



### **Directorate of Innovation Entrepreneurship and Startup Activities (IES):**

Directorate of Innovation Entrepreneurship and Startup activities (IES) is a creative hub of VFSTR Deemed to be University and dedicated to promote Innovation and Entrepreneurship with the support of guidance and monitoring committee which comprises of senior professors and deans of the University. It is a pedestal to help knowledge driven enterprises to establish and prosper under organized scientific guidance. It also facilitates swift commercialization of a product-based technology. The main objective of the center is to produce successful entrepreneurs and firms that are financially viable and relying on its own potential.

The Directorate of Innovation Entrepreneurship & Start-up Activities (IES) was established in 2018 with a special focus on Innovation, Intellectual property rights, Entrepreneurship and Startups. Formerly it was named as Innovation Entrepreneurship Development Center (IEDC) and established in 2012.

### **Vignan Technology Business Incubator (VTBI):**

Vignan Technology Business Incubator (VTBI) is a nonprofit Section (8) Incubator Established in the year 2017. It was founded with the objective of encouraging entrepreneurship within and outside the University. VTBI has partnered with Vignan's Foundation for Science, Technology and Research (VFSTR) to build intellectual property from basic and advance research, and commercialize the same through licensing and entrepreneurship. The incubator provides infrastructure, support and expertise to enable entrepreneurs plan, start and grow.

VTBI aims to coordinate, integrate and leverage the various strands of excellence driving innovation and entrepreneurship in a developing ecosystem which consists of research at the cutting edge of science and technology and social impact, also supports members of the VFSTR including staff, students, alumni, faculty, and R&D partners, in creating successful business ventures that can translate benefits from technology and knowledge innovations to the society at large.

VTBI offers to share resources including space and infrastructure, access to business support services, mentoring, training programmes to enhance the skills of entrepreneurs and seed funds. The scope of support is broad-based, and covers technologies/IP developed wholly at the Institute or partly through collaborations elsewhere, as well as external start-ups with which alumni/faculty are associated as consultants or mentors.

**Some of the activities:**

102 programs organized on Entrepreneurship Awareness / Development / Boot Camps, Ideation programs, Skill and IPR seminars by the students of the E-Cell. A few important activities are:

- Conducted a 25-Day Entrepreneurship Development Program through the DST-NIMAT project, 09<sup>th</sup> Dec 2019 to 03<sup>rd</sup> Jan2020.
- Entrepreneurship Boot Camp and Idea workshop in Association with TiE GRAD, Hyderabad on 13<sup>th</sup> Dec 2019.
- Organized a Seminar on Intellectual Property Rights by Dr. B.K. Sahool, Regional Manager NRDC, Govt. of India in VFSTR.

**Achievements/Impacts:**

- One former faculty and two former students of VFSTR started in 2019, a startup company named 30M Genomics Private Limited. Its proposal with code of BIRAC/IKP01210/BIG-16/20 is one of the 60 proposals selected by BIRAC out of 7000 proposals for funding up to Rs 50 Lakhs for their product/process.
- 32 of the patents were filed and published in different areas, and 4 patents are granted including two International Patents (USA).

**Incubated Start-ups:**



## Facilities and Infrastructure at VTBI:



• **VIGNAN TECHNOLOGY BUSINESS INCUBATOR (VTBI)**, (a company incorporated under the provisions of the Companies Act, 2013) having its **registered office at VFSTR**, Vadlamudi Chebrolu, Guntur - 522213, **Andhra Pradesh, INDIA**.

• The **plinth area** of **VTBI** is about **5000sft** with **all utilities/amenities** like **networking, electricity, Wi-Fi 15 desktop computers, printer, telephone**, mineral water for drinking, and wash area.

• Another **additional area** of **5000sft** is **reserved** for future expansion in the **newly constructing block**

• Incubation Centre have access to the labs:

- ❖ IoT
- ❖ AI
- ❖ Robotics,
- ❖ 3D printing
- ❖ Center of excellence for material testing and characterization
- ❖ Centre of Excellence on RF, Microwave and Wireless communications

• Incubation centre have the following common resources:

- ❖ Well established library
- ❖ 1GBPS Internet connectivity
- ❖ A very good food court
- ❖ Good supporting staff

## Our Supporting Associations



The Sedibus



**NATIONAL RESEARCH DEVELOPMENT CORPORATION**  
 नेशनल रिसर्च डिवेलपमेंट कारपोरेशन  
 (An Enterprise of DSIR)  
 Ministry of Science and Technology, Govt. Of India  
 Facilitating Technology Transfer Since 1953

### Our StartUp and Innovations



**Director:**

Dr.B. Nageswara Rao, Director IES ,  
 VFSTR Deemed to be University,  
 Vadlamudi, Guntur-522213.

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United States of America



To Promote the Progress

of Science and Useful Arts

The Director

of the United States Patent and Trademark Office has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this United States

Patent

grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America, and if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States of America, products made by that process, for the term set forth in 35 U.S.C. 154(a)(2) or (c)(1), subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b). See the Maintenance Fee Notice on the inside of the cover.

*Andrew Laxton*  
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE



US010361619B2

(12) **United States Patent**  
**Vangala et al.**

(10) **Patent No.:** US 10,361,619 B2  
(45) **Date of Patent:** Jul. 23, 2019

(54) **REALIZING ZVS AND ZCS IN A CCM BOOST CONVERTER WITH BCM CONTROL WITH A SINGLE SWITCH**

(52) U.S. CL.  
CPC ..... *H02M 1/083* (2013.01); *H02M 1/34* (2013.01); *H02M 3/33523* (2013.01); *H02M 2001/0058* (2013.01); *H02M 2001/342* (2013.01)

(71) Applicants: **Vignan Technology Business Incubator**, Guntur (IN); **Nagesh Vangala**, Bangalore (IN); **Rayudu Mannam**, Bangalore (IN)

(58) **Field of Classification Search**  
CPC ..... H02M 3/156; H02M 3/157  
See application file for complete search history.

(72) Inventors: **Nagesh Vangala**, Bangalore (IN); **Rayudu Mannam**, Bangalore (IN); **Srinivasa Rao Gorantla**, Guntur (IN)

(56) **References Cited**  
U.S. PATENT DOCUMENTS  
6,281,824 B1 \* 8/2001 Masuda ..... H03K 17/0413 341/144  
2010/0308733 A1 \* 12/2010 Shao ..... H02M 1/4225 315/119

(73) Assignees: **VIGNAN TECHNOLOGY BUSINESS INCUBATOR**, Guntur (IN); **Nagesh Vangala**, Bangalore (IN); **Rayudu Mannam**, Bangalore (IN)

\* cited by examiner  
*Primary Examiner* — Gary L Laxton  
(74) *Attorney, Agent, or Firm* — Mannava & Kang, P.C.; Vinay Malik

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(57) **ABSTRACT**  
Realizing ZVS and ZCS in a CCM Boost Converter with BCM control with a single switch. Embodiments disclosed herein relate to continuous conduction mode (CCM) boost converters and more particularly to continuous conduction mode (CCM) boost converters with boundary control mode. The embodiments herein achieve a scheme to achieve complete soft switching of all the switching elements of a boost converter, without incorporating any additional auxiliary switch, wherein total soft switching is achieved by inserting a fly back transformer in series with a normal boost converter operating in a continuous conduction mode, and adopting boundary control mode.

(21) Appl. No.: 16/281,824

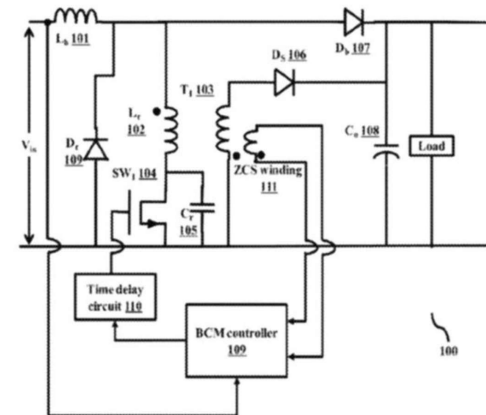
(22) Filed: Feb. 21, 2019

(65) **Prior Publication Data**

US 2019/0181743 A1 Jun. 13, 2019

(51) **Int. CL**  
*H02M 3/156* (2006.01)  
*H02M 1/08* (2006.01)  
*H02M 3/335* (2006.01)  
*H02M 1/34* (2007.01)  
*H02M 1/00* (2006.01)

1 Claim, 15 Drawing Sheets



United States of America



To Promote the Progress of Science and Useful Arts

The Director

of the United States Patent and Trademark Office has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this United States

Patent

grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America, and if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States of America, products made by that process, for the term set forth in 35 U.S.C. 154(a)(2) or (c)(1), subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b). See the Maintenance Fee Notice on the inside of the cover.

Andres Ibarra  
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE



US010211742B2

(12) **United States Patent**  
Vangala et al.

(10) Patent No.: **US 10,211,742 B2**  
(45) Date of Patent: **Feb. 19, 2019**

(54) **SOFT SWITCHING IN SINGLE SWITCH BOUNDARY CONDUCTION MODE FLYBACK CONVERTERS USING A FIXED DEAD TIME**

(71) Applicants: Nagesh Vangala, Bangalore (IN); Rayudu Mannam, Bangalore (IN); Vignan's University, Guntur (IN)

(72) Inventors: Nagesh Vangala, Bangalore (IN); Rayudu Mannam, Bangalore (IN); Srinivasa Rao Gorantla, Guntur (IN)

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **15/794,960**

(22) Filed: **Oct. 26, 2017**

(65) **Prior Publication Data**  
US 2018/0123442 A1 May 3, 2018

(30) **Foreign Application Priority Data**  
Oct. 26, 2016 (IN) ..... 201641036752

(51) **Int. Cl.**  
H02M 3/335 (2006.01)  
H02M 1/08 (2006.01)  
H02M 1/00 (2006.01)

(52) **U.S. Cl.**  
CPC ..... H02M 3/33507 (2013.01); H02M 1/083 (2013.01); H02M 2001/0058 (2013.01)

(58) **Field of Classification Search**  
CPC ..... H02M 3/335-3/42; H02M 2001/0058  
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,754,385 A *	6/1988	McDade	.....	H02M 3/3353
				363/16
2009/0027930 A1 *	1/2009	Usui	.....	H02M 1/4225
				363/84
2014/0334195 A1 *	11/2014	Nussbaum	.....	H02M 3/3376
				363/2104

OTHER PUBLICATIONS

J. Zhang, X. Huang, X. Wu and Z. Qian, "A High Efficiency Flyback Converter With New Active Clamp Technique," in IEEE Transactions on Power Electronics, vol. 25, No. 7, pp. 1775-1785, Jul. 2010.\*

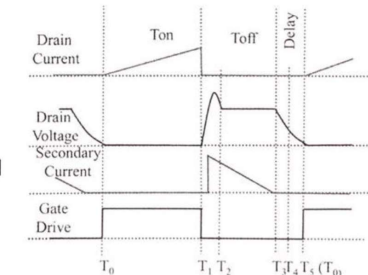
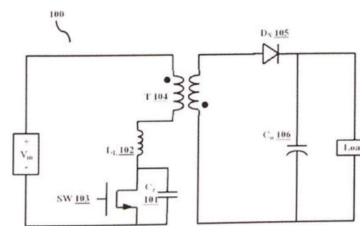
\* cited by examiner

Primary Examiner — Gary L. Laxton  
Assistant Examiner — Peter Novak  
(74) Attorney, Agent, or Firm — Mannava & Kang, P.C.; Vinay Malik

(57) **ABSTRACT**

Soft switching in Boundary Conduction Mode (BCM) flyback converters using a fixed dead time is presented. Embodiments disclosed herein relate to switching circuits and more particularly to soft switching in single stage isolated flyback converters with single switch. Embodiments herein disclose systems for soft switching in single stage isolated flyback converters by combining selection of transformers turn ratio and by incorporating the fixed dead time.

9 Claims, 3 Drawing Sheets



**Final list of BIG 16 Awardees\***

S.No	Proposal Code	Applicant
1	BIRAC/IKP01210/BIG-16/20	30M Genomics Private Limited
2	BIRAC/FITT0777/BIG-16/20	Amandeep Kaur
3	BIRAC/IKP01120/BIG-16/20	AMITKUMAR VERNEKAR
4	BIRAC/NAARM0056/BIG-16/20	AMVICUBE PVT LTD
5	BIRAC/CCAMP01225/BIG-16/20	Anupam Dutta
6	BIRAC/IKP01192/BIG-16/20	Arcapsis Technosolutions Pvt. Ltd.
7	BIRAC/FITT0781/BIG-16/20	Ashutosh Patra
8	BIRAC/CCAMP01238/BIG-16/20	Bauplechain Technologies Private Limited
9	BIRAC/FITT0736/BIG-16/20	Big Bang Boom Solutions Private Limited
10	BIRAC/IKP01125/BIG-16/20	Cellagility Biomed Pvt Ltd
11	BIRAC/SIIC0278/BIG-16/20	Chaitanya Dubey
12	BIRAC/IKP01198/BIG-16/20	CONSYTEL LIFE SCIENCES PVT LTD
13	BIRAC/FITT0779/BIG-16/20	CURIOUZ TECHLAB PRIVATE LIMITED
14	BIRAC/IKP01189/BIG-16/20	Curneu MedTech Innovations
15	BIRAC/CCAMP01165/BIG-16/20	Deval Karia
16	BIRAC/SINE0065/BIG-16/20	Dinoj Joseph
17	BIRAC/CCAMP01148/BIG-16/20	Dr Abrar Rizvi
18	BIRAC/IKP01134/BIG-16/20	Dr. Mrs.V.S.FELIX ENIGO
19	BIRAC/VENTURE0581/BIG-16/20	Dr. Nikhil Mamoria
20	BIRAC/KIIT0938/BIG-16/20	Dr. Shubhankar Kumar Singh
21	BIRAC/IKP01216/BIG-16/20	Dr. Vinod Malshe
22	BIRAC/KIIT0950/BIG-16/20	Elvikon India Pvt Ltd
23	BIRAC/FITT0765/BIG-16/20	GenElek Technologies Pvt. Ltd.
24	BIRAC/SIIC0296/BIG-16/20	Glorios Phyto Labs Private Limited
25	BIRAC/FITT0751/BIG-16/20	HempStreet Medicare Pvt. Ltd.
26	BIRAC/SIIC0363/BIG-16/20	Inhof Technologies



S.No	Proposal Code	Applicant
27	BIRAC/CCAMP01183/BIG-16/20	JESHROB BIOTECH SOLUTION PRIVATE LIMITED
28	BIRAC/SINE0092/BIG-16/20	Kapindra Precision Engineering Pvt. Ltd.
29	BIRAC/IKP01214/BIG-16/20	Kidambi Sneha
30	BIRAC/IKP01199/BIG-16/20	LOOPWORM PRIVATE LIMITED
31	BIRAC/NAARM0071/BIG-16/20	Mallikarjun Sajjan
32	BIRAC/FITT0799/BIG-16/20	NatureDots Private Limited
33	BIRAC/IKP01136/BIG-16/20	Nex Fitzap Private Limited
34	BIRAC/IKP01164/BIG-16/20	Nithyakalyani
35	BIRAC/VENTURE0571/BIG-16/20	PadCare Labs Pvt. Ltd.
36	BIRAC/VENTURE0574/BIG-16/20	Pramod Priya Ranjan
37	BIRAC/SIIC0273/BIG-16/20	Prof. Sourabh Ghosh
38	BIRAC/IKP01130/BIG-16/20	PRUDENTBIO RESEARCH PRIVATE LIMITED
39	BIRAC/CCAMP01241/BIG-16/20	Qzense Labs Private Limited
40	BIRAC/IKP01207/BIG-16/20	Rajasekaran Subramanian
41	BIRAC/IKP01218/BIG-16/20	Rekha Godbole
42	BIRAC/KIIT01029/BIG-16/20	Rigel Bioenviron Solutions Private Limited
43	BIRAC/SINE0060/BIG-16/20	Roshan Udhaorao Sakharkar
44	BIRAC/SINE0096/BIG-16/20	Sal Agrotech Private Limited
45	BIRAC/CCAMP01211/BIG-16/20	Shiva Prakash
46	BIRAC/SIIC0271/BIG-16/20	Siddhant Shrivastava
47	BIRAC/NAARM0032/BIG-16/20	Soniya .H
48	BIRAC/KIIT01036/BIG-16/20	Sumit Healthtech Pvt Ltd
49	BIRAC/IKP01174/BIG-16/20	Tardigrade Private Limited
50	BIRAC/FITT0755/BIG-16/20	Vaishnavi G V S
51	BIRAC/CCAMP01155/BIG-16/20	Wide Mobility Mechatronics Pvt Ltd

\* Subject to qualification through further due diligence

# 30m Genomics Private Limited

Track this company



Basic Information



Documents



Trademarks



Directors



Map

## Directors of 30M GENOMICS PRIVATE LIMITED

Director Identification Number	Name	Designation	Date of Appointment
08514207	SASIKANTA NAGA PAVANI PAVULURI	Director	18 July 2019
08514206	BENET BOSCO DHAS	Director	18 July 2019
08514208	YASWANTH REDDY	Director	18 July 2019

# 30M GENOMICS PRIVATE LIMITED

As on: May 9, 2020

[Track this company](#)



30m Genomics Private Limited is a Private incorporated on 18 July 2019. It is classified as Non-govt company and is registered at Registrar of Companies, Vijayawada. Its authorized share capital is Rs. 1,500,000 and its paid up capital is Rs. 100,000. It is involved in Social work activities

30m Genomics Private Limited's Annual General Meeting (AGM) was last held on N/A and as per records from Ministry of Corporate Affairs (MCA), its balance sheet was last filed on N/A.

Directors of 30m Genomics Private Limited are Sasikanta Naga Pavani Pavuluri, Benet Bosco Dhas and Yaswanth Reddy.

30m Genomics Private Limited's Corporate Identification Number is (CIN) U85300AP2019PTC112451 and its registration number is 112451. Its Email address is 30mgenomics@gmail.com and its registered address is C/O PAVULURI LAKSHMANA RAO, NEAR CHURCH Pavulavarigudem, Dwarakaturumala, WEST GODAVARI DISTRICT West Godavari AP 534426 IN

Current status of 30m Genomics Private Limited is - Active.

<b>Start-Ups from VFSTR</b>				
<b>Sl. No</b>	<b>Name of the start up</b>	<b>Nature of start up</b>	<b>Year of commencement</b>	<b>Contact information of the promoters</b>
1	30M Genomics	Genomics	2019	Pavuluri Pavani, Dwarakatirumala,A.P
2	Naavigo Campaigns and Events Pvt.Ltd.,	Health and Event Management	2019	Sairaj V, Hyderabad
3	Xone digital Pvt. Ltd	Digital Technologies	2018	Sathish V Madala, Amaravathi
4	Hungry Harbour	Food Delivery Services	2018	SampathSomisetty, Management Dept.
5	3D Makers	3D Printing Technology	2018	Ahamad Ali, MechDept
6	Roov, Spray Technologies	Commercial Services	2018	Naveen B, Mech Dept.,
7	49 Ers Technologies	Web Technologies	2018	Ravi Teja Gummadi,Amaravathi
8	Picxy	Digital Technologies	2017	Sathish V Madala, Amaravathi
9	National Clothing Company	Textile Business	2017	Chandra Reddy, Guntur
10	Amaravati people Foundation	IT Services	2017	Sathish V Madala, Amaravathi