

Title (en)
Printing device

Title (de)
Druckvorrichtung

Title (fr)
Dispositif d'impression

Publication
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Application
EP 96105732 A 19960411

Priority
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Abstract (en)
A printing device according to the present invention assures stable mixing and ejecting operations without provision of complicated mechanisms such as valves. The printing device includes an ejecting nozzle with a first discharge opening and a metering nozzle with a second discharge opening, which are provided separately from each other to feed two kinds of fluids through the first and second discharge openings, respectively. The two kinds of fluids are mixed together to form a fluid mixture to be ejected toward a recording medium. A minimum distance d between the first and second discharge openings of the metering and ejecting nozzles is in the range of $0 \leq d \leq 5 \sqrt{S_1}$ where S_1 stands for an opening area of the first discharge opening of the ejecting nozzle. <IMAGE>

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Citation (search report)

- [X] US 4017869 A 19770412 - MEYER RUDOLF, et al
- [A] DE 3501905 A1 19851212 - ROBOTRON VEB K [DD]
- [A] US 4614953 A 19860930 - LAPEYRE JAMES M [US]
- [DA] EP 0538147 A2 19930421 - SONY CORP [JP]

Cited by
EP1622774A4; GB2438180A; AU2007334792B2; EP1274551A4; EP1078761A3; EP0835759A1; US6139134A; US6164748A; EP0895864A3; US6312120B1; US8282197B2; US6676248B1; WO2008074589A1; US7300619B2; US7183335B2; US7851122B2; US8106107B2; US9744720B2; US10335994B2; US7479510B2

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