



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**25.01.2017 Bulletin 2017/04**

(51) Int Cl.:  
**B41J 2/175<sup>(2006.01)</sup>**

(43) Date of publication A2:  
**15.07.2015 Bulletin 2015/29**

(21) Application number: **15150439.6**

(22) Date of filing: **08.01.2015**

(84) Designated Contracting States:  
**AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR**  
 Designated Extension States:  
**BA ME**

(72) Inventors:  
 • **Tominaga, Hirotaka Ibaraki, 305-0818 (JP)**  
 • **Shimamura, Norihisa Ibaraki, 305-0818 (JP)**

(30) Priority: **09.01.2014 JP 2014002093**  
**09.01.2014 US 201414151431**

(74) Representative: **Hoffmann Eitle Patent- und Rechtsanwälte PartmbB Arabellastraße 30 81925 München (DE)**

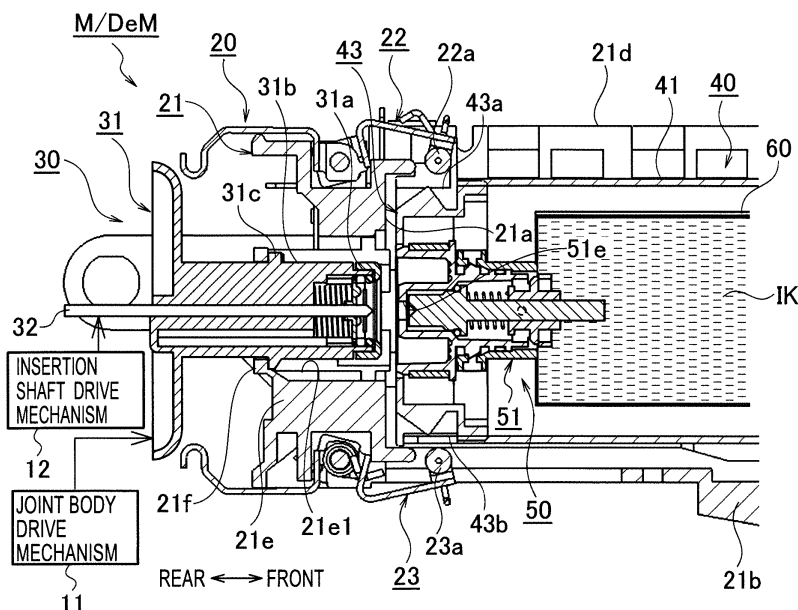
(71) Applicant: **Riso Kagaku Corporation Tokyo, 108-8385 (JP)**

(54) **Ink cartridge and mounting/dismounting mechanism for the same**

(57) An ink cartridge includes: an ink storage container configured to store ink; a socket portion provided at one end of the ink storage container and configured to be fitted to and detached from a joint portion of a printing machine; an ink supply port provided in the socket portion; an inside plug configured to seal an ink passage to the ink supply port by using a biasing force coming

from a direction of the ink storage container; and an inside plug lock portion configured to lock the inside plug at a position where the inside plug is pressed by an insertion shaft, and maintain a locked state of the inside plug independently of a retreating of the insertion shaft to a retreat position after a locking of the inside plug.

**FIG. 3B**





EUROPEAN SEARCH REPORT

Application Number  
EP 15 15 0439

5

10

15

20

25

30

35

40

45

50

55

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	US 2010/085404 A1 (AKIYAMA TOMOYUKI [JP]) 8 April 2010 (2010-04-08) * figure 5 *	1-8	INV. B41J2/175
A	US 2010/002061 A1 (SHIBANO MAKOTO [JP]) 7 January 2010 (2010-01-07) * paragraph [0067] - paragraph [0072]; figure 3 *	1-8	
A	US 2008/030557 A1 (UDAGAWA KENTA [JP]) 7 February 2008 (2008-02-07) * paragraph [0071]; figure 9 *	1-8	
A	JP 2008 200966 A (SII PRINTEK INC) 4 September 2008 (2008-09-04) * paragraph [0031]; figures 2, 3 *	1-8	
			TECHNICAL FIELDS SEARCHED (IPC)
			B41J
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 20 December 2016	Examiner Joosting, Thetmar
CATEGORY OF CITED DOCUMENTS		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	
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			

EPO FORM 1503 03/02 (P04/C01)

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

EP 15 15 0439

5

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.

20-12-2016

10

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2010085404 A1	08-04-2010	JP 2010083111 A US 2010085404 A1	15-04-2010 08-04-2010
US 2010002061 A1	07-01-2010	JP 5127600 B2 JP 2010012677 A US 2010002061 A1	23-01-2013 21-01-2010 07-01-2010
US 2008030557 A1	07-02-2008	CN 101117057 A JP 4942163 B2 JP 2008036908 A US 2008030557 A1	06-02-2008 30-05-2012 21-02-2008 07-02-2008
JP 2008200966 A	04-09-2008	NONE	

15

20

25

30

35

40

45

50

55

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82