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(71) **Applicant** *(for all designated States except US)*: **CATERPILLAR INC.** [US/US]; 100 N.E. Adams Street, Peoria, IL 61629-9510 (US).

(72) **Inventors; and**

(75) **Inventors/Applicants** *(for US only)*: **DANIEL, Steven, A.** [US/US]; 313 Oakbrook Drive, East Peoria, IL 61611 (US). **VANNETTE, Avert, G.** [US/US]; 9 Holborn Court, Washington, IL 61571 (US). **SERGISON, Daniel, P.** [US/US]; 3500 E. Washington St., East Peoria, IL 61611 (US). **THOMSON, Norval, P.** [US/US]; 4809 Cedar Hills Dr., Dunlap, IL 61525 (US).

(74) **Agents**: **CHANG, Richard, K., C., II.** et al.; 100 N.E. Adams Street, Peoria, IL 61629-9510 (US).

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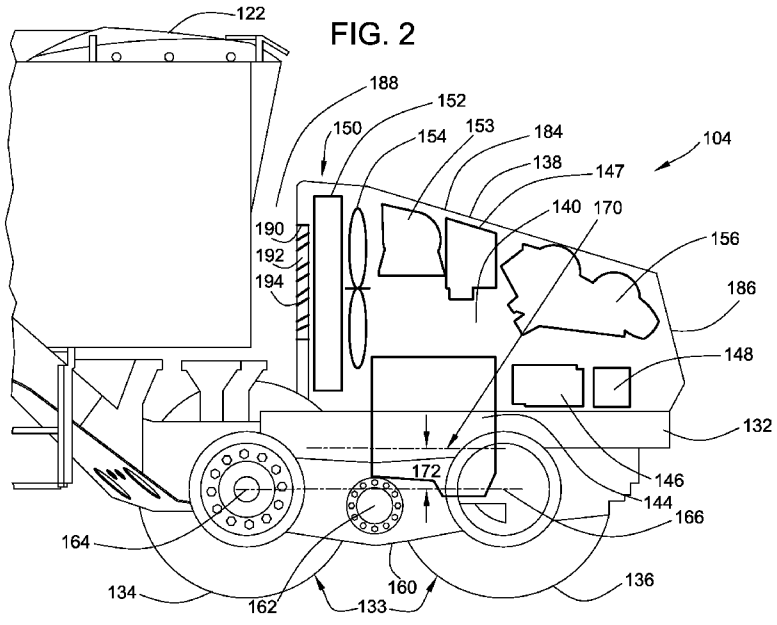
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— *with international search report (Art. 21(3))*

[Continued on next page]

(54) **Title**: COOLING SYSTEM PACKAGING ARRANGEMENT FOR A MACHINE

FIG. 2



(57) **Abstract**: A radiator (152) of a cooling system is disposed within an engine compartment (140), between a rear mounted engine (144) and a cab (122) on a wheeled machine (99). The remaining components within the engine compartment (140) are arranged such that they are lower in height than the radiator (152), the engine compartment (140) enclosure (138) generally angling down from the cab (122) rearward. The enclosure (138) includes an air intake (190) that opens into a gap (188) between the enclosure (138) and cab (122). A fan (154) disposed rearward the radiator (152) may pull cooling air through the air intake (190) and past the radiator (152).

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— *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

International application No.
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A. CLASSIFICATION OF SUBJECT MATTER

E02F 9/08(2006.01)i, B60K 11/04(2006.01)i, B60K 11/06(2006.01)i, E02F 3/76(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)

E02F 9/08; B60K 17/10; B60K 17/356; E02F 9/00; E02F 9/20; E02F 9/24

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
(Chinese Patents and application for patent)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: wheel loader, motor grader, engine, radiator, cooling, pump and similar terms.

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 2007-023508 A (HITACHI CONSTR MACH CO., LTD. et al.) 01 February 2007 See paragraphs 42-44, claim 1 and figures 1 - 7.	3 1-2,4-5
Y A	EP 1002685 A2 (EATON CORPORATION) 24 May 2000 See claim 1 and figures 1 - 2.	3 1-2,4-5
A	EP 0564501 B1 (CATERPILLAR INC.) 09 November 1994 See claim 1 and figure 1.	1-5
A	US 4355944 A1 (LORENC; DONALD D.) 26 October 1982 See claim 1 and figure 1.	1-5

☐ 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
"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	Date of mailing of the international search report
11 MARCH 2010 (11.03.2010)	**12 MARCH 2010 (12.03.2010)**
Name and mailing address of the ISA/KR Korean Intellectual Property Office Government Complex-Daejeon, 139 Seonsa-ro, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No. 82-42-472-7140	Authorized officer Cho, Durk Hyun Telephone No. 82-42-481-8425

Form PCT/ISA/210 (second sheet) (July 2009)

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2009/051814

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.: 6-10
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:

1. ☐ As all required addtional 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 an additional fee, this Authority did not invite payment of any additional fee.

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

Information on patent family members

International application No.

PCT/US2009/051814

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