

Title (en)

Ink-jet head and ink-jet printer having ink-jet head

Title (de)

Tintenstrahldruckkopf und damit versehene Druckvorrichtung

Title (fr)

Tête d'impression jet d'encre et imprimante l'utilisant

Publication

**EP 1336490 A3 20031105 (EN)**

Application

**EP 03003699 A 20030218**

Priority

- JP 2002045146 A 20020221
- JP 2002044626 A 20020221
- JP 2002044650 A 20020221
- JP 2002040524 A 20020218

Abstract (en)

[origin: EP1336490A2] An ink-jet head (1) has a passage unit (4) including a plurality of pressure chambers (10) each having one end connected with a nozzle (8) and the other end to be connected with an ink supply source. Each of the pressure chambers (10) is confined in each of a plurality of parallelogram regions (10x) and has an elliptical planar shape with no corner bulging in a direction to leave a line joining the one end and the other end in each of the pressure chambers (10), in a plane of the passage unit (4) where the pressure chambers (10) are arranged. The planar shape of the pressure chamber is slender along a longer diagonal line of a rhombic region, and a direction of the longer diagonal line of a rhombic region and a direction of a direction joining the one end and the other end in each of the pressure chambers (10) are substantially coincident with each other <IMAGE>

IPC 1-7

**B41J 2/14**

IPC 8 full level

**B41J 2/14** (2006.01)

CPC (source: EP)

**B41J 2/14209** (2013.01); **B41J 2002/14217** (2013.01); **B41J 2002/14225** (2013.01); **B41J 2002/14306** (2013.01); **B41J 2002/14459** (2013.01); **B41J 2002/14491** (2013.01); **B41J 2202/11** (2013.01); **B41J 2202/20** (2013.01)

Citation (search report)

- [XY] EP 1138493 A1 20011004 - NEC CORP [JP]
- [X] JP H0825628 A 19960130 - FUJITSU LTD
- [A] EP 0577383 A2 19940105 - HEWLETT PACKARD CO [US]
- [X] JP H08267743 A 19961015 - SEIKOSHA KK
- [Y] US 2001020968 A1 20010913 - ISONO JUN [JP], et al
- [A] US 4317124 A 19820223 - SHIRATO YOSHIKI, et al

Cited by

US9144967B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT SE SI SK TR

DOCDB simple family (publication)

**EP 1336490 A2 20030820**; **EP 1336490 A3 20031105**; **EP 1336490 B1 20081001**; CN 1280095 C 20061018; CN 1442297 A 20030917; CN 2732483 Y 20051012; DE 60323773 D1 20081113

DOCDB simple family (application)

**EP 03003699 A 20030218**; CN 03106110 A 20030218; CN 03201499 U 20030218; DE 60323773 T 20030218