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:F02B0003060000, C10L0001320000, F02D0019060000, F02M0025022000, Pradesh, Pin Code: 244102 -----2)Dr. Vaibhav Trivedi Name of Applicant: NA Address of Applicant : NA

(71)Name of Applicant: 1)Mr. Prashant Sharma

(72) Name of Inventor: 1)Mr. Shashank Kumar

Address of Applicant : Assistant Professor, Mechanical Engineering Department, IFTM University, Moradabad, Uttar

Address of Applicant : Assistant Professor, Mechanical Engineering Department, IFTM University, Moradabad, Uttar

Pradesh, Pin Code: 244102 -----

2)Mr. Vivek Shankhdhar

Address of Applicant : Assistant Professor, Mechanical Engineering Department, IFTM University, Moradabad, Uttar

Pradesh, Pin Code: 244102 -----

3)Mr. Mayank Bharadvaj

Address of Applicant : Assistant Professor, Mechanical Engineering Department, IFTM University, Moradabad, Uttar

Pradesh, Pin Code: 244102 -----

4)Mr. Kuldeep Dubev

Address of Applicant : Assistant Professor, Mechanical Engineering Department, IFTM University, Moradabad, Uttar

Pradesh, Pin Code: 244102 -----

5)Mr. Prashant Kumar

Address of Applicant : Assistant Professor, Mechanical Engineering Department, IFTM University, Moradabad, Uttar

Pradesh, Pin Code: 244102 -----

(57) Abstract:

The present invention relates to preparation of cost effective emulsion fuel for the engine, and the evaluation of its emission and performance parameters. The performance and emission characteristics of a single cylinder, 4-stroke, air-cooled, direct injection diesel engine fueled with two different emulsions were investigated. The performance and emission characteristics were studied by using AVL gas analyzer and smoke meter. The engine was run at various loads of the dynamometer o ,3, 6, 9kgs and respective readings were taken for engine performance parameters. AVL gas analyzer measure CO2, CO, HC, O2 are coming out of the engine. It measures the standard values of these emissions. The water-in-diesel emulsified fuels with different water proportions are showing similar results in both performance parameters and exhaust emissions. So emulsified fuel may also be a good objective of diesel.It may be a good future option and economic way in the energy field.

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