

Title (en)

TIP DESIGN AND RANDOM ACCESS ARRAY FOR MICROFLUIDIC TRANSFER

Title (de)

SPITZENGESTALTUNG UND DIREKTZUGRIFFSMATRIX FÜR MIKRO-FLÜSSIGKEITSTRANSFER

Title (fr)

MODELE DE POINTE ET MATRICE A ACCES SELECTIF POUR TRANSFERT MICRO-FLUIDIQUE

Publication

EP 1129008 A2 20010905 (EN)

Application

EP 99932267 A 19990707

Priority

- US 9915214 W 19990707
- US 9192898 P 19980707
- US 10671998 P 19981102
- US 11306298 P 19981221
- US 13846499 P 19990610
- US 13902499 P 19990614

Abstract (en)

[origin: WO0001798A2] The present invention relates to a ceramic tip (200) and a random access print head (230) for the transfer of microfluidic quantities of fluid. The print head (230) can randomly collect and deposit fluid samples to transfer the samples from a source plate (29) to a target (30). The print head (230) can also be programmed to create a direct map of the fluid samples from the source plate (29) on the target (30) or to create any desired pattern or print on the target (30). The tip (200) and print head (230) can be used for a wide variety of applications such as DNA microarraying and compound reformatting. In one preferred embodiment, the tip (200) is used as a capillary or "gravity" pin to draw or collect source fluid and "spot" or deposit the fluid onto the target (30) via physical contact (touch-off). In another preferred embodiment, the tip (200) is used in conjunction with an aspirate-dispense system (10) to actively aspirate source fluid and deposit the fluid via a contact or non-contact approach. The tip (200) provides improved, accurate and repeatable microfluidic transfer.

IPC 1-7

B65B 1/04

IPC 8 full level

B01J 19/00 (2006.01); **B01L 3/02** (2006.01); **G01N 35/10** (2006.01); **C40B 40/06** (2006.01); **C40B 60/14** (2006.01); **G01N 35/00** (2006.01)

CPC (source: EP)

B01J 19/0046 (2013.01); **B01L 3/0262** (2013.01); **B01L 3/0268** (2013.01); **G01N 35/1011** (2013.01); **G01N 35/109** (2013.01); **B01J 2219/00315** (2013.01); **B01J 2219/00317** (2013.01); **B01J 2219/00367** (2013.01); **B01J 2219/00369** (2013.01); **B01J 2219/00378** (2013.01); **B01J 2219/00527** (2013.01); **B01J 2219/00605** (2013.01); **B01J 2219/00608** (2013.01); **B01J 2219/0061** (2013.01); **B01J 2219/00612** (2013.01); **B01J 2219/00621** (2013.01); **B01J 2219/00659** (2013.01); **B01J 2219/00722** (2013.01); **C40B 40/06** (2013.01); **C40B 60/14** (2013.01); **G01N 2035/00237** (2013.01)

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 0001798 A2 20000113; **WO 0001798 A3 20000217**; AU 4861099 A 20000124; CN 1315913 A 20011003; EP 1129008 A2 20010905; EP 1129008 A4 20011205

DOCDB simple family (application)

US 9915214 W 19990707; AU 4861099 A 19990707; CN 99810378 A 19990707; EP 99932267 A 19990707