

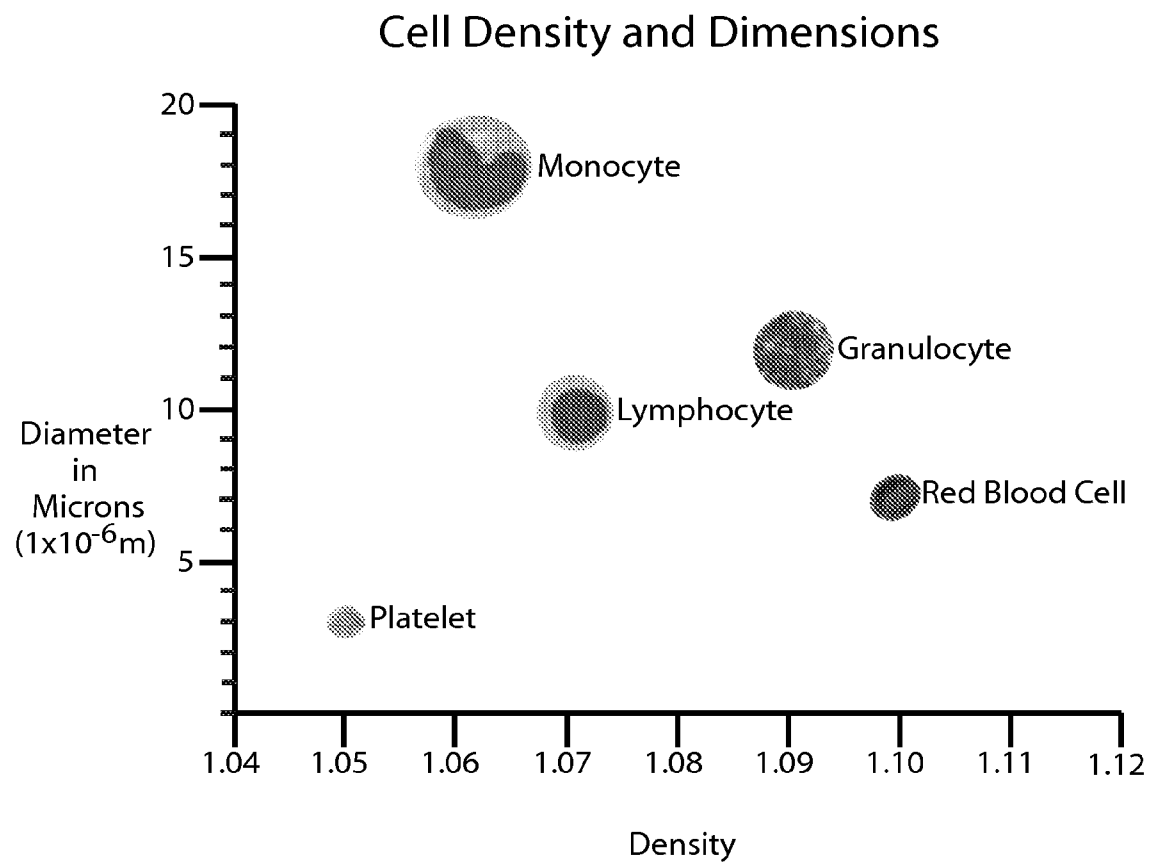


Figure 1

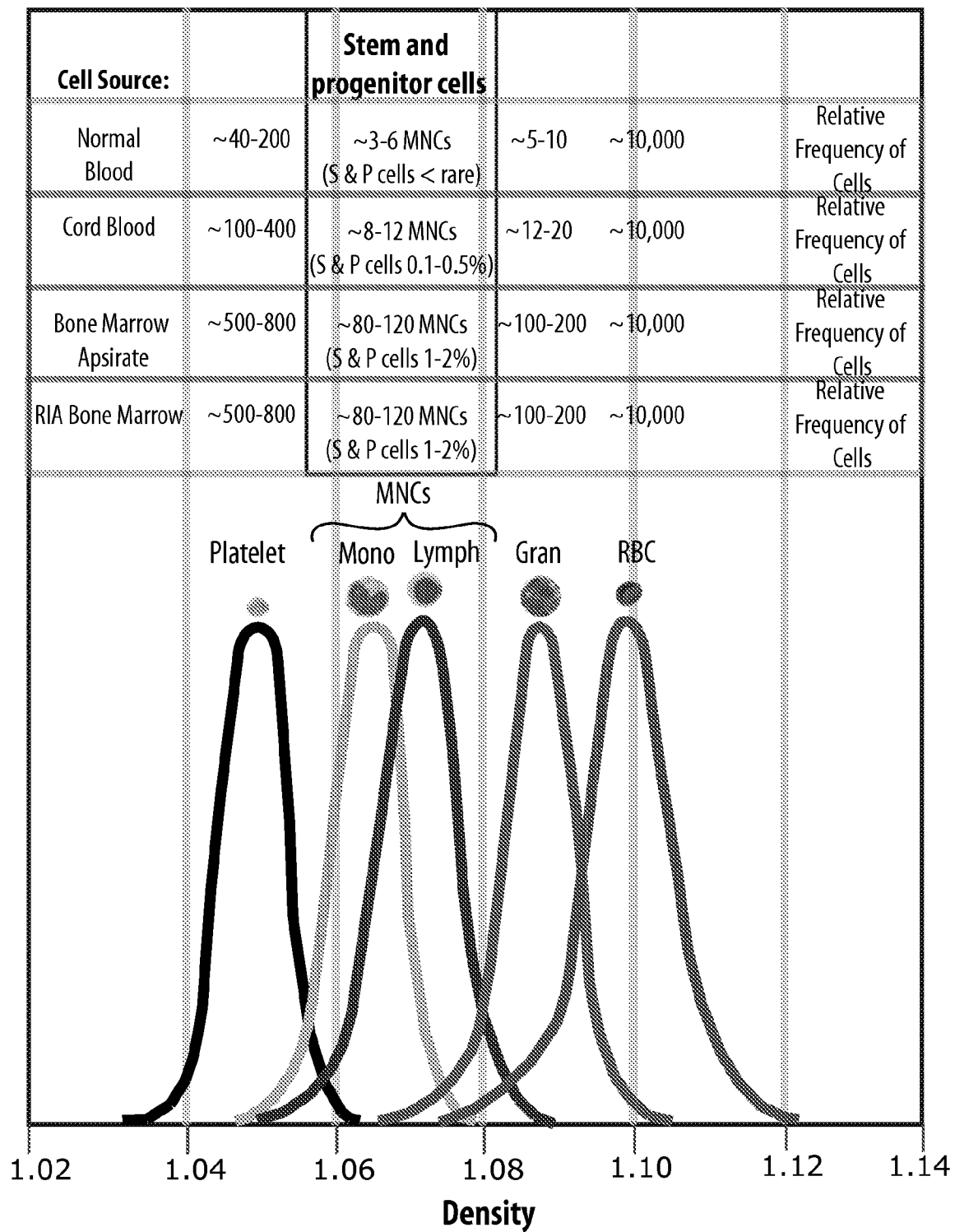


Figure 2

	Cell Types/source	RBCs	GRNs	Lymphocytes	Monocytes	PLTs
Radius (μ)		3.5	6.0	5.0	9.0	1.5
Unit Volume Ratio (R3)		42.90	216.00	125.00	729.00	3.38
Numerical Ratio of Cell Population	NB	1000.00	0.60	0.32	.08	10.00
	CB	1000.00	1.20	0.64	0.16	20.00
	BM	1000.00	15.00	6.40	1.60	200.00
Total Volume Ratio of Cell Population	NB	42900	129.6	40.0	58.3	33.8
	CB	42900	259.2	80.0	116.6	67.5
	BM	42900	3240	800	1166	675
% of Total Volume of Concentrated Cells	NB	99.39	0.30	0.09	0.14	0.08
	CB	98.79	0.60	0.18	0.27	2.39
	BM	87.94	6.64 2/37	1.64	2.39	1.38

Figure 3: Proportionate Volume of Cell Populations After Centrifugation

Cell Types		RBCs	GRNs	MNCs	PLTs
50ml	NB	22.36	0.07	0.05	0.02
	CB	22.23	0.14	0.10	0.04
	BM	19.79	1.49	0.90	0.09
100 ml	NB	44.73	0.14	0.10	0.04
	CB	44.46	0.27	0.20	0.07
	BM	39.57	2.99	1.80	0.17
150ml	NB	67.09	0.20	0.16	0.05
	CB	66.68	0.41	0.30	0.11
	BM	59.36	4.48	2.70	0.07
200ml	NB	89.45	0.27	0.21	0.07
	CB	88.91	0.54	0.41	0.14
	BM	79.15	5.98	3.60	0.34

Figure 4: Volume of Cells in Various Volumes of Anti Coagulated Blood

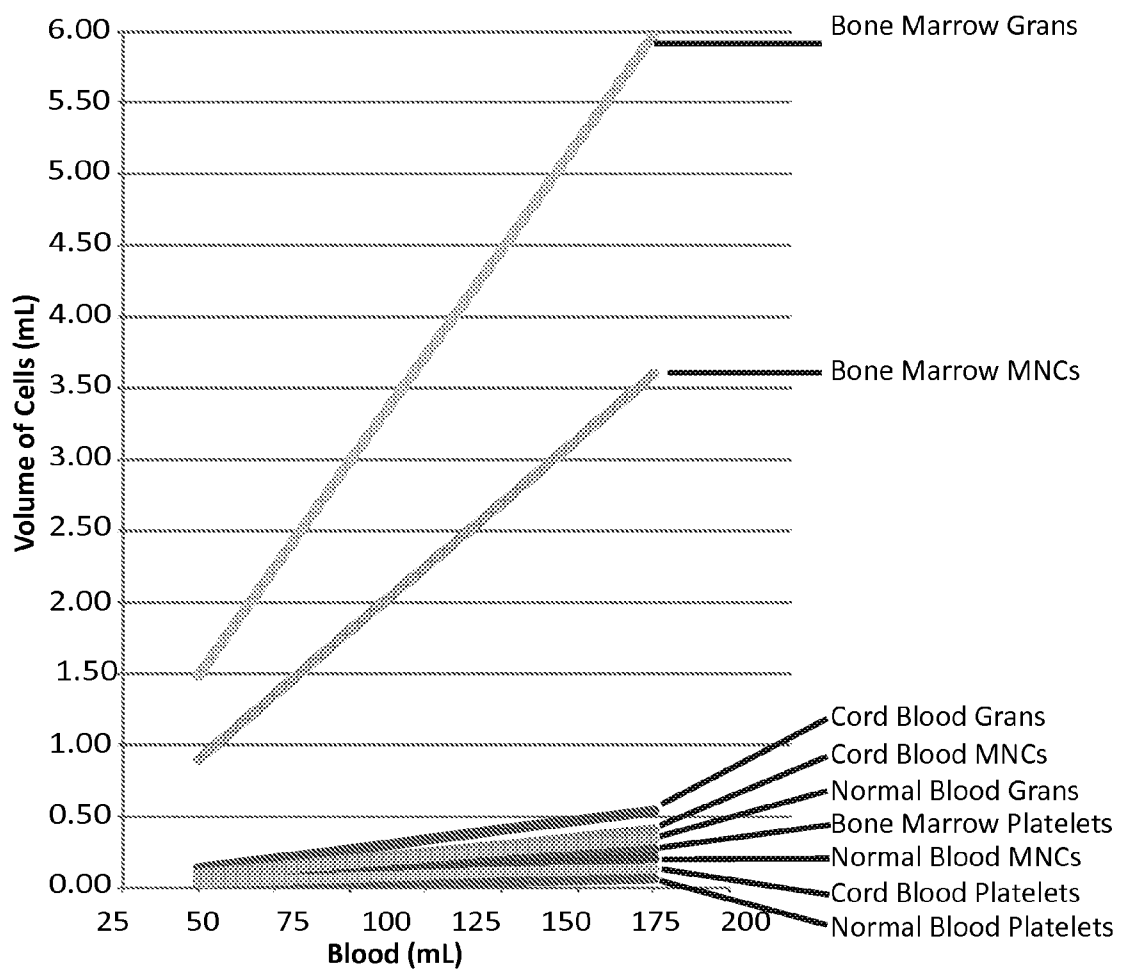


Figure 5: Volume of Anti Coagulated Blood Versus Volume of Centrifuged Cell Populations

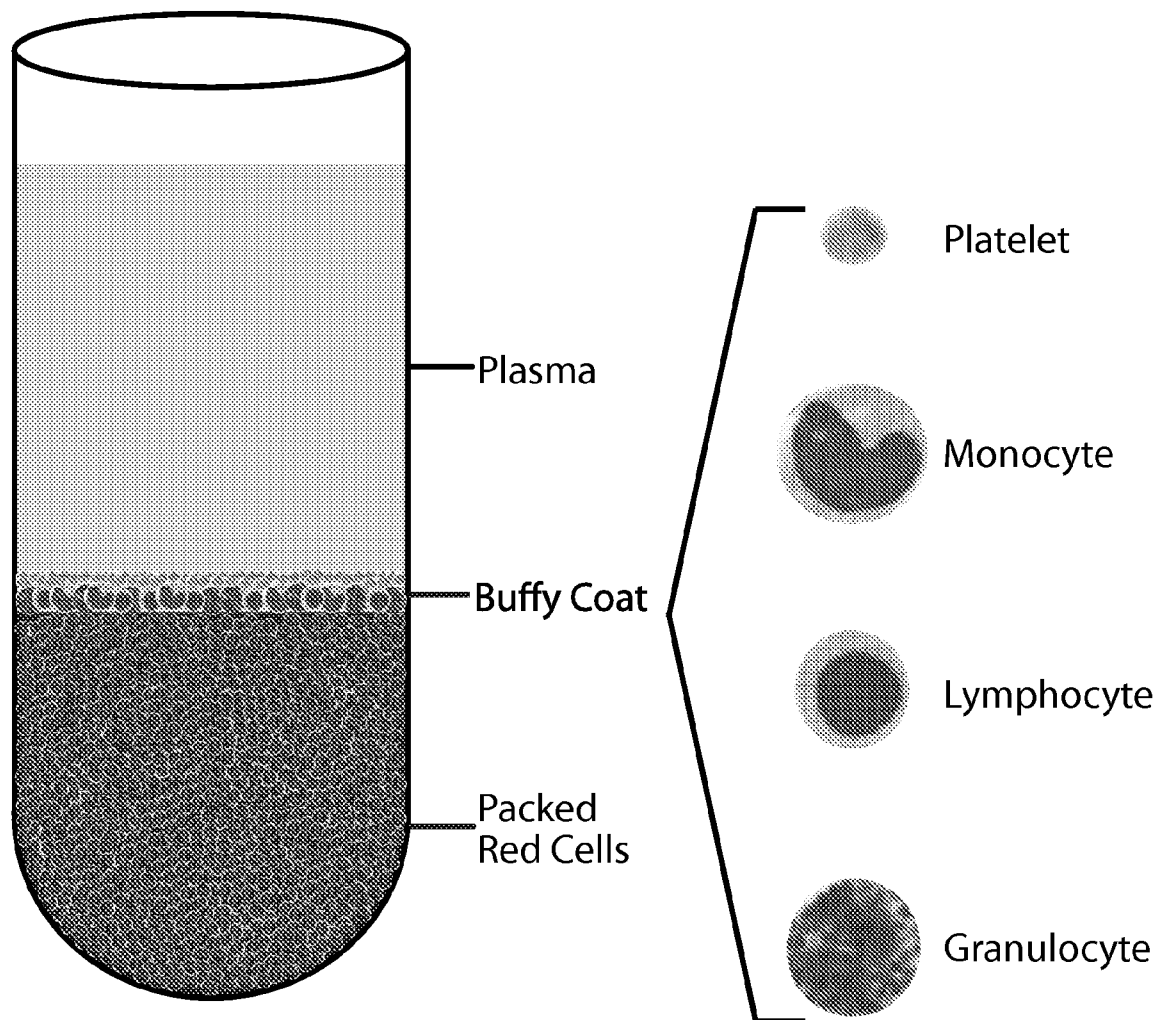
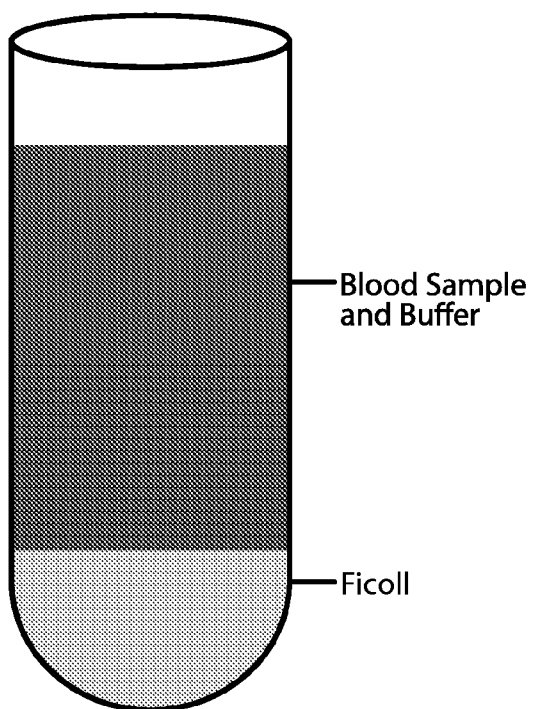


Figure 6

Layers before centrifugation



Layers after centrifugation

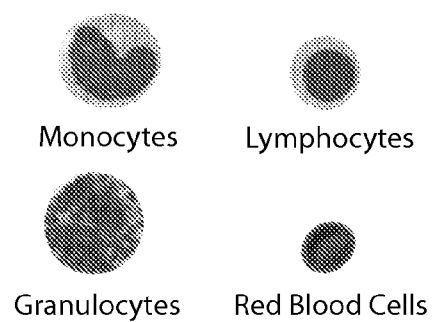
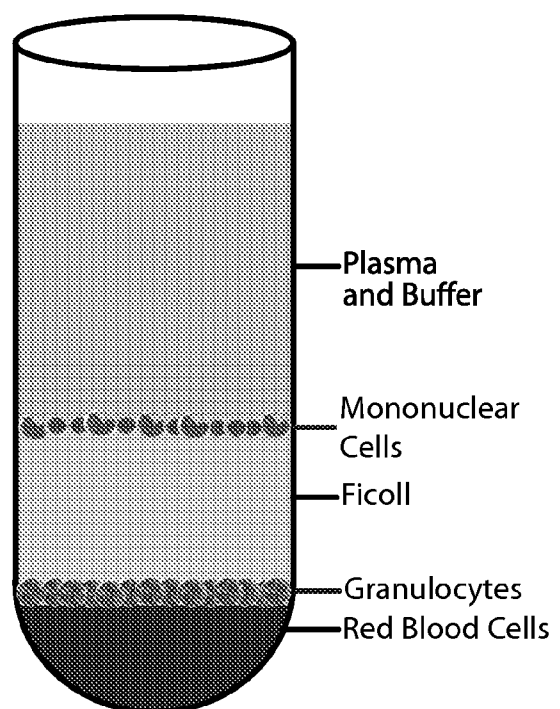
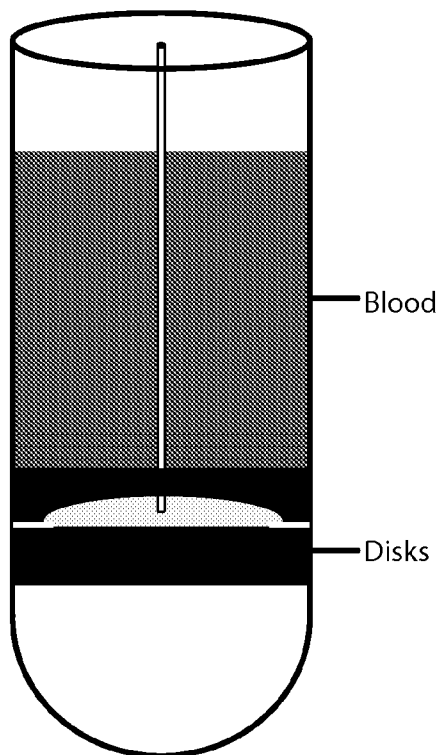


Figure 7

Blood and density gradient disk before centrifugation



Blood components after centrifugation

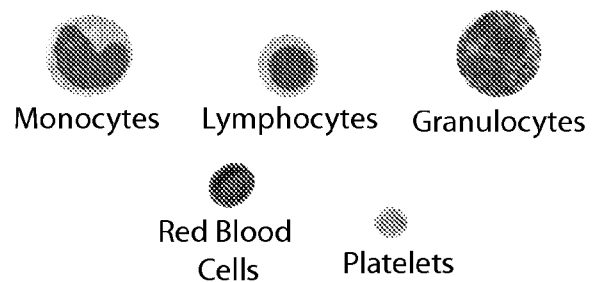
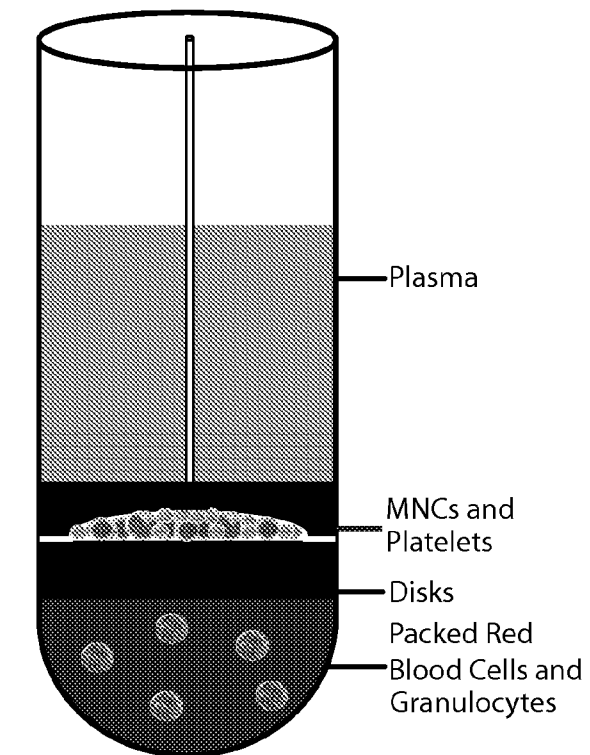


Figure 8

(ESR 95% limits)	Age (years)		
	20	55	90
Men	10mm/hr	14 mm/hr	19 mm/hr
Women	15 mm/hr	21 mm/hr	23 mm/hr

Figure 9: Adult ESR reference ranges

SCR-1000 reduces cost of capital equipment required for high volume cord blood banks (4 units/run)

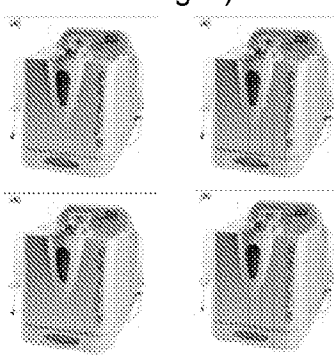
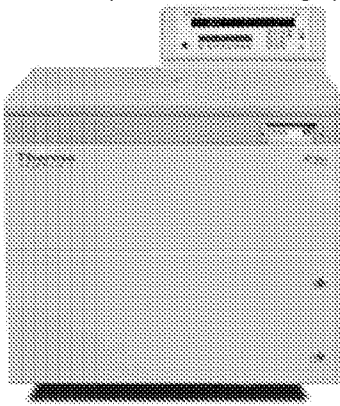
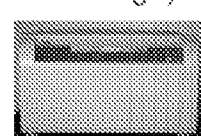
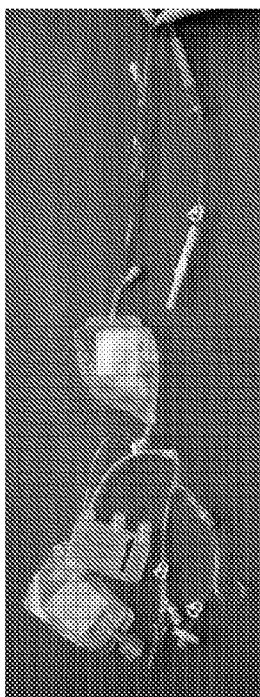
Thermogenesis AXP \$15,000 Each 	BioSafe Sepax \$30,000 Each (Table Top Centrifuges) 	Synergenesis SCR-1000 \$1,500 Each 
\$30,000 (Floor Centrifuge) 		\$7,000 (Table Top Centrifuge) 
Total \$90,000	\$120,000	\$13,000

Figure 10

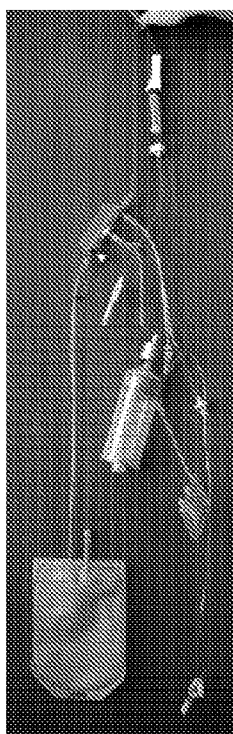
SCR-1000 cartridge design leapfrogs earlier solutions

Thermogenesis
AXP or MXP
Processes 35-150 mL



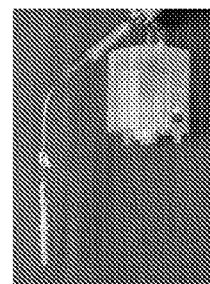
26 Glue Joints

BioSafe
Sepax
Processes 35-250 mL



24 Glue Joints

Synergenesis
SCR-1000
Processes 20-250 mL



- Precision injection molded construction
- Loads in 5 seconds
- Minimal training for optimal use
- Cell purity regulated by four infrared sensors

6 Glue Joints

Figure 11

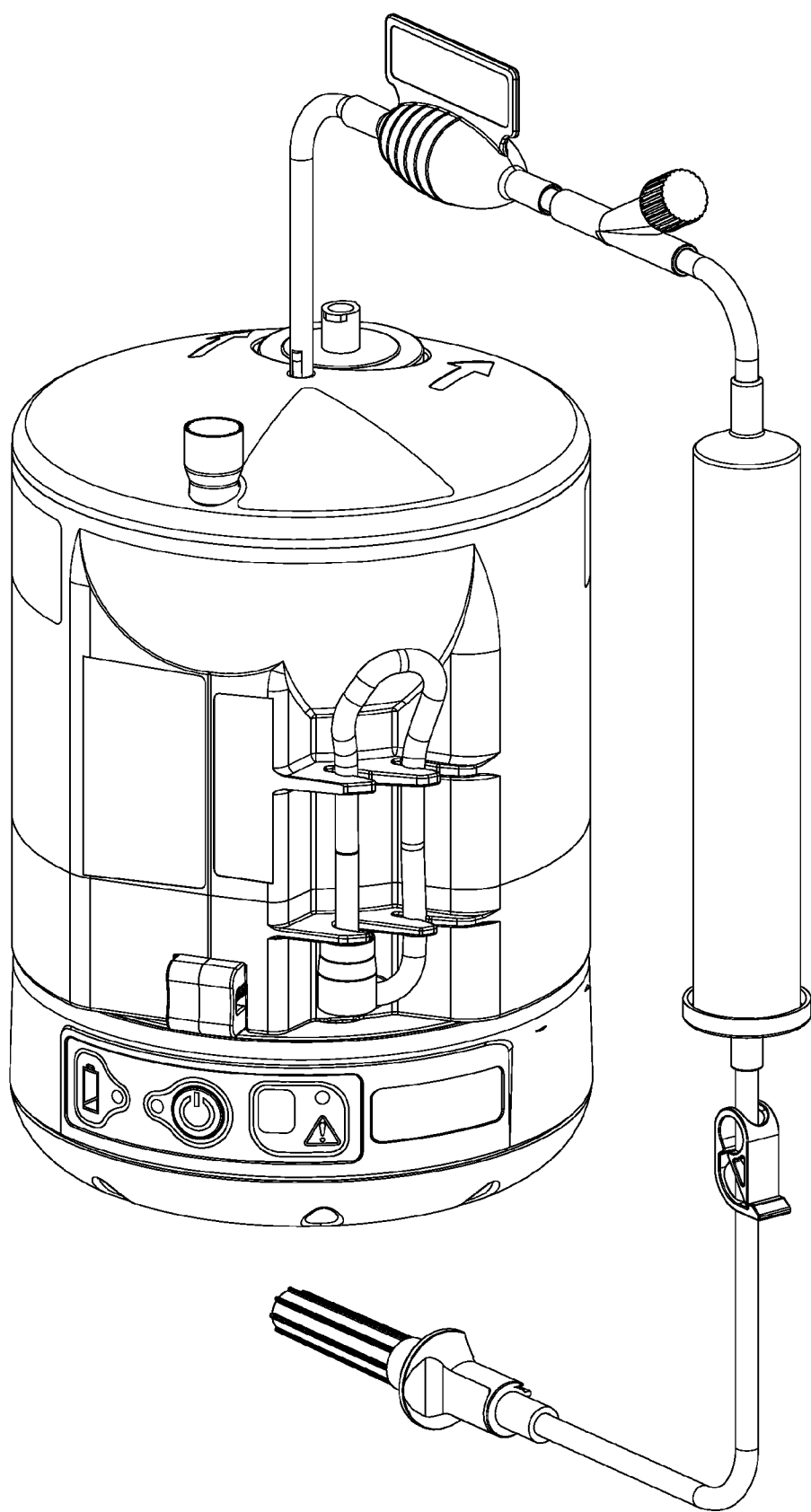


Figure 12

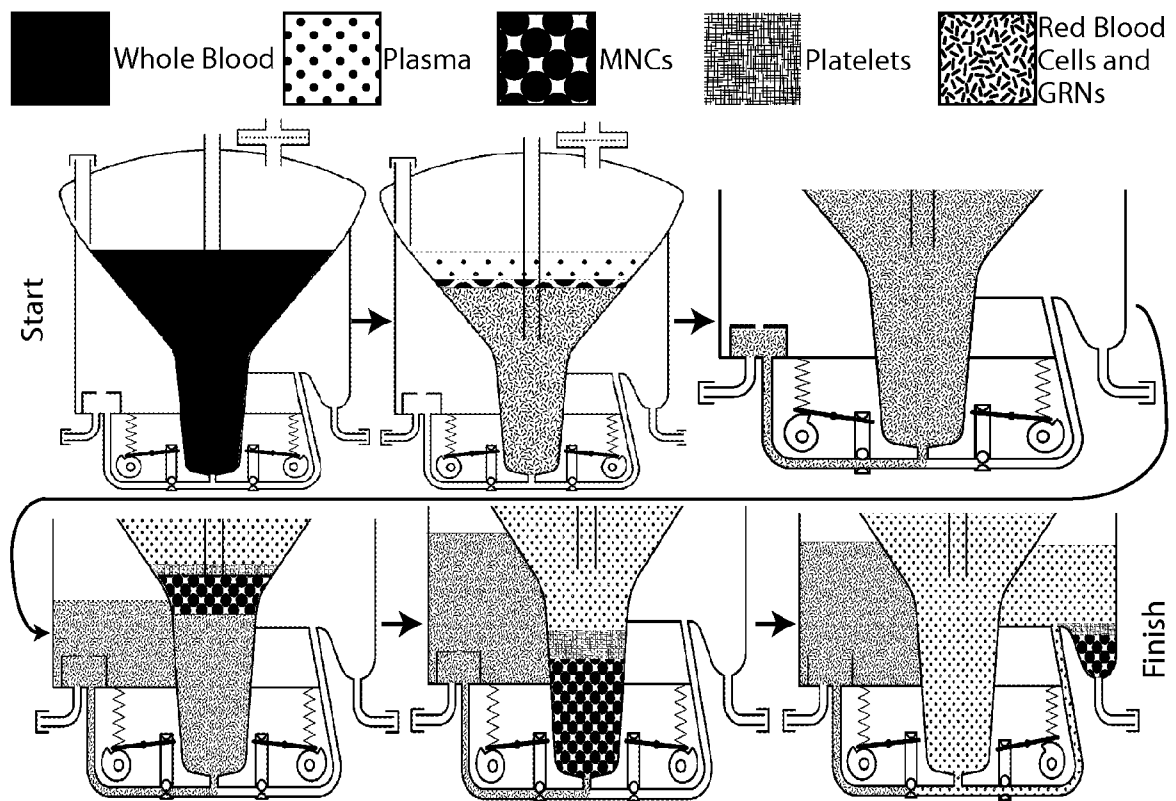


Figure 13

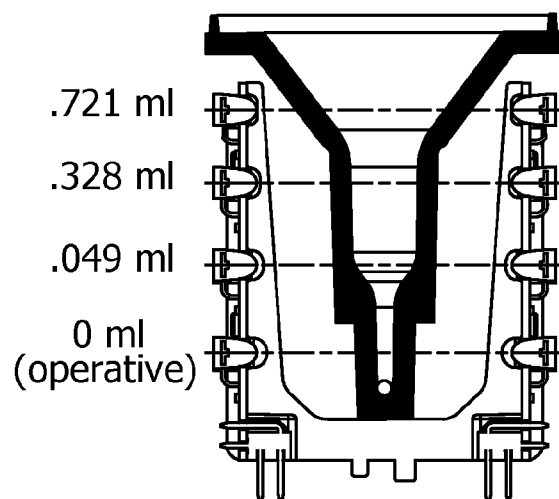
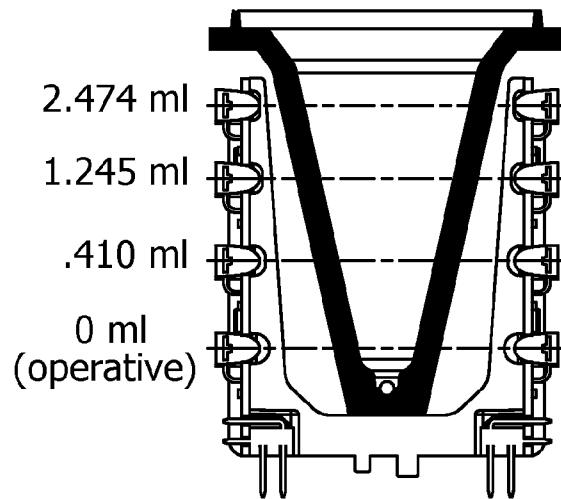
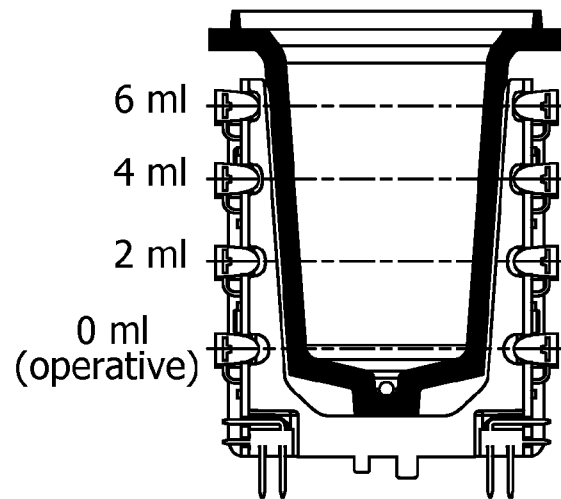


Figure 14

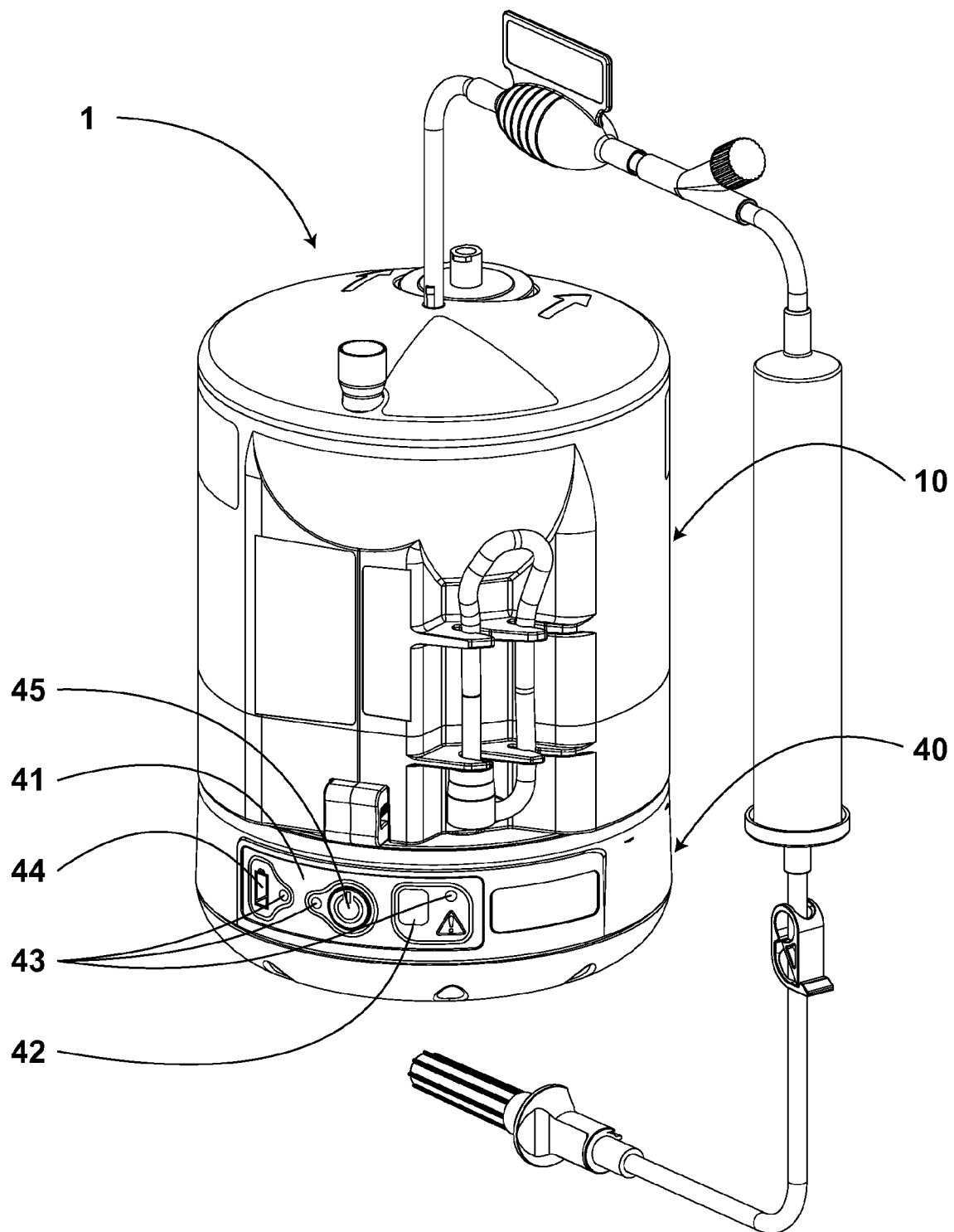


Figure 15

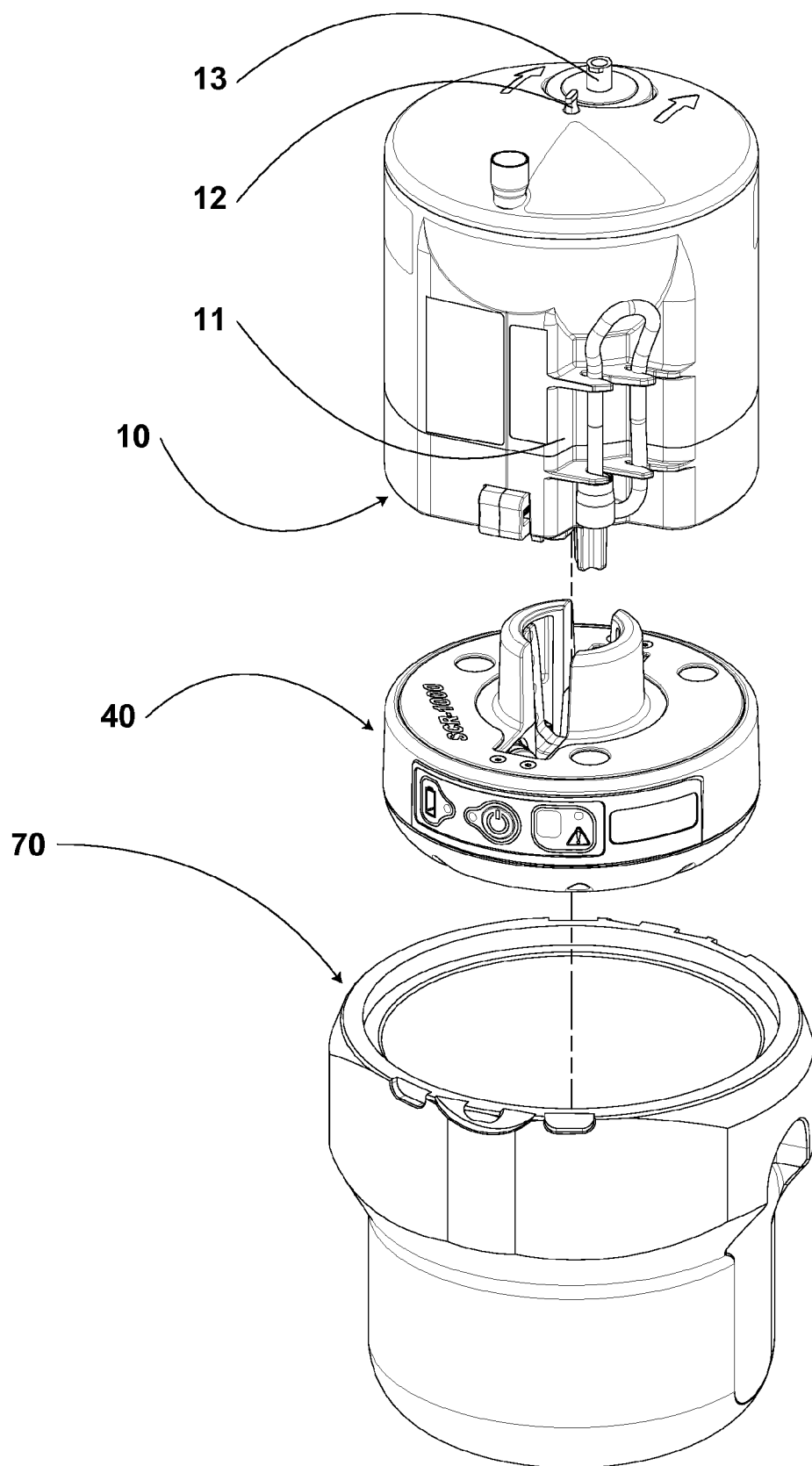


Figure 16

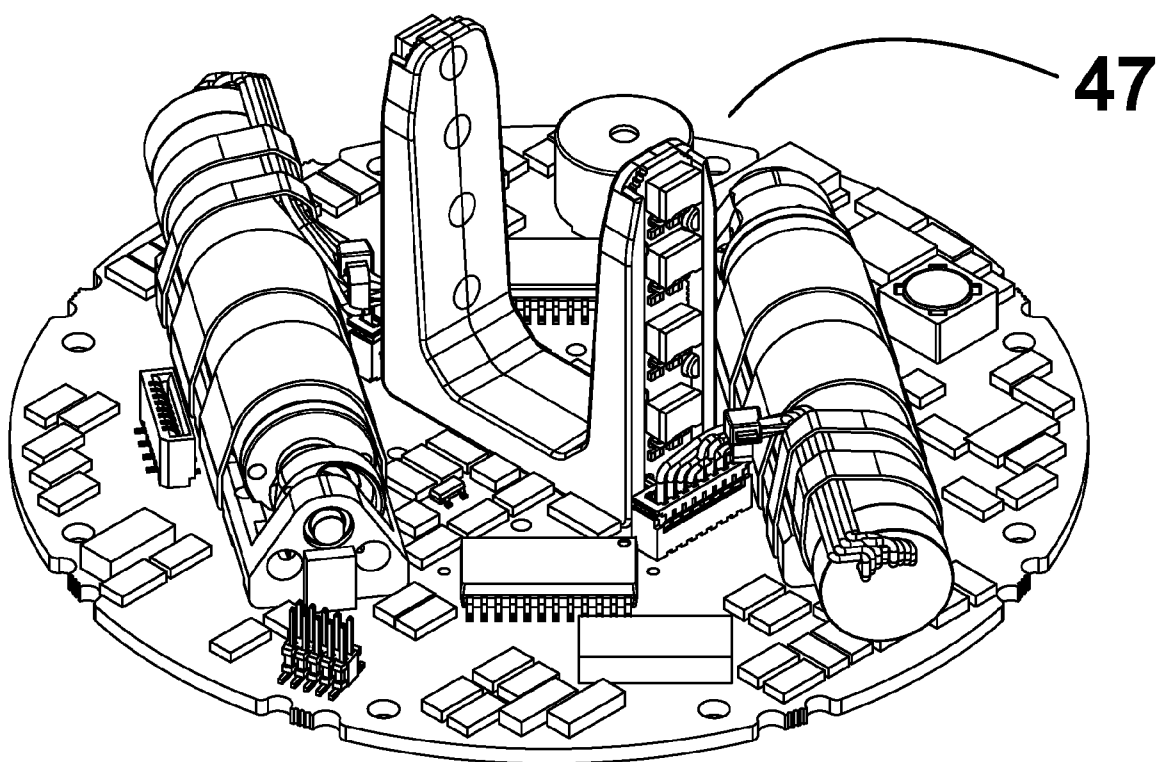


Figure 17

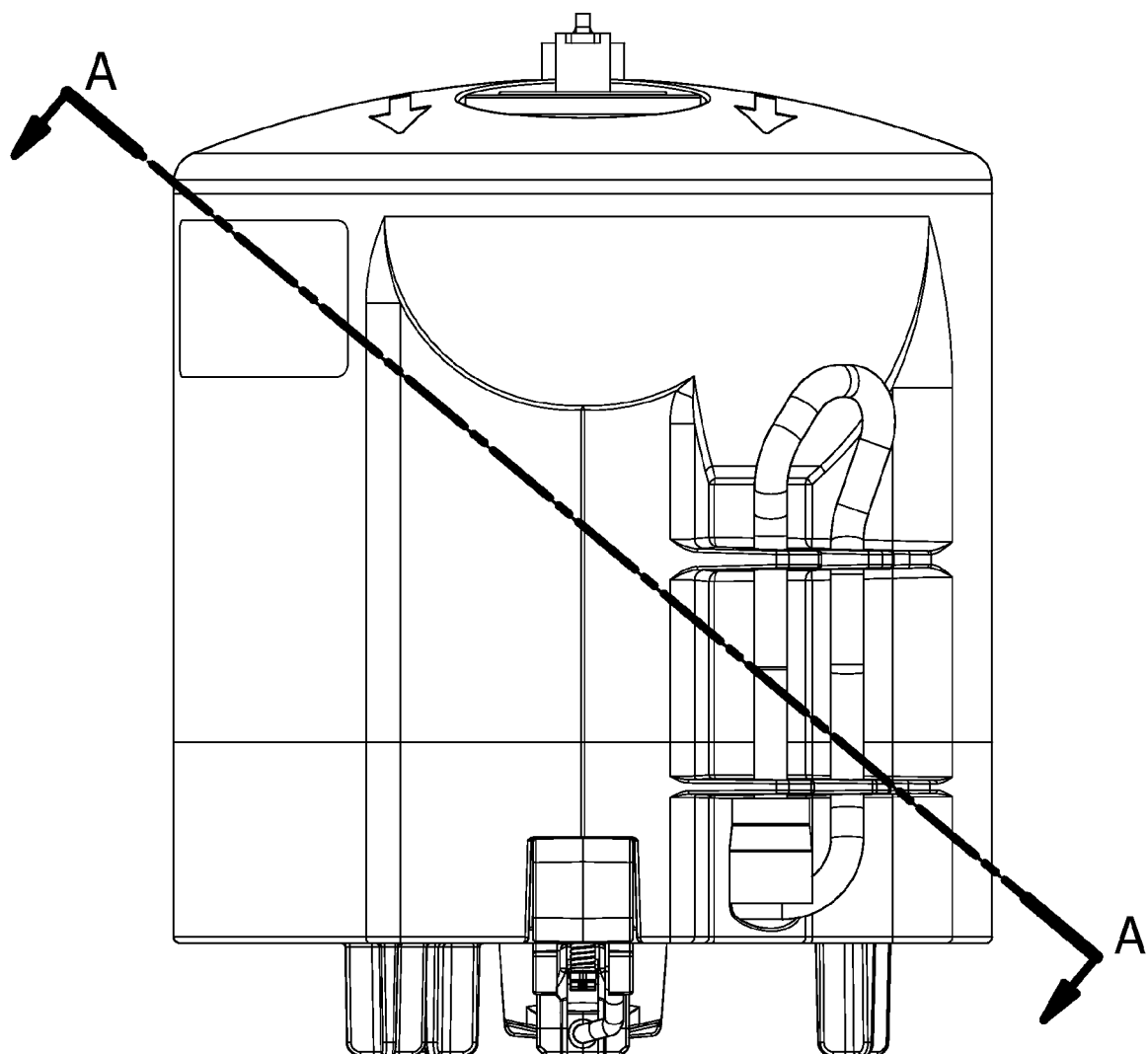


Figure 18a

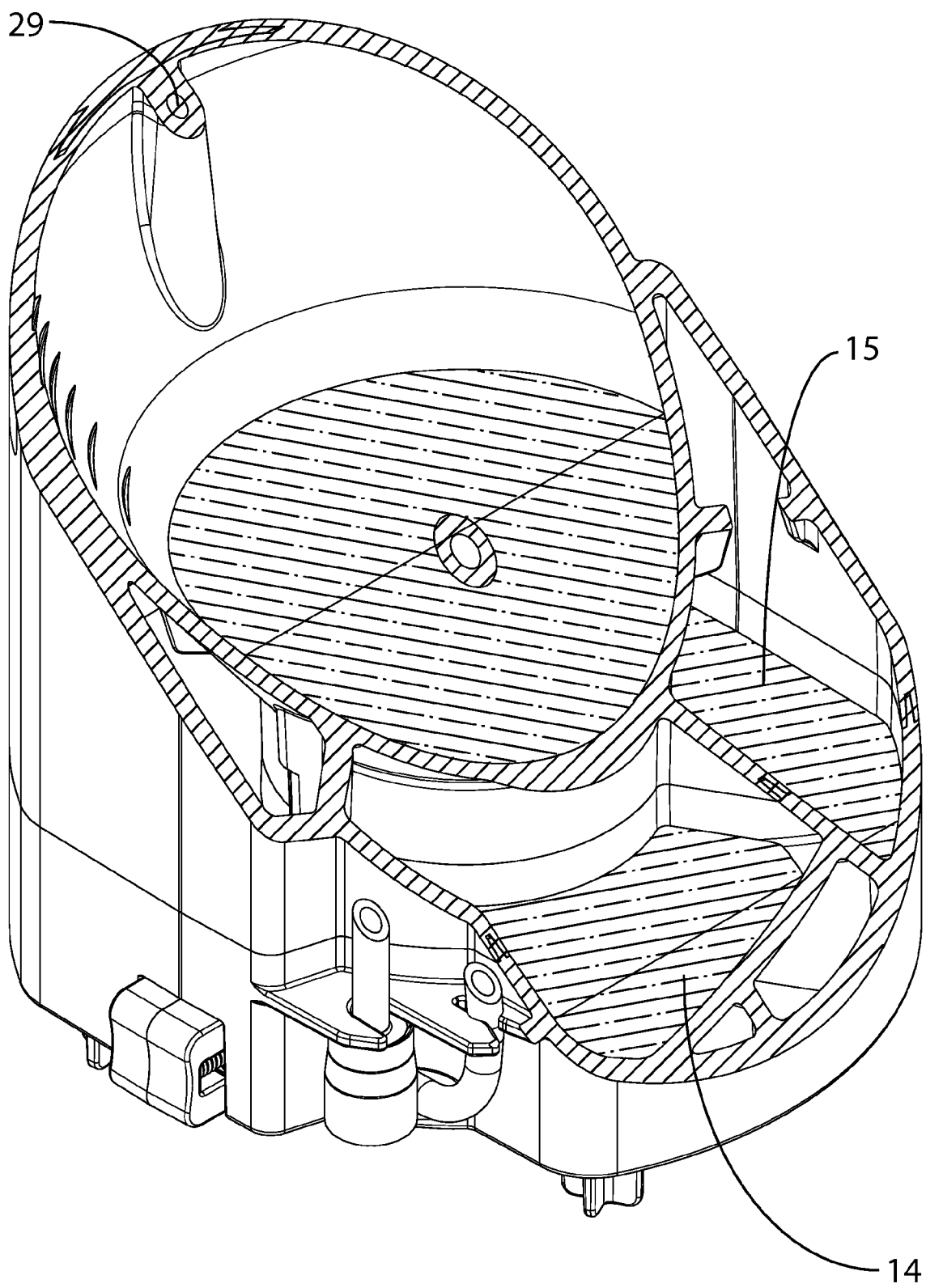


Figure 18b

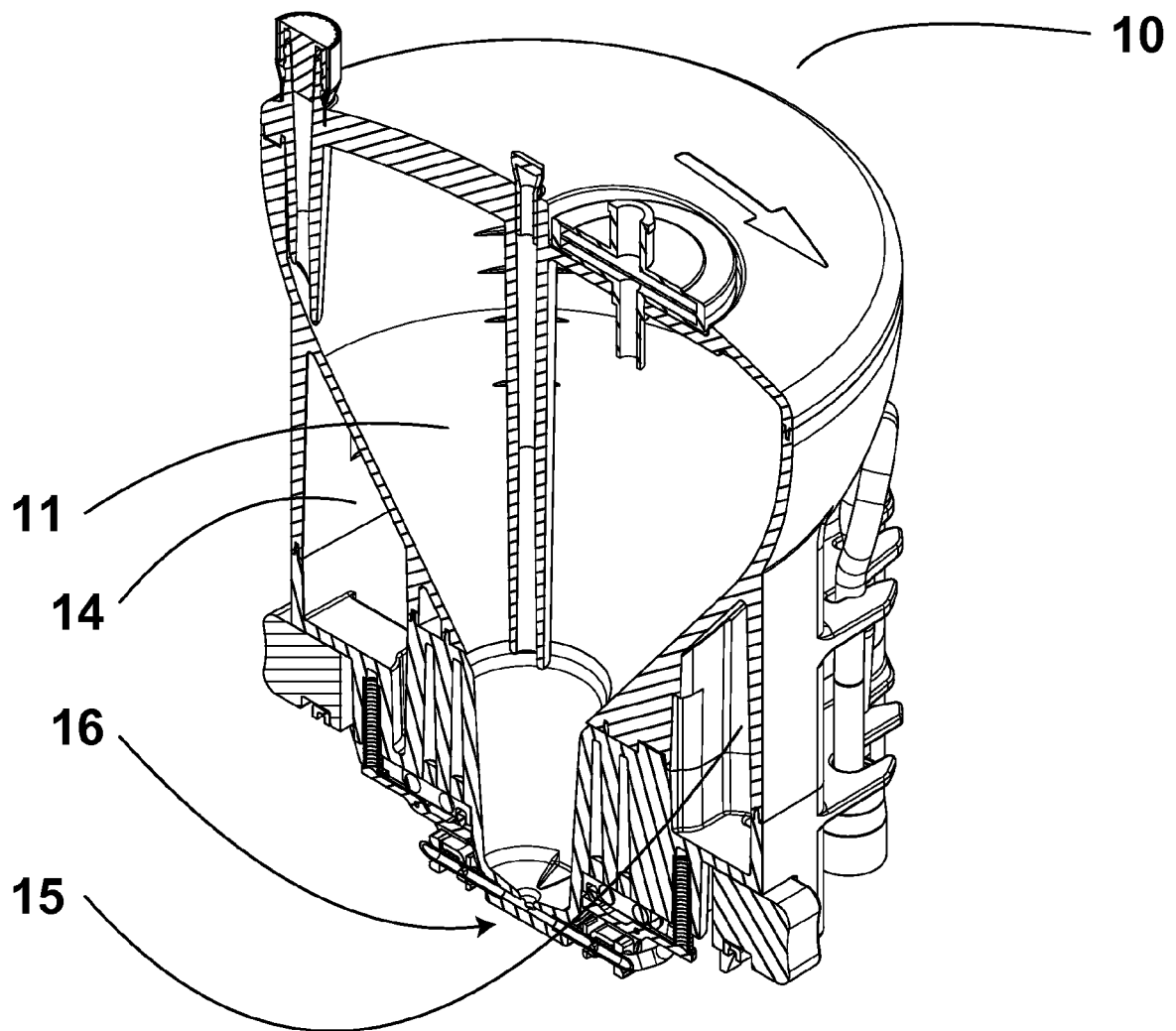


Figure 19



Whole Blood

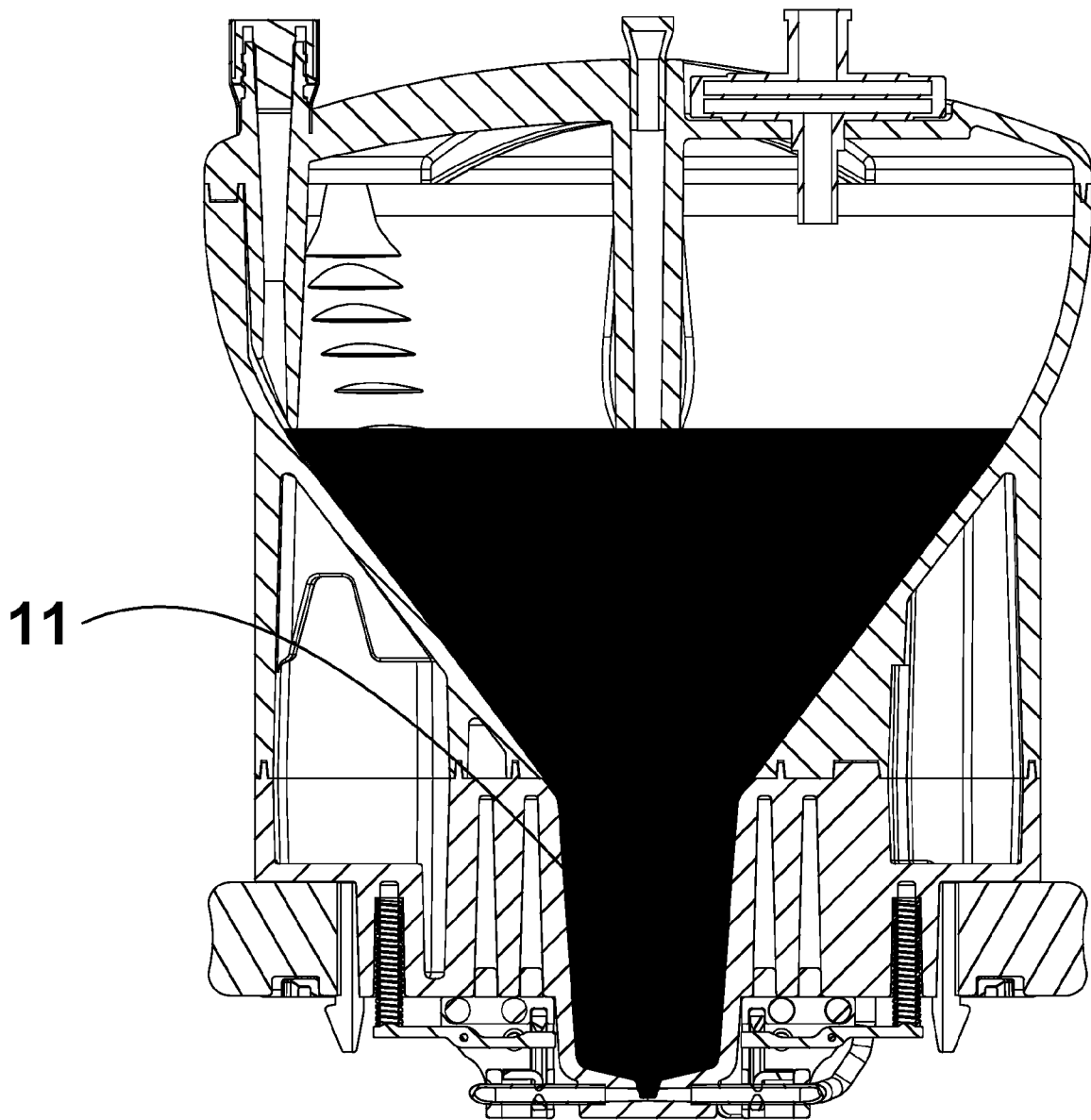


Figure 20

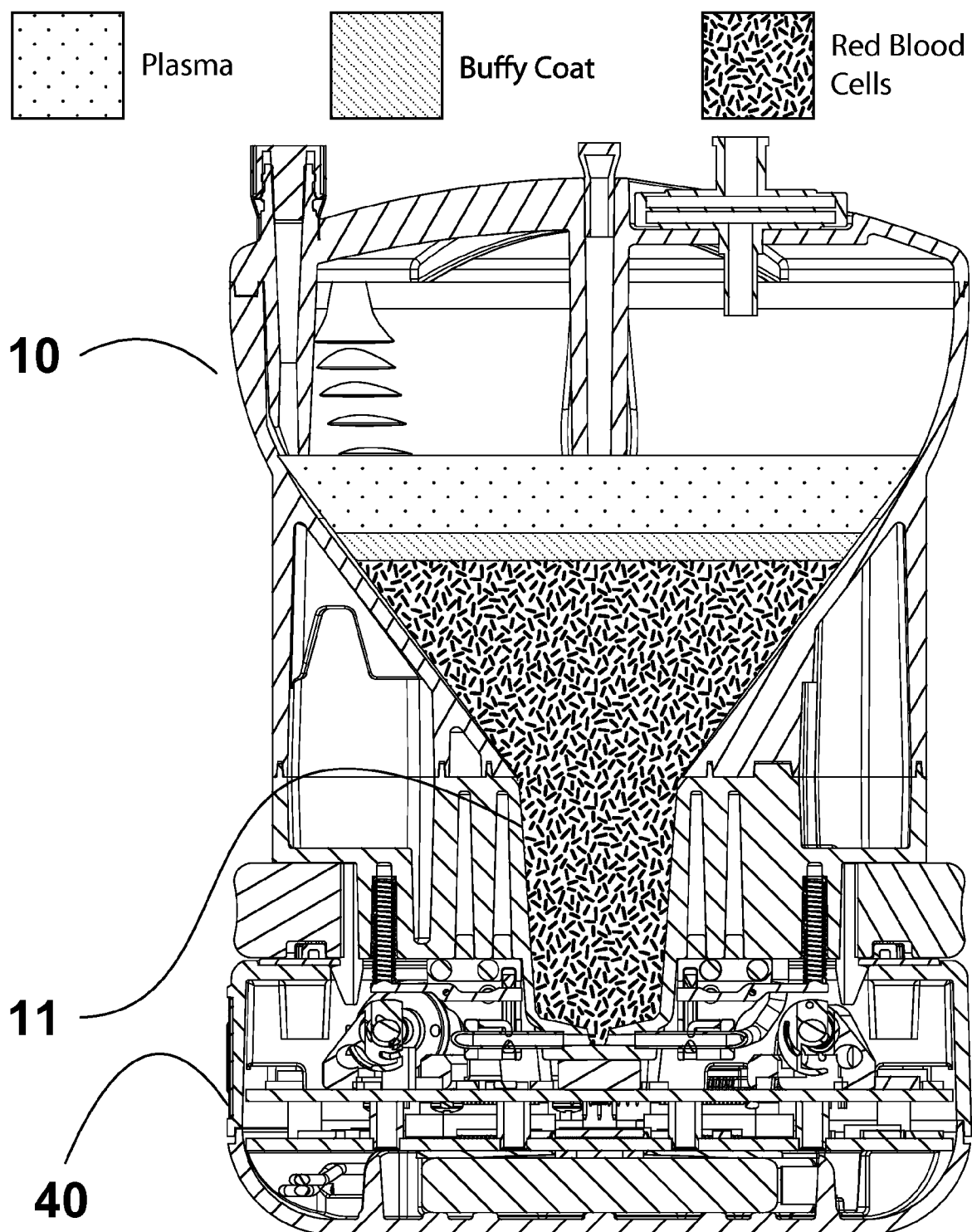


Figure 21

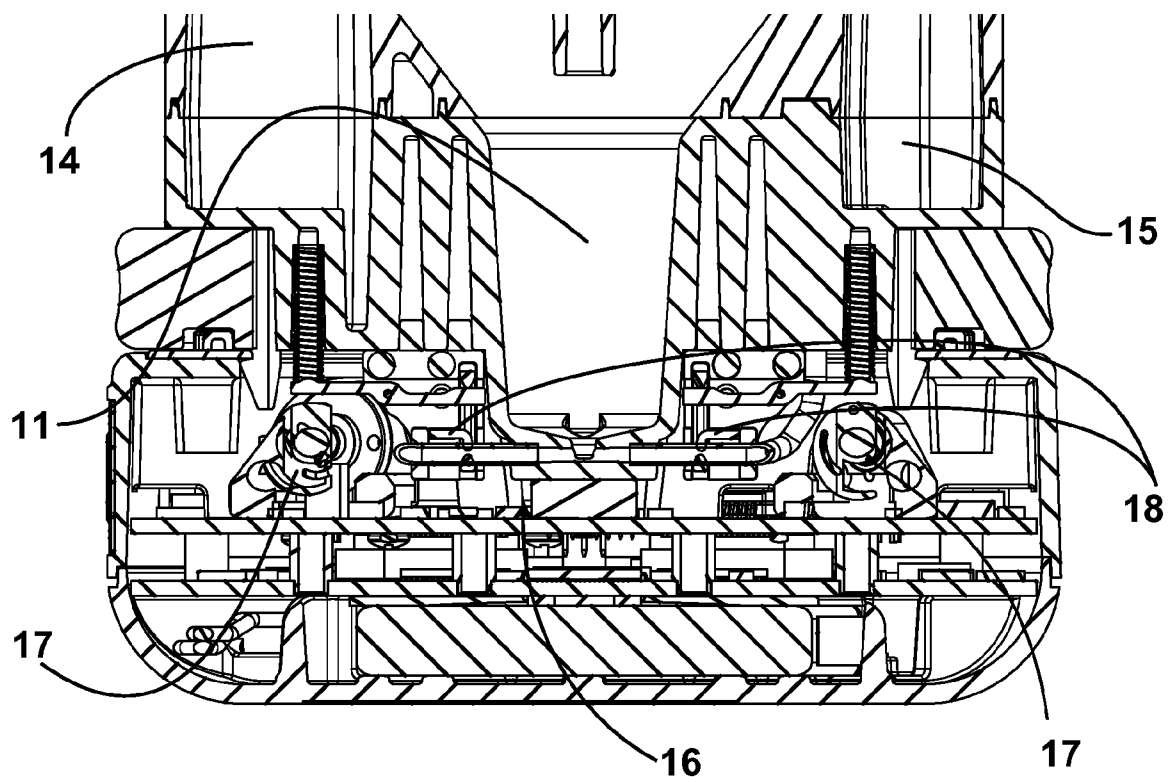


Figure 22

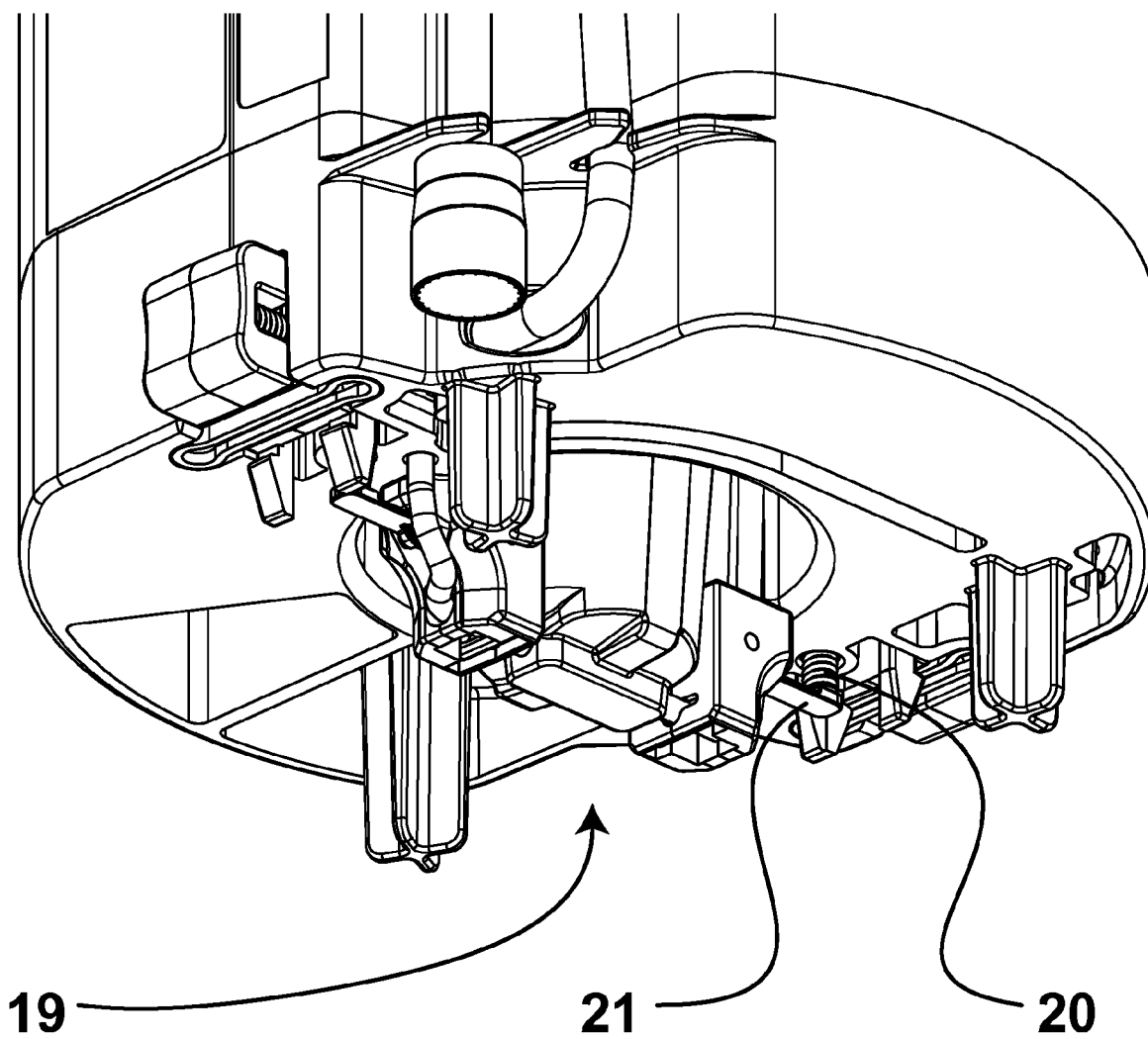


Figure 23

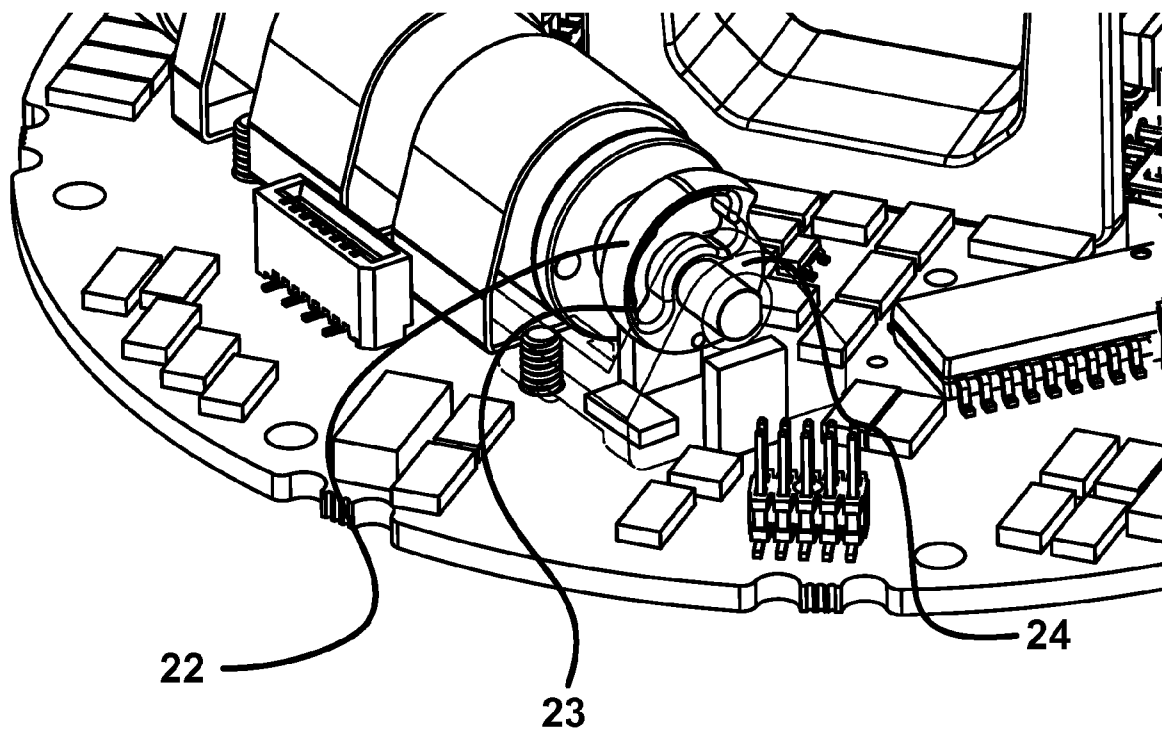


Figure 24

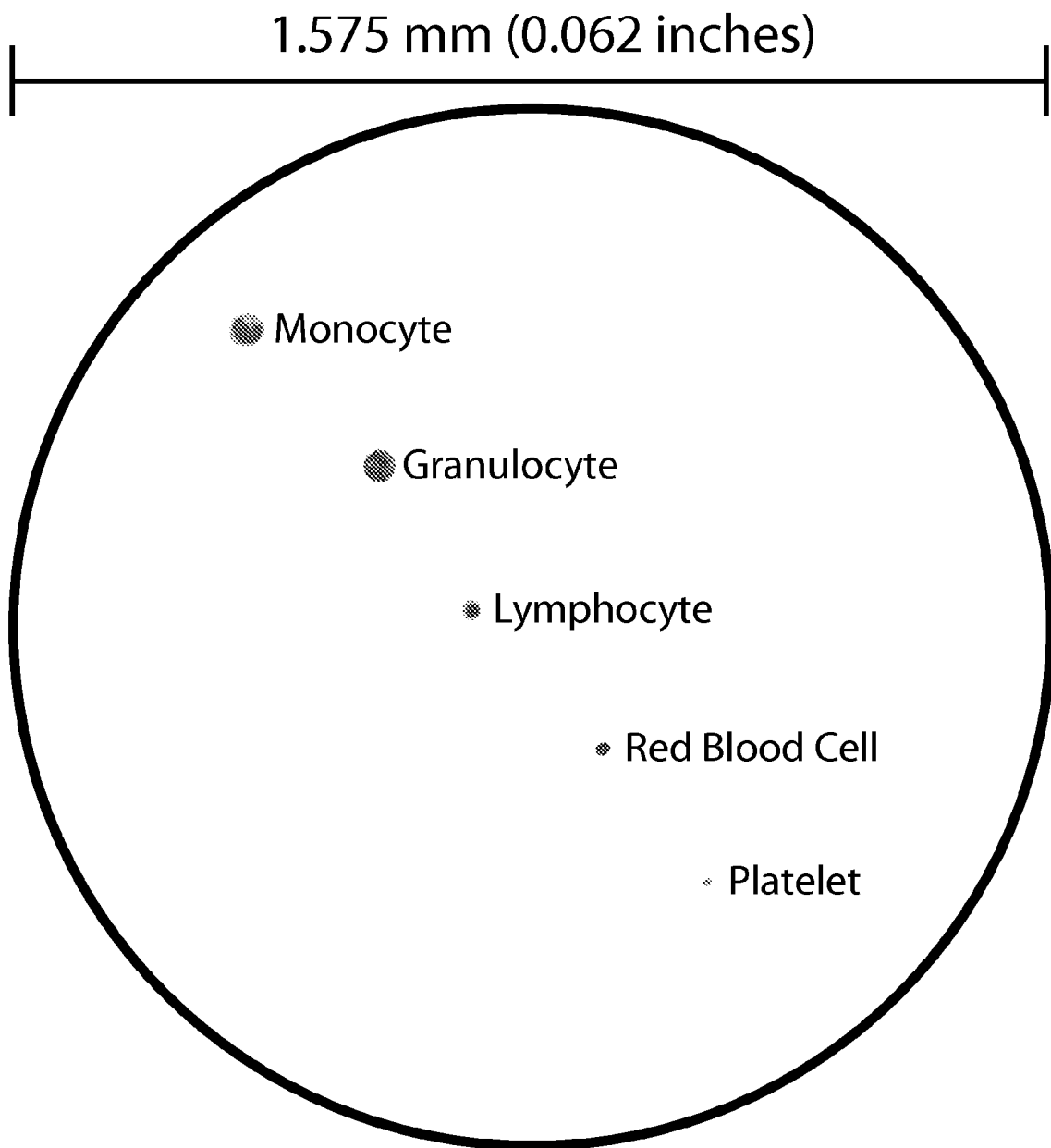


Figure 25

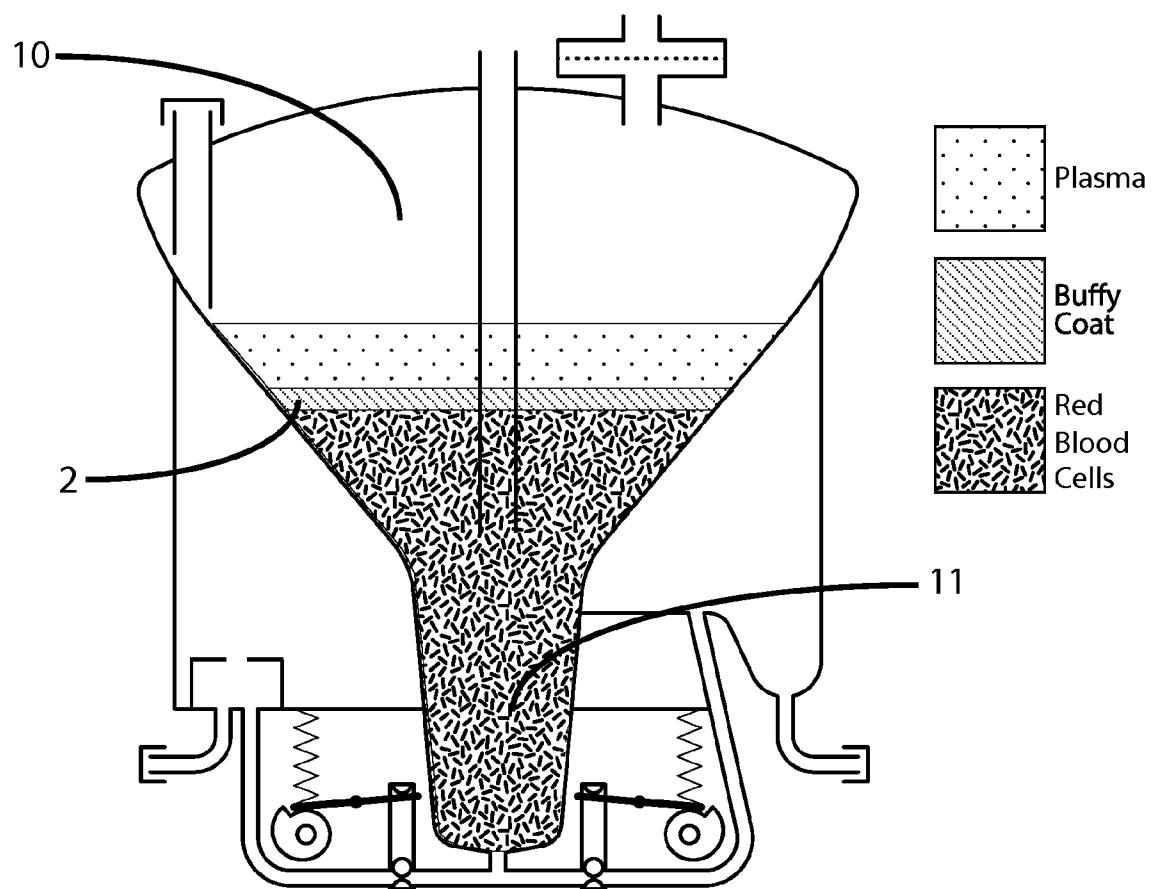


Figure 26

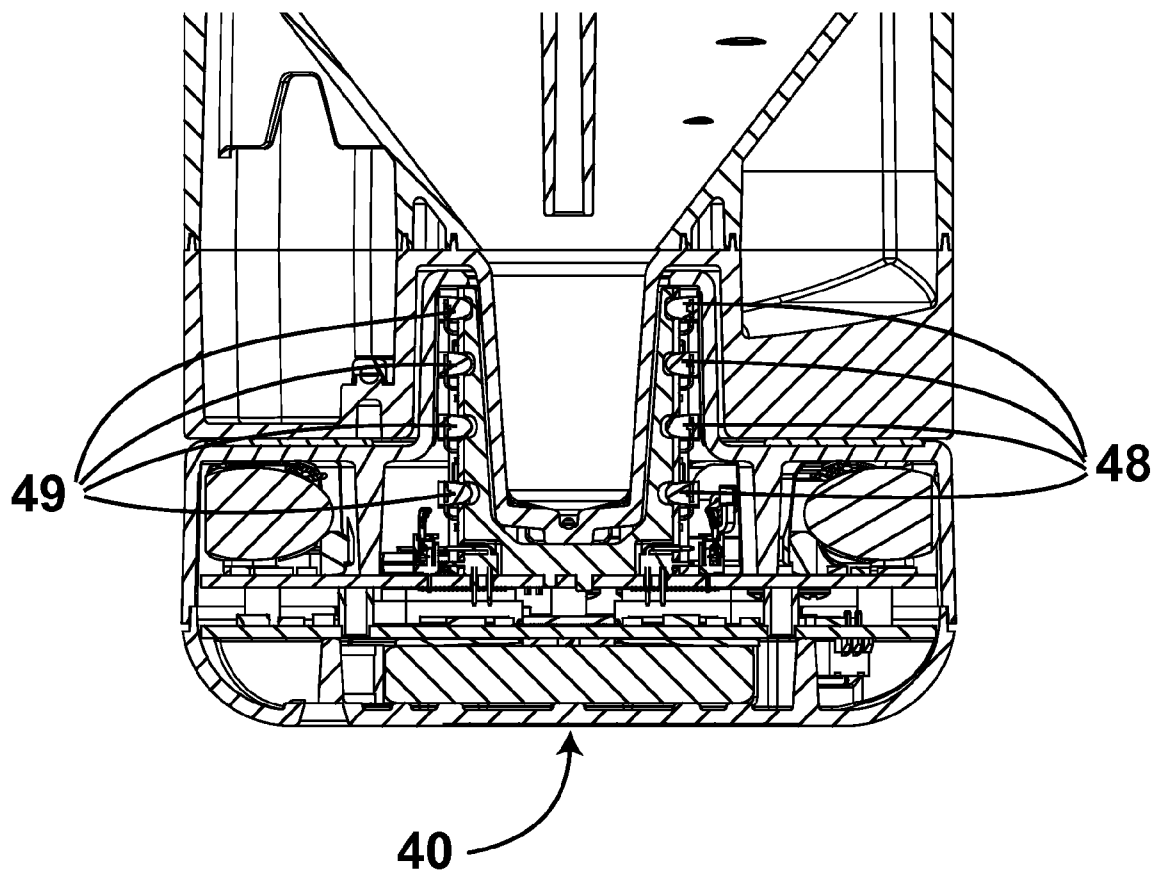


Figure 27

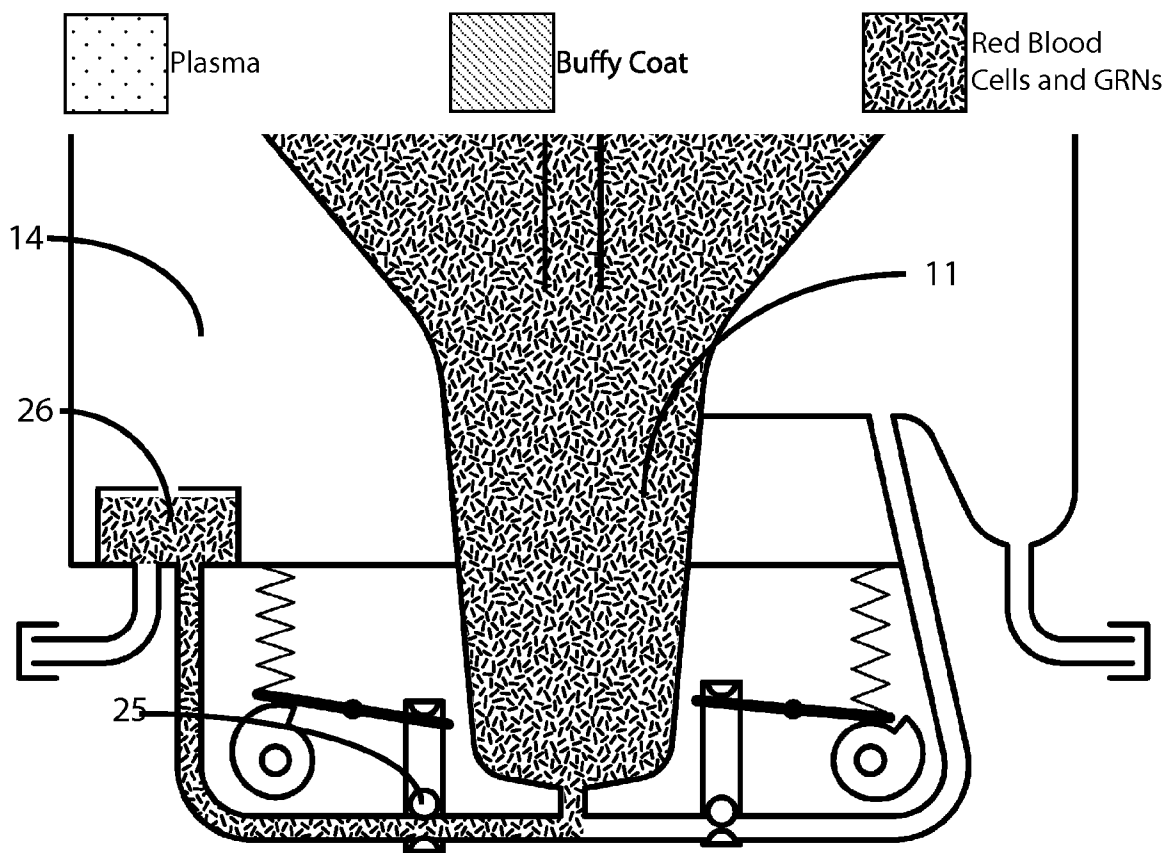


Figure 28

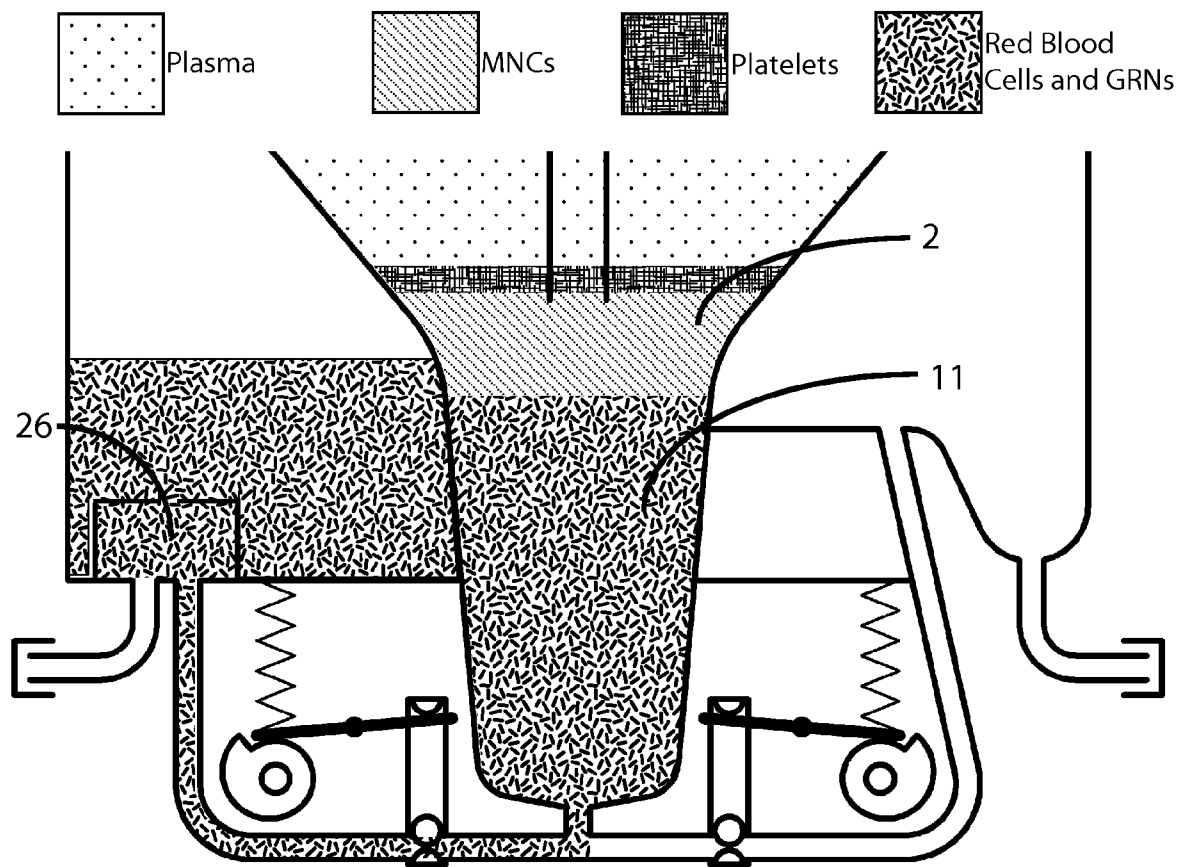


Figure 29

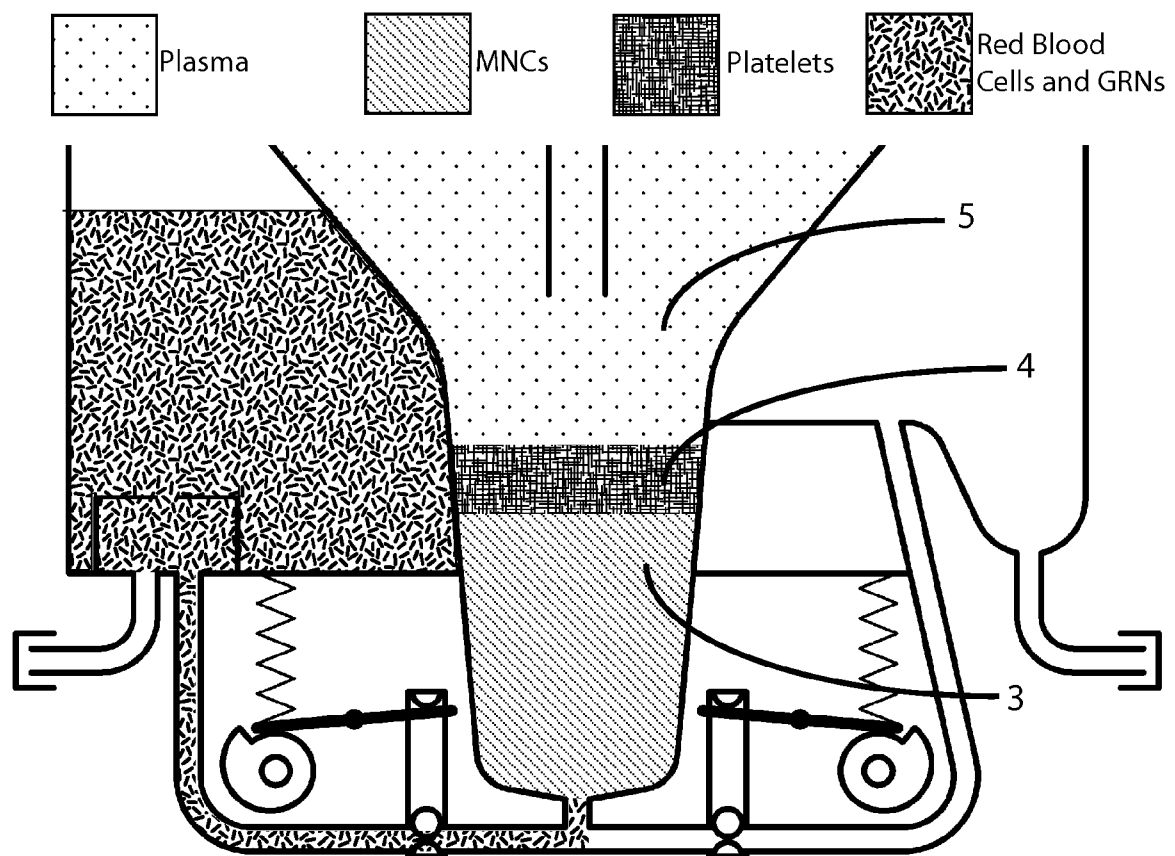


Figure 30

Infrared optical counts of blood cell populations during 100 G transit (upper sensor)

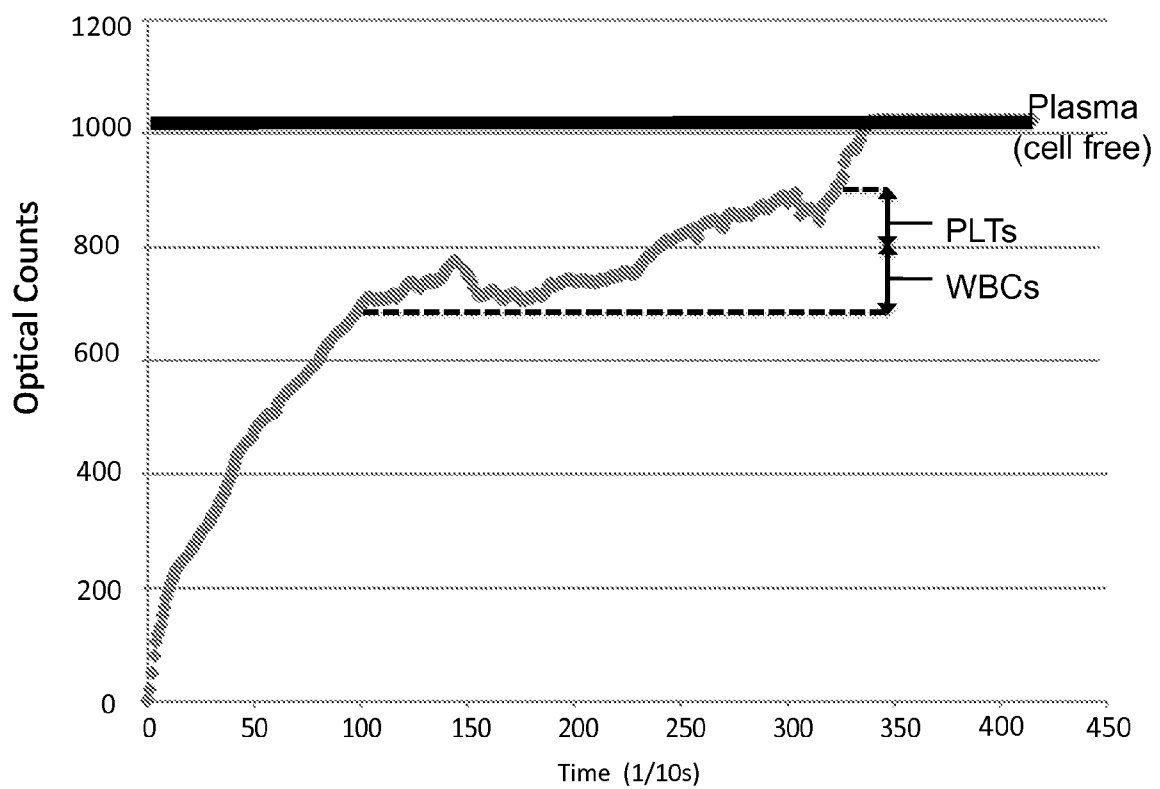


Figure 31

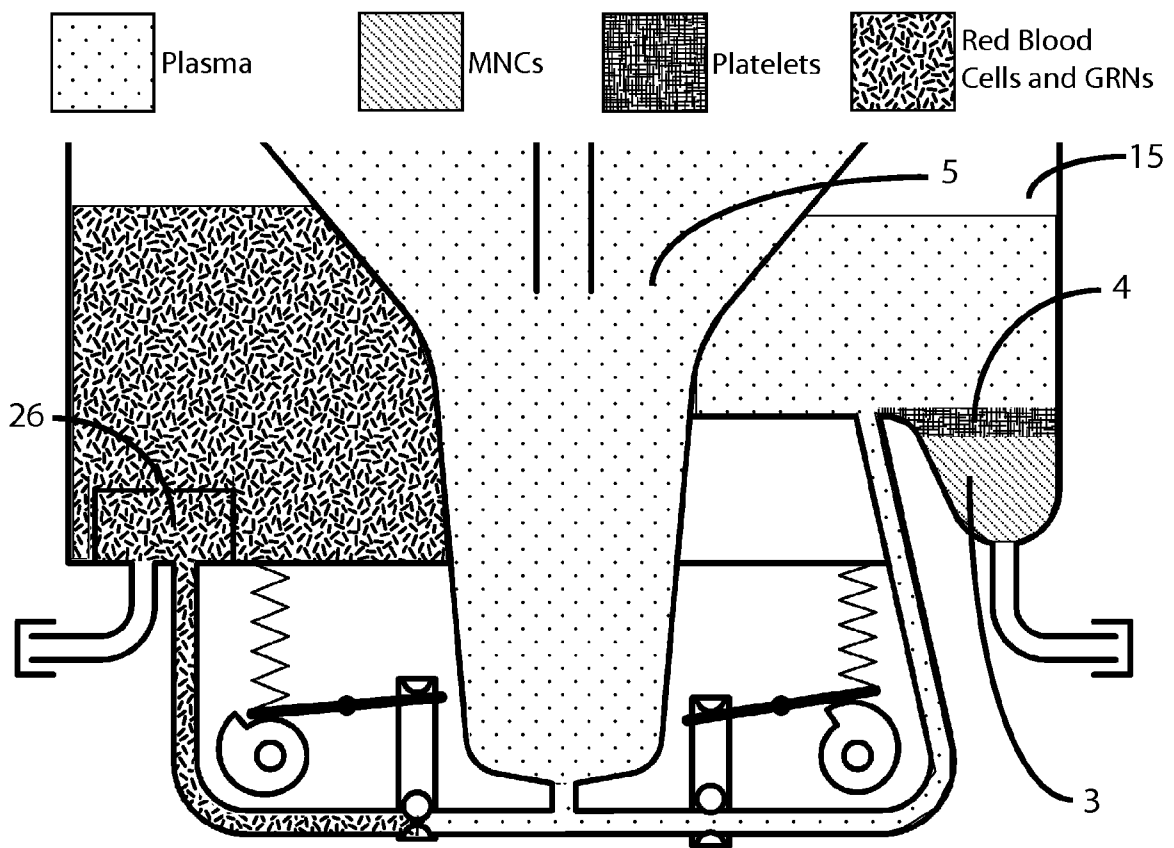


Figure 32

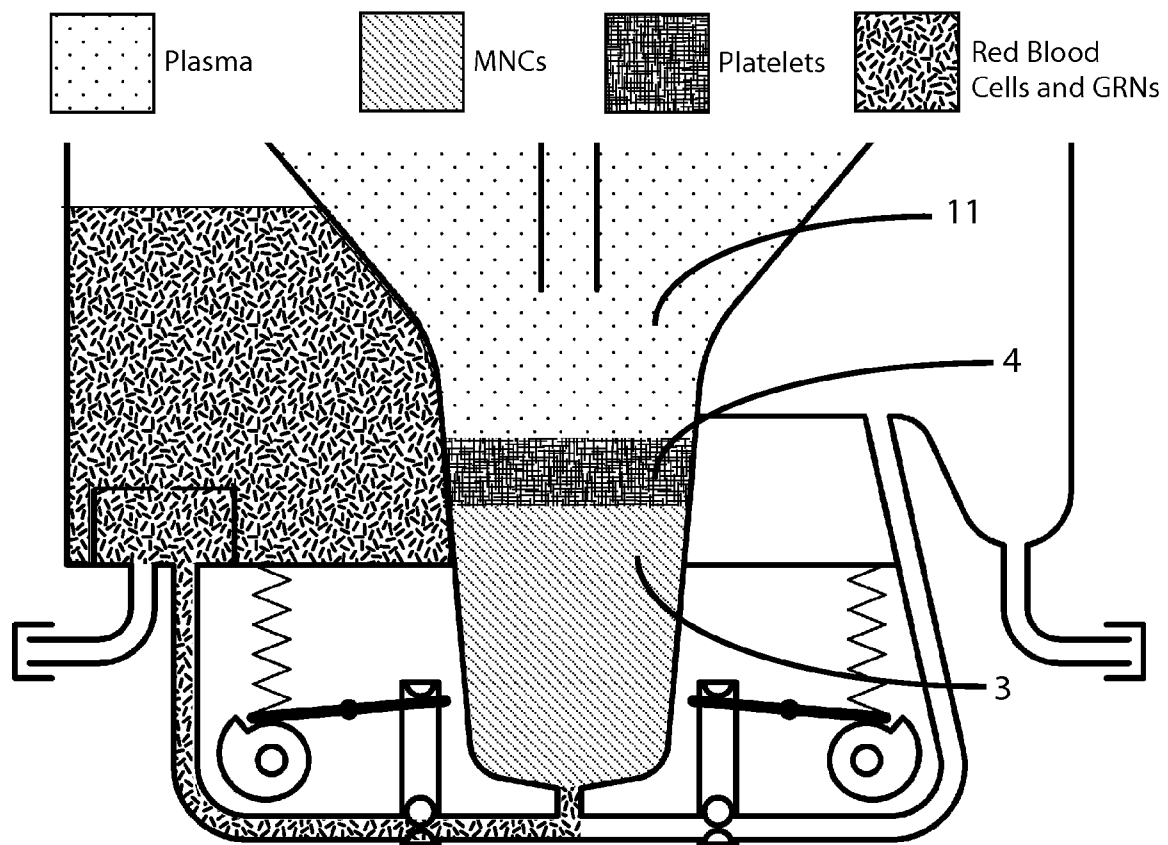


Figure 33

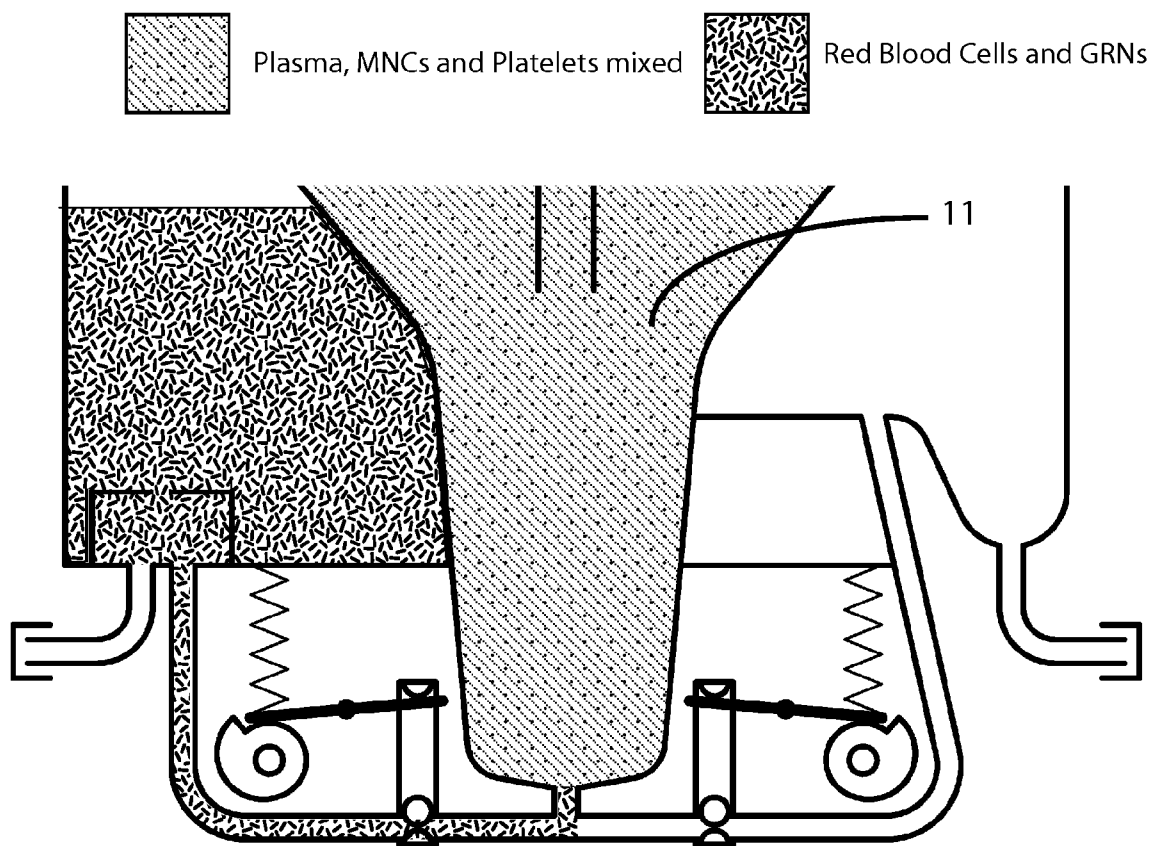


Figure 34

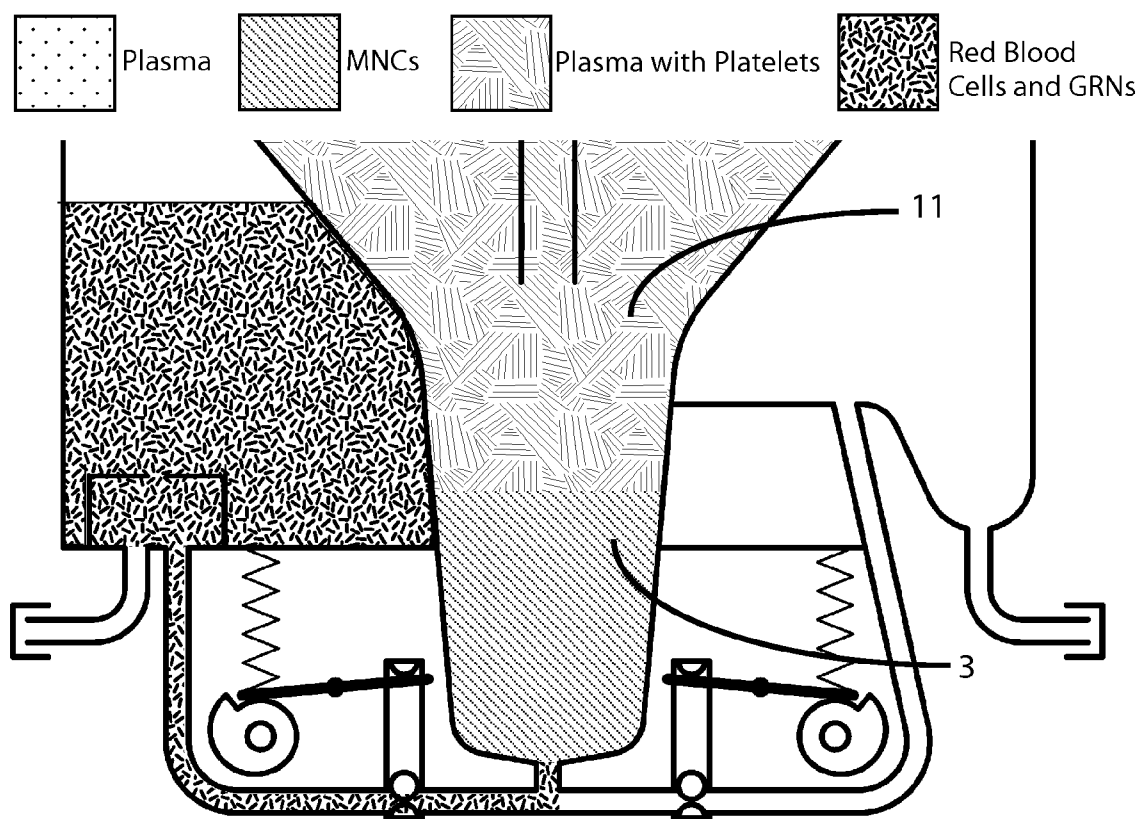


Figure 35

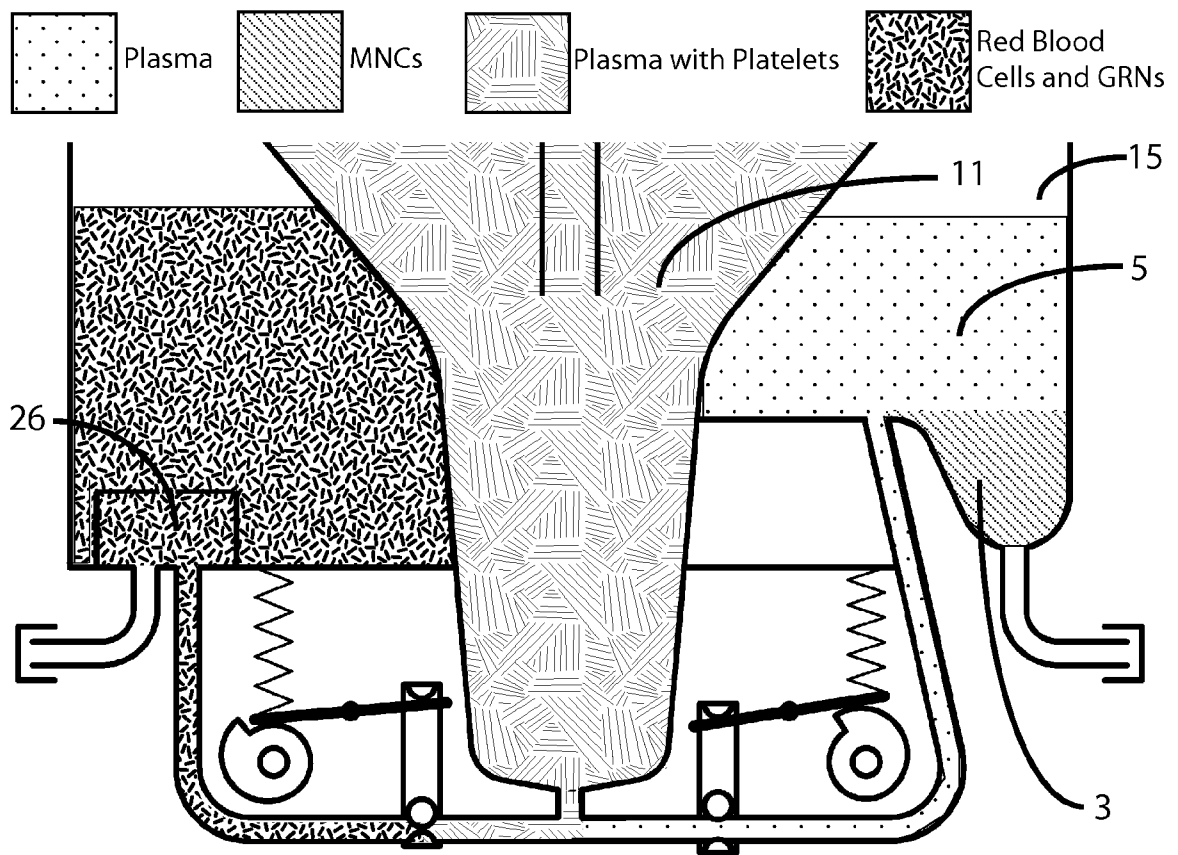


Figure 36

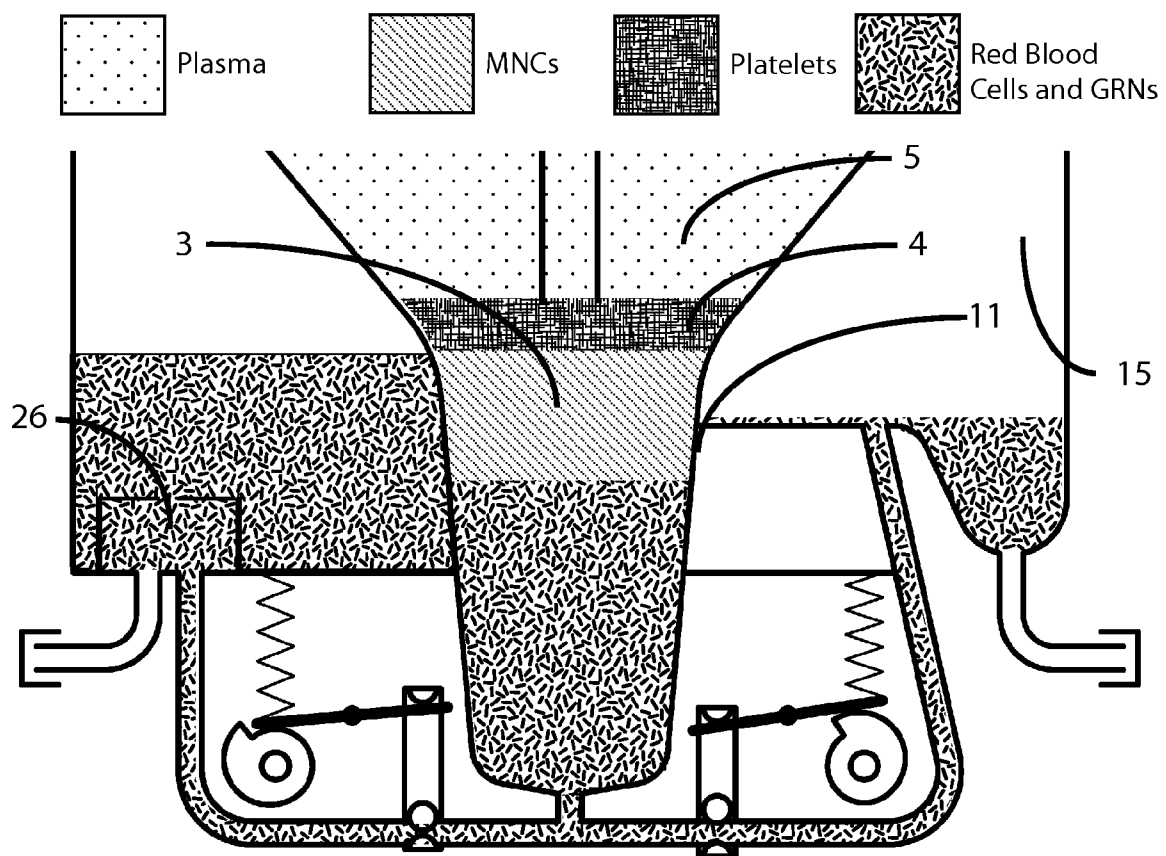


Figure 37

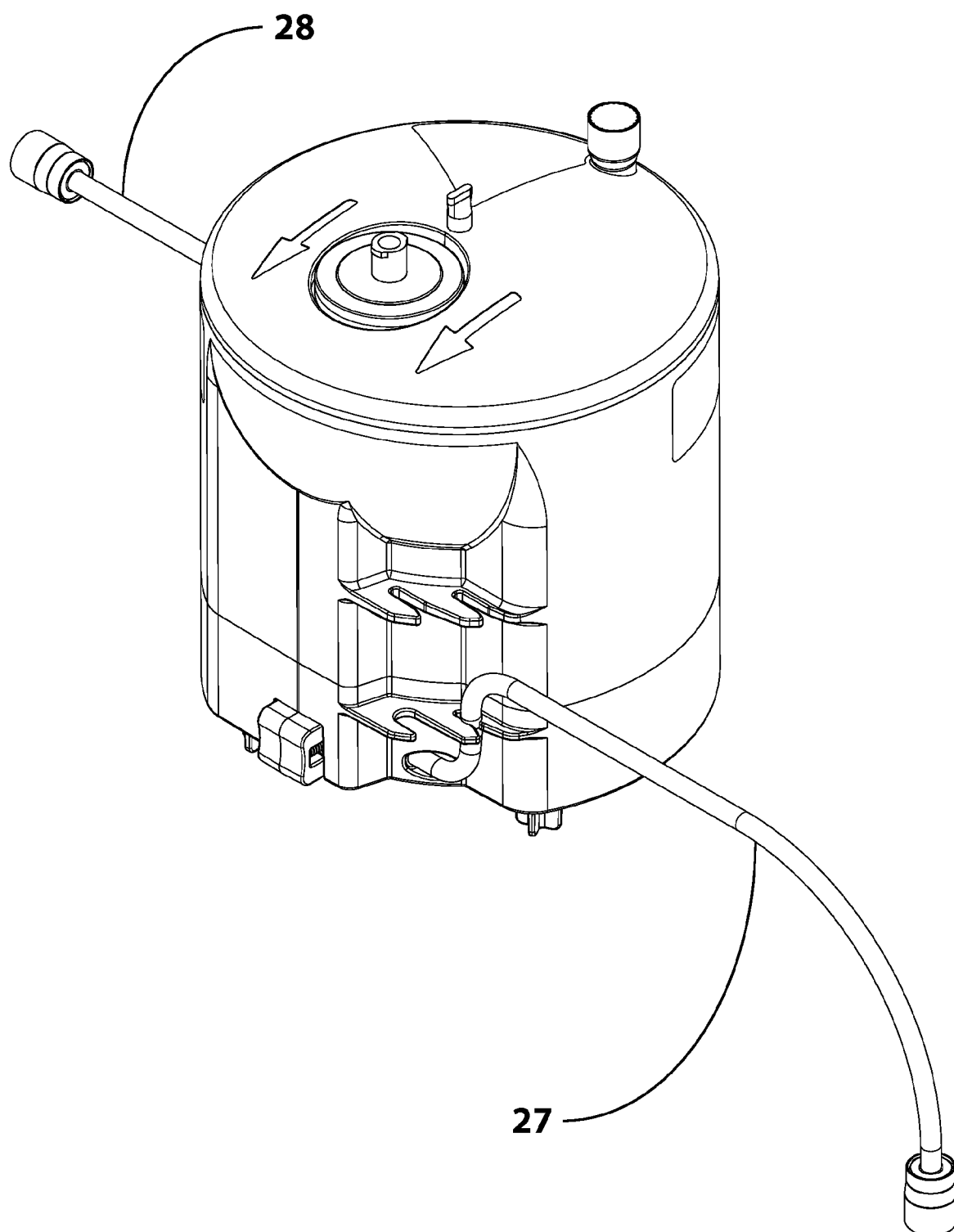


Figure 38