

Title (en)

Ink jet head cartridge with a residual-ink detector

Title (de)

Kassette für einen Tintenstrahl Druckkopf mit Resttintenüberwachungsvorrichtung

Title (fr)

Cartouche pour tête d'impression à jet d'encre avec détecteur d'encre résiduelle

Publication

EP 0370765 B1 19960306 (EN)

Application

EP 89312075 A 19891121

Priority

- JP 28873689 A 19891108
- JP 29362788 A 19881122

Abstract (en)

[origin: EP0370765A2] A device for detecting a quantity of remaining ink includes first and second electrodes (1, 2) provided in an ink supply passage (6) which connects an ink tank (8) for storing an ink to a recording head (9) for emitting the ink, and a detection means for detecting a resistance between the first and second electrodes (1, 2). The second electrode (2) is provided in the ink supply passage (6) in an area relatively close to the recording head (9), whereas the first electrode (1) is provided in the ink supply passage in an area relatively far from the recording head with the second electrode therebetween. The second electrode is maintained at the same potential as that of a substrate which constitutes the recording head and on which emission energy generating elements driven to emit the ink are disposed, whereas the first electrode is maintained at a potential different from that of the second electrode. IN consequence, the amount of remaining ink can be detected by measuring changes in the resistance between the first and second electrodes (1, 2).

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IPC 8 full level

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CPC (source: EP)

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Cited by

US6361135B1; EP0834402A3; US6022090A; US5329304A; EP1190860A1; US5289211A; EP0701900A4; US5724076A; US6554380B2; US6626516B2; EP0783968A2

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