

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

(19) World Intellectual Property

Organization

International Bureau

(43) International Publication Date

31 October 2019 (31.10.2019)



(10) International Publication Number

WO 2019/209232 A3

(51) International Patent Classification:

A61K 31/37 (2006.01) A61K 45/06 (2006.01)
A61P 35/00 (2006.01)

(21) International Application Number:

PCT/TR2019/050284

(22) International Filing Date:

26 April 2019 (26.04.2019)

(25) Filing Language:

Turkish

(26) Publication Language:

English

(30) Priority Data:

2018/05902 26 April 2018 (26.04.2018) TR

(71) Applicants: T.C. İSTANBUL MEDİPOL

ÜNİVERSİTESİ [TR/TR]; Kavacik Mah. Ekinciler Cd.
No:19, Istanbul (TR). T.C. İSTANBUL ÜNİVERSİTESİ
[TR/TR]; Istanbul Universitesi Merkez Kampüsü Beyazit,
Fatih/Istanbul (TR).

(72) Inventors: TOSUN, Fatma; Istanbul Medipol Universitesi

Eczacılık Fakültesi Farmakognozi Ana Bilim Dalı, Beykoz/
Istanbul (TR). MİSKİ, Mahmud; Istanbul Universitesi
Eczacılık Fakültesi Farmakognozi Ana Bilim Dalı, Istanbul
(TR).

(74) Agent: SIMSEK, Meliha Merve; Incirli Cad. Kibris Sok.

Akkul Apt., No:5 D:10, 34145 Bakirkoy/Istanbul (TR).

(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, CZ, DE, DJ, DK, DM, DO,
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,
HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP,
KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME,
MG, MK, MN, 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, SM, ST, SV, SY, TH, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every

kind of regional protection available): ARIPO (BW, GH,
GM, KE, LR, LS, MW, MZ, NA, RW, 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, 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))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))
- in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE

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

30 January 2020 (30.01.2020)

(54) Title: THE USE OF TERPENIC COUMARINE DERIVATIVE MOLECULES IN THE TREATMENT OF CANCER DISEASE

(57) Abstract: The present invention relates to compounds suitable for use in the treatment of cancer disease and to pharmaceutical compositions comprising said compounds.



WO 2019/209232 A3

INTERNATIONAL SEARCH REPORT

International application No
PCT/TR2019/050284

A. CLASSIFICATION OF SUBJECT MATTER INV. A61K31/37 A61P35/00 A61K45/06 ADD.		
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) A61P A61K		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EPO-Internal, BIOSIS, CHEM ABS Data, EMBASE, WPI Data		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	ANNA GLISZCZYNSKA ET AL: "Sesquiterpene coumarins", PHYTOCHEMISTRY REVIEWS, KLUWER ACADEMIC PUBLISHERS, DO, vol. 11, no. 1, 18 November 2011 (2011-11-18), pages 77-96, XP035015555, ISSN: 1572-980X, DOI: 10.1007/S11101-011-9220-6 page 80, left-hand column page 81, right-hand column, paragraph 3 page 82, left-hand column, paragraph 2 - right-hand column, paragraph 1 page 83, right-hand column page 86, right-hand column, last paragraph - page 87, left-hand column, paragraph 1 compounds 18, 22, 35, 47 ----- -/--	1,4-7
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
* Special categories of cited documents :		
<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>		<p>"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</p> <p>"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</p> <p>"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</p> <p>"&" document member of the same patent family</p>
Date of the actual completion of the international search 13 December 2019		Date of mailing of the international search report 08/01/2020
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016		Authorized officer Gradassi, Giulia

INTERNATIONAL SEARCH REPORT

International application No
PCT/TR2019/050284

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	LI GUANGZHI ET AL: "Sesquiterpene coumarins from seeds of <i>Ferula sinkiangensis</i> ", FITOTERAPIA, IDB HOLDING, MILAN, IT, vol. 103, 27 March 2015 (2015-03-27), pages 222-226, XP029187988, ISSN: 0367-326X, DOI: 10.1016/J.FITOTE.2015.03.022 compound 5, table 2, page 224 right-hand column paragraph 2 -----	1,4-7
X	CN 103 585 209 A (JINAN XINGYI MED TECH CO LTD) 19 February 2014 (2014-02-19) claims; examples -----	1-8
X	CN 103 585 211 A (JINAN XINGYI MED TECH CO LTD) 19 February 2014 (2014-02-19) claims; examples -----	1-3,5-8
X,P	FATMA TOSUN ET AL: "Anatolicin, a Highly Potent and Selective Cytotoxic Sesquiterpene Coumarin from the Root Extract of <i>Heptaptera anatolica</i> ", MOLECULES, vol. 24, no. 6, 23 March 2019 (2019-03-23), page 1153, XP055652508, DOI: 10.3390/molecules24061153 table 3 -----	1-7

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/TR2019/050284

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
CN 103585209	A	19-02-2014	NONE

CN 103585211	A	19-02-2014	NONE
