



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11)

EP 1 477 598 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
27.04.2005 Bulletin 2005/17

(51) Int Cl.7: **D03C 13/00**

(43) Date of publication A2:
17.11.2004 Bulletin 2004/47

(21) Application number: **04009979.8**

(22) Date of filing: **27.04.2004**

(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 PL PT RO SE SI SK TR**
Designated Extension States:
AL HR LT LV MK

(72) Inventor: **Hirai, Jun**
Ishikawa-gun Ishikawa-ken (JP)

(74) Representative:
von Samson-Himmelstjerna, Friedrich R. et al
SAMSON & PARTNER
Widenmayerstrasse 5
80538 München (DE)

(30) Priority: **16.05.2003 JP 2003139318**

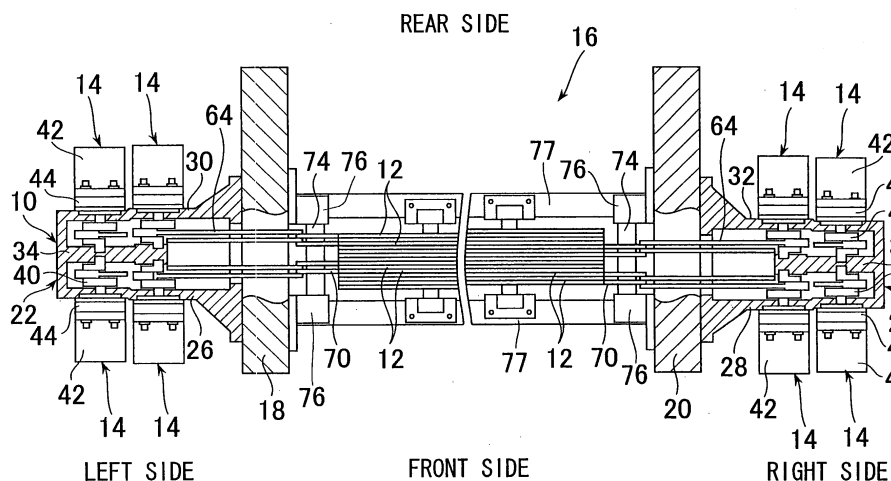
(71) Applicant: **TSUDAKOMA KOGYO KABUSHIKI
KAISHA**
Kanazawa-shi Ishikawa-Ken (JP)

(54) Shedding device of loom

(57) A shedding device (10) of a loom (16) comprises a plurality of drive mechanisms (14) provided in one-to-one correspondence to a plurality of heald frames (12). Each drive mechanism (14) includes: a rotary drive source (42); a speed reducer (44) having a reduction shaft (48) connected to an output shaft (50) of the rotary drive source (42) and driven by decelerating a rotation of the output shaft (50) and attached to a shedding device frame (22, 24) different from a loom frame; a bearing (38) disposed in the shedding device frame (22, 24);

and a motion converting mechanism (46) having a rod (64) connected to the heald frames (12) and a rotary member (40) and for converting a rotational motion of the reduction shaft (48) into a linear reciprocal motion of the rod (64) through the rotary member (40). The rotary member (40) has a one end portion (54) connected to the reduction shaft (48), the other end portion (56) supported by the bearing (38), and an intermediate portion (58) which is located between the one end portion (54) and the other end portion (56) and to which the rod (64) is swingably connected.

FIG. 1



EP 1 477 598 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 04 00 9979

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.7)
A	PATENT ABSTRACTS OF JAPAN vol. 1998, no. 10, 31 August 1998 (1998-08-31) & JP 10 130985 A (TOYOTA AUTOM LOOM WORKS LTD), 19 May 1998 (1998-05-19) * abstract *	1,3,4, 11,13	D03C13/00
A,D	----- US 2002/046777 A1 (HIRAI JUN) 25 April 2002 (2002-04-25) -----		
A	PATENT ABSTRACTS OF JAPAN vol. 2002, no. 08, 5 August 2002 (2002-08-05) & JP 2002 105793 A (TSUDAKOMA CORP), 10 April 2002 (2002-04-10) * abstract *		
A	----- PATENT ABSTRACTS OF JAPAN vol. 1999, no. 08, 30 June 1999 (1999-06-30) & JP 11 061590 A (TOYOTA AUTOM LOOM WORKS LTD), 5 March 1999 (1999-03-05) * abstract *		

The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 3 March 2005	Examiner Van Gelder, P
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	

2
EPO FORM 1503 03.82 (P04C01)

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

EP 04 00 9979

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.

03-03-2005

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 10130985	A	19-05-1998	NONE
US 2002046777	A1	25-04-2002	JP 3538137 B2 14-06-2004
			JP 2002129446 A 09-05-2002
			CN 1350078 A 22-05-2002
			EP 1215317 A2 19-06-2002
			TW 522184 B 01-03-2003
JP 2002105793	A	10-04-2002	NONE
JP 11061590	A	05-03-1999	NONE