(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application:23/02/2023

(21) Application No.202341012530 A

(43) Publication Date: 17/03/2023

(54) Title of the invention: METHOD AND SYSTEM FOR OPTIMIZED CONTROL OF DC SERVO MOTORS USING PID AND FUZZY PD CONTROLLERS

(51) International classification

:G03F 072000, G05B 130200, H02P 270800. H04L 126600, H04W 162800

(86) International Application No

:PCT// :01/01/1900

Filing Date

(87) International Publication No: NA

(61) Patent of Addition to

Application Number Filing Date

:NA

(62) Divisional to Application Number

Filing Date

·NA

:NA

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(57) Abstract:

The present invention relates to a system for controlling a DC servo motor. The system includes a mathematical model of the motor system, a PID controller, a Fuzzy PD controller, and a microcontroller or digital signal processor for implementing the controller. The controller is tuned using simulation and optimization techniques to achieve optimal performance, and is able to provide improved accuracy, stability, and robustness compared to traditional control methods.

No. of Pages: 21 No. of Claims: 10

SSM Institute Bullo Sud Tech.

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The Patent Office Journal No. 11/2023 Dated 17/03/2023 hunatti Village, Sindalagundu 27/251 Palam Road, Dindigul - 624 002.