

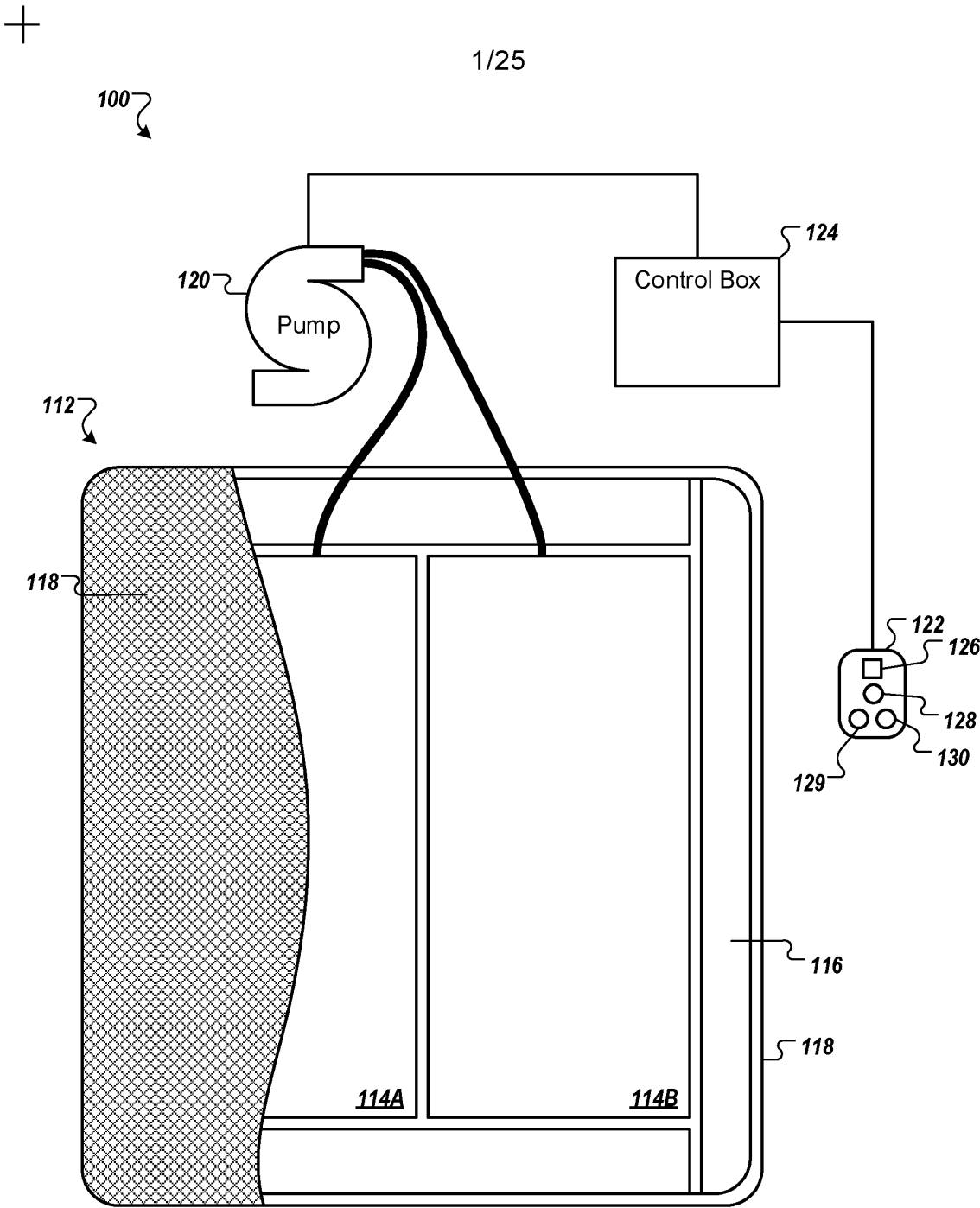


FIG. 1

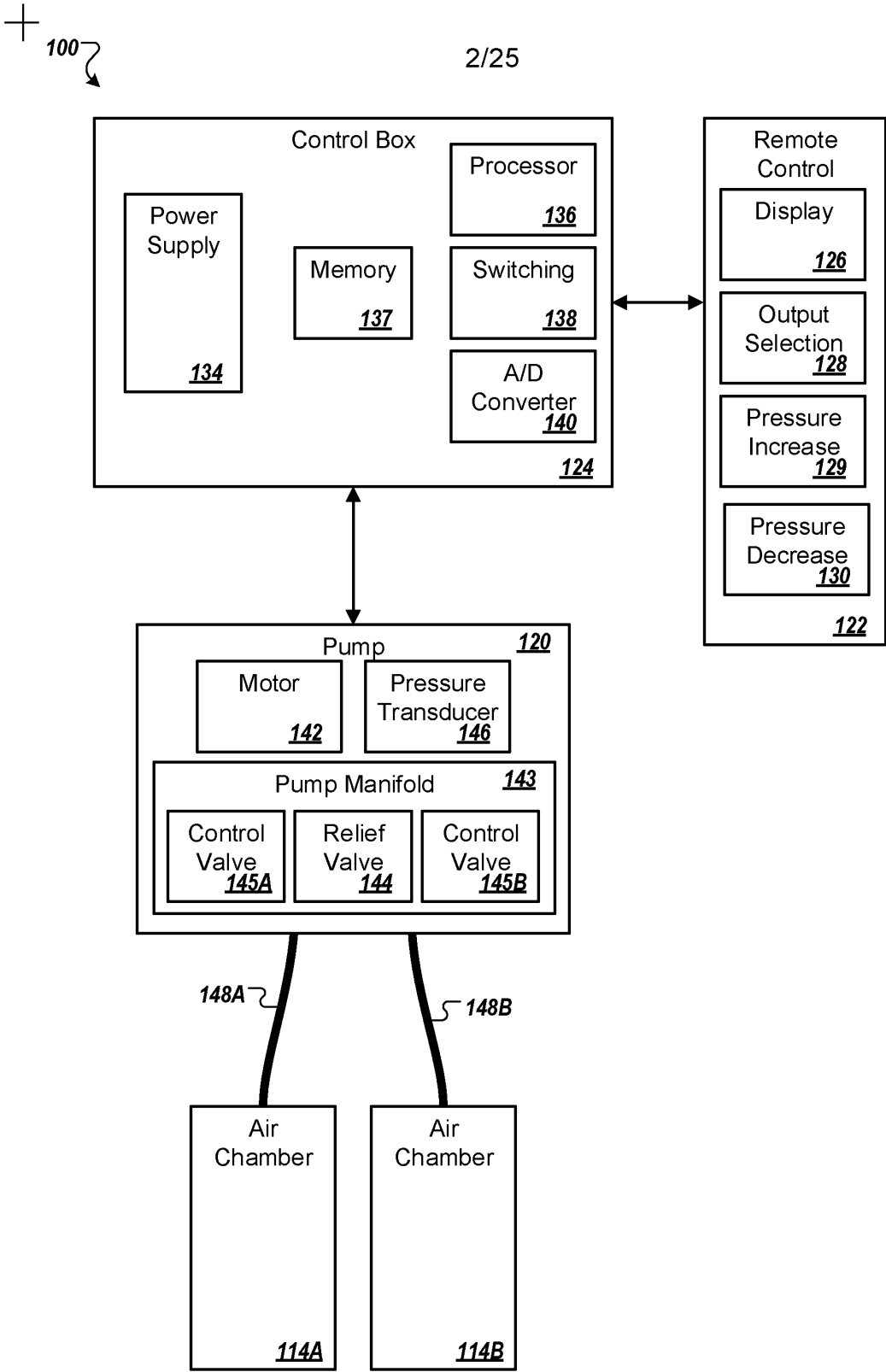
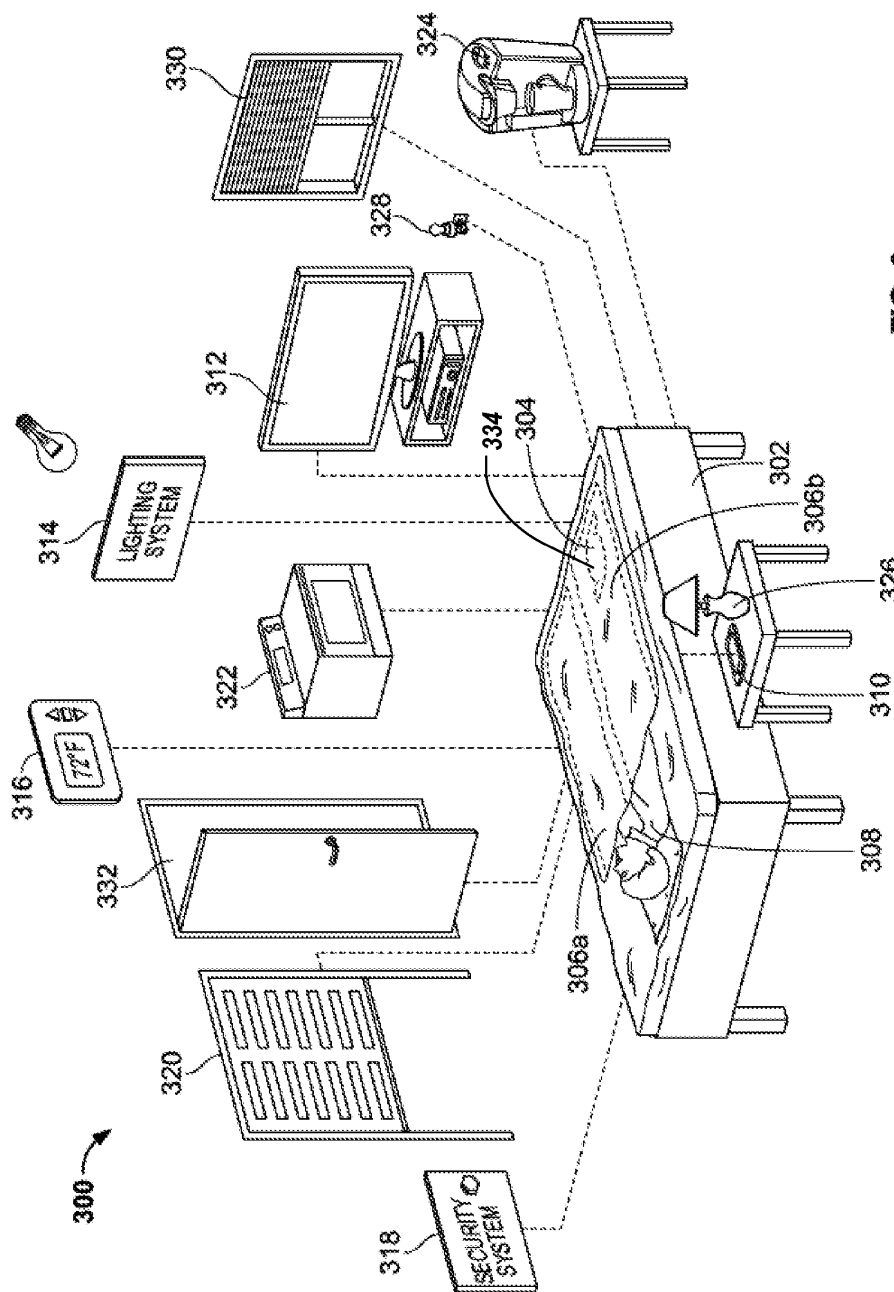
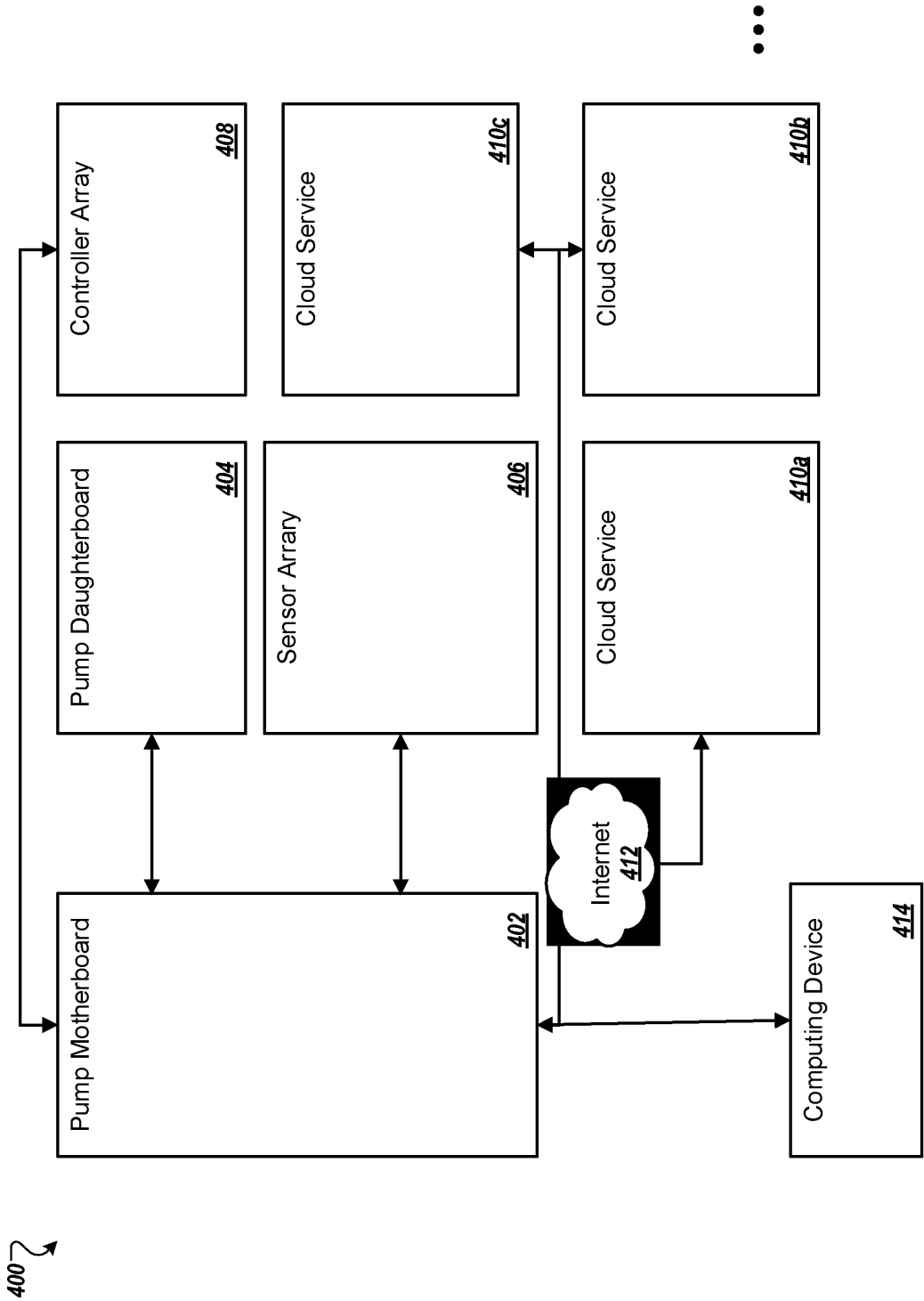


FIG. 2







400 ↗

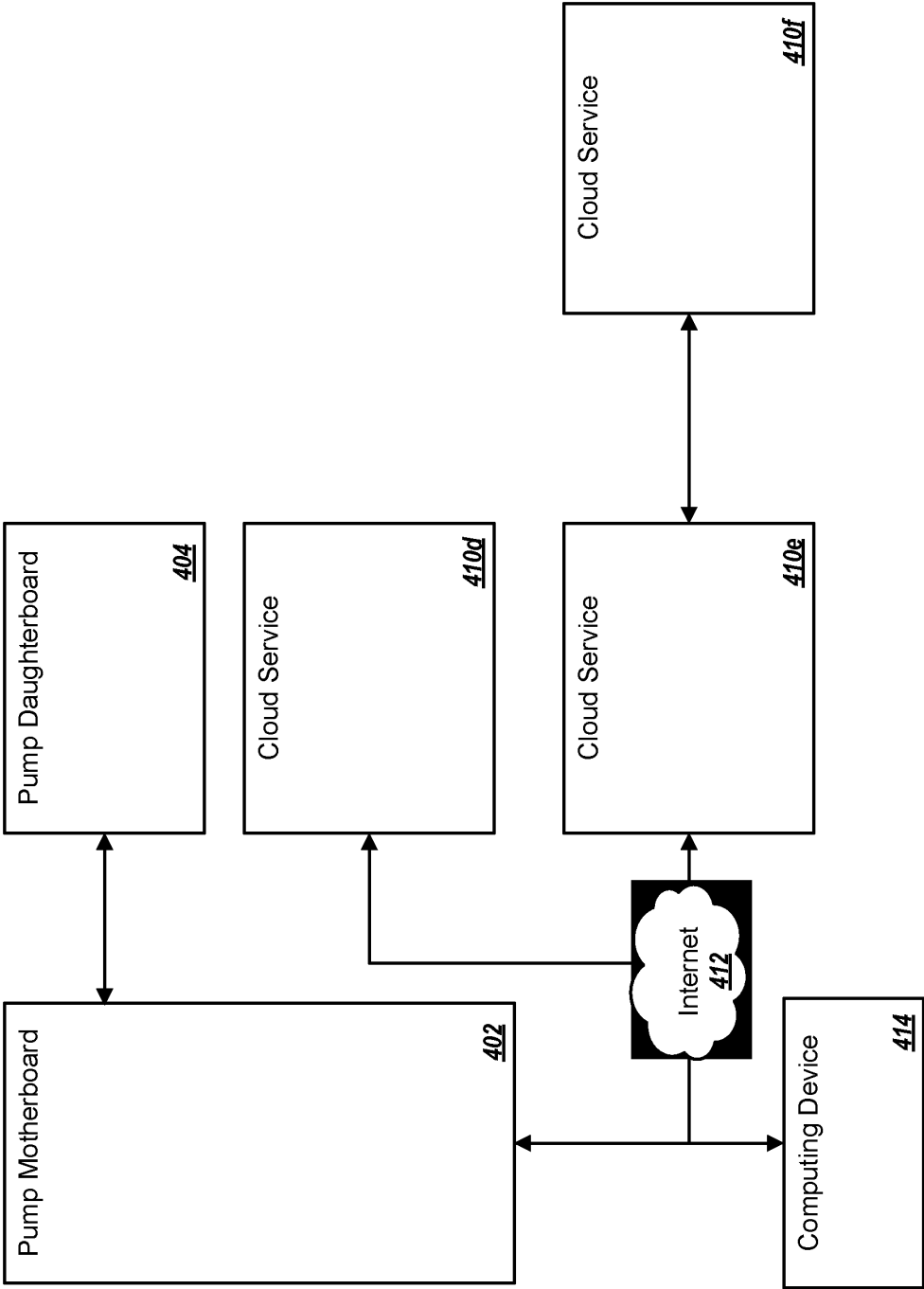


FIG. 4B

402 ↗

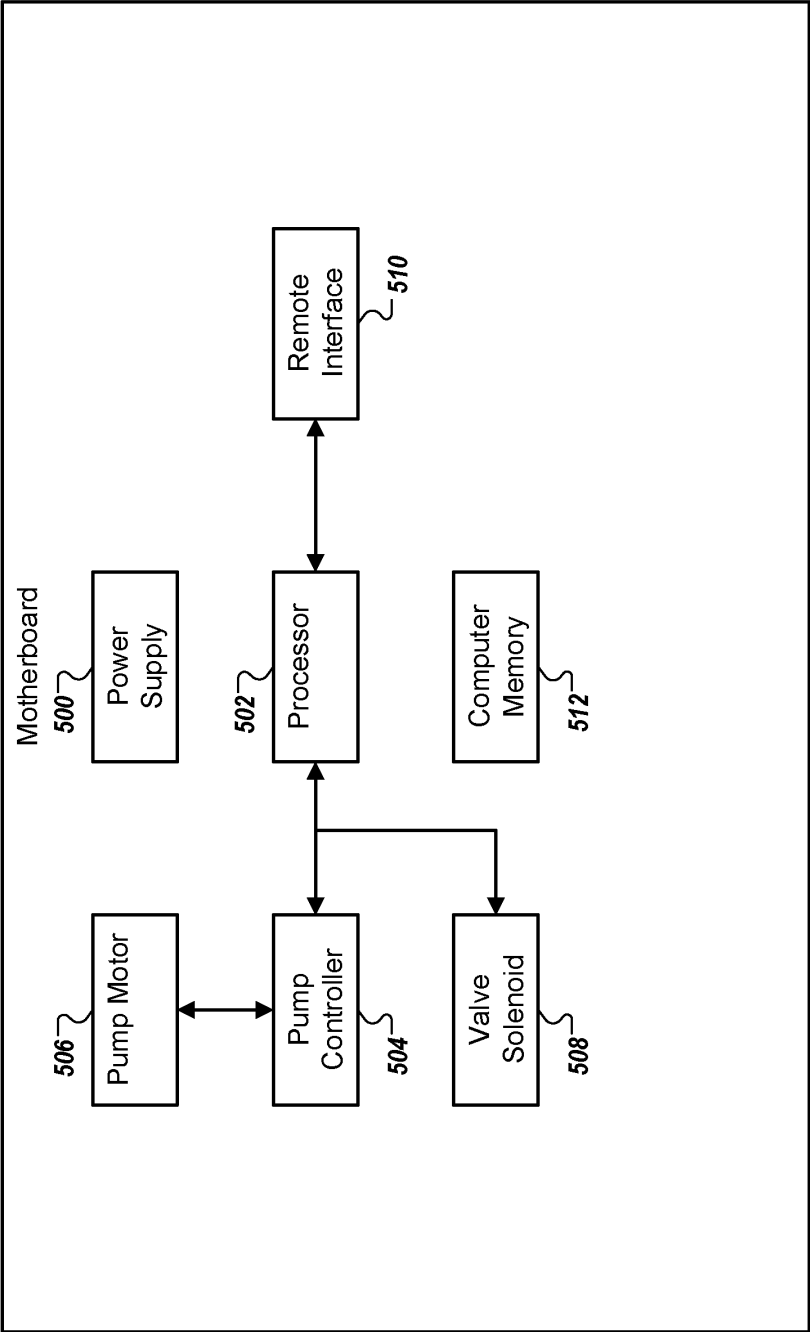


FIG. 5

+

402 ↗

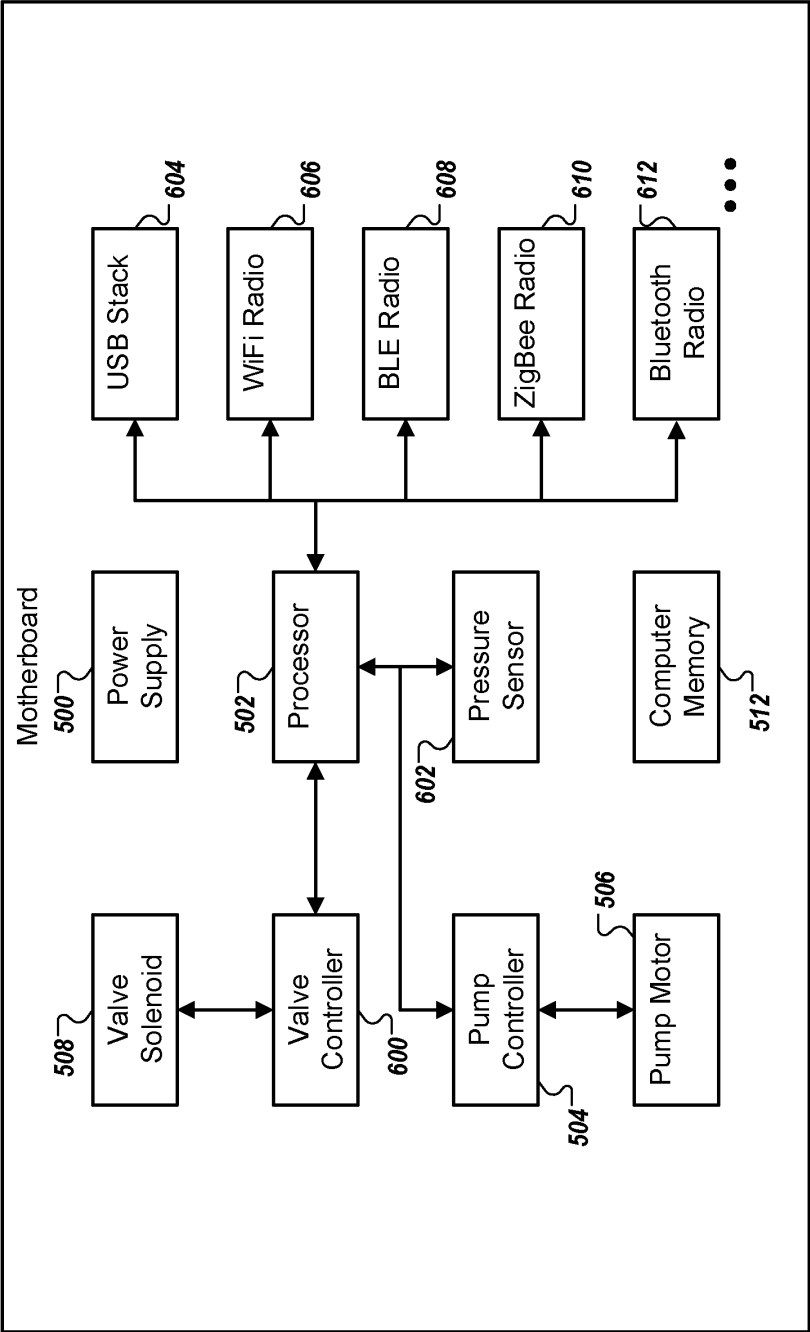


FIG. 6

+

404 ↗

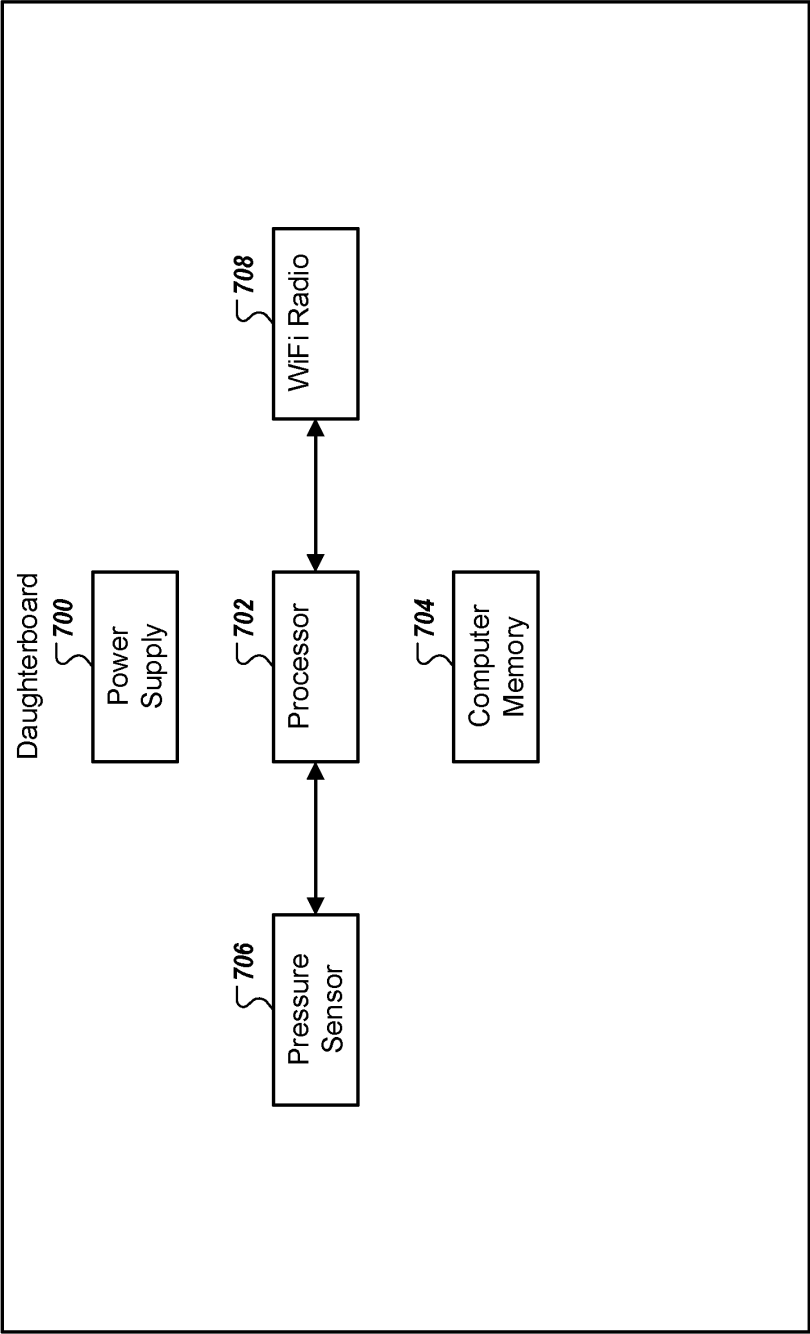


FIG. 7

800 ↗

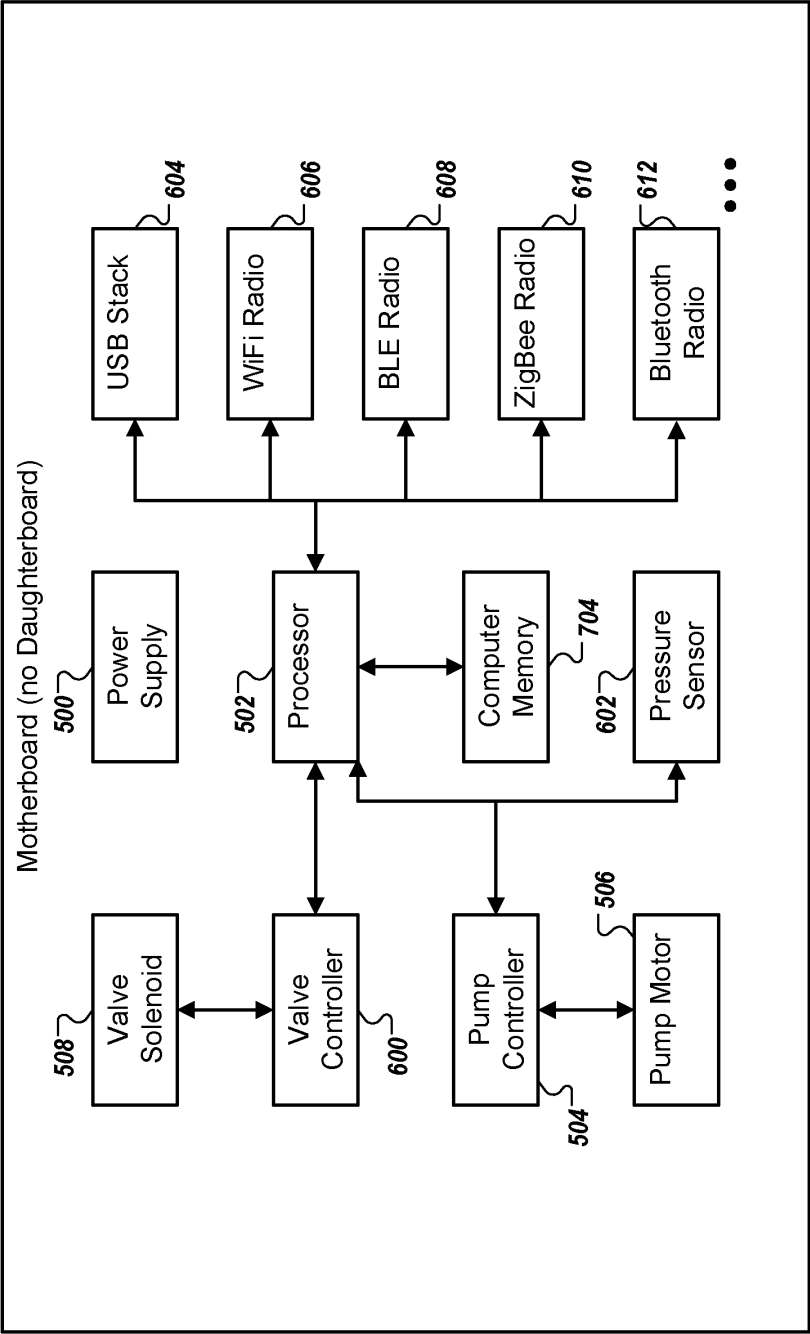


FIG. 8

+

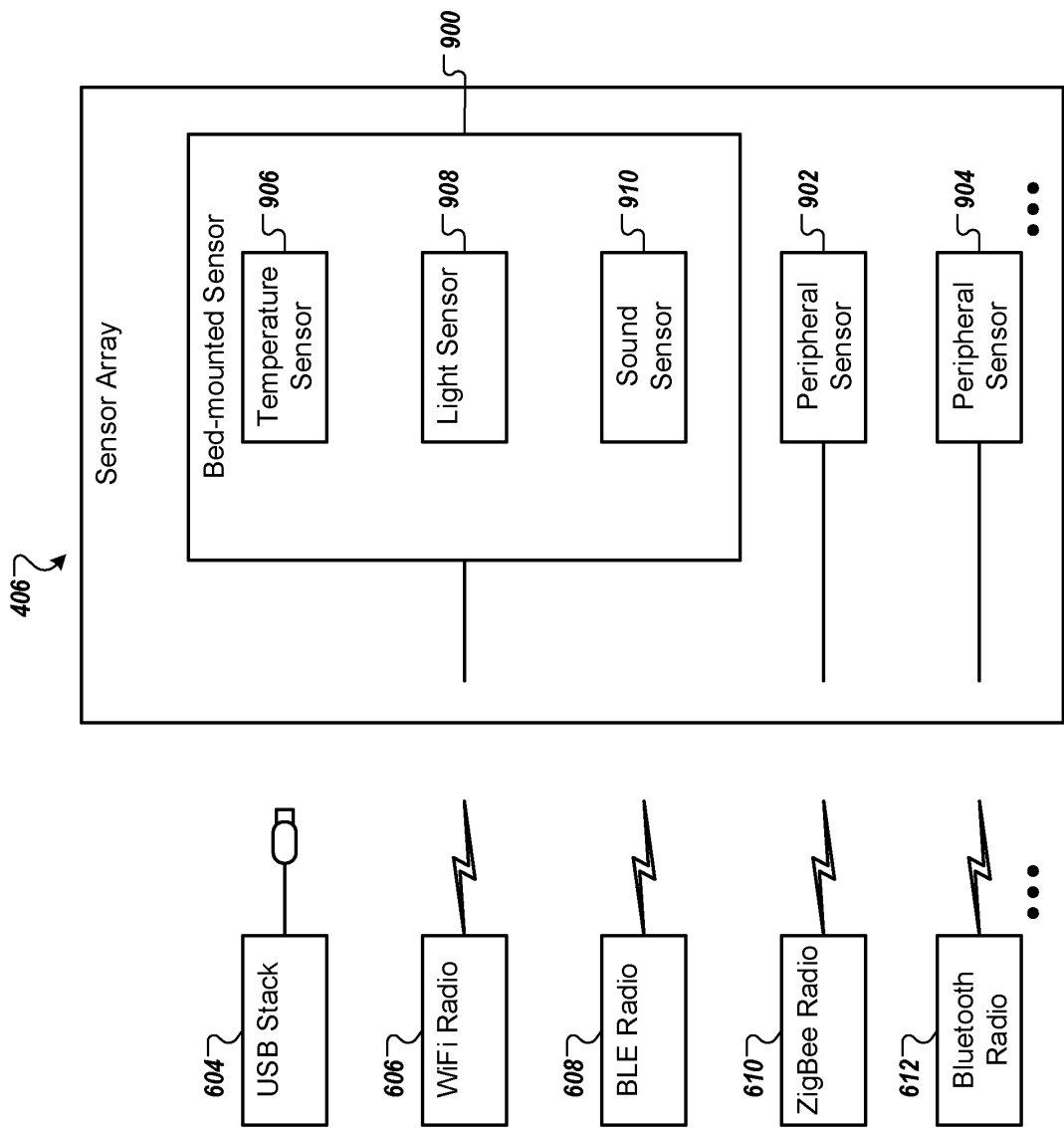


FIG. 9



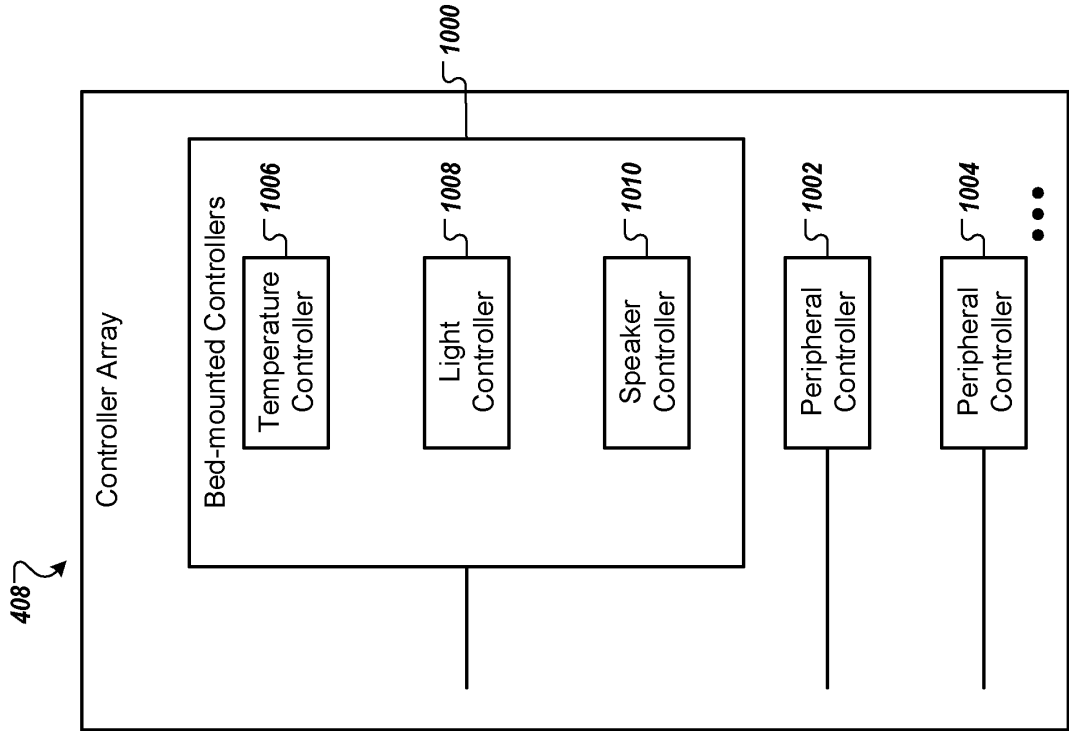
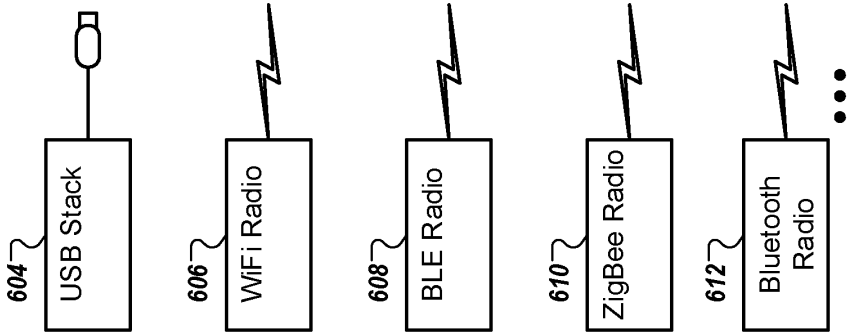


FIG. 10



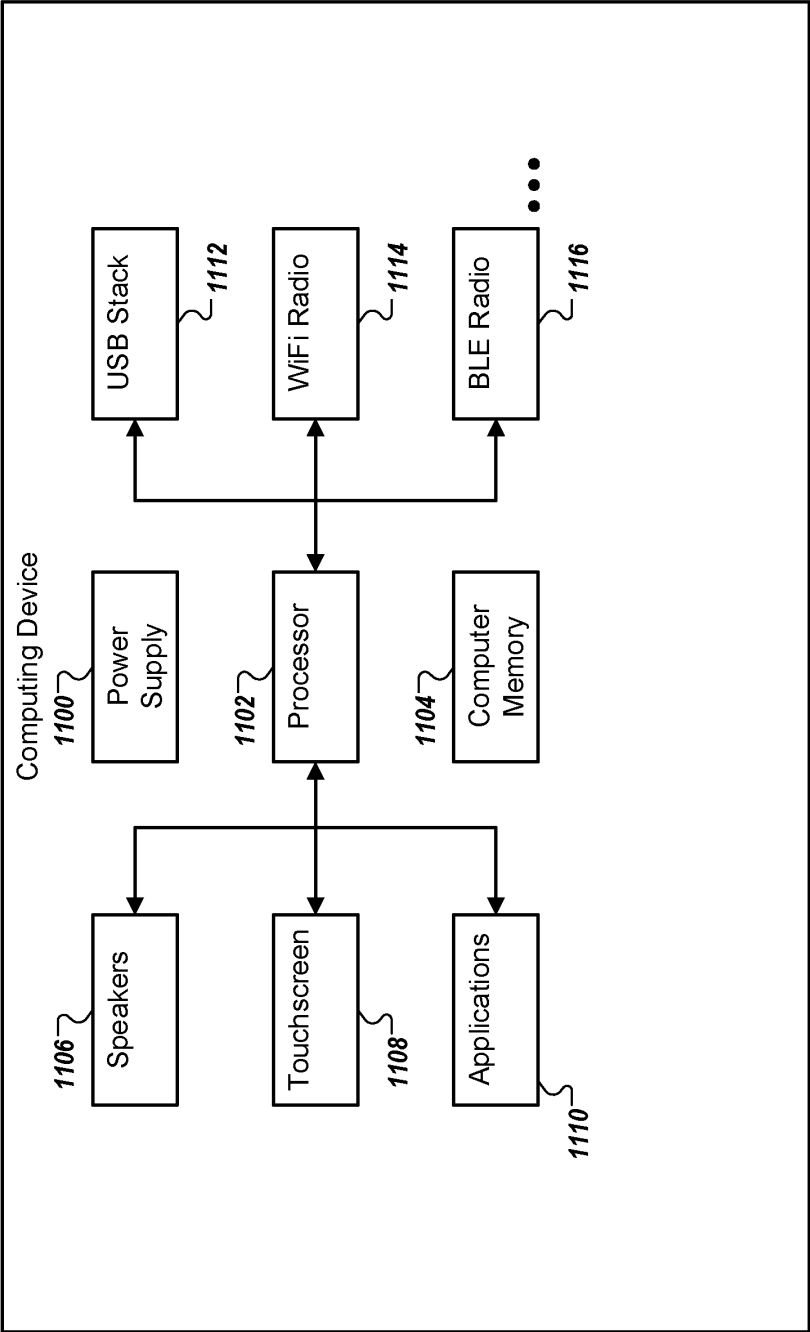


FIG. 11



410a

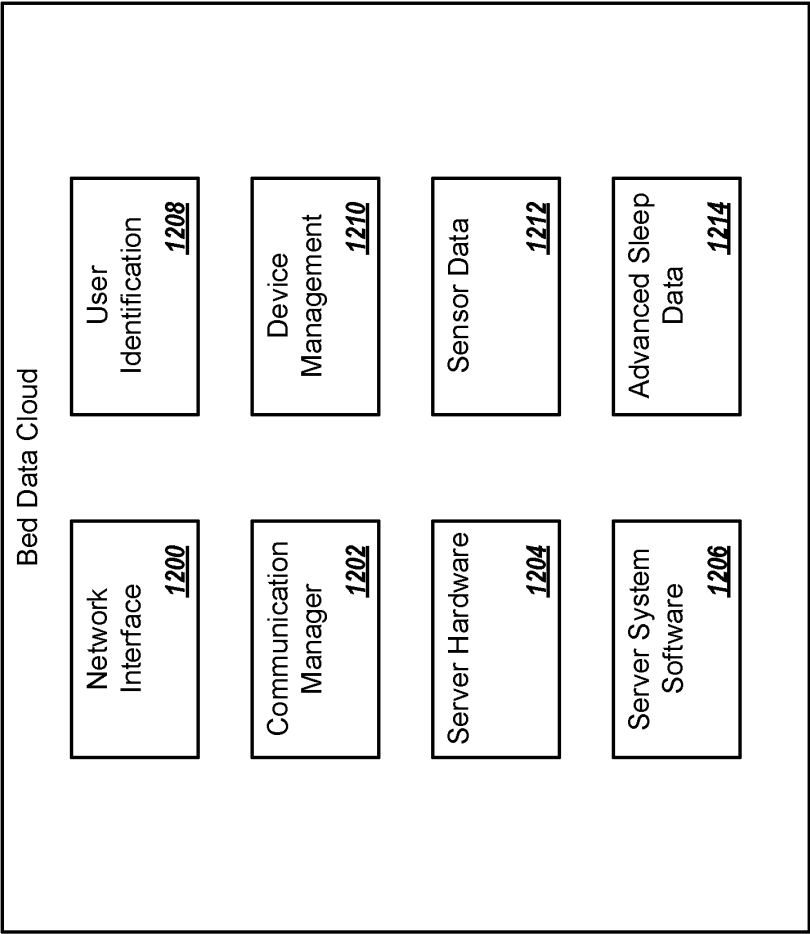


FIG. 12





410b ↷

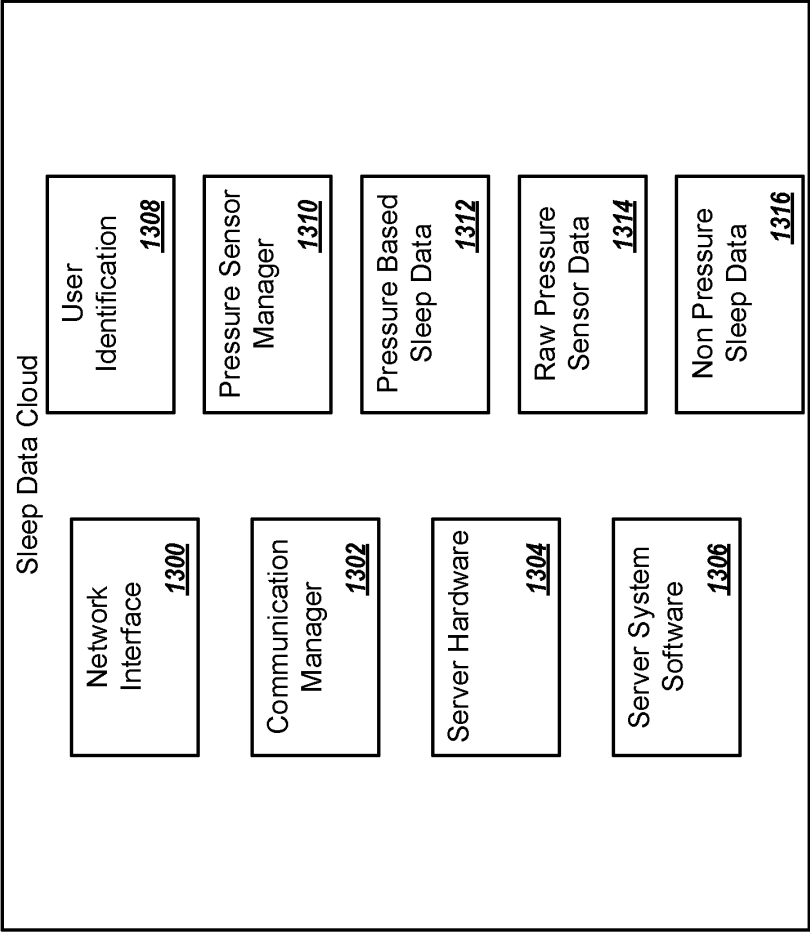


FIG. 13



410c ↷

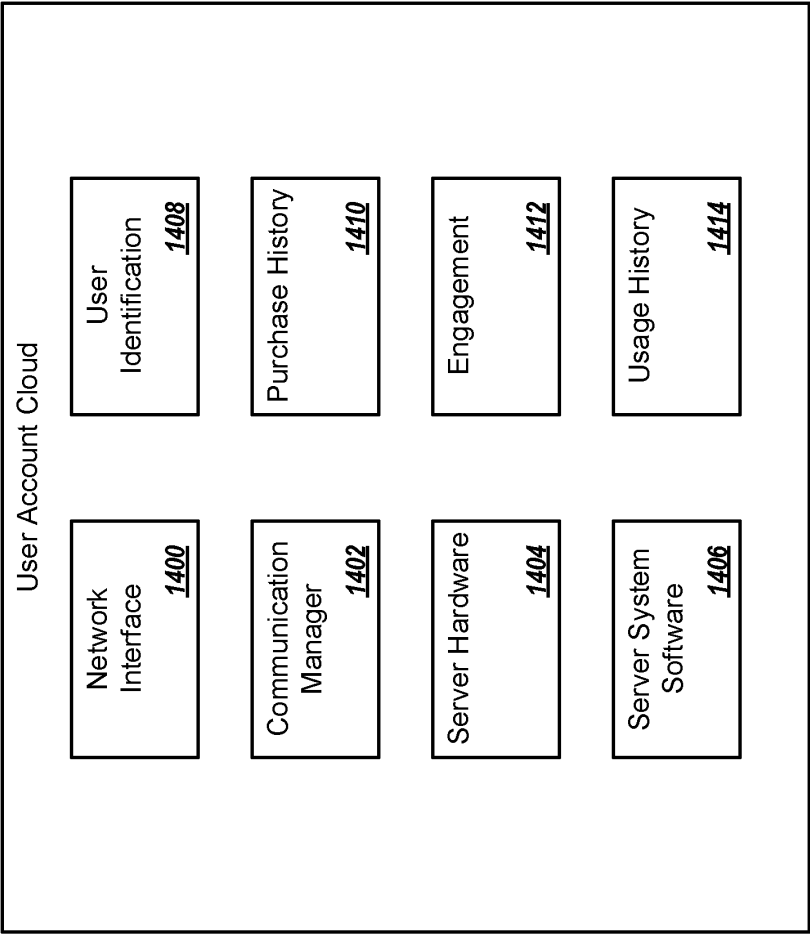


FIG. 14





1500 ↗

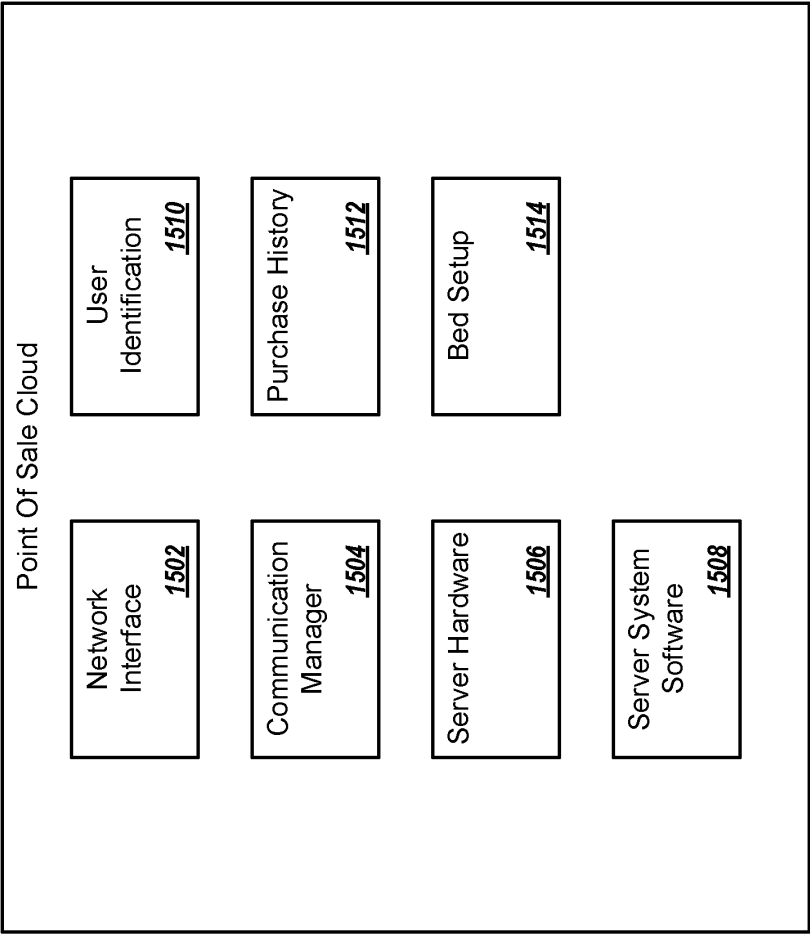


FIG. 15



1600 ↗

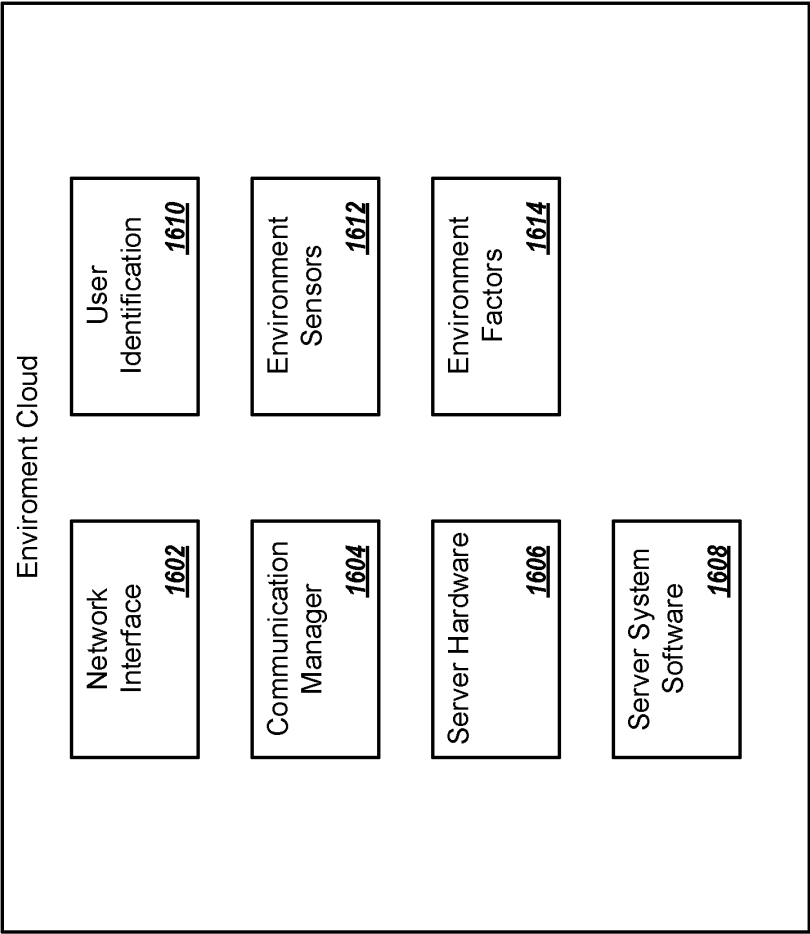


FIG. 16

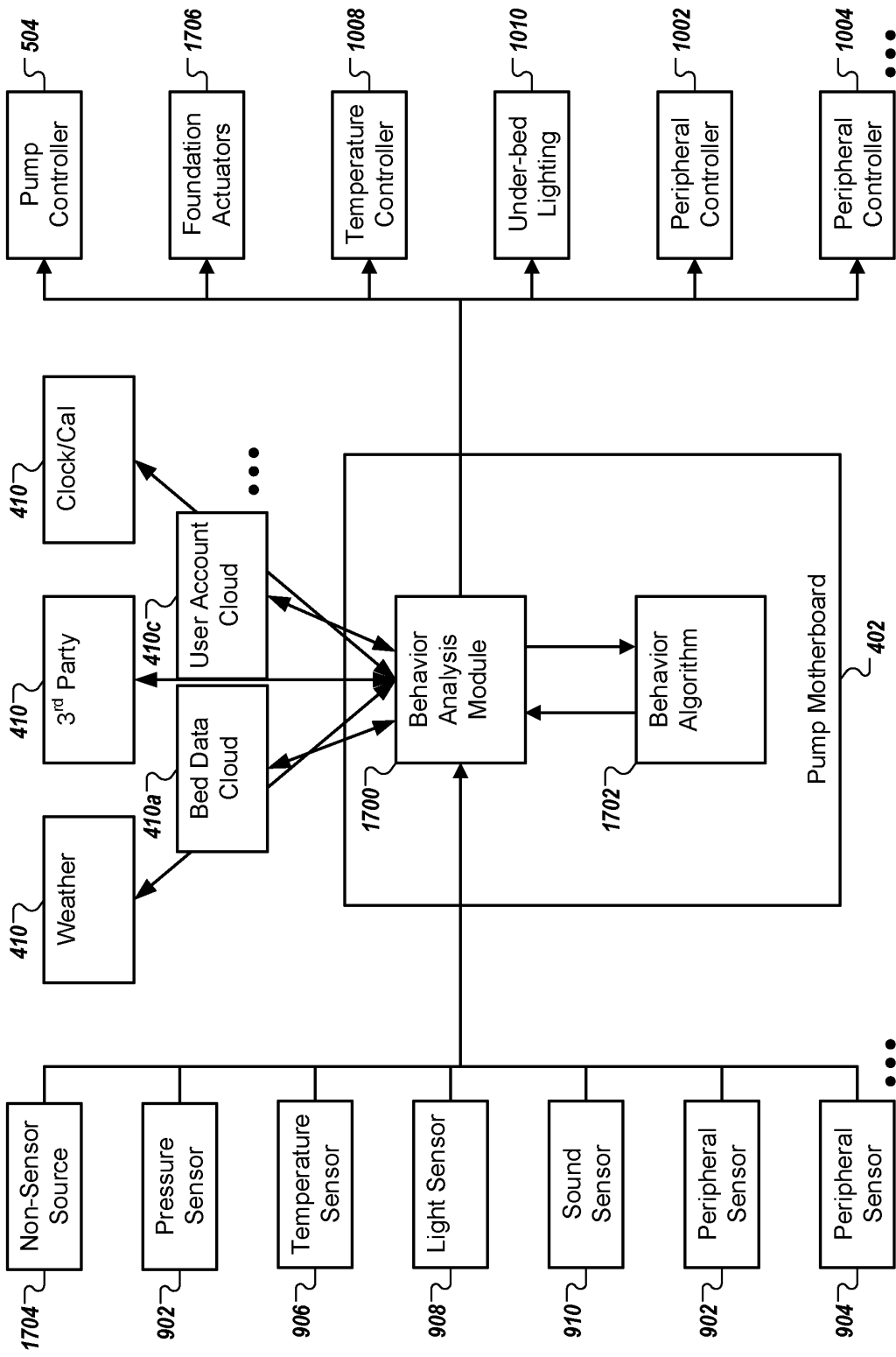


FIG. 17

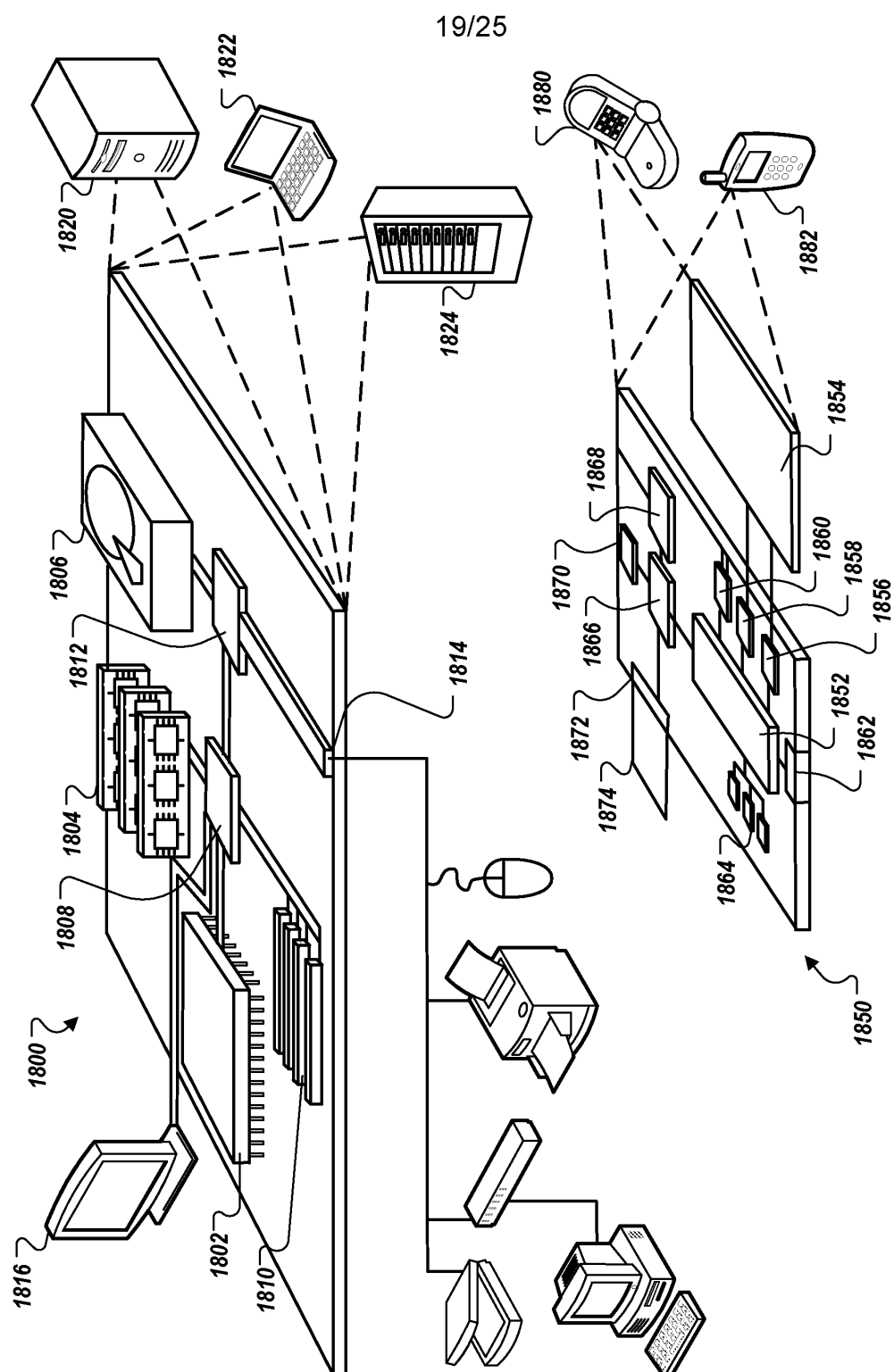


FIG. 18

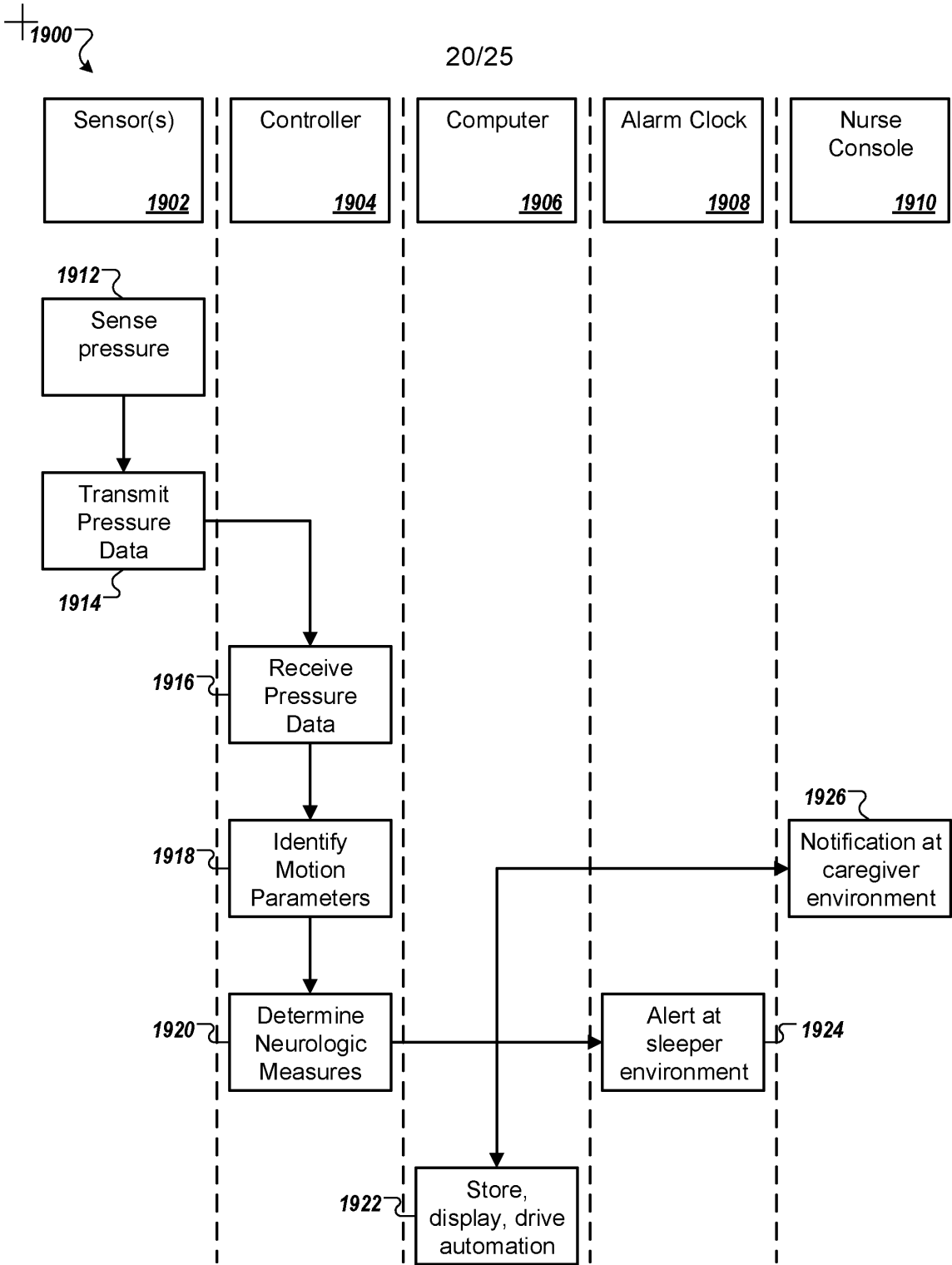


FIG. 19A

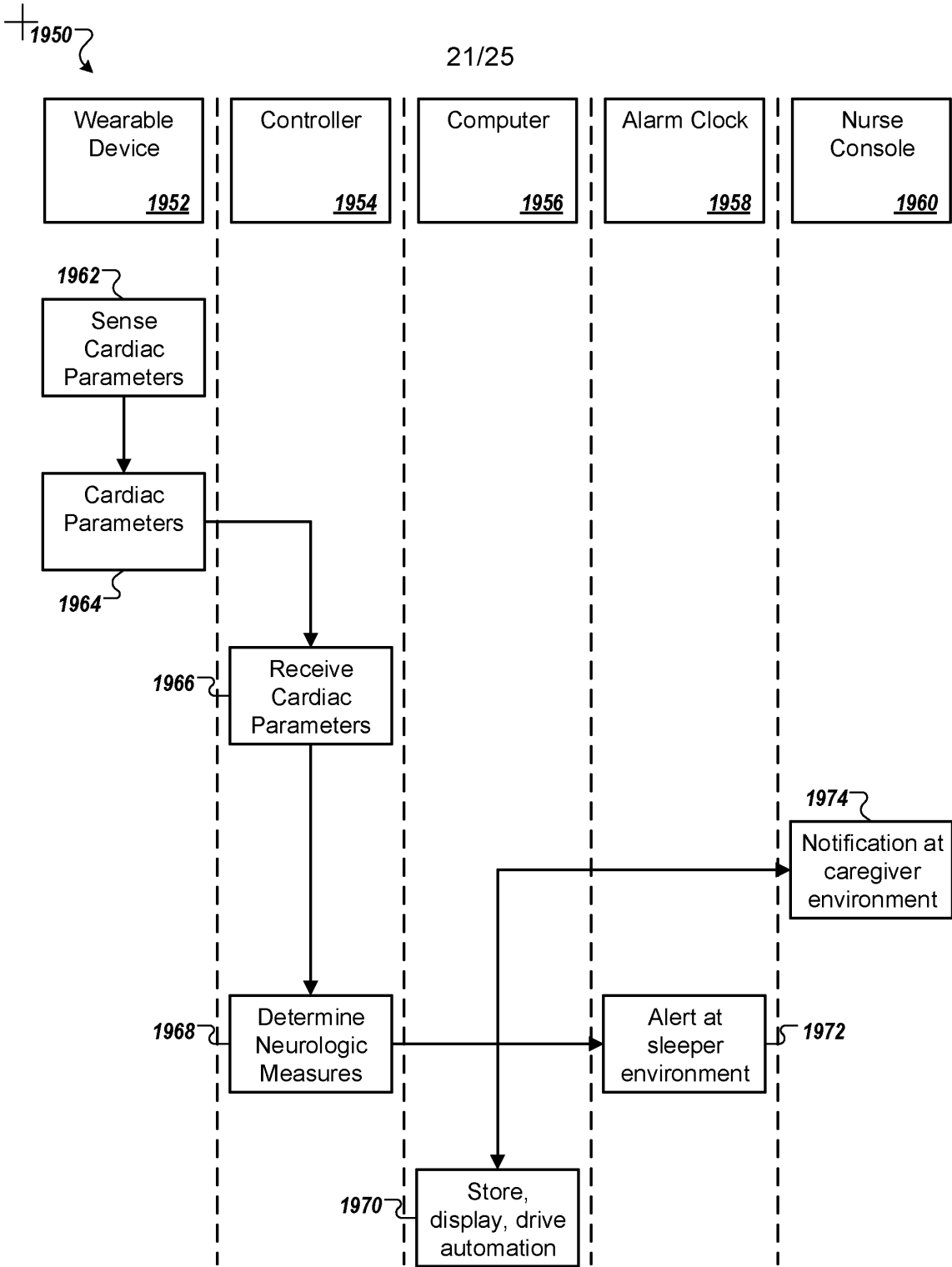


FIG. 19B

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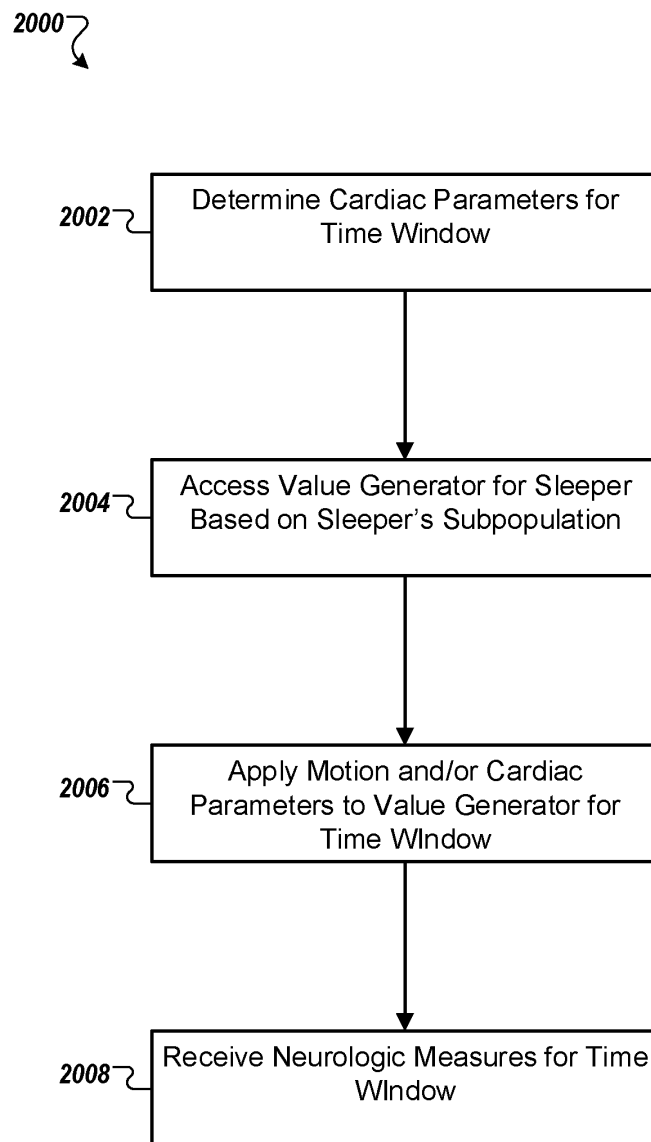


FIG. 20

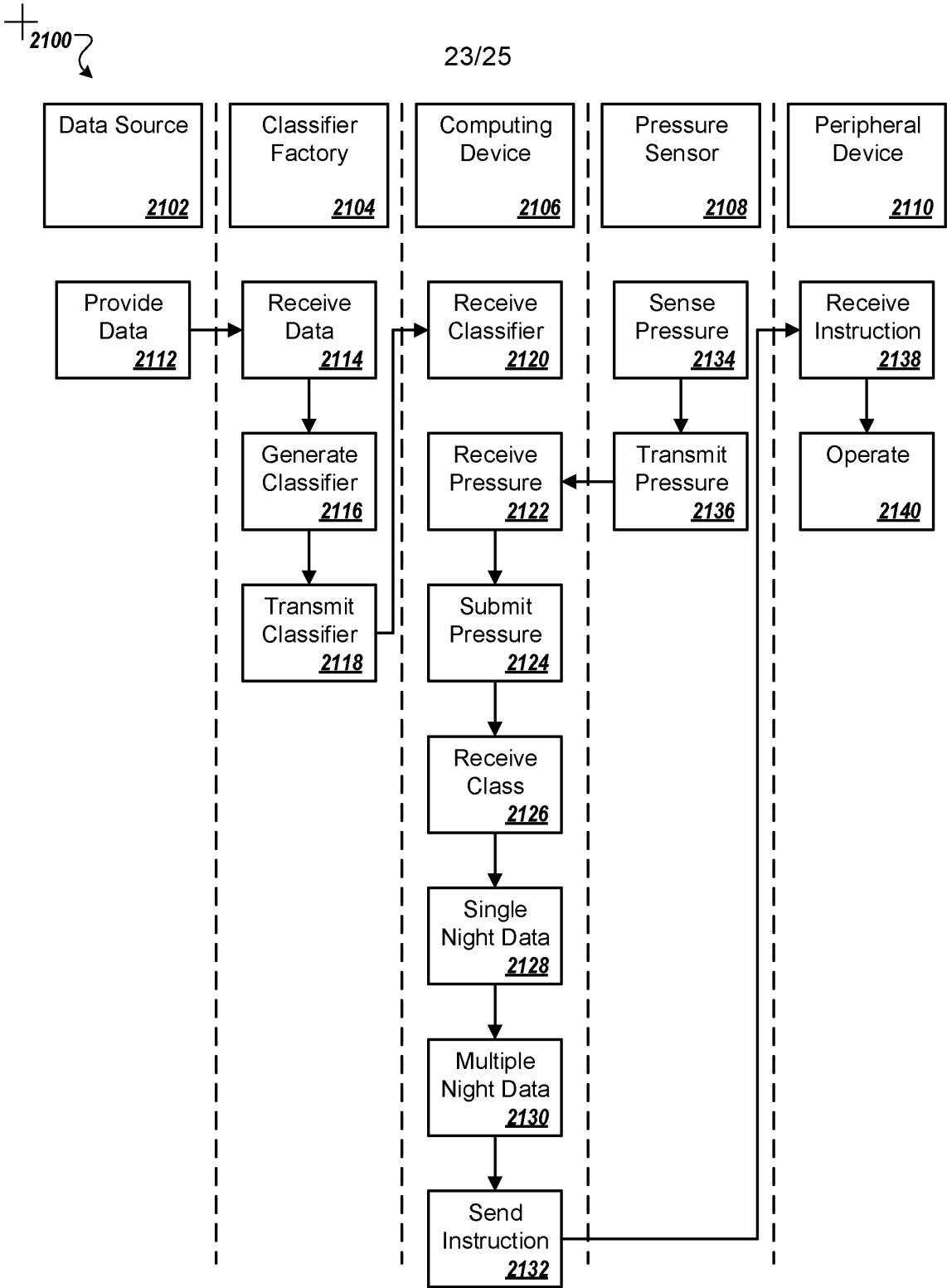


FIG. 21

24/25

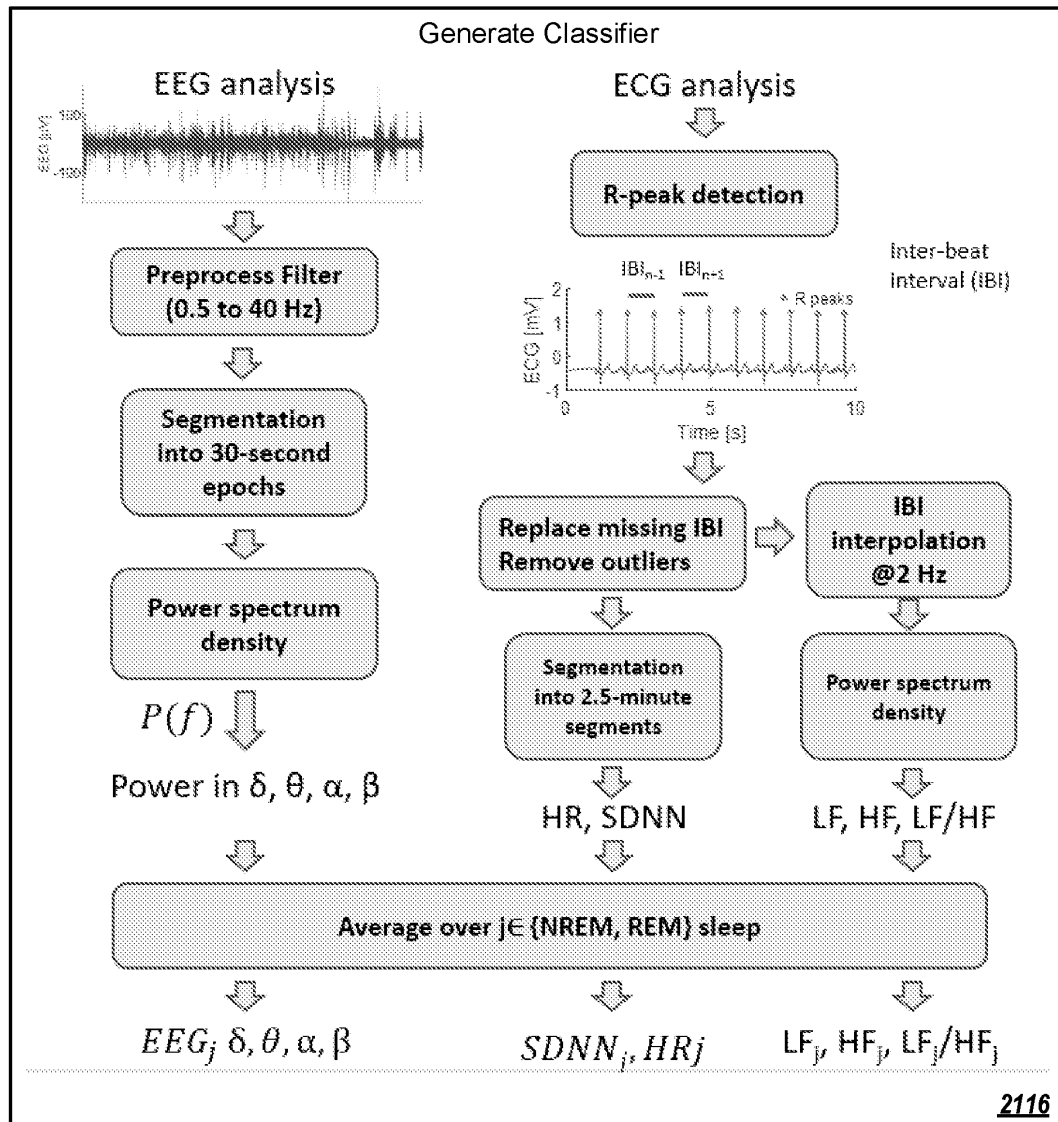


FIG. 22

Generate Classifier		
Model	Healthy adjusted R ² (p-value)	Insomnia adjusted R ² (p-value)
$\log(\text{EEG}_{\text{NREM}}\delta) \approx \lambda_1 \text{HR}_{\text{NREM}} + \lambda_2 \text{SDNN}_{\text{NREM}} + \lambda_3 \text{HF}_{\text{NREM}} + \lambda_4 \frac{\text{LF}_{\text{NREM}}}{\text{HF}_{\text{NREM}}}$	0.28 (0.24)	0.09 (0.481)
$\log \text{EEG}_{\text{REM}}\delta \approx \lambda_1 \text{HR}_{\text{REM}} + \lambda_2 \text{SDNN}_{\text{REM}} + \lambda_3 \text{HF}_{\text{REM}} + \lambda_4 \frac{\text{LF}_{\text{REM}}}{\text{HF}_{\text{REM}}}$	0.13 (0.39)	0.57 (0.19)
$\text{Log } \text{EEG}_{\text{NREM}} \theta \approx \lambda_1 \text{HR}_{\text{NREM}} + \lambda_2 \text{SDNN}_{\text{NREM}} + \lambda_3 \text{HF}_{\text{NREM}} + \lambda_4 \frac{\text{LF}_{\text{NREM}}}{\text{HF}_{\text{NREM}}}$	0.293 (0.227)	0.0667 (0.496)
$\text{Log } \text{EEG}_{\text{REM}} \theta \approx \lambda_1 \text{HR}_{\text{REM}} + \lambda_2 \text{SDNN}_{\text{REM}} + \lambda_3 \text{HF}_{\text{REM}} + \lambda_4 \frac{\text{LF}_{\text{REM}}}{\text{HF}_{\text{REM}}}$	0.145 (0.378)	-0.241 (0.667)
$\text{Log } \text{EEG}_{\text{NREM}} \alpha \approx \lambda_1 \text{HR}_{\text{NREM}} + \lambda_2 \text{SDNN}_{\text{NREM}} + \lambda_3 \text{HF}_{\text{NREM}} + \lambda_4 \frac{\text{LF}_{\text{NREM}}}{\text{HF}_{\text{NREM}}}$	0.06 (0.43)	0.705 (0.113)
$\text{Log } \text{EEG}_{\text{REM}} \alpha \approx \lambda_1 \text{HR}_{\text{REM}} + \lambda_2 \text{SDNN}_{\text{REM}} + \lambda_3 \text{HF}_{\text{REM}} + \lambda_4 \frac{\text{LF}_{\text{REM}}}{\text{HF}_{\text{REM}}}$	-0.299 (0.743)	0.101 (0.476)
$\text{Log } \text{EEG}_{\text{NREM}} \beta \approx \lambda_1 \text{HR}_{\text{NREM}} + \lambda_2 \text{SDNN}_{\text{NREM}} + \lambda_3 \text{HF}_{\text{NREM}} + \lambda_4 \frac{\text{LF}_{\text{NREM}}}{\text{HF}_{\text{NREM}}}$	0.002 (0.487)	0.493 (0.235)
$\text{Log } \text{EEG}_{\text{REM}} \beta \approx \lambda_1 \text{HR}_{\text{REM}} + \lambda_2 \text{SDNN}_{\text{REM}} + \lambda_3 \text{HF}_{\text{REM}} + \lambda_4 \frac{\text{LF}_{\text{REM}}}{\text{HF}_{\text{REM}}}$	0.0298 (0.475)	-0.662 (0.849)
2116		

FIG. 23