

Title (en)
PIEZOELECTRIC ACTUATOR AND RECORDING HEAD

Title (de)
PIEZOELEKTRISCHER AKTUATOR UND AUFZEICHNUNGSKOPF

Title (fr)
ACTIONNEUR PIÉZOÉLECTRIQUE ET TÊTE D'ENREGISTREMENT

Publication
EP 3072693 B1 20181128 (EN)

Application
EP 15160352 A 20150323

Priority
EP 15160352 A 20150323

Abstract (en)
[origin: EP3072693A1] There is provided a piezoelectric actuator configured to displace to project toward a pressure chamber so as to apply pressure to a liquid inside the pressure chamber, the piezoelectric actuator including: a vibration plate having a compressive stress; a piezoelectric layer having a pulling stress; and an individual electrode. The compressive stress of the vibration plate has a magnitude which is not less than a threshold value at which an extreme point is generated in a relationship between a compliance of the piezoelectric actuator and a displacement volume of the pressure chamber in a case that an electric voltage is applied to the piezoelectric actuator, the displacement volume converting from increasing to decreasing relative to increase in the compliance at the extreme point; and the thickness of the piezoelectric actuator is not less than a first thickness corresponding to a compliance allowing the extreme point to generate.

IPC 8 full level
B41J 2/14 (2006.01)

CPC (source: EP)
B41J 2/14233 (2013.01); **B41J 2202/11** (2013.01)

Cited by
JP2018167576A; JP2020026037A; JP2022120171A

Designated contracting state (EPC)
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