



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 16 91 50 83

Classification of the application (IPC):

C22C 38/02, C22C 38/04, C22C 38/06, C22C 38/14, C22C 38/00, C22C 38/08, C22C 38/12, C22C 38/16, C22C 38/20, C22C 38/22, C22C 38/24, C22C 38/26, C22C 38/28, C22C 38/44, C22C 38/46, C22C 38/48, C22C 38/50, C21D 9/08, C21D 1/18, C22C 38/58

Technical fields searched (IPC):

C22C, C21D

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X	EP 2837708 A1 (JFE STEEL CORP [JP]) 18 February 2015 (2015-02-18) * tables 1-3 * * claims 1-11 * * paragraphs [0023] - [0096] * * example 1 *	1-4
X	EP 2000555 A1 (SUMITOMO METAL IND [JP]) 10 December 2008 (2008-12-10) * claims 1-10 * * paragraphs [0010] - [0076] * * tables 1-2 *	1-4
A	US 2012031532 A1 (ISHIKAWA HAJIME [JP] ET AL) 09 February 2012 (2012-02-09) * claims 1-4 * * tables 1-3 * * paragraphs [0038] - [0101] *	1-4
A	EP 2902519 A1 (NIPPON STEEL & SUMITOMO METAL CORP [JP]) 05 August 2015 (2015-08-05) * claims 1-5 * * tables 1-3 * * paragraphs [0024] - [0072] *	1-4
A	EP 2933346 A1 (NIPPON STEEL & SUMITOMO METAL CORP [JP]) 21 October 2015 (2015-10-21) * claims 1-6 * * tables 1-6 * * paragraphs [0026] - [0061] *	1-4

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 The Hague	Date of completion of the search 12 February 2020	Examiner Vlassi, Eleni
------------------------------	--	---------------------------

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 |

Disclaimer: this document has been automatically generated using data structured in accordance with WIPO standard ST.36 from the database of search reports of the European Patent Office. For technical reasons, its content and layout may differ from that of the original publication. Only the original published information is legally binding.



ANNEX TO SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 16 91 50 83

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 12-02-2020
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 2837708	A1	18-02-2015	CA 2869879 A1	17-10-2013
			CN 104220622 A	17-12-2014
			EP 2837708 A1	18-02-2015
			JP 5534111 B2	25-06-2014
			JP WO2013153819 A1	17-12-2015
			KR 20140138942 A	04-12-2014
			RU 2014145519 A	10-06-2016
			US 2015083266 A1	26-03-2015
			WO 2013153819 A1	17-10-2013
EP 2000555	A1	10-12-2008	AR 067257 A1	07-10-2009
			AU 2008207591 A1	16-10-2008
			BR PI0802615 A2	30-08-2011
			CA 2638681 A1	30-09-2008
			CN 101541998 A	23-09-2009
			EA 200870306 A1	27-02-2009
			EP 2000555 A1	10-12-2008
			JP 4254909 B2	15-04-2009
			JP WO2008123025 A1	15-07-2010
			MY 145700 A	30-03-2012
			US 2009032150 A1	05-02-2009
			WO 2008123025 A1	16-10-2008
US 2012031532	A1	09-02-2012	BR PI0924925 A2	07-07-2015
			CA 2756409 A1	05-05-2011
			CN 102119236 A	06-07-2011
			EP 2397570 A1	21-12-2011
			JP 4572002 B1	27-10-2010
			JP WO2011052095 A1	14-03-2013
			KR 20110065418 A	15-06-2011
			US 2012031532 A1	09-02-2012
			WO 2011052095 A1	05-05-2011
EP 2902519	A1	05-08-2015	CA 2881372 A1	03-04-2014
			CN 104350168 A	11-02-2015
			EP 2902519 A1	05-08-2015
			JP 5516834 B1	11-06-2014
			JP WO2014051119 A1	25-08-2016
			KR 20150002871 A	07-01-2015
			US 2015219249 A1	06-08-2015
			WO 2014051119 A1	03-04-2014



ANNEX TO SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 16 91 50 83

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 12-02-2020
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
EP 2933346	A1	21-10-2015	BR	112015013061 A2	11-07-2017
			CN	104838026 A	12-08-2015
			EP	2933346 A1	21-10-2015
			ES	2689230 T3	12-11-2018
			JP	WO2014091554 A1	05-01-2017
			KR	20150086354 A	27-07-2015
			PL	2933346 T3	28-02-2019
			US	2015315683 A1	05-11-2015
			WO	2014091554 A1	19-06-2014

For more details about this annex: see Official Journal of the European Patent Office, No. 12/82

Disclaimer: this document has been automatically generated using data structured in accordance with WIPO standard ST.36 from the database of search reports of the European Patent Office. For technical reasons, its content and layout may differ from that of the original publication. Only the original published information is legally binding.