

INTERNATIONAL SEARCH REPORT

International application No. PCT/JP2018/046755
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A. CLASSIFICATION OF SUBJECT MATTER Int.Cl. H01L29/78 (2006.01) i, H01L21/336 (2006.01) i, H01L29/12 (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) Int.Cl. H01L29/78, H01L21/336, H01L29/12 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched <table border="0"> <tr> <td>Published examined utility model applications of Japan</td> <td>1922-1996</td> </tr> <tr> <td>Published unexamined utility model applications of Japan</td> <td>1971-2019</td> </tr> <tr> <td>Registered utility model specifications of Japan</td> <td>1996-2019</td> </tr> <tr> <td>Published registered utility model applications of Japan</td> <td>1994-2019</td> </tr> </table> Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)			Published examined utility model applications of Japan	1922-1996	Published unexamined utility model applications of Japan	1971-2019	Registered utility model specifications of Japan	1996-2019	Published registered utility model applications of Japan	1994-2019				
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C. DOCUMENTS CONSIDERED TO BE RELEVANT														
<table border="1"> <thead> <tr> <th>Category*</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>Y A</td> <td>WO 2013/179820 A1 (NATIONAL INSTITUTE OF ADVANCED INDUSTRIAL SCIENCE AND TECHNOLOGY) 05 December 2013, paragraphs [0018]-[0026], fig. 1 & US 2015/0171169 A1, paragraphs [0032]-[0046], fig. 1</td> <td>1-2, 4-5, 7 3, 6</td> </tr> <tr> <td>Y A</td> <td>JP 2015-18913 A (FUJI ELECTRIC CO., LTD.) 29 January 2015, paragraphs [0018], [0027]-[0028], fig. 1 & US 2015/0014764 A1, paragraphs [0028], [0037]-[0038], fig. 1</td> <td>1-2, 4-5, 7 3, 6</td> </tr> </tbody> </table>	Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	Y A	WO 2013/179820 A1 (NATIONAL INSTITUTE OF ADVANCED INDUSTRIAL SCIENCE AND TECHNOLOGY) 05 December 2013, paragraphs [0018]-[0026], fig. 1 & US 2015/0171169 A1, paragraphs [0032]-[0046], fig. 1	1-2, 4-5, 7 3, 6	Y A	JP 2015-18913 A (FUJI ELECTRIC CO., LTD.) 29 January 2015, paragraphs [0018], [0027]-[0028], fig. 1 & US 2015/0014764 A1, paragraphs [0028], [0037]-[0038], fig. 1	1-2, 4-5, 7 3, 6					
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<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.														
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Date of the actual completion of the international search 27 February 2019 (27.02.2019)	Date of mailing of the international search report 12 March 2019 (12.03.2019)													
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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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Y A	JP 2014-165306 A (FUJI ELECTRIC CO., LTD.) 08 September 2014, paragraph [0039], fig. 7 & US 2014/0242769 A1, paragraph [0076], fig. 7	1-2, 4-5, 7 3, 6