

Title (en)

Apparatus and method for automatically monitoring the destruction of thin sheets

Title (de)

Verfahren bzw. Vorrichtung zum automatischen Überwachen der Zerstörung von dünnem Blattgut

Title (fr)

Méthode et dispositif pour la surveillance automatique de la destruction de feuilles minces

Publication

**EP 0374481 B1 19960228 (DE)**

Application

**EP 89121238 A 19891116**

Priority

DE 3843602 A 19881223

Abstract (en)

[origin: JPH02214550A] PURPOSE: To monitor the destruction of bank notes by the destruction stage itself or an adequate sensor means capable of detecting the prompt result thereof. CONSTITUTION: The destruction of sheet materials, more particularly the bank notes, is monitored within an automatic classifying apparatus for continuously sending the sheet materials, sheet by sheet, to a cutting means 20 driven by a motor 15 having mesh cutter blocks 12, 13. At this time, the destruction stage and/or the prompt result thereof is detected by the sensor means, for example, an optical barrier 11, a proximity caliper 16, a current sensor 17, a microphone 18, an optical sensor 19, a band-pass filter 21 or the like. The signal of at least one sensor is sent to a microprocessor where evaluation is made relating to a plurality of parameters, such as counting, length determination, quality determination and detection of the plurality of bank notes.

IPC 1-7

**B02C 18/00**; **G07D 9/00**; **G07C 3/00**

IPC 8 full level

**B02C 23/00** (2006.01); **B02C 18/00** (2006.01); **G07C 3/00** (2006.01); **G07D 9/00** (2006.01); **G07D 11/00** (2006.01)

CPC (source: EP US)

**B02C 18/0007** (2013.01 - EP US); **G07C 3/00** (2013.01 - EP US); **G07D 11/16** (2018.12 - EP US); **G07D 11/22** (2018.12 - EP US); **G07D 11/50** (2018.12 - EP US); **B02C 2018/0038** (2013.01 - EP US)

Cited by

WO02072270A1; DE10050486A1; EP0682883A1; EP0565112A3; US5415355A; FR2723859A1; US5772129A; EP0851394A1; US5945602A; US7201340B2; US7661617B2; US8002210B2

Designated contracting state (EPC)

AT BE CH DE ES FR GB IT LI LU NL SE

DOCDB simple family (publication)

**EP 0374481 A2 19900627**; **EP 0374481 A3 19940803**; **EP 0374481 B1 19960228**; AT E134532 T1 19960315; DE 3843602 A1 19900705; DE 58909611 D1 19960404; ES 2083372 T3 19960416; HK 1007699 A1 19990423; JP 2884247 B2 19990419; JP H02214550 A 19900827; US 5039020 A 19910813

DOCDB simple family (application)

**EP 89121238 A 19891116**; AT 89121238 T 19891116; DE 3843602 A 19881223; DE 58909611 T 19891116; ES 89121238 T 19891116; HK 98106917 A 19980626; JP 33469189 A 19891222; US 45407989 A 19891221