

Title (en)

Positioning device for feeding coils, particularly of metal strip, on a un-coiler.

Title (de)

Positioniervorrichtung für auf eine Haspeltrommel aufzu- steckende Bunde, insbesondere aus Metallband.

Title (fr)

Dispositif de positionnement pour mettre des bobines, en particulier de bande métallique, sur un mandrin de dévidage.

Publication

EP 0487907 A1 19920603 (DE)

Application

EP 91118308 A 19911028

Priority

DE 4037671 A 19901127

Abstract (en)

[origin: JPH04268408A] PURPOSE: To accurately position a coil by controlling regulating means for vertical, lateral directions and relative rotation of the coil mounted at a raising truck by a controller based on the measured value of the profile at the inside of the coil and reeling drum to be fed. CONSTITUTION: The apparatus for positioning a coil loads the coil 1 on the support element 5 of raising truck 3 at the left receiving position, rotates the measuring head 13 of a measuring unit 12 suspended by an arm member 11 at 360 degrees, measures the profile at the inside of the coil, and transmits it to a controller. In this case, a tongue part 14 is displayed on a profile graph. The central vertical lines of the coil 1 and a reeling drum 2 are matched by using the lateral regulating member of the element 5, the element 5 is lowered, the coil 1 is rotated by rollers 6, 7, and a tongue part 14 is matched to the recess of the drum 2. Then, the truck 3 is moved to the left side feeding position on rails, the element 5 is raised, horizontally matched by using the vertical regulating member, and then the positioning is finished.

Abstract (de)

Die Erfindung bezieht sich auf eine Positioniervorrichtung für auf eine Haspeltrommel aufzusteckende Bunde, insbesondere aus Metallband. Zur allseitigen Erfassung des inneren Durchmessers des Bundes 1 und seiner Höhen- und Seitenlage in bezug auf die Haspeltrommel 2 werden die Innenkontur des Bundes 1 mit einem 360\circ messenden Meßkopf 13 festgestellt und in Abhängigkeit von den zu erhaltenden Meßwerten durch Vergleich mit den entsprechenden Meßwerten für die Haspeltrommel 2 Stellglieder für die Höhenverstellung eines Hubwagens 3 für den Bund 1 und/oder die Seitenversetzung und/oder die relative Verdrehung zwischen dem Bund 1 und der Haspeltrommel 2 beaufschlagt. <IMAGE>

IPC 1-7

B21C 47/24; **B65H 19/12**

IPC 8 full level

B25J 13/08 (2006.01); **B21C 47/24** (2006.01); **B65H 19/12** (2006.01); **G01B 21/00** (2006.01); **G01B 21/20** (2006.01)

CPC (source: EP US)

B21C 47/24 (2013.01 - EP US); **B65H 19/123** (2013.01 - EP US); **B65H 2301/41324** (2013.01 - EP US); **B65H 2301/41745** (2013.01 - EP US)

Citation (search report)

- [A] DE 8501277 U1 19881117
- [A] WO 8908598 A1 19890921 - CAMS SRL [IT]
- [A] PATENT ABSTRACTS OF JAPAN vol. 12, no. 73 (M-674)(2920) 8. März 1988 & JP-A-62 215 451 (YASKAWA ELECTRIC MFG CO LTD) 22. September 1987
- [A] PATENT ABSTRACTS OF JAPAN vol. 12, no. 164 (M-698)(3011) 18. Mai 1988 & JP-A-62 280 151 (MITSUBISHI HEAVY IND. LTD.) 5. Dezember 1987

Cited by

EP0708048A1; EP0775659A3; EP0995706A1; EP0697359A3; US6402083B1; EP1074472B1

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DOCDB simple family (application)

EP 91118308 A 19911028; AT 91118308 T 19911028; DE 4037671 A 19901127; DE 59104543 T 19911028; JP 31082491 A 19911126; US 78531991 A 19911030