

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2019/044725

<p>A. CLASSIFICATION OF SUBJECT MATTER Int.Cl. H04R1/10(2006.01) i, H04R1/28(2006.01) i, H04R7/24(2006.01) i, H04R17/00(2006.01) FI: H04R1/28310Z, H04R17/00, H04R1/10104Z, H04R7/24 According to International Patent Classification (IPC) or to both national classification and IPC</p>														
<p>B. FIELDS SEARCHED</p> <p>Minimum documentation searched (classification system followed by classification symbols) Int.Cl. H04R1/10, H04R1/28, H04R7/24, H04R17/00</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;">1971-2020</td> </tr> <tr> <td style="padding-left: 20px;">Registered utility model specifications of Japan</td> <td style="text-align: right;">1996-2020</td> </tr> <tr> <td style="padding-left: 20px;">Published registered utility model applications of Japan</td> <td style="text-align: right;">1994-2020</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	1971-2020	Registered utility model specifications of Japan	1996-2020	Published registered utility model applications of Japan	1994-2020				
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<p>C. DOCUMENTS CONSIDERED TO BE RELEVANT</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">Y A</td> <td>WO 2016/171250 A1 (NEC CORPORATION) 27 October 2016, paragraphs [0027], [0050]-[0067], fig. 10-18</td> <td align="center">1, 2, 8, 10, 12, 13 3-7, 9, 11, 14</td> </tr> <tr> <td align="center">Y A</td> <td>JP 2015-521007 A (SHURE ACQUISITION HOLDINGS, INC.) 23 July 2015, fig. 7</td> <td align="center">1, 2, 8, 10, 12, 13 3-7, 9, 11, 14</td> </tr> <tr> <td align="center">Y A</td> <td>KR 10-1539064 B1 (GOELBIO CO. LTD.) 23 July 2015, paragraph [0041], fig. 5, 6</td> <td align="center">1, 2, 8, 10, 12, 13 3-7, 9, 11, 14</td> </tr> </tbody> </table>			Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	Y A	WO 2016/171250 A1 (NEC CORPORATION) 27 October 2016, paragraphs [0027], [0050]-[0067], fig. 10-18	1, 2, 8, 10, 12, 13 3-7, 9, 11, 14	Y A	JP 2015-521007 A (SHURE ACQUISITION HOLDINGS, INC.) 23 July 2015, fig. 7	1, 2, 8, 10, 12, 13 3-7, 9, 11, 14	Y A	KR 10-1539064 B1 (GOELBIO CO. LTD.) 23 July 2015, paragraph [0041], fig. 5, 6	1, 2, 8, 10, 12, 13 3-7, 9, 11, 14
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<p><input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" 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>“&” 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>“&” document member of the same patent family</p>										
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<p>Date of the actual completion of the international search 14.01.2020</p>		<p>Date of mailing of the international search report 28.01.2020</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>												

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Information on patent family members

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WO 2016/171250 A1	27 October 2016	(Family: none)
JP 2015-521007 A	23 July 2015	US 2013/0315431 A1 fig. 7 WO 2013/176840 A1 EP 2853099 A1 CN 104412615 A KR 10-2015-0021950 A
KR 10-1539064 B1	23 July 2015	(Family: none)