

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :03/02/2022

(21) Application No.202241005964 A

(43) Publication Date : 11/02/2022

(54) Title of the invention : Smart factory automation with PLC and SCADA configurations

(51) International classification :G05B0019409000, G05B0019050000, G05B0019418000, G05B0015020000, H04L0012240000
(86) International Application No :PCT//
Filing Date :01/01/1900
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)Name of Applicant :

1)Periyar Maniammai Institute of Science and Technology

Address of Applicant :Periyar Nagar, Vallam, Thanjavur - 613403, Tamilnadu, India -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

1)Dr.C.Narmadha

Address of Applicant :Associate Professor & HOD, Department of Electronics and Communication Engineering, Periyar Maniammai Institute of Science and Technology, Periyar Nagar, Vallam, Thanjavur -613403 -----

2)Dr.V.Hamsadhwani

Address of Applicant :Associate Professor & HOD, Department of Electrical and Electronics Engineering, Periyar Maniammai Institute of Science and Technology, Periyar Nagar, Vallam, Thanjavur 613403 -----

3)Dr.J. Kesavan

Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Periyar Maniammai Institute of Science and Technology, Periyar Nagar, Vallam, Thanjavur -----

4)Mr.I.Karthic Subramaniyan

Address of Applicant :Assistant Professor & HOD, Department of Aerospace Engineering, Periyar Maniammai Institute of Science and Technology, Periyar Nagar, Vallam, Thanjavur- 613403 -----

5)Mr.R.Rakesh

Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Periyar Maniammai Institute of Science and Technology, Periyar Nagar, Vallam, Thanjavur- 613403 -----

6)Mr.U.Saravana Kumar

Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Periyar Maniammai Institute of Science and Technology, Periyar Nagar, Vallam, Thanjavur -----

(57) Abstract :

The present invention provides an automated configurable control system (CCS) for a manufacturing process system that allows a user to address menus on screen images for initially configuring the process and for subsequently quickly adding, modifying, and deleting components and control signals, all without having to modify software programmes. An automated configuration database file is generated by the control system from data entered by a user into the CCS via the use of a configuration tool in the control system. A deployment tool instantly uploads the configuration database file to a SCADA programme that is responsive to it and may be used to define the system, monitor the state of the processing system, and show screen pictures, among other functions. The data from the deployment tool is also sent to a PLC application for the purpose of defining the objects and logic of the processing system via the use of a download application.

No. of Pages : 16 No. of Claims : 3