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- (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, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, 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.
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**Declarations under Rule 4.17:**

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

**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))

- (88) **Date of publication of the international search report:**  
1 December 2016

(54) **Title:** NOVEL COMPOUNDS

(57) **Abstract:** The present invention relates to compounds, compositions, combinations and medicaments containing said compounds and processes for their preparation. The invention also relates to the use of said compounds, combinations, compositions and medicaments, for example as inhibitors of the activity of RIP2 kinase, including degrading RIP2 kinase, the treatment of diseases and conditions mediated by the RIP2 kinase, in particular for the treatment of inflammatory diseases or conditions.



INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 16/28332

**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.: 5-6 and 8-18  
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.

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 16/28332

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC(8) - C07D 239/86; C07D 403/12; C07D 207/09 (2016.01) CPC - C07D239/86; C07D403/12; C07D207/09; A61K38/06 According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) IPC(8): C07D 239/86; C07D 403/12; C07D 207/09 (2016.01) CPC: C07D239/86; C07D403/12; C07D207/09; A61K38/06 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC: 514/266.2; 544/293; 514/18.9; 530/331 Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) PatBase, Google Scholar, PubWEST PROTAC, Receptor Interacting Protein-2 kinase, RIP2 kinase inhibitor, 4-aminoquinazoline, IAP binding, tripeptide, linker, targeted ubiquitination		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2014/043437 A1 (GLAXOSMITHKLINE LLC.) 20 March 2014 (20.03.2014) pg 39, Example 1; pg 57, ln 10-14	1-4, 7
A	US 2010/0273812 A1 (WANG et al.) 28 October 2010 (28.10.2010) para [0093], [0162]	1-4, 7
A	US 2006/0128632 A1 (SHARMA et al.) 15 June 2006 (15.06.2006) para [0001], [0071]	1-4, 7
A	US 2014/0356322 A1 (CREWS et al.) 04 December 2014 (04.12.2014) para [0003], [0135], Fig 6 to Fig 12	1-4, 7
A	BUCKLEY et al. 'Small Molecule Control of Intracellular Protein Levels Through Modulation of the Ubiquitin Proteasome System', Angew Chem Int Ed Engl. 2014, Vol.53(9), pp 2312-2330. pg 29, Fig 6; pg 35, Fig 11	1-4, 7
A	PENG et al. 'Bivalent Smac Mimetics with a Diazabicyclic Core as Highly Potent Antagonists of XIAP and cIAP1/2 and Novel Anticancer Agents', Journal of Medicinal Chemistry, 2012, Vol.55, pages 106-114 [Published Online: December 2011]; pg 107, Fig 1; Table 1; pg 108, Fig 3	1-4, 7
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/>		
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "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 26 September 2016		Date of mailing of the international search report 24 OCT 2016
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: Lee W. Young PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774