



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 17 75 27 50

Classification of the application (IPC):
C25C 3/06, C25C 3/20

Technical fields searched (IPC):
C25C

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X	US 4786379 A (BARNETT WRAY M [US]) 22 November 1988 (1988-11-22)	1-6, 8-15
Y	* the whole document *	1, 2, 6, 10-15
A		7
Y	US 6136177 A (HUNG OLIVER K [CA]) 24 October 2000 (2000-10-24) * column 2, line 46 - column 5, line 35; claims 1-19; figures 1, 7, 8 *	1, 2, 6, 10-15
X	US 4098666 A (RALSTON RICHARD W) 04 July 1978 (1978-07-04)	1
Y	* claims 1-4; figures 1, 2; example 2 *	1, 2, 6, 10-15
A	CN 202502144 U (YANSHAN UNIVERSITY) 24 October 2012 (2012-10-24) * claims 1-5; figure 1 *	1-15
A	US 2006176175 A1 (EVANS JAMES W [US] ET AL) 10 August 2006 (2006-08-10) * paragraph [0058] - paragraph [0071]; figures 1, 3 * * paragraph [0019] - paragraph [0039]; claims 1-48 *	1-15
A	CA 2834292 A1 (CHINA ALUMINUM INT ENG CORP [CN]) 01 November 2012 (2012-11-01) * claims 1-6 *	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 25 September 2019	Examiner Teppo, Kirsi-Marja
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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 25-09-2019
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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4786379	A	22-11-1988	NONE	
US 6136177	A	24-10-2000	CA 2299260 A1 US 6136177 A	23-08-2000 24-10-2000
US 4098666	A	04-07-1978	NONE	
CN 202502144	U	24-10-2012	NONE	
US 2006176175	A1	10-08-2006	CA 2595781 A1 CN 101175981 A US 2006176175 A1 US 2009065041 A1 WO 2006081154 A2	03-08-2006 07-05-2008 10-08-2006 12-03-2009 03-08-2006
CA 2834292	A1	01-11-2012	CA 2834292 A1 CN 102758219 A WO 2012146059 A1	01-11-2012 31-10-2012 01-11-2012