

Title (en)  
INKJET PRINTERS

Publication  
**EP 0372810 A3 19910710 (EN)**

Application  
**EP 89312409 A 19891129**

Priority  
• US 27939588 A 19881202  
• US 27948388 A 19881202  
• US 27990488 A 19881208  
• US 34884289 A 19890508

Abstract (en)  
[origin: EP0372810A2] In an ink jet printer (110), the time that has elapsed since the ink jet cartridge (220) last printed is timed and after one hour has elapsed with no printing, all the nozzles (222a-222b) of the cartridge are caused to print, to prevent clogging of the nozzles. Also, a line of constant average dot density along its length is plotted, regardless of the orientation of various segments making up the plotted line. For any one increment of chart movement, each point in the other dimension is plotted only once, to conserve ink and prevent heavy buildup of ink on the chart. When the printer (110) is in plot mode, the nozzles are used in sequence, instead of always using the same nozzle, so as to lengthen the life of the cartridge (220).

IPC 1-7  
**B41J 2/17**

IPC 8 full level  
**B41J 2/165** (2006.01)

CPC (source: EP)  
**B41J 2/1652** (2013.01)

Citation (search report)  
• [X] GB 2000344 A 19790104 - KONISHIROKU PHOTO IND  
• [A] EP 0104628 A2 19840404 - SIEMENS AG [DE]  
• [X] US 4629342 A 19861216 - FUTAKI IPPEI [JP]  
• [A] US 4698779 A 19871006 - HOLDEN IAN [GB], et al  
• [X] US 4654805 A 19870331 - SHOUP II WALTER C [US]  
• [X] PATENT ABSTRACTS OF JAPAN, vol. 11, no. 28 (M-557)[2475], 27th January 1987; & JP-A-61 199 954 (CANON INC.) 04-09-1986  
• [X] PATENT ABSTRACTS OF JAPAN, vol. 9, no. 290 (M-430)[2013], 16th November 1985; & JP-A-60 129 266 (SHARP K.K.) 10-07-1985  
• [X] IBM TECHNICAL DISCLOSURE BULLETIN, vol. 29, no. 9, February 1987, page 3861, Armonk, New York, US; "Overpaint funtion for color printer".

Cited by  
EP1632356A1; US7677684B2

Designated contracting state (EPC)  
DE FR GB NL

DOCDB simple family (publication)  
**EP 0372810 A2 19900613; EP 0372810 A3 19910710**

DOCDB simple family (application)  
**EP 89312409 A 19891129**