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EUROPEAN PATENT APPLICATION

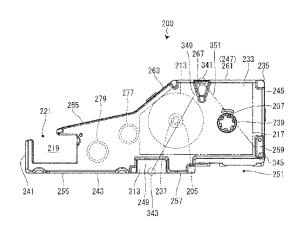
(88) Date of publication A3: (51) International Patent Classification (IPC): B41J 33/00^(2006.01) B41J 3/407 (2006.01) 20.03.2024 Bulletin 2024/12 B41J 33/14 (2006.01) B41J 35/04 (2006.01) B41J 32/00^(2006.01) (43) Date of publication A2: 21.02.2024 Bulletin 2024/08 (52) Cooperative Patent Classification (CPC): B41J 3/4075; B41J 2/325; B41J 17/32; (21) Application number: 23218308.7 B41J 33/003; B41J 33/14; B41J 35/04; B41J 32/00 (22) Date of filing: 28.03.2019 (84) Designated Contracting States: (71) Applicant: Seiko Epson Corporation AL AT BE BG CH CY CZ DE DK EE ES FI FR GB Tokyo 160-8801 (JP) GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR (72) Inventors: SASAKI, Taishi (30) Priority: 29.03.2018 JP 2018063682 392-8502 Suwa-shi (JP) 26.12.2018 JP 2018243214 ISHIMOTO, Akio 392-8502 Suwa-shi (JP) (62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC: (74) Representative: Lewis Silkin LLP 19777040.7 / 3 778 245 Arbor 255 Blackfriars Road London SE1 9AX (GB)

(54) **RIBBON CARTRIDGE AND PRINTING DEVICE**

(57) Provided is a ribbon cartridge capable of preventing a ribbon cartridge made by another company from being installed by mistake.

A ribbon cartridge includes: a paying-out core; a winding core that winds an ink ribbon fed from the paying-out core; and a cartridge case having a ribbon core accommodation part in which the paying-out core and the winding core are rotatably accommodated. In the cartridge case, a first peripheral wall recessed part, a second peripheral wall recessed part, and a third peripheral wall recessed part are provided at a peripheral edge part of the ribbon core accommodation part when seen from a front side of the ribbon cartridge in an installation direction, the first peripheral wall recessed part, the second peripheral wall recessed part, and the third peripheral wall recessed part being provided at a position corresponding to a first pressing protrusion, a position corresponding to a second pressing protrusion, and a position corresponding to a third pressing protrusion, respectively, when the ribbon cartridge is installed in a cartridge installation part and an installation-part cover is closed.

FIG. 6



-x **∢**-∲+Z +X



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EUROPEAN SEARCH REPORT

Application Number

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		DOCUMENTS CONSID				
	Category	Citation of document with i of relevant pase		ropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
10	A	US 6 485 206 B1 (TA 26 November 2002 (2 * column 4, line 24 * column 8, lines 9	2002-11-26) 4 - column 5,	line 53 *		INV. B41J3/407 B41J33/00 B41J33/14 D41J35/04
15		•				B41J35/04 ADD. B41J32/00
20						
25						
30						TECHNICAL FIELDS SEARCHED (IPC) B41J
35						
40						
45		The present search report has	been drawn un for al	claims	-	
1				pletion of the search		Examiner
50 (100)		The Hague		ruary 2024	Bac	on, Alan
2 (P04	C	ATEGORY OF CITED DOCUMENTS		T : theory or princip	le underlying the i	nvention
50 (P04C01) 55 658 0382 (P04C01)	X : part Y : part doc A : tech	ticularly relevant if taken alone ticularly relevant if combined with ano ument of the same category nological background		E : earlier patent do after the filing da D : document cited L : document cited	i the application r other reasons	
EPO FG	O : non-written disclosure P : intermediate document		& : member of the sa document		ime patent family, corresponding	

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

01-02-2024

10	Patent document cited in search report	Publication date	Patent family member(s)	Publication date					
	US 6485206 B1	26-11-2002	DE 60006622 T2	23-09-2004					
			EP 1084852 A1	21-03-2001					
			JP 4671062 B2	13-04-2011					
15			JP 4671063 B2	13-04-2011					
			JP 2008254449 A	23-10-2008					
			JP 2008279771 A	20-11-2008					
			JP 2008307900 A	25-12-2008					
			JP 2009001020 A	08-01-2009					
20			US 6485206 B1	26-11-2002					
25									
30									
35									
40									
45									
50									
	459								
	WHO O O H For more details about this annex : see O								
55									
	$\frac{\tilde{\Phi}}{\omega}$ For more details about this annex : see O	or more details about this annex : see Official Journal of the European Patent Office, No. 12/82							