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(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.

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