

Title (en)  
An ink cartridge

Title (de)  
Eine Tintenpatrone

Title (fr)  
Une cartouche d'encre

Publication  
**EP 1086816 A3 20010627 (EN)**

Application  
**EP 00309723 A 20001103**

Priority  
GB 9925988 A 19991103

Abstract (en)  
[origin: GB2353763A] The ink cartridge comprises an ink tank 12 defined by surfaces 20,22, 28. A group of ink outlet apertures 38 disposed in a concentric arrangement (Fig.4) is defined in a septum 36 in the floor 28 of the ink tank. The ink tank floor is flat in the vicinity of the ink outlet apertures. A porous member 60 (e.g. sponge) fits snugly against the flat area of the tank floor to ensure a steady flow of ink stored in the sponge through the ink outlet apertures. The cartridge includes an ink supply port 16 to receive the end of an ink withdrawal needle 82. A seal 44 is provided in the ink supply port and defines an aperture 48 to receive the needle to enable the sealing thereof on insertion of the needle into the supply port. A cover 50 is provided over the seal aperture and is pierced by the needle on insertion. A protective guide 52 may be provided to align the needle with the aperture and to guide the needle into the aperture. The guide prevents damage to the seal if the cartridge is misaligned on the needle. The seal may be replaced by an insert seal (90, Fig.5) which includes a bore (92) and a triangular rib (94) which seals against the sides of the needle on insertion.

IPC 1-7  
**B41J 2/175**

IPC 8 full level  
**B41J 2/175** (2006.01)

CPC (source: EP)  
**B41J 2/17513** (2013.01)

Citation (search report)

- [X] US 5633666 A 19970527 - HAIGO HIDEAKI [JP]
- [X] US 5907341 A 19990525 - MIYAZAWA HISASHI [JP]
- [X] US 5477963 A 19951226 - MOCHIZUKI SEIJI [JP], et al
- [X] PATENT ABSTRACTS OF JAPAN vol. 013, no. 077 (M - 801) 22 February 1989 (1989-02-22)
- [XA] PATENT ABSTRACTS OF JAPAN vol. 012, no. 197 (M - 706) 8 June 1988 (1988-06-08)
- [X] PATENT ABSTRACTS OF JAPAN vol. 1996, no. 03 29 March 1996 (1996-03-29)

Cited by  
DE10239659B4; EP1279510A1

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