

Title (en)
CONTROL SYSTEM FOR AN AIRCRAFT PROPELLER DRIVE

Title (de)
STEUERSYSTEM FÜR EINEN FLUGZEUGPROPELLERANTRIEB

Title (fr)
SYSTÈME DE COMMANDE D'UN MÉCANISME D'ENTRAÎNEMENT D'HÉLICE D'AVION

Publication
EP 2331401 A2 20110615 (DE)

Application
EP 09782180 A 20090825

Priority
• EP 2009060953 W 20090825
• DE 102008041925 A 20080909

Abstract (en)
[origin: WO2010028943A2] The invention relates to a control system for an aircraft propeller drive for controlling the power of a diesel engine (2) by means of an accelerator (7) and a control module (8), and for controlling the speed of the aircraft propeller (4) which can be controlled by a propeller blade control valve (6) and which is connected to the diesel engine (2) by means of a drive train (3). Said control module comprises a totally digital power unit regulator (8) integrating a closed control circuit which is connected to the accelerator for controlling the power and to the propeller blade control valve for controlling the speed of the propeller. Said control circuit compares the desired value based on the position of the accelerator and the measured actual value of the engine speed and controls the propeller blade control valve (6) based on the determined differential speed, and automatically adapts the propeller speed to the engine power predetermined by the position of the accelerator. The control system has one lever allowing the pilot to be discharged and the redundant control system requires a reduced number of components.

IPC 8 full level
B64C 11/30 (2006.01); **B64D 31/04** (2006.01); **B64D 31/06** (2006.01); **B64D 31/14** (2006.01)

CPC (source: EP US)
B64C 11/305 (2013.01 - EP US); **B64D 31/04** (2013.01 - EP US); **B64D 31/06** (2013.01 - EP US); **B64D 31/14** (2013.01 - EP US)

Citation (search report)
See references of WO 2010028943A2

Designated contracting state (EPC)
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 SE SI SK SM TR

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
WO 2010028943 A2 20100318; **WO 2010028943 A3 20100701**; CA 2736193 A1 20100318; CN 102149600 A 20110810; DE 102008041925 A1 20100325; EP 2331401 A2 20110615; US 2011190966 A1 20110804

DOCDB simple family (application)
EP 2009060953 W 20090825; CA 2736193 A 20090825; CN 200980135185 A 20090825; DE 102008041925 A 20080909; EP 09782180 A 20090825; US 200913062842 A 20090825