



(11) **EP 2 657 778 B8**

(12) **CORRECTED EUROPEAN PATENT SPECIFICATION**

(15) Correction information:  
**Corrected version no 1 (W1 B1)**  
**Corrections, see**  
**Bibliography INID code(s) 73**

(51) Int Cl.:  
**G03G 15/00 (2006.01) G03G 21/00 (2006.01)**

(48) Corrigendum issued on:  
**25.12.2019 Bulletin 2019/52**

(45) Date of publication and mention  
of the grant of the patent:  
**20.11.2019 Bulletin 2019/47**

(21) Application number: **13163802.5**

(22) Date of filing: **15.04.2013**

---

(54) **Image forming apparatus having a cleaning unit to clean an optical sensor unit**

Bilderzeugungsvorrichtung mit einer Reinigungseinheit zum Reinigen einer optischen Sensoreinheit  
Appareil de formation d'images comportant une unité de nettoyage pour une unité de capteur optique

---

(84) Designated Contracting States:  
**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**

(30) Priority: **25.04.2012 KR 20120043206**

(43) Date of publication of application:  
**30.10.2013 Bulletin 2013/44**

(73) Proprietor: **Hewlett-Packard Development**  
**Company, L.P.**  
**Texas 77389 (US)**

(72) Inventors:  
• **Jang, Jeong Hun**  
**Suweon-si (KR)**  
• **Han, Dong Hun**  
**Suwon-si (KR)**

(74) Representative: **Appleyard Lees IP LLP**  
**15 Clare Road**  
**Halifax HX1 2HY (GB)**

(56) References cited:  
**EP-A2- 1 361 482 JP-A- 2000 344 394**  
**JP-A- 2004 277 107 US-A1- 2008 166 151**  
**US-A1- 2008 304 119 US-A1- 2009 274 478**

**EP 2 657 778 B8**

---

Note: Within nine months of the publication of the mention of the grant of the European patent in the European Patent Bulletin, any person may give notice to the European Patent Office of opposition to that patent, in accordance with the Implementing Regulations. Notice of opposition shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European Patent Convention).