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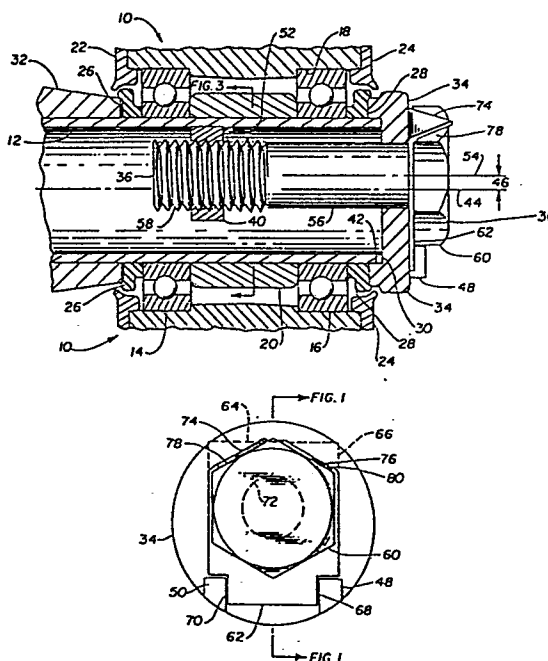
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54 **Sheave retention apparatus and method.**

57 The sheave retention apparatus of the present invention includes a cap (34) that fits over the end (30) of an axle (12) to retain a sheave (10) thereon. A bolt (36) fastens the cap to the axle. Cap (34) is disk shaped with a shoulder (42) that fits over end (30) of axle (12). When installed, bolt (36) passes through an off-center hole (38) in the cap and into a corresponding off-center nut (40) welded to the inner wall of the tubular axle. Rotation of cap (34) on axle (12) will bind the cap between the bolt and the axle to prevent unthreading of the bolt. Additionally, to resist unthreading under vibrational influences, a locking plate (62) that is clamped between the hexagonal head (60) of the bolt and the outer surface of the cap. The locking plate has two notched corners (68) and (70) that contact a portion of the cap to prevent rotation of the locking plate with respect to the cap, and has two square corners (64) and (66) that are bent up against the wrench flats of the bolt to prevent the bolt from rotating with respect to the locking plate.





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## EUROPEAN SEARCH REPORT

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Application number

EP 84 30 2163

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. <sup>3</sup> )
A	GB-A-1 004 880 (SCHARF)		B 61 B 12/02 B 61 B 12/06
A	DE-A- 245 356 (BLEICHERT)		
A	GB-A-2 120 314 (ALLSOP)		
			TECHNICAL FIELDS SEARCHED (Int. Cl. <sup>3</sup> )
			B 61 B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 23-01-1986	Examiner DICKINSON D.J.
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

