

(54) Title of the invention : A SYSTEM FOR RESOLVING NON-LINEAR DYNAMICS WITH LESSER ITERATIONS IN NUMEROUS SECTORS AND METHOD THEREOF

(57) Abstract :

ABSTRACT: Title: A System for Resolving Non-Linear Dynamics with Lesser Iterations in Numerous Sectors and Method Thereof

The present disclosure proposes a system (100) and method that require minimum number of iterations for efficiently resolving non-linear dynamics. The system (100) utilizes weighted averaging techniques to find the solution for nonlinear dynamics. The system (100) obtains the solution within 10 to 20 percentage points lesser number of iterations for a permissible error greater than 0.0001, when compared to the bisection method, depending upon the complexity of the function. The system (100) applies in many fields of engineering, such as electrical engineering, mechanical engineering, chemical engineering, computer science. Particularly in domains like flow of current, analysis of circuits, mechanical oscillations, forces on beams, optimization and data analysis. The system (100) may decrease 5 to 10 percent of the calculation time by investigating the weights when compared to the bisection method.

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