

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 15-98-PCT	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/HU2016/050042	International filing date (<i>day/month/year</i>) 13 September 2016 (13-09-2016)	(Earliest) Priority Date (<i>day/month/year</i>) 1 September 2015 (01-09-2015)
Applicant LORANTFY, LASZLO		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 5 sheets.

☒

It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the report**

a. With regard to the **language**, the international search was carried out on the basis of:

☒

the international application in the language in which it was filed

☐

a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))

b. ☐

This international search report has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43.6**bis**(a)).

c. ☐

With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐

Certain claims were found unsearchable (See Box No. II)

3. ☐

Unity of invention is lacking (see Box No III)

4. With regard to the **title**,

☒

the text is approved as submitted by the applicant

☐

the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☐

the text is approved as submitted by the applicant

☒

the text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. 2a

☐

as suggested by the applicant

☐

as selected by this Authority, because the applicant failed to suggest a figure

☒

as selected by this Authority, because this figure better characterizes the invention

b. ☐

none of the figures is to be published with the abstract

Box No. IV Text of the abstract (Continuation of item 5 of the first sheet)

The object of the invention relates to an extraction cell for a centrifugal. partition chromatograph, which extraction cell contains an extraction chamber delimited by a cell wall and accommodates the liquid stationary phase, and it has a liquid inlet opening and a liquid outlet opening serving to let in and out the liquid mobile phase to be made to flow through the extraction cell. The essence of the extraction cell is that it contains an extraction chamber established as a tubular body, and a liquid inlet plug that includes a liquid inlet opening and a liquid outlet plug that includes a liquid outlet opening, that can be attached to the extraction chamber. An insert is included in the extraction cell chamber in order to overcome the effects of the Coriolis force on the mobile phase. The diameter of the passages of the insert is chosen dependant on the diameter of the droplets of the mobile phase.

The object of the invention also .relates to a centrifugal partition chromatograph containing such an extraction cell, and a , method for producing such an . extraction cell.

INTERNATIONAL SEARCH REPORT

International application No
PCT/HU2016/050042

A. CLASSIFICATION OF SUBJECT MATTER
INV. G01N30/42 B01D15/18
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)
G01N B01D

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, 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	US 2004/173534 A1 (MARGRAFF RODOLPHE [FR] ET AL) 9 September 2004 (2004-09-09) cited in the application	1-4, 6-10, 12-20
Y	figures 1, 2, 5a, 5b paragraphs [0025], [0052] paragraph [0038] - paragraph [0049] -----	11
Y	US 4 422 941 A (VAUGHAN JR MAURICE H [US] ET AL) 27 December 1983 (1983-12-27)	11
A	column 10, line 5 - line 14; figures 17,26 ----- -/--	10



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

"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

27 January 2017

Date of mailing of the international search report

07/02/2017

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

Dedman, Emma

INTERNATIONAL SEARCH REPORT

International application No

PCT/HU2016/050042

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	RODOLPHE MARGRAFFA ET AL: "Partitron 25, a Multi-Purpose Industrial Centrifugal Partition Chromatograph: Rotor Design and Preliminary Results on Efficiency and Stationary Phase Retention", JOURNAL OF LIQUID CHROMATOGRAPHY AND RELATED TECHNOLOGIES, MONTICELLO, NY, US, vol. 28, no. 12-13, 31 August 2004 (2004-08-31), pages 1893-1902, XP009168822, ISSN: 1082-6076, DOI: 10.1081/JLC-200063539 the whole document -----	1-10, 12-18,21
X	CH 655 577 A5 (TALAMONA A. F.) 30 April 1986 (1986-04-30) the whole document -----	1,3,8, 10,12, 14-17
X	US 3 853 765 A (TANIMURA T ET AL) 10 December 1974 (1974-12-10) the whole document -----	1,3,10, 14-17
X	FR 2 883 770 A1 (KROMATON SARL SARL [FR]) 6 October 2006 (2006-10-06) figures 9-14,17 -----	1-4,10, 14,15
A	MARCHAL L ET AL: "Mass transport and flow regimes in centrifugal partition chromatography", AI CH E JOURNAL, JOHN WILEY & SONS, INC, US, vol. 48, no. 8, 1 August 2002 (2002-08-01), pages 1692-1704, XP002469489, ISSN: 0001-1541, DOI: 10.1002/AIC.690480811 the whole document -----	18-21
A	CN 202 631 489 U (ROESSELET ROBATEL; SHANGHAI CHEMICAL MACHINERY PLANT CO LTD) 26 December 2012 (2012-12-26) the whole document -----	1-21

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/HU2016/050042

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2004173534	A1	09-09-2004	AT 395591 T 15-05-2008
		CN 1756956 A 05-04-2006	
		EP 1599724 A1 30-11-2005	
		FR 2852104 A1 10-09-2004	
		JP 2006519991 A 31-08-2006	
		US 2004173534 A1 09-09-2004	
		WO 2004079363 A1 16-09-2004	
US 4422941	A	27-12-1983	NONE
CH 655577	A5	30-04-1986	NONE
US 3853765	A	10-12-1974	NONE
FR 2883770	A1	06-10-2006	NONE
CN 202631489	U	26-12-2012	NONE