



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 19 87 51 71

Classification of the application (IPC):

B22D 11/00, B22D 11/103, B22D 11/04, B22D 11/16, B22D 1/00, B22D 11/108, B22D 41/00, B22D 41/08

Technical fields searched (IPC):

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X	JP H01284459 A (NISSHIN STEEL CO LTD) 15 November 1989 (1989-11-15) * paragraph [0001] - paragraph [0003] * * figure 1 *	1-15
X	JP H06320232 A (NIPPON STEEL CORP) 22 November 1994 (1994-11-22) * figure 1 * * paragraph [0001] - paragraph [0019] *	1-15
A	JP 2005103552 A (DAIDO STEEL CO LTD) 21 April 2005 (2005-04-21) * figure 1 * * paragraph [0001] * * paragraph [0006] - paragraph [0019] *	1-15
A	EP 3369495 A1 (NIPPON STEEL & SUMITOMO METAL CORP [JP]) 05 September 2018 (2018-09-05) * figures 1, 11, 14 * * paragraph [0001] * * paragraph [0011] - paragraph [0013] * * paragraph [0016] - paragraph [0096] *	1-15
A	EP 0265235 A2 (NIPPON STEEL CORP [JP]) 27 April 1988 (1988-04-27) * figures 1-12 * * page 2, line 1 - line 15 * * page 2, line 24 - page 3, line 20 * * page 3, line 49 - page 9, line 20 *	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 28 September 2021	Examiner Jung, Régis
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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

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**ANNEX TO SUPPLEMENTARY EUROPEAN
SEARCH REPORT**

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EP 19 87 51 71

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 28-09-2021
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
JP H01284459	A	15-11-1989	NONE	
JP H06320232	A	22-11-1994	NONE	
JP 2005103552	A	21-04-2005	NONE	
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