ABSTRACT

A planar modular microfluidic module, system and method for manufacturing such module is provided. The module includes a base layer, and a fluidic layer configured to be attached to and on top of the base layer, whereby the base layer and said fluidic layer configured to create a single basic module, a jacket configured to cover the basic module around its lateral sides, in order to provide sturdiness to the basic module and create a jacket covered module. The jacket includes a physical connector configured to enable lateral connection between adjacent modules, the physical connector positioned on at least one lateral side of the jacket covered module, and a fluidic connection port located within said physical connector and configured to enable fluid flow connection between adjacent modules. The physical connector may be a magnetic connector.

(Fig. 1A)