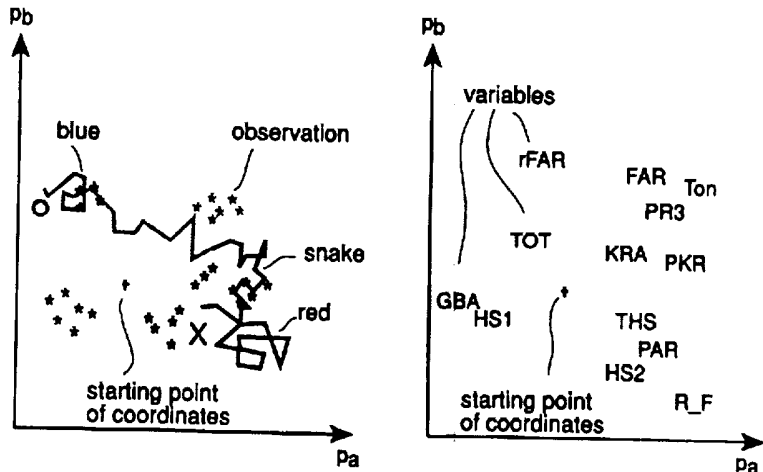




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<p>(21) International Application Number: PCT/SE94/01208 (22) International Filing Date: 15 December 1994 (15.12.94) (30) Priority Data: 9304246-3 22 December 1993 (22.12.93) SE (71) Applicant (for all designated States except US): ASEA BROWN BOVERI AB [SE/SE]; S-721 83 Västerås (SE). (71)(72) Applicant and Inventor: WOLD, Svante [SE/SE]; Gullsjö-äng 4, S-911 91 Vännäs (SE). (72) Inventor; and (75) Inventor/Applicant (for US only): SUNDIN, Lasse [SE/SE]; Västra Malmgatan 11 B, S-972 41 Luleå (SE). (74) Agents: LUNDBLAD VANNESJÖ, Katarina et al.; Asea Brown Boveri AB, Patent, S-721 78 Västerås (SE).</p>		<p>(81) Designated States: CA, FI, JP, NO, US, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>In English translation (filed in Swedish). With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 27 July 1995 (27.07.95)</p>

(54) Title: METHOD FOR MONITORING MULTIVARIATE PROCESSES



(57) Abstract

A method for monitoring and control of an industrial or other technical process, in which the process is dependent on a multiple of variables (X) relevant to the process. The process comprises a description of the relevant variables as a multidimensional room, where each variable represents an independent component in the room, that the observations of the variable values at a certain time point represent a point in the multidimensional room, that observations from a number of time points form a point swarm in the room, that at least one first (p_a) and one second (p_b) principal direction of the point swarm are calculated, that the projections of the observations onto these first and second principal directions are determined, that the principal directions are illustrated graphically in the plane which is formed by the first and second principal directions in the point swarm, further that the principal directions (p_a, p_b) are continuously updated during the course of the process, the graphic information thus becoming dynamic, and, finally, that the process operator or the monitoring member, on the basis of the presented information, adapts members which influence variable quantities in the process such that the process is controlled to optimum operating conditions.

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International application No.

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A. CLASSIFICATION OF SUBJECT MATTER		
IPC6: G05B 23/00 According to International Patent Classification (IPC) or to both national classification and IPC		
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