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SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 20 88 35 98

Classification of the application (IPC):
A61K 9/00*, *A61K 9/08*, *A61K 9/20*, *A61K 47/10*, *A61K 47/12*, *A61K 31/352*, *A61K 31/485*, *A61P 29/00

Technical fields searched (IPC):
A61K, A61P

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X Y	US 2004147581 A1 (TAYLOR DUNCAN P [US] ET AL) 29 July 2004 (2004-07-29) * page 5 - page 10; claims 1,2,9,12,22-26; examples 757-840; tables 1,5 * * page 63 - page 65 *	1-15 1-15
Y	**ZARGHI AFSHIN ET AL**: "Design, Synthesis, and Biological Evaluation of New 2-Phenyl-4H-chromen-4-one Derivatives as Selective Cyclooxygenase-2 Inhibitors" *SCIENTIA PHARMACEUTICA* Austria 01 January 2015 (2015-01-01), vol. 83, no. 1, pages 15-26 URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4727773/pdf/SciPharm-83-15.pdf , ISSN: 0036-8709, XP055932699 * page 19; table 1 *	1, 3, 13
X Y	US 2019142789 A1 (HEPLER DOUGLAS I [US] ET AL) 16 May 2019 (2019-05-16) * paragraph [0004] - paragraph [0029]; claims; figures 1,2 * * paragraphs [0052], [0053]; examples *	1-15 1-15
X Y	US 2004204471 A1 (SEIBERT KAREN [US]) 14 October 2004 (2004-10-14) * page 6, paragraph 0076 - page 12; claims 1,7,8,10,12-15; examples; table 1 *	1-15 1-15
X Y	US 2005070543 A1 (STEPHENSON DIANE T [US]) 31 March 2005 (2005-03-31) * page 6, paragraph 0010 - page 9, paragraph 0018; claims 1-7; examples; tables IX,3X * * paragraph [00288] *	1-15 1-15
X Y	US 2014256804 A1 (IWATA YASUHIRO [JP] ET AL) 11 September 2014 (2014-09-11) * paragraphs [0086], [0102] - paragraph [0122]; claims *	1-15 1-15

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search	Date of completion of the search	Examiner
The Hague	26 July 2023	Härtinger, Stefan

CATEGORY OF CITED DOCUMENTS

X: particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A: technological background
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EP 4 041 245 A4

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LACK OF UNITIY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 5, 6(completely); 1-4, 7-15(all partially)
2H-chromen COX-2 inhibitor of Formula III with X = O

2. claims: 1-4, 7-15(all partially)
2H-benzothiopyran COX-2 inhibitor of Formula III with X = S

3. claims: 1-4, 7-15(all partially)
dihydroquinoline COX-2 inhibitor of Formula III with X = N

None of the further search fees have been paid within the fixed time limit. The present (supplementary) European search report has been drawn up for those parts of the European patent application which relate to the first mentioned in the claims, namely claims: 5, 6(completely); 1-4, 7-15(partially)

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search	Date of completion of the search	Examiner
The Hague	26 July 2023	Härtinger, Stefan

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& : member of the same patent family, corresponding document

EP 4 041 245 A4

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ANNEX TO SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 20 88 35 98

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2004147581 A1	29-07-2004	AU 2003295431 A1	15-06-2004
		US 2004147581 A1	29-07-2004
		WO 2004045509 A2	03-06-2004
US 2019142789 A1	16-05-2019	AU 2018313933 A1	12-03-2020
		CA 3072335 A1	14-02-2019
		EP 3664800 A1	17-06-2020
		JP 2020530462 A	22-10-2020
		JP 2023134739 A	27-09-2023
		US 2019142789 A1	16-05-2019
		US 2023285354 A1	14-09-2023
		WO 2019032910 A1	14-02-2019
US 2004204471 A1	14-10-2004	TW 200507833 A	01-03-2005
		US 2004204471 A1	14-10-2004
		WO 2004093870 A1	04-11-2004
US 2005070543 A1	31-03-2005	US 2005070543 A1	31-03-2005
		WO 2005016249 A2	24-02-2005
US 2014256804 A1	11-09-2014	BR 112014007568 A2	18-04-2017
		CA 2852618 A1	25-04-2013
		CN 103889414 A	25-06-2014
		CN 110292575 A	01-10-2019
		EP 2769718 A1	27-08-2014
		ES 2859676 T3	04-10-2021
		JP 6051466 B2	27-12-2016
		JP WO2013058303 A1	02-04-2015
		KR 20140092316 A	23-07-2014
		RU 2014119946 A	27-11-2015
		TW 201322979 A	16-06-2013
		US 2014256804 A1	11-09-2014
		WO 2013058303 A1	25-04-2013

EP 4 041 245 A4