

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR2019/015021

## A. CLASSIFICATION OF SUBJECT MATTER

*B23K 35/02(2006.01)i, B23K 35/30(2006.01)i, C22C 19/05(2006.01)i, B22F 9/08(2006.01)i*

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

B23K 35/02; B22D 27/04; B22F 9/08; B23K 35/30; C22C 019/05; C22C 19/05; C22C 30/02

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models: IPC as above

Japanese utility models and applications for utility models: IPC as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS (KIPO internal) &amp; Keywords: Cr, Fe, P, Ni, brazing, alloy, and atomizing

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002-0085943 A1 (NAGAI, Shozo et al.) 04 July 2002 See claims 1-2 and paragraph [0025].	1-4
Y		5-8
Y	KR 10-2010-0113816 A (PUSAN NATIONAL UNIVERSITY INDUSTRY-UNIVERSITY COOPERATION FOUNDATION et al.) 22 October 2010 See paragraphs [0025]-[0029] and figure 1.	5-8
A	JP 2011-110575 A (SANYO SPECIAL STEEL CO., LTD. et al.) 09 June 2011 See paragraphs [0013]-[0020].	1-8
A	JP 2008-012592 A (SULZER METCO US INC.) 24 January 2008 See paragraphs [0017]-[0023].	1-8
A	US 2016-0175992 A1 (SANYO SPECIAL STEEL CO., LTD.) 23 June 2016 See paragraphs [0010]-[0026], [0061].	1-8

 Further documents are listed in the continuation of Box C. See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family


Date of the actual completion of the international search

18 FEBRUARY 2020 (18.02.2020)

Date of mailing of the international search report

19 FEBRUARY 2020 (19.02.2020)

Name and mailing address of the ISA/KR


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**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International application No.

**PCT/KR2019/015021**

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