

Title (en)

APPARATUS AND METHOD FOR DETECTING SHEET QUANTITY OF PAPER PRODUCT

Title (de)

VORRICHTUNG UND VERFAHREN ZUR ERKENNUNG DER BAHNENQUANTITÄT EINES PAPIERPRODUKTS

Title (fr)

APPAREIL ET PROCÉDÉ POUR DÉTECTER UNE QUANTITÉ DE FEUILLES DE PRODUIT EN PAPIER

Publication

EP 2424803 A4 20171018 (EN)

Application

EP 10770256 A 20100428

Priority

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Abstract (en)

[origin: US2010276862A1] A system detects the sheet quantity of sheet material such as paper by use of a detection roller which deforms from concentric when sheet material passes between the detection roller and another roller, and using a detector to detect the degree of de-concentricity and provide an output indicating the number of sheets passing through. The system has particular application to insert machines for detecting the number of sheets of insert material being inserted into host material such as newspapers.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

- [IA] US 6782986 B2 20040831 - TODA KINYA [JP], et al
- [A] JP H0649442 U 19940708
- [A] JP 2003091757 A 20030328 - OMRON TATEISI ELECTRONICS CO
- [A] JP H11120414 A 19990430 - HITACHI LTD
- [A] US 4425694 A 19840117 - SOMERVILLE RICHARD C [US]
- [A] US 4707598 A 19871117 - CROSET MICHEL R [GB], et al
- [A] EP 0064523 A1 19821117 - DE LA RUE SYST [GB]
- [A] WO 2004000503 A2 20031231 - GRAPHIC MAN ASSOCIATES INC [US]
- See references of WO 2010126995A2

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