

NISTTech

SINGLE MOLECULE FILTER AND SINGLE MOLECULE ELECTROGRAPH, AND PROCESS FOR MAKING AND USING SAME

Docket: 14-031

Abstract

The fabrication and construction of a solid-state nanopore device for uniquely identifying molecules in solution is described. The device is comprised of a glass nanotube derived from a silicon nanowire grown on a suspended glass membrane. Molecules in fluid are able to pass through the glass tube to the other side of the membrane by the application of an external electric field. The invention serves as a platform for electronic sensing devices that can be fabricated near or on the external surface of the glass tube to measure attributes of the translocating molecules for the purpose of identification and characterization.

Status of Availability

This invention is available for licensing exclusively or non-exclusively in any field of use.

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