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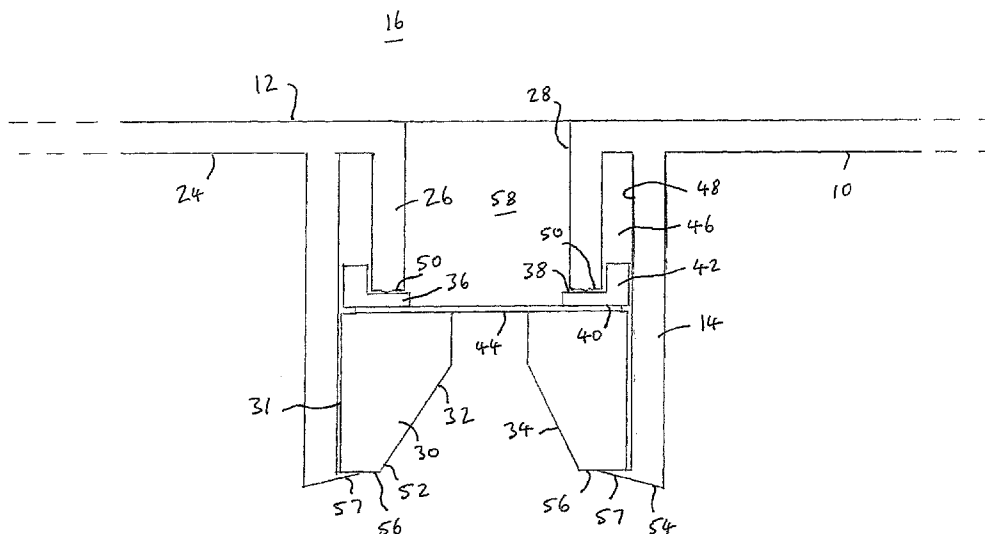
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SEALING ARRANGEMENT FOR THE INK SUPPLY PORT OF AN INK CARTRIDGE



(57) Abstract: An ink cartridge (10) for a printer (64) comprises a container (12) for holding ink and ink supply port (14) to receive an ink withdrawal needle (60) of the printer (64). The cartridge (10) further comprises an elastomeric member (30) in the ink supply port (14) to resiliently abut against and thereby seal against the outer periphery (90) of the ink withdrawal needle (60) in use, and a seal (44) to seal the ink supply port (14) and be pierced by the ink withdrawal needle (60). The seal (44) is mounted on a mounting piece (36) which is inserted into the outer end of the ink supply port (14) before the elastomeric member (30) in assembly of the cartridge (10). The seal (44) is thus positioned in the ink supply port (14) so that the ink withdrawal needle (60) passes through the elastomeric member (30) before piercing the seal (44).

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INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2006/002869

A. CLASSIFICATION OF SUBJECT MATTER
INV. B41J2/175

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
B41J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/107626 A1 (QINGGUO XIAO [CN] ET AL) 12 June 2003 (2003-06-12) paragraphs [0171] - [0183] figure 19A	1-8, 15, 16
X	EP 1 231 064 A2 (CANON KK [JP]) 14 August 2002 (2002-08-14)	1, 6-12, 15, 16, 43
Y	paragraphs [0067] - [0086] figures 1, 6-9	13, 14
X	US 2004/001127 A1 (NIP SHUI KUEN [HK]) 1 January 2004 (2004-01-01) the whole document	1-8, 15, 16
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Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

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15. 03. 2007

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INTERNATIONAL SEARCH REPORT

International application No

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2004/039592 A (KMP PRINT TECHNIK AG [DE]; LEHNER MARKUS [DE]) 13 May 2004 (2004-05-13)	1,2,4,5, 13,15,16
Y	page 5, line 25 - page 6, line 2 page 13, line 1 - page 18, line 12 figures 4,6,7	3
X	----- EP 0 745 480 A2 (DYNAMIC CASSETTE INT [GB]) 4 December 1996 (1996-12-04) column 2, line 49 - column 3, line 38 figure 2	1,2,4-6, 15,16
X	----- EP 0 553 535 A1 (SEIKO EPSON CORP [JP]) 4 August 1993 (1993-08-04) cited in the application	43
Y	page 4, lines 37-55	3
A	figure 3	1-5,15, 16
Y	----- EP 1 190 861 A (OWENS ILLINOIS CLOSURE INC [US]) 27 March 2002 (2002-03-27) paragraphs [0022] - [0024], [0030] -----	13,14

INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB2006/002869

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-16, 43

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-16,43

Ink supply port with elastomeric member

1.1. claims: 1-16

The special technical feature with respect to EP-A-0553535 is that the seal is positioned in the ink supply port such that the ink withdrawal needle passes through at least part of the elastomeric member before piercing the seal. This has the technical effect of preventing leakage of ink when the seal is pierced by a needle and protecting the seal so it will not be accidentally broken.

1.2. claim: 43

No special technical feature with respect to EP-A-0553535.

2. claims: 17-42,44

The special technical feature with respect to EP-A-0553535 is that the seal is mounted on a mounting piece. This has the technical effect of simplifying manufacture.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/GB2006/002869

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