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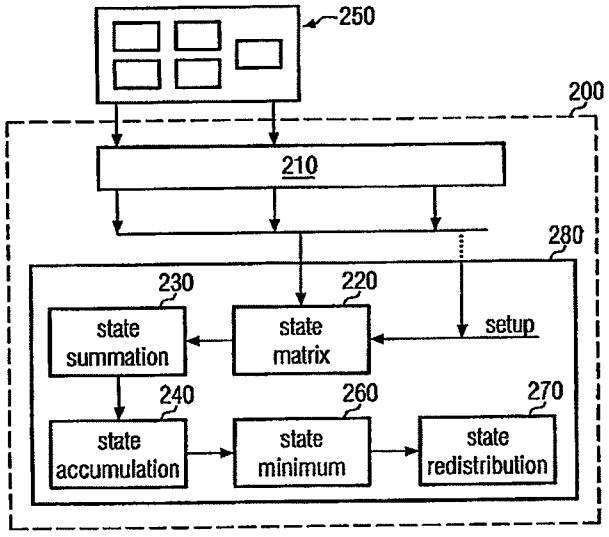
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[Continued on next page]

(54) Title: AN AUTOMATED STATE ESTIMATION SYSTEM FOR CLUSTER TOOLS AND A METHOD OF OPERATING THE SAME



(57) Abstract: By using weighted entity states for representing a state of a cluster tool, a highly efficient technique for the measurement and monitoring of cluster tool characteristics, such as reliability, availability and maintainability, is provided. For example, individual entities of the cluster tool may be weighted according to their capacity and corresponding entity states may be ranked in accordance with a predefined hierarchy structure, thereby enabling an efficient combination of weighted entity states so as to represent the cluster tool state.

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