

Title (en)

COOLING DEVICE FOR WORKING MACHINE

Title (de)

KÜHLVORRICHTUNG FÜR ARBEITSMASCHINE

Title (fr)

SYSTÈME DE REFROIDISSEMENT POUR ENGINE DE CHANTIER

Publication

**EP 1826373 A4 20090114 (EN)**

Application

**EP 05768786 A 20050802**

Priority

- JP 2005014068 W 20050802
- JP 2004365112 A 20041216

Abstract (en)

[origin: EP1826373A1] An object of the present invention is to provide a cooling system for a work machine including a sound insulating/flow regulating plate that is capable of coping with different types and operating conditions of a work machine. An upper cover 3a is provided above a cooling package 21 that comprises a heat exchanger unit 11 and a cooling fan 12. A side door 3b is provided at one side of the upper cover 3a and faces the cooling package 21. Upper air intake holes 6 open to the space between the side door 3b and the cooling package are formed in the upper cover 3a. Side air intake holes 7 are formed in the side door 3b, at a location adjacent to the upper cover 3a. A sound insulating/flow regulating plate 27 is swingably mounted by hinges 26 that are disposed between the upper air intake holes 6 and the side air intake holes 7. The sound insulating/flow regulating plate 27 is designed so that its inclination angle is automatically controlled to achieve a balance between wind pressures from flows of air introduced from the upper air intake holes 6 and the side air intake holes 7, thereby blocking sound generated inside the machine body and regulating the flow of air introduced from the upper air intake holes 6 and the side air intake holes 7.

IPC 8 full level

**E02F 9/00** (2006.01); **F01P 11/10** (2006.01); **F01P 11/12** (2006.01); **F01P 1/00** (2006.01)

CPC (source: EP KR US)

**E02F 9/00** (2013.01 - KR); **E02F 9/0866** (2013.01 - EP US); **E02F 9/0891** (2013.01 - EP US); **F01P 11/10** (2013.01 - EP KR US); **F01P 11/12** (2013.01 - EP KR US); **F01P 2001/005** (2013.01 - EP US); **F01P 2025/48** (2013.01 - EP US)

Citation (search report)

- [XY] JP H09250344 A 19970922 - HITACHI CONSTRUCTION MACHINERY
- [YA] JP 2003003849 A 20030108 - HITACHI CONSTRUCTION MACHINERY
- [Y] JP 2001214740 A 20010810 - DENSO CORP
- [Y] JP S6031594 U 19850304
- [Y] JP H0932553 A 19970204 - SUMITOMO CONSTR MACH
- [Y] JP H03220023 A 19910927 - TOYODA AUTOMATIC LOOM WORKS
- [A] KR 20010087301 A 20010915 - KOMATSU MFG CO LTD
- See references of WO 2006064588A1

Cited by

CN105612292A; EP2157297A1; EP2248695A4; US8550198B2; WO2015055481A1

Designated contracting state (EPC)

DE

DOCDB simple family (publication)

**EP 1826373 A1 20070829**; **EP 1826373 A4 20090114**; CN 1906387 A 20070131; JP 2006170108 A 20060629; JP 4238206 B2 20090318; KR 20070088251 A 20070829; US 2007187075 A1 20070816; WO 2006064588 A1 20060622

DOCDB simple family (application)

**EP 05768786 A 20050802**; CN 200580001789 A 20050802; JP 2004365112 A 20041216; JP 2005014068 W 20050802; KR 20067003320 A 20060217; US 59885705 A 20050802