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SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 21 85 50 35

Classification of the application (IPC):
B21B 1/46, ***B22D 11/124***, ***C22F 3/00***, ***B22D 11/00***, ***B22D 11/22***, ***B22D 11/06***, ***B22D 11/12***, ***C22F 1/04***, *B21B 3/00*

Technical fields searched (IPC):
B22D

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X	US 2002153123 A1 (UNAL ALI [US]) 24 October 2002 (2002-10-24) * abstract * * paragraph [0046] * * paragraph [0056] * * paragraph [0062] *	1, 3-5, 8-12
X	JP 2005111482 A (FURUKAWA SKY KK) 28 April 2005 (2005-04-28) * abstract * * paragraph [0035] * * example 6; table 2 *	1, 2, 4, 6, 7, 13
X	WO 2013133976 A1 (ALCOA INC [US]) 12 September 2013 (2013-09-12) * abstract * * example B; table 6 *	14, 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	Date of completion of the search	Examiner
The Hague	10 August 2023	Rosciano, Fabio

CATEGORY OF CITED DOCUMENTS

X: particularly relevant if taken alone
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E: earlier patent document, but published on, or after the filing date
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L: document cited for other reasons

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ANNEX TO SUPPLEMENTARY EUROPEAN SEARCH REPORT

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2002153123 A1	24-10-2002	AT E431208 T1	15-05-2009
		AU 2002240436 A1	04-09-2002
		EP 1414602 A2	06-05-2004
		ES 2323767 T3	24-07-2009
		JP 4375966 B2	02-12-2009
		JP 2005504635 A	17-02-2005
		KR 20040004533 A	13-01-2004
		PT 1414602 E	05-08-2009
		US 2002153123 A1	24-10-2002
		WO 02066181 A2	29-08-2002
JP 2005111482 A	28-04-2005	JP 4109178 B2	02-07-2008
		JP 2005111482 A	28-04-2005
WO 2013133976 A1	12-09-2013	AR 090278 A1	29-10-2014
		AU 2013202557 A1	26-09-2013
		CN 104284745 A	14-01-2015
		EP 2822717 A1	14-01-2015
		KR 20140132002 A	14-11-2014
		TW 201348471 A	01-12-2013
		US 2014366998 A1	18-12-2014
		WO 2013133976 A1	12-09-2013

EP 4 007 663 A4

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