

Title (en)  
Ink cartridge

Title (de)  
Tintenkartusche

Title (fr)  
Cartouche d'encre

Publication  
**EP 1348556 A1 20031001 (EN)**

Application  
**EP 02021657 A 20020927**

Priority  

- JP 2002090322 A 20020328
- JP 2002218192 A 20020726
- JP 2002225292 A 20020801
- JP 2002214079 A 20020723

Abstract (en)  
An ink cartridge (200) includes an ink-holding portion and a rigid upper surface. The ink-holding portion includes a rigid indented surface portion and a flexible film. The indented surface portion has an open side at one side thereof that is covered by the flexible film. Ink is accommodated between the indented surface portion and the flexible film. The upper surface is positioned opposite from the indented surface portion with respect to the flexible film. The upper surface (212) is formed with a substantial semispherical shape that bulges in a direction away from the indented surface portion. <IMAGE>

IPC 1-7  
**B41J 2/175**

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

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

Citation (applicant)  

- JP S5853473 A 19830330 - EPSON CORP, et al
- JP H03505999 A 19911226
- US 4509062 A 19850402 - LOW ROBERT N [US], et al

Citation (search report)  

- [X] US 4604633 A 19860805 - KIMURA YOSHIKI [JP], et al
- [PX] US 2002047882 A1 20020425 - KARLINSKI HAGGAI [IL], et al
- [A] US 5623290 A 19970422 - IIDA HIROSHI [JP], et al
- [A] EP 0742102 A2 19961113 - LEXMARK INT INC [US]
- [A] US 4777497 A 19881011 - NOZU TAKETO [JP], et al
- [X] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 13 30 November 1998 (1998-11-30)
- [X] PATENT ABSTRACTS OF JAPAN vol. 018, no. 366 (M - 1636) 11 July 1994 (1994-07-11)

Cited by  
EP1757454A4; GB2409435B; GB2433231A; GB2433231B; US8083335B2; US8210670B2; US8668317B2; US7455397B2; US8042909B2

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)  
**EP 1348556 A1 20031001; EP 1348556 B1 20041201**; AT E283765 T1 20041215; CN 1191941 C 20050309; CN 1267280 C 20060802; CN 1410273 A 20030416; CN 1410274 A 20030416; DE 60202127 D1 20050105; DE 60202127 T2 20051027; ES 2233758 T3 20050616; HK 1055277 A1 20040102; HK 1055581 A1 20040116

DOCDB simple family (application)  
**EP 02021657 A 20020927**; AT 02021657 T 20020927; CN 02143989 A 20020930; CN 02143991 A 20020930; DE 60202127 T 20020927; ES 02021657 T 20020927; HK 03107526 A 20031016; HK 03107530 A 20031016