

**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/JP2018/004748

**A. CLASSIFICATION OF SUBJECT MATTER**

Int.Cl. B62M7/02 (2006.01) i, F01N3/24 (2006.01) i, F01N13/08 (2010.01) 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. B62M7/02, F01N3/24, F01N13/08

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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

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.
Y A	JP 5-240036 A (YAMAHA MOTOR CO., LTD.) 17 September 1993, paragraphs [0012]-[0020], [0029], fig. 1-7 (Family: none)	1 2-5
Y A	JP 2006-250129 A (HONDA MOTOR CO., LTD.) 21 September 2006, paragraphs [0018], [0049], fig. 1, 3 (Family: none)	1 2-5
Y	JP 5-98959 A (HONDA MOTOR CO., LTD.) 20 April 1993, paragraphs [0022], [0029], fig. 1-6 (Family: none)	1

Further documents are listed in the continuation of Box C.       See patent family annex.

* Special categories of cited documents:	"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
"A" document defining the general state of the art which is not considered to be of particular relevance	"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
"E" earlier application or patent but published on or after the international filing date	"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
"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)	"&" document member of the same patent family
"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	

Date of the actual completion of the international search 16.04.2018	Date of mailing of the international search report 01.05.2018
---	--

Name and mailing address of the ISA/ Japan Patent Office 3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan	Authorized officer  Telephone No.
--	---

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2018/004748

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 2008-45515 A (HONDA MOTOR CO., LTD.) 28 February 2008, paragraphs [0024], [0026], [0029]- [0033], [0047], [0048], [0070], fig. 1-11 (Family: none)	6-10
Y A	WO 2014/129014 A1 (HONDA MOTOR CO., LTD.) 28 August 2014, paragraphs [0020], [0023]-[0025], [0032], [0037], fig. 1-4 & EP 2960457 A1, paragraphs [0049], [0050], [0054]-[0063], [0078], [0085]-[0087], fig. 1-4 & CN 104995381 A	11-14 15
Y A	Microfilm of the specification and drawings annexed to the request of Japanese Utility Model Application No. 84547/1985 (Laid-open No. 200409/1986) (NISSAN MOTOR CO., LTD.) 15 December 1986, specification, page 5, line 18 to page 7, line 13, fig. 1, 2 (Family: none)	11-14 15
A	JP 2016-182926 A (HONDA MOTOR CO., LTD.) 20 October 2016, paragraphs [0024]-[0033], fig. 1-4 (Family: none)	2-5

**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/JP2018/004748

**Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)**

This international search report has not been established in respect of certain claims under Article 17 (2)(a) for the following reasons:

1.  Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2.  Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
  
3.  Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

**Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)**

This International Searching Authority found multiple inventions in this international application, as follows:  
[see extra sheet]

1.  As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2.  As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.
3.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
  
4.  No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

**Remark on Protest**

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/JP2018/004748

(Continuation of Box No. III)

The claims are classified into the two inventions below.

(Invention 1) Claims 1-5

Claims 1-5 have the special technical feature wherein "in a side view, at least a part of the catalyst device (140) is disposed below the cylinder part (35); is positioned in a region between an imaginary line (L1) and another imaginary line (L2), the imaginary line (L1) connecting between a front end of the crankcase (34) and a link member connecting part (61) connecting the link member (38) to the vehicle frame (12), the imaginary line (L2) connecting between the link member connecting part (61) and an exhaust pipe connecting part (35e) of the unit swing engine (13) connected with an end of the exhaust pipe (121); and is provided with an exhaust device connecting part (135) connecting between the crankcase (34) and an exhaust device (120)"; thus these claims are classified as invention 1.

(Invention 2) Claims 6-15

Claim 6 has the common technical feature between these claims and claim 1 classified as invention 1 of an exhaust device provided with: an exhaust pipe; and a catalyst device that is disposed at some midpoint in the exhaust pipe".

However, this technical feature, which does not make a contribution over the prior art in light of the disclosure of JP 2006-250129 A (in particular, refer to paragraph [0049] and fig. 4), cannot be considered a special technical feature. Apart from this feature, there are not the same or corresponding special technical features between these inventions. Furthermore, claim 6 does not depend from claim 1. In addition, claim 6 and claims 7-15 depending therefrom are not substantially identical to or similarly closely related to any of the claims classified as invention 1.

Accordingly claims 6-15 cannot be identified as invention 1.

Meanwhile, claim 6 has the special technical feature wherein "the catalyst case part (131b) of the catalyst device housing exhaust pipe (131) is provided with a reduced diameter part (131f, 132f, 133f) holding the catalyst device (140), and the connection edge (132e, 133e) in the same cross section as the reduced diameter part (131f, 132f, 133f) as taken vertical to the division direction of the catalyst device housing exhaust pipe (131) serves as an enlarged diameter part (131f1, 132f1, 133f1), which is larger than the outer diameter of the catalyst device (140)"; thus this claim is classified as invention 2.