

(12) **United States Patent**  
**Kimura et al.**

(10) **Patent No.:** **US 9,409,406 B2**  
(45) **Date of Patent:** **Aug. 9, 2016**

(54) **RECORDING APPARATUS WITH MOUNTING-REMOVING MECHANISM FOR INK CARTRIDGE**

(71) Applicant: **CANON KABUSHIKI KAISHA,**  
Tokyo (JP)

(72) Inventors: **Yukimichi Kimura,** Kawasaki (JP);  
**Koya Iwakura,** Kawasaki (JP)

(73) Assignee: **Canon Kabushiki Kaisha,** Tokyo (JP)

(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **14/832,846**

(22) Filed: **Aug. 21, 2015**

(65) **Prior Publication Data**  
US 2016/0052284 A1 Feb. 25, 2016

(30) **Foreign Application Priority Data**  
Aug. 25, 2014 (JP) ..... 2014-170983

(51) **Int. Cl.**  
**B41J 2/175** (2006.01)

(52) **U.S. Cl.**  
CPC ..... **B41J 2/1752** (2013.01)

(58) **Field of Classification Search**  
CPC ..... B41J 2/175; B41J 2/17553; B41J 29/02;  
B41J 2/14; B41J 29/13; B41J 2/17503  
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

8,079,683 B2 \* 12/2011 Silverbrook ..... B41J 2/1752  
347/49  
8,297,738 B1 \* 10/2012 Kodama ..... B41J 2/1752  
347/49  
8,454,136 B2 \* 6/2013 Katoh ..... B41J 2/17509  
347/85

FOREIGN PATENT DOCUMENTS

JP 2008-110577 5/2008

\* cited by examiner

*Primary Examiner* — Lamson Nguyen

(74) *Attorney, Agent, or Firm* — Canon USA Inc. IP Division

(57) **ABSTRACT**

A recording apparatus includes a recording head, an mounting portion on which an ink cartridge is mounted, a latching member configured to be movable between a first position where the latching member latches the ink cartridge mounted on the mounting portion and a second position where the latching member does not latch the ink cartridge mounted on the mounting portion, a regulation member configured to be movable between a regulating position where the regulation member regulates movement of the latching member and a regulation releasing position where the regulation member allows the movement of the latching member, and a return unit configured to return the regulation member to the regulating position from the regulation releasing position by contacting the regulation member moved to the regulation releasing position in order to allow the latching member to move to the second position.

**20 Claims, 17 Drawing Sheets**

