(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111026248 A

(19) INDIA

(22) Date of filing of Application :12/06/2021 (43) Publication Date : 24/02/2023

## (54) Title of the invention : NANO FLY ASH PARTICLES AS AN ADDITIVE IN LUBRICATING OILS FOR ENHANCING THE TRIBOLOGICAL PROPERTIES OF ALLOY STEELS

(51) International classification	:C10M0141080000, C23C0014060000, C10M0163000000, C10M0171060000, C10M0177000000	(71)Name of Applicant:  1)Chitkara Innovation Incubator Foundation Address of Applicant: SCO: 160-161, Sector - 9c, Madhya Marg, Chandigarh- 160009, India. Chandigarh India (72)Name of Inventor:
(31) Priority Document No	:NA	1)SINGH, Harvinder
(32) Priority Date	:NA	2)SINGH, Anoop Kumar
(33) Name of priority country	:NA	3)SINGLA, Yogesh Kumar
(86) International Application No	:NA	4)CHATTOPADHYAY, Kashidas
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
(E7) A1 4 4		

## (57) Abstract:

The present invention relates to a method for improving the tribological properties of the sliding alloys in different applications. Specifically, the present invention relates to a nano fly ash particulate matter, a biowaste from the thermal power plants that are found to be beneficial in enhancing the anti-wear properties and anti-friction properties of the alloy steels, as a novel additive in lubricating oils.

No. of Pages: 20 No. of Claims: 9