(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) Publication number: **0 246 012**
A3

(12) EUROPEAN PATENT APPLICATION

(21) Application number: **87303952.3**

(51) Int. Cl.4: **B41F 27/12 , B41N 9/02**

(22) Date of filing: **01.05.87**

(30) Priority: **01.05.86 US 858932**
24.04.87 US 40803

(43) Date of publication of application:
19.11.87 Bulletin 87/47

(84) Designated Contracting States:
DE FR GB IT

(88) Date of deferred publication of the search report:
24.05.89 Bulletin 89/21

(71) Applicant: **MINNESOTA MINING AND MANUFACTURING COMPANY**
3M Center, P.O. Box 33427
St. Paul, Minnesota 55133-3427(US)

(72) Inventor: **Goar, Richard T. c/o Minnesota Mining and**
Manufacturing Company 2501 Hudson Road
P.O. Box 33427 St. Paul Minnesota 55133(US)
Inventor: **Tholen, John H. c/o Minnesota Mining and**
Manufacturing Company 2501 Hudson Road
P.O. Box 33427 St. Paul Minnesota 55133(US)
Inventor: **Lien, Larry A. c/o Minnesota Mining and**
Manufacturing Company 2501 Hudson Road
P.O. Box 33427 St. Paul Minnesota 55133(US)

(74) Representative: **Baillie, Iain Cameron et al**
c/o Ladas & Parry Isartorplatz 5
D-8000 München 2(DE)

(54) Method and underpacking for mounting printing plates on a rotary printing press.

(57) A deformable printing plate is mounted on the plate cylinder of a rotary printing press over an underpacking comprising a flexible film having a major surface having a sufficiently high effective coefficient of breakout friction with the underside of the printing plate. The flexible film cooperates with essentially inextensible supporting means, and supports and stabilizes the printing plate, thereby substantially eliminating or substantially reducing the stretching and distortion of the printing plate during printing. In a preferred embodiment, the underpacking further comprises an essentially inextensible, flexible underlayer. In alternative embodiments, a contact layer may be applied to the underside of the printing plate such that the underside of the printing plate achieves a sufficiently high coefficient of breakout friction with cylinder body.

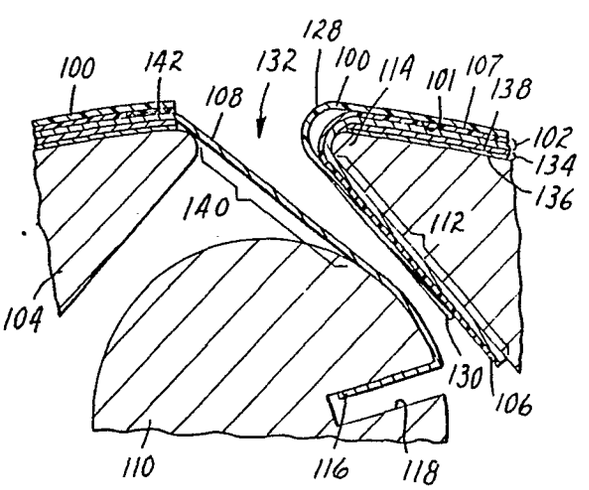

FIG. 2

EP 0 246 012 A3

European Patent Office

EUROPEAN SEARCH REPORT

Application Number

EP 87 30 3952

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
X,P, D	EP-A-194111 (MINNESOTA MINING & MANUFACTURING COMPANY) * page 3, line 32 - page 4, line 15; figure 10 *	1, 12-15, 17	B41F27/12 B41N9/02
X	US-A-3705072 (ROSVOLD R.M.) * the whole document *	1-8, 10, 11, 15-18, 22	
Y		12-14, 17	
Y	FR-A-2127709 (W.R.GRACE & CO) * page 4, line 1 - line 15; figure 3 *	13, 14	
Y	US-A-4092925 (FROMSON H.A.) * column 2, line 53 - column 5, line 62; figures 1-6 *	12, 17	
A	US-A-3217644 (SCHMIDT H.P.) * column 5, line 34 - column 6, line 46; figures 1-14 *	1-22	

TECHNICAL FIELDS SEARCHED (Int. Cl.4)

B41F
B41N

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	22 MARCH 1989	DIAZ-MAROTO V.

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
O : non-written disclosure
P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document

EPO FORM 1503 03.82 (P0401)