[0063] FIG. **15**A is a representation of one exemplary system and method for passive particle separation using magnetically labeled particles for identification in focused streams;

[0064] FIG. **15**B is a representation of one exemplary system and method for active particle separation using fluorescence to identify particles of a predetermined type in focused streams;

[0065] FIG. **15**C is a graphical representation of the frequency of rare cell population within whole blood;

[0066] FIG. **16**A is a side view illustrating focusing for various density particles;

[0067] FIG. **16**B is a graphical representation of data taken from FIG. **16**A illustrating the independence of particle density;

[0068] FIG. **16**C is a side view of an inlet and an outlet of an exemplary system illustrating the independence of particle density;

[0069] FIG. **17**A is a graphical representation of the stability and precision of inertially focused particles showing intensity profiles fitted to a Gaussian;

[0070] FIG. **17**B is a graphical representation of data taken from FIG. **17**A showing FWHM and center position of focused particles versus time;

[0071] FIG. **18**A is a side view of a channel of an exemplary focusing system illustrating the self-ordering of particles;

[0072] FIG. **18**B is a graphical representation of the data taken from FIG. **18**A;

[0073] FIG. **18**C is a side view of particle self-ordering within an asymmetric curving channel of an exemplary focusing system;

[0074] FIG. **18**D is a graphical representation of data taken from FIG. **18**C;

[0075] FIG. **19**A is a side view showing self-ordering for cells in diluted whole blood within an exemplary focusing system;

[0076] FIG. **19**B is a graphical representation of a segment of a peak plot obtained from the date of FIG. **19**A illustrating the in-focus particles;

[0077] FIG. **19**C is a graphical representation of a histogram of distances between particles in the system of FIG. **19**A;

[0078] FIG. **20**A is a side view representing a spatial mapping of the rotational, axial, and focal alignment of red blood cells is a channel of an exemplary focusing system;

[0079] FIG. **20**B is a side view and cross-sectional view of rotational alignment of discoid red blood cells within an exemplary focusing system;

[0080] FIG. **21** is a graphical representation of focusing results for a/D_h versus Dean number;

[0081] FIG. **22** is a side view of exemplary channels illustrating focusing for various a/D_h;

[0082] FIG. **23**A is a side view of channels for focusing various size particles within an exemplary focusing system;

[0083] FIG. **23**B is a side view and representation of a random distribution of particles at an inlet and the separation of particles at an outlet using an exemplary focusing system;

[0084] FIG. **23**C is a top view of a tree configuration for a multi-channel exemplary focusing system;

[0085] FIG. **24** is a side view illustrating particle separation behavior for various R_p within an exemplary focusing system;

[0086] FIG. **25** includes top views of particle distribution at an inlet and particle separations at an outlet for various particle sizes within an exemplary focusing system;

[0087] FIG. **26**A is a graphical representation of particle diameter distributions for an input solution and various output fractions within an exemplary focusing system;

[0088] FIG. **26**B is a graphical representation of one portion of the graphical representation of FIG. **26**A illustrating the presence of larger particles;

[0089] FIG. **27** illustrates purity and yield data for filtration of large particles from 3.1-μm particles;

[0090] FIG. **28** illustrates data for an exemplary focusing system having cascaded separations with two tiers;

[0091] FIG. **29**A is a representation of an exemplary focusing system for separating various sized deformable silicone oil droplets;

[0092] FIG. **29**B is a graphical representation of particle size distributions for the system of FIG. **29**A;

[0093] FIG. **29**C is a graphical representation of particle size distribution for rigid particles flown in the system of FIG. **29**A;

[0094] FIG. **30** is a graphical representation illustrating a size cutoff for the separation of platelets from other blood components;

[0095] FIG. **31** is a side view of an exemplary channel illustrating focusing in solutions having different total volume fractions;

[0096] FIG. **32**A is a top view of the focusing of particles within an expanding spiral channel of an exemplary focusing system;

[0097] FIG. **32**B is a side view of the longitudinal ordering of various particle sizes within the channel of FIG. **32**A;

[0098] FIG. **33**A is a representation of the lateral displacement of particles within an expanding spiral channel of an exemplary focusing system;

[0099] FIG. **33**B is a further illustration of the lateral displacement of particles within the channel of FIG. **33**A;

[0100] FIG. **33**C is a graphical representation of the lateral displacement of particles for various a/D_h;

[0101] FIG. **34**A is a representation of focusing within an expanding spiral channel of an exemplary focusing system for various R_c;

[0102] FIG. **34**B is a side view illustrating longitudinal ordering of various particle sizes within the channel of FIG. **34**A;

[0103] FIG. **35**A is a side view of relative particle size and ordering within an expanding spiral channel of an exemplary focusing system;

[0104] FIG. **35**B is an illustration of the focusing of 10-μm particles within the channel of FIG. **35**A;

[0105] FIG. **35**C is an illustration of the focusing of 10-μm particles within the channel of FIG. **35**A;

[0106] FIG. **35**D is a side view of a 10-μm particle within the channel of FIG. **35**A;

[0107] FIG. **35**E is a side view of a 7-μm particle within the channel of FIG. **35**A;

[0108] FIG. **35**F is a graphical representation of particle count versus particle size within the channel of FIG. **35**A;

[0109] FIG. **36** is a side view illustrating particle focusing behavior for various R_e within an exemplary focusing system;

[0110] FIG. **37** is a representation of focusing behavior in symmetric curving channels within an exemplary focusing system;

[0111] FIG. **38** is a top view of an exemplary channel representing the dependence of particle focusing on a/D_h;