



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
12.04.2006 Bulletin 2006/15

(51) Int Cl.:
B62M 9/12^(2006.01)

(43) Date of publication A2:
10.09.2003 Bulletin 2003/37

(21) Application number: **03005132.0**

(22) Date of filing: **07.03.2003**

(84) Designated Contracting States:
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
HU IE IT LI LU MC NL PT RO SE SI SK TR**
Designated Extension States:
AL LT LV MK

(72) Inventor: **Ando, Yoshiaki**
Kawachinagano-shi,
Osaka (JP)

(30) Priority: **08.03.2002 CN 02106975**

(74) Representative: **GROSSE BOCKHORNI
SCHUMACHER**
Patent- und Rechtsanwälte
Forstenrieder Allee 59
81476 München (DE)

(71) Applicant: **SHIMANO INC.**
Osaka (JP)

(54) **Bicycle rear derailleur**

(57) An object of the invention is to provide a rear derailleur 100 for a bicycle, in which main components thereof, such as inner and outer plate members, are made from lightweight metal or steel plates having smaller areas to thereby decrease the amount of material used and hence achieve significant cost reduction while performance and functions thereof are kept the same as those of a conventional bicycle rear derailleur of the same type.

According to the invention, a rear derailleur 100 for a bicycle for shifting a chain engaging one of a plurality of sprockets for driving a rear wheel of the bicycle comprises a bracket 110 fixed to a frame of the bicycle, a base member 120 supported by the bracket 110, a link mechanism 130 coupled at one end thereof to the base member 120, a movable member 140 coupled to the other end of the link mechanism 130, an outer plate member movably supported to the movable member 140 and an inner plate member 180 located inwardly of the outer plate member 150 for, together with the outer plate member 150, freely rotatably supporting a guide pulley 160 and a tension pulley 170 between the outer plate member 150 and the inner plate member 180, characterized in that at least one of the inner and outer plate members includes a bent portion 182 formed by bending a plate member portion at an inner periphery of the at least one of the inner and outer plate members 180, 150 in a direction towards the other of the inner and outer plate members 180, 150, and a disengagement prevention portion 190 for preventing the chain from disengaging from the tension pulley 170 and/or the guide pulley 160

is defined by the bent portion 182 and the other of the inner and outer plate members 180, 150 facing the bent portion.

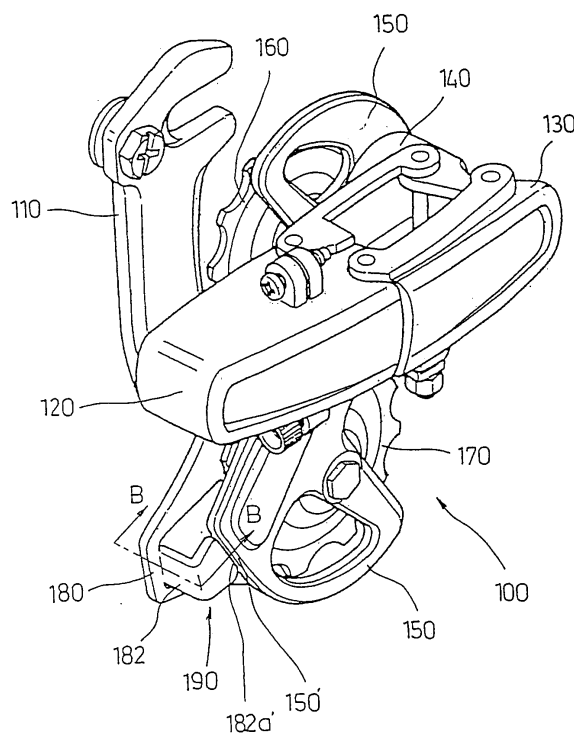


Fig. 6



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	US 6 350 212 B1 (CAMPAGNOLO VALENTINO) 26 February 2002 (2002-02-26) * figures *	1,9	B62M9/12
A	US 5 836 844 A (YOSHIDA ET AL) 17 November 1998 (1998-11-17) * figures *	1,9	
A	US 4 274 828 A (HURET ET AL) 23 June 1981 (1981-06-23) * figures *	1,9	
			TECHNICAL FIELDS SEARCHED (IPC)
			B62M
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
The Hague		20 February 2006	van Rooij, M
CATEGORY OF CITED DOCUMENTS		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	
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			

1
EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 03 00 5132

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

20-02-2006

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6350212	B1	26-02-2002	CN 1270121 A	18-10-2000
			DE 10017140 A1	09-11-2000
			FR 2792279 A1	20-10-2000
			IT T0990283 A1	13-10-2000
			JP 2000313394 A	14-11-2000
			TW 498038 B	11-08-2002

US 5836844	A	17-11-1998	NONE	

US 4274828	A	23-06-1981	DE 2903736 A1	09-08-1979
			FR 2416157 A1	31-08-1979
			GB 2013797 A	15-08-1979
			IT 1164970 B	22-04-1987
			JP 1290581 C	29-11-1985
			JP 54113142 A	04-09-1979
			JP 58055948 B	12-12-1983
