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(54) **Sheet reverse device**

(57) A sheet reverse controller is equipped with a reverse unit (29) to convey sheets conveyed from the first conveying means (31,33) in the second direction differing from the first direction; a second conveying means (31,33,49,51) to convey the sheets in the second

direction; a sensor (53) provided to the second conveying means to detect the sheets; and a controller (2,4,5) to decelerate or accelerate the sheet conveying velocity of the driving rollers based on the detected result of this sensor (53).

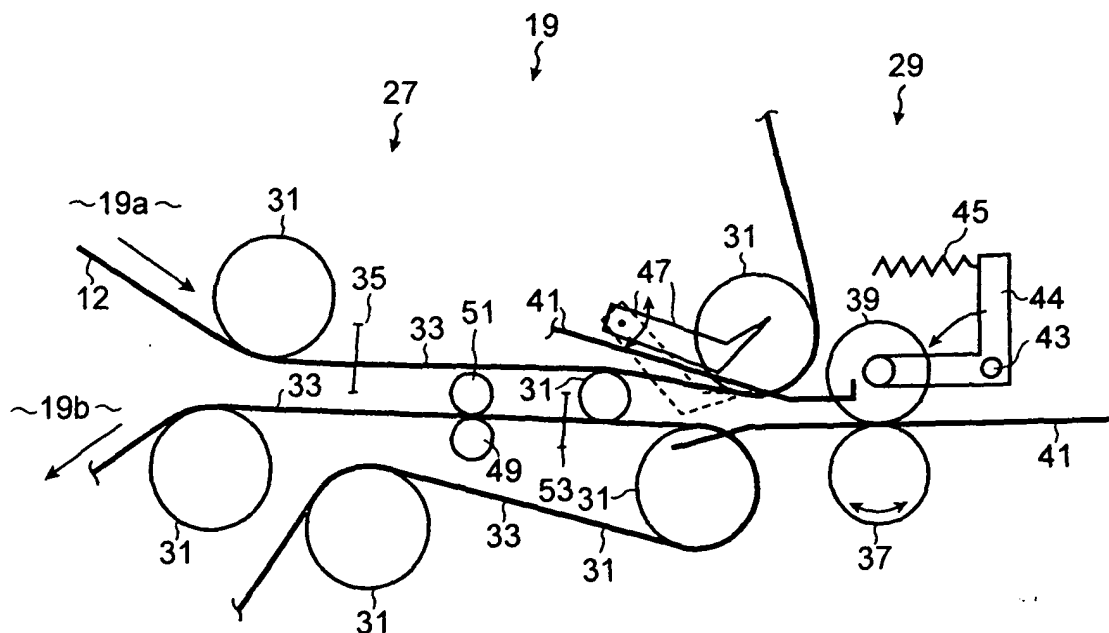


FIG. 6



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EUROPEAN SEARCH REPORT

Application Number
EP 04 02 0148

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 17 February 2005	Examiner Rupprecht, 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	

4
EPO FORM 1503 03.82 (P04C01)



European Patent
Office

Application Number
EP 04 02 0148

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:
1-7
- ☐ 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:



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**LACK OF UNITY OF INVENTION
SHEET B**

Application Number
EP 04 02 0148

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: 1-4

Sheet reverse device comprising a sensor, calculation means for calculating a space between sheets and a controller for controlling a conveyance velocity of a conveying unit.

2. claims: 5-7

Sheet reverse device comprising resistance reducing means for reducing a conveying resistance.

3. claim: 8

Sheet reverse device comprising a conveying roller equipped with a one-way clutch.

4. claim: 9

Sheet reverse device comprising holding force adjusting means for increasing a holding force of a conveying belt to hold a sheet.

5. claims: 10-12

Sheet reverse device comprising an acceleration drive roller for accelerating a sheet in the conveying direction.

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

EP 04 02 0148

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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17-02-2005

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