

Title (en)
Ink cartridge and recording apparatus

Title (de)
Tintenpatrone, Satz von Tintenpatronen und Tintenpatronenbestimmungssystem

Title (fr)
Cartouche d'encre, ensemble de cartouches d'encre, et système pour déterminer la cartouche d'encre

Publication
EP 2397337 B1 20131211 (EN)

Application
EP 11151931 A 20110125

Priority
JP 2010137808 A 20100617

Abstract (en)
[origin: EP2397337A1] An ink supplying apparatus is provided with a cartridge installation portion into which an ink cartridge is detachably loadable in an installation direction. The ink cartridge includes: a cartridge body having a front wall which is a leading side in the installation direction and defining therein an ink chamber in which ink is accommodated, the cartridge body having a height in a first direction perpendicular to the installation direction; an ink outlet port provided on the front wall for supplying the ink in the ink chamber to an outside; and a detection region provided at a position rearward of the ink outlet port in the installation direction and at a position different from the ink outlet port in the first direction, the detection region being defined by a first surface generally extending in the first direction and a second surface generally extending in the first direction and aligned with the first surface in the installation direction. The cartridge installation portion includes: a guide portion slidably movably guiding the cartridge body in the installation direction when the ink cartridge is loaded into the cartridge installation portion; an ink needle insertable into the ink outlet port when the cartridge body is slidably guided along the guide portion; an optical sensor provided to be in coincidence with the detection region in the installation direction upon insertion of the ink needle into the ink outlet port, the detection region capable of altering an optical characteristic of light emitted from the optical sensor in the installation direction during loading of the ink cartridge into the cartridge installation portion, the optical sensor outputting optical information based on the optical characteristic of the light altered at the detection region; and a control unit configured to determine information on the ink cartridge in accordance with the optical information outputted from the optical sensor.

IPC 8 full level
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CPC (source: EP)
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Cited by
CN103587247A; US10399345B2; US10226935B2; US10759177B2; US11453221B2; US10239322B2; US10596819B2

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