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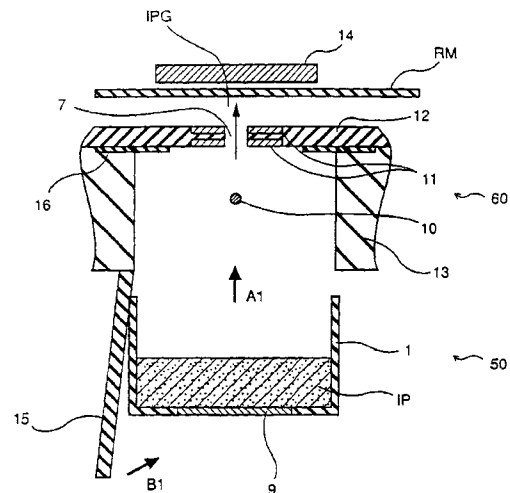
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(54) **Image forming apparatus provided with ink cartridge preventing deterioration of heater by ink and ink cartridge of the same**

(57) An image forming apparatus for recording a prescribed image by vaporizing, charging and ejecting ink onto a recording medium includes a printing head unit (60) and an ink cartridge (50) detachably mounted to in the printing head unit (60). The printing head unit (60) includes an ejecting unit (12) for ejecting charged gaseous ink by attracting the ink toward a back electrode provided over the rear surface of the recording medium, and an electric field shutter unit (11) for controlling ejection of the ink from the ejecting unit (12) based on a signal corresponding to image data to be recorded. The ink cartridge (50) includes an ink chamber (1) for storing ink, and a heating unit (9) for vaporizing ink within the ink chamber (1), the ink chamber (1) having an ink supply port for supplying ink into the printing head unit (60).

Fig. 4





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EUROPEAN SEARCH REPORT

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	EP 0 284 282 A (TOKYO ELECTRIC CO., LTD.) 28 September 1988 * page 5, line 19 - line 58; figures 6,7 *	1,2,40, 41,76	B41J2/06 B41J2/175
A	---	31,32,68	
Y	EP 0 212 792 A (TOKYO ELECTRIC CO., LTD.) 4 March 1987 * column 4, line 24 - column 5, line 28 * * column 8, line 14 - line 31; figures 2-4 *	1,2,40, 41,76	
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The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 5 October 1998	Examiner Ducreau, F
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons</p> <p>& : member of the same patent family, corresponding document</p>			

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Place of search		Date of completion of the search	Examiner
BERLIN		5 October 1998	Ducreau, F
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X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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