

Title (en)

Paper coating method and apparatus.

Title (de)

Verfahren und Vorrichtung zum Beschichten von Papier.

Title (fr)

Procédé et dispositif d'enduisage du papier.

Publication

EP 0051698 B2 19940817 (EN)

Application

EP 80303958 A 19801106

Priority

EP 80303958 A 19801106

Abstract (en)

[origin: EP0051698A1] This invention relates to a method, and apparatus of the blade type, for applying a coating material to a web of paper. A conventional coater of the blade type includes means for applying coating to a paper web supported and carried by a resilient backing roll (24), together with a flexible doctor blade (98) located some distance from and on the trailing side of the applicator (20), which serves to level the applied coating. In order to achieve low coat weights, i.e. in the order of 3 to 4.5 grams per square metre per side of paper, it is necessary to increase the pressure of the blade (98) against the web (26), which results in a high rate of wear, and increases the possibility of web breakage and streaking caused by foreign particles being caught between the blade (98) and the web (26). The present invention utilizes a reservoir (80) of liquid coating material between a forward liquid seal and a rearward doctor blade (98) spaced a short distance from the seal. The coating material is applied under pressure so as to form and maintain the liquid seal. This provides a short dwell time, low coat weights, low blade pressures, and excellent results.

IPC 1-7

B05D 1/26; **B05C 5/02**

IPC 8 full level

B05C 5/02 (2006.01); **B05C 9/04** (2006.01); **B05C 11/10** (2006.01); **B05D 1/26** (2006.01)

CPC (source: EP)

B05C 9/04 (2013.01); **D21H 5/0015** (2013.01); **D21H 23/40** (2013.01)

Cited by

CN108262219A; US4887547A; DE19603861C1; US6066208A; EP0787857A1; WO9850631A1

Designated contracting state (EPC)

SE

DOCDB simple family (publication)

EP 0051698 A1 19820519; **EP 0051698 B1 19860806**; **EP 0051698 B2 19940817**; AT E21222 T1 19860815; DE 3071691 D1 19860911

DOCDB simple family (application)

EP 80303958 A 19801106; AT 80303958 T 19801106; DE 3071691 T 19801106