



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 22 86 10 64

Classification of the application (IPC):

C21D 9/573, C21D 1/18, C21D 1/63, C21D 1/667, C22C 38/00, B21B 45/02, C21D 1/60, C21D 9/46, C21D 8/02, C21D 11/00, C22C 38/04, C22C 38/12, C22C 38/14, C22C 38/16, C22C 38/32, C22C 38/38, C22C 38/60

Technical fields searched (IPC):

C21D, B21B

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X	JP H04114549 U (CHUGAI RO CO., LTD) 08 October 1992 (1992-10-08) * claim 1, Fig.1, §2, §10, §11 *	1, 3, 4, 6-9, 11-13
Y		1-15
Y	EP 3225705 A1 (JFE STEEL CORP [JP]) 04 October 2017 (2017-10-04) * claim 1, Figs. 1-3, §1, §8, §25, §27 *	1-15
A	JP 2011184773 A (KOBE STEEL LTD) 22 September 2011 (2011-09-22) * the whole document *	1-15
A	JP S462733 B1 (TOYO KOHAN CO., LTD.) 23 January 1971 (1971-01-23) * the whole document *	1-15
A	JP 2019090106 A (JFE STEEL CORP) 13 June 2019 (2019-06-13) * the whole document *	1-15
A	JP S5456060 A (MITSUBISHI HEAVY IND LTD) 04 May 1979 (1979-05-04) * the whole document *	1-15
A	US 10737306 B2 (PRIMETALS TECHNOLOGIES AUSTRIA GMBH [AT]) 11 August 2020 (2020-08-11) * Fig. 1, col. 4 l. 3-4, col. 5 l. 41-57 *	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 The Hague	Date of completion of the search 13 November 2024	Examiner Abrasonis, Gintautas
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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
& : member of the same patent family, corresponding document

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

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**ANNEX TO SUPPLEMENTARY EUROPEAN
SEARCH REPORT**

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EP 22 86 10 64

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 13-11-2024
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