

Title (en)  
ARRANGEMENT FOR PRINTING DEVICES FOR MONITORING PRINTING MEDIUM CONTAINERS

Publication  
**EP 0433280 B1 19930428 (DE)**

Application  
**EP 88907091 A 19880725**

Priority  
DE 8800462 W 19880725

Abstract (en)  
[origin: WO9000974A1] Containers (11, 12) for printing devices, be they ink reservoirs, ribbon cassettes or toner reservoirs, are fitted with an electronic storage device (14) in the form of a chip in which the information on the current level of the container and/or other status data relevant to printer operation, e.g. expiry date of printing medium, are stored. The level of the printing medium is detected via the central control system (16) of the printing device and transmitted to the chip (14). The chip on the container monitors consumption until the level of the printing medium (ink, ribbon, toner) has fallen to the point at which the container needs to be changed. It is impossible to reprogram the chip and thus to refill the container.

IPC 1-7  
**B41J 2/175; B41J 27/00; B41J 32/00; G03G 15/06**

IPC 8 full level  
**B41J 2/175** (2006.01); **B41J 29/00** (2006.01); **B41J 29/20** (2006.01); **B41J 29/46** (2006.01); **B41J 33/54** (2006.01); **B41J 35/36** (2006.01); **B41M 5/10** (2006.01); **B41M 5/382** (2006.01); **G03G 15/08** (2006.01); **G03G 21/00** (2006.01)

CPC (source: EP US)  
**B41J 2/17546** (2013.01 - EP US); **B41J 2/17566** (2013.01 - EP US); **B41J 35/36** (2013.01 - EP US); **G03G 15/0855** (2013.01 - EP US); **G03G 15/0863** (2013.01 - EP US); **G03G 15/0865** (2013.01 - EP US); **B41J 2202/17** (2013.01 - EP US)

Cited by  
DE19957576C1; DE10332225A1; DE10332225B4; USRE35751E

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**WO 9000974 A1 19900208**; DE 3880694 D1 19930603; EP 0433280 A1 19910626; EP 0433280 B1 19930428; JP 2752402 B2 19980518; JP H04500482 A 19920130; US 5365312 A 19941115

DOCDB simple family (application)  
**DE 8800462 W 19880725**; DE 3880694 T 19880725; EP 88907091 A 19880725; JP 50616688 A 19880725; US 64677791 A 19910122