

Title (en)

A method and apparatus for inserting a paper strip in a metallic strip continuous processing line.

Title (de)

Verfahren und Vorrichtung zum Anbringen eines Papierstreifens an ein Metallband auf einer kontinuierlich arbeitenden Anlage.

Title (fr)

Procédé et dispositif pour l'insertion d'une bande de papier et d'une bande métallique dans une installation de traitement continu.

Publication

EP 0648554 A1 19950419 (EN)

Application

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Priority

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Abstract (en)

A method for inserting a paper strip (P) between the layers of a strip (m) wound around a winding reel (10) of a carousel type winding apparatus (9) provided at the exit of metallic strip continuous processing line. The method includes the steps of advancing the paper (P) discharged from a paper strip coil (24) located above a carousel type winding apparatus (9) in a downward direction; shifting a paper feeding direction to a horizontal plane; and inserting the paper strip (P) through an entrance of a winding reel (10). An apparatus for performing this method includes a continuous paper feeding apparatus (20) disposed near a winding carousel type winding apparatus (9); a paper feeding direction changing apparatus (40) disposed at an entrance of the winding reel (10); and a paper shear (29). The continuous paper feeding apparatus (20) includes two or more paper unwinders (22a,b); a paper bonding device (28) which bonds a paper (P) discharged from one paper-discharging unwinder (22a,b) to a paper on another idle paper unwinder (22a,b); and a paper cutter (29) for cutting the discharged paper (P) when the papers (P) are bonded together. <IMAGE>

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IPC 8 full level

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Citation (search report)

- [YA] DE 3431177 A1 19860424 - BREIDENBACH GMBH & CO KG GEB [DE]
- [YA] PATENT ABSTRACTS OF JAPAN vol. 16, no. 7 (M - 1198) 9 January 1992 (1992-01-09)
- [A] PATENT ABSTRACTS OF JAPAN vol. 17, no. 449 (M - 1465) 18 August 1993 (1993-08-18)
- [A] PATENT ABSTRACTS OF JAPAN vol. 15, no. 358 (M - 1156) 10 September 1991 (1991-09-10)
- [A] PATENT ABSTRACTS OF JAPAN vol. 14, no. 147 (M - 952)<4090> 20 March 1990 (1990-03-20)
- [A] PATENT ABSTRACTS OF JAPAN vol. 15, no. 393 (M - 1165) 4 October 1991 (1991-10-04)

Cited by

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