(11) **EP 0 925 854 A3**

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: 03.04.2002 Bulletin 2002/14

(51) Int Cl.7: **B21B 39/14**

(43) Date of publication A2: **30.06.1999 Bulletin 1999/26**

(21) Application number: 98204393.7

(22) Date of filing: 23.12.1998

(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: 24.12.1997 IT MI972879

(71) Applicant: ABB Sistemi Industriali SpA 20099 Sesto San Giovanni (MI) (IT)

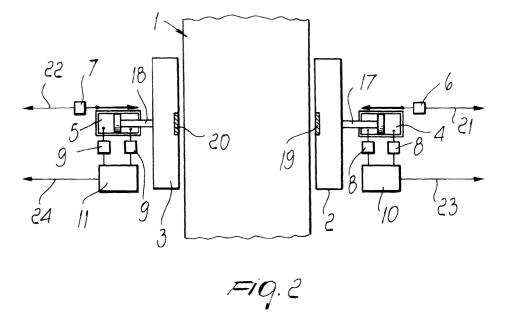
(72) Inventors:

- Andreolii, Marco 27100 Pavia (IT)
- Perego, Carlo 20050 Triuggio (MI) (IT)
- (74) Representative: Giavarini, Francesco ABB Ricerca S.p.A. Viale Edison, 50 20099 Sesto San Giovanni (MI) (IT)

(54) Device for adjusting the guides for the entry of the strip in a mill

(57) A device for adjusting the guides for the entry of the strip in a housing, the particularity of which is the fact that it comprises: at least one pair of mutually opposite guides which are suitable to adjust the correct alignment of the strip that enters the housing and are actuated, in terms of position and force, by respective actuation means; position and force/pressure transducer means which are connected to the actuation means;

and an electronic adjustment unit, which is suitable to receive signals from the position and force/pressure transducer means for the closed-loop control of the actuation means, in order to keep the guides in the correct position with respect to the strip and apply to the edges of the strip a force which is controlled as a function of parameters related to the position, width and thickness of the strip, which are detected by the transducer means.





EUROPEAN SEARCH REPORT

Application Number

		ERED TO BE RELEVANT	Relevant	CLARRIEDATION OF THE
Category	Citation of document with ii of relevant passa	ndication, where appropriate, ges	to claim	CLASSIFICATION OF THE APPLICATION (Int.CI.6)
Y	US 4 590 778 A (KLC 27 May 1986 (1986-6 * the whole documer		1-7,10, 13,14	B21B39/14
Υ	PATENT ABSTRACTS OF vol. 014, no. 552 (7 December 1990 (19 -& JP 02 235519 A (LTD), 18 September	1-7,10, 13,14		
Α	* abstract *	2550 (2550 05 20)	15	
A	PATENT ABSTRACTS OF vol. 010, no. 295 (7 October 1986 (198 -& JP 61 108415 A (27 May 1986 (1986-6 * abstract *	M-523), 6-10-07) KAWASAKI STEEL CORP),	1,8,15	
A	GB 2 100 475 A (BET FORSCH) 22 December	R FORSCH INST ANGEW 1982 (1982-12-22)		TECHNICAL FIELDS
			Mile Andrews	SEARCHED (Int.Cl.6)
				B21B
TO THE PARTY OF TH				
	The present search report has t	een drawn up for all claims		
	Place of search	Date of completion of the search		Examiner
	MUNICH	7 February 2002	Mer	itano, L
X : parti Y : parti docu A : tech	TEGORY OF CITED DOCUMENTS cularly relevant if taken alone oularly relevant if combined with another ment of the same category nological background written disolosure	E : earlier patent de after the filing du ner D : document oited L : document oited	in the application for other reasons	shed on, or

EPO FORM 1503 03.82 (P04C01)

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

EP 98 20 4393

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.

07-02-2002

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 4590778	Α	27-05-1986	DE AT DE EP JP	3423560 A1 35387 T 3563516 D1 0166981 A1 61014013 A	09-01-1986 15-07-1988 04-08-1988 08-01-1986 22-01-1986
JP 02235519	Α	18-09-1990	JР	1827742 C	28-02-1994
JP 61108415	Α	27-05-1986	JP JP	1503518 C 63054445 B	28-06-1989 28-10-1988
GB 2100475	А	22-12-1982	DE FR IT JP	3116278 A1 2504415 A1 1190784 B 57181709 A	11-11-1982 29-10-1982 24-02-1988 09-11-1982

FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82