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(54) **Title:** A METHOD OF MICROFLUIDIC PARTICLE SEPARATION ENHANCEMENT AND THE DEVICE THEREOF

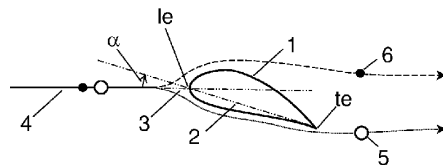


Figure 1

(57) **Abstract:** This invention describes a method and a device for microfluidic separation enhancement according to size. An asymmetric obstacle in the shape of cambered hydrofoil, placed at the downstream of the microfluidic channel increases the distance between particles of different sizes, which have been partially separated at the upstream of the microfluidic channel, resulting an enhancement in the separation efficiency. Thus, microchannel length is decreased, resulting a decrease in hydraulic resistance and footprint of the microchannel.