



(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
07.01.2004 Bulletin 2004/02

(51) Int Cl.7: A47K 10/36

(43) Date of publication A2:
08.01.2003 Bulletin 2003/02

(21) Application number: 02013038.1

(22) Date of filing: 13.06.2002

(84) Designated Contracting States:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE TR
Designated Extension States:
AL LT LV MK RO SI

• Chen, Joline
Vancouver BC V5R 4E3 (CA)

(72) Inventors:
• Chen, Chien-Jung
Kaohsiung City (TW)
• Lin, Ming-Chung
Kaohsiung City (TW)

(30) Priority: 05.07.2001 CN 01120132
06.08.2001 CN 01124014

(71) Applicants:
• Yen Sun Technology Corp.
Jen-Wu Hsian, Kaohsiung Hsien (TW)

(74) Representative: LOUIS- PÖHLAU- LOHRENTZ
Postfach 3055
90014 Nürnberg (DE)

(54) Tissue paper dispenser with a device for separating a roll of tissue paper and method thereof

(57) A tissue paper dispenser includes a casing, a first set of rollers and a second set of rollers rotatably in the casing, a detecting means mounted between the first set of rollers and the second set of rollers, and a roll of tissue paper carrying a plurality of sensor marks. The first set of rollers and the second set of rollers are driven

by power devices to rotate at the same speed for moving the roll of tissue paper through the rollers of the first set of rollers and the second set of rollers. The first set of rollers and the second set of rollers rotate at different speeds when one of the sensor marks on the roll of tissue paper passes through the detecting means to thereby tear the tissue paper apart.

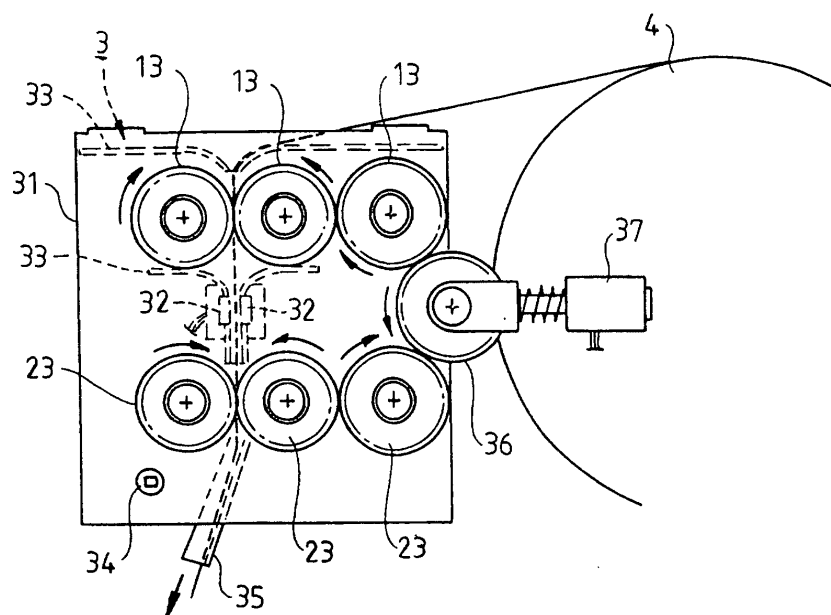


FIG. 7



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 02 01 3038

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 0 516 991 A (WINDMOELLER & HOELSCHER) 9 December 1992 (1992-12-09)	1	A47K10/36
A	* abstract *	3, 4	
X	US 4 284 221 A (SCHANER FERDINAND ET AL) 18 August 1981 (1981-08-18)	1	
A	* abstract *	3	
X	PATENT ABSTRACTS OF JAPAN vol. 013, no. 451 (C-643), 11 October 1989 (1989-10-11) & JP 01 175820 A (AICHI ELECTRIC CO LTD;OTHERS: 01), 12 July 1989 (1989-07-12)	14, 15	
A	* abstract *	3, 12	
A	PATENT ABSTRACTS OF JAPAN vol. 1999, no. 14, 22 December 1999 (1999-12-22) & JP 11 244189 A (MARUWA DENSHI KAGAKU KK), 14 September 1999 (1999-09-14) * abstract *	1, 3, 7, 12, 14, 17, 18	TECHNICAL FIELDS SEARCHED (Int.Cl.7) A47K B26F B26D
A	US 6 213 424 B1 (HELPER-GRAND BEVERLY) 10 April 2001 (2001-04-10) * abstract *	1, 3, 7	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 19 November 2003	Examiner Vrugt, S
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			

EPO FORM 1503 03/02 (P04001)

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

EP 02 01 3038

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
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

19-11-2003

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0516991 A	09-12-1992	DE 4134834 A1	10-12-1992
		CA 2070088 A1	06-12-1992
		DE 59200343 D1	08-09-1994
		EP 0516991 A1	09-12-1992
		ES 2057946 T3	16-10-1994
		JP 5154266 A	22-06-1993
US 4284221 A	18-08-1981	DE 2851894 A1	12-06-1980
		CH 642298 A5	13-04-1984
		IT 1125605 B	14-05-1986
JP 01175820 A	12-07-1989	JP 2652179 B2	10-09-1997
JP 11244189 A	14-09-1999	NONE	
US 6213424 B1	10-04-2001	US 2001006206 A1	05-07-2001