

Title (en)
MICRO-DROPLET DISPENSING DEVICE

Title (de)
MIKROTROPFENABGABEVORRICHTUNG

Title (fr)
DISPOSITIF DE DISTRIBUTION DE MICROGOUTTELETTES

Publication
EP 2266691 A4 20140416 (EN)

Application
EP 09723884 A 20090324

Priority
• JP 2009055816 W 20090324
• JP 2008079375 A 20080325

Abstract (en)
[origin: EP2266691A1] There is provided a microreactor that has a simple structure and prepares stable monodisperse droplets over a long period of time, with simple modifications to a conventional microreactor. A microreactor 1 that includes flow channels 2 formed by the lamination of a plurality of substrates so as to allow fluids to flow therethrough, and prepares droplets by causing a continuous phase fluid to shear a dispersed phase fluid, has an integrated lamination of: a flow-channel substrate 5 including the flow channels 2 formed open, through which the continuous phase fluid and the dispersed phase fluid flow, and also including a merge section 3b formed open where the flow channels 2 merge; spacer substrates 4 and 6, either or both joined to one side or respective sides of the flow-channel substrate 5 and including space portions 3a and 3c each formed so as to have a predetermined space in a corresponding one of the vertical directions with respect to the merge section 3b of the flow-channel substrate 5; and cover substrates 7 and 8 joined to respective outer sides of the lamination of: the spacer substrates 4 and 6 and the flow-channel substrate 5, the spacer substrates 4 and 6 joined to the respective sides of the flow-channel substrate 5; or the flow-channel substrate 5 and the one of the spacer substrates 4 and 6, the spacer substrate joined to the one side of the flow-channel substrate 5, so as to close both outer sides.

IPC 8 full level
B01F 3/08 (2006.01); **B01F 13/00** (2006.01)

CPC (source: EP)
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Citation (search report)
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• [Y] WO 0211888 A2 20020214 - NANOSTREAM INC [US]
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EP 09723884 A 20090324; JP 2009055816 W 20090324; JP 2010505672 A 20090324