseases (e.g., cancer). Also provided in the present disclosure are pharmaceutical compositions, kits, and uses thereof for treating proliferative diseases.



(I')



(I)

19 Claims, 1 Drawing Sheet

Maintenance Fee Notice

If the application for this patent was filed on or after December 12, 1980, maintenance fees are due three years and six months, seven years and six months, and eleven years and six months after the date of this grant, or within a grace period of six months thereafter upon payment of a surcharge as provided by law. The amount, number and timing of the maintenance fees required may be changed by law or regulation. Unless payment of the applicable maintenance fee is received in the United States Patent and Trademark Office on or before the date the fee is due or within a grace period of six months thereafter, the patent will expire as of the end of such grace period.

Patent Term Notice

If the application for this patent was filed on or after June 8, 1995, the term of this patent begins on the date on which this patent issues and ends twenty years from the filing date of the application or, if the application contains a specific reference to an earlier filed application or applications under 35 U.S.C. 120, 121, 365(c), or 386(c), twenty years from the filing date of the earliest such application ("the twenty-year term"), subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b), and any extension as provided by 35 U.S.C. 154(b) or 156 or any disclaimer under 35 U.S.C. 253.

If this application was filed prior to June 8, 1995, the term of this patent begins on the date on which this patent issues and ends on the later of seventeen years from the date of the grant of this patent or the twenty-year term set forth above for patents resulting from applications filed on or after June 8, 1995, subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b) and any extension as provided by 35 U.S.C. 156 or any disclaimer under 35 U.S.C. 253.