

Title (en)  
Ink cartridge and recording device

Title (de)  
Tintenpatrone und Aufzeichnungsgerät

Title (fr)  
Cartouche d'encre et dispositif enregistreur

Publication  
**EP 1690688 B1 20071114 (EN)**

Application  
**EP 06006577 A 20020927**

Priority  

- EP 04016566 A 20020927
- EP 02021659 A 20020927
- JP 2002090322 A 20020328
- JP 2002218192 A 20020726
- JP 2002225294 A 20020801
- JP 2002214079 A 20020723

Abstract (en)  
[origin: EP1348558A1] An ink cartridge (200) is used mounted in a recording device with a hollow needle (82), a lever, a protruding wall, and an optical sensor. The lever and the optical sensor are located on either side of the hollow needle, but closer to the opening through which the ink cartridge (200) is mounted. The ink cartridge is formed with two grooves open to the front and lower surfaces of the ink cartridge at positions that correspond to the protruding wall and the optical sensor. A light blocking member is disposed in the groove that corresponds to the optical sensor. When the ink cartridge is mounted into the recording device, one groove accommodates and is guided by the protruding wall. The other groove accommodates the sensor so that the light blocking member protrudes into the optical sensor. Also, the front surface of the ink cartridge abuts the lever, which uncovers the hollow needle so that ink supply hole in the front surface of the ink cartridge is inserted with the hollow needle. <IMAGE>

IPC 8 full level  
**B41J 2/175** (2006.01)

CPC (source: EP)  
**B41J 2/17506** (2013.01); **B41J 2/17513** (2013.01); **B41J 2/1752** (2013.01); **B41J 2/17553** (2013.01); **B41J 2/17566** (2013.01);  
**B41J 2002/17573** (2013.01)

Cited by  
EP2036730A1

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**EP 1348558 A1 20031001**; **EP 1348558 B1 20040901**; AT E275044 T1 20040915; AT E332237 T1 20060715; CN 2649338 Y 20041020; DE 20221816 U1 20080103; DE 60201122 D1 20041007; DE 60201122 T2 20050922; DE 60213004 D1 20060817; DE 60213004 T2 20070125; DE 60223609 D1 20071227; DE 60223609 T2 20080306; EP 1466740 A2 20041013; EP 1466740 A3 20050202; EP 1466740 B1 20060705; EP 1690688 A1 20060816; EP 1690688 B1 20071114; HK 1130736 A1 20100108

DOCDB simple family (application)  
**EP 02021659 A 20020927**; AT 02021659 T 20020927; AT 04016566 T 20020927; CN 02259416 U 20020930; DE 20221816 U 20020927; DE 60201122 T 20020927; DE 60213004 T 20020927; DE 60223609 T 20020927; EP 04016566 A 20020927; EP 06006577 A 20020927; HK 09108746 A 20090924