

**Patents by NITT Faculty**

<b><u>Sl.No</u></b>	<b><u>Faculty Name/Dept</u></b>	<b><u>Title of the patent</u></b>	<b><u>Patent Filing date</u></b>	<b><u>Patent sanctioned date</u></b>	<b><u>Patent No</u></b>	<b><u>Whether the patents have been utilized by the industry If so, the details thereof</u></b>	<b><u>Remarks/ Any other information</u></b>
1.	Dr. D. Lenin Singaravelu, Assistant Professor, Production Engineering Department	Iron based cermet friction materials/composites/ brake elements with built-in backing plates	07/11/2006	06/05/2014	260479	No	The patent should be renewed now.
2.	Dr. S. Anandan Dept. of Chemistry	An Improved Solid-State Polymer Composition, a Process for its Preparation and an Improved Dye-sensitized Solar Cell	Application No.2728/CH/2007	13/07/2015	266300		
3.	Dr. M. Duraiselvam, Production Engineering	Laser surface nitrided titanium alloy for light weight automobile disk brake rotor application	07.06.2012	Under review	2285/CHE/2012	No	
4.	Dr. Pannirselvam/Mechanical	Auxiliary starter and controller assembly for compressor system	5/9/2006		240995	Not yet	Needs financial support to

							build a prototype and test.
5.	Dr.M.Premalatha/ Department of Energy and Environment	Surface Renewal Photobioreactor	5.4.2014	filed	1826/CHE/2014	=	=
6.	Dr.S.Natarajan & Dr.S.P.Kumaresh babu (of NITT)and Mr.P. Veerabalu & Mr.M.Kumarasamy(of NLC,Neyveli).	High Longevity Coatings and Alternate Material for Erosion and Corrosion resistance in Mining Pumps.	14/10/2014	=	5145/CHE/2014		
7.	S. Muthukumaran/MME	Friction welding of tube to tube sheet or plate by adopting an external tool	07-03-2006	26/03/2008	217446	—	
8.	S. Muthukumaran and S. K. Mukherjee / MME	An improved tool device adaptable to typical milling machine for carrying out friction stir welding procedure and a process thereof	21/01/2010	23/02/2016	238121	—	
9.	S. Muthukumaran / MME	An improved friction forming process and a friction forming machine with a tool and fixture	27-08-2010	<u>16/02/2016</u>	242420	—	
10	S. Muthukumaran / MME	Method of Joining Dissimilar Materials	09-09-2010	In processing	2646/CHE/2010	Yet to receive grant	
11	Dr. Sishaj P Simon, Asst. Professor/EEE	A System with Multiple transmission Loss Co-efficient for Dynamic	10/07/2014		3413/CHE/2014	No	<i>Name of applicant: NIT, Trichy</i>

		Economic Generator Dispatch					
12	Dr. Sishaj P Simon, Asst. Professor/EEE	A Batteryless Solar Photovoltaic Power Generation System to Supply Electrical Power during all Seasons to the Utilities Throughout the Day	25/11/2014		1231/KOL/2014	No	<i>Name of applicant:</i> BHEL, Trichy
13	Dr. Sishaj P Simon, Asst. Professor/EEE	A system to determine a day-ahead loading pattern of heavy machineries in industries and proactive control of peak load overshoot	19/03/2016		201631009629	No	Name of applicant: BHEL, Trichy
14	Dr. Sishaj P Simon, Asst. Professor/EEE	A method of differential relay for power transformer protection using DSP processor	05/04/2016		201641012033	No	<i>Name of applicant:</i> NIT, Trichy
15	Dr. Sishaj P Simon, Asst. Professor/EEE	A battery less solar photovoltaic power generation system to supply electrical power during all seasons to the utilities throughout the day.	25/11/2014		1231/KOL/2014	No	Name of applicant: BHEL, Trichy
16	Dr. Sishaj P Simon, Asst. Professor/EEE	A system to determine a day-ahead loading pattern of heavy machineries in	19/03/2016		201631009629	No	Name of applicant: BHEL, Trichy

		industries and proactive control of peak load overshoot					
17	M.Jaya Bharata Reddy D.K.Mohanta / EEE	A Novel System for detection and classification of power transmission line fault	27/03/2008	16/05/2013	256209	Not yet	
18	M.Jaya Bharata Reddy D.K.Mohanta B M Karan / EEE	A Novel power monitoring system for detection, localization and classification of disturbances	27/03/2008	31/12/2012	254882	Not yet	
19	N Kumeresan M Subbiah N Ammasai Gounden /EEE	A New Four-Stage Power Controller for Improved Energy Efficiency and Saving in Reactive Power for Three-Phase Induction Motors and Wind-Driven Grid-Connected Induction Generators	24.03.2006	07.05.2009	234172	No	--
20	Dr. B.Venkataramani & Dr. G. Lakshminarayanan ECE	Improved wave pipelined array multiplier	May 2002	May 15, 2008	Indian Patent No. 220117 Granted	-	
21	Dr. G. Lakshminarayanan &	Design of Global Asynchronous	Feb 2013	2013	Application	-	

	Dr. T. N. Prabhakaran ECE	Controller			No. 596/CHE/2013 Filed		
22	M. Gopiraman, R. Karvembu, (Chemistry,NITT) K. Watanabe, I.S. Kim, ,	Processed animal tissues in catalysis, animal tissues as catalyst support - Fabrication process and catalytic applications	Submitted on 18th September 2014		Japanese Patent, Application No. 2014- 190593.	-	
23	B.Dastagiri Reddy M.P.Selvan Anish NK S.Moorthi / EEE	EMBEDDED CONTROLLER FOR N-LEVEL MULTILEVEL INVERTER USING FPGA	31/07/2013		Application No. 3435/CHE/2013	-	
24	B.Dastagiri Reddy M.P.Selvan S.Moorthi / EEE	S3 SINE WAVE INVERTER	9/5/2014		Application No. 2313/CHE/2014	-	
25	B.Dastagiri Reddy M.P.Selvan S.Moorthi / EEE	S3 Grid-Tie inverter	9/5/2014		Application No. 2311/CHE/2014	-	
26	N Kumeresan M P Selvan S Moorthi N Ammasai Gounden Subirsan Kashish Bhambhani / EEE	FPGA BASED MICRO-GRID CONTROL AND MONITORING SYSTEM	1/8/2014		Application No. 2181/DEL/2014		Filed in the name of Power Grid Corporation of India Ltd.
27	K.Venkataraman S Moorthi / EEE	ANALOG SIGNAL ACQUISITION CARD	9/5/2014		Application No.	-	

	M P Selvan	(ASAC) FOR ADC CHANNEL ENHANCEMENT IN FPGA BOARDS TO SUIT FOR POWER ELECTRONIC APPLICATIONS			2314/CHE/2014		
28	C.Mala / CSE	System for the Remote Control of electrical equipment			244528	=	
29	Moorthi Dhiwakar Irin Jose Anusha.R. Kowshick B Niranjan Kumar / EEE	Vehicle accident response system			4434/CHE/2013	-	Published in IPR Journal.
30	S. Moorthi / EEE	intelligent Location identification and Passenger-Alert System Railways Using GPS Receiver			3945/CHE/2012	-	Published in IPR Journal.
31	Ganasan Saravana Ilango P.Srinivasa Rao C.Nagamani B. Indurani / EEE	A PHOTOVOLTAIC SYSTEM AND A METHOD OF ARRANGING PV ARRAYS IN PV SYSTEM	17/07/2013			-	
32	Dr.S. Manivannan/Physics	Yet to be finalized	Filing under process			=	We are working on drafting the information for filing and is expected to be

							completed this year
33	Dr.S. Manivannan/Physics	Yet to be finalized	Filing under process			=	We are working on drafting the information for filing and is expected to be completed this year