

Title (en)
Ink delivery system for ink-jet printer

Title (de)
Tintenzuführsystem für Tintenstrahldrucker

Title (fr)
Système d'alimentation en encre pour imprimante par jet d'encre

Publication
EP 0903238 A3 20001108 (EN)

Application
EP 98306329 A 19980807

Priority
US 91483297 A 19970818

Abstract (en)
[origin: EP0903238A2] An off-axis printing system (10) with high performance tubing. The printing system includes a media transporting system for transporting a print medium along a medium path to a print area (14), a scanning carriage (16) for holding a printing structure (18) including a printhead, and a scanning apparatus (22, 24) for scanning the carriage along a scanning axis transverse to the media path at the print area. The system further includes a fixed ink supply station (30) including an ink reservoir. A fluid conduit interconnects between the ink reservoir of the fixed ink supply station and the printing structure, the fluid conduit including a length of hollow flexible tubing routed such that a flexible loop is formed therein. The tubing includes a tubing material having an oxygen permeability characteristic of less than 100 cc•mil/(100 in<2>•day•atm), at 23 DEG C, 0% RH. The tubing material has a tensile modulus characteristic value which is less than 300,000 pounds per square inch (psi), and a water vapor transmission rate of less than one g•mil/(100in<2>•day), at 10% RH, 100 DEG F. Particular tubing materials suitable for the purpose include polyvinylidene chloride copolymer, polychlorotrifluoroethylene copolymer, and ethylenechlorotrifluoroethylene. <IMAGE>

IPC 1-7
B41J 2/175

IPC 8 full level
B41J 2/175 (2006.01)

CPC (source: EP)
B41J 2/17509 (2013.01); **B41J 2/17523** (2013.01); **B41J 2/17556** (2013.01)

Citation (search report)
• [A] EP 0666178 A2 19950809 - HEWLETT PACKARD CO [US]
• [A] US 5640184 A 19970617 - MOYNIHAN EDWARD R [US], et al
• [A] PATENT ABSTRACTS OF JAPAN vol. 014, no. 327 (M - 0998) 13 July 1990 (1990-07-13)
• [A] PATENT ABSTRACTS OF JAPAN vol. 017, no. 291 (C - 1067) 4 June 1993 (1993-06-04)
• [A] PATENT ABSTRACTS OF JAPAN vol. 004, no. 025 (M - 001) 5 March 1980 (1980-03-05)

Cited by
WO0068017A1; WO2006076852A1; WO2018200930A1; WO2006081465A1; US7461928B2; WO0068018A1; US6698869B2

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
EP 0903238 A2 19990324; EP 0903238 A3 20001108

DOCDB simple family (application)
EP 98306329 A 19980807