

Title (en)

SYSTEMS, METHODS AND APPARATUSES FOR AUTHORIZED USE AND REFILL OF A PRINTER CARTRIDGE

Title (de)

SYSTÈME, VERFAHREN UND VORRICHTUNGEN ZUR AUTORIZIERTEN VERWENDUNG UND NACHFÜLLUNG EINER DRUCKERPATRONE

Title (fr)

SYSTÈMES, MÉTHODES ET APPAREILS POUR UTILISATION AUTORISÉE ET RECHARGE D'UNE CARTOUCHE D'IMPRIMANTE

Publication

**EP 2969571 B1 20190220 (EN)**

Application

**EP 14716641 A 20140313**

Priority

- US 201361794413 P 20130315
- US 201361858868 P 20130726
- IB 2014059743 W 20140313

Abstract (en)

[origin: WO2014141139A1] A chip for a cartridge with dispensable material may be provided. In one aspect, the chip may comprise a non-volatile memory for storing a number tracking amount of dispensable material in the cartridge, a key storage for storing an encryption key, a signature verification module and circuit components configured to receive and process a print job, receive and validate a message comprising a command to increase the amount of dispensable material, and update the amount of dispensable material if the validation of the second message using the signature verification module and the encryption key succeeds. In another aspect, the chip may comprise a circuit with permanently and irreversibly changeable state and circuit components configured to ignore a command to increase a number tracking amount of dispensable material if the circuit has permanently and irreversibly changed its state to prevent responding to requests to increase the number.

IPC 8 full level

**B41J 2/175** (2006.01)

CPC (source: EP)

**B41J 2/175** (2013.01); **B41J 2/17546** (2013.01); **B41J 2/17566** (2013.01)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**WO 2014141139 A1 20140918**; CA 2907017 A1 20140918; CA 2907017 C 20160712; CA 2928848 A1 20140918; CA 2928848 C 20211214; CA 3107371 A1 20140918; CA 3242267 A1 20140918; EP 2969571 A1 20160120; EP 2969571 B1 20190220; EP 3513976 A1 20190724; EP 3513976 B1 20210818; EP 3925783 A1 20211222; EP 3925783 B1 20240424; EP 4427941 A2 20240911; EP 4427941 A3 20241016; TW 201501957 A 20150116

DOCDB simple family (application)

**IB 2014059743 W 20140313**; CA 2907017 A 20140313; CA 2928848 A 20140313; CA 3107371 A 20140313; CA 3242267 A 20140313; EP 14716641 A 20140313; EP 19158000 A 20140313; EP 21189886 A 20140313; EP 24170765 A 20140313; TW 103109796 A 20140314