

Title (en)  
Ink tank cartridge and container therefor

Title (de)  
Tintenvorratspatrone und Behälter dafür

Title (fr)  
Cartouche de réservoir d'encre et son conteneur

Publication  
**EP 1013444 A1 20000628 (EN)**

Application  
**EP 00200827 A 19920807**

Priority  
• EP 97200694 A 19920807  
• EP 92307270 A 19920807  
• JP 1283492 A 19920128  
• JP 3222692 A 19920219  
• JP 5815192 A 19920316  
• JP 19340292 A 19920626

Abstract (en)  
An ink tank cartridge (5) is disclosed including a housing (11,50) removeably mounted onto an ink supply needle (14,90) of the ink-jet type recording apparatus body. The housing being provided with an ink supply port (15,53,71) projecting outwardly from a bottom surface of the housing. A porous member (21,64) for impregnating ink is positioned inside the housing abutting against the ink supply port through a filter (17,55). The ink tank cartridge being further provided with a packing member (19,57,73) resiliently abutting against an outer periphery of the ink supply needle at the end of the ink supply port. An end opening is sealed with a sealing member (20,60,77) through which the ink supply needle penetrates. Accordingly, the ink tank cartridge of the invention is advantageous in that the ink supply needle does not require a sharp tip, air is prevented from entering the ink supply path of the recording apparatus, and a tight air-seal between the ink supply needle and the ink tank can be maintained. <IMAGE>

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

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

CPC (source: EP)  
**B41J 2/17513** (2013.01); **B41J 2/17523** (2013.01); **B41J 2/17533** (2013.01)

Citation (applicant)  
• JP H0392356 A 19910417 - SEIKO EPSON CORP  
• JP S5074341 A 19750619  
• JP H02187364 A 19900723 - CANON KK [JP]

Citation (search report)  
• [X] EP 0408241 A2 19910116 - OLIVETTI & CO SPA [IT]  
• [XA] DE 2709730 A1 19780907 - OLYMPIA WERKE AG  
• [X] US 4156244 A 19790522 - ERIKSON ROLF B [US], et al  
• [XA] PATENT ABSTRACTS OF JAPAN vol. 016, no. 122 (M - 1226) 27 March 1992 (1992-03-27)  
• [X] PATENT ABSTRACTS OF JAPAN vol. 012, no. 364 (M - 747) 29 September 1988 (1988-09-29)  
• [A] PATENT ABSTRACTS OF JAPAN vol. 012, no. 416 (M - 759) 4 November 1988 (1988-11-04)  
• [DA] PATENT ABSTRACTS OF JAPAN vol. 015, no. 272 (M - 1134) 10 July 1991 (1991-07-10)

Cited by  
EP1938998A3; EP1231064A3; US6712458B2

Designated contracting state (EPC)  
CH DE FR GB IT LI NL SE

DOCDB simple family (publication)  
**EP 0553535 A1 19930804; EP 0553535 B1 19981028; EP 0553535 B2 20040414;** DE 69227441 D1 19981203; DE 69227441 T2 19990318; DE 69227441 T3 20040909; DE 69232194 D1 20011213; DE 69232194 T2 20020718; DE 69232243 D1 20020110; DE 69232243 T2 20020725; DE 69232893 D1 20030213; DE 69232893 T2 20031106; DE 69233371 D1 20040722; DE 69233371 T2 20050616; DE 69233784 D1 20100610; EP 0782927 A1 19970709; EP 0782927 B1 20011107; EP 0786352 A1 19970730; EP 0786352 B1 20011128; EP 1013444 A1 20000628; EP 1013444 B1 20030108; EP 1241012 A2 20020918; EP 1241012 A3 20030102; EP 1241012 B1 20040616; EP 1396344 A2 20040310; EP 1396344 A3 20040728; EP 1905599 A2 20080402; EP 1905599 A3 20090408; EP 1905599 B1 20100428; HK 1002449 A1 19980828; HK 1010709 A1 19990625; HK 1021810 A1 20000707; HK 1025932 A1 20001201; HK 1046666 A1 20030124; HK 1046666 B 20050204; SG 46602 A1 19980220

DOCDB simple family (application)  
**EP 92307270 A 19920807;** DE 69227441 T 19920807; DE 69232194 T 19920807; DE 69232243 T 19920807; DE 69232893 T 19920807; DE 69233371 T 19920807; DE 69233784 T 19920807; EP 00200827 A 19920807; EP 02076904 A 19920807; EP 03026325 A 19920807; EP 08000634 A 19920807; EP 96120032 A 19920807; EP 97200694 A 19920807; HK 00105237 A 20000821; HK 02108240 A 20021113; HK 98100731 A 19980127; HK 98111815 A 19981106; HK 99106082 A 19981106; SG 1996006518 A 19920807