

Title (en)
METHOD OF MAINTENANCE OF EQUIPMENT

Title (de)
VERFAHREN ZUR WARTUNG EINER AUSRÜSTUNG

Title (fr)
PROCEDE DE MAINTENANCE D'UN EQUIPEMENT

Publication
EP 3084692 A1 20161026 (FR)

Application
EP 14814873 A 20141218

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• FR 1303026 A 20131220
• EP 2014078399 W 20141218

Abstract (en)
[origin: WO2015091752A1] The invention relates to a method of maintenance of equipment liable to pass through at least one degraded state before becoming faulty, this equipment being furnished with a data sensor, linked to a recorder, itself associated with a processing unit, which comprises the following steps of: - detection of states of the equipment on the basis of the recorded data, and by means of a hidden Markov model, - determination of an optimal date of maintenance as a function of a state of the equipment, of an aggregate time of use of the equipment which is predetermined, using an optimal shutdown on PDMP, which comprises: o a substep of calculating a quantification grid consisting of cells with for each cell the date of transition, the state of the equipment at this date of transition, the time spent in the previous state, the probability of being in said state at said date, o a substep of calculating a discretized grid of usage time remaining for each cell of the quantification grid, o a substep of calculating the date of maintenance starting from a state of the equipment detected at a date t and of the date of transition into this state, itself determined as a function of the time of use, and by using the discretized quantification grid. The so-called optimal maintenance date is determined by minimizing the mathematical expectation of a temporal cost function; furthermore a probability of passing from the state of a cell to each other possible state is associated with each cell of the discretized quantification grid.

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G06Q 10/00 (2012.01)

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