

Title (en)
SYSTEM AND METHOD FOR MONITORING AN AIRCRAFT ENGINE

Title (de)
SYSTEM UND VERFAHREN ZUR ÜBERWACHUNG EINES FLUGZEUGMOTORS

Title (fr)
SYSTÈME ET PROCÉDÉ DE SURVEILLANCE D'UN MOTEUR D'AÉRONEF

Publication
EP 3941826 A1 20220126 (FR)

Application
EP 20727833 A 20200421

Priority
• FR 1904283 A 20190423
• FR 2020000143 W 20200421

Abstract (en)
[origin: WO2020217004A1] A system for monitoring an aircraft engine, comprising: an acquisition module (3) for acquiring current measurements of physical size, referred to as input (ME) and output (MS) physical sizes, relative to the aircraft engine (15), a module (5) for simulating the physical behavior of the aircraft engine, in order to simulate output physical sizes (VS) as a function of the current measurements of input physical sizes (ME), a processor for calculating physical margins, referred to as actual physical margins (MR), between the simulated values of output physical sizes (VS) and the corresponding current measurements of output physical sizes (MS), a learning module (7) for predicting margins, said margins (MP) being predicted using current measurements of input physical sizes (ME) and in that the processor (9) is configured to calculate surveillance residuals (R) showing an indication of the status of the aircraft engine.

IPC 8 full level
B64C 27/04 (2006.01); **B64D 45/00** (2006.01); **G01M 15/14** (2006.01); **G05B 17/00** (2006.01); **G07C 5/00** (2006.01)

CPC (source: CN EP US)
B64C 27/04 (2013.01 - EP); **B64D 45/00** (2013.01 - EP); **B64F 5/40** (2016.12 - CN); **B64F 5/60** (2016.12 - CN US); **G01M 15/14** (2013.01 - EP US); **G05B 17/02** (2013.01 - EP); **G07C 5/0808** (2013.01 - US); **G07C 5/0841** (2013.01 - US); **B64C 27/04** (2013.01 - US); **B64D 2045/0085** (2013.01 - EP US); **B64F 5/40** (2016.12 - US); **G07C 5/008** (2013.01 - EP); **G07C 5/0841** (2013.01 - EP)

Citation (search report)
See references of WO 2020217004A1

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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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
WO 2020217004 A1 20201029; CN 113748066 A 20211203; EP 3941826 A1 20220126; FR 3095424 A1 20201030; US 2022242592 A1 20220804

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FR 2020000143 W 20200421; CN 202080031237 A 20200421; EP 20727833 A 20200421; FR 1904283 A 20190423; US 202017605269 A 20200421