

Title (en)

INK APPLICATOR, INK BACKFLOW PREVENTION MECHANISM OF INK APPLICATOR, AND A PEN TIP

Title (de)

TINTENAUFTRAGUNGSGERÄT, TINTENRÜCKFLUSSVERHINDERUNG DAFÜR UND FILZSCHREIBER

Title (fr)

APPLICATEUR D'ENCRE, MECANISME DE PREVENTION DU RETOUR D'ENCRE DE CET APPLICATEUR D'ENCRE ET POINTE DE PLUME

Publication

**EP 0972654 B1 20050914 (EN)**

Application

**EP 98957150 A 19981202**

Priority

- JP 9805456 W 19981202
- JP 34993997 A 19971203

Abstract (en)

[origin: EP0972654A1] An applicator that makes it unlikely for an ink, particularly water-based or alcohol solvent ink, to become blurred and assures smooth writing, including an ink reservoir accommodating an ink, a penpoint tip for ink application, and a valve mechanism, wherein the valve mechanism has an axially movable valve body, a valve seat situated on the side of the ink reservoir with respect to the valve body, and a valve support situated on the side of the tip with respect to the valve body; the valve support can anchor the valve body and has an interstice between it and the valve body through which the ink passes; when the tip is disposed upward, the valve body contacts the valve seat to prevent backflow of ink from the tip toward the ink reservoir; and when the tip is disposed downward, the valve body contacts the valve support, allowing the ink to flow through the interstice toward the tip; characterized in that a portion of the valve body that contacts the valve support is formed spherical, and the projected area of the interstice not covered by the valve body produced by projecting the valve body and the interstice onto a plane perpendicular to the axis is 0.035 mm<sup>2</sup> or more. <IMAGE>

IPC 1-7

**B43K 7/08**; B43K 7/02; B43K 1/08; B05C 17/00; B43K 5/18

IPC 8 full level

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Cited by

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**EP 0972654 A1 20000119**; **EP 0972654 A4 20031126**; **EP 0972654 B1 20050914**; AU 2243599 A 19990616; DE 69831561 D1 20051020; DE 69831561 T2 20060614; JP 4028886 B2 20071226; JP H11165487 A 19990622; WO 9928139 A1 19990610

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