

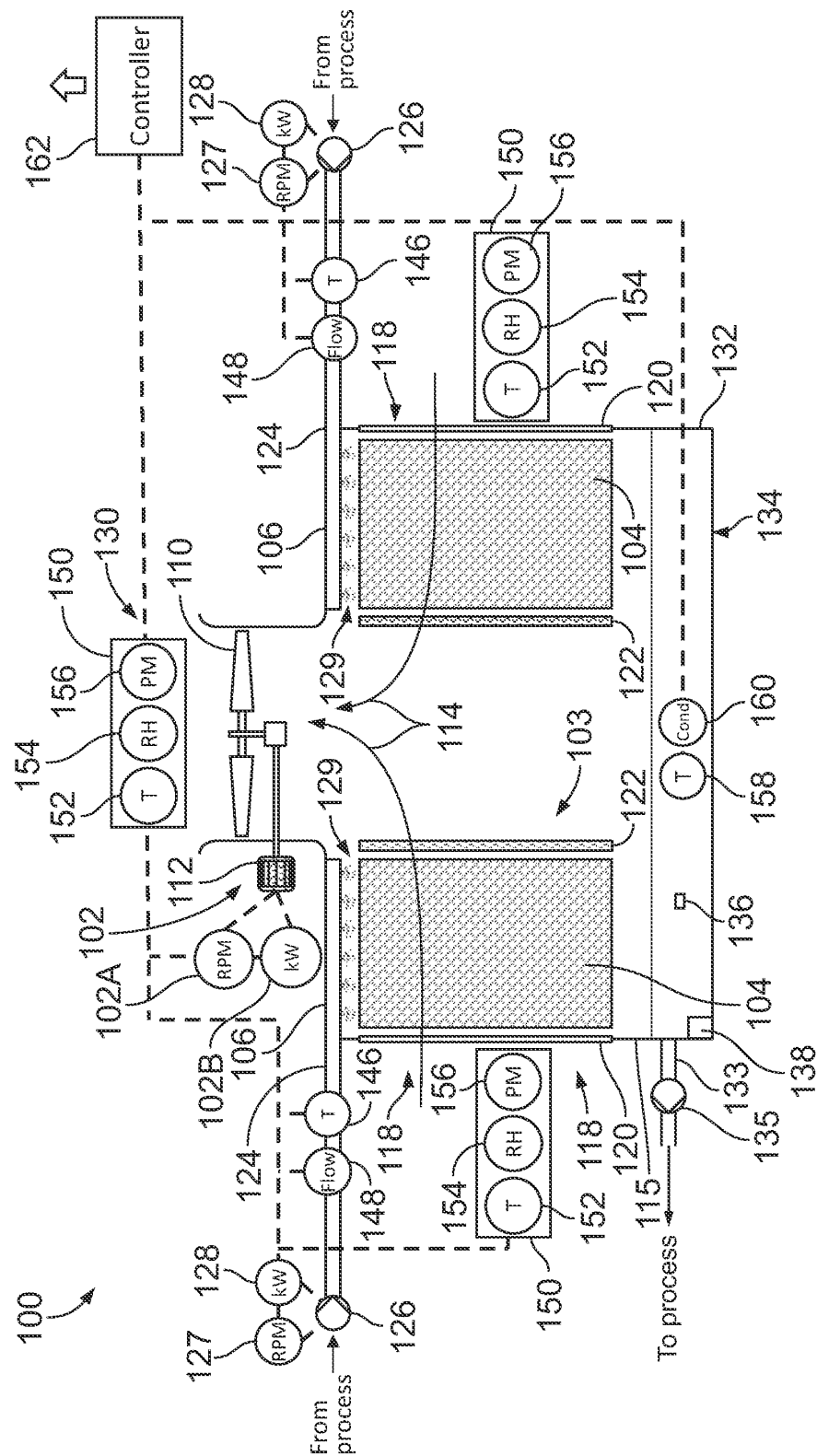


FIG. 1A

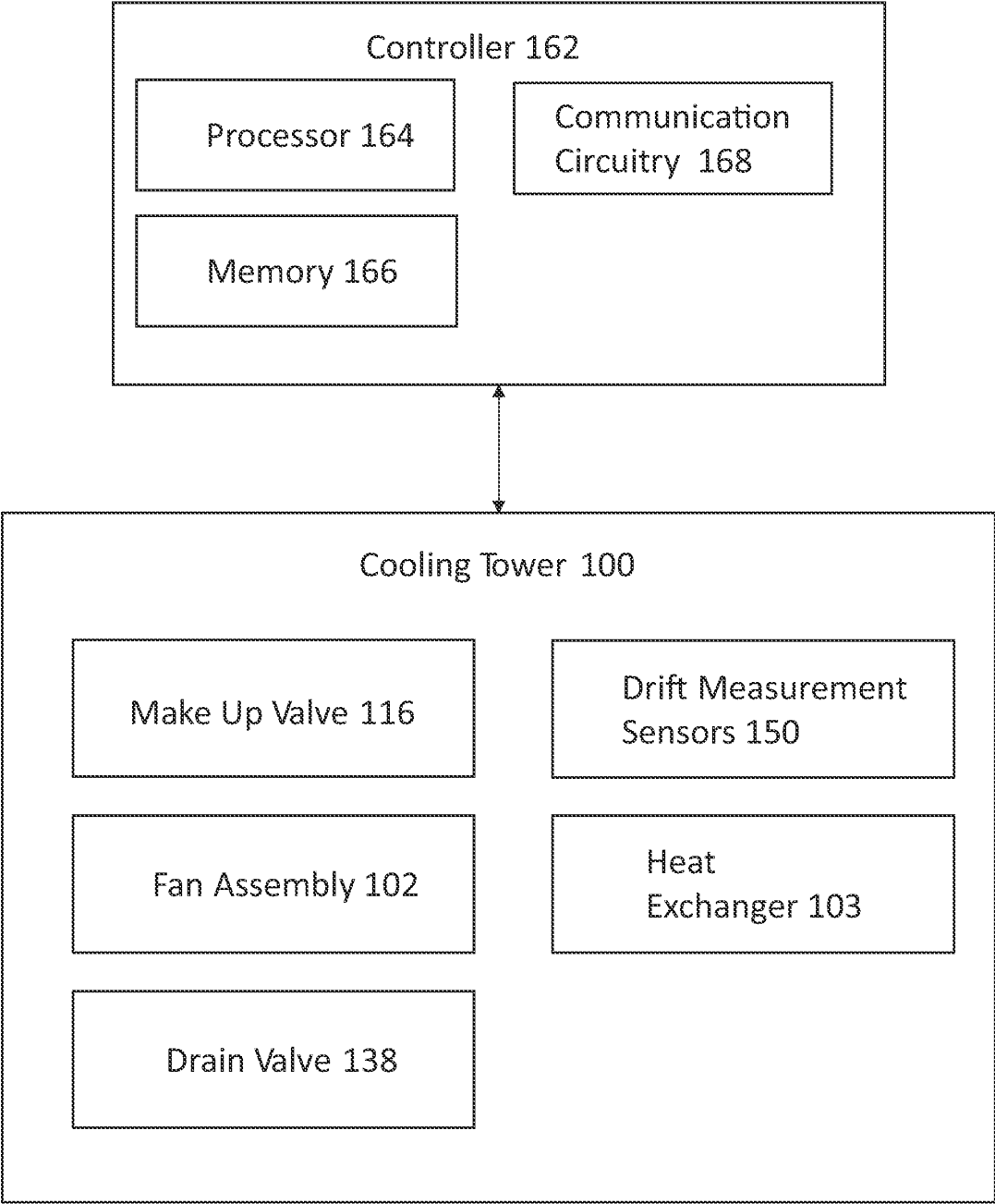


FIG. 1B

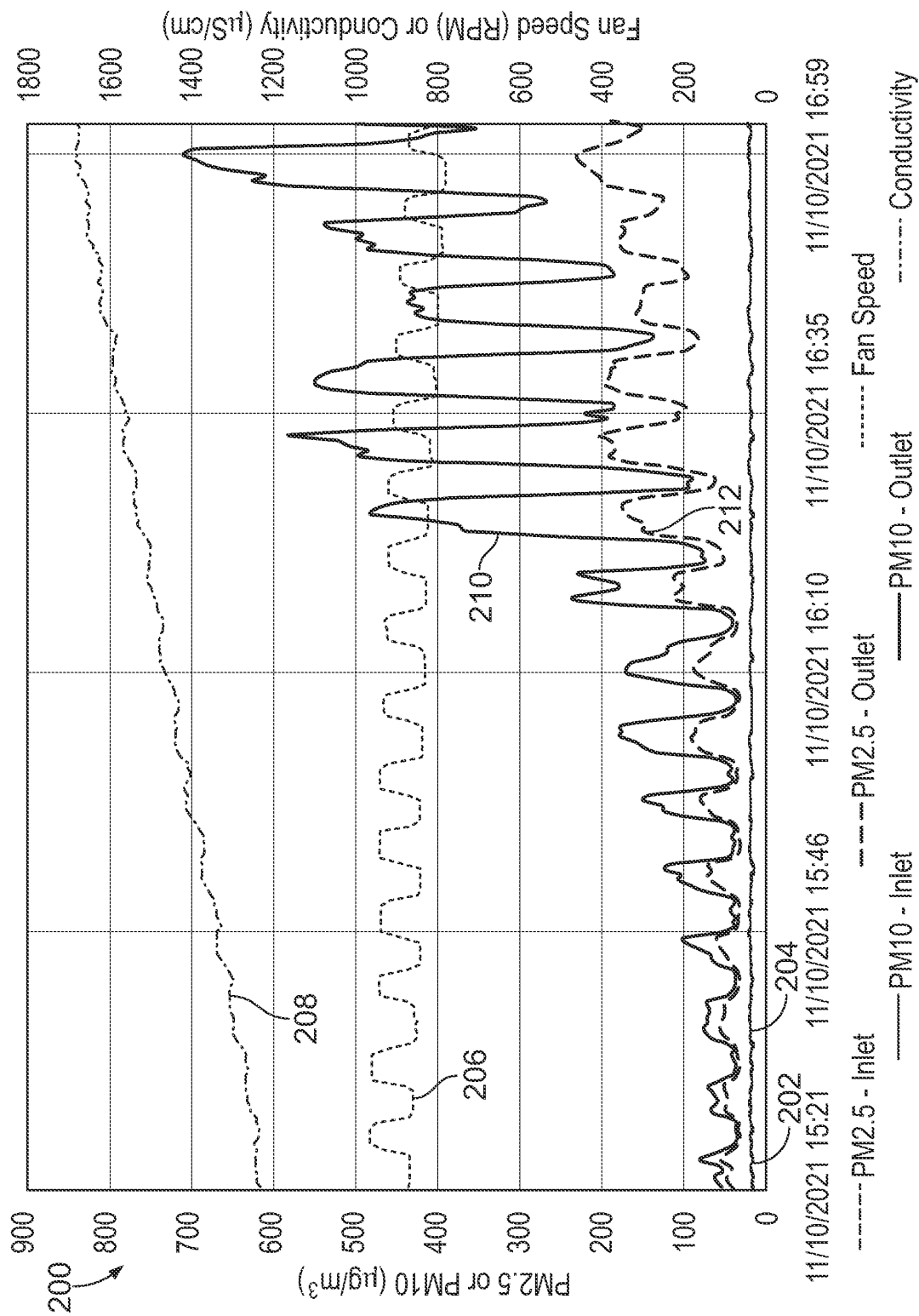


FIG. 2

300

	Fan Speed (%)	Spray Water Status (-)	Spray Water Conductivity (μS/cm)	Air Inlet				Air Outlet				Determination
				PM2.5 (μg/cm3)	PM10 (μg/cm3)	Tdry bulb (°F)	RH (%)	PM2.5 (μg/cm3)	PM10 (μg/cm3)	RH (%)	Tdry bulb (°F)	
Baseline 1	0.80	On	1250	10	10	95.0	0.45	25	30	0.95	88.0	-
New Condition A	0.80	On	1550↑	10	10	95.0	0.45	28↑	34↑	0.95	88.0	Normal change of drift rate
New Condition B	0.80	On	1250	10	10	95.0	0.45	35↑	42↑	0.95	88.0	Abnormal change of drift rate

302304308

FIG. 3A

	Fan Speed (%)	Spray Water Status (-)	Spray Water Conductivity (μS/cm)	Air Inlet			Air Outlet			Determination		
				PM2.5 (μg/cm3)	PM10 (μg/cm3)	Tdry bulb (°F)	PM2.5 (μg/cm3)	PM10 (μg/cm3)	RH (%)			
Baseline 2	0.75	On	1050	5	5	0.55	92.0	17	19	0.99	87.0	-
New Condition C	0.95↑	On	1050	5	5	0.45	95.0	27↑	32↑	0.95↓	89.0↑	Normal change of drift rate
New Condition D	0.80↑	On	1250	5	5	0.45	95.0	35↑	42↑	0.95↓	88.0↑	Abnormal change of drift rate

310

314

311

312

315

FIG. 3B

	Fan Speed (%)	Spray Water Status (-)	Spray Water Conductivity (μS/cm)	Air Inlet			Air Outlet			Determination			
				PM2.5 (μg/cm3)	PM10 (μg/cm3)	Tdry bulb (°F)	PM2.5 (μg/cm3)	PM10 (μg/cm3)	RH (%)				
320	Baseline 3	0.50	On	1750	10	10	0.45	95.0	18	21	0.99	88.0	-
New Condition E	0.50	On	1750	30↑	45↑	45↑	0.45	95.0	45↑	60↑	0.99	88.0	Normal change of drift rate
New Condition F	0.50	On	1750	30↑	45↑	45↑	0.45	95.0	75↑	105↑	0.99	88.0	Abnormal change of drift rate

321322323324

FIG. 3C

	Fan Speed (%)	Spray Water Status (-)	Spray Water Conductivity (μS/cm)	Air Inlet			Air Outlet			Determination		
				PM2.5 (μg/cm3)	PM10 (μg/cm3)	Tdry bulb (°F)	PM2.5 (μg/cm3)	PM10 (μg/cm3)	RH (%)			
Baseline 4	1.00	On	1050	25	25	0.35	97.0	57	68	0.85	93.0	-
New Condition G	0.85↓	On	2250↑	25	25	0.35	97.0	75↑	82↑	0.91↑	91.0↓	Normal change of drift rate
New Condition H	0.85↓	On	2250↑	25	25	0.45	95.0	115↑	175↑	0.91↑	91.0↓	Abnormal change of drift rate

FIG. 3D

	Fan Speed (%)	Spray Water Status (-)	Spray Water Conductivity (µS/cm)	Air Inlet			Air Outlet			Determination
				PM2.5 (µg/cm3)	PM10 (µg/cm3)	Tdry bulb (°F)	PM2.5 (µg/cm3)	PM10 (µg/cm3)	RH (%)	
Baseline 5	1.00	Off	1050	17	21	0.65	17	21	0.45	-
New Condition I	0.65↓	On↑	1050	17	21	0.65	55↑	62↑	0.92↑	Normal change of drift rate
New Condition J	0.65↓	On↑	1050	17	21	0.65	115↑	121↑	0.92↑	Abnormal change of drift rate

340

342

341

343

344

346

345

FIG. 3E

	Fan		Spray Water		Air Inlet				Air Outlet				Determination
	Speed (%)	Status (-)	Conductivity (μS/cm)	Tdry bulb (°F)	PM10 (μg/cm3)	PM2.5 (μg/cm3)	RH (%)	Tdry bulb (°F)	PM10 (μg/cm3)	PM2.5 (μg/cm3)	RH (%)	Tdry bulb (°F)	
Baseline 6	0.75	Off	1250		17	21	0.65	75.0	17	21	0.45	85.0	-
New Condition K	0.65↓	Off	1250		55↑	59↑	0.65	75.0	55↑	59↑	0.42↓	88.0↑	Normal change of drift rate
New Condition L	0.50↓	On↑	1050↓		55↑	59↑	0.65	75.0	105↑	107↑	0.93↑	89.0↑	Abnormal change of drift rate

350

355

356

357

358

359

351

352

353

FIG. 3F

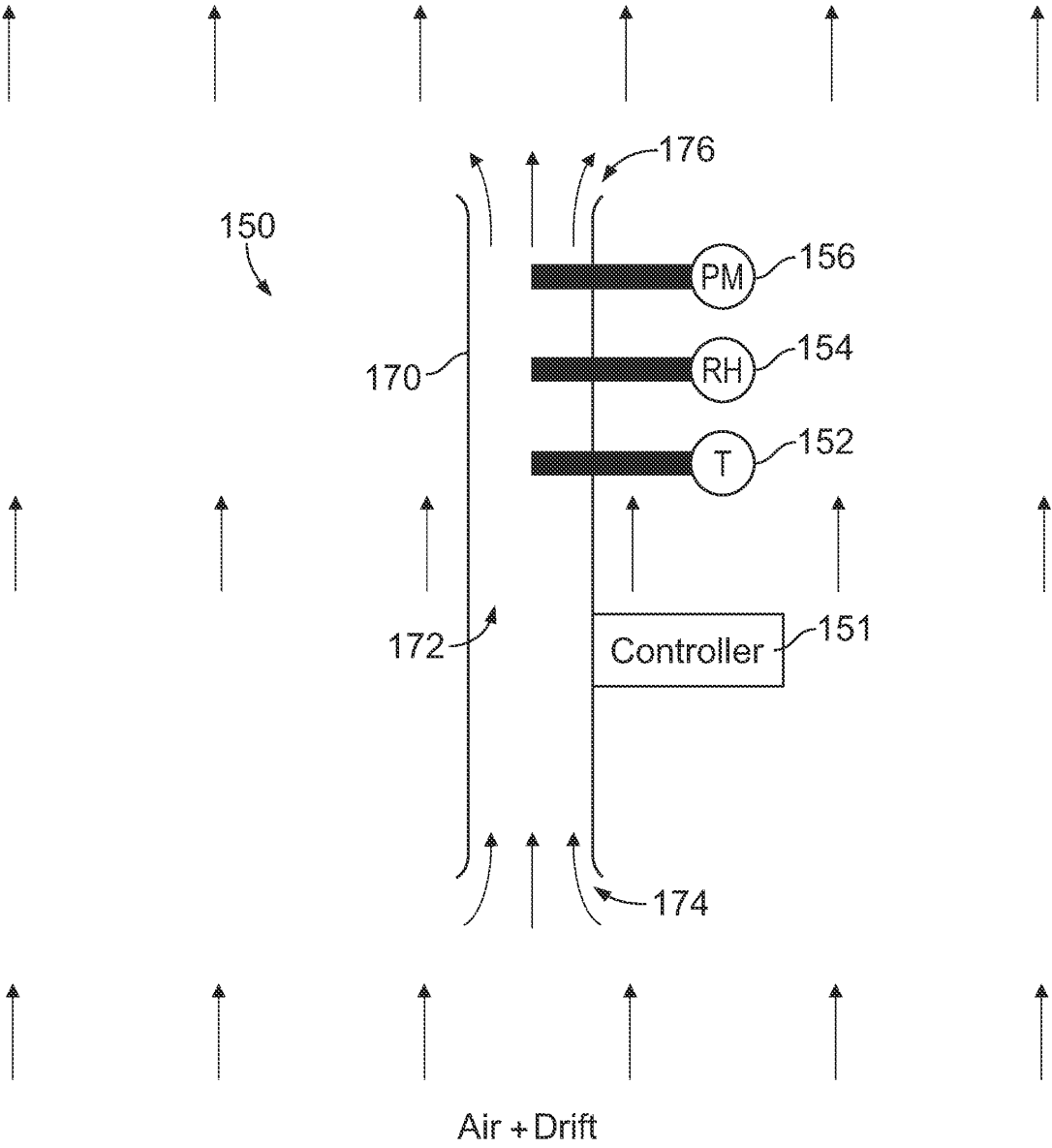


FIG. 4

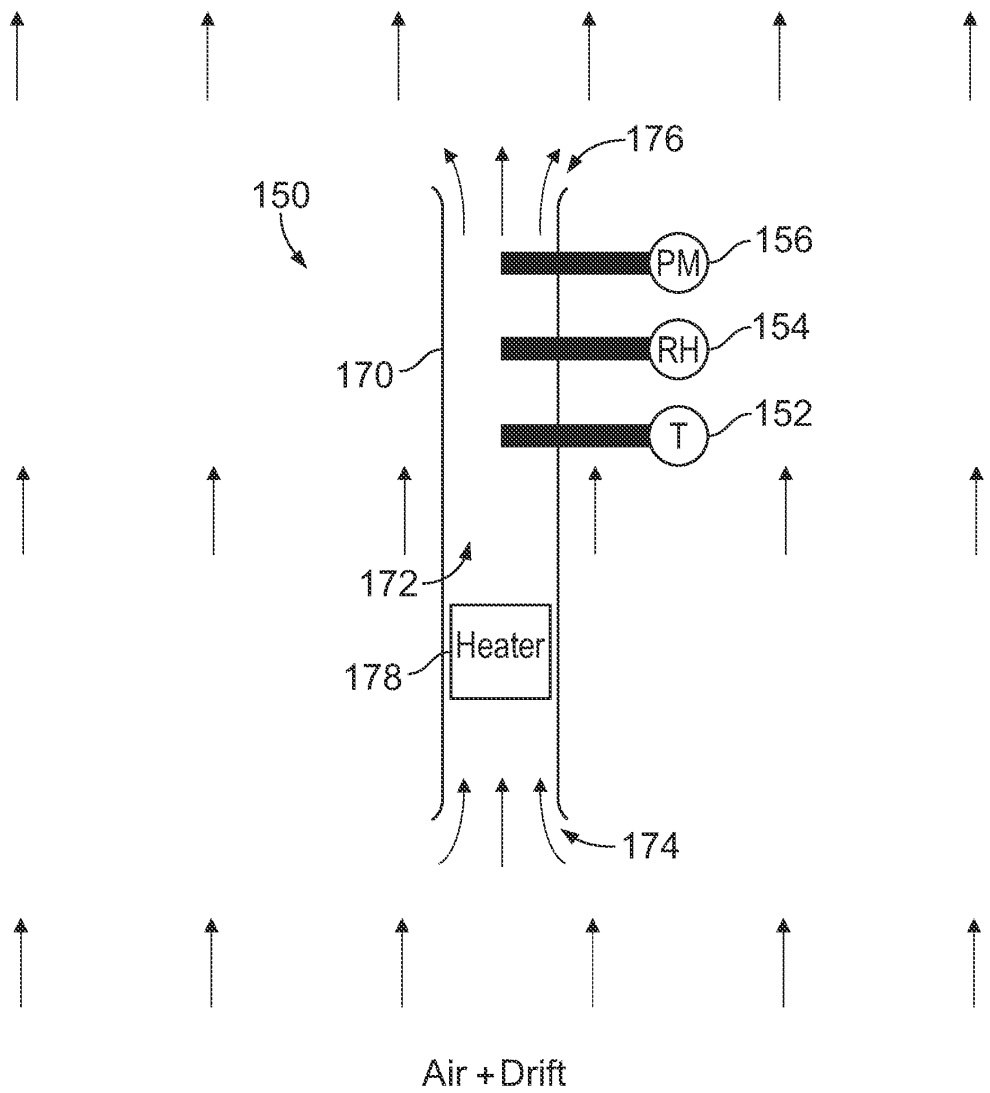


FIG. 5

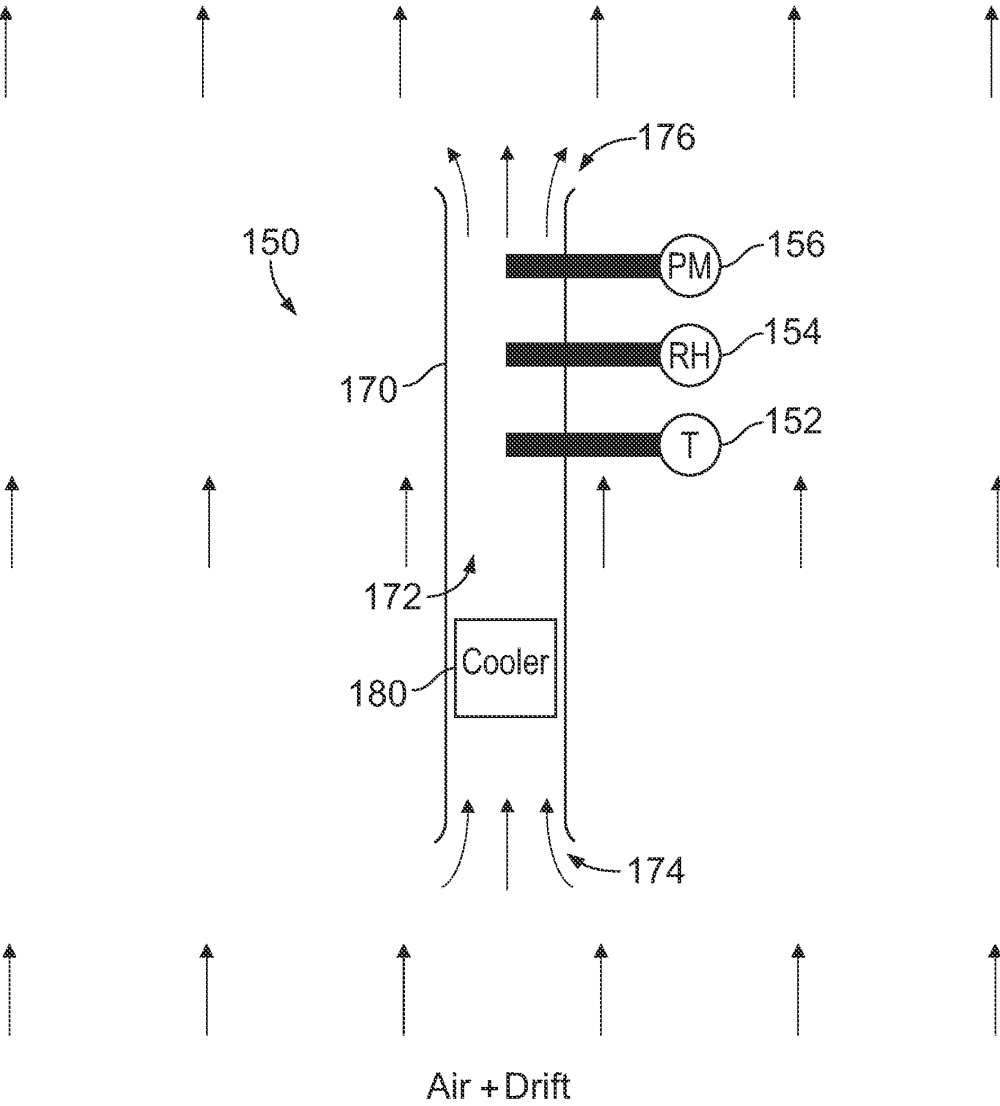


FIG. 6

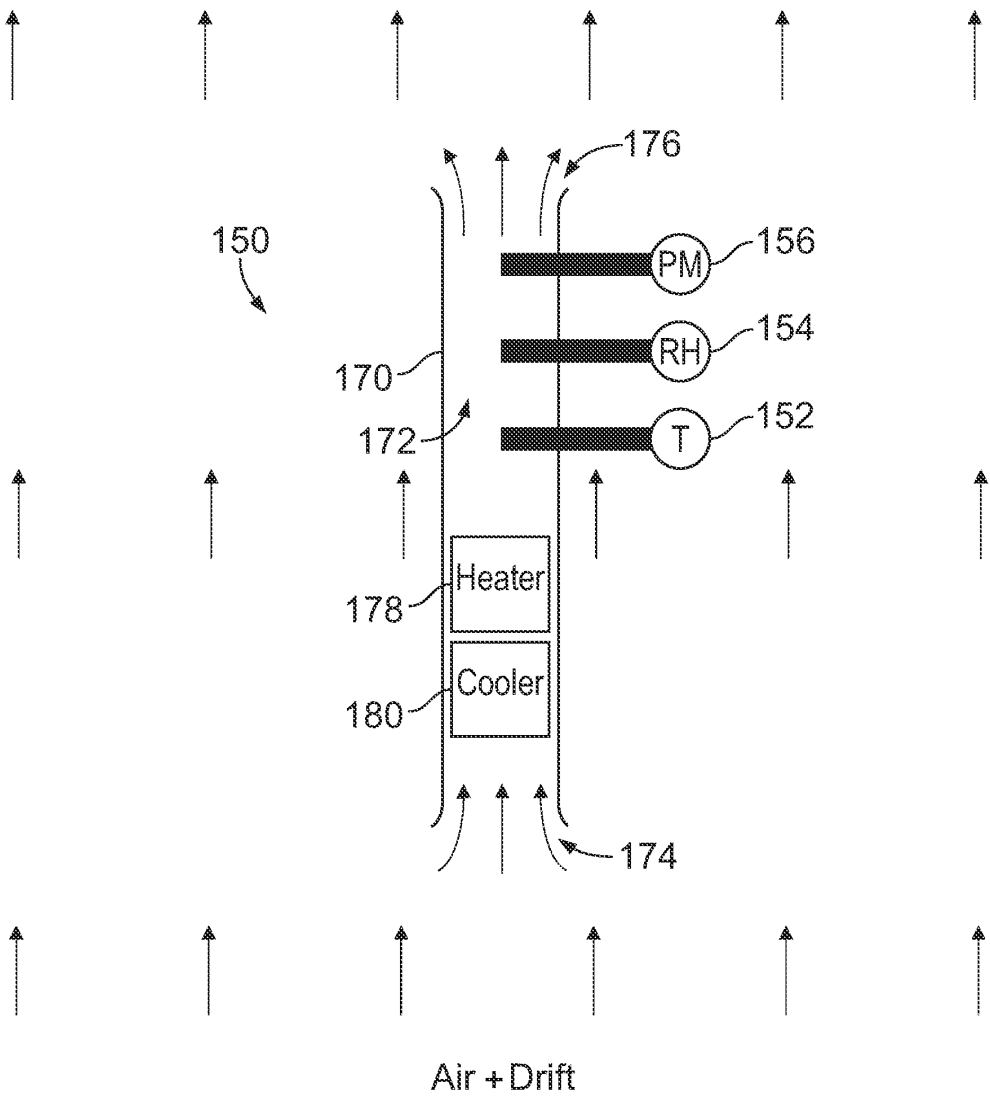


FIG. 7

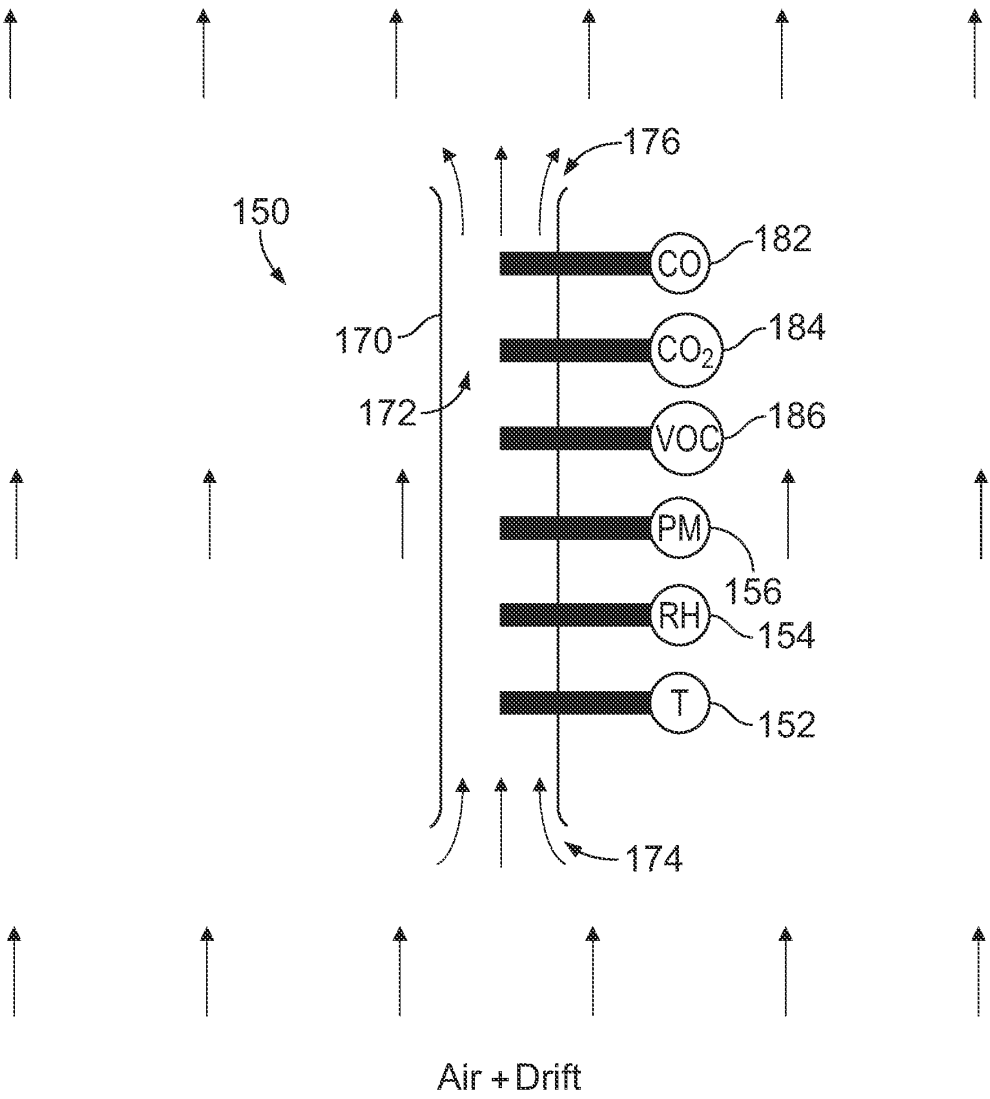


FIG. 8

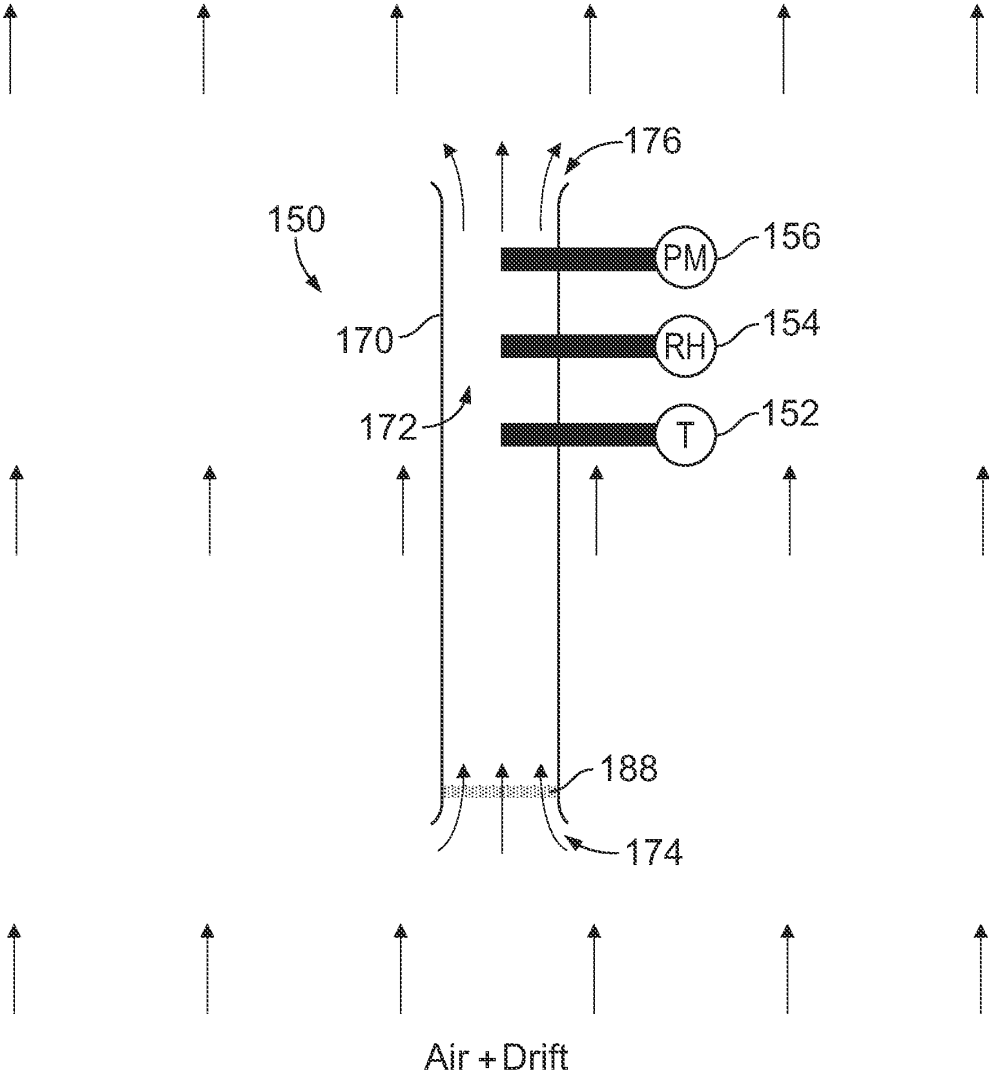


FIG. 9

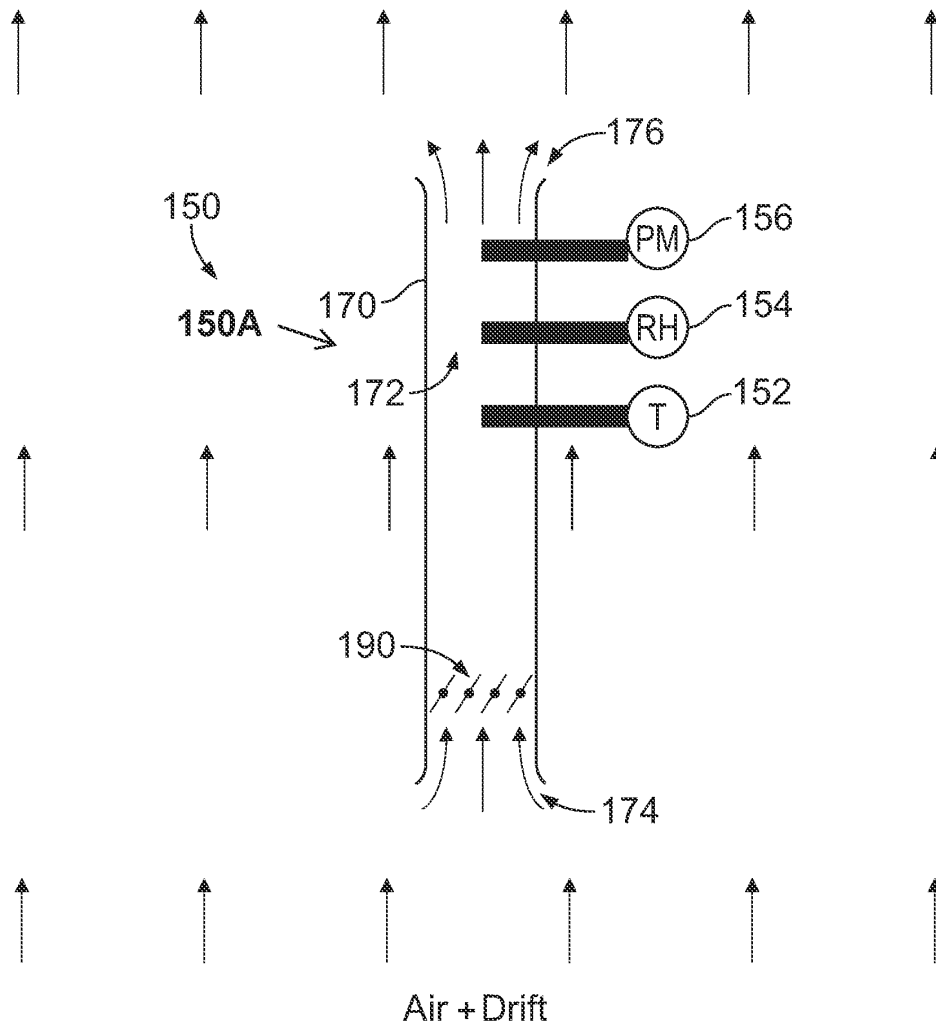


FIG. 10

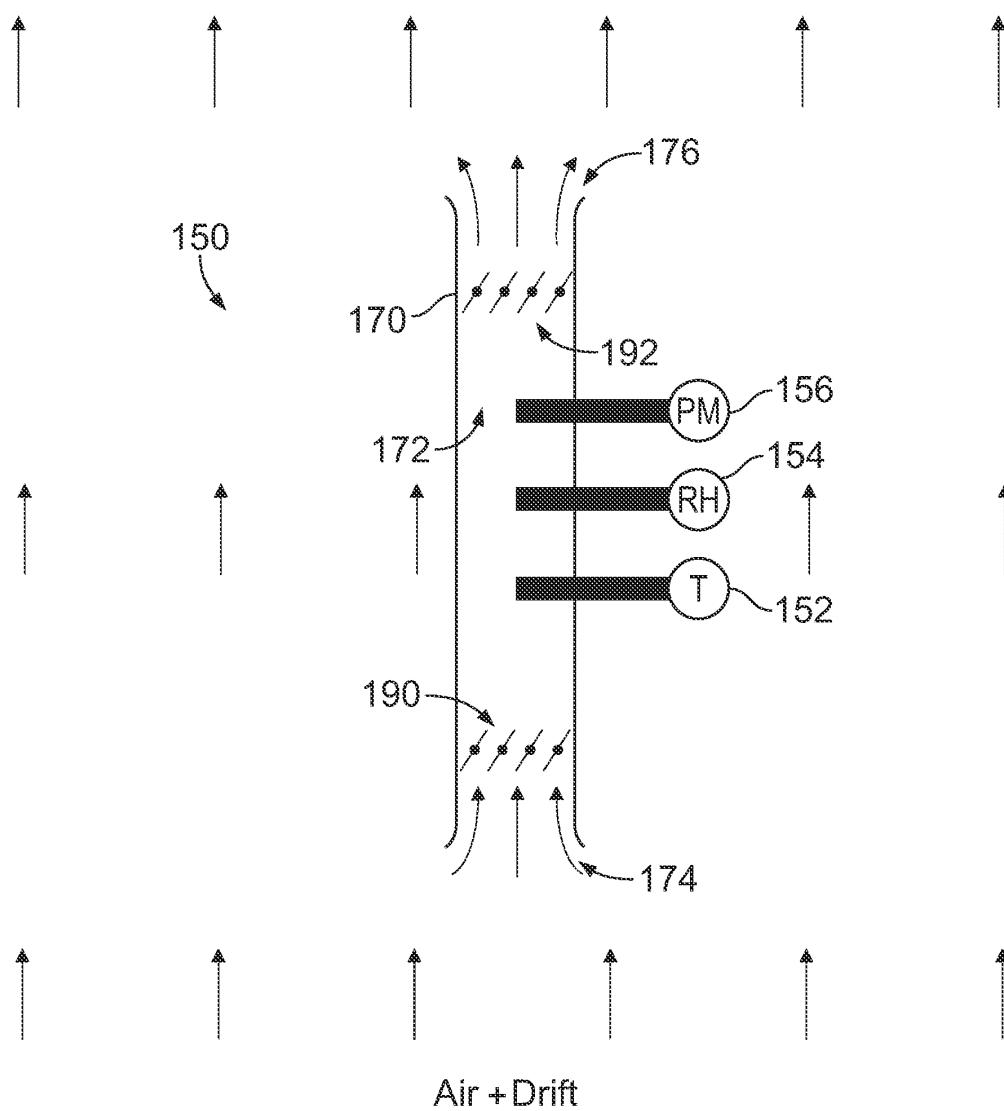


FIG. 11

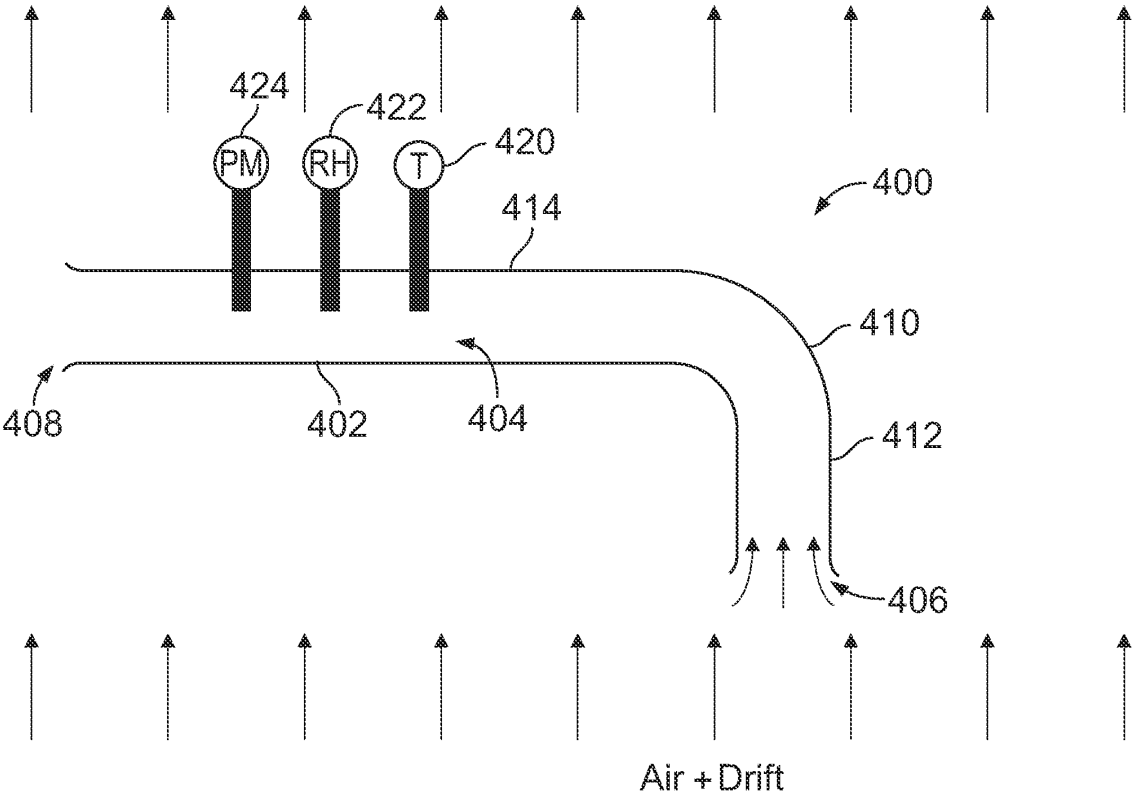


FIG. 12

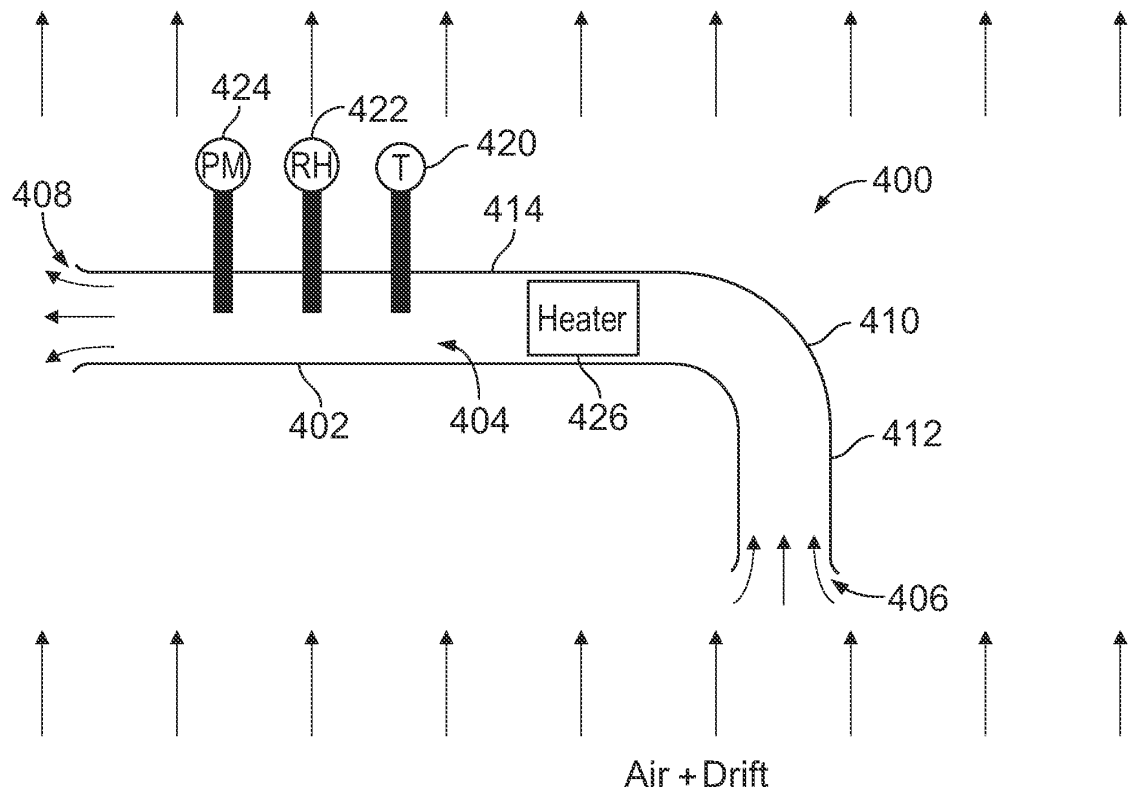


FIG. 13

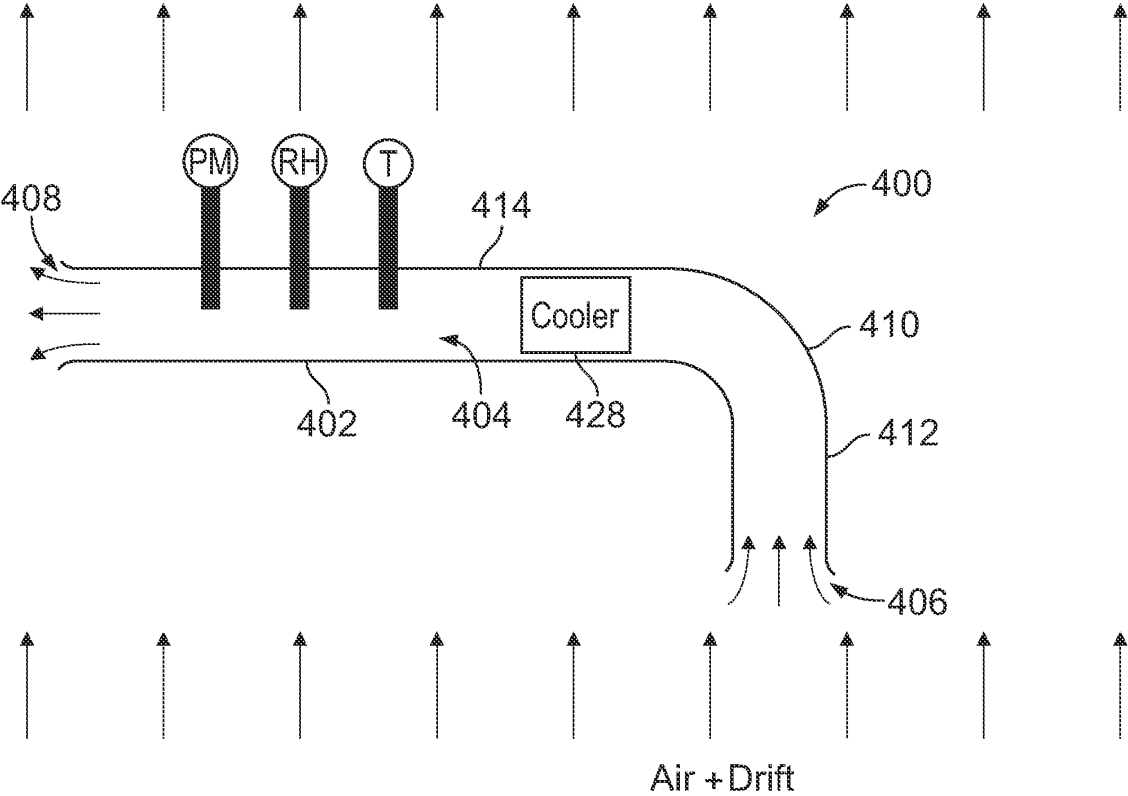


FIG. 14

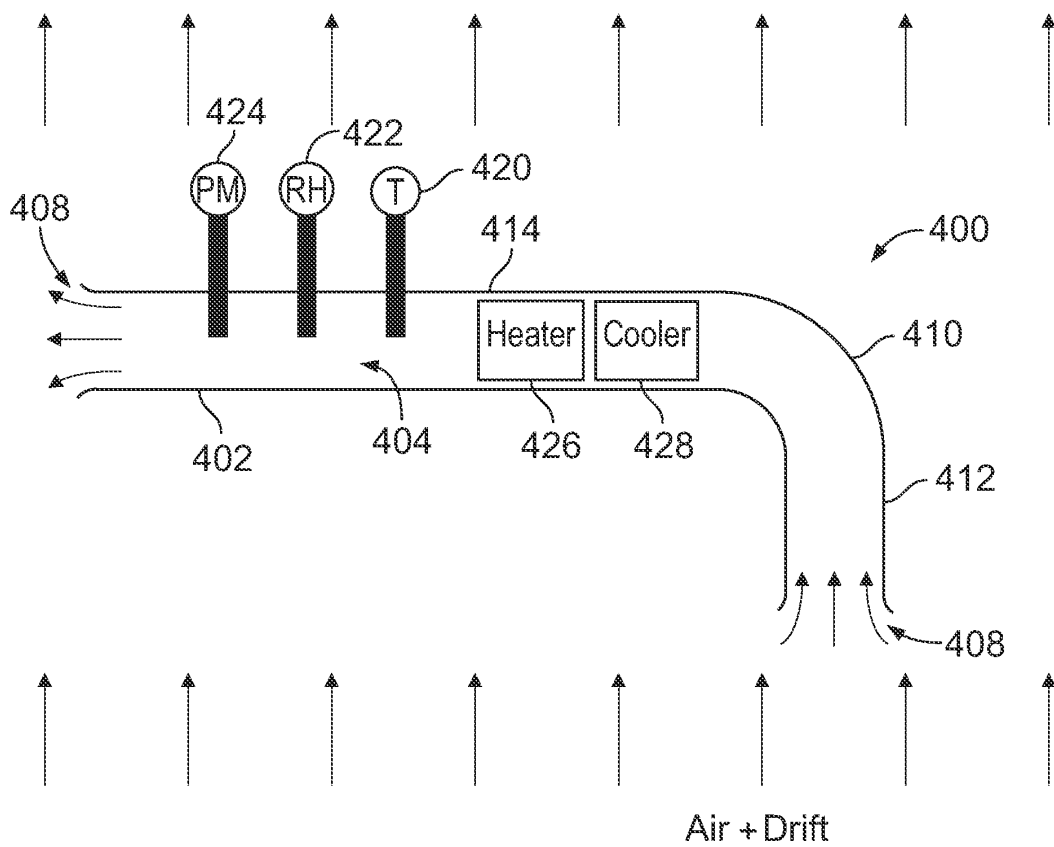


FIG. 15

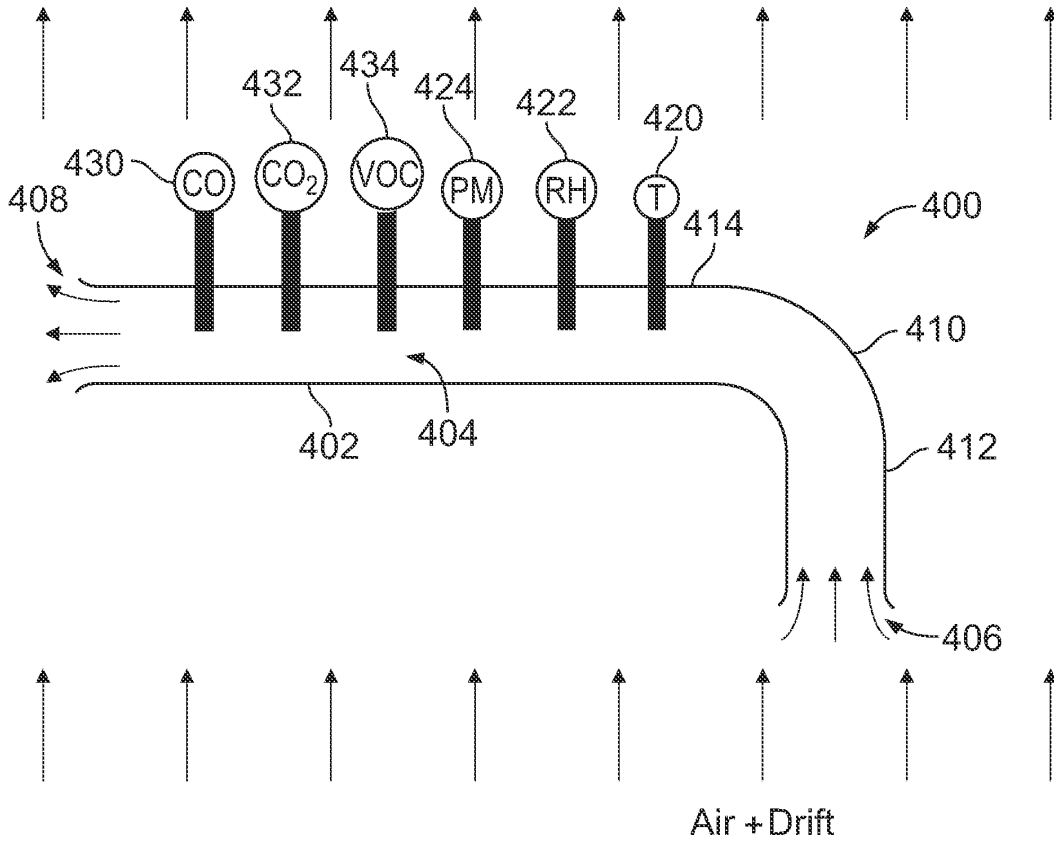


FIG. 16

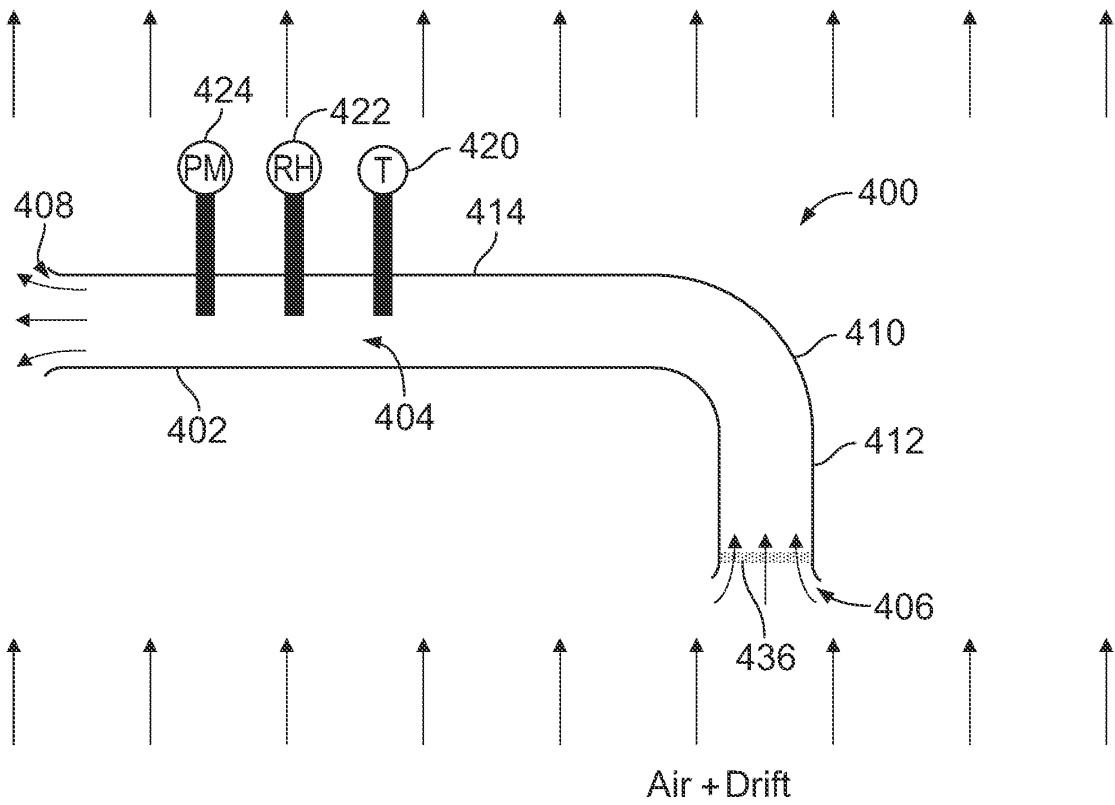


FIG. 17

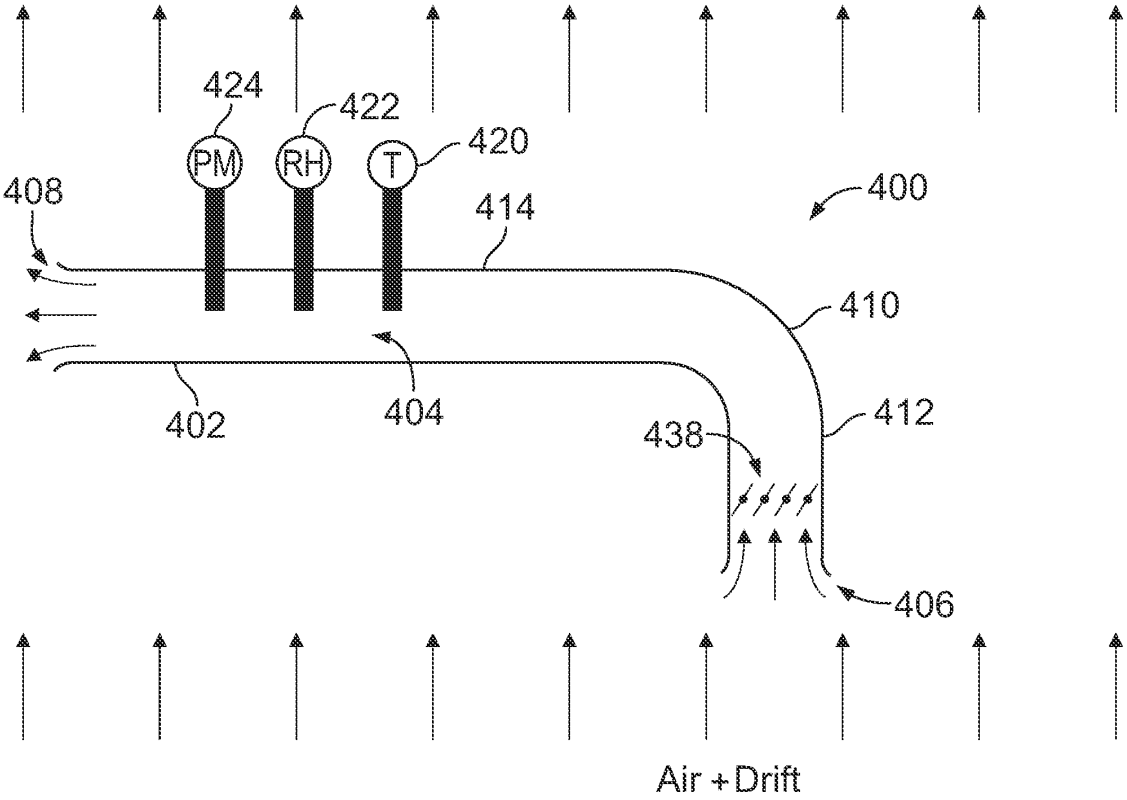


FIG. 18

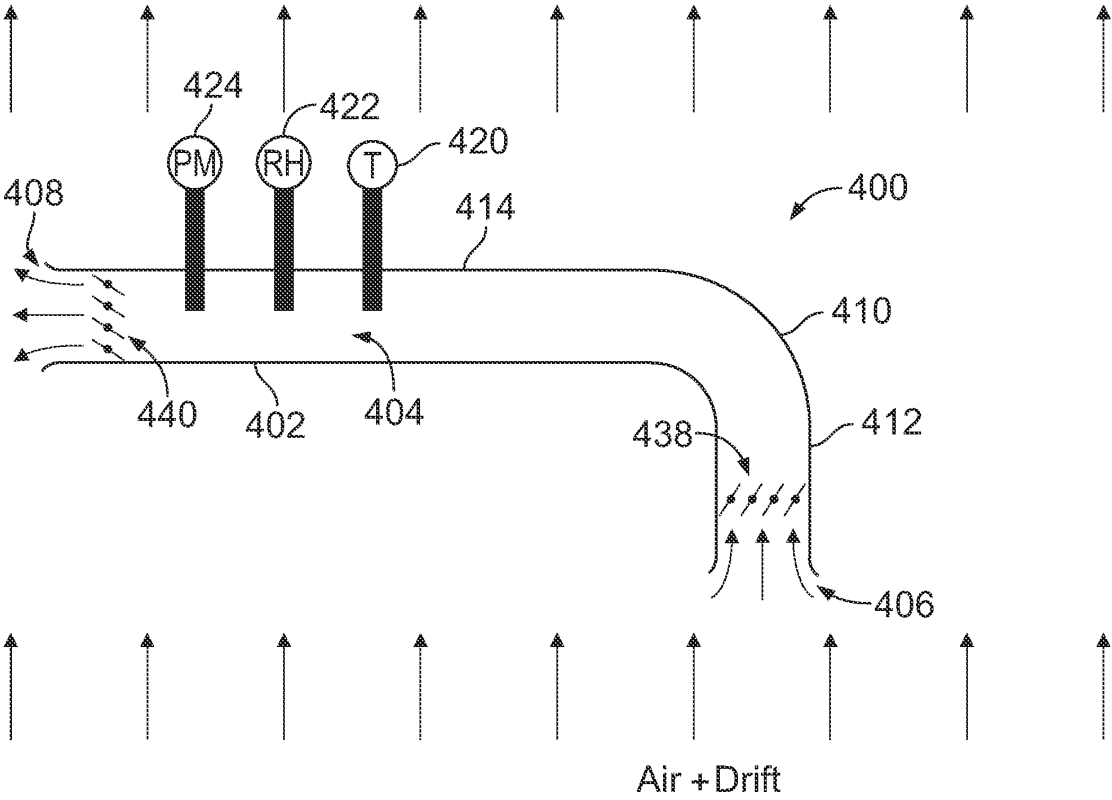


FIG. 19

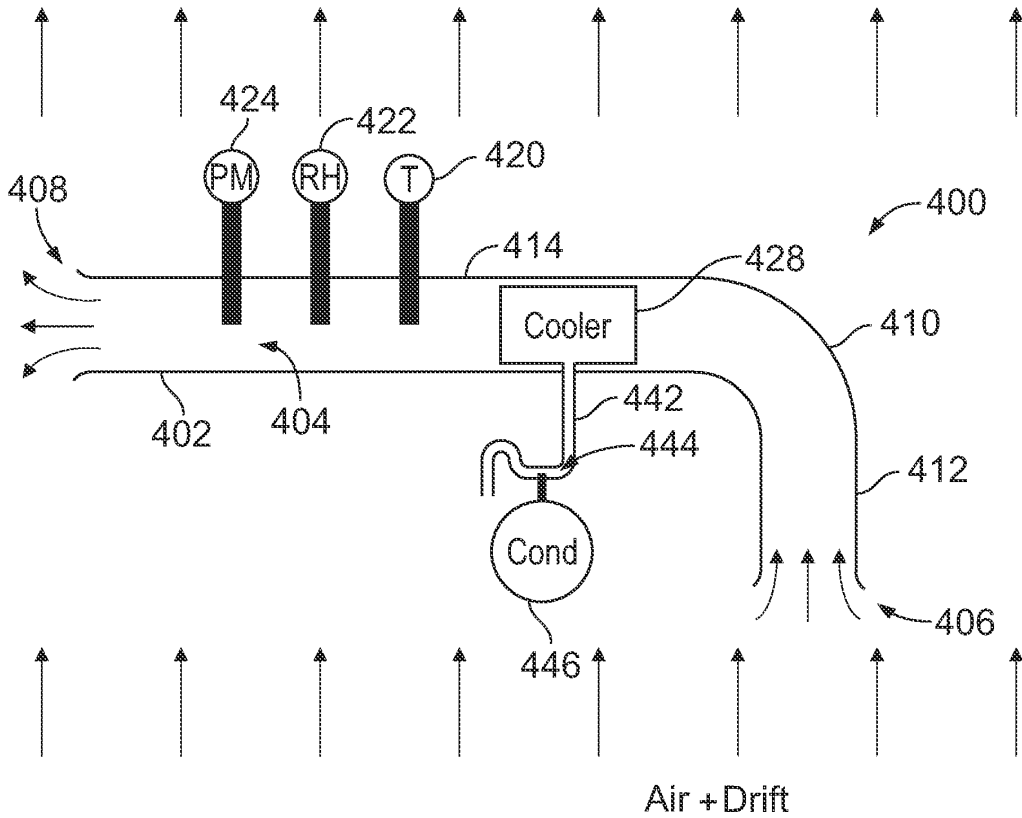


FIG. 20

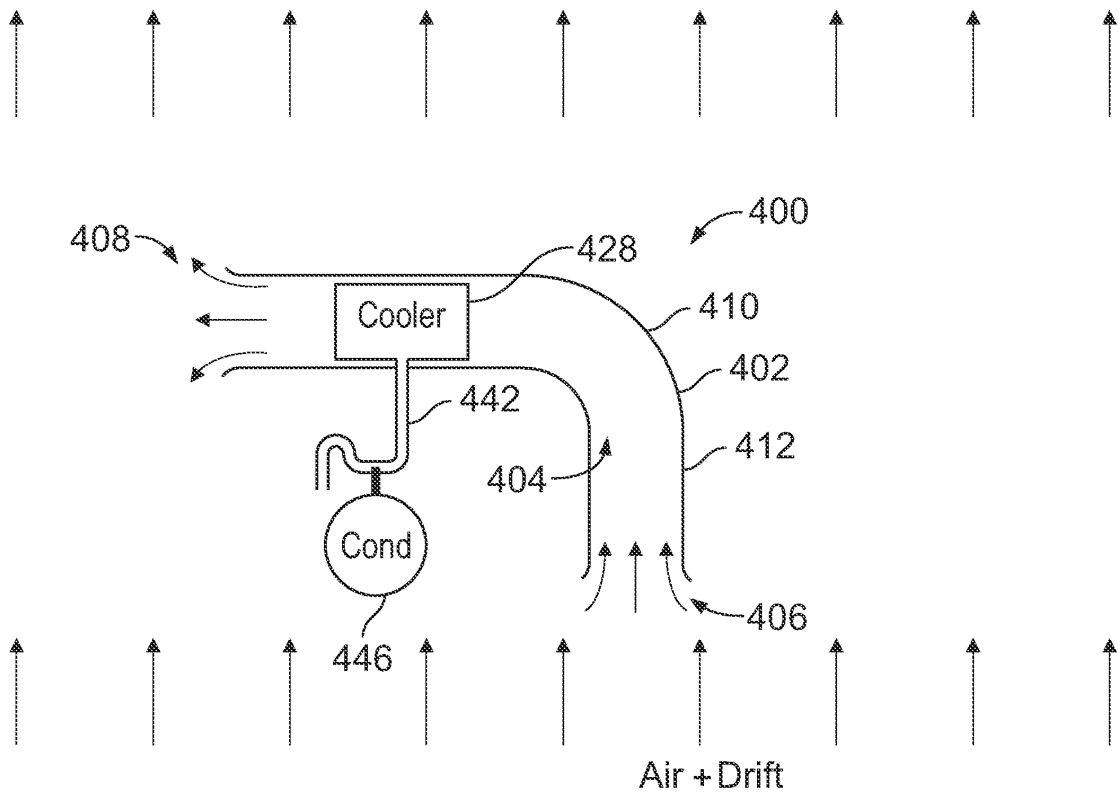


FIG. 21

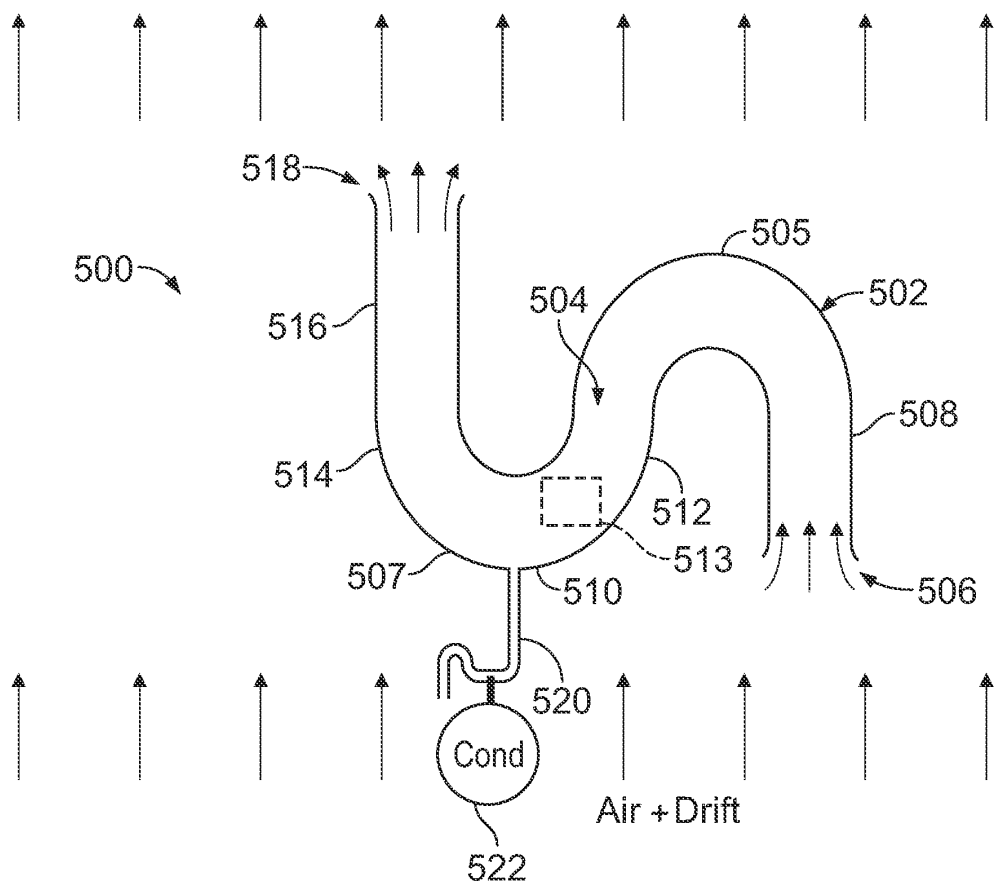


FIG. 22

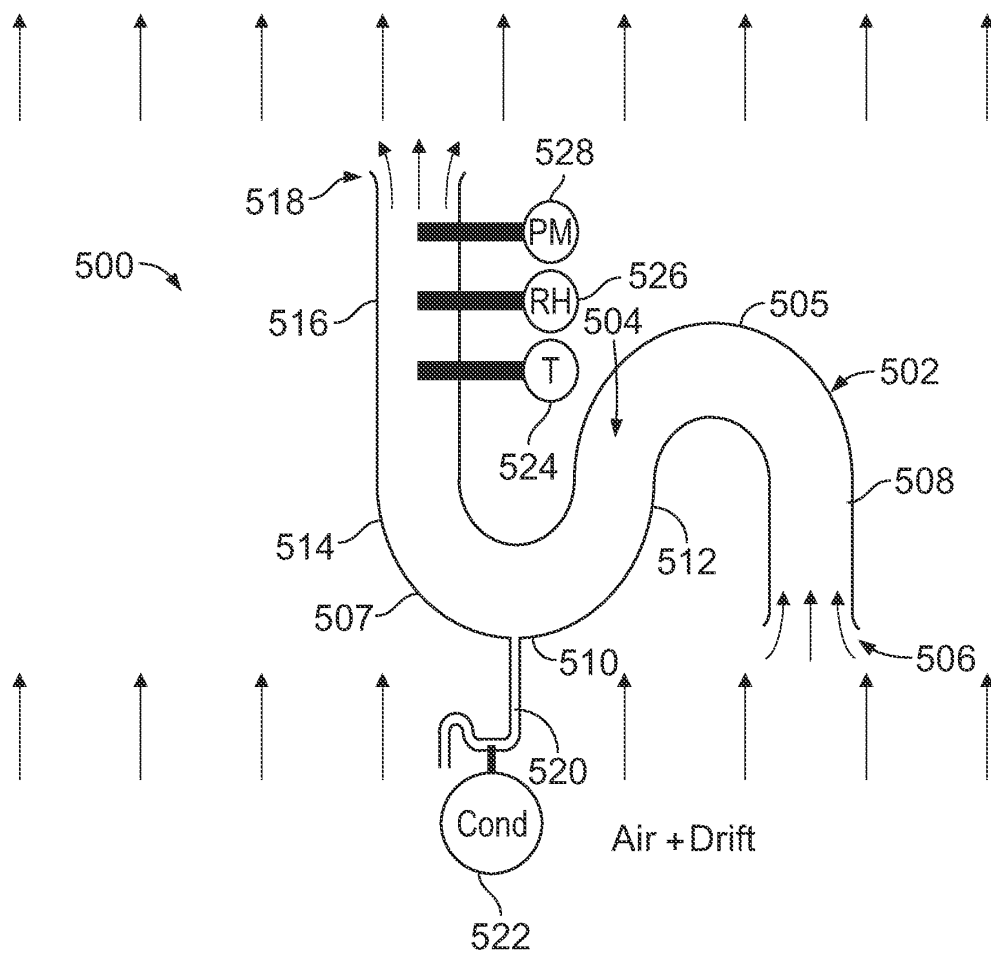


FIG. 23

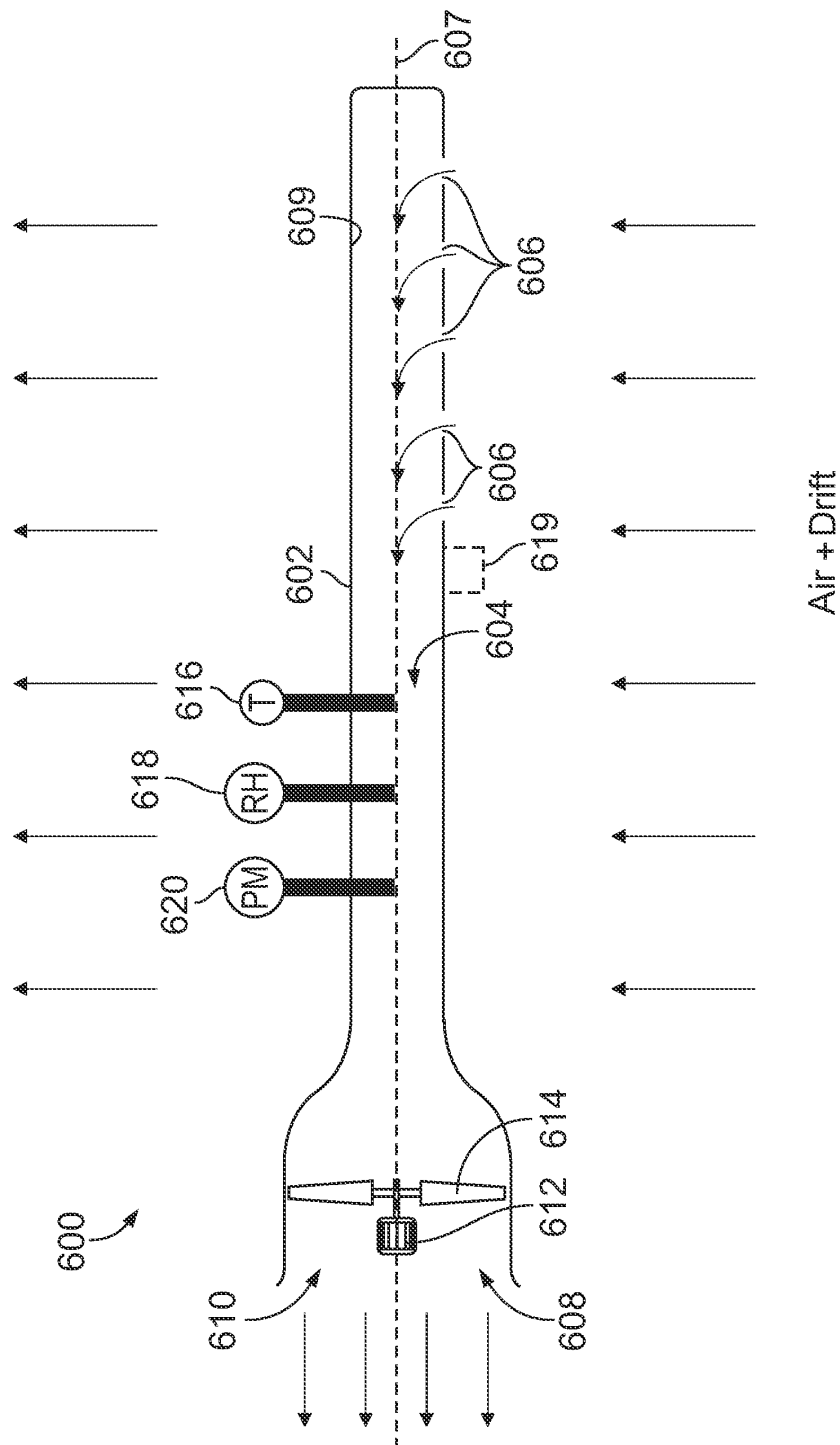


FIG. 24

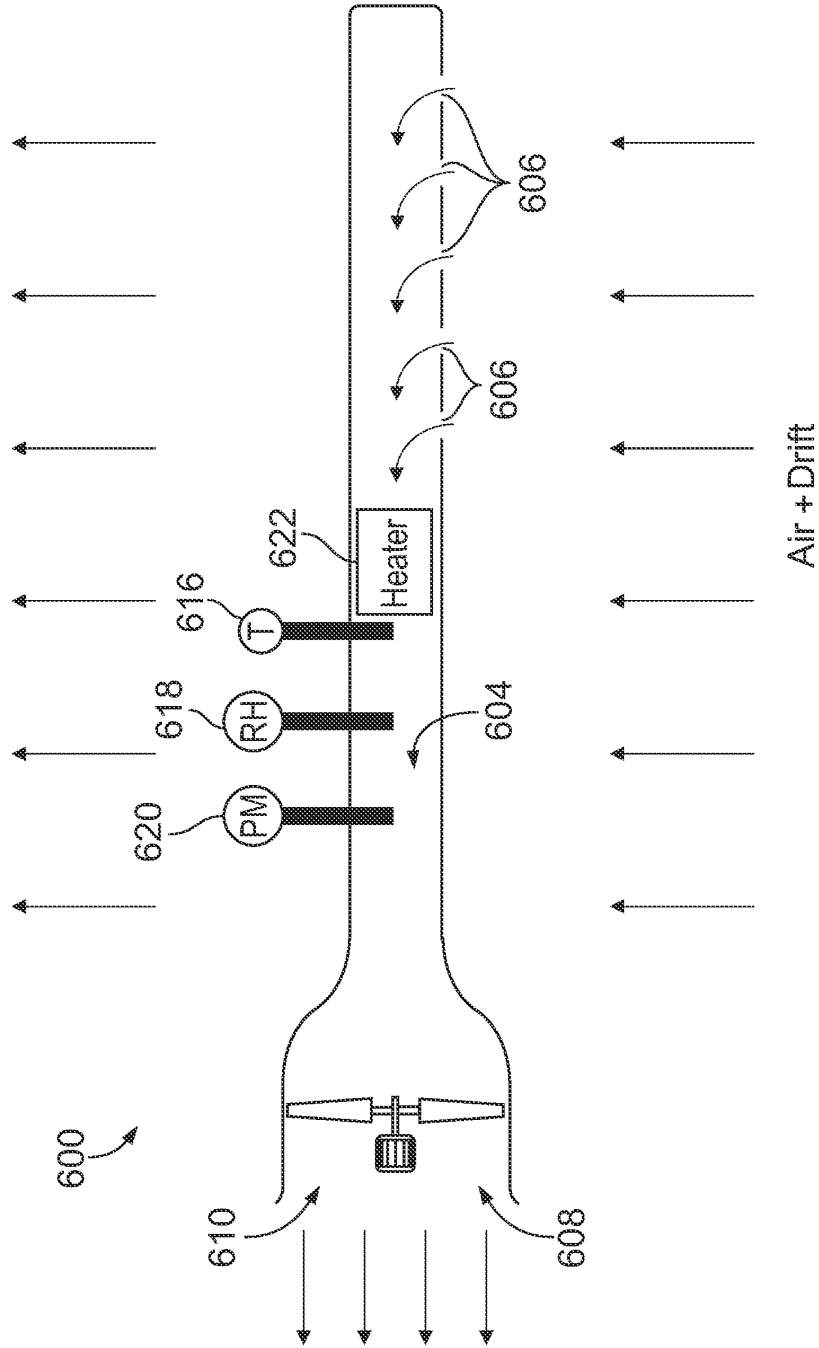


FIG. 25

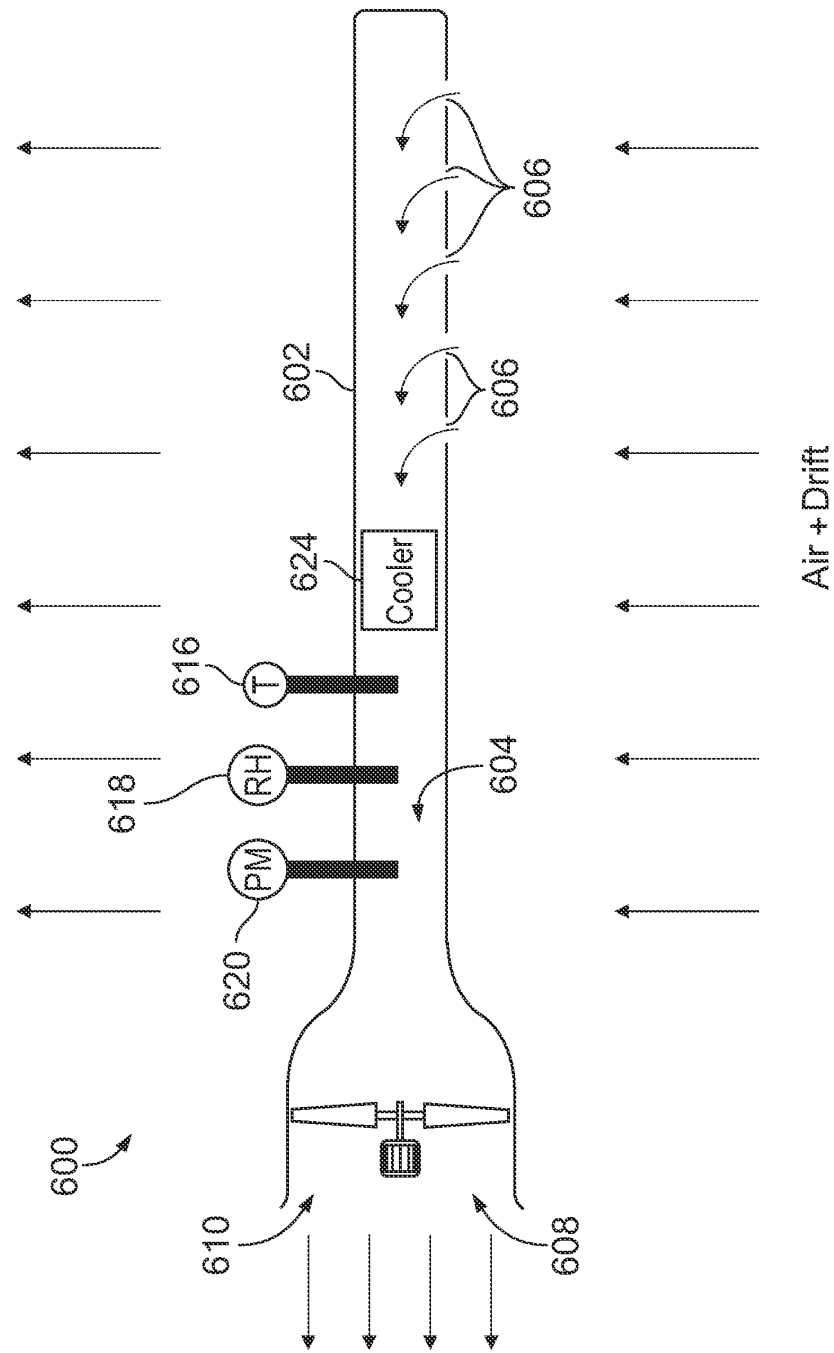


FIG. 26

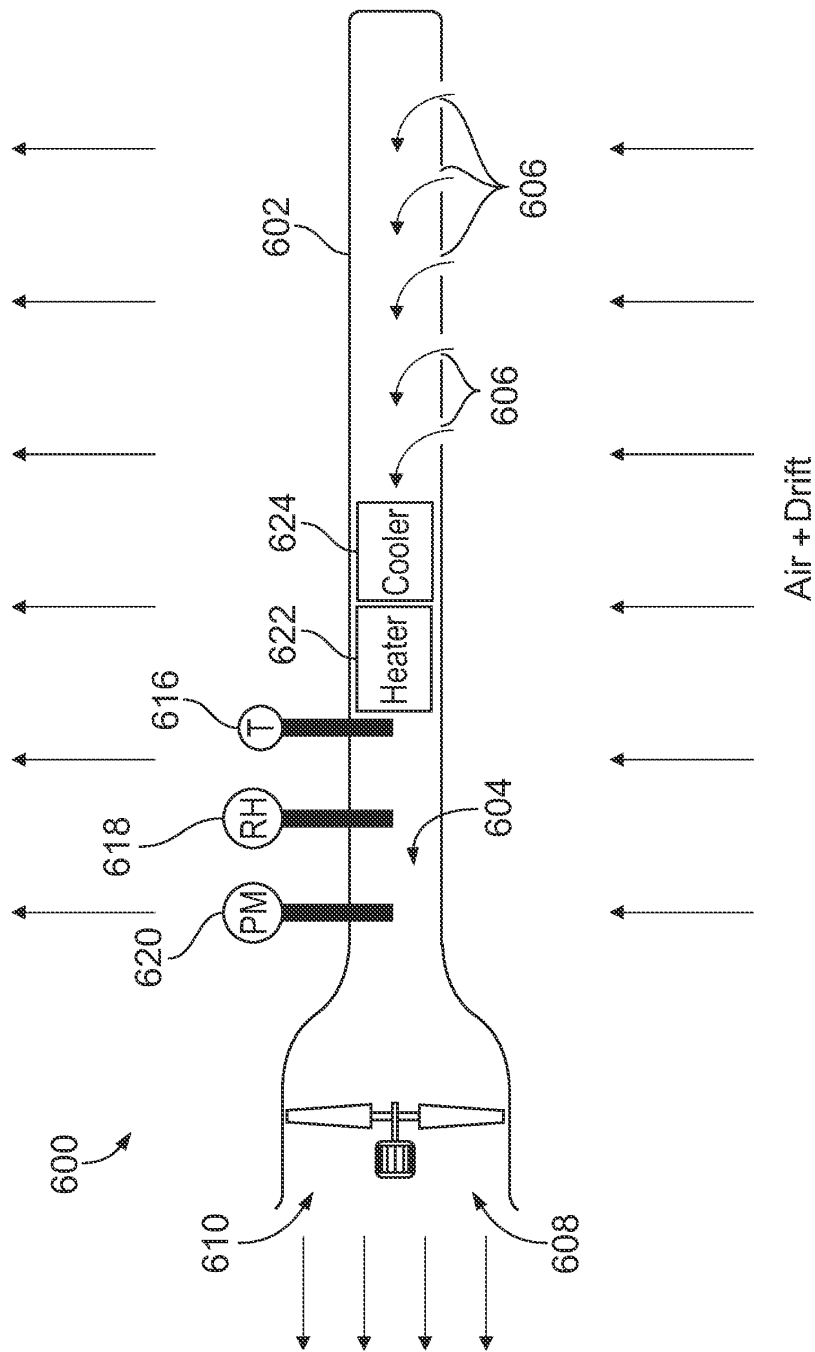


FIG. 27

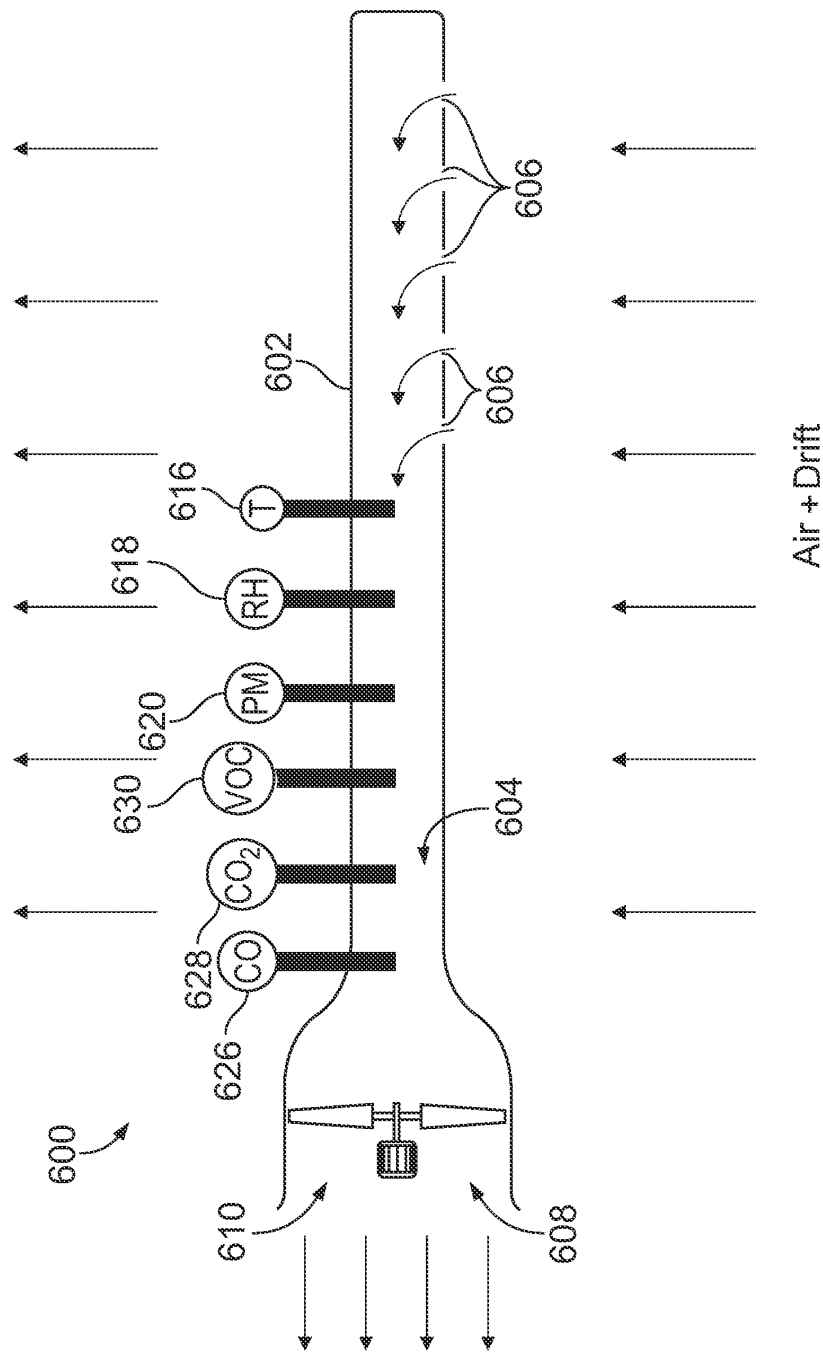


FIG. 28

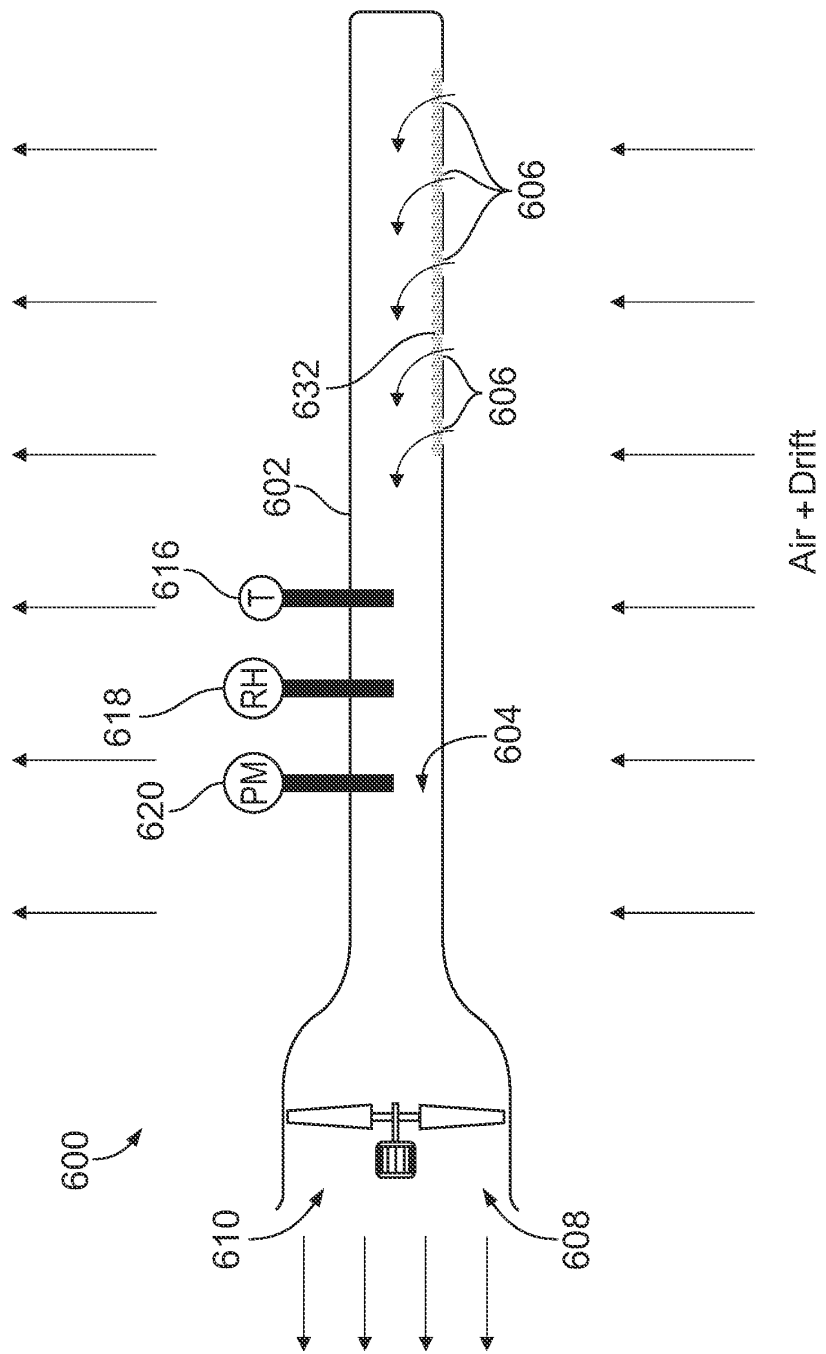


FIG. 29

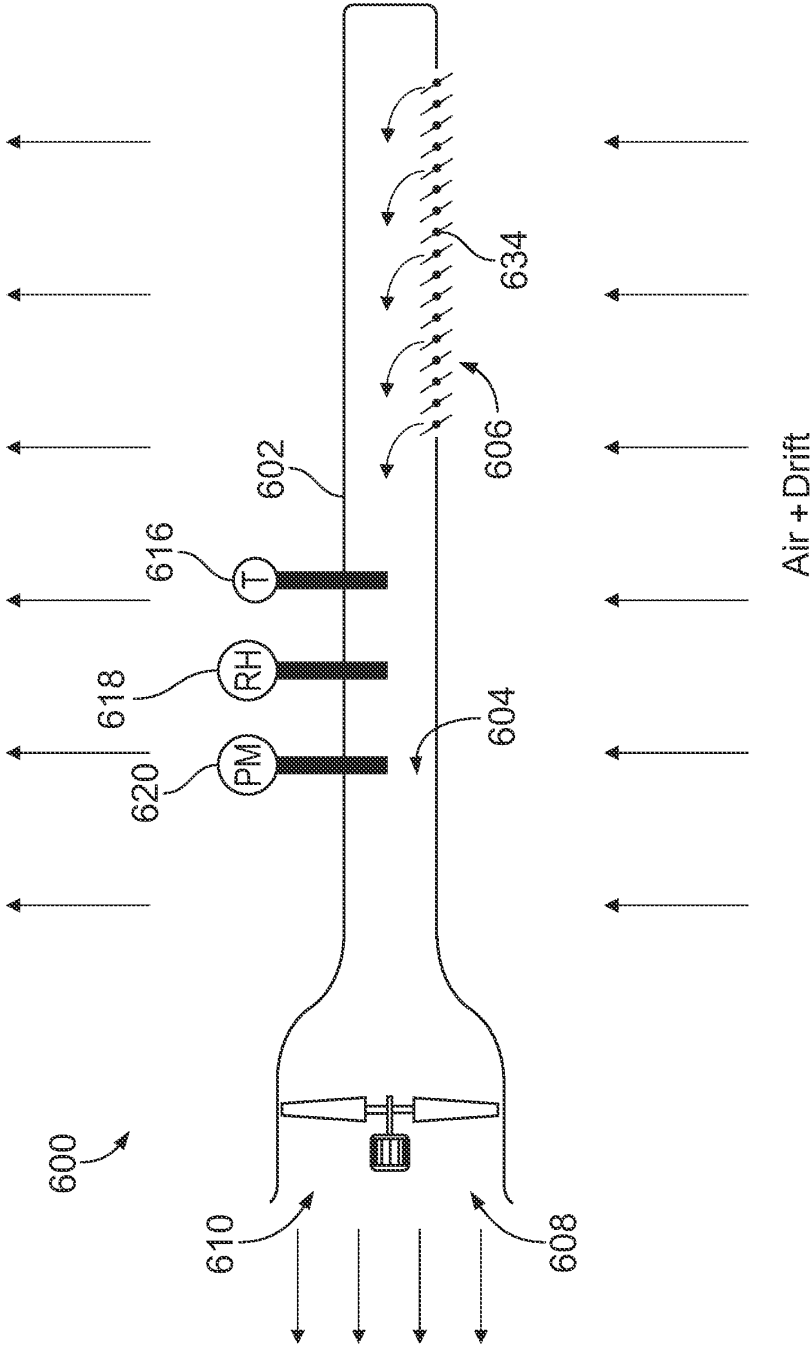


FIG. 30

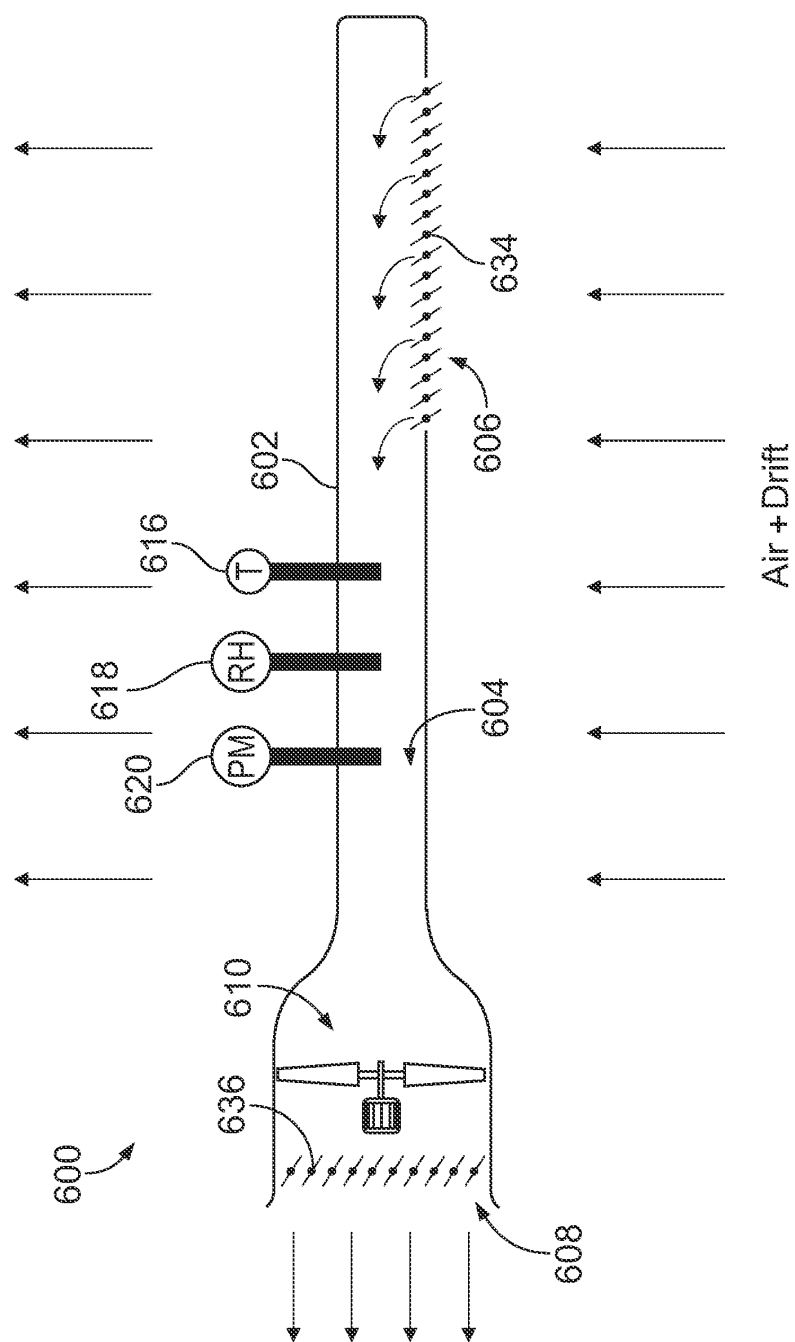


Figure 6

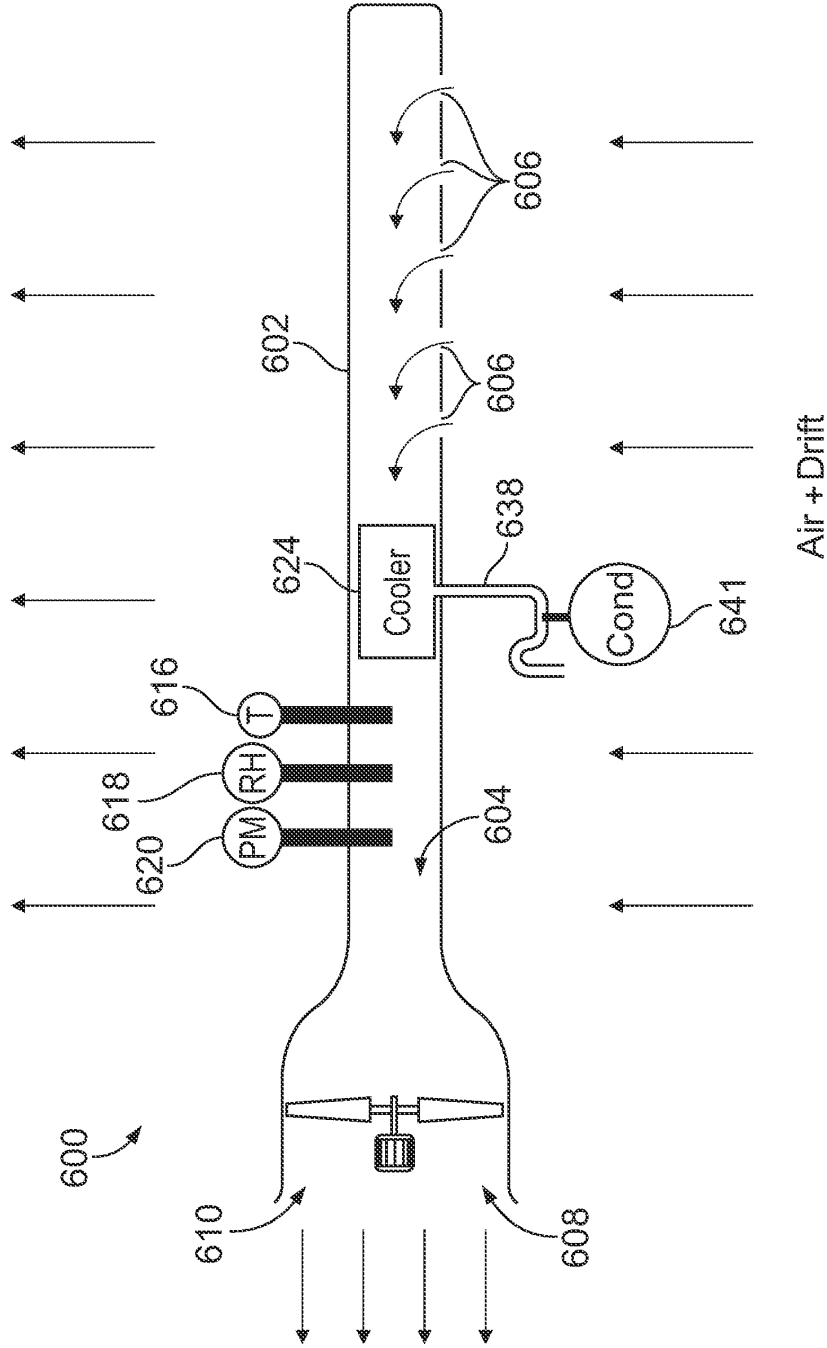


FIG. 32

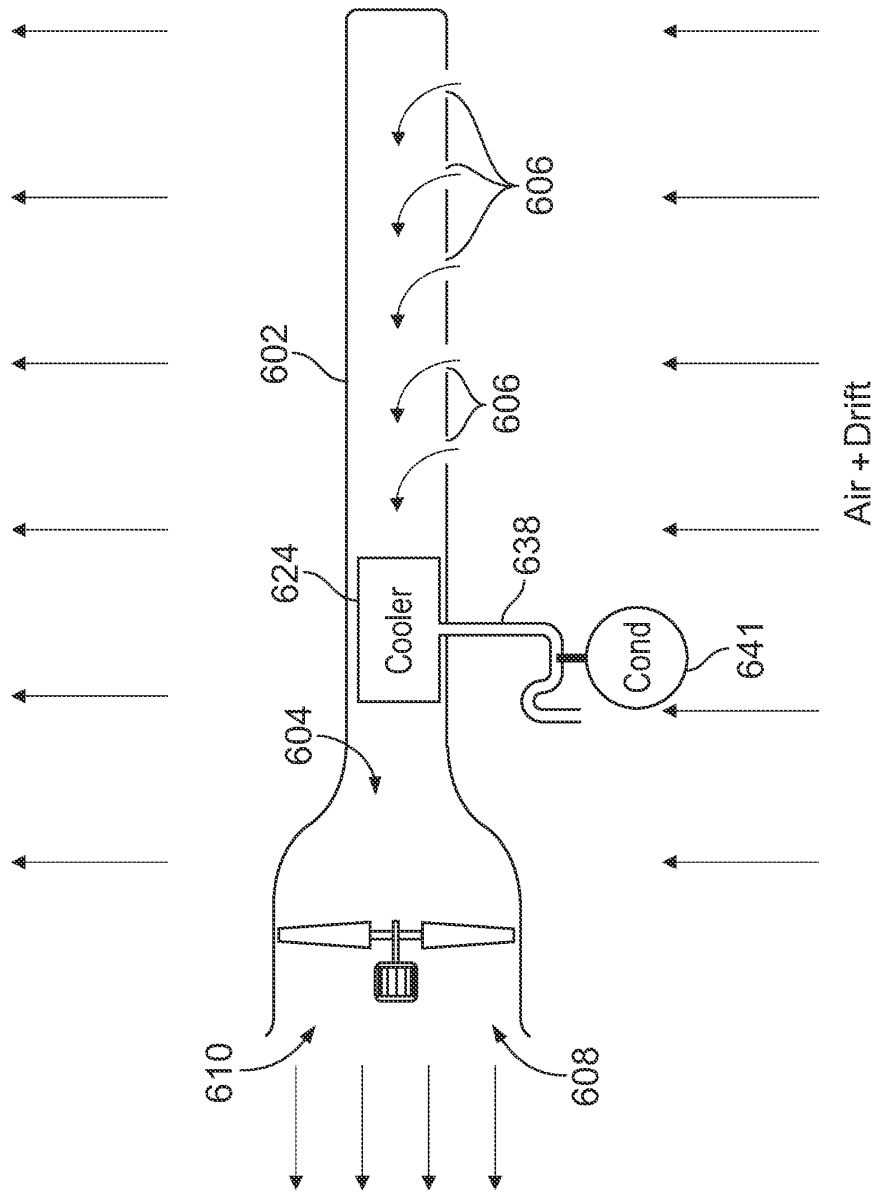


FIG. 33

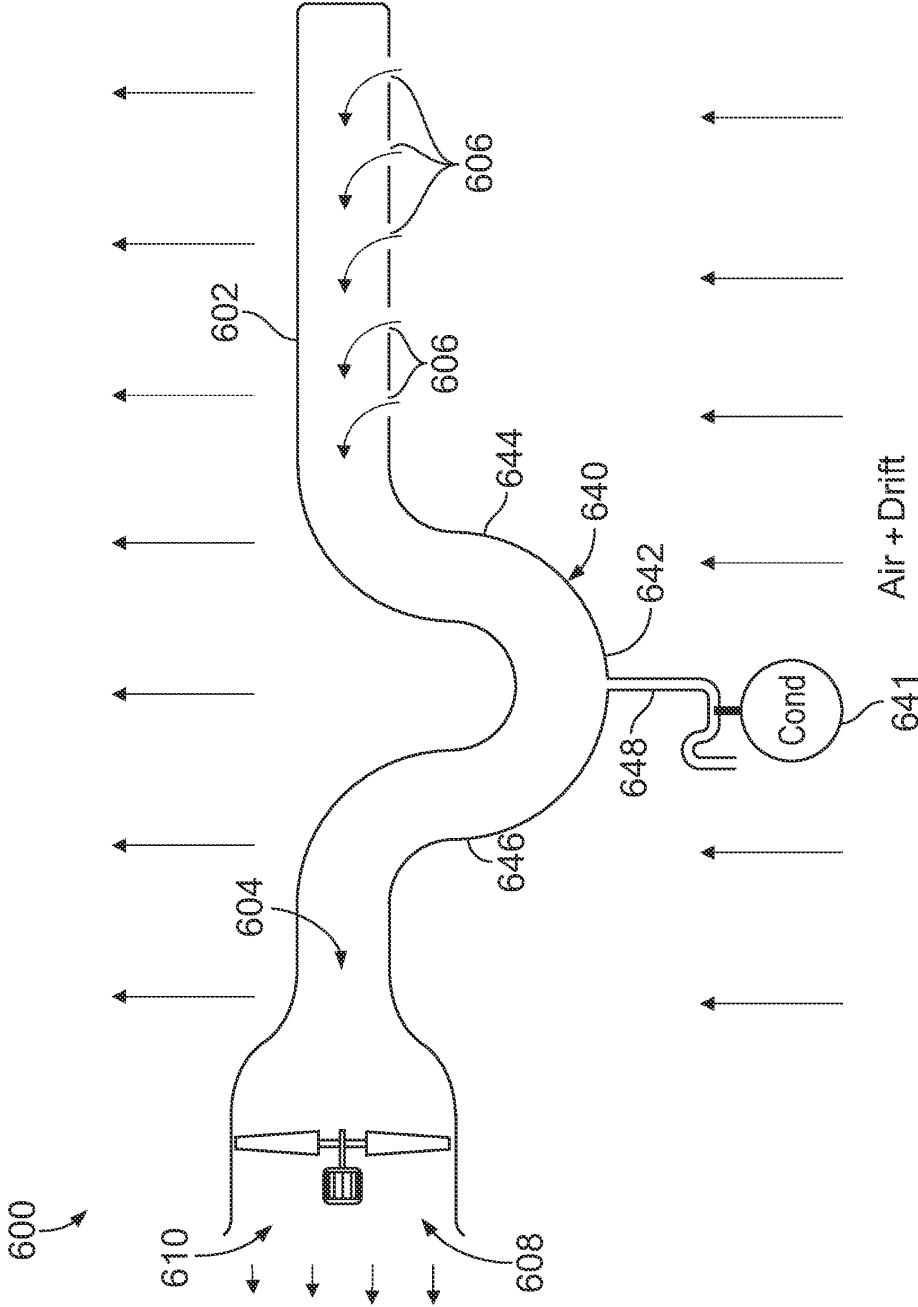


FIG. 34

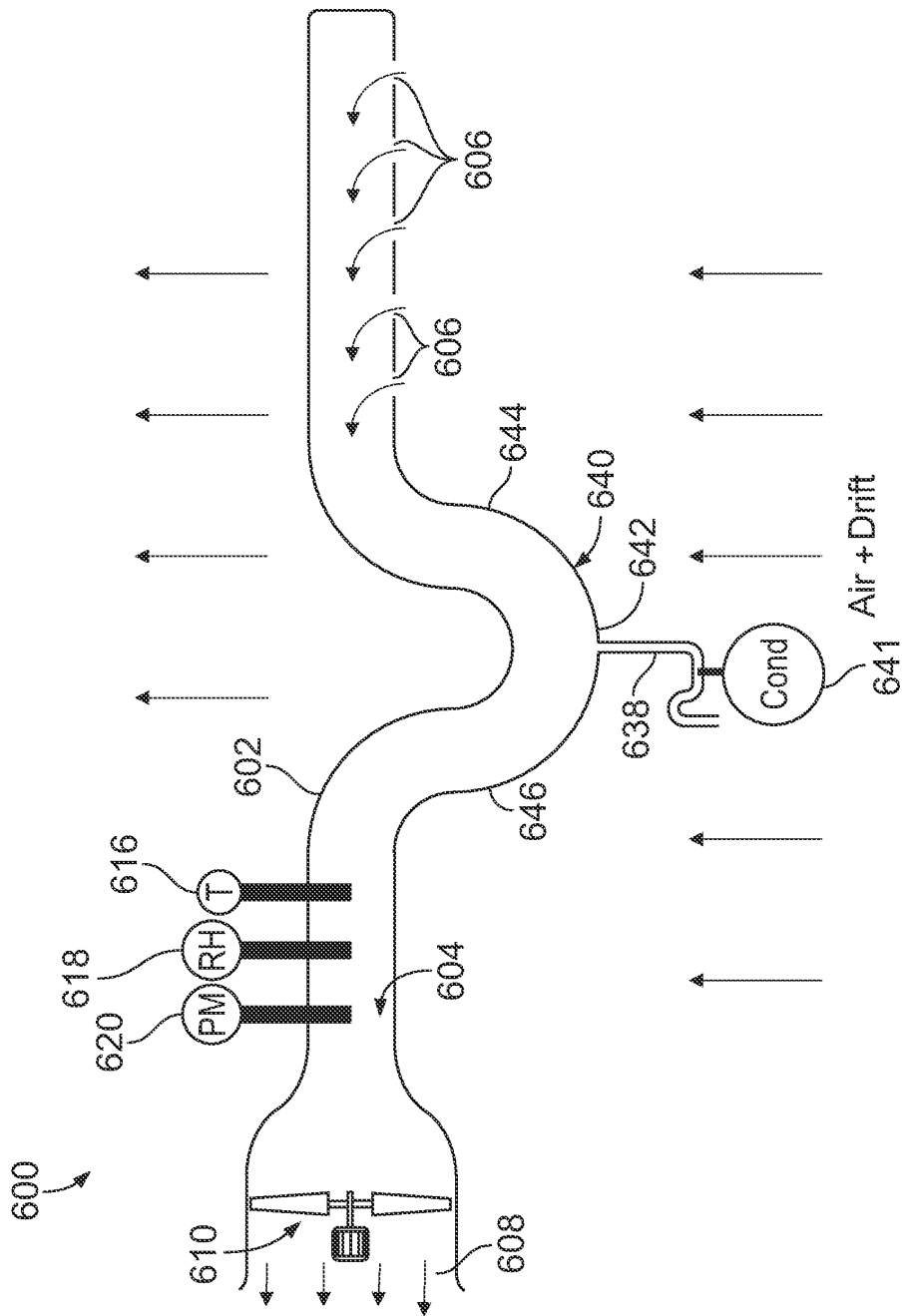


FIG. 35

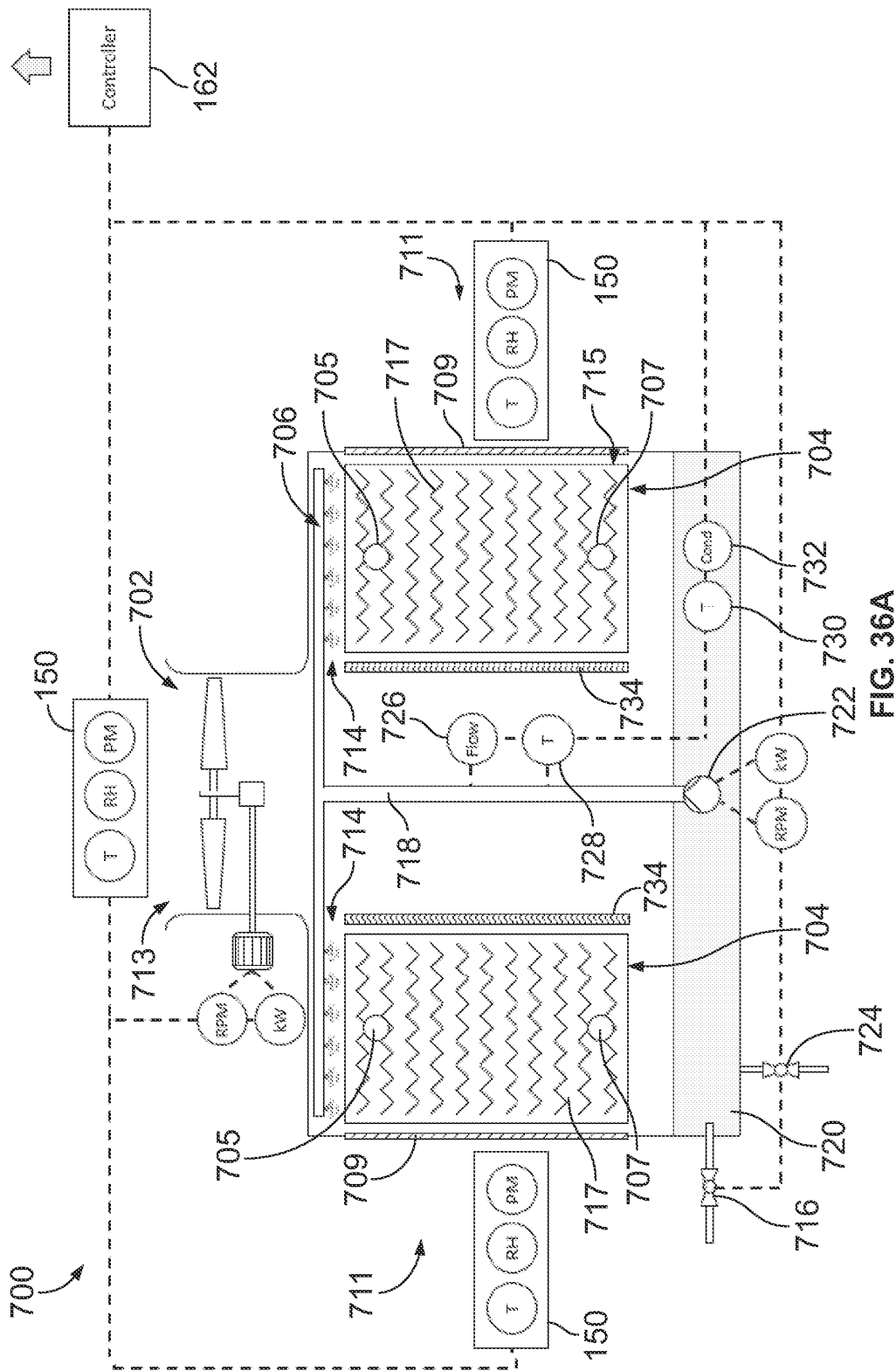
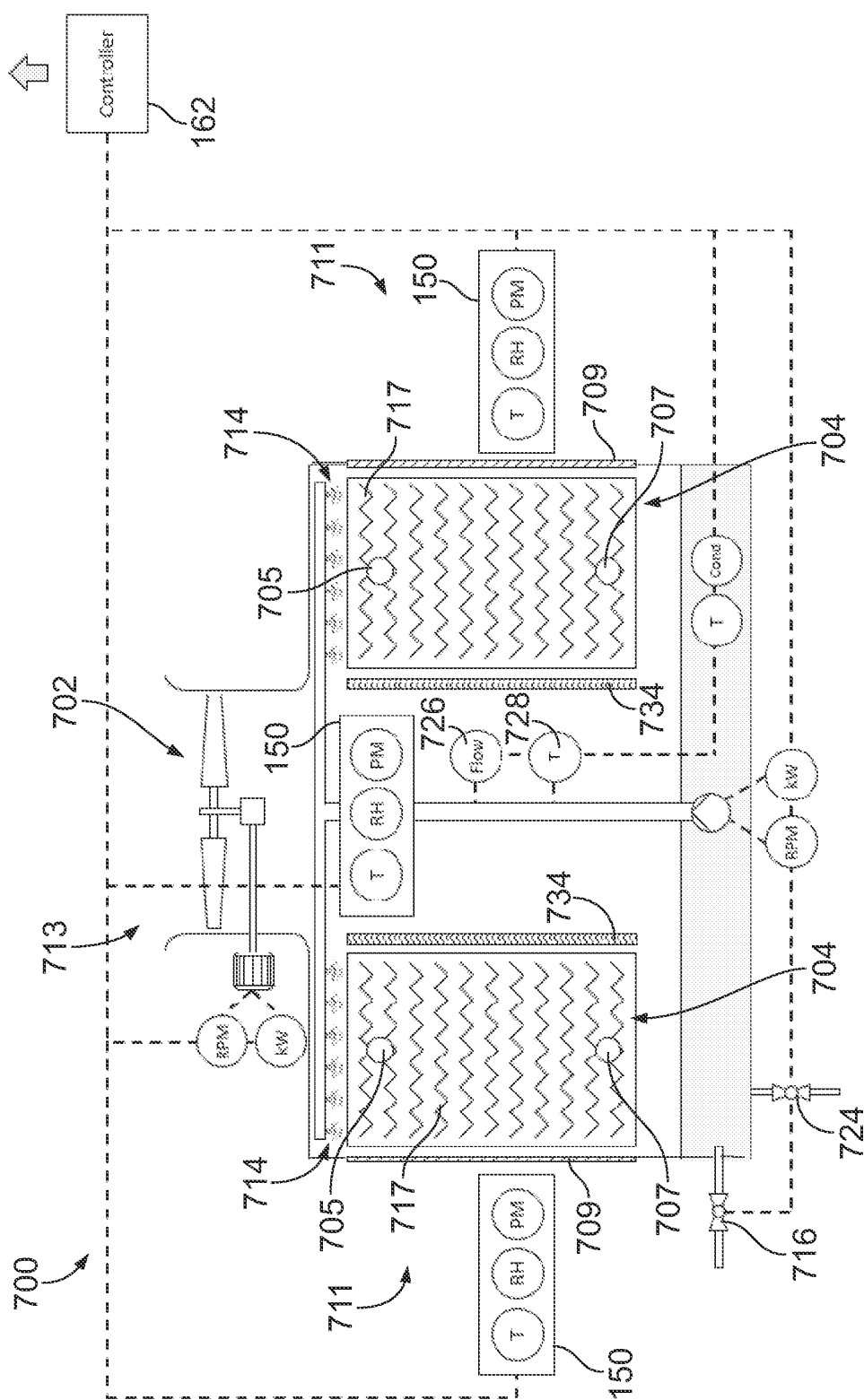
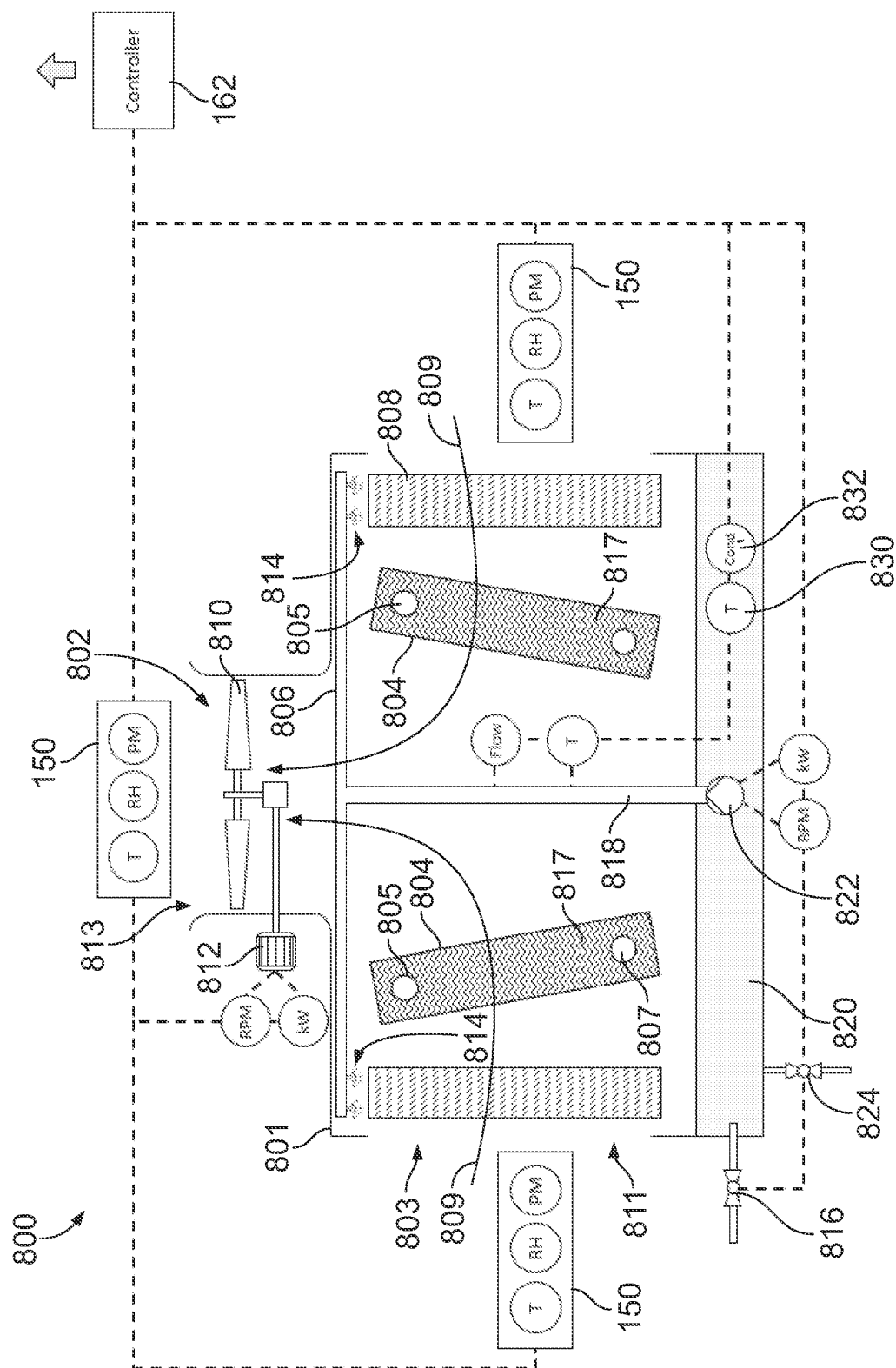


FIG. 36A





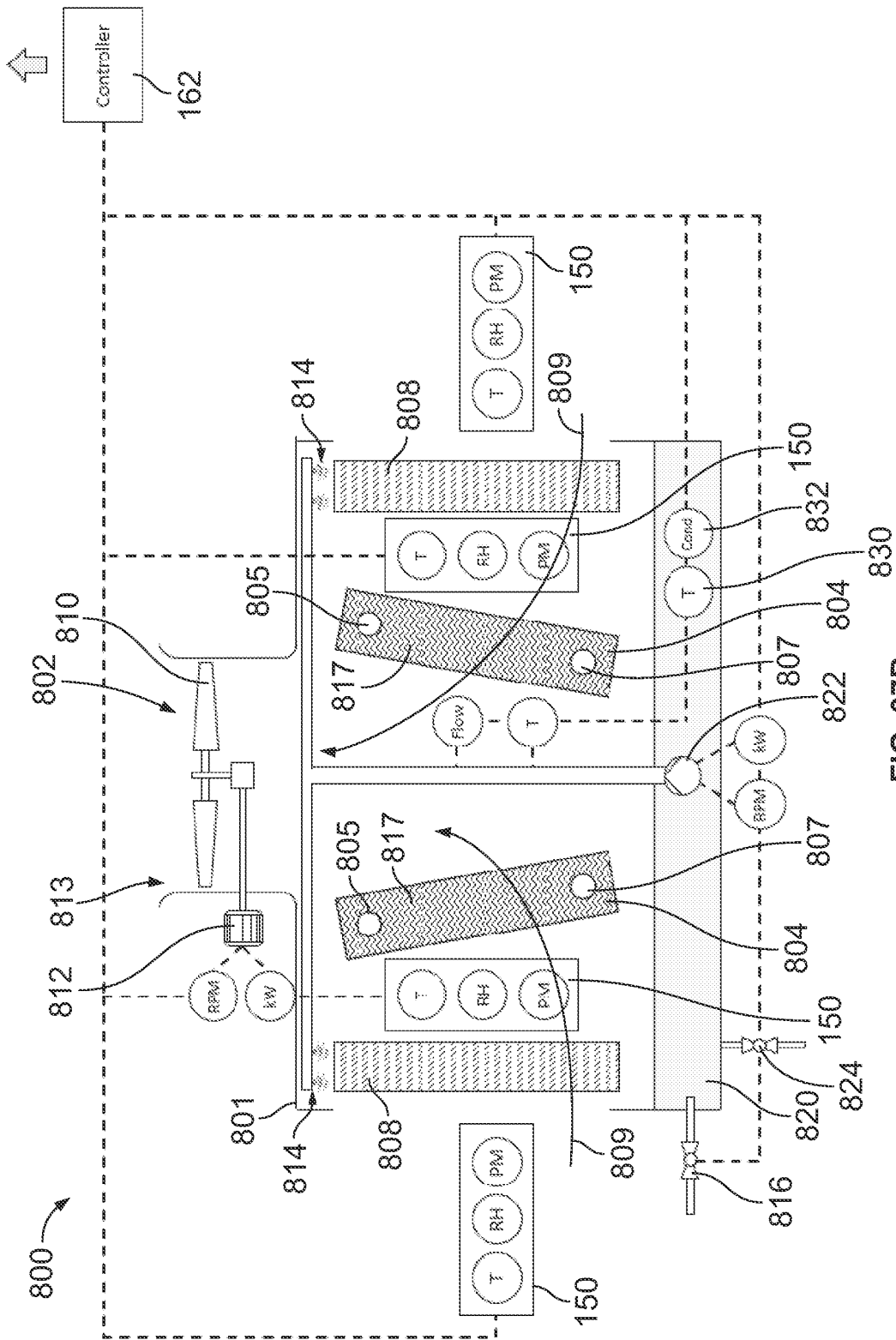


FIG. 37B

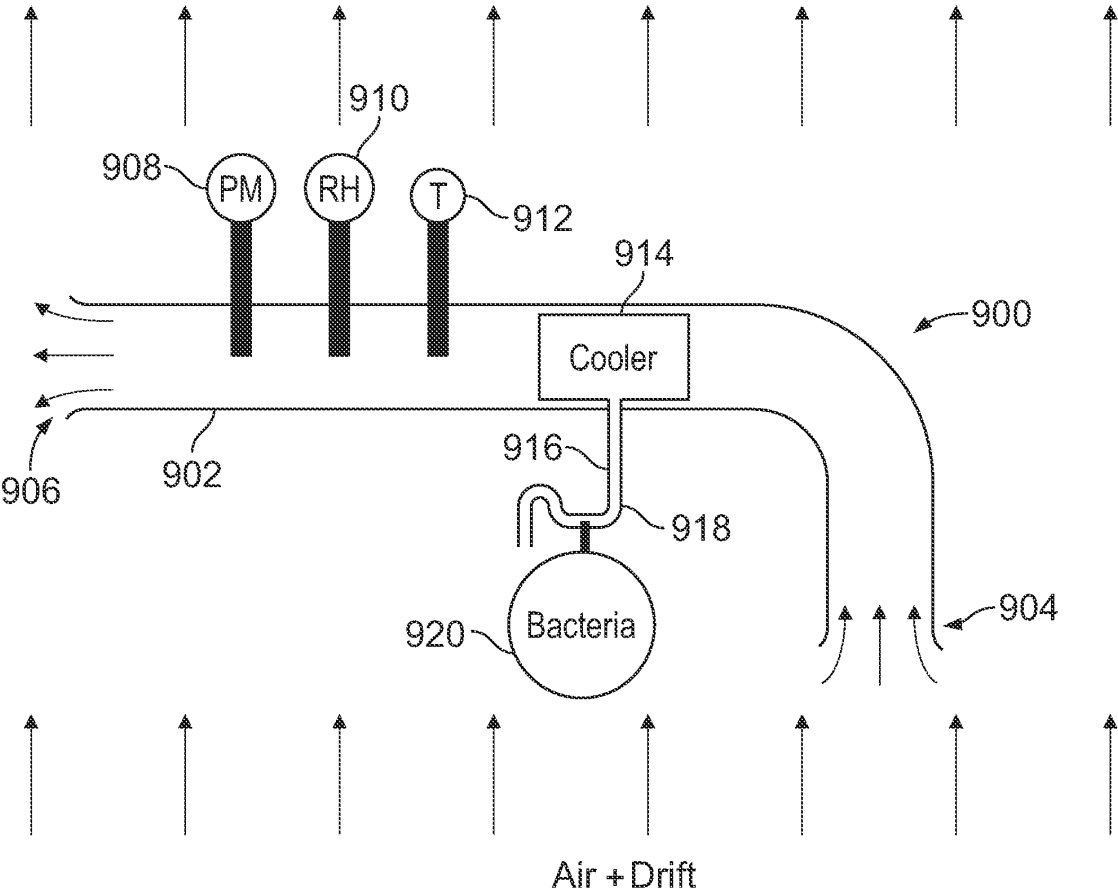


FIG. 38

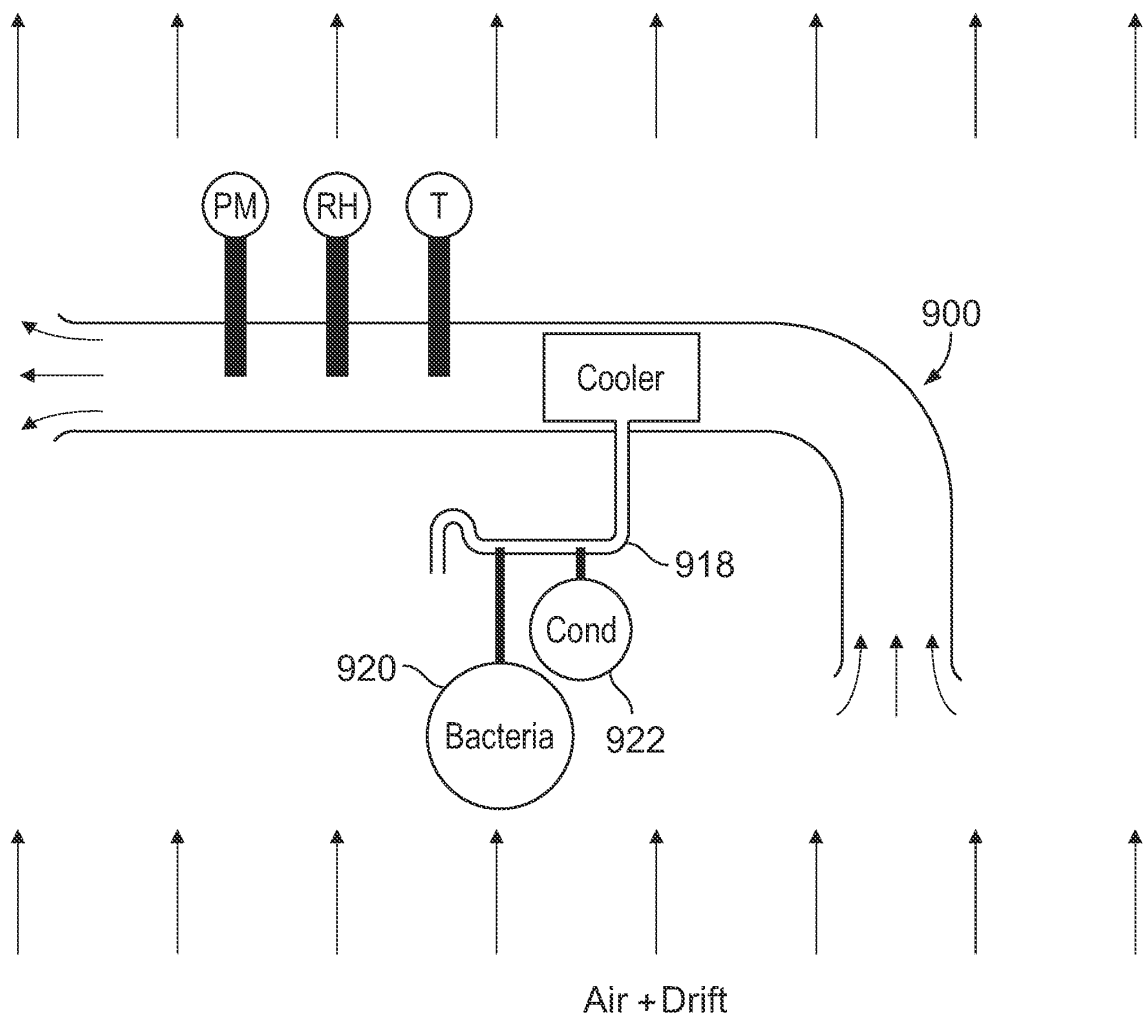


FIG. 39

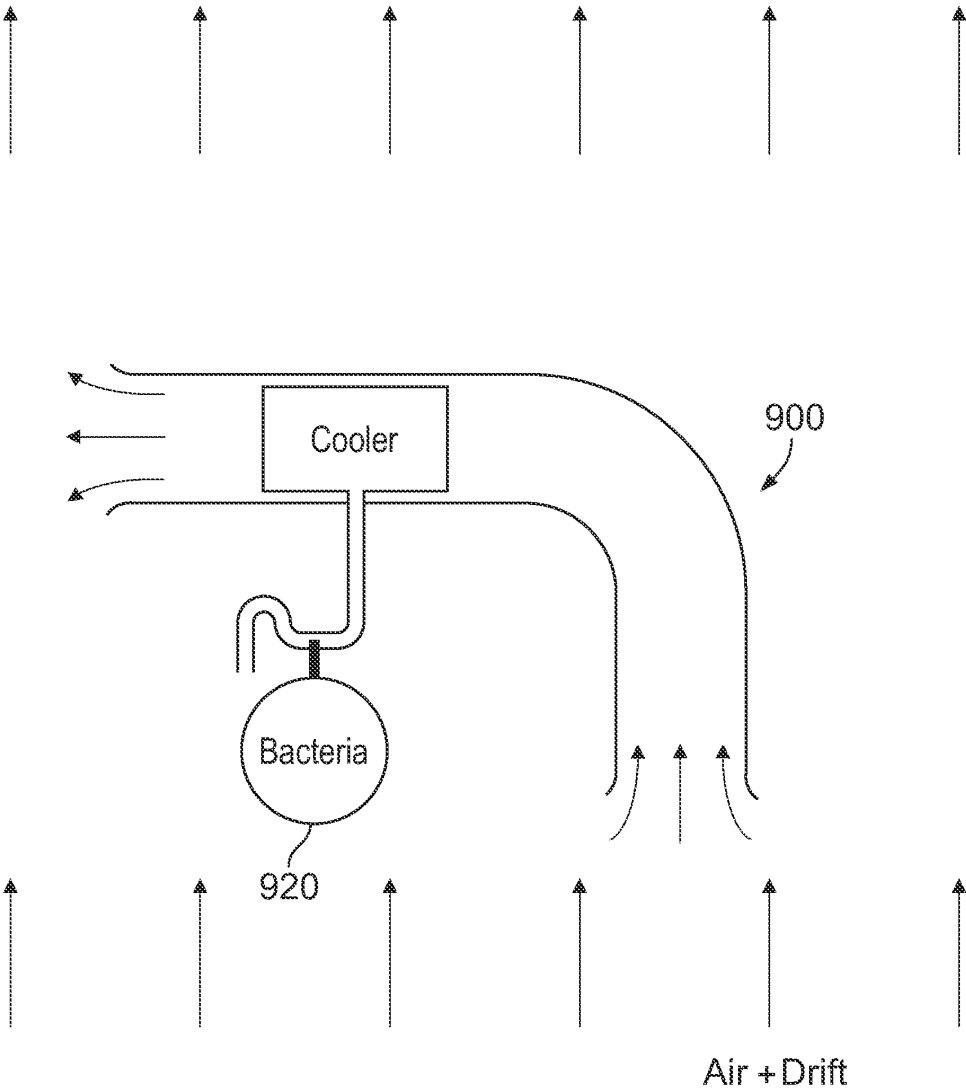


FIG. 40

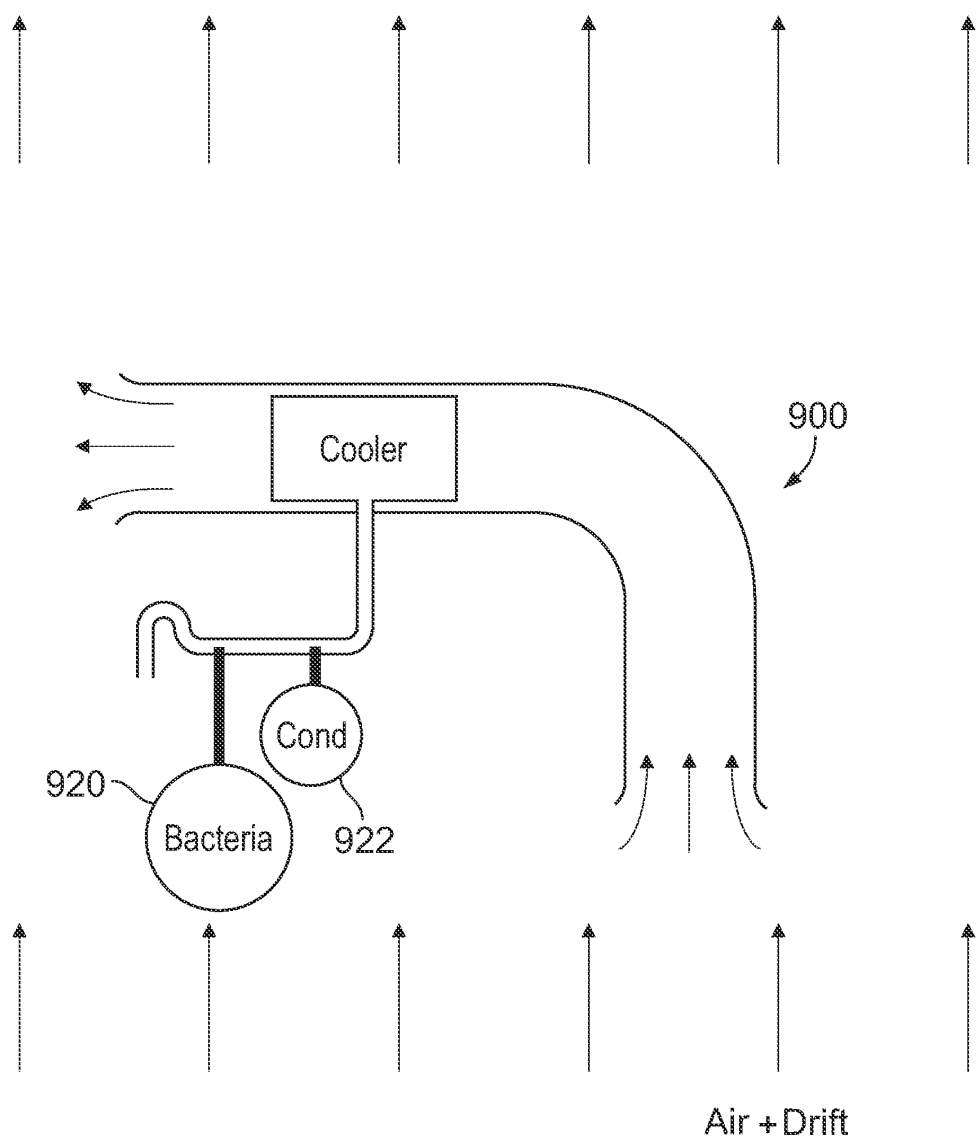


FIG. 41

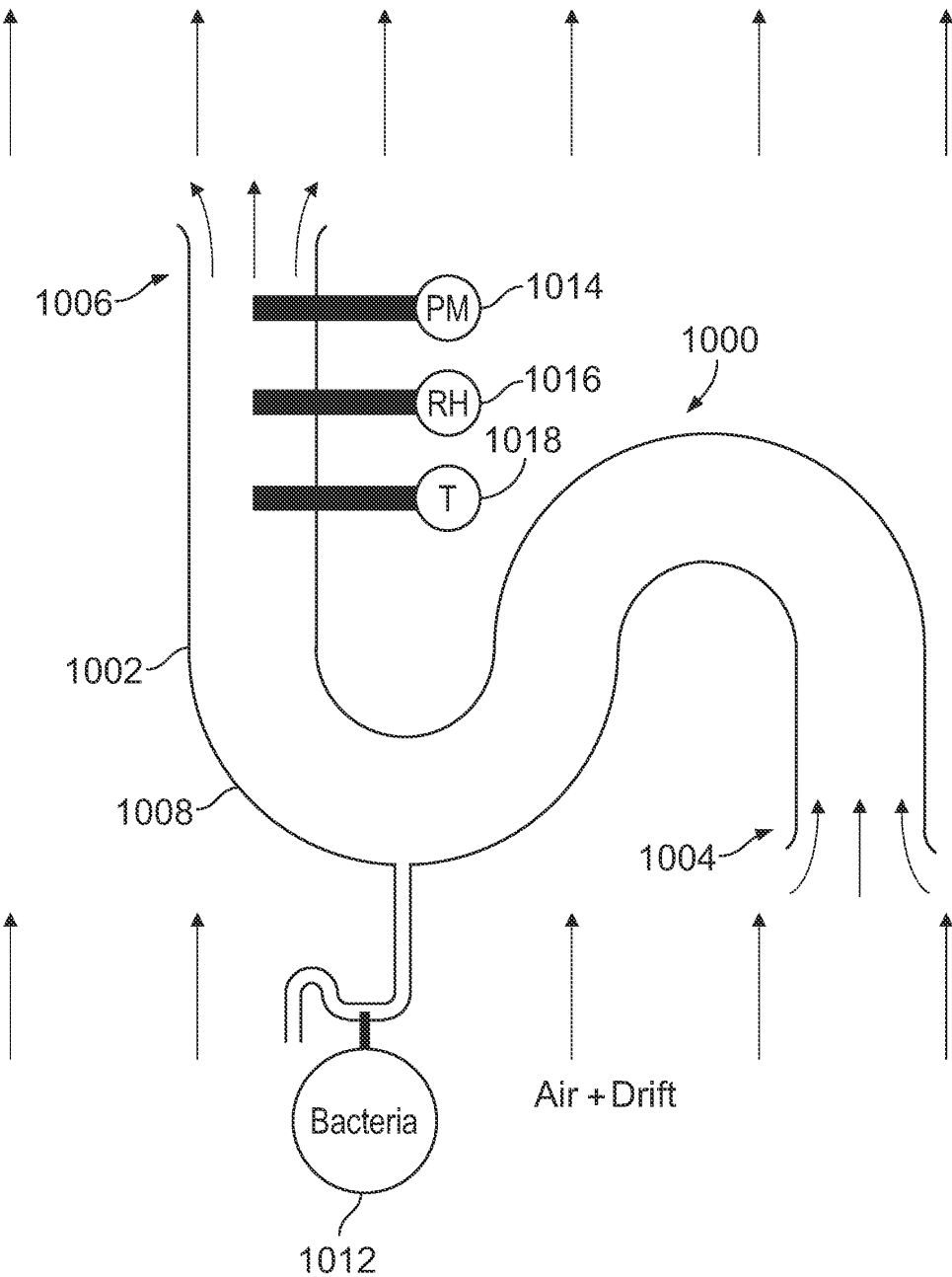


FIG. 42

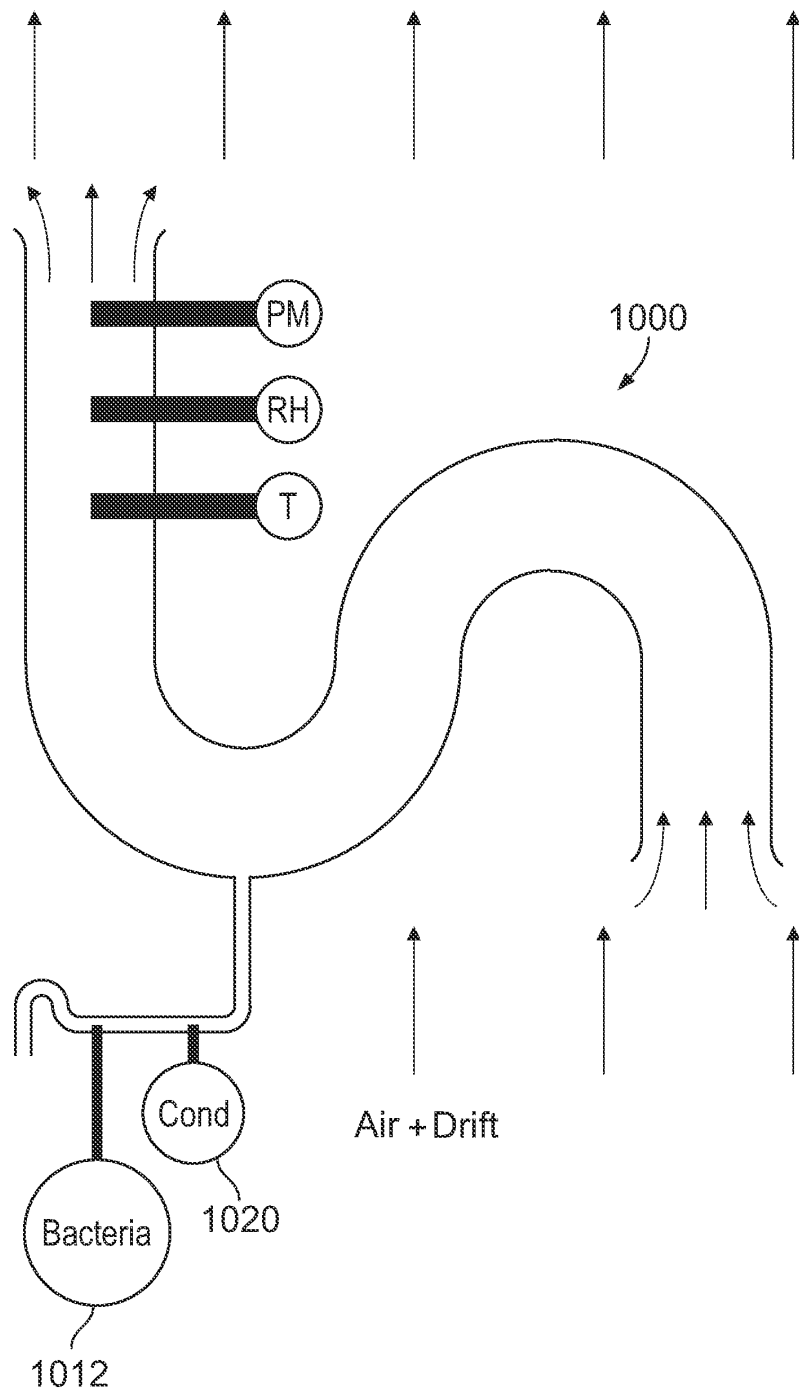


FIG. 43

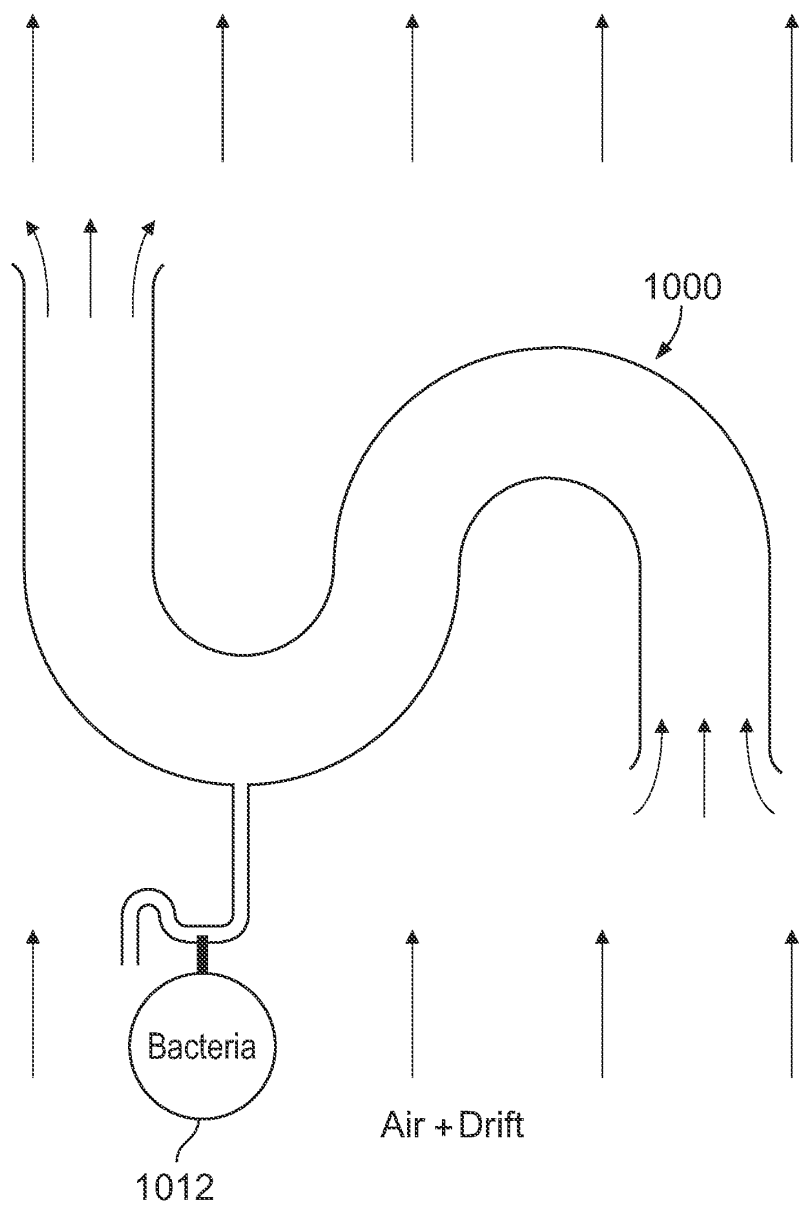


FIG. 44

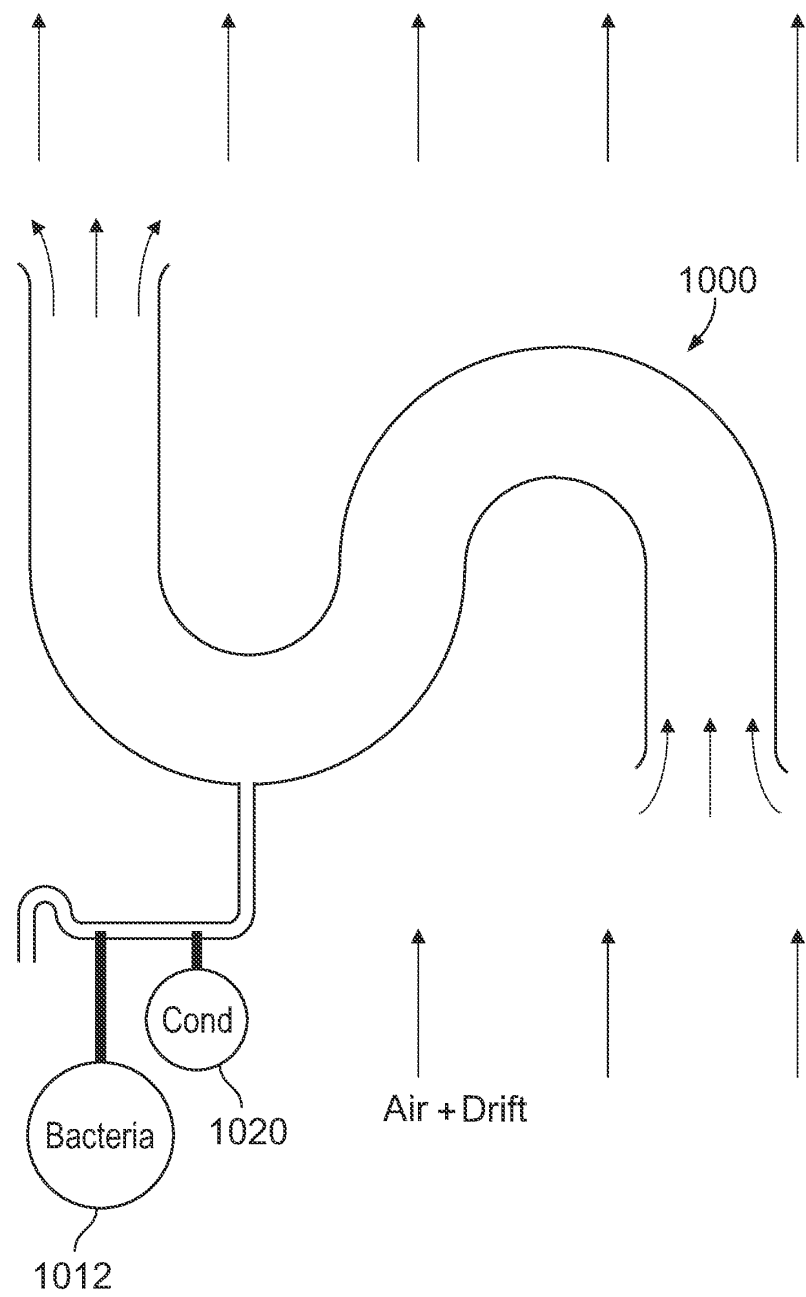


FIG. 45

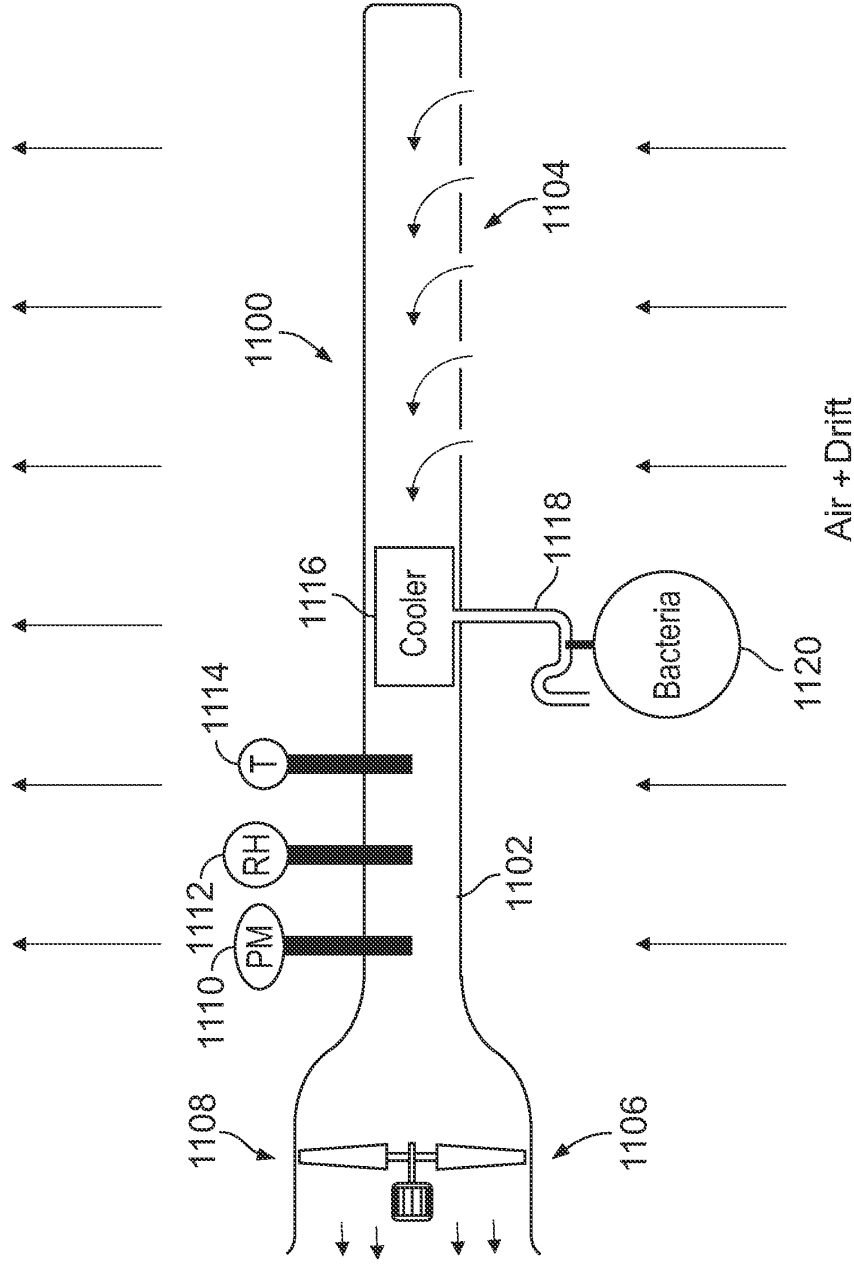


FIG. 46

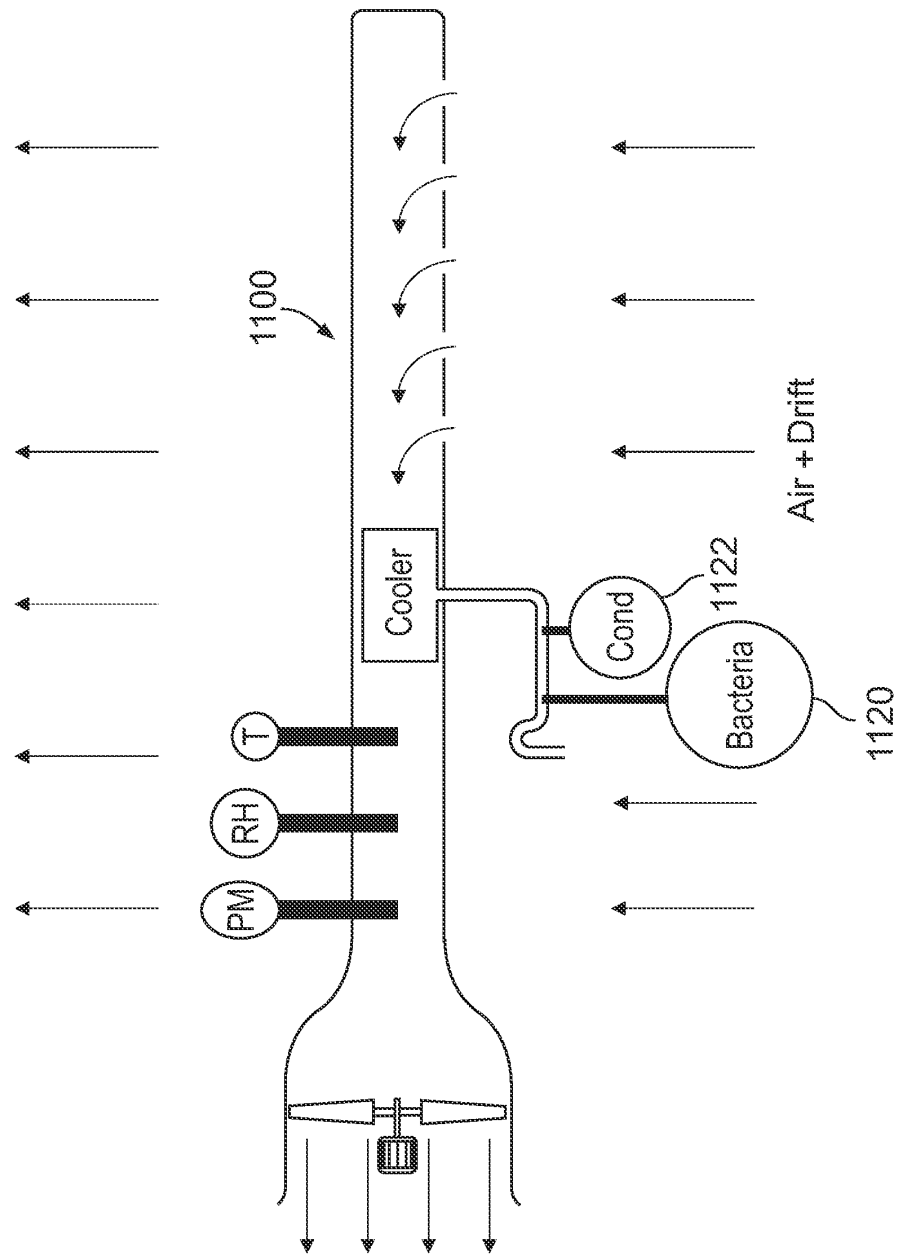


FIG. 47

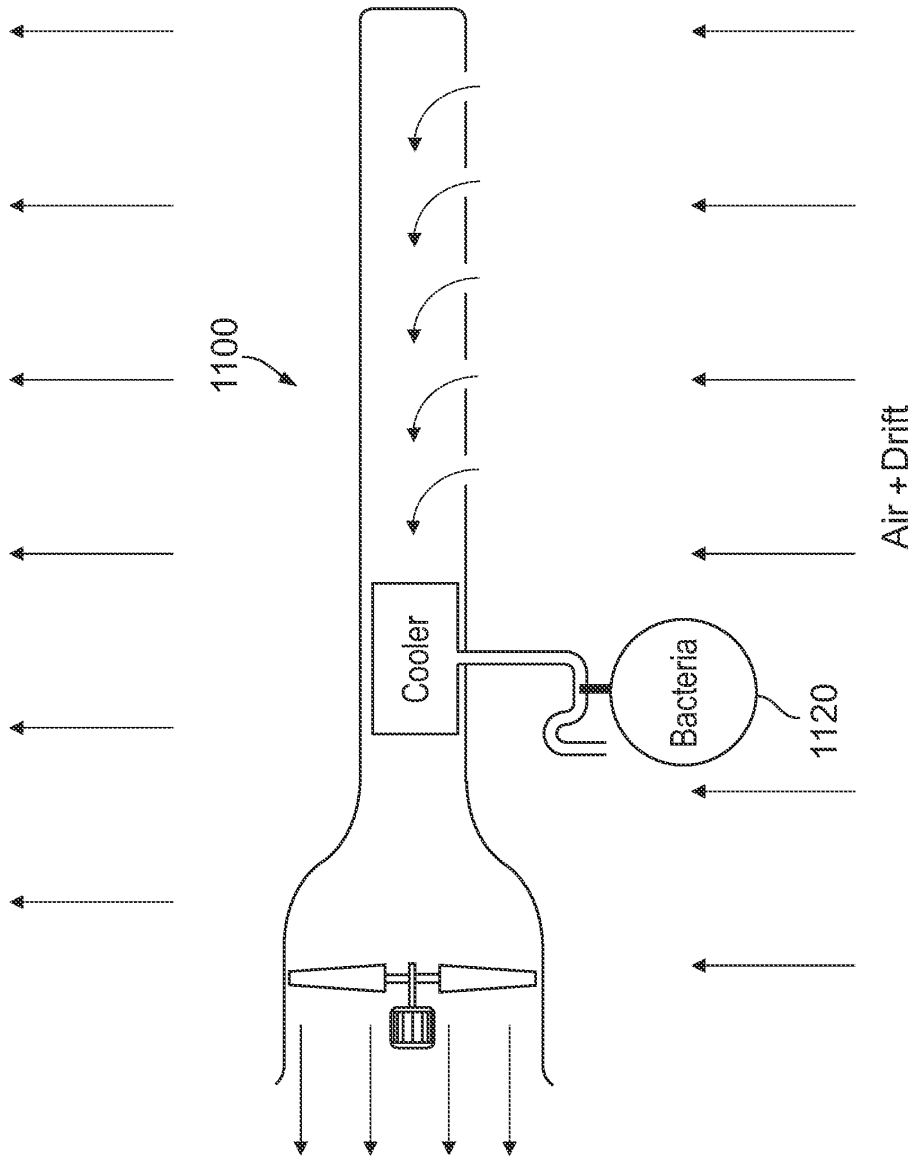


FIG. 48

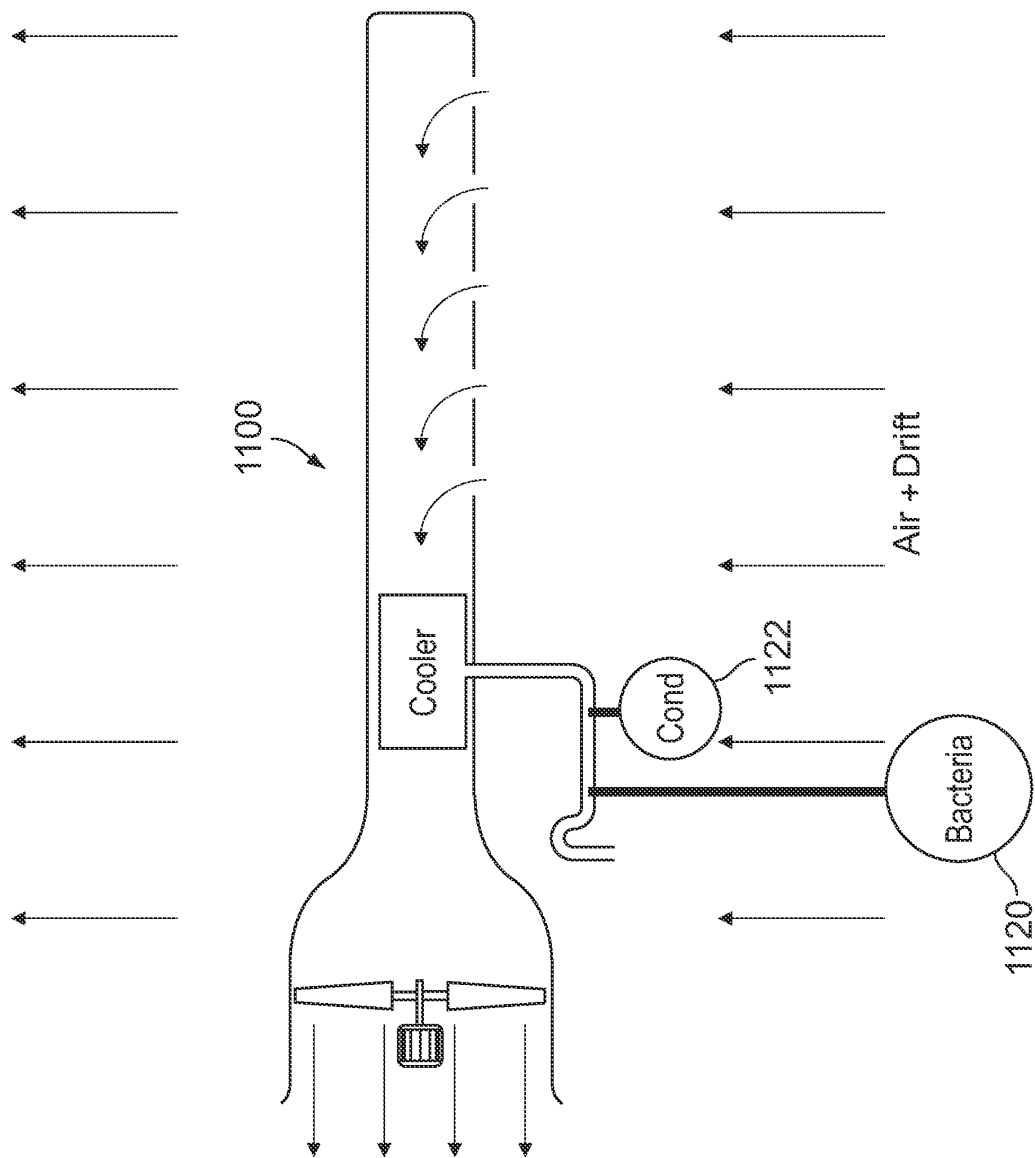


FIG. 49

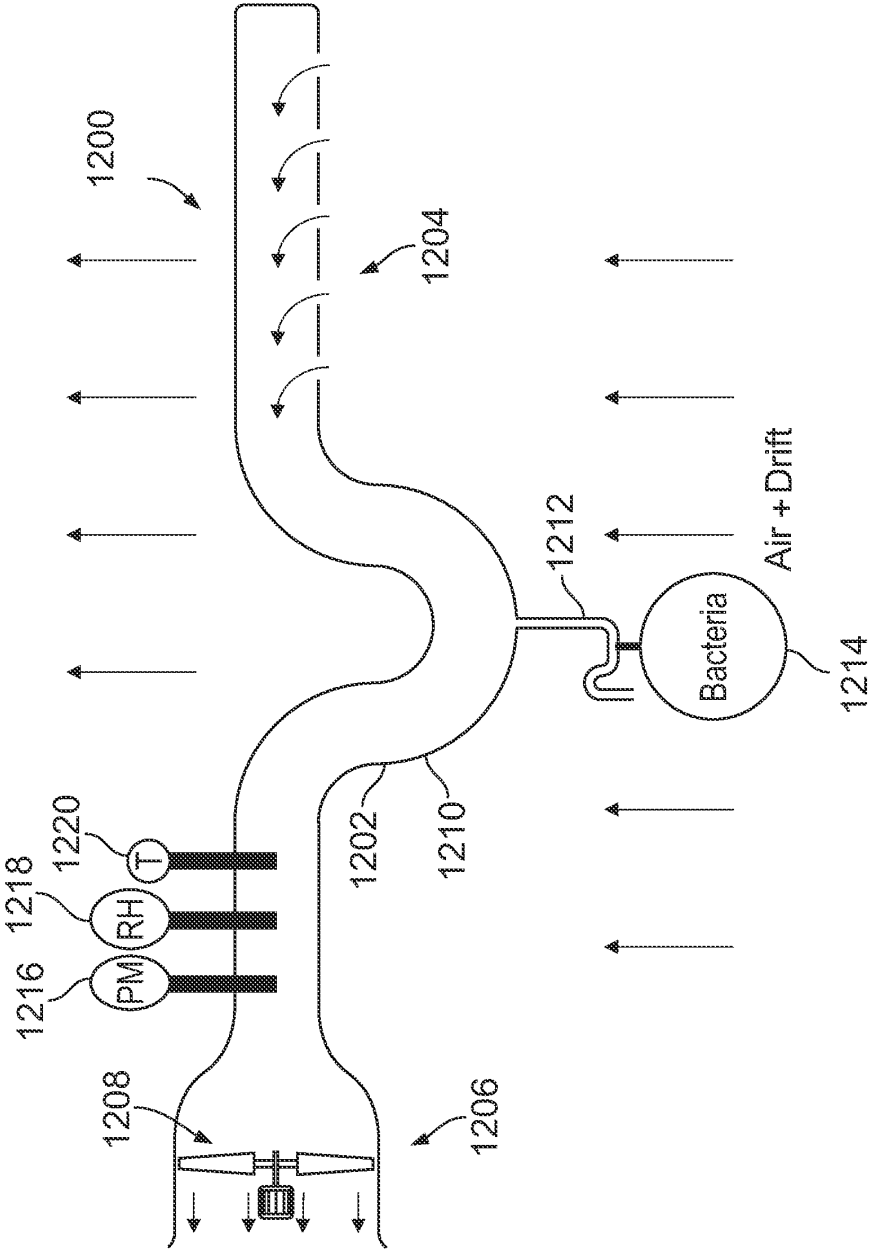


FIG. 50

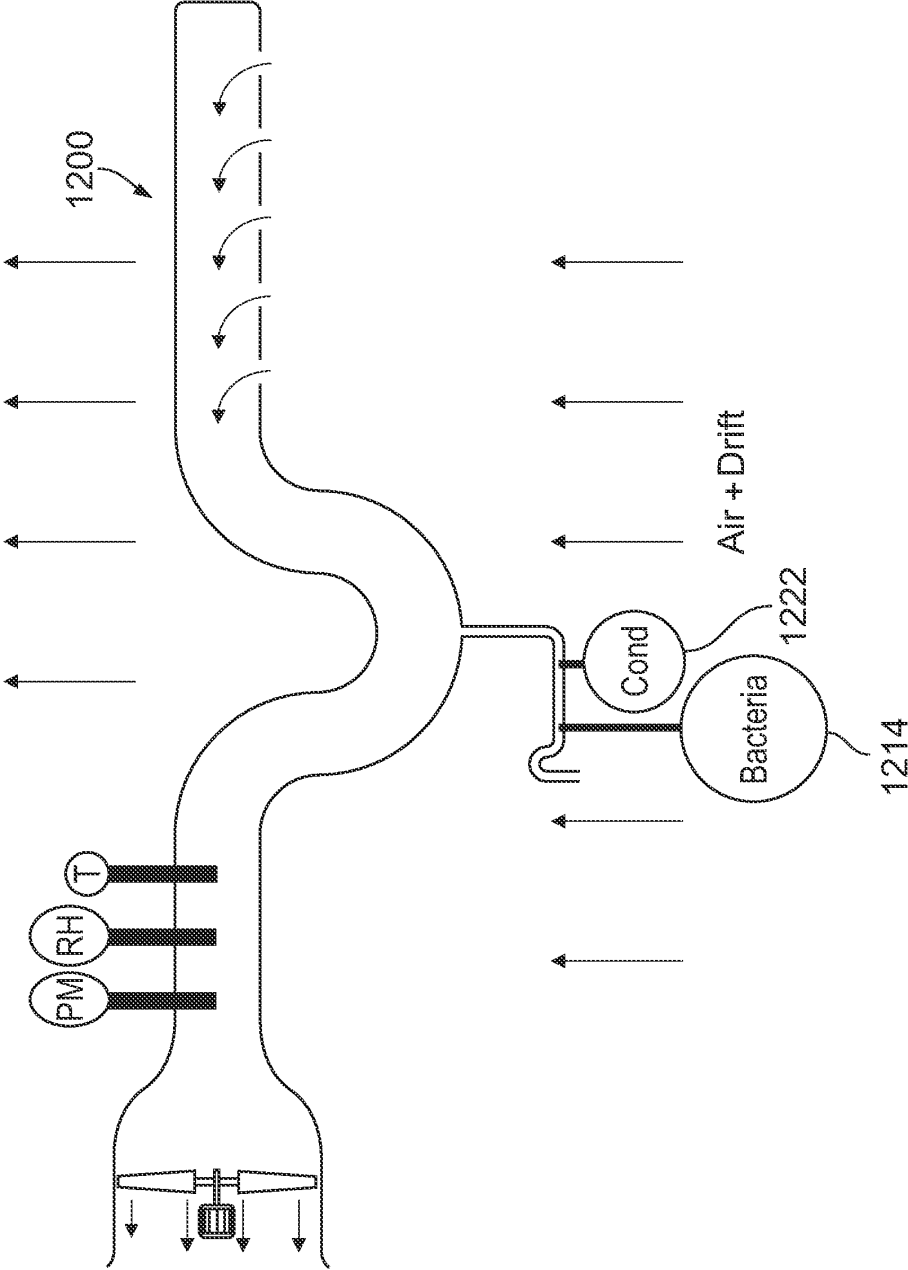


FIG. 51

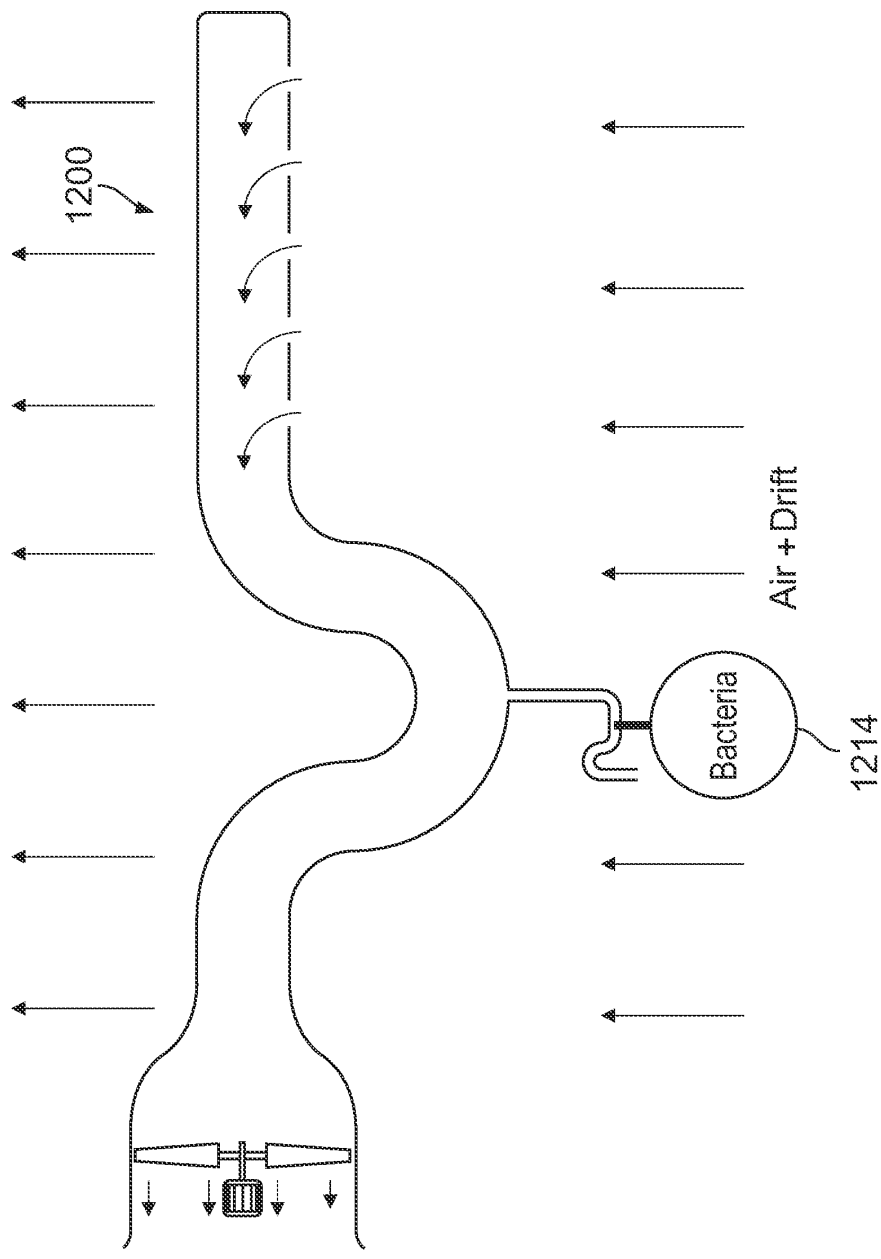


FIG. 52

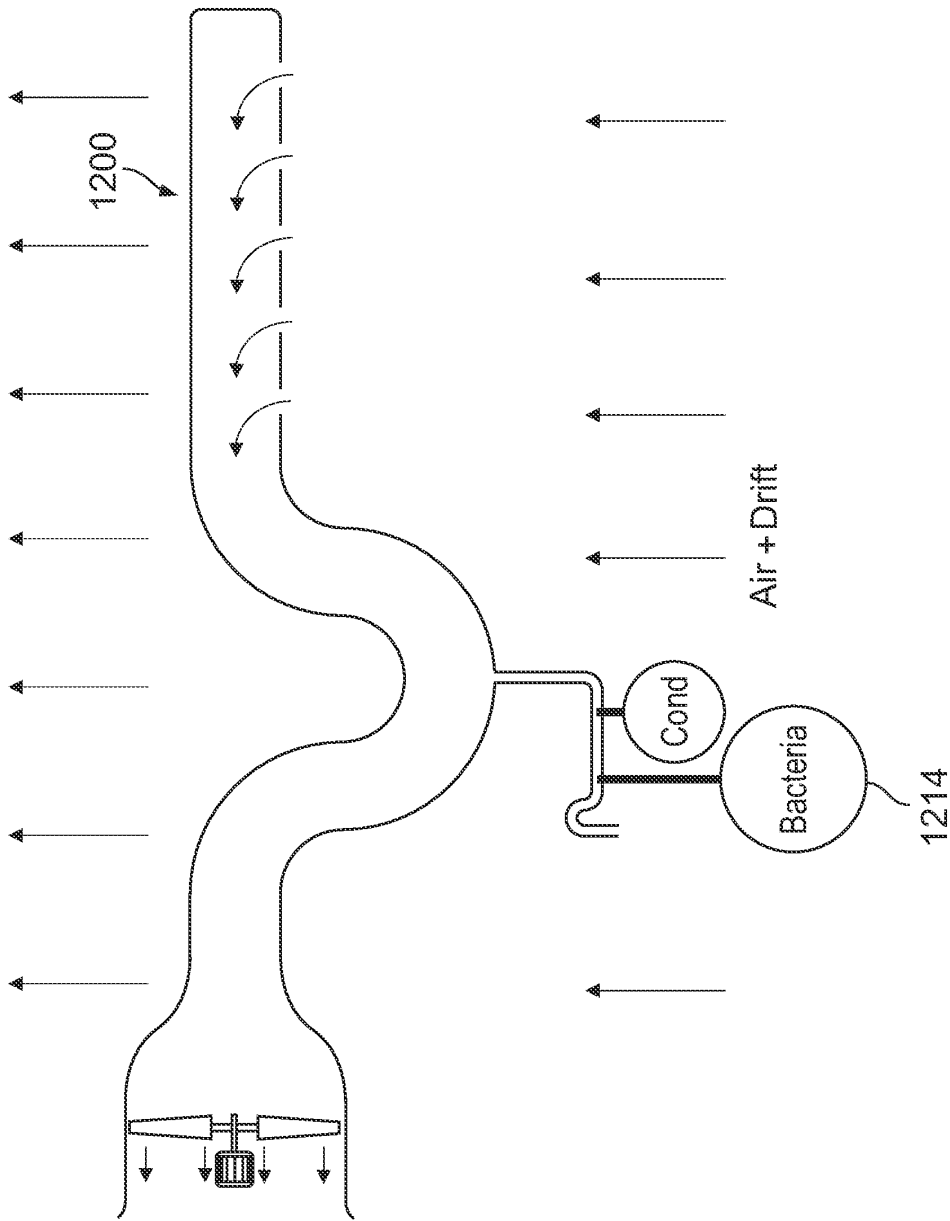


FIG. 53

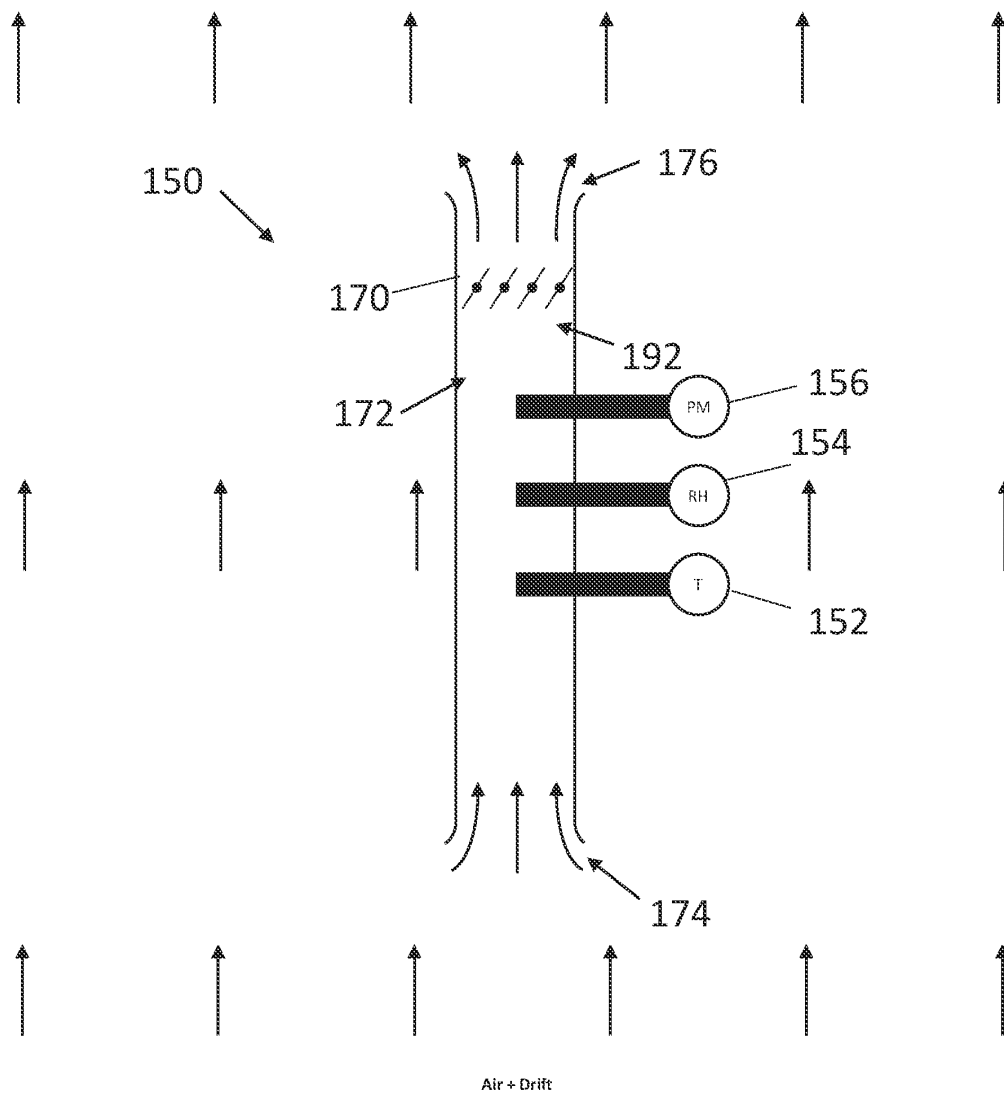


FIG. 54

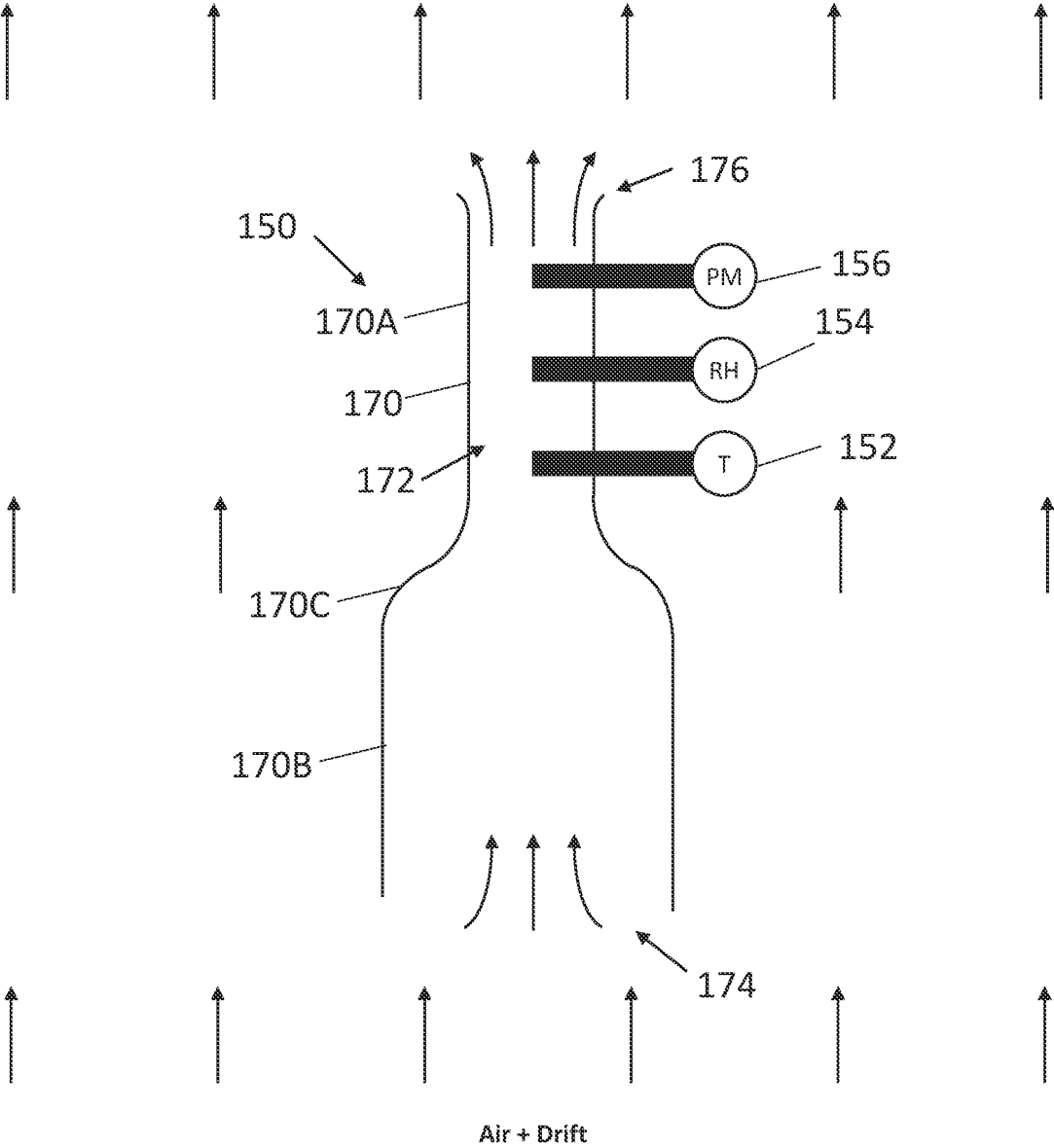


FIG. 55

1302

1304

1306

	Fan Speed (%)	Spray Water Status (-)	Spray Flow Rate (gpm)	Spray Water Conductivity (µS/cm)	Air Inlet				Air Outlet				Output		What does it tell us? (-)
					PM2.5 (µg/cm3)	PM10 (µg/cm3)	RH (%)	Tdry bulb (°F)	PM2.5 (µg/cm3)	PM10 (µg/cm3)	RH (%)	Tdry bulb (°F)	Drift Volume (gpm)	Drift Rate (%)	
Baseline	0.80	On	1000	1250	10	10	0.45	95.0	25	30	0.95	88.0	0.030	0.003	Baseline Conditions
New Condition 1	0.80	On	1000	1550↑	10	10	0.45	95.0	28↑	34↑	0.95	88.0	0.030	0.003	Normal change of drift rate
New Condition 2	0.80	On	1000	1250	10	10	0.45	95.0	35↑	42↑	0.95	88.0	0.060	0.006	Abnormal change of drift rate
Baseline	0.75	On	1000	1050	5	5	0.55	92.0	17	19	0.99	87.0	0.020	0.002	Baseline Conditions
New Condition 1	0.95↑	On	1000	1050	5	5	0.45	95.0	27↑	32↑	0.95↓	89.0↑	0.040	0.004	Normal change of drift rate
New Condition 2	0.80↑	On	1000	1250	5	5	0.45	95.0	35↑	42↑	0.95↓	88.0↑	0.070	0.007	Abnormal change of drift rate

FIG. 56A

	1302			1304							1306		What does it tell us? (-)		
	Fan Speed (%)	Spray Water Status (-)	Spray Flow Rate (gpm)	Spray Water Conductivity (µS/cm)	Air Inlet			Air Outlet			Output Drift Volume Rate (gpm)	Output Drift Rate (%)			
					PM2.5 (µg/cm3)	PM10 (µg/cm3)	RH (%)	Tdry bulb (°F)	PM2.5 (µg/cm3)	PM10 (µg/cm3)	RH (%)	Tdry bulb (°F)			
Baseline	0.50	On	1000	1750	10	10	0.45	95.0	18	21	0.99	88.0	0.010	0.001	Baseline Conditions
New Condition 1	0.50	On	1000	1750	30↑	45↑	0.45	95.0	45↑	60↑	0.99	88.0	0.020	0.002	Normal change of drift rate
New Condition 2	0.50	On	1000	1750	30↑	45↑	0.45	95.0	75↑	105↑	0.99	88.0	0.030	0.003	Normal change of drift rate
Baseline	1.00	On	1000	1050	25	25	0.35	97.0	57	68	0.85	93.0	0.040	0.004	Baseline Conditions
New Condition 1	0.85↓	On	1000	2550↑	25	25	0.35	97.0	75↑	82↑	0.91↑	91.0↓	0.040	0.004	Normal change of drift rate
New Condition 2	0.85↓	On	1000	2550↑	25	25	0.45	95.0	115↑	175↑	0.91↑	91.0↓	0.080	0.008	Abnormal change of drift rate

FIG. 56B

	Fan Speed (%)	Spray Water Status (-)	Spray Flow Rate (gpm)	Spray Water Conductivity (µS/cm)	Air Inlet				Air Outlet				Output		What does it tell us? (-)
					PM2.5 (µg/cm3)	PM10 (µg/cm3)	RH (%)	Tdry bulb (°F)	PM2.5 (µg/cm3)	PM10 (µg/cm3)	RH (%)	Tdry bulb (°F)	Drift Volume (gpm)	Drift Rate (%)	
Baseline	1.00	Off	0	1050	17	21	0.65	75.0	17	21	0.45	85.0	0.000	0.000	Baseline Conditions
New Condition 1	0.65↓	On↑	1000	1050	17	21	0.65	75.0	55↑	62↑	0.92↑	87.0↑	0.020	0.002	Normal change of drift rate
New Condition 2	0.65↓	On↑	1000	1050	17	21	0.65	75.0	115↑	121↑	0.92↑	87.0↑	0.060	0.006	Abnormal change of drift rate
Baseline	0.75	Off	0	1250	17	21	0.65	75.0	17	21	0.45	85.0	0.000	0.000	Baseline Conditions
New Condition 1	0.65↓	Off	0	1250	55↑	59↑	0.65	75.0	55↑	59↑	0.42↑	88.0↑	0.000	0.000	Normal change of drift rate (spray is off)
New Condition 2	0.50↓	On↑	1000	1050↓	55↑	59↑	0.65	75.0	105↑	107↑	0.93↑	89.0↑	0.070	0.007	Abnormal change of drift rate

FIG. 56C

1320

1322	Spray Water		Spray	Air Inlet			Air Outlet			Output		What does it tell us? (-)			
	Fan Speed (%)	Water Status (-)	Flow Rate (gpm)	Conductivity (µS/cm)	PM2.5 (µg/cm3)	PM10 (µg/cm3)	RH (%)	Tdry bulb (°F)	PM2.5 (µg/cm3)	PM10 (µg/cm3)	RH (%)		Tdry bulb (°F)	Volume (gpm)	Drift Rate (%)
Baseline	0.75	On	1000	750	17	21	0.65	75.0	17	21	0.45	85.0	0.030	0.003	Baseline Conditions
New Condition 1	0.75	On	1250↑	750	17	21	0.65	75.0	27↑	35↑	0.45	85.0	0.050	0.004	Normal change of drift rate
New Condition 2	0.75	On	1250↑	750	17	21	0.65	75.0	99↑	108↑	0.45	85.0	0.100	0.008	Abnormal change of drift rate

1326 1324 1330 1328 1332 1334

1336

FIG. 56D

1350

1352	Spray Water		Spray		Air Inlet			Air Outlet			Output		What does it tell us?		
	Fan Speed (%)	Water Status (-)	Flow Rate (gpm)	Conductivity (µS/cm)	PM2.5 (µg/cm3)	PM10 (µg/cm3)	RH (%)	Tdry bulb (°F)	PM2.5 (µg/cm3)	PM10 (µg/cm3)	RH (%)	Tdry bulb (°F)	Drift Volume (gpm)	Drift Rate (%)	(-)
Baseline	0.50	On	1000	750	17	21	0.65	75.0	17	21	0.45	85.0	0.020	0.002	Baseline Conditions
New Condition 1	0.75↑	On	1350↑	750	17	21	0.65	75.0	45↑	47↑	0.45	85.0	0.054	0.004	Normal change of drift rate
New Condition 2	0.75↑	On	1450↑	750	17	21	0.65	75.0	112↑	145↑	0.45	85.0	0.102	0.007	Abnormal change of drift rate

1355 1354 1362 1360 1356 1358 1364 1366

1368

FIG. 56E