

Title (en)

Printheads for decorating ceramic substrates

Title (de)

Druckkopf zum Dekorieren von keramischen Substraten

Title (fr)

Têtes d'impression pour décorer des substrats céramiques

Publication

EP 2842753 A1 20150304 (EN)

Application

EP 13425119 A 20130829

Priority

EP 13425119 A 20130829

Abstract (en)

A printhead (20) comprising: a chamber (22); an actuator element (30) located outside the chamber (22), wherein the actuator element (30) is coupled to an obturator (31); and a separator element (26) located between the chamber (2) and the actuator element (30), characterized in that a portion of the obturator (31) is located within the chamber (22) and operable to move from a first position inside the chamber (22) to a second position inside the chamber (22) on actuation of the actuator element (30), whereby the actuator element is isolated from the fluid chamber during printing.

IPC 8 full level

B41J 2/14 (2006.01)

CPC (source: EP)

B41J 2/14201 (2013.01); **B41J 3/407** (2013.01); **B41J 2202/05** (2013.01); **B41J 2202/12** (2013.01)

Citation (applicant)

- EP 1972450 A2 20080924 - INGEGNERIA CERAMICA S R L [IT]
- ES 2386267 A1 20120814 - ESMALGLASS SAU [ES]

Citation (search report)

- [X] EP 0993951 A2 20000419 - MATSUSHITA ELECTRIC IND CO LTD [JP]
- [X] US 5636788 A 19970610 - WILSON ANTHONY D [US]
- [X] WO 8606684 A1 19861120 - SWEDOT SYSTEM AB [SE]
- [X] WO 2007100247 A2 20070907 - COLOR WINGS B V [NL], et al
- [X] US 2009115816 A1 20090507 - PAULY MANFRED [DE]
- [A] US 5602575 A 19970211 - PAULY MANFRED [DE]

Cited by

ITUB20153006A1; IT201700019466A1; EP3698880A1; US2023339176A1; US12030247B2; EP3300889A1; US2016176187A1; US9586395B2; US11944990B2; US10788028B2; US10315432B2; US11154892B2; US11167297B2; US10286651B2; ITUA20164471A1; CN109311323A; EP3695976A3; IT201900002151A1; WO2017216713A1; WO2017025830A1; US10384227B2; US11338312B2; US10697449B2; US11067073B2; US10364910B2; US11167302B2; US11167308B2; US11440035B2; TWI606936B; US11298717B2; US11504735B2; US11878317B2; US11203030B2; US11813630B2; US11975345B2; US10647120B2; EP3695976A2

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 2842753 A1 20150304; EP 2842753 B1 20210120; ES 2861950 T3 20211006

DOCDB simple family (application)

EP 13425119 A 20130829; ES 13425119 T 20130829