



## SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:  
EP 20 73 88 85

### Classification of the application (IPC):

C25B 1/042, C25B 5/00, C25B 9/015, C25B 9/23, C25B 9/65, C25B 9/75,  
C25B 9/77, C25B 11/02, C25B 11/091, C25B 11/093, C25B 13/07, C01B 3/34,  
H01M 8/0612, B33Y 70/00, B33Y 80/00

### Technical fields searched (IPC):

C25B

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
A	US 2007217995 A1 (MATSUMURA CHI [JP] ET AL) 20 September 2007 (2007-09-20) * the whole document *	1-15
A	US 2013082421 A1 (ALLEMAND ALEXANDRE [FR] ET AL) 04 April 2013 (2013-04-04) * the whole document *	1-15
A	US 2015167186 A1 (HIRATA YOSHIHIRO [JP] ET AL) 18 June 2015 (2015-06-18) * the whole document *	1-15
A	US 2009235587 A1 (HAWKES GRANT L [US] ET AL) 24 September 2009 (2009-09-24) * the whole document *	1-15
A	JP 2004284875 A (NIPPON OIL CORP) 14 October 2004 (2004-10-14) * the whole document *	1-15
X	US 3635812 A (SPACIL HENRY S) 18 January 1972 (1972-01-18) * the whole document *	1-4, 7-13, 15
X	US 6051125 A (PHAM AI-QUOC [US] ET AL) 18 April 2000 (2000-04-18) * the whole document *	1, 9, 11, 12, 15
X	US 2007163889 A1 (KATO TOHRU [JP] ET AL) 19 July 2007 (2007-07-19) * the whole document *	1-8, 11, 13, 15
A	SU 364563 A1 (NO APPLICANT) 28 December 1972 (1972-12-28) * the whole document *	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 06 December 2022	Examiner Ritter, Thomas
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### CATEGORY OF CITED DOCUMENTS

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Application number:  
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### DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X	<b>MARTINEZ-FRIAS J ET AL:</b> "A natural gas-assisted steam electrolyzer for high-efficiency production of hydrogen" <i>INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, ELSEVIER, AMSTERDAM, NL</i> , 01 May 2003 (2003-05-01), vol. 28, no. 5, DOI: 10.1016/S0360-3199(02)00135-0, ISSN: 0360-3199, pages 483-490, XP004411258 * the whole document *	1-4, 7, 8, 13, 15
X	US 2010086824 A1 (HOMEL MICHAEL [US] ET AL) 08 April 2010 (2010-04-08) * the whole document *	1-9, 11, 13-15

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 06 December 2022	Examiner Ritter, Thomas
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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

Application number:  
EP 20 73 88 85

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 06-12-2022  
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2007217995 A1	20-09-2007	DE 112005000402 T5 US 2007217995 A1 WO 2005078159 A1	12-06-2008 20-09-2007 25-08-2005
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