

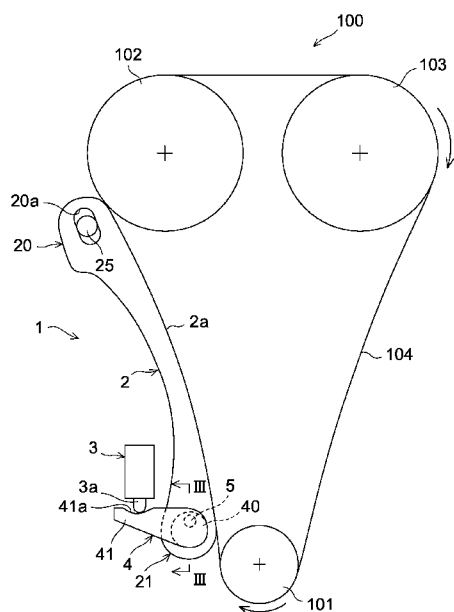


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- Declarations under Rule 4.17:**
— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

[Continued on next page]

(54) Title: TENSIONING DEVICE

FIG. 1



(57) **Abstract:** To increase the pressing force on a chain as the chain undergoes greater elongation. [Resolving Means] Provision is made for: a tensioner arm 2 in which a through-hole 21a is formed at a free end 21 which can pivot about a pivoting end 20; a hydraulic tensioner 3 for causing the tensioner arm 2 to pivot about the pivoting end 20; a lever arm 4 having a boss part 40 which is rotatably supported in the through-hole 21a at the free end 21 and comprises a pin insertion hole 40a at a position which is offset from the center O of the through-hole 21a, said lever arm also having a lever part 41 which extends from the boss part 40 toward the hydraulic tensioner 3 with the tip end of a piston 3a of the hydraulic tensioner 3 in abutment against it; and a pin 5 of which one end is fitted in a fixed wall 50, and of which the other end is inserted into the pin insertion hole 40a of the boss part 40 of the lever arm 4. When the piston 3a of the hydraulic tensioner 3 extends, the lever arm 4 pivots about the pin 5, whereby the amount of pushing by the free end 21 of the tensioner arm 2 into a chain 104 is increased.



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A. CLASSIFICATION OF SUBJECT MATTER		
<i>F16H 7/08(2006.01)i, F16H 9/24(2006.01)i, F16H 55/30(2006.01)i</i>		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols) F16H 7/08; F02B 67/06; F16H 7/12		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean utility models and applications for utility models Japanese utility models and applications for utility models (Chinese Patents and application for patent)		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) eKOMPASS(KIPO internal) & Keywords: tensioner, lever arm, pin, chain, offset.		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2007-0259744 A1 (LEHTOVAARA et al.) 08 November 2007 See the abstract; Figs. 1-10; paragraphs [0032]-[0061].	1-3
Y	JP 08-100851 A (NTN CORP.) 16 April 1996 See the abstract; Fig. 4; paragraphs [0002]-[0004].	1-3
A	JP 05-071603 A (DAIDO KOGYO CO., LTD.) 23 March 1993 See the abstract; Figs. 1-5; paragraphs [0010]-[0030].	1-3
A	KR 20-1998-0053835 U (DAEWOO HEAVY IND. CO., LTD) 07 October 1998 See the abstract; Figs. 1-4; page 2, lines 18-33.	1-3
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
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Name and mailing address of the ISA/KR  Korean Intellectual Property Office Government Complex-Daejeon, 139 Seonsa-ro, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No. 82-42-472-7140		Authorized officer YANG Kyung Jinn Telephone No. 82-42-481-8556 

INTERNATIONAL SEARCH REPORT

Information on patent family members

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