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(72) Inventors:  
• **Marschke, Carl R.**  
**Phillips, Wisconsin 54555 (US)**  
• **Jones, Kenneth L.**  
**Phillips, Wisconsin 54555 (US)**

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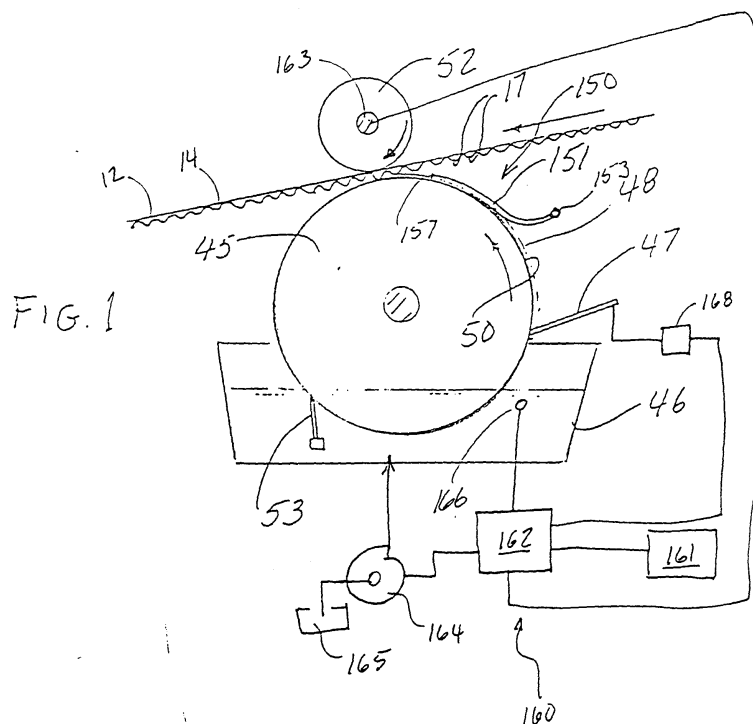
(74) Representative: **Carpenter, David**  
**MARKS & CLERK,**  
**Alpha Tower,**  
**Suffolk Street Queensway**  
**Birmingham B1 1TT (GB)**

(71) Applicant: **MARQUIP, INC.**  
**Phillips, Wisconsin 54555-0028 (US)**

### (54) Improved apparatus and method for applying a viscous liquid to a material surface

(57) An adhesive or other viscous liquid applicator apparatus utilizes a cylindrical glue roll (45) and a reverse acting notched metering or doctor blade (47) which forms, from an initial liquid layer on the roll, a se-

ries of laterally spaced liquid beads of metered size. The beads are subsequently spread to form a liquid layer for transfer to a web or other surface by a flexible spreader tongue (51). A glue film control system and glue film width control are also disclosed.



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## EUROPEAN SEARCH REPORT

Application Number  
EP 97 30 8813

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.6)
X	GB 1 304 449 A (MARDON FLEXIBLE PACKAGING LTD) 24 January 1973	2,3	B05C1/08 B05C1/16 B05C11/02 B31F1/20
A	* page 2, line 23 - line 104; figures * ---	1	
X	GB 1 272 256 A (AGFA-GEVAERT AG) 26 April 1972	2,3	
A	* page 1, line 92 - page 2, line 10 * * page 3, line 85 - line 108; figures * ---	1,4	
X	DATABASE IBM TDB Vol. 26 N.1 p. 117-118, June 1983 D. J. PIPKIN: "web-coating station" XP002085662 * abstract; figure * ---	2,3	
X	"SMOOTHING FILM COATING DEVICE" RESEARCH DISCLOSURE, NEW YORK, NY, US, no. 290, June 1988, page 362 XP000003551 * right-hand column * ---	2	
X	EP 0 603 145 A (VALMET PAPER MACHINERY INC) 22 June 1994 * column 6, line 21 - line 45; figure 4 * ---	2	TECHNICAL FIELDS SEARCHED (Int.Cl.6)
A	GB 1 029 987 A (EASTMAN KODAK COMPANY) * claims; figures * -----	2	B05C B31F
-The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 25 November 1998	Examiner BREVIER F.J.
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			

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**LACK OF UNITY OF INVENTION  
SHEET B**

Application Number  
EP 97 30 8813

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims: 2-5, 1

A flexible spreader tongue overlying a portion of a rotating applicator roll surface for spreading the adhesive to form a uniform layer of adhesive on the roll surface and apparatus comprising such a spreader.

2. Claim : 6

A method for controlling the thickness of a glue film applied to a web comprising in particular the steps:  
-supplying the reservoir with a make-up amount of adhesive equal to the rate of supply and returning to the reservoir adhesive not transferred to the web  
-adjusting the rate of supply to maintain an equilibrium state in the volume of glue in the reservoir.

3. Claim : 7

An adjustable wiper blade means for scraping adhesive from roll surface portions extending axially inwardly from opposite roll ends of a rotatable applicator roll.

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 97 30 8813

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
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25-11-1998

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