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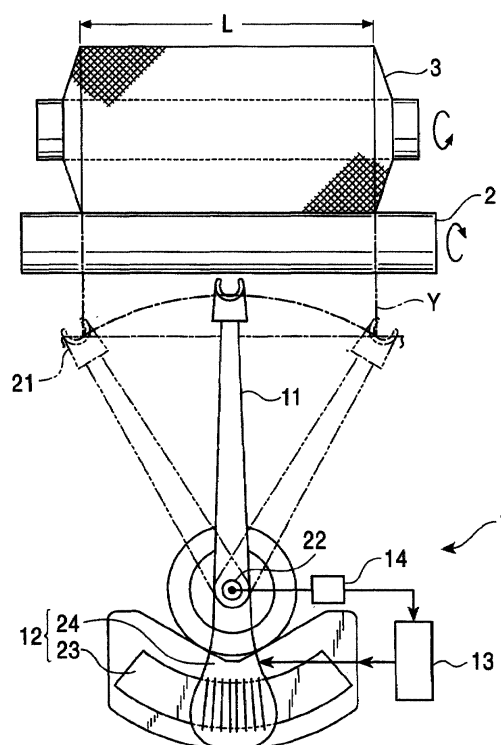
(30) Priority: **01.09.1999 JP 24702299**

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(54) **Traverse device and method**

(57) The present invention provides a simply structured traverse device that can arbitrarily change a traverse range to obtain packages in an arbitrary form. A traverse device comprises an oscillating member 11 having a yarn guide, a voice coil motor 12 connected to the oscillating member 11 and driven normally and reversely within a predetermined range, and control means 13 for controlling oscillation of the voice coil motor 12, the control means determining a range within which the oscillating member 11 is oscillated.

FIG. 1





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EUROPEAN SEARCH REPORT

Application Number
EP 00 11 8313

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,P	WO 00 37346 A (SCHLAFHORST & CO W) 29 June 2000 (2000-06-29) * page 17, paragraph 2; claims 1-5,12; figures *	1-3,10, 11	B65H54/28
X,P	WO 00 24663 A (MASCHINENFABRIK RIETER AG) 4 May 2000 (2000-05-04) * page 26, paragraph 3 - paragraph 4; figure 16 *	1-3,10, 11	
A	PATENT ABSTRACTS OF JAPAN vol. 1996, no. 12, 26 December 1996 (1996-12-26) -& JP 08 217332 A (MURATA MACH LTD), 27 August 1996 (1996-08-27) * abstract; figures *	1,10	
A	US 5 523 911 A (ENDO JURO ET AL) 4 June 1996 (1996-06-04) * column 11, line 27 - column 13, line 53; figures 9-14 *	1,10	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			B65H
The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 12 December 2001	Examiner Fuchs, H
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:

1-3,10,11



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LACK OF UNITY OF INVENTION
SHEET B

Application Number
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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: 1-3,10,11

Traverse device with voice coil motor.

2. Claims: 4-9,12

Traverse device with a plurality of oscillating members.

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

EP 00 11 8313

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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