

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference T-10970	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/IB2019/059442	International filing date (<i>day/month/year</i>) 4 November 2019 (04-11-2019)	(Earliest) Priority Date (<i>day/month/year</i>) 28 November 2018 (28-11-2018)
Applicant CHEVRON USA INC.		

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 4 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. 1
 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)

A method is described for automated post-geosteering including receiving a pilot well log and a lateral well log with an initial lateral well path (10); performing automated post-geosteering to generate a corrected well path image; and displaying the corrected well path image (14) on a graphical display. The method may be executed by a computer system.

INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2019/059442

A. CLASSIFICATION OF SUBJECT MATTER
INV. E21B7/04 E21B44/00 E21B47/024
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)
E21B

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	WO 2017/116436 A1 (LANDMARK GRAPHICS CORP [US]) 6 July 2017 (2017-07-06)	1,3-5,7
A	paragraphs [0001], [0059] - [0073], [0084]; figures 1-7	2,6,8
X	US 2017/081953 A1 (BENSON TODD W [US] ET AL) 23 March 2017 (2017-03-23)	1,3-5,7
A	paragraphs [0004], [0061], [0144], [0173], [0178] - [0184]; figures 1, 40	1-8
A	US 10 012 028 B2 (LANDMARK GRAPHICS CORP [US]) 3 July 2018 (2018-07-03)	
	column 8, line 66 - column 10, line 24; figures 1-6	

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

4 December 2019

Date of mailing of the international search report

13/12/2019

Name and mailing address of the ISA/

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2019/059442

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2017116436 A1	06-07-2017	AU 2015419230 A1	07-06-2018
		CA 3005827 A1	06-07-2017
		EP 3397836 A1	07-11-2018
		US 2018334896 A1	22-11-2018
		WO 2017116436 A1	06-07-2017

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		AU 2012394434 A1	30-04-2015
		AU 2017200089 A1	02-02-2017
		BR 112015009680 A2	04-07-2017
		CA 2888037 A1	22-05-2014
		CN 104854555 A	19-08-2015
		EP 2895950 A1	22-07-2015
		NO 2895950 T3	07-07-2018
		RU 2015116535 A	10-01-2017
		SG 11201502922Y A	28-05-2015
		US 2015292266 A1	15-10-2015
WO 2014077799 A1	22-05-2014		
