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(54) **Title:** NANOPORE SYSTEMS AND METHODS FOR SINGLE-MOLECULE POLYMER PROFILING

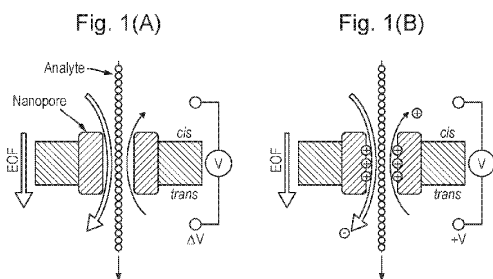
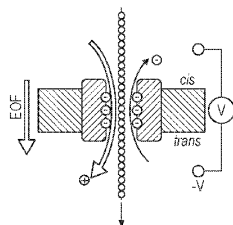


Fig. 1(C)



(57) **Abstract:** The invention relates to means and methods for analysis of target analytes using nanopore-based sensors, more in particular to methods, nanopore systems and devices for single-molecule profiling of polymers, e.g. polypeptide or polysaccharides. Provided is a method for translocating a non-nucleic acid based polymer analyte through a nanopore, the nanopore being comprised in a membrane separating a fluidic chamber of a nanopore system into a cis side and a trans side, comprising adding the analyte to the cis side of and allowing for translocation, wherein the nanopore system has a cis to trans electro-osmotic force (EOF) resulting from a net ionic current flow cis to trans, preferably wherein the cis to trans EOF results from a net ionic current flow cis to trans over total ionic current flow of greater than 0.2 or less than -0.2.



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