A B S T R A C T

A MULTIDIMENSIONAL METHOD AND SYSTEM FOR STATISTICAL PROCESS CONTROL

The present invention relates to a method and to any system using such a method for performing statistical process control on the basis of taking indicators or measurements on the inputs, the outputs, and the control and operating parameters of said process, and which can be represented by observation points in frames of reference associating their values to their sampling indices. In the invention, the observed values are transformed so that the resulting values are compatible with the multidimensional Gaussian distribution model; said transformed observation points are situated in a multidimensional space, each dimension being associated with a measured magnitude; the out-of-control observation points situated in this way and concentrated in a particular direction are identified; and said direction is associated with a common cause for drift in said process, and each observation-and-anomaly pair is associated with indicators in order to propose zero, one, or more causes of anomaly that might relate to the observation made.

Translation of the title and the abstract as they were when originally filed by the Applicant. No account has been taken of any changes that may have been made subsequently by the PCT Authorities acting ex officio, e.g. under PCT Rules 37.2, 38.2, and/or 48.3.