

Title (en)
Ink jet head and manufacturing method thereof, discharge opening plate for head and manufacturing method thereof, and ink jet apparatus with ink jet head

Title (de)
Tintenstrahlkopf und sein Herstellungsverfahren, Aufflussöffnungsplatte für diesen Kopf und sein Herstellungsverfahren, und Tintenstrahlgerät damit versehen

Title (fr)
Tête à jet d'encre et son procédé de fabrication, plaque à orifices d'écoulement pour cette tête et son procédé de fabrication, et appareil à jet d'encre avec tête à jet d'encre

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Application
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Priority

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- EP 89311199 A 19891030
- JP 27579488 A 19881031
- JP 27579788 A 19881031
- JP 27580088 A 19881031
- JP 747089 A 19890113
- JP 740389 A 19890113
- JP 740989 A 19890113
- JP 741089 A 19890113
- JP 918189 A 19890118
- JP 918489 A 19890118
- JP 1807989 A 19890128

Abstract (en)
A discharge opening plate for an ink jet recording head comprises a plate having a through hole forming a discharge opening, a water repellant cover layer on one surface of the plate and an adhesive layer provided on its other surface. An ink jet recording head may be manufactured by adhering this plate to a head body having an ink path arranged to correspond to the through hole opening. <IMAGE>

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Citation (applicant)

- US 4723129 A 19880202 - ENDO ICHIRO [JP], et al
- US 4740796 A 19880426 - ENDO ICHIRO [JP], et al
- US 4463359 A 19840731 - AYATA NAOKI [JP], et al
- US 4345262 A 19820817 - SHIRATO YOSHIKI, et al
- US 4313124 A 19820126 - HARA TOSHITAMI
- US 4558333 A 19851210 - SUGITANI HIROSHI [JP], et al
- US 4459600 A 19840710 - SATO YASUSHI [JP], et al
- JP S59123670 A 19840717 - CANON KK

Cited by
AU2001288168B2; US7311386B2; US7043838B2; WO0222275A1

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EP 0367541 A2 19900509; **EP 0367541 A3 19901114**; **EP 0367541 B1 19941005**; DE 68918663 D1 19941110; DE 68918663 T2 19950316; DE 68929489 D1 20031113; DE 68929489 T2 20040819; EP 0602021 A2 19940615; EP 0602021 A3 19940831; EP 0937579 A2 19990825; EP 0937579 A3 19991103; EP 0937579 B1 20031008; ES 2060789 T3 19941201; ES 2207908 T3 20040601

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