

Title (en)
Endless ribbon cartridge.

Title (de)
Endlosbandkassette.

Title (fr)
Cassette de ruban sans fin.

Publication
EP 0013339 A2 19800723 (FR)

Application
EP 79104870 A 19791204

Priority
US 74679 A 19790103

Abstract (en)
[origin: US4236678A] A freely rotatable spool having an endless loop of printer ribbon wound around it is disclosed. The ribbon is withdrawn from the inner periphery of the coil and is simultaneously wound onto the outer periphery of the coil in a known manner. The freely rotatable spool is driven by the forces applied through pulling the ribbon off the inner periphery. Ribbon pulling is performed by an external set of feed rollers or similar mechanism. Difficulties encountered with the use of fabric ribbons in endless reel configurations are eliminated in the present invention by an improvement in the form of a polygonally shaped flange on the upper side of the freely rotatable spool on which the ribbon is wound. The flat sides on the polygonal flange have an optimum length which is defined in relationship to the width of the ribbon and the cosine of the angle at which the ribbon is withdrawn from the spool. An undercut dimension is provided on the spool so that the inner periphery of the ribbon is not in too great a contact with the hub or central core of the spool. A smooth ribbon flow from the vertical plane on the inner periphery of the coil to the horizontal plane as the ribbon is pulled from the center of the coil and out through the cassette is obtained.

Abstract (fr)
Cassette de ruban sans fin dans laquelle la bobine à rotation libre (2) comportant le rouleau (1A) de ruban sans fin, comprend un premier côté (5) de forme hexagonale adjacent à une des surfaces latérales du rouleau de ruban et un deuxième côté (6) de forme circulaire adjacent à l'autre surface latérale du rouleau. Le ruban est retiré de la bobine à partir de la spire intérieure du rouleau par les bords plats du côté hexagonal (5), est décalé de 90° lorsqu'il traverse l'épaisseur du rouleau et est ré-enroulé sur la périphérie extérieure du rouleau après utilisation, par exemple comme ruban encreur dans un dispositif d'impression.

IPC 1-7
B41J 33/10

IPC 8 full level
B41J 32/02 (2006.01); **G11B 23/07** (2006.01); **B41J 33/10** (2006.01); **B65H 18/12** (2006.01); **B65H 20/26** (2006.01)

CPC (source: EP US)
B41J 32/02 (2013.01 - EP US); **B41J 33/10** (2013.01 - EP US)

Cited by
US4840502A; WO8706884A1

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
EP 0013339 A2 19800723; **EP 0013339 A3 19810408**; **EP 0013339 B1 19830601**; CA 1109045 A 19810915; DE 2965591 D1 19830707; IT 1165404 B 19870422; IT 7928243 A0 19791220; JP S5593752 A 19800716; JP S5823310 B2 19830514; US 4236678 A 19801202

DOCDB simple family (application)
EP 79104870 A 19791204; CA 339703 A 19791113; DE 2965591 T 19791204; IT 2824379 A 19791220; JP 16487879 A 19791220; US 74679 A 19790103