**Europäisches Patentamt** 

**European Patent Office** 

Office européen des brevets



EP 0 908 280 A1 (11)

(12)

## **EUROPEAN PATENT APPLICATION**

(43) Date of publication:

14.04.1999 Bulletin 1999/15

(21) Application number: 98118825.3

(22) Date of filing: 06.10.1998

(51) Int. Cl.6: **B27B 29/08** 

(84) Designated Contracting States:

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

**Designated Extension States:** 

**AL LT LV MK RO SI** 

(30) Priority: 06.10.1997 IT TO970886

(71) Applicant:

Bongioanni Legno S.r.l. 12080 Pianfei (Cuneo) (IT) (72) Inventors:

 Capuzzi, Antonio 25028 Verolanuova (Brescia) (IT)

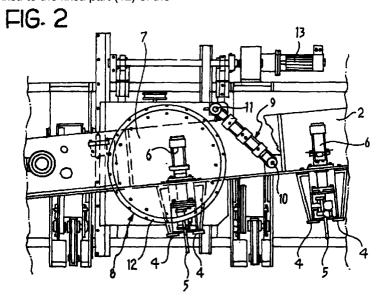
· Galli, Roberto 12045 Fossano (Cuneo) (IT)

(74) Representative:

Serra, Francesco et al c/o JACOBACCI & PERANI S.p.A. Corso Regio Parco, 27 10152 Torino (IT)

#### (54)Log carriage for sawing machine

(57)A log carrier (1) includes a supporting beam (2) fixed to the rotatable part (7) of a turntable (8), the fixed part (12) of which is fixed to the log carrier (1). The rotatable part (7) is rotated by a double piston (9) having a first end (11) rotatably fixed to the fixed part (12) of the turntable (8), and the other end (10) rotatably fixed to the supporting beam (2). Upper and lower (5, 5') gripper hooks are adjustable in height.



5

15

25

35

### Description

**[0001]** The present invention concerns a log carrier for a log cutter and, more precisely, it concerns a log carrier having pivoting alignment.

**[0002]** Circular, conical or half logs, as well as very thick planks, need to be aligned perfectly on the log carrier in order to optimise the sawing operation.

**[0003]** According to the prior art, various systems are used to align the log, or thick planks, which necessitate various adjustment manipulations assisted by hooks or catches, with a consequent loss of time, or which use various arms that move independently but which are more expensive.

[0004] The object of the present invention is to provide a log carrier in which the alignment system and that for the horizontal and vertical positioning of the log are integrated, thus limiting the preparation time by utilising a single positioning axis. The present invention achieves the aforesaid objects with a log carrier having the characteristics specifically referred to in the following claims.

[0005] The invention will now be described with reference to the accompanying drawings provided by way of non-limitative example, in which:

- Figure 1 is a plan view of a log carrier according to the invention;
- Figures 2 and 3 are partial views of the log carrier of Figure 1 in two different working positions; and
- Figure 4 is a schematic partial side view of the log carrier according to the invention.

**[0006]** With reference to the drawings, the reference numeral 1 generally indicates a log carrier according to the invention.

**[0007]** A log T to be cut into planks by a saw, not shown, is carried by the log carrier 1 in a fixed position with respect to the carrier 1 and with a cutting plane indicated 3.

**[0008]** The log T is held securely in the log carrier 1 by locator frames 4 and associated upper and lower gripper hooks 5, 5' fixed to a beam 2.

**[0009]** The upper and lower gripper hooks 5, 5' can be retracted to a plurality of positions by means of associated hydraulic pistons 6, and have the possibility of being adjusted in height.

[0010] The beam 2 is fixed to the rotatable part 7 of a load-bearing turntable 8, the fixed part 12 of which is fixed to a carriage, known and for simplicity not described, that enables the beam 2 and the turntable 8 to move transversely in the directions indicated by the arrows in Figure 1. The assembly of the beam 2 and the turntable 8 is moved by an actuator 13, for example a hydraulic or electromechanical actuator, using means that are known and, for simplicity, not described.

**[0011]** A double hydraulic piston 9 is rotatably attached at its first end 10 to the beam 2, and rotatably attached at its second end to the fixed part 12 of the

turntable 8.

**[0012]** In use, the log T is positioned and secured in the log carrier 1 by the locator frames 4 and the associated gripper hooks 5 and 5'.

[0013] By shortening or lengthening the double hydraulic piston 9, the rotatable part 7 of the turntable 8 is rotated in one direction or the other (see Figure 2 or Figure 3) until the log T is in optimal alignment with the cutting plane 3.

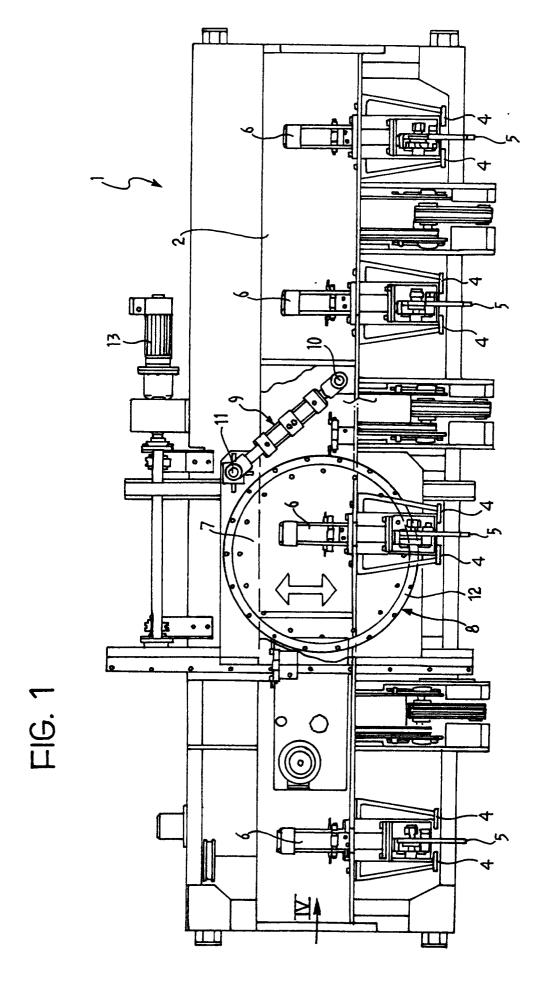
**[0014]** Naturally, the principle of the invention remaining the same, the details of construction and the embodiments can be widely varied with respect to that described and illustrated without by this departing from the ambit of the present invention.

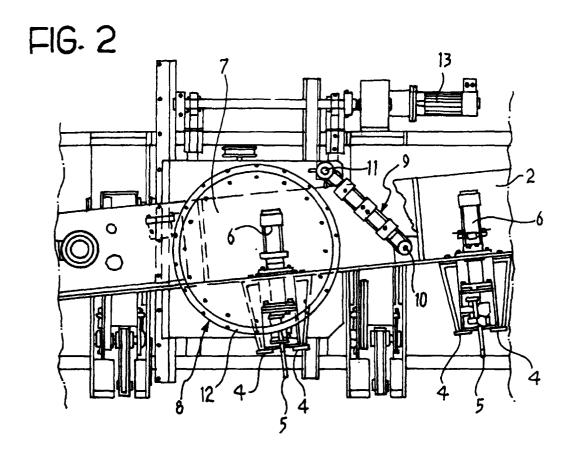
#### Claims

- A log carrier (1) for a log cutter including a beam (2), having locator frames (4) and pairs of upper and lower gripper hooks (5, 5'), which secure the log, (T) while it is being worked, mounted on the said beam (2), characterised in that the said beam (2) is fixed to the rotatable part (7) of a turntable (8) the fixed part (12) of which is fixed to a transversely movable carriage that is moved by an actuator (13).
- 2. A log carrier (1) according to Claim 1, characterised in that the rotatable part (7) of the turntable (8) is rotated in two directions by a thrust element (9), the first (11) and second (10) ends of which are rotatably fixed to the fixed part (12) of the turntable (8) and the supporting beam (2), respectively.
- A log carrier (1) according to Claim 2, characterised in that the said thrust element (9) comprises two counterposed hydraulic pistons.
- 4. A log carrier (1) according to any preceding claim, characterised in that the said upper and lower gripper hooks (5, 5') are retractable under the action of hydraulic pistons (6), and their height is adjustable.

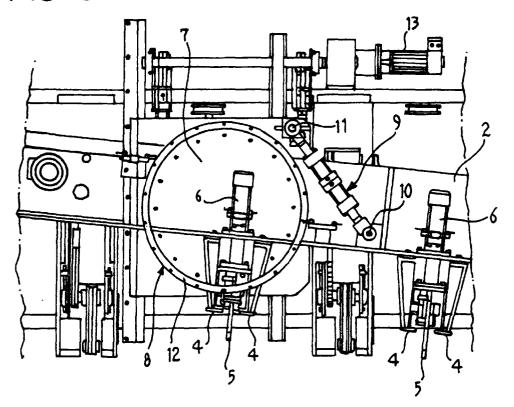
All substantially as described and illustrated and for the specified objects.

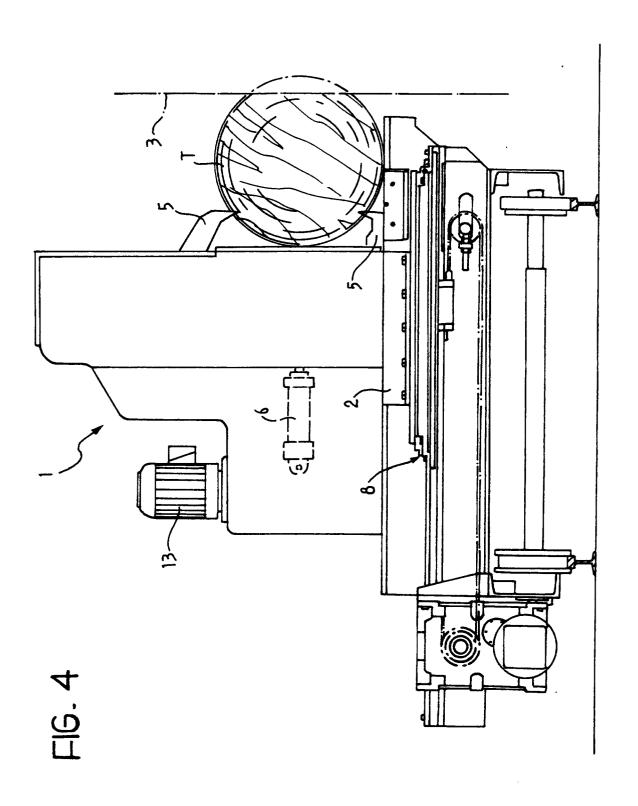
55













# **EUROPEAN SEARCH REPORT**

Application Number EP 98 11 8825

Category	Citation of document with indication of relevant passages	n, where appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)	
Y	DE 87 00 436 U (MASCHINE BRAUN GMBH & CO KG) 23 A * page 4, line 38 - page * page 6, line 1 - line * figures *	April 1987 2 5, line 12 *	1-4	B27B29/08	
Y	US 5 243 888 A (W.P. BOW 14 September 1993 * column 3, line 54 - li * column 4, line 18 - li * figures 3,10 *	ne 56 *	1-4		
				TECHNICAL FIELDS SEARCHED (Int.CI.6)	
	The present search report has been dr	awn up for all claims  Date of completion of the search		Examiner	
THE HAGUE		11 December 1998	Moe	oet, H	
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		E : earlier patent docu after the filing date D : document cited in L : document cited for	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		

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

EP 98 11 8825

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.

11-12-1998

	cited in search report		date	member(s)	date
DE	8700436	U	23-04-1987	NONE	
US	5243888	Α	14-09-1993	NONE	
			·		
				pean Patent Office, No. 12/82	