



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 20 75 18 83

Classification of the application (IPC):
E21B 43/12, F04B 47/08, F04B 53/14, F04B 9/105

Technical fields searched (IPC):
E21B

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X	US 2005109516 A1 (WILSON BROWN L [US] ET AL) 26 May 2005 (2005-05-26)	1-5, 9-12, 14, 15
A	* figures 2-4 *	6-8, 13
A	US 2004241024 A1 (BRADFORD FLOYD JOHN [US]) 02 December 2004 (2004-12-02) * paragraphs [0005], [0008], [0018], [0019], [0020], [0024], [0026], [0029]; figures 1-6 *	1-15
A	US 2006124298 A1 (GEIER HOWARD [CA]) 15 June 2006 (2006-06-15) * paragraphs [0018], [0056], [0058], [0064], [0071], [0077]; figures 1, 3 *	1-15
A	US 4778355 A (HOLLAND JOHN H [US]) 18 October 1988 (1988-10-18) * figure 1 *	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 Munich	Date of completion of the search 23 August 2022	Examiner Georgescu, Mihnea
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CATEGORY OF CITED DOCUMENTS

X: particularly relevant if taken alone	P: intermediate document
Y: particularly relevant if combined with another document of the same category	T: theory or principle underlying the invention
A: technological background	E: earlier patent document, but published on, or after the filing date
O: non-written disclosure	D: document cited in the application
& : member of the same patent family, corresponding document	L: document cited for other reasons

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ANNEX TO SUPPLEMENTARY EUROPEAN SEARCH REPORT

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on 23-08-2022
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			US 2005109516 A1	26-05-2005
US 2004241024	A1	02-12-2004	NONE	
US 2006124298	A1	15-06-2006	CA 2531202 A1	14-06-2006
			US 2006124298 A1	15-06-2006
US 4778355	A	18-10-1988	NONE	