

Title (en)

Compact arrangement to detect the amount of unused ink ribbon

Title (de)

Kompakte Anordnung zum Detektieren der unbenutzten Farbbandlänge

Title (fr)

Agencement compact pour détecter la quantité de ruban d'encre non utilisée

Publication

EP 1500517 B1 20060920 (EN)

Application

EP 04016457 A 20040713

Priority

JP 2003279381 A 20030724

Abstract (en)

[origin: EP1500517A1] A ribbon support device for rotatably supporting a rolled ink ribbon (1) includes a partitioning disk (6) mounted in a terminal part of a ribbon core (4) on which the ink ribbon (1) is wound, the partitioning disk (6) having a plurality of slits (9) formed therein, and a reflection-type photoelectric sensor (10) for detecting the slits, the sensor (10) being located at a position facing the slits (9). Each rotation of the ribbon core (4) is detected when the reflection-type photoelectric sensor (10) has detected all the slits (9) formed in the partitioning disk (6). The length of the ink ribbon (1) supplied by one rotation of the ink ribbon is calculated by counting the amount of feed (or the number of steps) of a ribbon feeding stepping motor per rotation of the ribbon core (4). <IMAGE>

IPC 8 full level

B41J 35/36 (2006.01); **B41J 17/36** (2006.01)

CPC (source: EP)

B41J 17/36 (2013.01); **B41J 35/36** (2013.01)

Cited by

US11148446B2

Designated contracting state (EPC)

DE GB

DOCDB simple family (publication)

EP 1500517 A1 20050126; **EP 1500517 B1 20060920**; CN 1325278 C 20070711; CN 1576043 A 20050209; DE 602004002434 D1 20061102; DE 602004002434 T2 20070426; JP 2005041163 A 20050217

DOCDB simple family (application)

EP 04016457 A 20040713; CN 200410054976 A 20040726; DE 602004002434 T 20040713; JP 2003279381 A 20030724