

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2017/027796

A. CLASSIFICATION OF SUBJECT MATTER

H01M8/02(2016.01)i, H01M8/12(2016.01)n

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)

H01M8/02, H01M8/12

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	1996-2017
Kokai Jitsuyo Shinan Koho	1971-2017	Toroku Jitsuyo Shinan Koho	1994-2017

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.
A	JP 2008-34229 A (Toyota Motor Corp.), 14 February 2008 (14.02.2008), claims 1, 3; paragraphs [0004] to [0008], [0032] to [0035]; fig. 3 & US 2010/0021628 A1 claims 1, 3; paragraphs [0005] to [0008], [0039] to [0042]; fig. 3	1-8
A	WO 2015/025642 A1 (Murata Mfg. Co., Ltd.), 26 February 2015 (26.02.2015), claim 1; paragraphs [0004], [0017], [0018], [0029] to [0031]; fig. 3 & EP 3038197 A1 claim 1; paragraphs [0004], [0017], [0018], [0029] to [0031]; fig. 3	1-8

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
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- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

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- "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
- "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
- "&" document member of the same patent family

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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 2005-251562 A (Nissan Motor Co., Ltd.), 15 September 2005 (15.09.2005), paragraphs [0042] to [0045]; fig. 2 (Family: none)	1-8