Title (en)

PROCESS FOR THE MANUFACTURE OF THERMAL INK JET PRINTING HEADS AND HEADS OBTAINED IN THIS WAY

Publication

EP 0401996 A3 19911204 (EN)

Application

EP 90305432 A 19900518

Priority

IT 6745889 A 19890608

Abstract (en)

[origin: EP0401996A2] Each thermal ink jet printing head (1) comprises a multi-layer plate in which layers of metals and of insulating materials are successively deposited under vacuum on a silicon base plate (20). The ink is contained in expulsion chambers (4) formed by a photolithographic process in a layer of photosensitive resin (74) and is expelled by the effect of rapid heating of resistive elements (8) contained within the expulsion chambers through nozzles (5) disposed in two rows side by side and produced in a metal lamina stuck to the resin layer. The expulsion chambers communicate with a main reservoir through a common ink feed duct (14) in the form of a slot or groove disposed between the two rows of nozzles and cut through the silicon plate (20) partly by an etching process and partly by a sandblasting process or with a special type of laser (excimer).

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B41J 2/05; B41J 2/16

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

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- [A] US 4835553 A 19890530 - TORPEY PETER A [US], et al
- [A] EP 0197723 A2 19861015 - XEROX CORP [US]
- [A] EP 0224937 A2 19870610 - HEWLETT PACKARD CO [US]

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