

Title (en)

PENS WITH EXCHANGEABLE CARTRIDGES

Publication

**EP 0113274 B1 19860917 (FR)**

Application

**EP 83402447 A 19831216**

Priority

FR 8222062 A 19821230

Abstract (en)

[origin: US4544297A] An improvement in a ballpoint pen having an ink cartridge with a writing nib slidably mounted in the body of the pen and translatable between a resting position wherein the nib is retracted within the body of the pen and a writing position wherein the nib is disposed outside of the pen body, the ink cartridge being provided in the vicinity of the nib with at least one orifice for supplying the ink cartridge with air, the improvement including a chamber sealed from the ambient atmosphere in both the resting and writing positions, the orifice being disposed within the chamber, and an interruptable sealing mechanism for establishing communication between the chamber and the ambient atmosphere whenever the ink cartridge is translated between the resting and writing positions.

IPC 1-7

**B43K 7/12; B43K 24/06**

IPC 8 full level

**B43K 5/16** (2006.01); **B43K 5/17** (2006.01); **B43K 7/00** (2006.01); **B43K 7/12** (2006.01); **B43K 8/02** (2006.01); **B43K 24/00** (2006.01);  
**B43K 24/06** (2006.01)

CPC (source: EP KR US)

**B43K 7/00** (2013.01 - KR); **B43K 7/12** (2013.01 - EP US); **B43K 8/028** (2013.01 - EP US); **B43K 24/06** (2013.01 - EP US)

Cited by

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DOCDB simple family (publication)

**US 4544297 A 19851001**; AT E22255 T1 19861015; DE 3366339 D1 19861023; EP 0113274 A1 19840711; EP 0113274 B1 19860917;  
ES 284623 U 19860401; ES 284623 Y 19861116; FR 2538762 A1 19840706; FR 2538762 B1 19850322; GB 2132565 A 19840711;  
GB 2132565 B 19860903; GB 8333973 D0 19840201; HK 22588 A 19880331; JP H0119356 B2 19890411; JP S59136296 A 19840804;  
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