

Title (en)  
ENDLESS RIBBON CARTRIDGE

Publication  
**EP 0013339 B1 19830601 (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 The ribbon is withdrawn from the inner periphery of the coil and is simultaneously wound onto the outer periphery of the coil in a known manner.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length which is defined in relationship to the width of the ribbon and the cosine of the angle at which the ribbon is withdrawn from the spool.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.

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**B41J 33/10**

IPC 8 full level  
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CPC (source: EP US)  
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Cited by  
US4840502A; WO8706884A1

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**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

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