

SUPPLEMENTARY EUROPEAN SEARCH **REPORT**

Application number: EP 21 88 31 21

Classification of the application (IPC): C22C 38/60, C22C 38/38, C23C 2/40, C22C 38/02, C22C 38/24, C23C 2/28. C23C 2/02, C22C 38/04, C21D 1/25, C21D 1/22, C22C 38/26, C22C 38/22, C21D 9/46, C21D 8/02, C23C 2/06

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					
х	JP 6614397 B1 (JFE STEEL CORP) 04 December 2019 (2019-12-04) * § 0078; cl. 2, 5; tab. 1, S; tab. 3+4; 40 *	1-10					
×	JP H09302440 A (SUMITOMO METAL IND)	1, 5					
Α	25 November 1997 (1997-11-25)	2-4, 6-10					
	* § 0045; tab. 1, D, tab. 3, 17 *						
×	JP H0657375 A (SUMITOMO METAL IND) 01 March 1994 (1994-03-01)	1, 5					
A	* § 0037; tab. 1+2, 3-5 *	2-4, 6-10					
X	JP 5365217 B2 (JFE STEEL CORP) 11 December 2013 (2013-12-11)	1, 5					
A	* § 0069; tab. 1-3, D *	2-4, 6-10					
X	JP H0665685 A (SUMITOMO METAL IND) 08 March 1994 (1994-03-08)	1, 5					
A	* § 0042; tab. 1-3, 6, 7 *	2-4, 6-10					
^`	3						
X	JP 2862187 B2 (KOBE STEEL LTD) 24 February 1999 (1999-02-24)	1, 5					
А	* p. 3-4; tab. 1-2, B *	2-4, 6-10					

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Date of completion of the search Place of search Examiner The Hague 24 October 2024 Kreutzer, Ingo

CATEGORY OF CITED DOCUMENTS

- X: particularly relevant if taken alone
 Y: particularly relevant if
- particularly relevant if combined with another document of the same category
- technological background
- O: non-written disclosure
- &: member of the same patent family, corresponding document
- intermediate document
- theory or principle underlying the invention earlier patent document, but published on, or after the filing date
- document cited in the application
- L: document cited for other reasons

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 24-10-2024

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Patent document cited in search report			Publication date	Patent family member(s)		Publication date
JP	6614397	B1	04-12-2019	CN EP JP JP KR US WO	111788323 A 3757242 A1 6614397 B1 WO2019159771 A1 20200106195 A 2021102278 A1 2019159771 A1	16-10-2020 30-12-2020 04-12-2019 27-02-2020 11-09-2020 08-04-2021 22-08-2019
JP	H09302440	Α	25-11-1997	NONE		
JP	H0657375	Α	01-03-1994	JP JP	2616350 B2 H0657375 A	04-06-1997 01-03-1994
JP	5365217	B2	11-12-2013	CA CN EP JP JP KR US WO	2713181 A1 101932746 A 2246456 A1 5365217 B2 2009203550 A 20100101697 A 2011030854 A1 2009096596 A1	06-08-2009 29-12-2010 03-11-2010 11-12-2013 10-09-2009 17-09-2010 10-02-2011 06-08-2009
JP	H0665685	A	08-03-1994	JP JP	2621744 B2 H0665685 A	18-06-1997 08-03-1994
JP	2862187	B2	24-02-1999	JP JP	2862187 B2 H04128321 A	24-02-1999 28-04-1992