(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/09/2023

(21) Application No.202341063956 A
(43) Publication Date : 06/10/2023

(54) Title of the invention : PALASA SEED OIL BIODIESEL BLENDS ON COMPRESSION IGNITION ENGINES

(51) International classification :F02B0003060000, C04B0028040000, C10L0001020000, F02D0019080000, F02B0023060000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. Shaik Hussain
Address of Applicant :Professor, Mechanical Engineering Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. Maisammaguda ---------- ----------
2)Malla Reddy Engineering College
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Shaik Hussain
Address of Applicant :Professor, Mechanical Engineering Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. Maisammaguda ---------- ----------
2)Dr.Valiveti Sivaramakrishna
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad, India. Hyderabad ---------- ----------
3)Dr.Ch. Ravikiran
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, MLR Institute of Technology, Hyderabad, India. Hyderabad ---------- ----------
4)G Chandra Mohana Reddy
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, MLR Institute of Technology, Hyderabad, India. Hyderabad ---------- ----------

(57) Abstract :
The bulk of automobiles in a country like India run on ICE, whose propulsion is derived from petro diesel goods. Petrodiesel supplies have been seen to diminish over time in nature. On the other side, pollution levels have dramatically grown. Researchers have focused on alternate fuels instead of petro-diesel fuels to solve these issues. The qualities of biodiesel are more like those of diesel. Palasa seed oil is employed as an alternative fuel in this work using several mix combinations. B10, B20, B30, and B40 parts of ordinary diesel are blended with palasa seed oil. A four-stroke diesel engine with direct injection is the subject of the effort. The blend that most closely resembles diesel in terms of performance and emissions is B20.The braking thermal efficiency of B20 mix is increased by up to 13.41% when compared to B0 blend. In addition, B20 has lower HC and CO emissions than normal diesel. However, compared to B0 blend, the amounts of nitrogen oxide emissions are slightly higher.

No. of Pages : 9 No. of Claims : 1