

Title (en)  
INK JET TYPE RECORDING HEAD.

Title (de)  
AUFZEICHNUNGSKOPF NACH DER TINTENSTRAHLART.

Title (fr)  
TETE D'IMPRESSION DU TYPE A JET D'ENCRE.

Publication  
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Application  
**EP 94916426 A 19940531**

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Abstract (en)  
[origin: WO9429110A1] Nozzles (190 to 197) for jetting ink droplets are so disposed along two line segments (L1 and L2) diverging in opposite directions with respect to a main scanning direction. The drop of printing quality and interference in an ink chamber can be solved if the two line segments form a V-shape. Accordingly, the present invention provides an ink jet type recording head capable of high density printing with high printing quality.

IPC 1-7  
**B41J 2/15**

IPC 8 full level  
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**B41J 2/14233** (2013.01); **B41J 2/15** (2013.01); **B41J 2/51** (2013.01); **B41J 2002/14387** (2013.01)

Citation (search report)  
• [X] EP 0430064 A2 19910605 - IBM [US]  
• [A] EP 0389016 A1 19900926 - PHILIPS PATENTVERWALTUNG [DE], et al  
• [DX] PATENT ABSTRACTS OF JAPAN vol. 017, no. 133 (M - 1383) 19 March 1993 (1993-03-19)  
• [A] JOHN M. MCINTYRE: "24-Wire Dot Matrix Printers Raise Quality Of Print And Graphics", COMPUTER TECHNOLOGY REVIEW, vol. VII, no. 13, LOS ANGELES US, pages 104 - 107  
• [A] TAKADA ET AL.: "THE EFFECT OF HEAD SHAPE ON DOD INK-JET DROP FORMATION", PROCEEDINGS OF THE SID, vol. 25, no. 4, PLAYA DEL REY, CA US, pages 311 - 314  
• See references of WO 9429110A1

Cited by  
US2013063522A1; US6024436A; EP0799699A3; US6042223A; EP0820871A3; EP1285763A3; US6371601B1; US6220698B1

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