

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2018/031911

<p>A. CLASSIFICATION OF SUBJECT MATTER Int.Cl. C08L21/00 (2006.01) i, B60C1/00 (2006.01) i, B60C15/06 (2006.01) i, C08K3/04 (2006.01) i, C08K3/36 (2006.01) i, C08K5/54 (2006.01) i, C08L7/00 (2006.01) i, C08L9/00 (2006.01) i, C08L15/00 (2006.01) i 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. C08L21/00, B60C1/00, B60C15/06, C08K3/04, C08K3/36, C08K5/54, C08L7/00, C08L9/00, C08L15/00</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;">1971-2018</td> </tr> <tr> <td style="padding-left: 20px;">Registered utility model specifications of Japan</td> <td style="text-align: right;">1996-2018</td> </tr> <tr> <td style="padding-left: 20px;">Published registered utility model applications of Japan</td> <td style="text-align: right;">1994-2018</td> </tr> </table> <p>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) CPlus/REGISTRY (STN)</p>			Published examined utility model applications of Japan	1922-1996	Published unexamined utility model applications of Japan	1971-2018	Registered utility model specifications of Japan	1996-2018	Published registered utility model applications of Japan	1994-2018	
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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">X</td> <td>JP 2013-249359 A (BRIDGESTONE CORPORATION) 12 December 2013, entire text, particularly, claims, table 1, P-30, tables 2, 3 (Family: none)</td> <td align="center">1-14</td> </tr> <tr> <td align="center">X</td> <td>JP 61-197646 A (IDEMITSU PETROCHEMICAL CO., LTD.) 01 September 1986, entire text, particularly, claims, page 2, upper left column, line 19 to upper right column, line 16, page 2, lower left column, line 13 to page 3, upper left column, [effects of the invention], examples 1, 2 (Family: none)</td> <td align="center">1-14</td> </tr> </tbody> </table>			Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	X	JP 2013-249359 A (BRIDGESTONE CORPORATION) 12 December 2013, entire text, particularly, claims, table 1, P-30, tables 2, 3 (Family: none)	1-14	X	JP 61-197646 A (IDEMITSU PETROCHEMICAL CO., LTD.) 01 September 1986, entire text, particularly, claims, page 2, upper left column, line 19 to upper right column, line 16, page 2, lower left column, line 13 to page 3, upper left column, [effects of the invention], examples 1, 2 (Family: none)	1-14
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<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>“&” 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 31.10.2018</p>		<p>Date of mailing of the international search report 13.11.2018</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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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 2016-113588 A (HENKEL JAPAN LTD.) 23 June 2016, paragraph [0088] & US 2017/0267903 A1, paragraphs [0137], [0138] & WO 2016/098288 A1 & EP 3233957 A1 & CN 107001576 A & KR 10-2017-0095289 A	1-14
A	JP 2016-28235 A (UBE INDUSTRIES, LTD.) 25 February 2016, paragraph [0034] (Family: none)	1-14
A	JP 2016-60789 A (JSR CORPORATION) 25 April 2016, paragraph [0030] (Family: none)	1-14
A	JP 2014-98102 A (JSR CORPORATION) 29 May 2014, paragraph [0051] (Family: none)	1-14
A	JP 62-112618 A (IDEMITSU PETROCHEMICAL CO., LTD.) 23 May 1987, example 1 (Family: none)	1-14
P, A	WO 2018/043699 A1 (KURARAY CO., LTD.) 08 March 2018 & TW 201811836 A	1-14
P, A	WO 2018/043700 A1 (KURARAY CO., LTD.) 08 March 2018 (Family: none)	1-14