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(54) **Paper-like material processing apparatus and paper-like material processing method**

(57) A paper-like material processing method includes the steps of conveying paper-like materials, discriminating in discriminator (9) the direction of the front/back and top/bottom of paper-like materials being conveyed, a step of changing the directions of paper-like materials to prescribed directions by switching conveying paths of paper-like materials with gate (13) accord-

ing to the result of discrimination, a step of stacking paper-like materials of which directions are changed, and changing the directions of succeeding paper-like materials to be stacked to the reverse direction of paper-like materials already stacked by changing the conveying path whenever paper-like materials in the prescribed number of sheets are stacked.

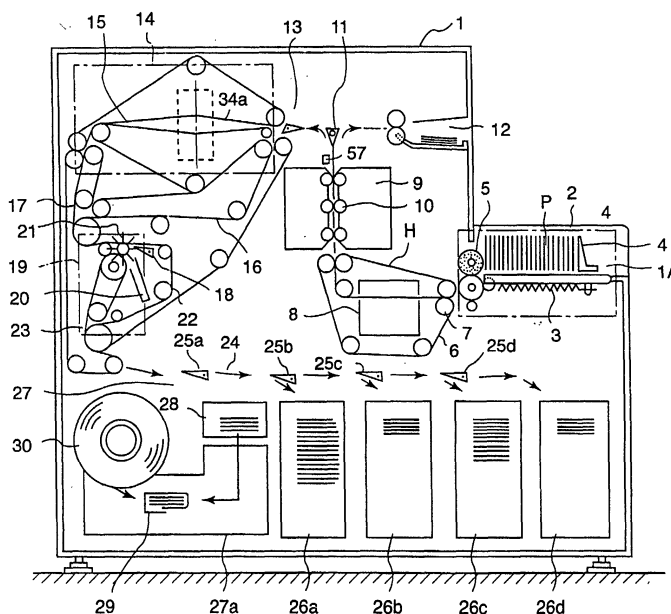


FIG.1

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EUROPEAN SEARCH REPORT

Application Number
EP 01 30 8951

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	EP 0 885 826 A (GD SPA) 23 December 1998 (1998-12-23) * column 1, line 41 - column 2, line 35 * * column 3, line 6 - column 4, line 4 * * column 5, line 2 - column 5, line 51; figures 1-6 *	1,2,10, 11	B65H29/60 B65H33/06 G07D11/00
A	----- US 5 186 334 A (KAKO YUTAKA ET AL) 16 February 1993 (1993-02-16) * column 3, line 64 - column 5, line 29; figures 3,6 *	1-3,10, 11	
A	----- DE 195 22 998 A (REIS STANDARDWERK) 2 January 1997 (1997-01-02) * column 6, line 51 - column 10, line 59; figures 1-3 *	1,10	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			G07D B65H
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
Munich		9 October 2003	Kising, A
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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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

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:

see sheet B

- ☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☒ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

1-7,10-16



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LACK OF UNITY OF INVENTION
SHEET B

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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: 1-7,10-16

A paper-like material processing apparatus for reversion the direction of succeeding paper-like materials to be stacked

(Object: to avoid an uneven height of stacked paper-like materials due to uneven thickness of said paper-like materials)

2. claims: 8,17

A paper-like material processing apparatus comprising posture correction means for correcting the posture of paper-like materials as well as to control the conveying position (shift position) of the paper-like materials to be stacked

(Object: To simplify the identification of stacks having different modes (A,B) or arrangements of said paper-like materials)

3. claims: 9,18

A paper-like material processing apparatus comprising pre-set thickness distribution patterns to kinds of paper-like materials for changing the position of said paper-like materials when stacked via a control of gate means

(Object: To avoid reading and discriminating of a banknote thickness distribution pattern)

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

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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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09-10-2003

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