

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202511095484 A

(19) INDIA

(22) Date of filing of Application :04/10/2025

(43) Publication Date : 05/12/2025

(54) Title of the invention : A DEVICE FOR REDUCING FRICTION IN SLIDING MECHANICAL JOINTS

(51) International classification	:F16C29/02, F16C33/12, F16C33/10, F16C33/02, F16C33/20	(71) Name of Applicant : 1)NOIDA INSTITUTE OF ENGINEERING & TECHNOLOGY Address of Applicant :19, Knowledge Park-II, Institutional Area, Greater Noida – 201306, Uttar Pradesh, India. Uttar Pradesh India
(31) Priority Document No	:NA	(72) Name of Inventor :
(32) Priority Date	:NA	1)RAKESH KUMAR SINGH
(33) Name of priority country	:NA	2)ANURAG PAL
(86) International Application No	:	
Filing Date	:01/01/1900	
(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	

(57) Abstract :

The invention discloses a device for reducing friction in sliding mechanical joints (1) through the integration of a low-friction insert (2), an internal lubrication channel (3), and a lubricant reservoir (4). The design further incorporates textured surface regions (5) to retain lubricants, ensuring consistent friction reduction, extended service life, and reduced maintenance. The modular nature of the insert (2) allows adaptability and retrofitting into existing assemblies. This invention provides enhanced efficiency, durability, and sustainability in mechanical systems requiring precision and reliability.

No. of Pages : 13 No. of Claims : 6