

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	JP 2009 030094 A (JFE STEEL KK) 12 February 2009 (2009-02-12) * the whole document *	1-7	INV. C22C38/00 C22C38/54 C21D8/02
X	JP 2009 030092 A (JFE STEEL KK) 12 February 2009 (2009-02-12) * the whole document *	1-7	C22C38/02 C22C38/04 C22C38/06 C22C38/28
X	EP 1 930 459 A1 (NIPPON STEEL CORP [JP]) 11 June 2008 (2008-06-11) * claims 1-4 * * tables 1-2 * * paragraph [0010] - paragraph [0043] *	1-7	C22C38/20 C22C38/22 C22C38/24 C22C38/26 C22C38/32 C22C38/42
X	JP H11 71631 A (SUMITOMO METAL IND) 16 March 1999 (1999-03-16) * the whole document *	1-7	C22C38/44 C22C38/48 C22C38/50 C21D9/46
E	EP 2 692 890 A1 (JFE STEEL CORP [JP]) 5 February 2014 (2014-02-05) * claims 1-7 * * paragraph [0027] - paragraph [0066]; tables 1-2 *	1-7	TECHNICAL FIELDS SEARCHED (IPC) C22C C21D
E	EP 2 695 960 A1 (JFE STEEL CORP [JP]) 12 February 2014 (2014-02-12) * claims 1-10 * * tables 1-3 * * paragraph [0027] - paragraph [0069] *	1-7	
E	EP 2 589 675 A1 (JFE STEEL CORP [JP]) 8 May 2013 (2013-05-08) * claims 1-7 * * tables 1-6 * * paragraph [0019] - paragraph [0061] *	1-7	
-/--			
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 14 March 2017	Examiner Vlassi, Eleni
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

**SUPPLEMENTARY
 EUROPEAN SEARCH REPORT**

Application Number
 EP 11 80 1027

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	JP 2009 030093 A (JFE STEEL KK) 12 February 2009 (2009-02-12) * the whole document * -----	1-7	
A	JP 2008 214651 A (JFE STEEL KK) 18 September 2008 (2008-09-18) * the whole document * -----	1-7	
			TECHNICAL FIELDS SEARCHED (IPC)
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		14 March 2017	Vlassi, Eleni
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

1
 EPO FORM 1503 03 82 (P04C04)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 11 80 1027

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

14-03-2017

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 2009030094	A	12-02-2009	JP 5145805 B2	20-02-2013
			JP 2009030094 A	12-02-2009

JP 2009030092	A	12-02-2009	JP 5145803 B2	20-02-2013
			JP 2009030092 A	12-02-2009

EP 1930459	A1	11-06-2008	BR PI0615885 A2	31-05-2011
			CN 101258257 A	03-09-2008
			EP 1930459 A1	11-06-2008
			JP 4846308 B2	28-12-2011
			JP 2007070713 A	22-03-2007
			KR 20080034987 A	22-04-2008
			US 2010059150 A1	11-03-2010
			WO 2007029515 A1	15-03-2007

JP H1171631	A	16-03-1999	JP 3543619 B2	14-07-2004
			JP H1171631 A	16-03-1999

EP 2692890	A1	05-02-2014	AU 2012233197 A1	03-10-2013
			BR 112013025002 A2	17-01-2017
			CN 103459635 A	18-12-2013
			EP 2692890 A1	05-02-2014
			JP 2012214891 A	08-11-2012
			KR 20130133036 A	05-12-2013
			PE 17122014 A1	28-11-2014
			US 2014090755 A1	03-04-2014
			WO 2012133910 A1	04-10-2012

EP 2695960	A1	12-02-2014	AU 2012233198 A1	03-10-2013
			BR 112013025040 A2	27-12-2016
			CN 103459634 A	18-12-2013
			EP 2695960 A1	12-02-2014
			JP 5553081 B2	16-07-2014
			JP 2012214890 A	08-11-2012
			KR 20130133035 A	05-12-2013
			PE 17392014 A1	26-11-2014
			US 2014096875 A1	10-04-2014
			WO 2012133911 A1	04-10-2012

EP 2589675	A1	08-05-2013	AU 2011272249 A1	14-02-2013
			CA 2801708 A1	05-01-2012
			CN 102959112 A	06-03-2013
			EP 2589675 A1	08-05-2013
			JP 2012031511 A	16-02-2012
			KR 20130025947 A	12-03-2013
			RU 2013103813 A	10-08-2014

EPO FORM P0459

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

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 11 80 1027

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

14-03-2017

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
		US 2013206286 A1	15-08-2013
		WO 2012002563 A1	05-01-2012

JP 2009030093 A	12-02-2009	JP 5145804 B2	20-02-2013
		JP 2009030093 A	12-02-2009

JP 2008214651 A	18-09-2008	NONE	
