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(71) Applicant: **Masytec A/S
2605 Broendby (DK)**

(72) Inventor: **Herloev, Jesper
2605 Broendby (DK)**

(74) Representative: **Larsen, Hans Ole et al
Larsen & Birkeholm A/S
Skandinavisk Patentbureau
Banegaardspladsen 1
1570 Copenhagen V (DK)**

(54) A system for supplying ink to a printing machine

(57) An automatic ink filling system for printing machines, where a pipe (3) has a plurality of inlet openings (4) and outlet openings (5), said inlet openings (4) being connected with a base member (6) of an ink case, in which case an ink cartridge (20) with ink is disposed, while an air hose (8) is connected at the cover (7) of the

ink case via a magnetic valve (9), which is in turn connected with a level sensor (11) via a control, so that compressed air may be supplied to the ink in the cartridge (20), whereby it is pressed out through the outlet opening (5) and down into the ink chamber (21).



EUROPEAN SEARCH REPORT

Application Number
EP 10 38 8001

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (IPC)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	EP 1 142 713 A2 (SEIKO EPSON CORP [JP]) 10 October 2001 (2001-10-10) * paragraphs [0025] - [0027]; figures 1, 2 * * paragraphs [0059], [0 66], [0 77]; figures 10b-12 *	1,2	INV. B41J2/175
X	EP 1 920 933 A2 (CANON KK [JP]) 14 May 2008 (2008-05-14) * paragraph [109n]; figure 19 *	1,2	
X	EP 0 753 411 A2 (CANON KK [JP]) 15 January 1997 (1997-01-15) * column 2, line 36 - line 52; figure 1 *	1,2	
X	US 5 980 030 A (FUJII TAKEO [JP]) 9 November 1999 (1999-11-09) * figure 1 *	1,2	
X	DE 197 02 283 A1 (HOFFMANN JOSEF [DE]) 6 August 1998 (1998-08-06) * abstract; figure 1 *	1,2	TECHNICAL FIELDS SEARCHED (IPC)
X, P	EP 2 127 886 A1 (SEIKO EPSON CORP [JP]) 2 December 2009 (2009-12-02) * paragraphs [0037], [0 38], [0 78]; figure 4 *	1,2	B41J
X	US 5 343 226 A (NIEDERMEYER JOHN F [US] ET AL) 30 August 1994 (1994-08-30) * column 4, line 42 - column 5, line 4 *	1	
The present search report has been drawn up for all claims			
2	Place of search The Hague	Date of completion of the search 11 June 2010	Examiner Adam, Emmanuel
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 C : 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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Application Number

EP 10 38 8001

CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due 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 those claims for which no payment was due.

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, 2

The present supplementary 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 (Rule 164 (1) EPC).



LACK OF UNITY OF INVENTION
SHEET B

Application Number
EP 10 38 8001

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, 2

System for the supply of ink to an ink chamber in a printing machine provided with a control system comprising a level sensor. Compressed air is supplied to a closed space above the ink in the ink cartridge via a compressed air channel

2. claim: 3

System for the supply of ink to an ink chamber in a printing machine provided with a ultrasonic sensor

3. claims: 4, 5

System for the supply of ink to an ink chamber in a printing machine provided with a stop valve. Discharge openings are movable and may thereby be positioned in any desired position above the ink chamber

4. claim: 6

System for the supply of ink to an ink chamber in a printing machine, wherein a channel is configured as a pipe, which is provided with brackets at the ends for releasable attachment to the opposed side walls of the ink chamber.

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

EP 10 38 8001

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.

11-06-2010

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