

Title (en)  
A PRINTING HEAD

Title (de)  
DRUCKKOPF

Title (fr)  
TÊTE D'IMPRESSION

Publication  
**EP 3069884 A1 20160921 (EN)**

Application  
**EP 15202694 A 20151224**

Priority  
• PL 41160515 A 20150317  
• GB 201504539 A 20150318

Abstract (en)  
A drop-on-demand inkjet printing head comprising a nozzle assembly having at least two nozzles (111A, 111B), each nozzle (111A, 111B) being connected through a channel (112A, 112B) with a separate liquid reservoir (116A, 116B) and having at its outlet (113A, 113B) a drop generating and propelling device (161A, 161B) for forming on demand a primary drop (121A, 121B) of liquid at a nozzle outlet (113A, 113B), wherein the first nozzle (111A) is configured to discharge a first primary drop (121A) along a first path and the second nozzle (111B) is configured to discharge a second primary drop (121B) along a second path which is not aligned with the first path, characterized in that the printing head further comprises a set of electrodes (141, 142) for altering the path of flight of the second primary drop (121B) to a path being in line with the path of flight of the first primary drop (121A) before or at a connection point (132) to allow the first primary drop (121A) to combine with the second primary drop (121B) at the connection point (132) into a combined drop (122), wherein each of the first primary drops (121A) and second primary drops (121B) are output to a surface to be printed.

IPC 8 full level  
**B41J 2/21** (2006.01)

CPC (source: EP GB)  
**B41J 2/07** (2013.01 - GB); **B41J 2/09** (2013.01 - GB); **B41J 2/095** (2013.01 - GB); **B41J 2/105** (2013.01 - GB); **B41J 2/14016** (2013.01 - EP); **B41J 2/14201** (2013.01 - EP); **B41J 2/211** (2013.01 - EP GB); **B41J 2/2121** (2013.01 - EP); **B41J 2202/02** (2013.01 - GB); **B41J 2202/05** (2013.01 - EP)

Citation (search report)  
• [A] EP 0775583 A2 19970528 - OKI DATA KK [JP]  
• [A] DE 102006048460 A1 20080424 - KBA METRONIC AG [DE]  
• [A] EP 1574343 A2 20050914 - BROTHER IND LTD [JP]

Cited by  
GB2554445A; GB2554445B; GB2555470A; GB2555470B; US11945153B2; DE102020108317A1; WO2021190978A1; WO2019008373A1

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 3069884 A1 20160921**; **EP 3069884 B1 20190522**; GB 201504539 D0 20150429; GB 201707884 D0 20170628; GB 2539168 A 20161214; GB 2548035 A 20170906; GB 2548035 B 20180207; PL 226753 B1 20170929; PL 411605 A1 20160926

DOCDB simple family (application)  
**EP 15202694 A 20151224**; GB 201504539 A 20150318; GB 201707884 A 20160226; PL 41160515 A 20150317