

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211028907 A

(19) INDIA

(22) Date of filing of Application :19/05/2022

(43) Publication Date : 27/05/2022

(54) Title of the invention : A NOVEL COMPOSITION HAVING METHYL ESTER FATTY ACIDS AS AN ADDITIVE IN A LUBRICANT FOR EXTERNAL MESHING MACHINE COMPONENTS AND PREPARATION METHOD THEREOF

(51) International classification :C10L0001190000, C10M0141100000, G01N0033680000, C10M0177000000, C10L0001160000
(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)Mr. Dharmaraj Singh

Address of Applicant :Assistant Professor, Department of Mechanical Engineering, SET, IFTM University, Moradabad, UP 244102 Moradabad -----

2)Prof. Intezar Mahdi

3)Prof. Anil Kumar

4)Dr. Nabeel Ahmad

5)Mr. Hemant Kumar Mishra

6)Mr. Syed Baqar Imam

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

1)Mr. Dharmaraj Singh

Address of Applicant :Assistant Professor, Department of Mechanical Engineering, SET, IFTM University, Moradabad, UP 244102 Moradabad -----

2)Prof. Intezar Mahdi

Address of Applicant :Director, School of Engineering and Technology, SET, IFTM University, Moradabad, UP 244102 Moradabad -----

3)Prof. Anil Kumar

Address of Applicant :Head, Department of Electrical Engineering, SET, IFTM University, Moradabad, UP 244102 Moradabad -----

4)Dr. Nabeel Ahmad

Address of Applicant :Head, School of Biotechnology, SBT, IFTM University, Moradabad, UP 244102 Moradabad -----

5)Mr. Hemant Kumar Mishra

Address of Applicant :Assistant Professor, Department of Mechanical Engineering, SET, IFTM University, Moradabad, UP 244102 Moradabad -----

6)Mr. Syed Baqar Imam

Address of Applicant :Head, Department of Civil Engineering, SET, IFTM University, Moradabad,UP 244001 Moradabad -----

(57) Abstract :

The present invention discloses a novel composition having Methyl Ester Fatty Acids as an additive in a lubricant for external meshing machine components and preparation method thereof. In the present invention, Methyl Ester fatty Acid (MEFA) is used as an additive for the preparation of a Lubricant for external meshing machine Component. Rapeseed oil is used as base oil for the preparation of the lubricant. Four samples were prepared by adding MEFA in to rape seed oil in different concentration. These samples are gone for two different tests. First Test was for load carrying capacity for which load test are carried out. Second test is for service life for which Rotatory Bomb Oxidation Test was conducted. These two tests are also conducted on a commercially available lubricant for comparison. The results shows that the prepared lubricant composition may have better properties than the commercially available lubricant.

No. of Pages : 20 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application : 19/05/2022

(21) Application No. 202211028907 A

(43) Publication Date : 27/05/2022

(54) Title of the invention : A NOVEL COMPOSITION HAVING METHYL ESTER FATTY ACIDS AS AN ADDITIVE IN A LUBRICANT FOR EXTERNAL MESHING MACHINE COMPONENTS AND PREPARATION METHOD THEREOF

(51) International classification : C10L0001190000, C10M0141100000, G01N0033680000, C10M0177000000, C10L0001160000
(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) Mr. Dharmaraj Singh

Address of Applicant : Assistant Professor, Department of Mechanical Engineering, SET, IFTM University, Moradabad, UP 244102 Moradabad -----

2) Prof. Intezar Mahdi

3) Prof. Anil Kumar

4) Dr. Nabeel Ahmad

5) Mr. Hemant Kumar Mishra

6) Mr. Syed Baqar Imam

Name of Applicant : NA

Address of Applicant : NA

(72) Name of Inventor :

1) Mr. Dharmaraj Singh

Address of Applicant : Assistant Professor, Department of Mechanical Engineering, SET, IFTM University, Moradabad, UP 244102 Moradabad -----

2) Prof. Intezar Mahdi

Address of Applicant : Director, School of Engineering and Technology, SET, IFTM University, Moradabad, UP 244102 Moradabad -----

3) Prof. Anil Kumar

Address of Applicant : Head, Department of Electrical Engineering, SET, IFTM University, Moradabad, UP 244102 Moradabad -----

4) Dr. Nabeel Ahmad

Address of Applicant : Head, School of Biotechnology, SBT, IFTM University, Moradabad, UP 244102 Moradabad -----

5) Mr. Hemant Kumar Mishra

Address of Applicant : Assistant Professor, Department of Mechanical Engineering, SET, IFTM University, Moradabad, UP 244102 Moradabad -----

6) Mr. Syed Baqar Imam

Address of Applicant : Head, Department of Civil Engineering, SET, IFTM University, Moradabad, UP 244001 Moradabad -----

(57) Abstract :

The present invention discloses a novel composition having Methyl Ester Fatty Acids as an additive in a lubricant for external meshing machine components and preparation method thereof. In the present invention, Methyl Ester fatty Acid (MEFA) is used as an additive for the preparation of a Lubricant for external meshing machine Component. Rapeseed oil is used as base oil for the preparation of the lubricant. Four samples were prepared by adding MEFA in to rape seed oil in different concentration. These samples are gone for two different tests. First Test was for load carrying capacity for which load test are carried out. Second test is for service life for which Rotatory Bomb Oxidation Test was conducted. These two tests are also conducted on a commercially available lubricant for comparison. The results shows that the prepared lubricant composition may have better properties than the commercially available lubricant.

No. of Pages : 20 No. of Claims : 4