(21) Application No.202441034466 A

(19) INDIA

(51) International classification

(86) International Application

(87) International Publication

(61) Patent of Addition to

Filing Date

**Application Number** 

Filing Date (62) Divisional to Application

Filing Date

Number

(22) Date of filing of Application :30/04/2024 (43) Publication Date: 10/05/2024

:F02B43/00, F02D19/00, F02D19/02,

F02D19/06, F02M21/02

:NA

:NA

: NA

:NA

:NA

:NA

:NA

### (54) Title of the invention: A NOVEL GAS CIRCULATION OPERATING SYSTEM FOR ALTERNATIVE FUEL IN **AUTOMOBILE VEHICLES**

# (71)Name of Applicant:

#### 1)Dr.J.Ananth

Address of Applicant : Professor, Department of Marine Engineering, AMET University, Kanathur, Chennai -603112, India ------

2)Mr. T Kumarasan 3)Dr. Syed Saleem Pasha

4)Dr. P. Suresh Kumar

5)Mr. Shankar Kumar

6)Mr.K.Veeramanikandan

7)Mr. M. Sudhakar Name of Applicant: NA

Address of Applicant : NA (72)Name of Inventor:

1)Dr.J.Ananth

Address of Applicant: Professor, Department of Marine Engineering, AMET University, Kanathur, Chennai -603112, India ------

#### 2)Mr. T Kumarasan

Address of Applicant : HoD - Assistant Professor, Department of Aeronautical Engineering, J.J. College of Engineering and Technology, Trichy - 620009 -----

#### 3)Dr. Sved Saleem Pasha

Address of Applicant: Associate Professor, Department of Mechanical Engineering, Ghousia College of Engineering, Ramanagaram-562159 ----

#### 4)Dr. P. Suresh Kumar

Address of Applicant: Associate Professor, Department of Mechanical Engineering, R. V. R & J. C. College of Engineering, Chowdavaram, Guntur-522019, Andhra Pradesh, India -----

#### 5)Mr. Shankar Kumar

Address of Applicant :Lecturer, Birla Institute of Technology, Mesra-835215, Jharkhand ------

#### 6)Mr.K.Veeramanikandan

Address of Applicant: Assistant Professor, Mechanical Department, Karpagam College of Engineering, Myleripalayam Village, Coimbatore -

# 7)Mr. M. Sudhakar

Address of Applicant : Assistant Professor, Department of Mechanical Engineering, Sri Sai Ram Engineering College, West Tambaram, Chennai, Tamil Nadu – 600044 -----

## (57) Abstract:

The present invention discloses a novel gas circulation operating system designed to enhance the efficiency and performance of alternative fuel vehicles. Comprising a gas storage tank, circulation pump, fuel injector system, combustion chamber, and control unit, this system optimizes the circulation and utilization of alternative fuels such as compressed natural gas (CNG), liquefied petroleum gas (LPG), and hydrogen. By precisely controlling fuel delivery, combustion processes, and emissions, the system improves overall vehicle performance while reducing environmental impact. The integration of advanced features and components represents a significant advancement in automotive engineering, offering a promising solution for a cleaner, greener future. Accompanied Drawing [FIGS. 1-2]

No. of Pages: 18 No. of Claims: 5