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(71) Applicant: **Xerox Corporation**  
**Rochester, New York 14644 (US)**

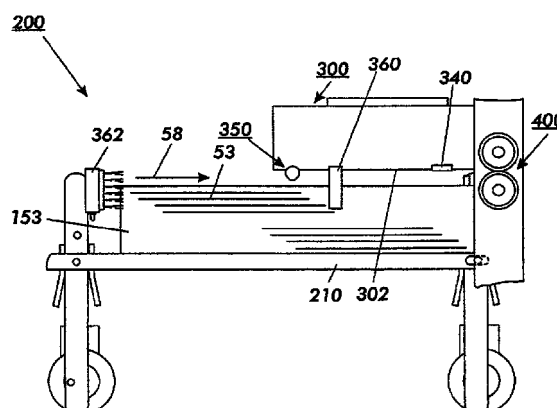
(72) Inventors:  
• **Domoto, Gerhald A.**  
**Briarcliff Manor, New York 10510 (US)**  
• **Ricciardelli, John J.**  
**Poughkeepsie, New York 12603 (US)**  
• **Moore, Kenneth P.**  
**Rochester, NY 14624 (US)**

• **Linder, Michael J.**  
**Walworth, New York 14568 (US)**  
• **Williams, Stephen B.**  
**Ontario, NY 14519 (US)**  
• **Haag, William R.**  
**Rochester, New York 14617 (US)**  
• **Yow, Gregory D.**  
**Webster, New York 14580 (US)**  
• **Clark, Lawrence A.**  
**Webster, New York 14580 (US)**  
• **Buchmann, Leonid**  
**Rochester, New York 14617 (US)**

(74) Representative:  
**Grünecker, Kinkeldey,**  
**Stockmair & Schwanhäusser**  
**Anwaltssozietät**  
**Maximilianstrasse 58**  
**80538 München (DE)**

(54) **High capacity sheet feeder having tiltable tray**

(57) A tiltable tray (210) utilizing a multi-position stack height (contact) sensor (350) (can detect 2 or more specific stack heights) in conjunction with a second sensor (340) near stack lead edge which also senses distance to the top sheet (without sheet contact). The two sensors together enable the paper supply to position the stack (53) with respect to the acquisition surface both vertically and angularly in the process direction. This height and attitude control greatly improves the capability of the feeder (200) to cope with a wide range of paper basis weight, type, and curl.



**FIG. 2**

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# EUROPEAN SEARCH REPORT

Application Number  
EP 99 12 5241

| 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.7) |
| X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | DE 11 46 507 B (MABEG MASCHINENBAU GMBH)<br>4 April 1963 (1963-04-04)<br>* the whole document *<br>----- | 1-6                                                   | B65H7/02<br>B65H1/18                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                          |                                                       | TECHNICAL FIELDS SEARCHED (Int.Cl.7)         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                          |                                                       | B65H                                         |
| The present search report has been drawn up for all claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                          |                                                       |                                              |
| Place of search<br><b>BERLIN</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                          | Date of completion of the search<br><b>2 May 2000</b> | Examiner<br><b>David, P</b>                  |
| <p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>X : particularly relevant if taken alone<br/>Y : particularly relevant if combined with another document of the same category<br/>A : technological background<br/>O : non-written disclosure<br/>P : intermediate document</p> <p>T : theory or principle underlying the invention<br/>E : earlier patent document, but published on, or after the filing date<br/>D : document cited in the application<br/>L : document cited for other reasons<br/>.....<br/>&amp; : member of the same patent family, corresponding document</p> |                                                                                                          |                                                       |                                              |

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

EP 99 12 5241

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| DE 1146507                                | B                   | NONE                       |                     |

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82