

Title (en)
A liquid ink printing apparatus and system

Title (de)
Apparat und System zum Drucken mit flüssiger Tinte

Title (fr)
Appareil et système d'impression à l'encre liquide

Publication
EP 0890436 B1 20020828 (EN)

Application
EP 98119750 A 19960409

Priority

- AU PN230895 A 19950412
- AU PN231095 A 19950412
- AU PN231195 A 19950412
- AU PN231295 A 19950412
- EP 96911663 A 19960409

Abstract (en)
[origin: WO9632279A1] A new printing system is disclosed for drop on demand printing. This printing mechanism divides the printing process into two stages; a drop selection means to select drops to be printed which generates a difference in meniscus position between selected drops and unselected drops of fluidized ink; and a drop separation means, attracting the ink of said drops to a substrate, the attraction being insufficient to overcome the surface tension of drops in an unselected meniscus position but being sufficient to overcome the surface tension of drops in a selected meniscus position so as to cause movement of the drops to the substrate. The drop selection means can produce a difference in meniscus position in the absence of the drop separation means. The separation of drop selection means from drop separation means significantly reduces the energy required to select which ink drops are to be printed. Only the drop selection means must be driven by individual signals to each nozzle. The drop separation means can be a field or condition applied simultaneously to all nozzles.

IPC 1-7
B41J 2/065; **B41J 2/04**; **B41J 2/005**

IPC 8 full level
B41J 2/005 (2006.01); **B41J 2/045** (2006.01); **B41J 2/055** (2006.01); **B41J 2/14** (2006.01); **B41J 2/175** (2006.01)

CPC (source: EP KR)
B41J 2/005 (2013.01 - EP KR); **B41J 2/04** (2013.01 - KR); **B41J 2/065** (2013.01 - KR); **B41J 2/14451** (2013.01 - EP)

Citation (examination)
JP S60210462 A 19851022 - FUJI XEROX CO LTD

Cited by
US2011015721A1

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
WO 9632279 A1 19961017; BR 9606313 A 19970902; CN 1150777 A 19970528; DE 69603057 D1 19990805; DE 69603057 T2 20000105; DE 69623135 D1 20020926; DE 69623135 T2 20030508; DE 69623340 D1 20021002; DE 69623340 T2 20030417; EP 0765235 A1 19970402; EP 0765235 B1 19990630; EP 0890436 A2 19990113; EP 0890436 A3 19990728; EP 0890436 B1 20020828; EP 0890437 A2 19990113; EP 0890437 A3 19990728; EP 0890437 B1 20020821; JP H10501491 A 19980210; KR 970703857 A 19970809; MX 9606283 A 19980331

DOCDB simple family (application)
US 9604887 W 19960409; BR 9606313 A 19960409; CN 96190334 A 19960409; DE 69603057 T 19960409; DE 69623135 T 19960409; DE 69623340 T 19960409; EP 96911663 A 19960409; EP 98119750 A 19960409; EP 98119751 A 19960409; JP 53112296 A 19960409; KR 19960707094 A 19961211; MX 9606283 A 19960409