

Title (en)

LIQUID DISCHARGE APPARATUS AND METHOD FOR CONTROLLING THE SAME

Title (de)

FLÜSSIGKEITSAUSSTOSSVORRICHTUNG UND VERFAHREN ZUR STEUERUNG DAVON

Title (fr)

APPAREIL D'ÉVACUATION DE LIQUIDES ET PROCÉDÉ DE COMMANDE CORRESPONDANT

Publication

EP 3381701 A1 20181003 (EN)

Application

EP 18162127 A 20180315

Priority

JP 2017062701 A 20170328

Abstract (en)

There is provided a liquid discharge apparatus including: a liquid chamber that communicates with a nozzle; a liquid chamber driving unit that changes a volume of the liquid chamber so as to discharge the liquid from the nozzle; a flow channel which is connected to the liquid chamber; and a valve that changes a volume of the flow channel so as to control flow of the liquid. At least one of first control of increasing the volume of the liquid chamber in association with a decrease in volume of the flow channel by the valve, such that a change amount of the volume of the liquid chamber is equal to or larger than a volume of the liquid flowing from the flow channel into the liquid chamber due to the decrease in volume of the flow channel, and second control of decreasing the volume of the liquid chamber in association with an increase in volume of the flow channel by the valve, such that a change amount of the volume of the liquid chamber is equal to or larger than a volume of the liquid flowing from the liquid chamber out to the flow channel due to the increase in volume of the flow channel, is executed.

IPC 8 full level

B41J 2/18 (2006.01)

CPC (source: EP)

B41J 2/14233 (2013.01); **B41J 2/18** (2013.01); **B41J 2202/05** (2013.01)

Citation (applicant)

- JP 2001063047 A 20010313 - RICOH KK
- JP 2011213094 A 20111027 - PANASONIC CORP

Citation (search report)

- [XY] US 2011169897 A1 20110714 - YOKOYAMA NAOTO [JP], et al
- [X] EP 1862311 A1 20071205 - MIMAKI ENG KK [JP]
- [XD] JP 2001063047 A 20010313 - RICOH KK
- [X] US 2008018715 A1 20080124 - WEE SANG-KWON [KR], et al
- [XDY] JP 2011213094 A 20111027 - PANASONIC CORP
- [A] WO 2013032471 A1 20130307 - HEWLETT PACKARD DEVELOPMENT CO [US], et al

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)

BA ME

DOCDB simple family (publication)

EP 3381701 A1 20181003; **EP 3381701 B1 20200513**; JP 2018165050 A 20181025; JP 7021536 B2 20220217

DOCDB simple family (application)

EP 18162127 A 20180315; JP 2017253336 A 20171228