

Title (en)

Flying cutter for cutting different lengths of a running web.

Title (de)

In der Formatlänge verstellbare Querschneidvorrichtung für laufende Bahnen.

Title (fr)

Cisaille volante pour couper des longueurs différentes d'une bande en déplacement.

Publication

EP 0423529 A2 19910424 (DE)

Application

EP 90118802 A 19901001

Priority

DE 3934673 A 19891018

Abstract (en)

The invention relates to a flying cutter for cutting different lengths of a running web, in particular for the folder arranged downstream of a printing machine. The flying cutter has the form of two cylinders of equal diameter arranged on either side of the web, one of which, the cutting cylinder, carries at least one cutting knife carried by a knife box and the other, the mating cylinder, carries a corresponding number of resilient cutting strips carried by supporting beams. To be able to cut different lengths with a single cylinder pair, the diameter of the cutting cylinder and of the mating cylinder is so dimensioned that, with the longest length, the cylinder circumferential speed is the same or slightly greater (by approximately 3%) than the web speed, that furthermore each knife box and each supporting beam are pivotably mounted in their associated cylinders about pivot axes lying inside the cylinder rotational axes and parallel thereto, and that each knife box and each supporting beam are pivoted by a pivot mechanism, during the cutting operation, with an adjustable stroke (including zero stroke for the longest length) periodically towards the web running direction and then back again into their starting position, about their respect pivot axes in the circumferential direction of the cutting cylinder and of the mating cylinder respectively. <IMAGE>

Abstract (de)

Die Querschneidvorrichtung hat die Form zweier beiderseits der Bahn angeordneter Zylinder (1, 2) gleichen Durchmessers, von denen der eine (1), Messerbalken (3) und der andere (2), Tragbalken (4) trägt. Um mit einem einzigen Zylinderpaar verschiedene Formatlängen schneiden zu können, sind jeder Messerbalken (3) und jeder Tragbalken (4) in ihren zugehörigen Zylindern (1, 2) um innerhalb der Zylinder-Drehachsen liegende, zu den Zylinder-Drehachsen parallele Schwenkachsen (5, 6) schwenkbar gelagert, und jeder Messerbalken (3) und jeder Tragbalken (4) können durch einen Schwenkmechanismus während des Schneidvorgangs mit verstellbarem Hub (einschließlich Hub Null für das längste Format) periodisch entgegen der Bahnlaufrichtung und anschließend wieder zurück in ihre Ausgangsstellung um ihre jeweiligen Schwenkachsen (5, 6) in Umfangsrichtung des Messerzylinders (1) bzw. des Gegenzylinders (2) verschwenkt werden.

IPC 1-7

B26D 1/62

IPC 8 full level

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CPC (source: EP)

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Cited by

EP1810799A1; EP0744254A1; CN109807640A; EP2342035A4; CN114505908A; CN111170050A; CN109572163A; WO9620072A1

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