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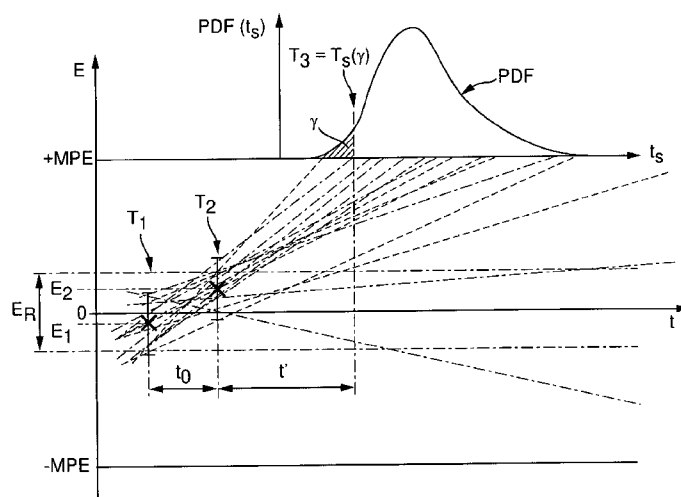
(54) Title: METHOD OF DETERMINING A CALIBRATION TIME INTERVAL FOR A CALIBRATION OF A MEASURE-
MENT DEVICE

Fig. 1

(57) **Abstract:** Method of determining a calibration time interval for a measurement device, which allows an optimization of calibration time intervals, comprising the steps of: performing a first and a second calibration and determining a first and a second measurement errors (E1, E2), adjusting, repairing or replacing the device and restarting the method from the beginning if said measurement errors (E1, E2) exceed predetermined error ranges (E_R MPE), if a significant drift (D) between the first and the second measurement errors (E1, E2) occurred, determining the calibration time of a third calibration, according to a probability density function ($PDF_{TS}(t_s)$) of a crossing time (t_s) at which the measurement error (E) of the device will exceed the maximum permissible error (MPE), which is determined based on the first and the second measurement errors (E1, E2), a probability density function ($PDF(e_{cal})$) for determining a measurement error (e_{cal1}) solely due to a calibration uncertainty inherent to the first calibration, a probability density function ($PDF_2(e_{cal2})$) for determining a measurement error (e_{cal2}) solely due to a calibration uncertainty inherent to the second calibration, and the first and the second calibration times (T1, T2).