(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :22/10/2022

(5			1 E D'CC 47		G A 1' 4'
(54) Title of the invention : Au	to 1 urn off for water Pur	np with Four Different	Time Slots for Power	Saving Applications

		(71)Name of Applicant :
		1)St. Martin's Engineering College
		Address of Applicant :St.Martin's Engineering College, Dhulapally
		Kompally Secunderabad
		Name of Applicant : NA
		Address of Applicant : NA
		(72)Name of Inventor :
		1)Dr. N. Ramchandra Professor, EEE Department, SMEC
		Address of Applicant :St.Martin's Engineering College, Dhulapally
		Kompally Secunderabad
		2) Mr. Kambhampati Venkata Govardhan Rao Assistant Professor,
		EEE Department, SMEC
		Address of Applicant :St.Martin's Engineering College, Dhulapally
		Kompally Secunderabad
(51) T	:H02J0007350000, A01K0063040000,	3)Dr. P. Santosh Kumar Patra Principal and Professor, CSE
(51) International	F21S0009030000, H04L0005000000,	Department, SMEC
classification	G06F0001140000	Address of Applicant :St.Martin's Engineering College, Dhulapally
(86) International	DOT	Kompally Secunderabad
Application No	:PCT// /	4) Ms. B. Sowkya Student, EEE Department, SMEC
Filing Date	:01/01/1900	Address of Applicant :St.Martin's Engineering College, Dhulapally
(87) International	NT A	Kompally Secunderabad
Publication No	: NA	5)Mr. B. Vikas Student, EEE Department, SMEC
(61) Patent of Addition	to NA	Address of Applicant :St.Martin's Engineering College, Dhulapally
Application Number	:NA :NA	Kompally Secunderabad
Filing Date	.NA	6)Mr. B. Santosh Reddy Student, EEE Department, SMEC
(62) Divisional to	:NA	Address of Applicant :St.Martin's Engineering College, Dhulapally
Application Number	:NA :NA	Kompally Secunderabad
Filing Date	.NA	7)Mr. G. Jeevanmukesh Student, EEE Department, SMEC
		Address of Applicant :St.Martin's Engineering College, Dhulapally
		Kompally Secunderabad
		8)Ms. V Vaeshnavi Reddy Student, EEE Department, SMEC
		Address of Applicant :St.Martin's Engineering College, Dhulapally
		Kompally Secunderabad
		9)Ms. N Hema Mythreyi Student, EEE Department, SMEC
		Address of Applicant :St.Martin's Engineering College, Dhulapally
		Kompally Secunderabad
		10)Ms. K Usha Student, EEE Department, SMEC
		Address of Applicant :St.Martin's Engineering College, Dhulapally
		Kompally Secunderabad
		11)Mr. K Shashank Kumar Student, EEE Department, SMEC
		Address of Applicant :St.Martin's Engineering College, Dhulapally
		Kompally Secunderabad
(57) 11		

(57) Abstract :

The modern technologies are helpful in all aspects of our life. Due to this lots of development done in the field of agriculture we can save lot of time and resources to get more yield. The solar energy converted into electrical energy by photo voltaic cells. This energy stored in batteries during the daytime to run the water pump for agriculture and distribute the water to the farm. The invention is designed to operate the water pump at four different time slots. It prevents the difficulties of switching the pump on/off manually. Real time clock interfaced to Arduino then Arduino give command to the corresponding relay to start the load and another command to switch off the load is programmed. A matrix keypad helps to entering different time slots. There be an inbuilt real time clock (RTC) which keeps tracking the time and thus switches ON/OFF the pump accordingly. In this work, solar panel used to charge the battery a lcd display is interfaced to the to display time. We are setting the time slots from app through Wi-Fi communication.

No. of Pages : 11 No. of Claims : 4