

Title (en)
SYSTEM FOR MEASURING OUTPUT OF LARGE-SIZED LOW-SPEED TWO-STROKE ENGINE AND METHOD FOR MEASURING OUTPUT OF LARGE-SIZED LOW-SPEED TWO-STROKE ENGINE

Title (de)
SYSTEM ZUM MESSEN DER LEISTUNG EINES GROSSFORMATIGEN ZWEITAKTMOTORS MIT NIEDRIGER DREHZAHL UND VERFAHREN ZUM MESSEN DER LEISTUNG EINES GROSSFORMATIGEN ZWEITAKTMOTORS MIT NIEDRIGER DREHZAHL

Title (fr)
SYSTÈME ET PROCÉDÉ DE MESURE DE LA PUISSANCE D'UN MOTEUR DEUX TEMPS À FAIBLE VITESSE ET DE GRANDE TAILLE

Publication
EP 3561271 A1 20191030 (EN)

Application
EP 19170457 A 20190423

Priority
KR 20180046997 A 20180423

Abstract (en)
An output measurement system of a large-sized low-speed two-stroke engine according to an embodiment of the present disclosure is an output measurement system of a large-sized low-speed two-stroke engine that measures output of an engine for one cycle. The output measurement system includes: a pressure sensor unit that detects individual combustion pressure of cylinders; an angle sensor unit that detects rotation angles of a crankshaft with a Z-pulse thereof matched with an actual TDC of a predetermined reference cylinder; and an output measurer that collects combustion pressure of cylinders at the rotation angles of the crankshaft from the pressure sensor unit and the angle sensor unit, shows a plurality of graphs about combustion pressure of the cylinders at the rotation angles of the crankshaft, combustion pressure of the cylinders at combustion chamber volumes, and pressure change rates of the cylinders at the rotation angles of the crankshaft, finds out the position of a compression TDC and a loss of angle of the reference cylinder from the plurality of graphs, adjusts points in time when the angle sensor unit detects the rotation angle of the crankshaft for the other cylinders except for the reference cylinder, and then measures output of the cylinders.

IPC 8 full level
F02D 35/02 (2006.01); **F02D 39/04** (2006.01); **F02D 41/00** (2006.01)

CPC (source: EP KR)
F02D 35/023 (2013.01 - EP KR); **F02D 39/04** (2013.01 - KR); **F02D 41/009** (2013.01 - EP KR); **F02D 41/1497** (2013.01 - EP); **F02D 2200/10** (2013.01 - EP); **F02D 2400/04** (2013.01 - EP)

Citation (search report)
• [I] WO 2004048762 A1 20040610 - RICARDO CONSULTING ENG [GB], et al
• [I] DE 102011083471 A1 20130328 - BOSCH GMBH ROBERT [DE]
• [I] US 2016146132 A1 20160526 - FROEHLICH MORITZ [AT], et al
• [I] KR 101061290 B1 20110831 - YU GANG JU [KR], et al

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 3561271 A1 20191030; **EP 3561271 B1 20220112**; DK 3561271 T3 20220307; ES 2907807 T3 20220426; JP 2019190463 A 20191031; JP 6760588 B2 20200923; KR 101865023 B1 20180607

DOCDB simple family (application)
EP 19170457 A 20190423; DK 19170457 T 20190423; ES 19170457 T 20190423; JP 2019082257 A 20190423; KR 20180046997 A 20180423