



(51) International Patent Classification:
F01P 5/04 (2006.01) *F16H 55/36* (2006.01)
F16D 13/74 (2006.01) *F01M 1/06* (2006.01)

(21) International Application Number:
PCT/US2009/064727

(22) International Filing Date:
17 November 2009 (17.11.2009)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/117,201 23 November 2008 (23.11.2008) US

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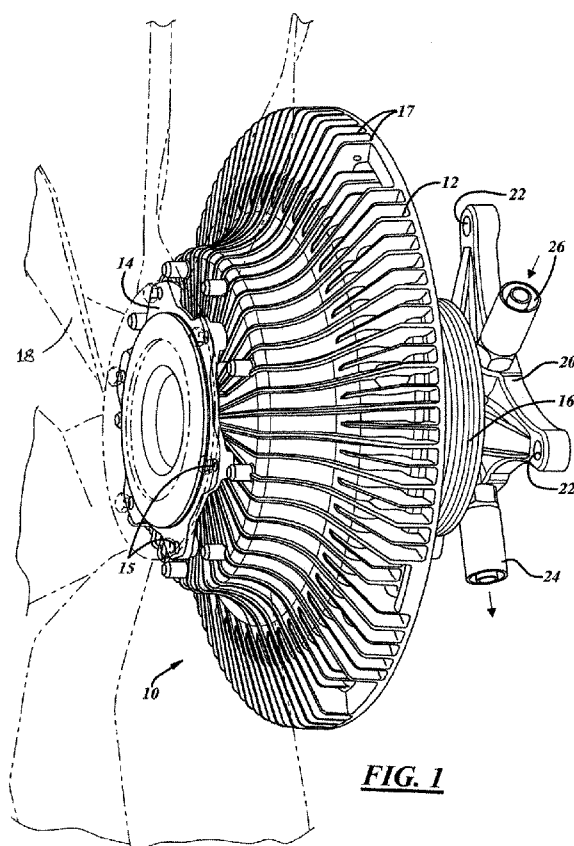
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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH,

[Continued on next page]

(54) Title: FAN DRIVE SYSTEM WITH LUBRICATION FLOW SYSTEM



(57) Abstract: Hydraulic fan drive system with oil flow system. A modular valve mechanism is provided with coaxial oil passages to circulating lubrication oil through the clutch and to and from a heat exchanger.



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

— of inventorship (Rule 4.17(iv))

Published:

— with international search report (Art. 21(3))

— 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))

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

(88) Date of publication of the international search report:

26 August 2010

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2009/064727**A. CLASSIFICATION OF SUBJECT MATTER*****F01P 5/04(2006.01)i, F16D 13/74(2006.01)i, F16H 55/36(2006.01)i, F01M 1/06(2006.01)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)

F01P 5/04; F16D 11/04; F16D 13/24; F16D 13/72; F16D 25/0638

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: "friction", "clutch", "three-way valve", "oil passageway"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2007/0023253 A1 (WAYMAN, N. E.) 01 February 2007 See claims 1-16 and figures 1-4	1-5
A	US 2006/0201771 A1 (IGNATOVICH, J. E. et al.) 14 September 2006 See claims 1-19 and figures 1-3	1-5
A	US 2006/0096831 A1 (SETTINERI, S. E.) 11 May 2006 See claims 1-23 and figures 1-4	1-5



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

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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

"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

21 JUNE 2010 (21.06.2010)

Date of mailing of the international search report

01 JULY 2010 (01.07.2010)

Name and mailing address of the ISA/KR

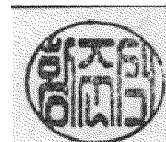
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Facsimile No. 82-42-472-7140

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2009/064727

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2007/0023253 A1	01.02.2007	US 7331437 B2	19.02.2008
US 2006/0201771 A1	14.09.2006	DE 602005010974 D1	24.12.2008
		EP 1710412 A1	11.10.2006
		EP 1710412 B1	12.11.2008
		US 7249664 B2	31.07.2007
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