

Title (en)

Machines and method for web processing by longitudinal compression.

Title (de)

Maschine und Verfahren zur Bearbeitung von Bahnen mittels longitudinalen Zusammendrückens.

Title (fr)

Machine et procédé d'usinage de bande par compression longitudinale.

Publication

EP 0268304 A2 19880525 (EN)

Application

EP 87117160 A 19871120

Priority

US 93308786 A 19861120

Abstract (en)

A machine and method for longitudinally compressing a web (12) under the influence of driving forces provided at a nip line defined by spaced-apart pairs of matched rotating disks (16,18) and under the influence of retarding forces provided by sets of retarding fingers (20,22) inserted in the spaces between the disks. In the region close to the nip line, web-contacting surfaces of sets of the fingers diverge in the direction of travel of the web whereby the longitudinally compressed web is subjected to tightest constraint of its thickness at a point longitudinally close to the nip line and downstream therefrom, while still confined, the corresponding sections of web are released from tightest constraint, the diverging surfaces promoting uniform movement of the corresponding oncoming sections of compressed web while enabling relatively steady retarding forces to be transmitted laterally through the web to retard the adjacent sections of the web that are in line with the disks, whereby the longitudinal compressive treatment of both the sections of the web in line with the fingers and the sections in line with the disks can be substantially regular. The retarding fingers extend as cantilevers upstream toward the nip line and are integral extensions of a continuous metal sheet that engages the treated web in its outward movement. A dwell cavity that lightly confines the web can aid in the setting of the treatment, and enable high speed throughout.

IPC 1-7

B31F 1/12

IPC 8 full level

B21D 31/00 (2006.01); **B31F 1/12** (2006.01); **C10M 171/00** (2006.01); **D06C 21/00** (2006.01)

CPC (source: EP)

B31F 1/12 (2013.01); **C10M 171/008** (2013.01)

Cited by

EP0347875A3

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI NL SE

DOCDB simple family (publication)

EP 0268304 A2 19880525; **EP 0268304 A3 19891018**; FI 875121 A0 19871119; FI 875121 A 19880521; JP S63211362 A 19880902; NO 874838 D0 19871119; NO 874838 L 19880524

DOCDB simple family (application)

EP 87117160 A 19871120; FI 875121 A 19871119; JP 29386287 A 19871120; NO 874838 A 19871119