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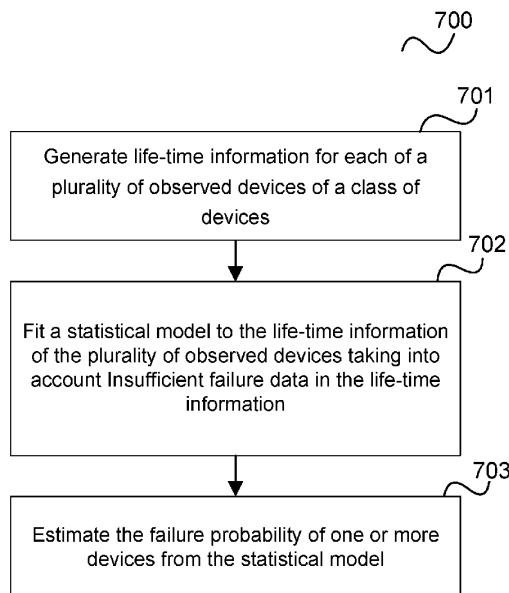


FIG 7

(57) Abstract: Aspects concern a method for estimating a failure probability of one or more devices, comprising generating life-time information for each of a plurality of observed devices of a class of devices to which the one or more devices belong, fitting a statistical model to the life- time information of the plurality of observed devices taking into account insufficient failure data in the life-time information by setting up a prior distribution for each parameter of the statistical model, formulating a likelihood function based on the life-time information, computing a joint posterior distribution of the parameters of the statistical model based on the prior distributions and the likelihood function according to Bayes's theorem and obtaining values of the parameters of the statistical model and estimating the failure probability of the one or more devices from the statistical model.

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