(19) INDIA

(22) Date of filing of Application :23/03/2020 (43) Publication Date : 24/09/2021

(54) Title of the invention: THREAD LESS NUT BOLT APPARATUS

(51) International classification	F16B0037100000, F16B0001000000, F16H0025220000,	(71)Name of Applicant: 1)CGC Technical Campus Jhanjeri Address of Applicant: State Highway 12A Jhanjeri, Sahibzada Ajit Singh Nagar, Punjab 140307, India. Punjab India
(31) Priority Document No(32) Priority Date(33) Name of priority country(86) International Application NoFiling Date	B60T0017040000 :NA :NA :NA :NA :NA	(72)Name of Inventor : 1)Girish Chandra Mishra
 (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number 	: NA ::NA :NA :NA	
Filing Date	:NA	

(57) Abstract:

The present invention relates to a thread less nut and bolt apparatus, comprising a bolt 2 made up of high strength aluminum for providing clamp load or preload to fasten a stack of parts together having multiple of vertically stacked grooves 1 engraved on two sides of the bolt 2 on its outer surface, a nut 3 in association with the bolt 2 for locking the bolt 2 inside the nut 3, wherein the nut 3 comprises of two sliding pins 4 which when inserted into the grooves 1 of the bolt 2 and twisted by some degree performs interlocking of the pins 6 with the grooves 1, a pair of springs 5 installed inside the sliding pins 6 for assisting the pins 6 to retract back and forth during the mounting and unmounting of the bolt 2 on the nut 3.

No. of Pages: 11 No. of Claims: 6