Patent Search

Invention Title	Differential Equation Solutions to Mathematical Concepts Using Various Nonlinear Continuity Equation Solutions
Publication Number	52/2022
Publication Date	30/12/2022
Publication Type	INA
Application Number	202241072338
Application Filing Date	14/12/2022
Priority Number	
Priority Country	
Priority Date	
Field Of Invention	COMMUNICATION
Classification (IPC)	H04L0001180000, H04Q0011000000, H04N0001600000, G16B0030000000, B01L0003000000

Inventor

Name	Address	Country
Shaik Mohammed Ali, Associate Professor in Mathematics / Department of S&H, Lords Institute of Engineering & Technology	Lords Institute of Engineering & Technology, Himayath Sagar, Hyderabad, Telangana-500091.	India
Jyothi kodela, Assistant Professor in Mathematics / Department of H&S, Guru Nanak Institute of Engineering & Technology	Guru Nanak Institute of Engineering & Technology, Ibrahimpatnam, R. R. Dist, Telangana-501506.	India
Radhika Biragoni, Associate Professor in Mathematics, Malla Reddy Institute of Engineering & Technology.	Malla Reddy Institute of Engineering & Technology, Maisammaguda, Secunderabad, Hyderabad, Telangana-500100.	India
Dr.P.Ramesh Babu, Associate Professor in Mathematics / Department of H&S, Guru Nanak Institute of Technology (Autonomous).	Guru Nanak Institute of Technology (Autonomous), Ibrahimpatnam, R. R. Dist, Telangana-501506.	India
Dr. Ayyalappagari Sreenivasulu, Assistant Professor in Mathematics / Department of H&S, Marri Laxman Reddy Institute of Technology, (Autonomous).	Marri Laxman Reddy Institute of Technology, (Autonomous), Dundigal, Hyderabad, Telangana-500043.	India
Dr.S.Prasanna Rani, Assistant Professor / Department of Mathematics, Government Degree College for Women (A).	Government Degree College for Women (A), Begumpet, Hyderabad, Telangana-500016.	India
Dr.D.Pushpa, Assistant Professor / Department of Mathematics, Government Degree College for Women (A).	Government Degree College for Women (A), Begumpet, Hyderabad, Telangana-500016	India
Dr. P. Srilatha, Associate Professor / Department of Mathematics, Institute of Aeronautical Engineering.	Institute of Aeronautical Engineering, Dundigal Road, Hyderabad, Telangana-500043.	India

Applicant

Name	Address	Country
Shaik Mohammed Ali, Associate Professor in Mathematics / Department of S&H, Lords Institute of Engineering & Technology	Lords Institute of Engineering & Technology, Himayath Sagar, Hyderabad, Telangana-500091.	India
Jyothi kodela, Assistant Professor in Mathematics / Department of H&S, Guru Nanak Institute of Engineering & Technology	Guru Nanak Institute of Engineering & Technology, Ibrahimpatnam, R. R. Dist, Telangana-501506.	India
Radhika Biragoni, Associate Professor in Mathematics, Malla Reddy Institute of Engineering & Technology.	Malla Reddy Institute of Engineering & Technology, Maisammaguda, Secunderabad, Hyderabad, Telangana-500100.	India
Dr.P.Ramesh Babu, Associate Professor in Mathematics / Department of H&S, Guru Nanak Institute of Technology (Autonomous).	Guru Nanak Institute of Technology (Autonomous), Ibrahimpatnam, R. R. Dist, Telangana-501506.	India
Dr. Ayyalappagari Sreenivasulu, Assistant Professor in Mathematics / Department of H&S, Marri Laxman Reddy Institute of Technology, (Autonomous).	Marri Laxman Reddy Institute of Technology, (Autonomous), Dundigal, Hyderabad, Telangana-500043.	India
Dr.S.Prasanna Rani, Assistant Professor / Department of Mathematics, Government Degree College for Women (A).	Government Degree College for Women (A), Begumpet, Hyderabad, Telangana-500016.	India
Dr.D.Pushpa, Assistant Professor / Department of Mathematics, Government Degree College for Women (A).	Government Degree College for Women (A), Begumpet, Hyderabad, Telangana-500016	India
Dr. P. Srilatha, Associate Professor / Department of Mathematics, Institute of Aeronautical Engineering.	Institute of Aeronautical Engineering, Dundigal Road, Hyderabad, Telangana-500043.	India

Abstract:

Abstract In this research, we focus mostly on a non-linear, 4th-order equation using initial data. We prove the Avery-Peterson base theorem-based results for the pres multiple solutions in this research. Numerical studies for alternative approaches to the challenges with regard are also included in this research, and they are centred Liebenberg-Marquetry approach with a heuristic methodology for the Initial state.

Complete Specification

Description:Differential Equation Solutions to Mathematical Concepts Using Various Nonlinear Continuity Equation Solutions

Field and Background of the Invention

The bending stability of a simply-supported extension beam on non-linear foundations is modelled by the problem stated by Equations (1), (2), and (3). Small fluctua in beam measurements are modelled using the function M, while the force exerted by the foundation is represented by the function f. Various studies investigate w problem indicated by (1), (2), and (3) doesn't apply to f, where u is a constant. We pointed out that the issue defined by (1), (2), and (3) relies nonlinearly on the very f derivative and contains a quasi-M term. As formerly mentioned, the reliance revealed here makes the research on the presence of solutions that much more difficu resorting to more traditional notions predicated on the Krasnoselskii Hypothesis in conjunction with Leray-Schauder's Alternative Solutions. Consequently, this prob exists when working with Avery-Peterson theorem-based methods. Therefore, to the aimed to contribute, this type of issue receives minimal attention. Our primary is on applying the Avery-Peterson remedied theorem to show that there are multiple positive approaches to the issue specified by (1), (2), and (3). Assuming circums M, f, and g, we assert findings that generalise those provided in using Krasnoselskii's Theorem. Moreover, we introduce a novel method for locating numerical soluti Based on the theoretical approach taken in this work, this new process can deal with cases involving many solutions. In this work, we provide preliminary findings o theoretical conclusion that assures the existence of numerous solutions under particular assumptions mostly on the component of the equations. In this study, we about a powerful optimization approach to finding estimated remedies defined by (1), (2), and (3). In the end, it offers some concluding thoughts on the work. We th prove several solutions using the Avery-Peterson theory, which we state below.

View Application Status

Office of the Controller General of Patents, Designs & Trade Marks
Department of Industrial Policy & Promotion,
Ministry of Commerce & Industry,
Government of India

(http://ipindia.nic.in/index.htm)

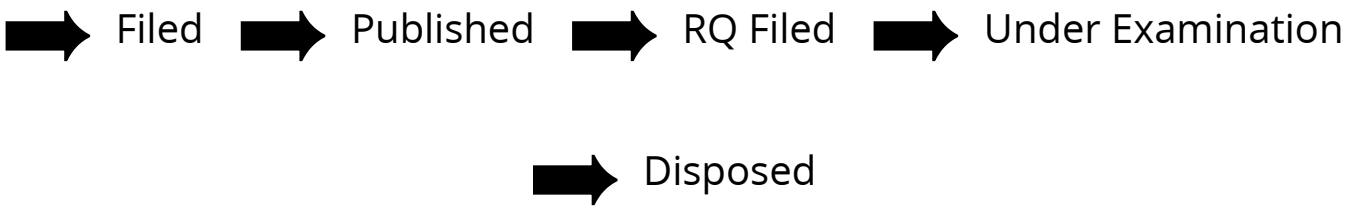
INTELLECTUAL PROPERTY INDIA
PATENTS | DESIGNS | TRADE MARKS
GEOGRAPHICAL INDICATIONS

(http://ipindia.nic.in/index.htm)

Application Details	
APPLICATION NUMBER	202241072338
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	14/12/2022
APPLICANT NAME	1 . Shaik Mohammed Ali, Associate Professor in Mathematics / Department of S&H, Lords Institute of Engineering & Technology 2 . Jyothi kodela, Assistant Professor in Mathematics / Department of H&S, Guru Nanak Institute of Engineering & Technology 3 . Radhika Biragoni, Associate Professor in Mathematics, Malla Reddy Institute of Engineering & Technology. 4 . Dr.P.Ramesh Babu, Associate Professor in Mathematics / Department of H&S, Guru Nanak Institute of Technology (Autonomous). 5 . Dr. Ayyalappagari Sreenivasulu, Assistant Professor in Mathematics / Department of H&S, Marri Laxman Reddy Institute of Technology, (Autonomous). 6 . Dr.S.Prasanna Rani, Assistant Professor / Department of Mathematics, Government Degree College for Women (A). 7 . Dr.D.Pushpa, Assistant Professor / Department of Mathematics, Government Degree College for Women (A). 8 . Dr. P. Srilatha, Associate Professor / Department of Mathematics, Institute of Aeronautical Engineering.
TITLE OF INVENTION	Differential Equation Solutions to Mathematical Concepts Using Various Nonlinear Continuity Equation Solutions
FIELD OF INVENTION	COMMUNICATION
E-MAIL (As Per Record)	senanipindia@gmail.com
ADDITIONAL-EMAIL (As Per Record)	admin@senanip.com
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	30/12/2022

Application Status	
APPLICATION STATUS	**Awaiting Request for Examination**

			View Documents



In case of any discrepancy in status, kindly contact ipo-helpdesk@nic.in