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[Continued on next page]

(54) Title: ELECTRIC MACHINE COOLING SYSTEM AND METHOD

(57) Abstract: Embodiments of the invention provide an electric machine module comprising an electric machine with a stator and housing at least partially circumscribing the electric machine. The housing includes at least two housing members coupled together and substantially securing the electric machine within the housing. The electric machine module also includes a coolant jacket at least partially defined by an outer diameter of the stator and an inner diameter portion of the housing.

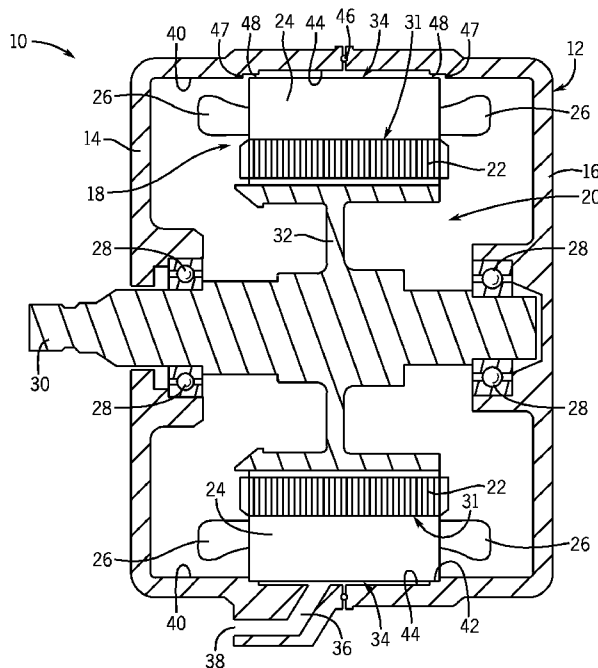
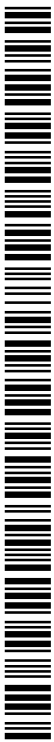


FIG. 1





TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER		
<i>H02K 9/19(2006.01)i, H02K 9/197(2006.01)i</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) H02K 9/19; B23B 19/00; B24B 41/04; H02K 5/20; B23B 19/02		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean utility models and applications for utility models Japanese utility models and applications for utility models		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) eKOMPASS(KIPO internal) & Keywords: coolant jacket, housing member, stator, flow path		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 2004-357472 A (SUZUKI MOTOR CORP.) 16 December 2004	1
Y	See claims 1, 2 and figures 1, 6	10, 11
Y	US 05664916A A (LINK; HELMUT FRIEDRICH et al.) 09 September 1997 See abstract and figures 1, 2	10, 11
A	JP 2006-297541 A (NSK LTD.) 02 November 2006 See paragraph 6 and figure 4	1-20
A	JP 2008-544733 A (Siemens Aktiengesellschaft) 04 December 2008 See paragraph 19 and figures 1, 2	1-20
A	JP 09-154257 A (NIPPEI TOYAMA CORP. et al.) 10 June 1997 See claims 1-10 and figures 1, 2	1-20
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> 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 "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified) "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 "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 "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		
Date of the actual completion of the international search 24 APRIL 2012 (24.04.2012)		Date of mailing of the international search report 24 APRIL 2012 (24.04.2012)
Name and mailing address of the ISA/KR  Korean Intellectual Property Office Government Complex-Daejeon, 189 Cheongsu-ro, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No. 82-42-472-7140		Authorized officer Hwang Jae Youn Telephone No. 82-42-481-8701 

INTERNATIONAL SEARCH REPORT

Information on patent family members

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