

**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/JP2017/034522

<p><b>A. CLASSIFICATION OF SUBJECT MATTER</b>                  Int.Cl. H02P6/16(2016.01) i, F04B43/04(2006.01) i, F04B49/06(2006.01) i,                  F04C2/10(2006.01) i, H02P6/15(2016.01) i, H02P23/03(2006.01) i,                  H02P27/08(2006.01) i                  According to International Patent Classification (IPC) or to both national classification and IPC</p>														
<p><b>B. FIELDS SEARCHED</b></p> <p>Minimum documentation searched (classification system followed by classification symbols)                  Int.Cl. H02P6/16, F04B43/04, F04B49/06, F04C2/10, H02P6/15, H02P23/03,                  H02P27/08</p> <p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched</p> <table style="width:100%; border: none;"> <tr> <td style="padding-left: 20px;">Published examined utility model applications of Japan</td> <td style="text-align: right;">1922-1996</td> </tr> <tr> <td style="padding-left: 20px;">Published unexamined utility model applications of Japan</td> <td style="text-align: right;">1971-2017</td> </tr> <tr> <td style="padding-left: 20px;">Registered utility model specifications of Japan</td> <td style="text-align: right;">1996-2017</td> </tr> <tr> <td style="padding-left: 20px;">Published registered utility model applications of Japan</td> <td style="text-align: right;">1994-2017</td> </tr> </table> <p>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)</p>			Published examined utility model applications of Japan	1922-1996	Published unexamined utility model applications of Japan	1971-2017	Registered utility model specifications of Japan	1996-2017	Published registered utility model applications of Japan	1994-2017				
Published examined utility model applications of Japan	1922-1996													
Published unexamined utility model applications of Japan	1971-2017													
Registered utility model specifications of Japan	1996-2017													
Published registered utility model applications of Japan	1994-2017													
<p><b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Category*</th> <th style="width: 70%;">Citation of document, with indication, where appropriate, of the relevant passages</th> <th style="width: 20%;">Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td align="center">A</td> <td>JP 2013-207891 A (FUJITSU GENERAL LIMITED) 07 October 2013, entire text, all drawings (Family: none)</td> <td align="center">1-22</td> </tr> <tr> <td align="center">A</td> <td>JP 2007-229256 A (SHARP CORPORATION) 13 September 2007, entire text, all drawings (Family: none)</td> <td align="center">1-22</td> </tr> <tr> <td align="center">A</td> <td>JP 2013-163237 A (SEIKO EPSON CORPORATION) 22 August 2013, entire text, all drawings (Family: none)</td> <td align="center">1-22</td> </tr> </tbody> </table>			Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	A	JP 2013-207891 A (FUJITSU GENERAL LIMITED) 07 October 2013, entire text, all drawings (Family: none)	1-22	A	JP 2007-229256 A (SHARP CORPORATION) 13 September 2007, entire text, all drawings (Family: none)	1-22	A	JP 2013-163237 A (SEIKO EPSON CORPORATION) 22 August 2013, entire text, all drawings (Family: none)	1-22
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.												
A	JP 2013-207891 A (FUJITSU GENERAL LIMITED) 07 October 2013, entire text, all drawings (Family: none)	1-22												
A	JP 2007-229256 A (SHARP CORPORATION) 13 September 2007, entire text, all drawings (Family: none)	1-22												
A	JP 2013-163237 A (SEIKO EPSON CORPORATION) 22 August 2013, entire text, all drawings (Family: none)	1-22												
<p><input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C.      <input type="checkbox"/> See patent family annex.</p>														
<p>* Special categories of cited documents:</p> <table style="width:100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>“A” document defining the general state of the art which is not considered to be of particular relevance</p> <p>“E” earlier application or patent but published on or after the international filing date</p> <p>“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)</p> <p>“O” document referring to an oral disclosure, use, exhibition or other means</p> <p>“P” document published prior to the international filing date but later than the priority date claimed</p> </td> <td style="width: 50%; vertical-align: top;"> <p>“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</p> <p>“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</p> <p>“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</p> <p>“&amp;” document member of the same patent family</p> </td> </tr> </table>			<p>“A” document defining the general state of the art which is not considered to be of particular relevance</p> <p>“E” earlier application or patent but published on or after the international filing date</p> <p>“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)</p> <p>“O” document referring to an oral disclosure, use, exhibition or other means</p> <p>“P” document published prior to the international filing date but later than the priority date claimed</p>	<p>“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</p> <p>“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</p> <p>“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</p> <p>“&amp;” document member of the same patent family</p>										
<p>“A” document defining the general state of the art which is not considered to be of particular relevance</p> <p>“E” earlier application or patent but published on or after the international filing date</p> <p>“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)</p> <p>“O” document referring to an oral disclosure, use, exhibition or other means</p> <p>“P” document published prior to the international filing date but later than the priority date claimed</p>	<p>“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</p> <p>“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</p> <p>“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</p> <p>“&amp;” document member of the same patent family</p>													
<p>Date of the actual completion of the international search 05 December 2017</p>		<p>Date of mailing of the international search report 19 December 2017</p>												
<p>Name and mailing address of the ISA/ Japan Patent Office 3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan</p>		<p>Authorized officer</p> <p>Telephone No.</p>												

**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/JP2017/034522

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2003-227468 A (ASAHI SUNAC CORPORATION) 15 August 2003, entire text, all drawings (Family: none)	1-22
A	JP 2014-9655 A (JTEKT CORPORATION) 20 January 2014, entire text, all drawings (Family: none)	1-22