

Title (en)

LIQUID DISCHARGE HEAD, LIQUID DISCHARGE APPARATUS, AND METHOD FOR MANUFACTURING LIQUID DISCHARGE HEAD

Title (de)

FLÜSSIGKEITSAUSSTOSSKOPF, FLÜSSIGKEITSAUSSTOSSVORRICHTUNG UND VERFAHREN ZUR HERSTELLUNG EINES FLÜSSIGKEITSAUSSTOSSKOPFES

Title (fr)

TÊTE DE DÉCHARGE DE LIQUIDE, APPAREIL DE DÉCHARGE DE LIQUIDE ET PROCÉDÉ DE FABRICATION DE TÊTE DE DÉCHARGE DE LIQUIDE

Publication

EP 3858621 A1 20210804 (EN)

Application

EP 21150875 A 20210111

Priority

- JP 2020011867 A 20200128
- JP 2020155546 A 20200916

Abstract (en)

A liquid discharge head (100) includes a nozzle plate (1) configured to vibrate to discharge liquid. The nozzle plate includes a substrate (81), a piezoelectric body (82), and a nozzle orifice (4). The piezoelectric body (82) is disposed closer to a discharge target than the substrate, the piezoelectric body (82) including lead zirconate titanate (PZT). The nozzle orifice (4) penetrates the substrate and the piezoelectric body. When a direction from one opening to another opening in the nozzle orifice is a discharge direction of the liquid, the PZT has a crystal structure extending parallel with the discharge direction.

IPC 8 full level

B41J 2/14 (2006.01)

CPC (source: EP)

B41J 2/14233 (2013.01); **B41J 2002/1437** (2013.01); **B41J 2202/15** (2013.01)

Citation (applicant)

- JP H0365350 A 19910320 - RICOH KK
- JP 3427608 B2 20030722
- JP H09226111 A 19970902 - FUJI XEROX CO LTD

Citation (search report)

- [X] WO 2006059102 A1 20060608 - XAAR TECHNOLOGY LTD [GB], et al
- [I] US 2015062254 A1 20150305 - KAWAKUBO TAKASHI [JP], et al
- [A] EP 3238942 A1 20171101 - TOSHIBA TEC KK [JP]
- [A] EP 0952000 A2 19991027 - SEIKO EPSON CORP [JP]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

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DOCDB simple family (publication)

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