

**INTERNATIONAL SEARCH REPORT**

International application No.  
PCT/JP2016/072158

**A. CLASSIFICATION OF SUBJECT MATTER**  
H01L23/48(2006.01) i, H01L21/52(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)  
H01L23/48, H01L21/52

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

|                           |           |                            |           |
|---------------------------|-----------|----------------------------|-----------|
| Jitsuyo Shinan Koho       | 1922-1996 | Jitsuyo Shinan Toroku Koho | 1996-2016 |
| Kokai Jitsuyo Shinan Koho | 1971-2016 | Toroku Jitsuyo Shinan Koho | 1994-2016 |

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

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category* | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No.           |
|-----------|--|---------------------------------|
| Y<br>A    | Microfilm of the specification and drawings annexed to the request of Japanese Utility Model Application No. 147342/1979(Laid-open No. 65650/1981) (New Nippon Electric Co., Ltd.), 01 June 1981 (01.06.1981), specification, page 1, line 1 to page 4, line 19; fig. 4 (Family: none) | 1-10, 13-14, 16-19<br>11-12, 15 |
| Y<br>A    | Dai 33 Hyo Jitsuyo Kinzoku Oyobi Gokin no Butsuriteki Seishitsu, Nippon Welding Rod Co., Ltd. [online], 2012 [retrieval date 09 September 2016 (09.09.2016)], Internet: <URL: http://www.nihonwel.co.jp/pdf_data/Capter17/alloy%20property.pdf>, entire text                           | 1-10, 13-14, 16-19<br>11-12, 15 |

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

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| * Special categories of cited documents:  | "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  |
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| Date of the actual completion of the international search<br>09 September 2016 (09.09.16) | Date of mailing of the international search report<br>20 September 2016 (20.09.16) |
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PCT/JP2016/072158

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No.              |
|-----------|---|------------------------------------|
| Y<br>A    | Microfilm of the specification and drawings annexed to the request of Japanese Utility Model Application No. 71677/1980 (Laid-open No. 172938/1981) (NEC Corp.), 21 December 1981 (21.12.1981), specification, page 2, lines 7 to 12; fig. 1 (Family: none) | 3-4, 6-7, 9,<br>17-19<br>11-12, 15 |
| Y         | WO 2015/029186 A1 (Mitsubishi Electric Corp.), 05 March 2015 (05.03.2015), paragraphs [0010] to [0012], [0023] to [0025], [0046]; fig. 1, 5 (Family: none)  | 17-19                              |