

Method and Device for Monitoring the Malfunction of APU turbine vane fracture and rotor shaft jam

Abstract

5 The present invention relates to a method and device for monitoring
APU turbine vane fracture and rotor shaft jam. The method for monitoring
APU turbine vane fracture and rotor shaft jam comprises: acquiring APU
messages at multiple time points within a period; obtaining the operation
parameters of the APU according to the APU messages, the operation
10 parameters including at least the start time STA; calculating the average value
AVG and the deviation index δ of the start time STA within the period; and
determining the circumstance of the turbine vane fracture and rotation shaft
jam of APU is in stable phase, decline phase or malfunction phase according
to the deviation index δ .

15 FIG. 6