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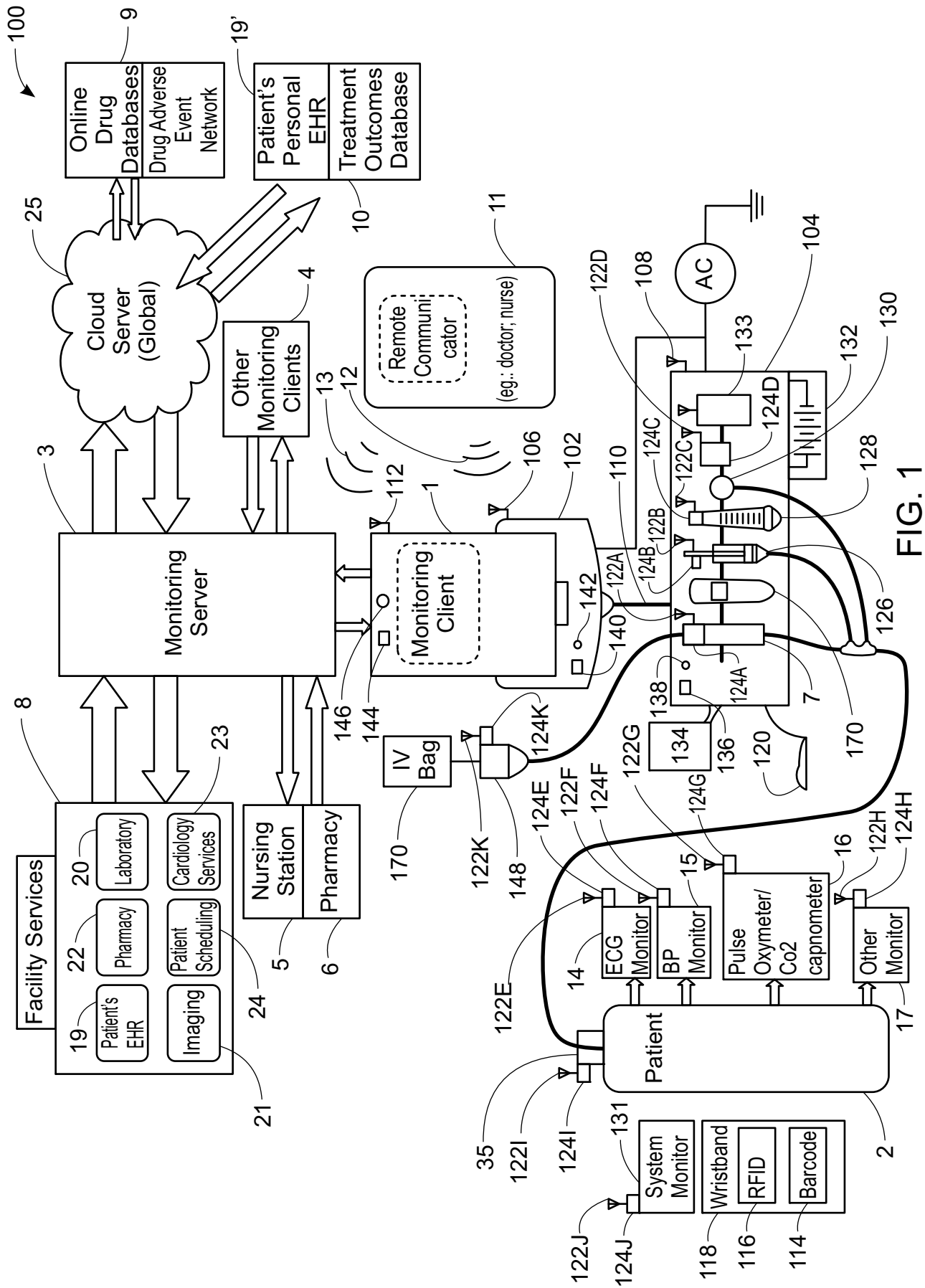


FIG. 1

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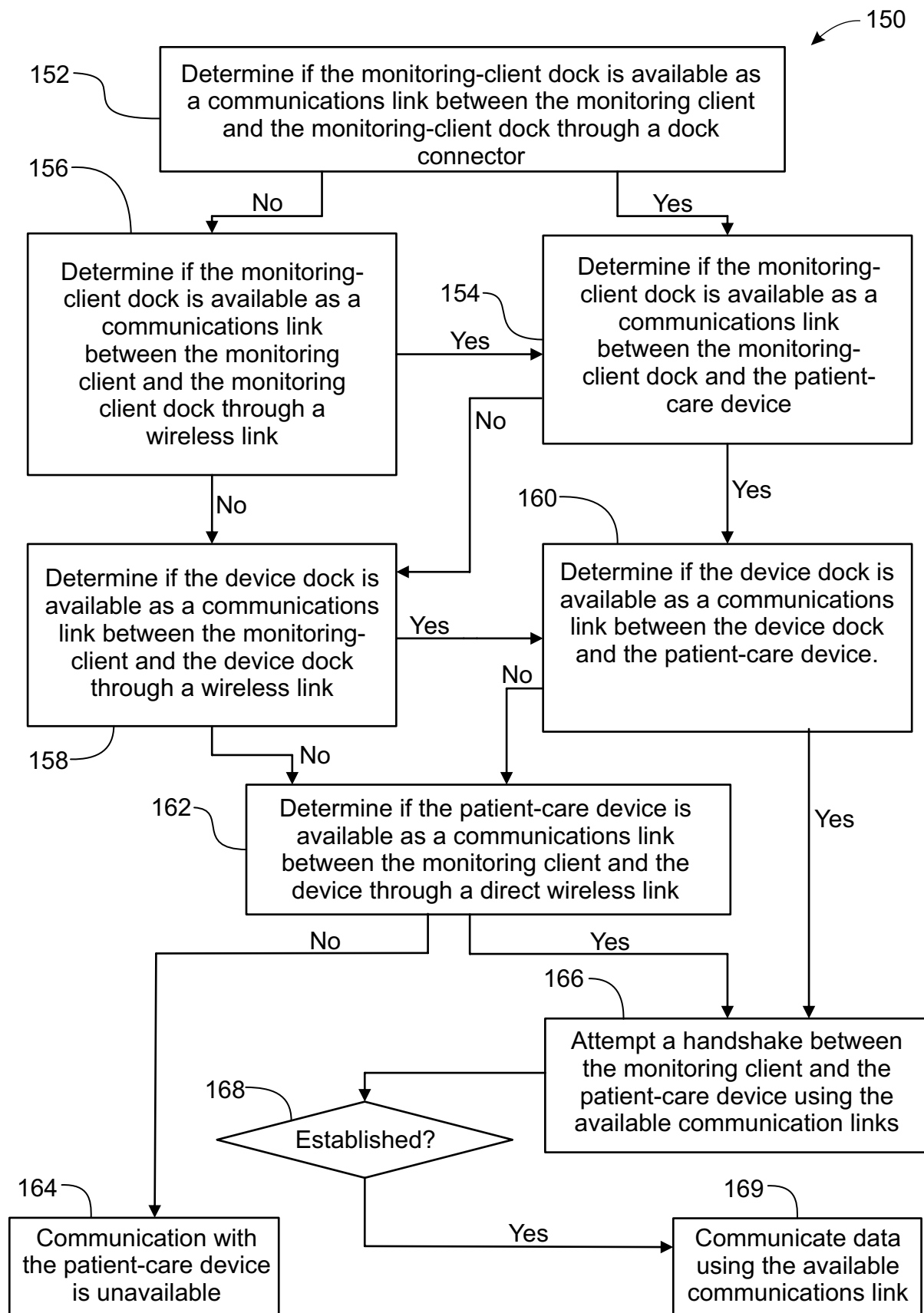


FIG. 2

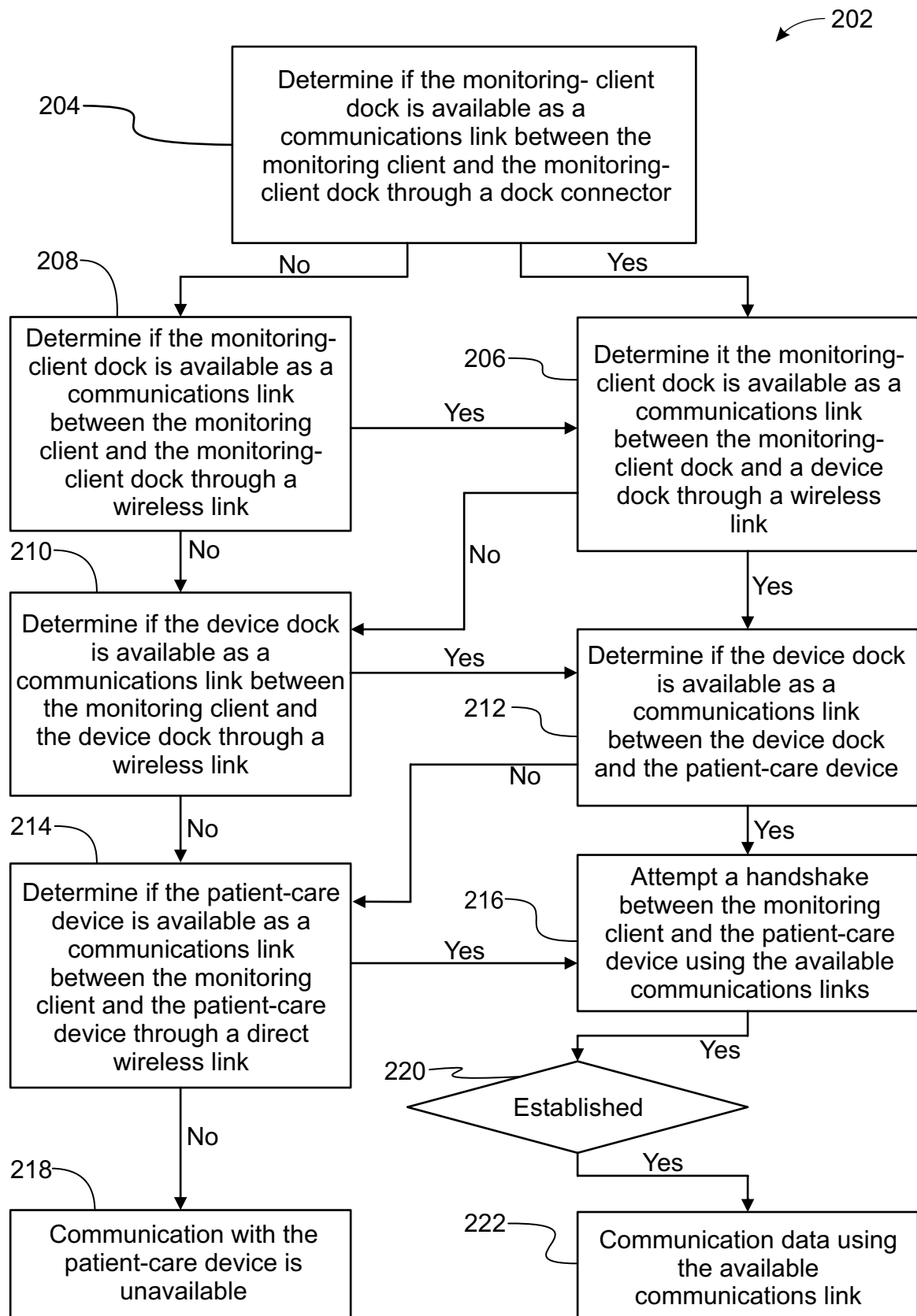


FIG. 4

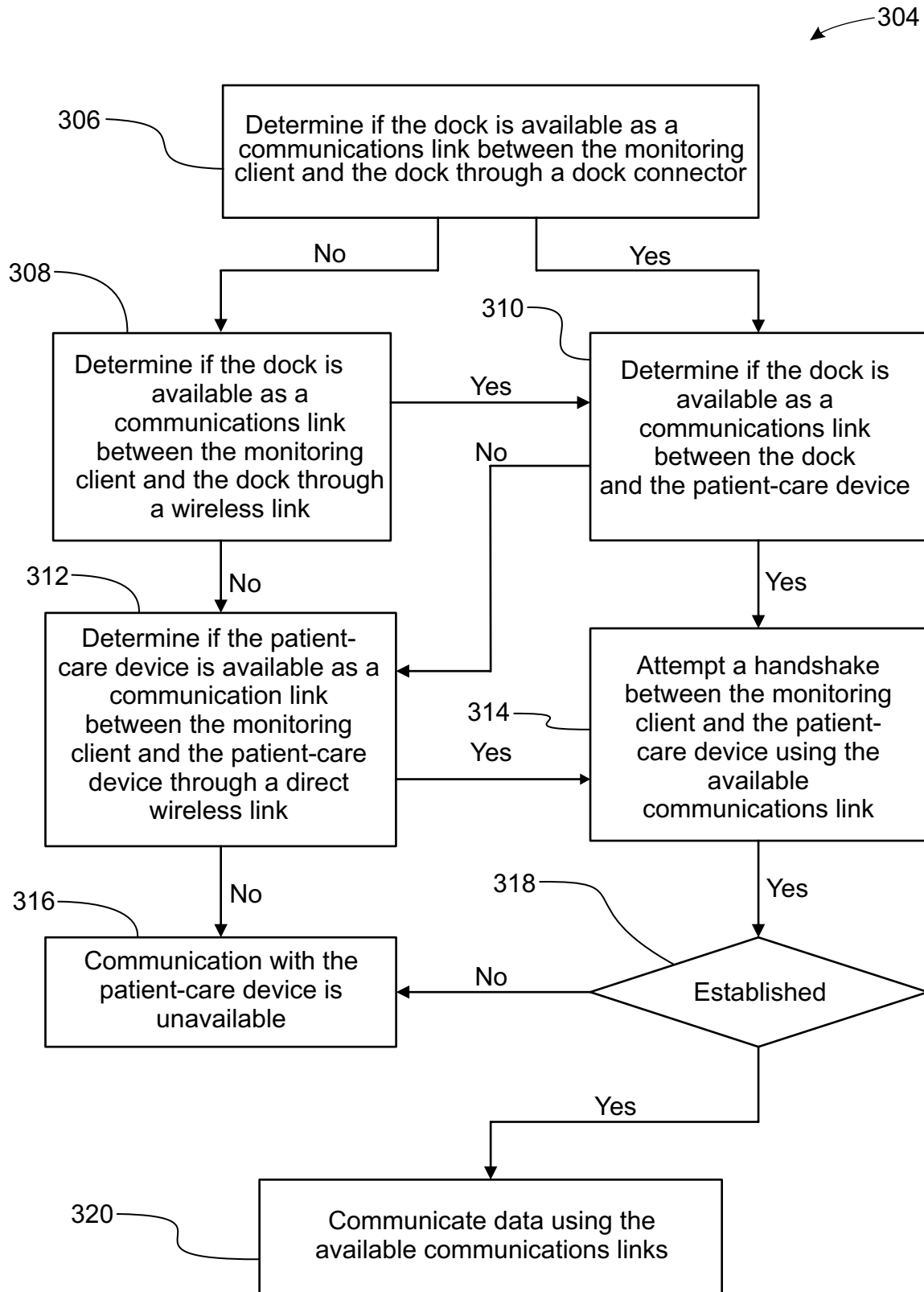


FIG. 6

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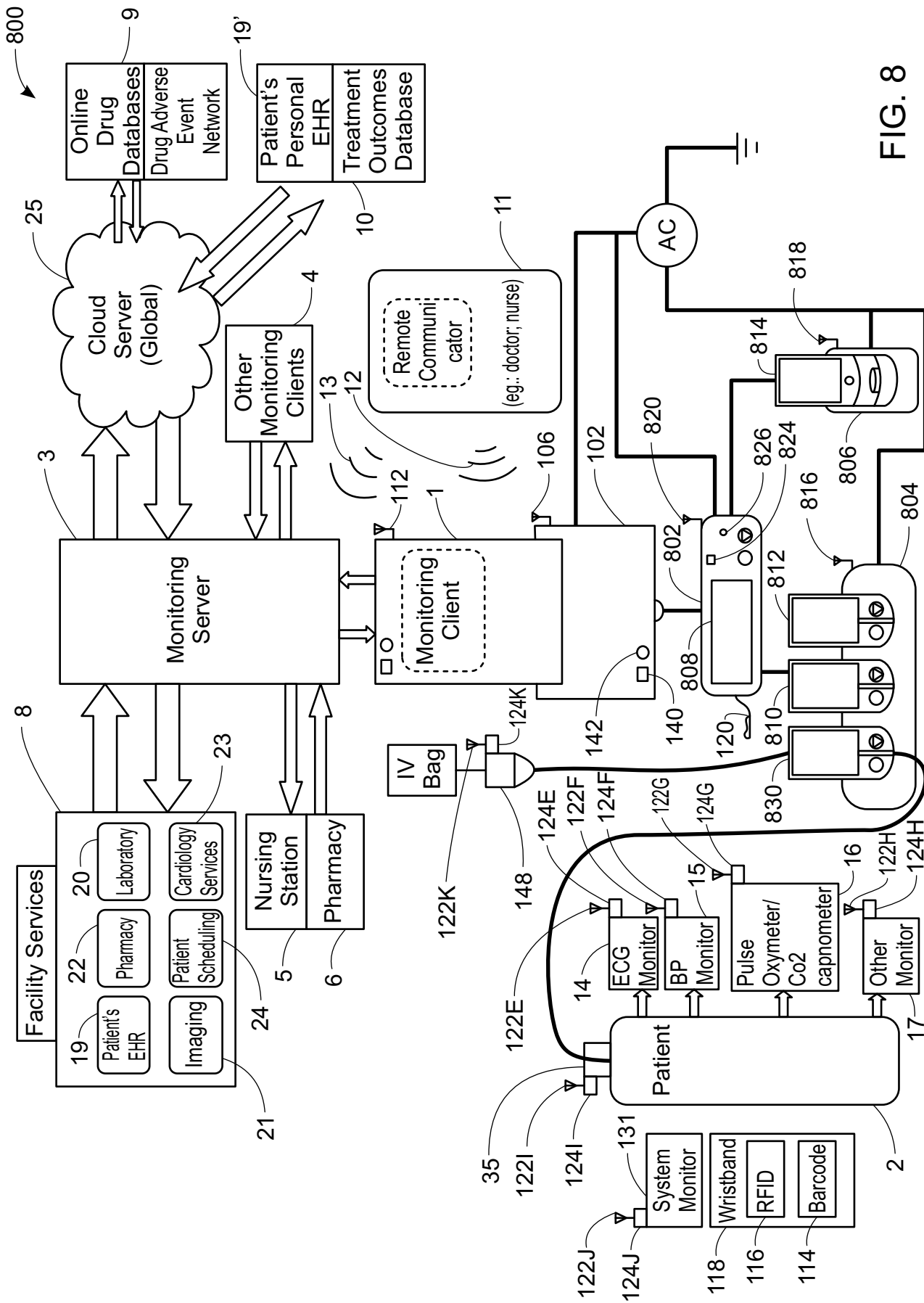


FIG. 8

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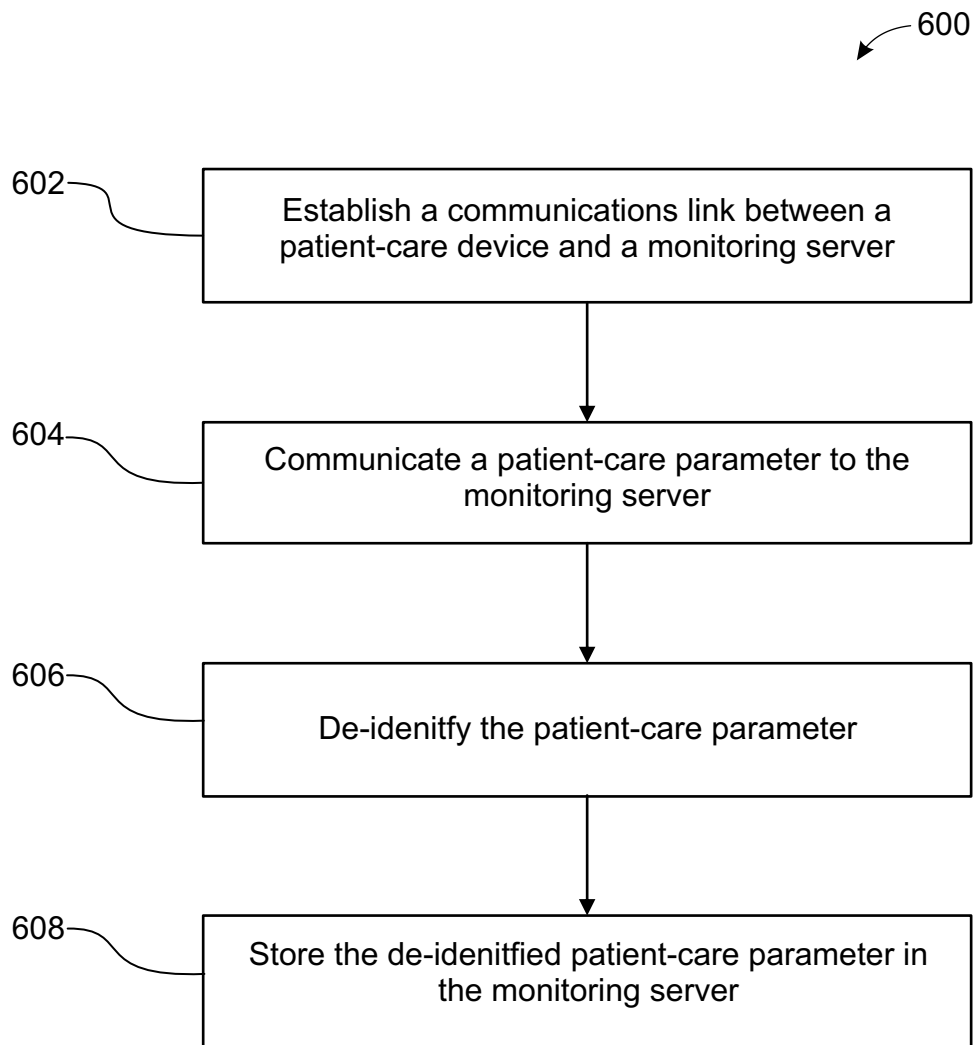


FIG. 10

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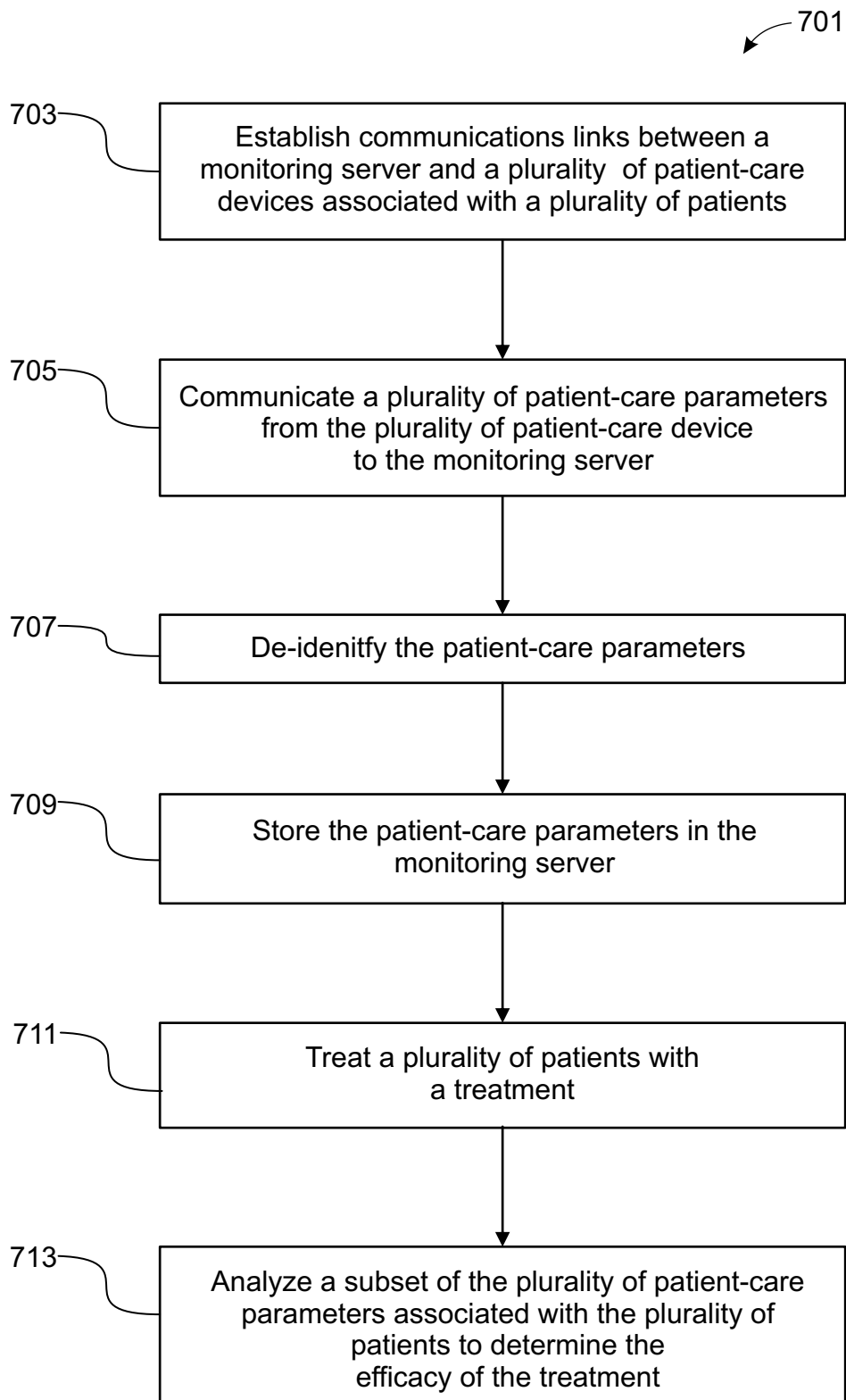


FIG. 11

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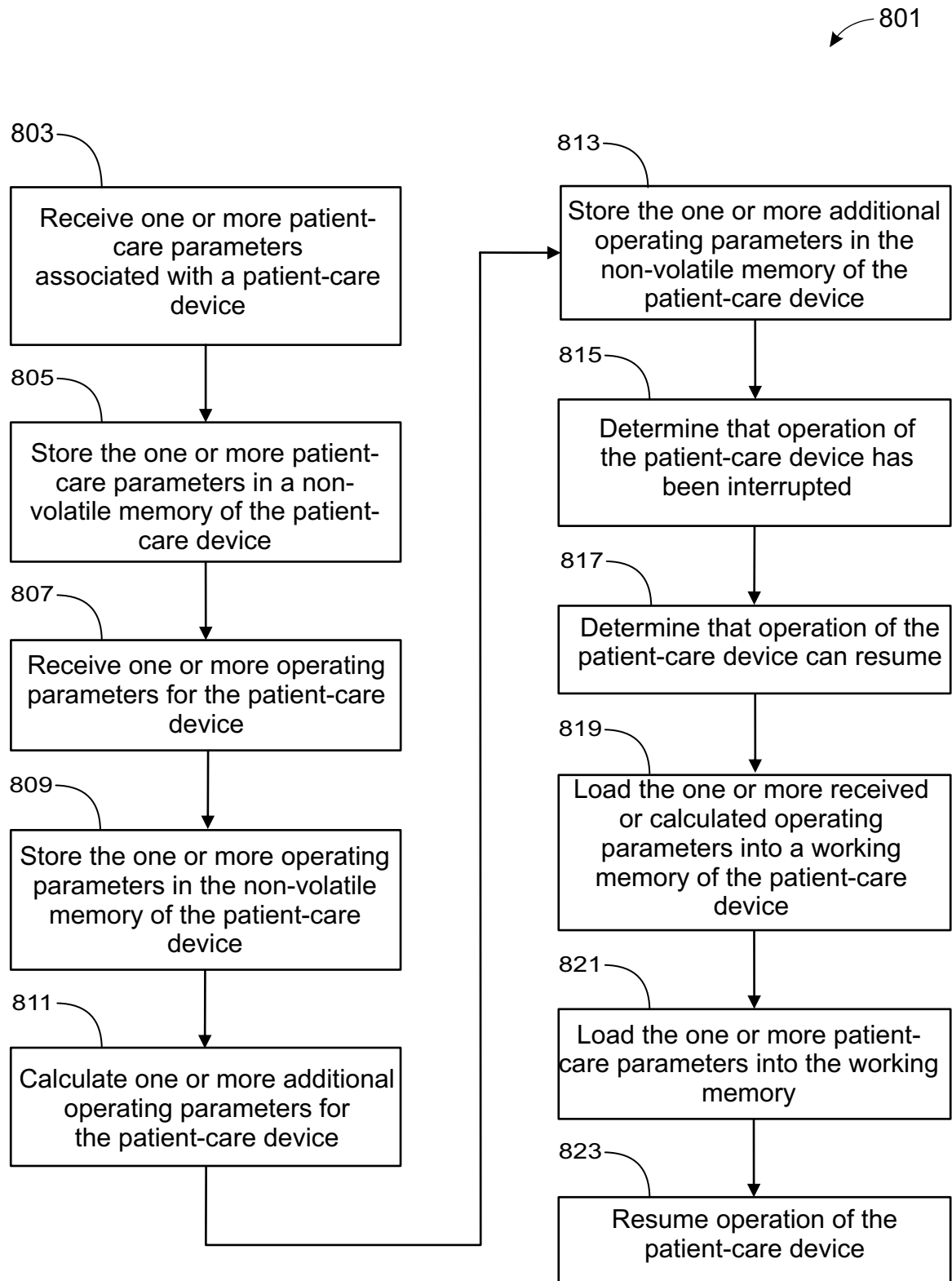


FIG. 12

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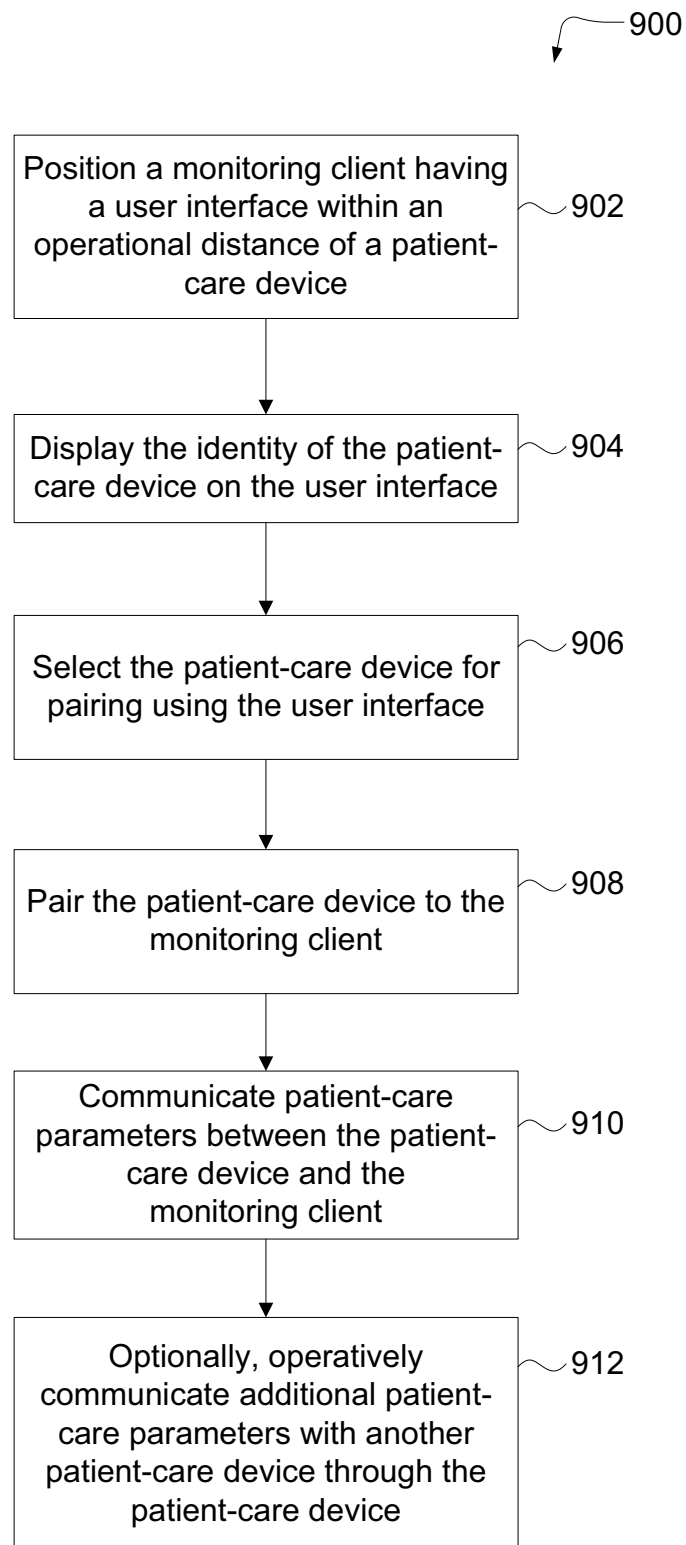


FIG. 13

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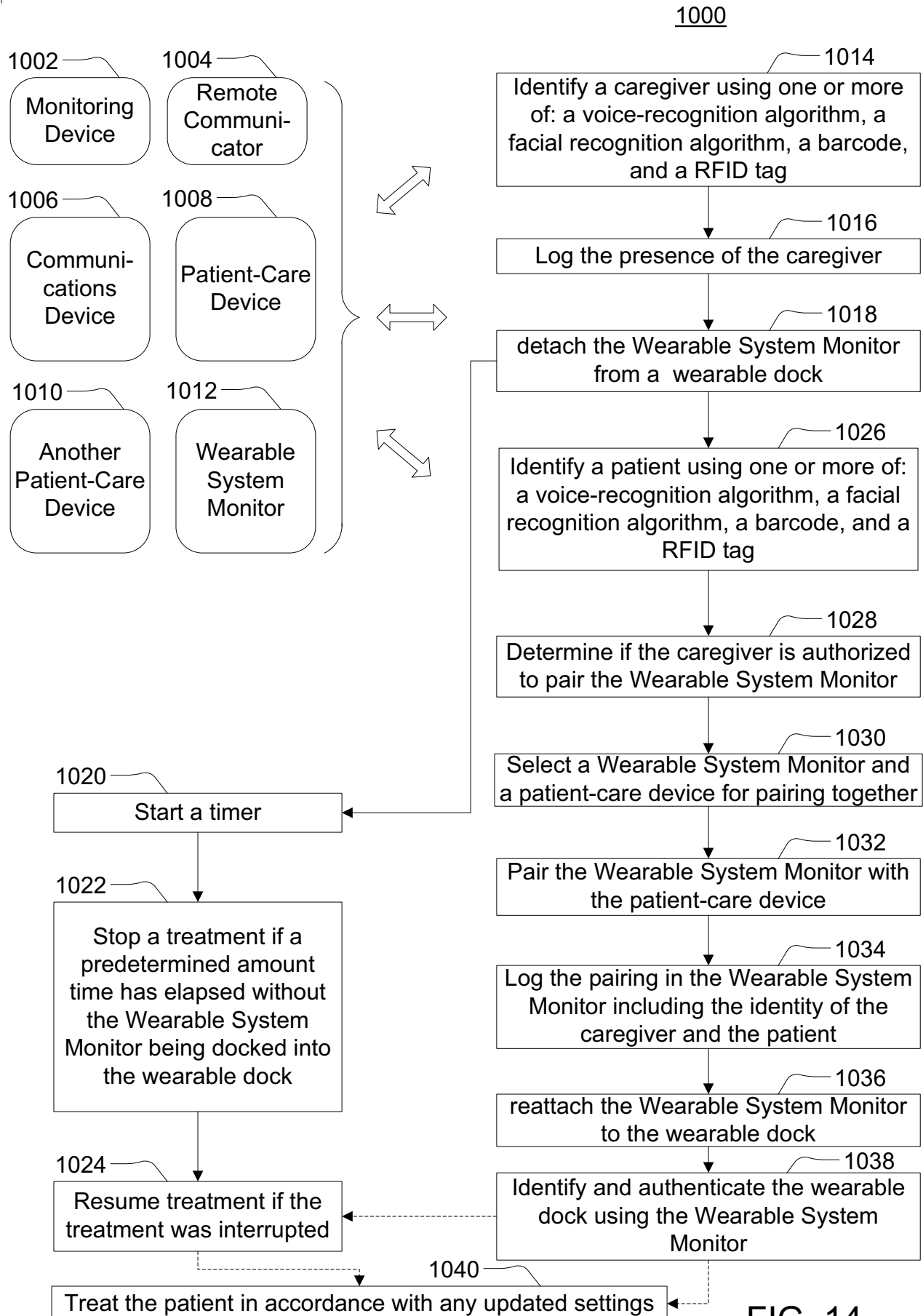


FIG. 14

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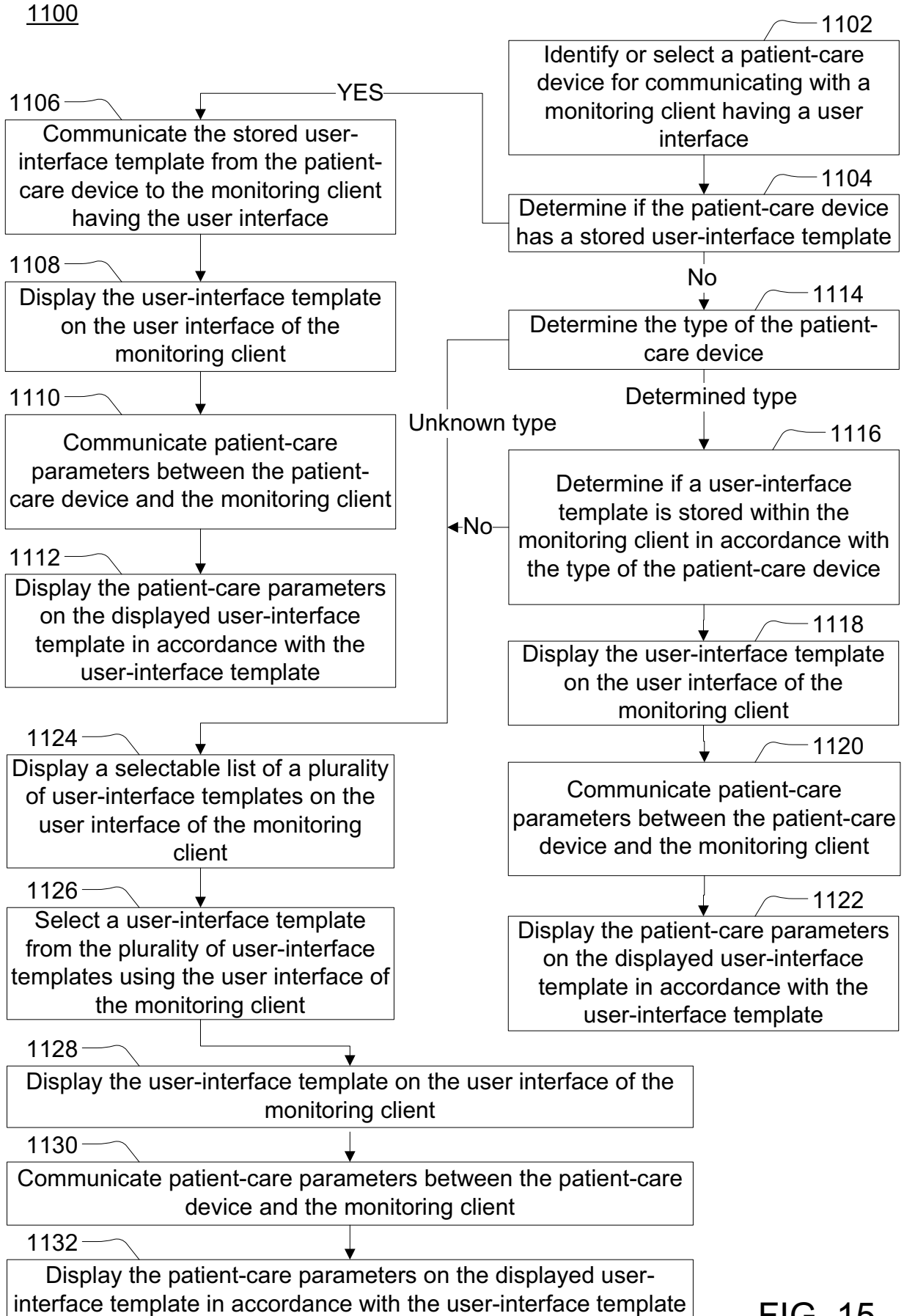


FIG. 15

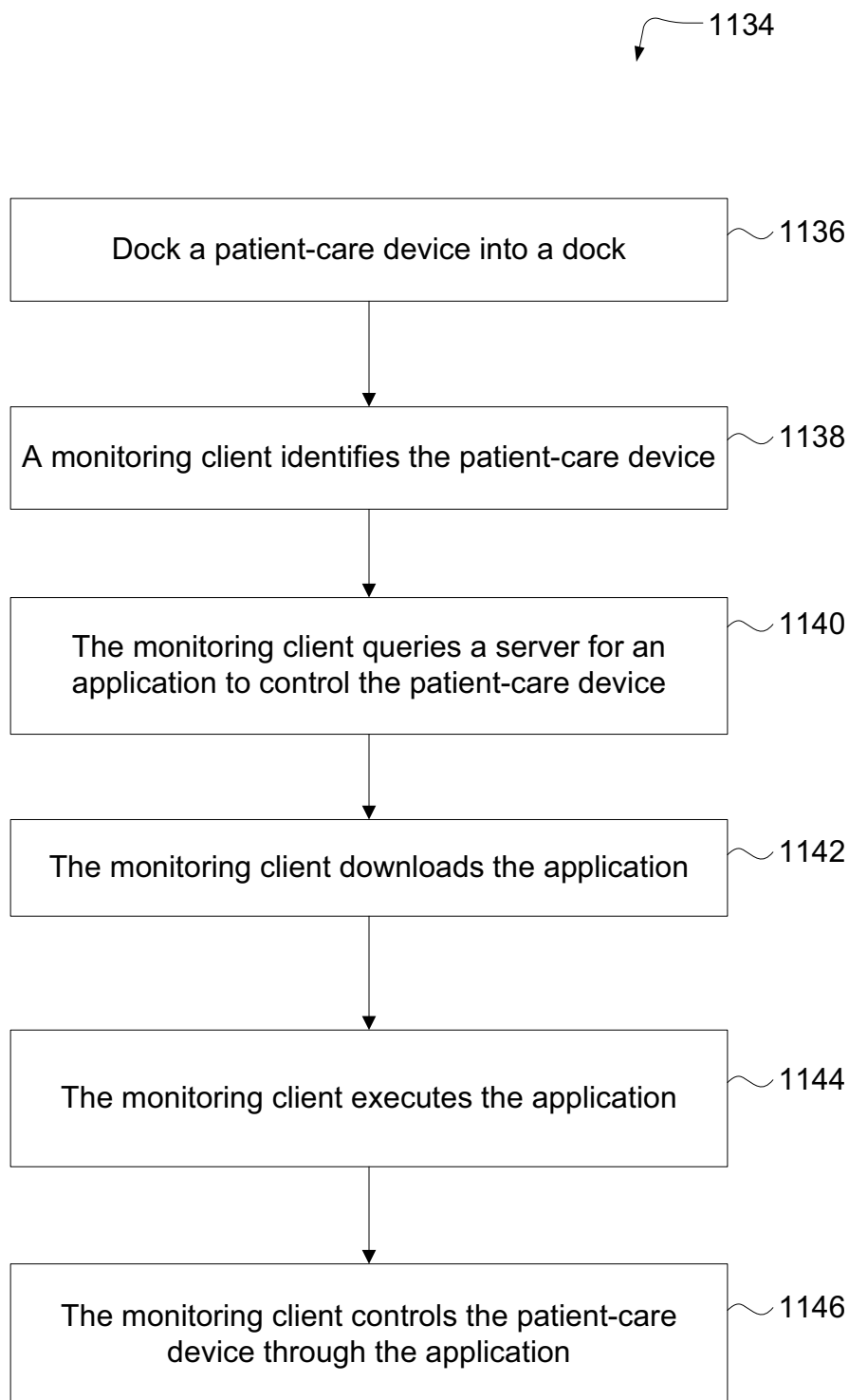


FIG. 16

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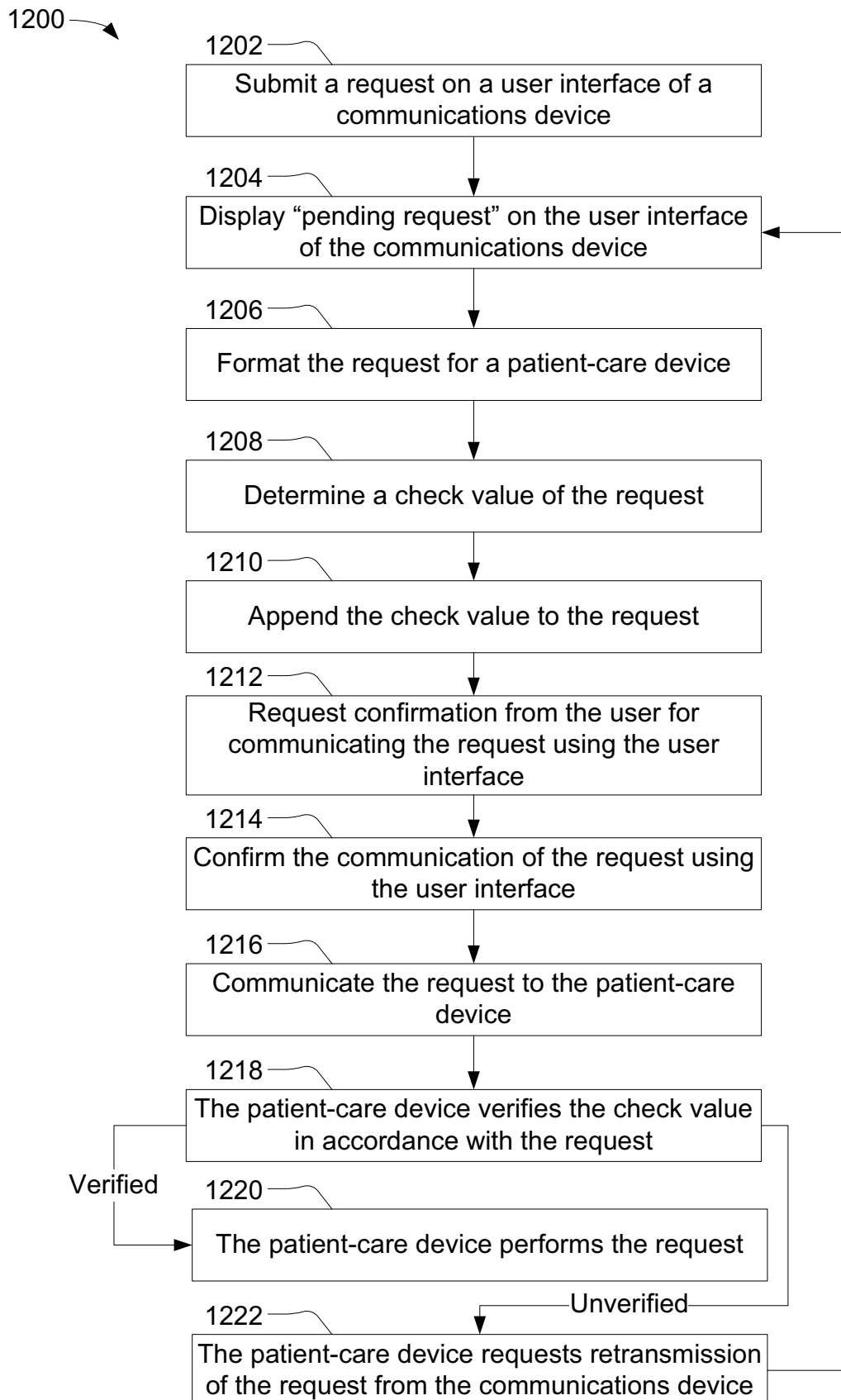


FIG. 17

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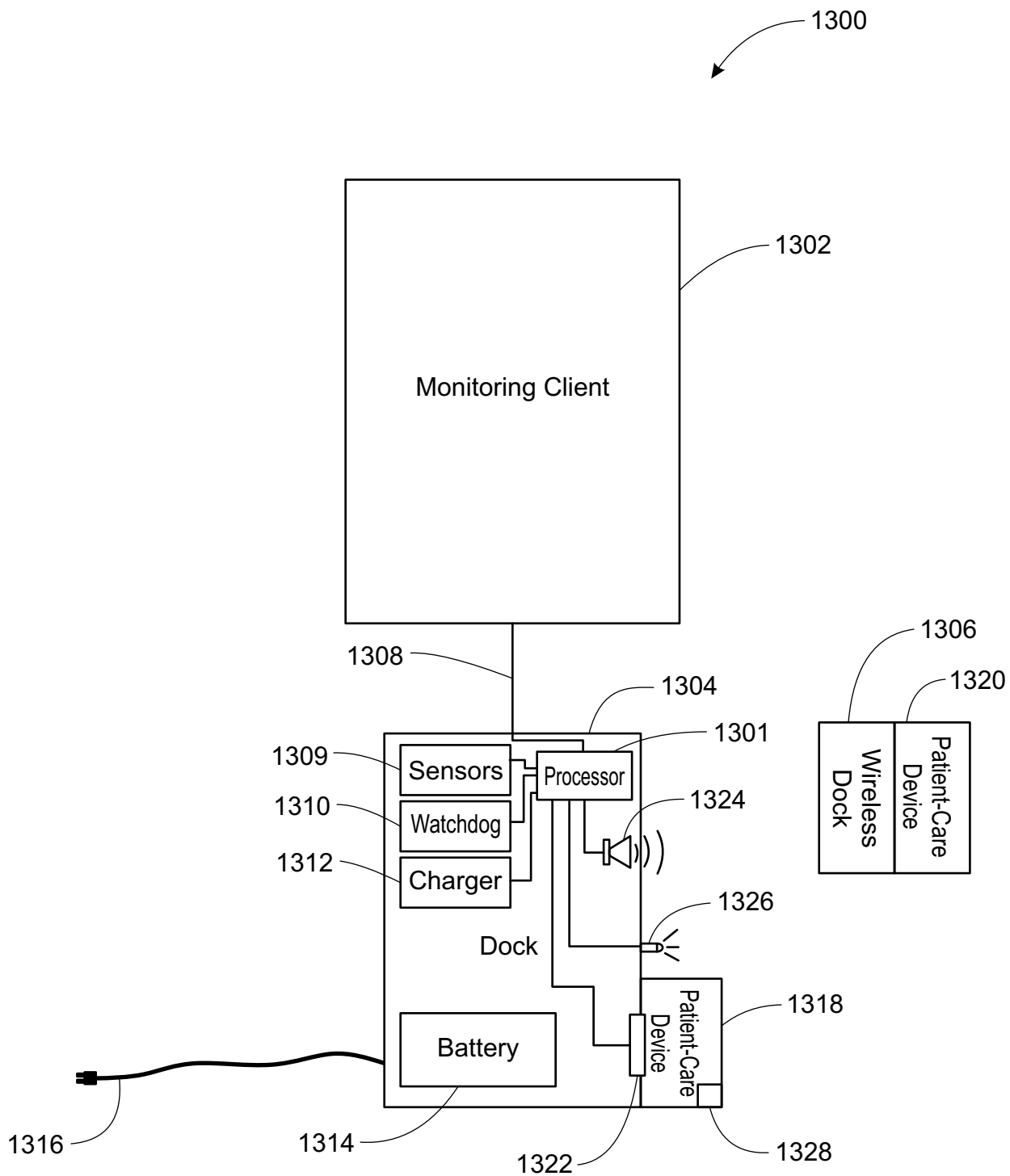


FIG. 18

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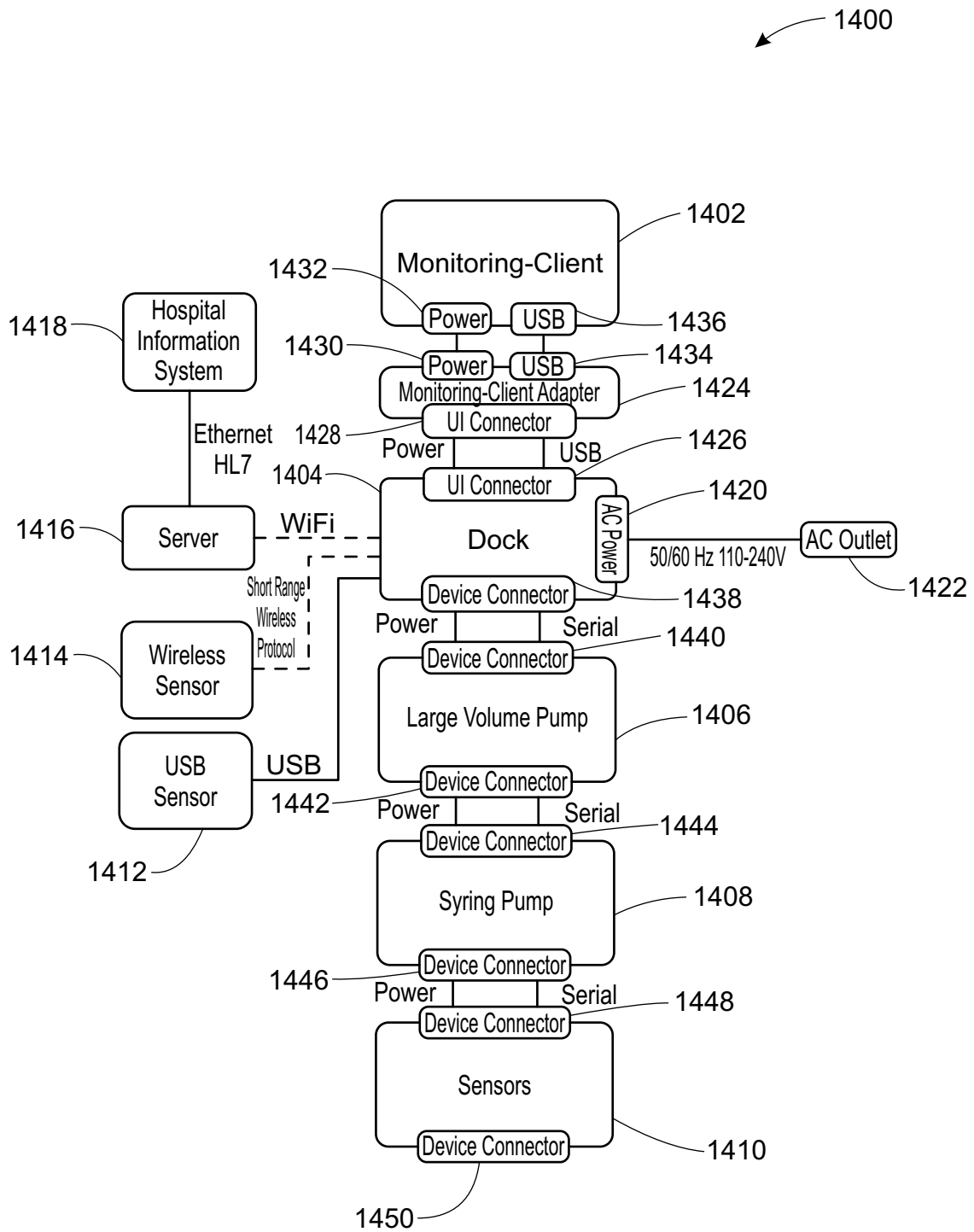


FIG. 19

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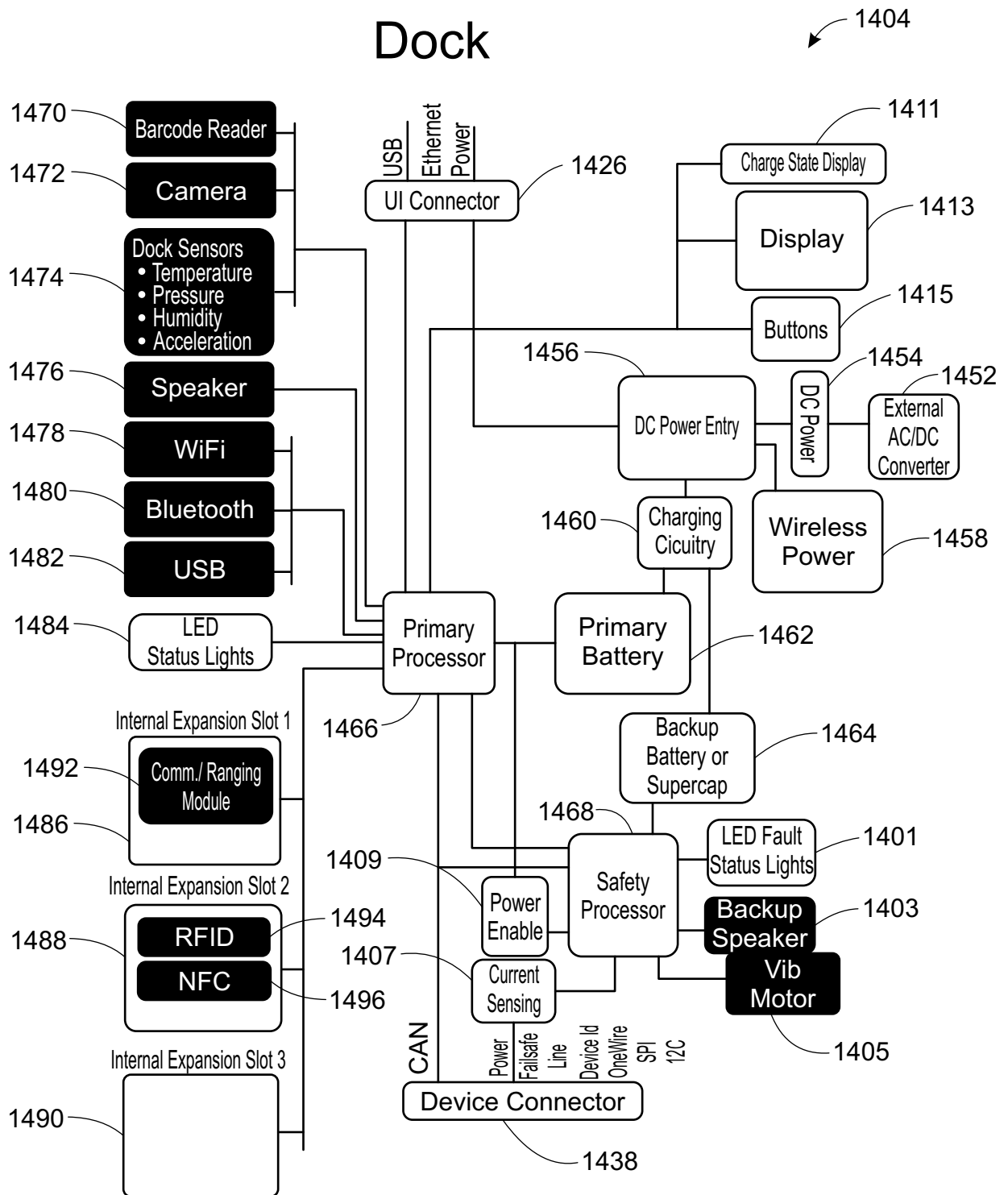


FIG. 20

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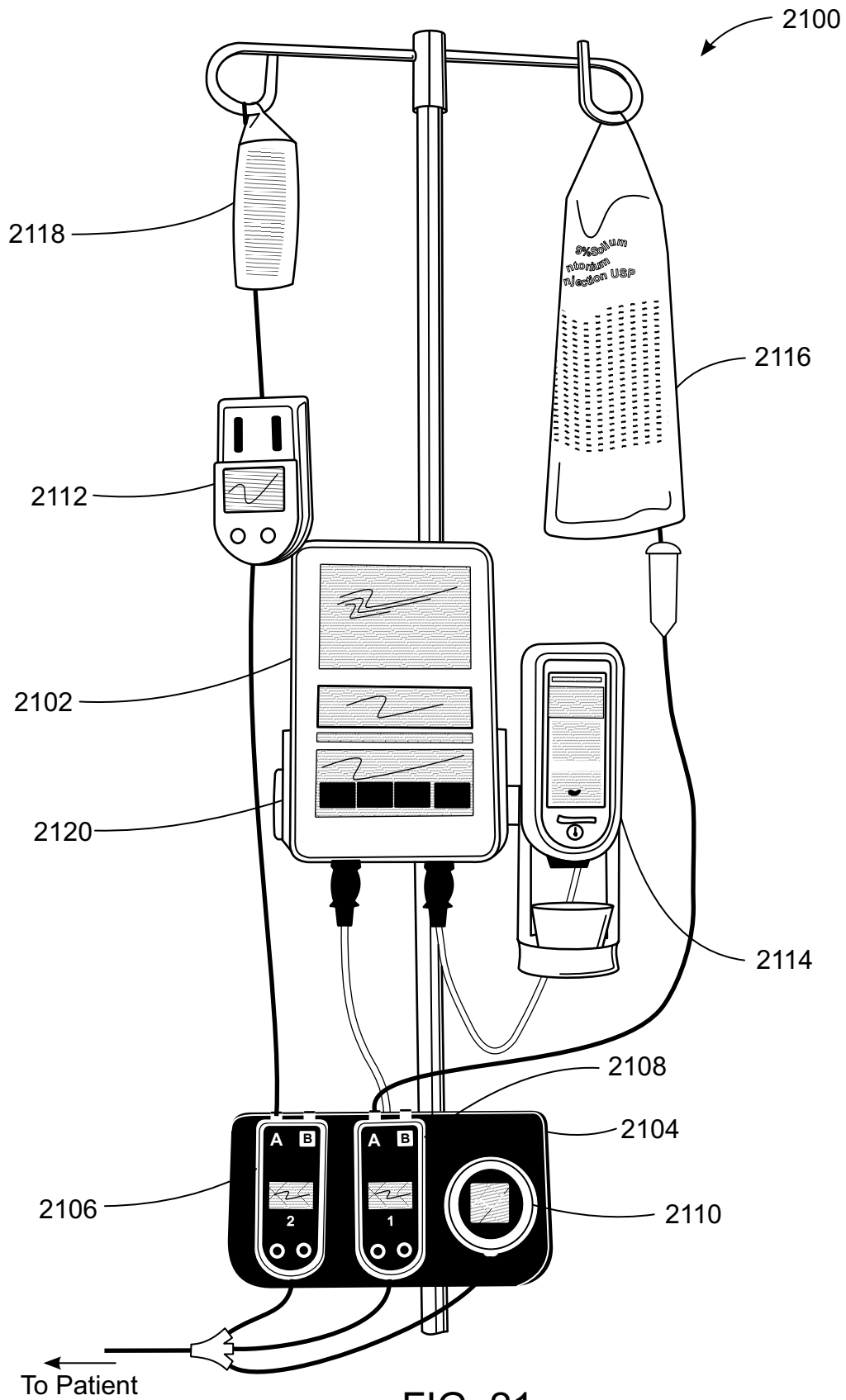


FIG. 21

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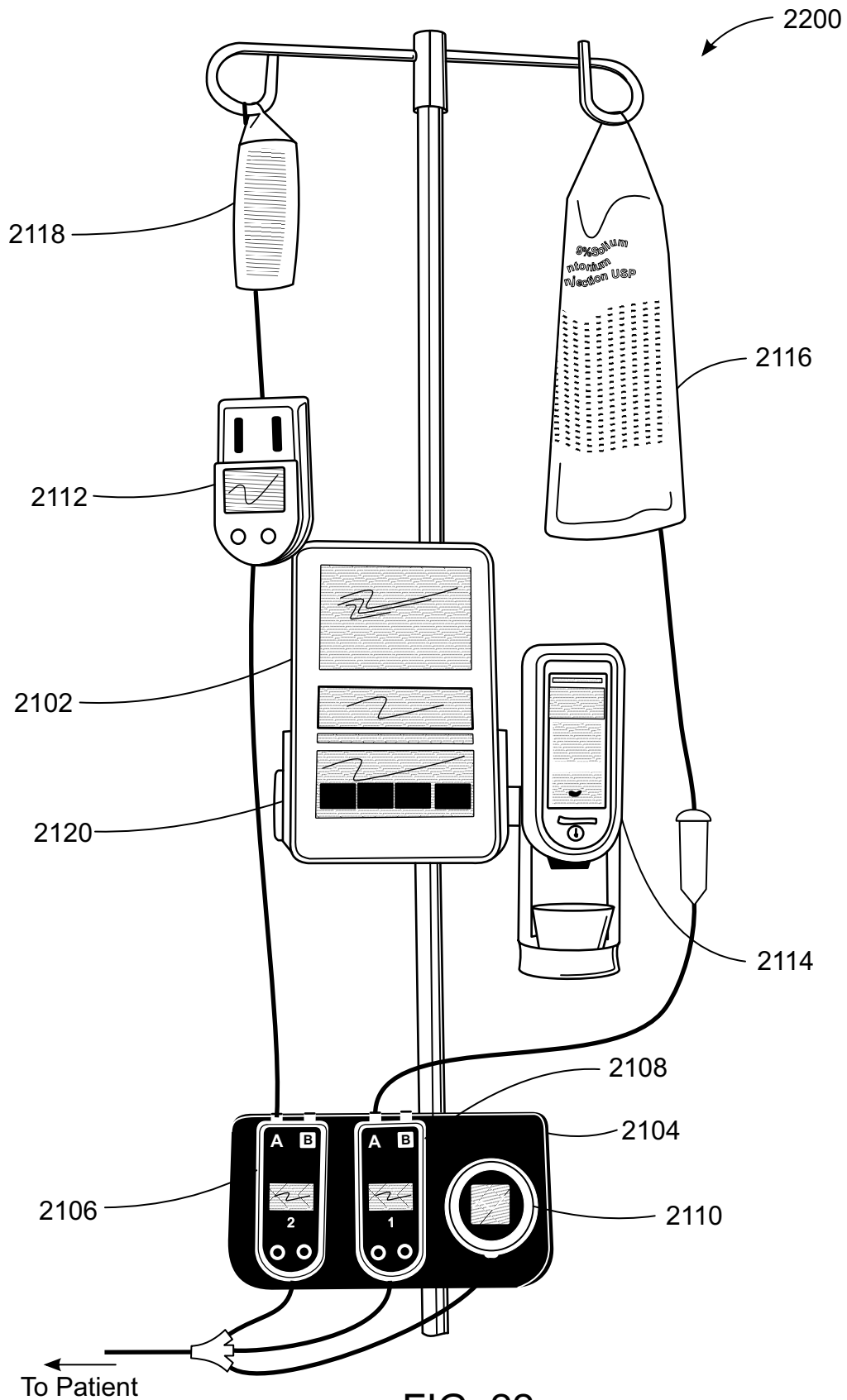


FIG. 22

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FIG. 23

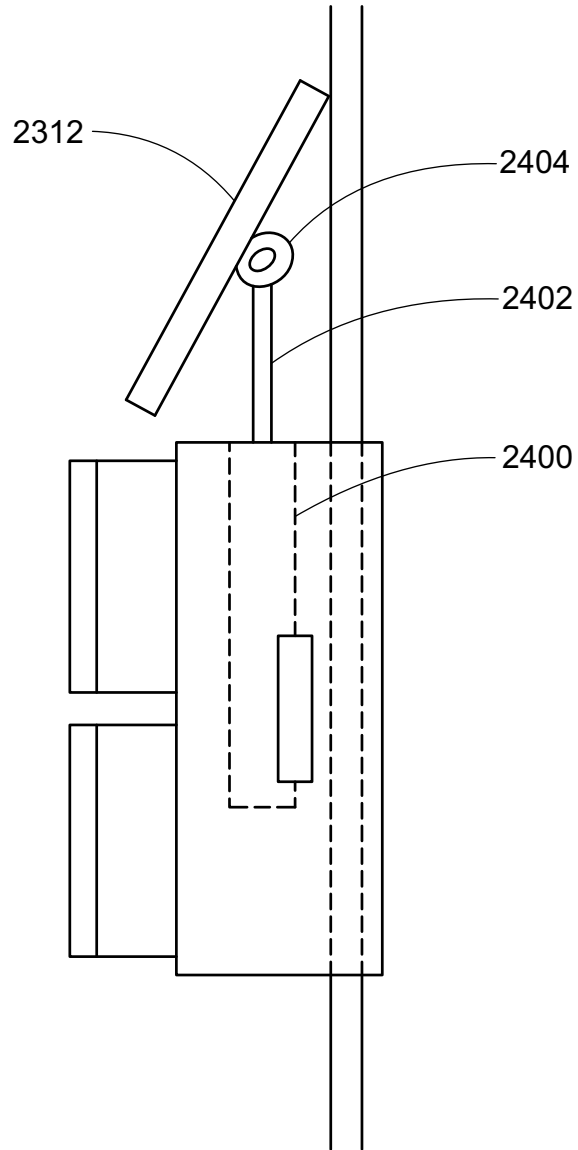


FIG. 24

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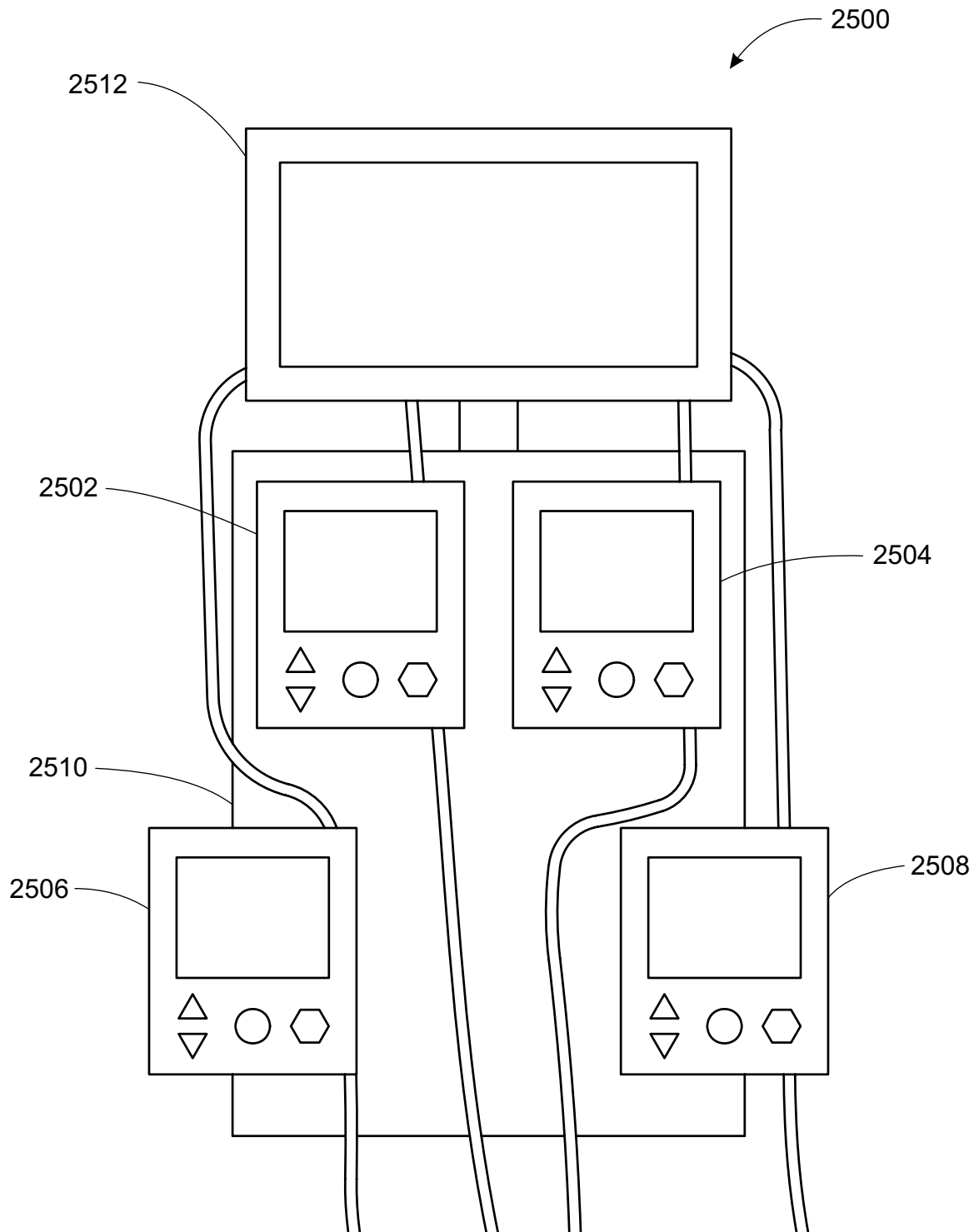


FIG. 25

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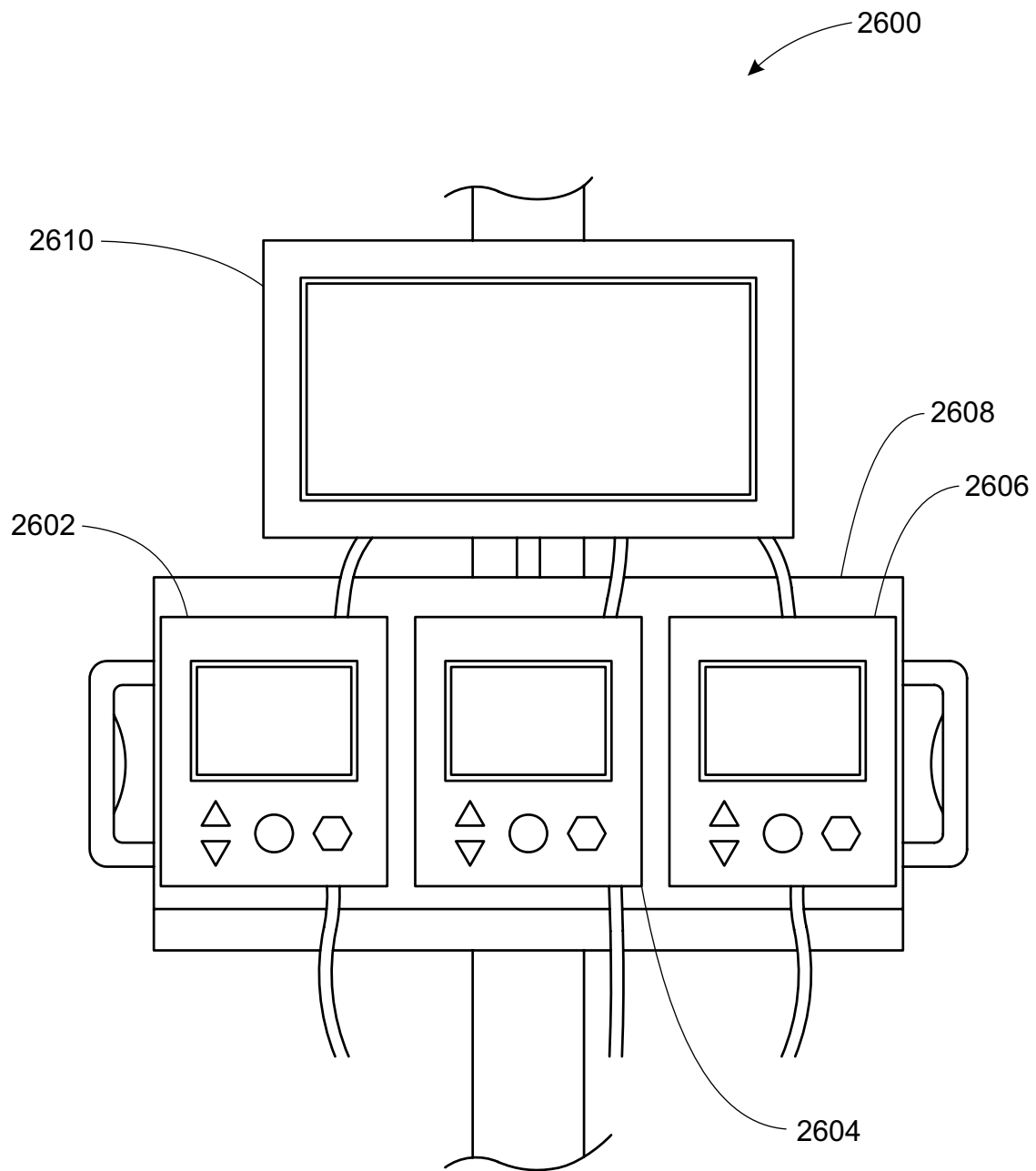


FIG. 26

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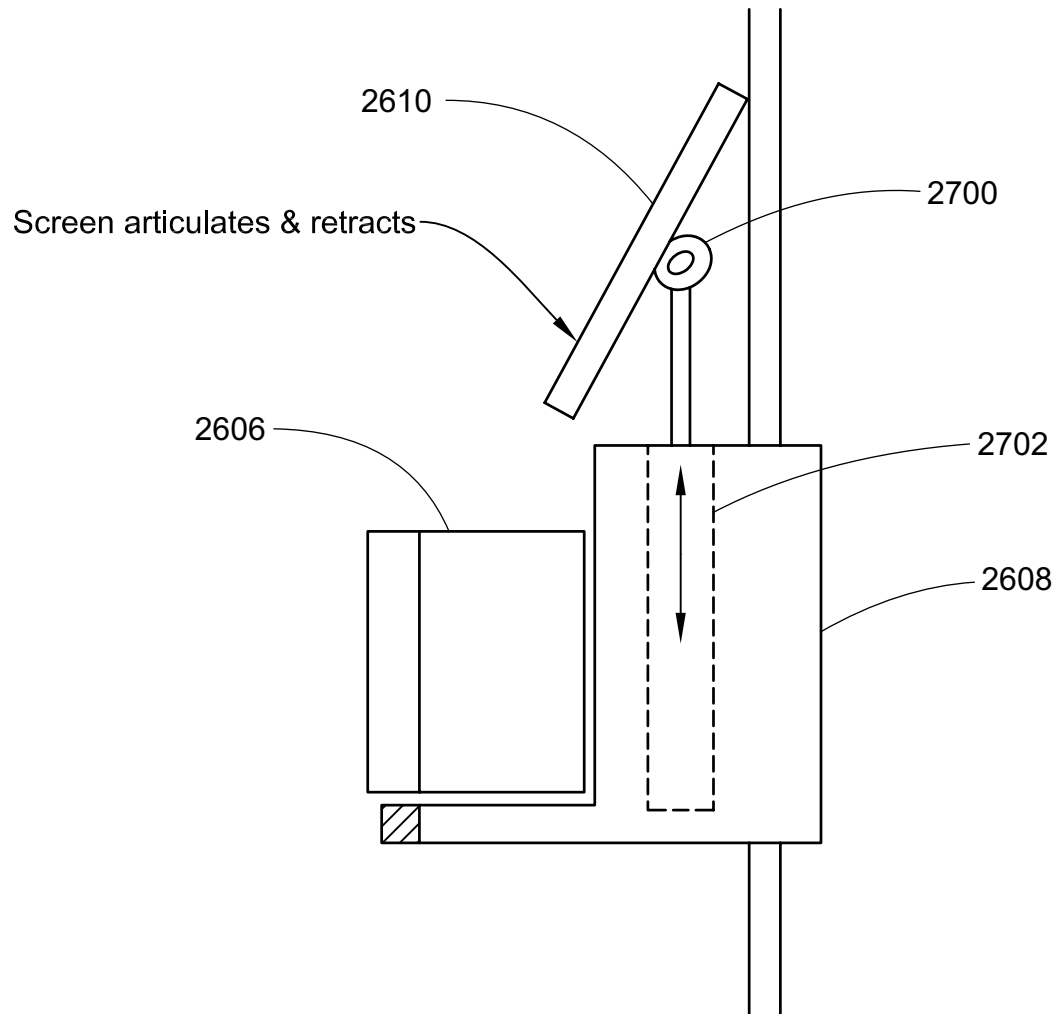


FIG. 27

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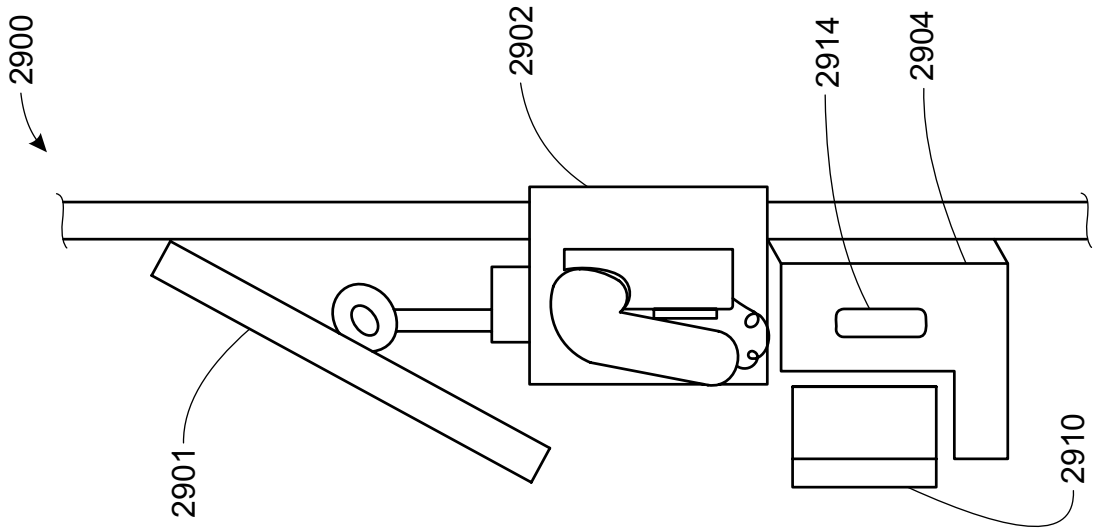


FIG. 29

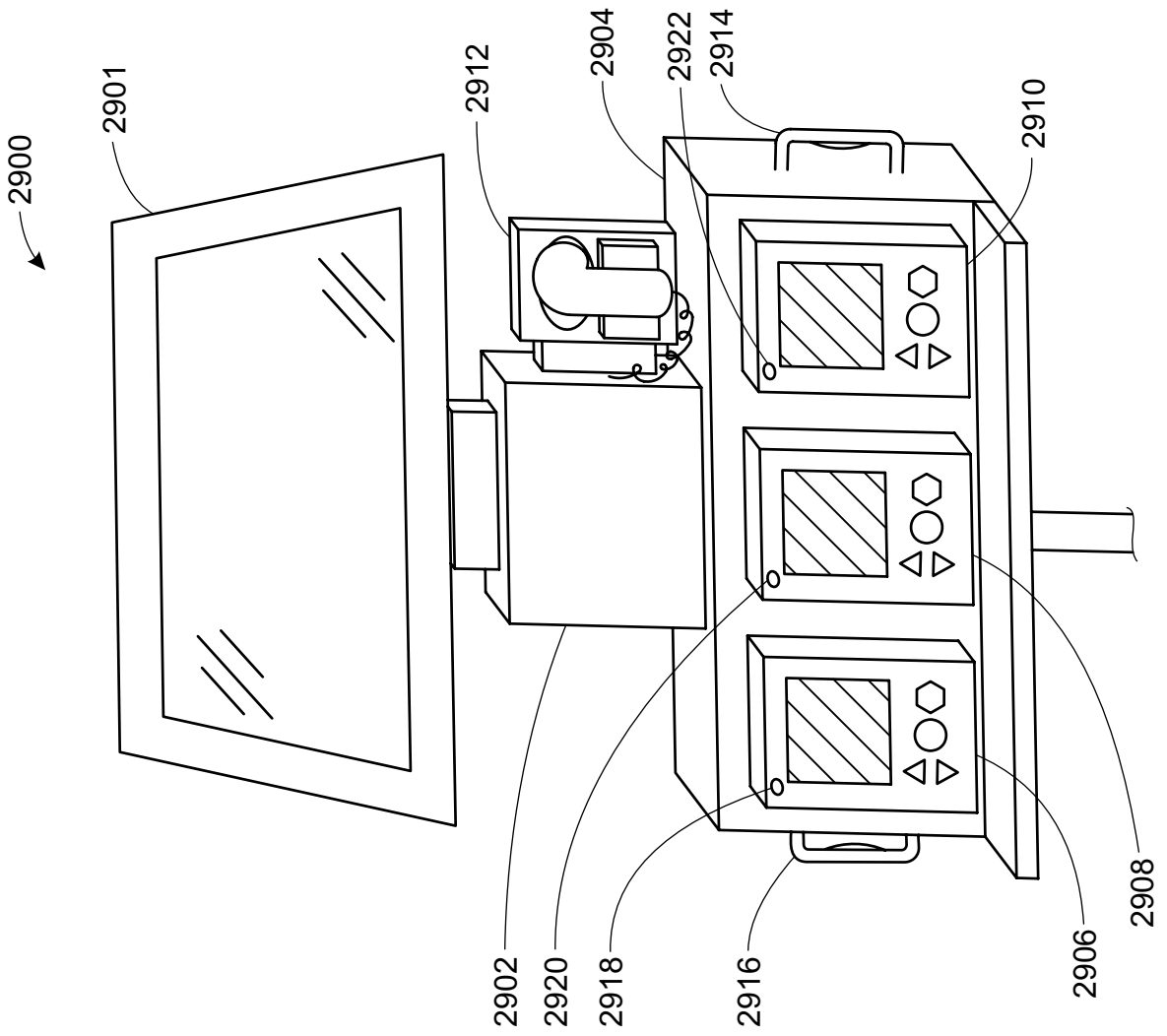


FIG. 28

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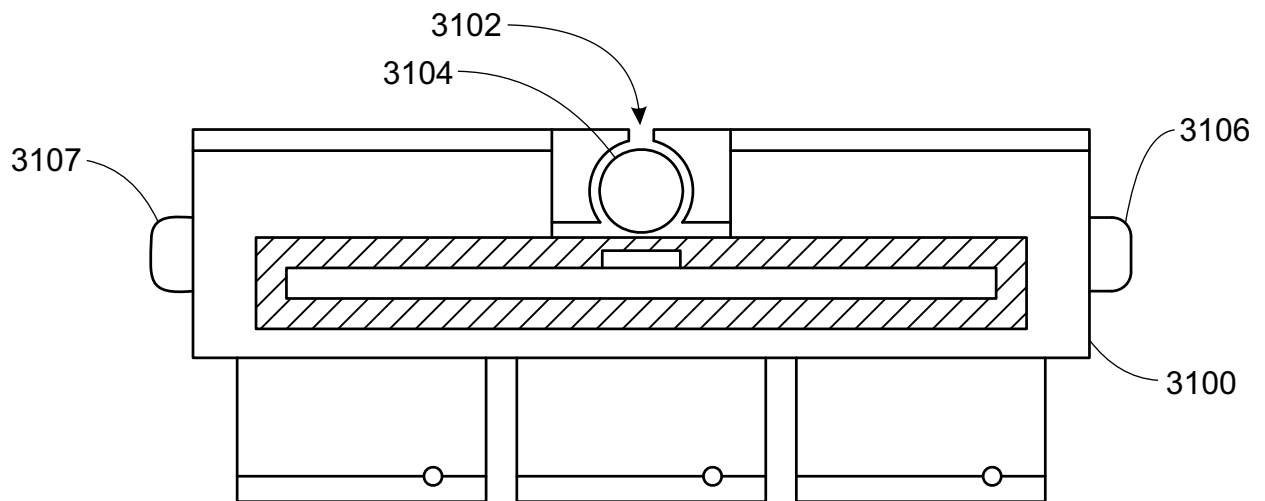


FIG. 30

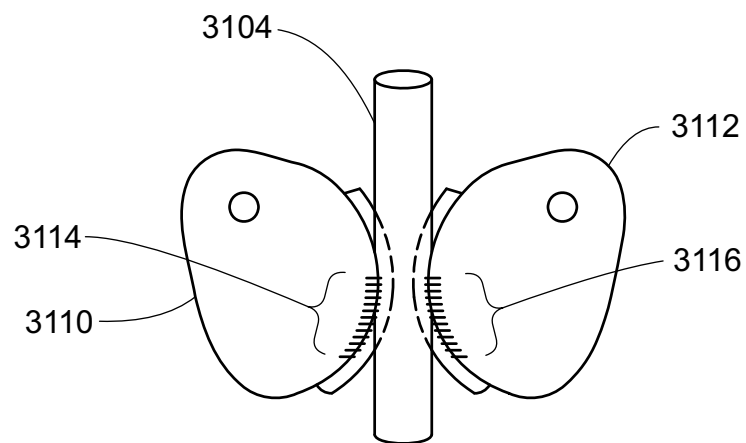


FIG. 31

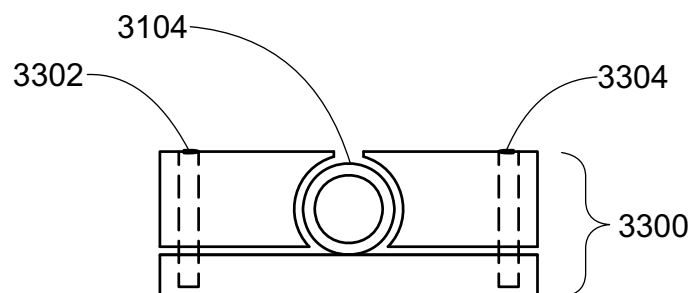


FIG. 32

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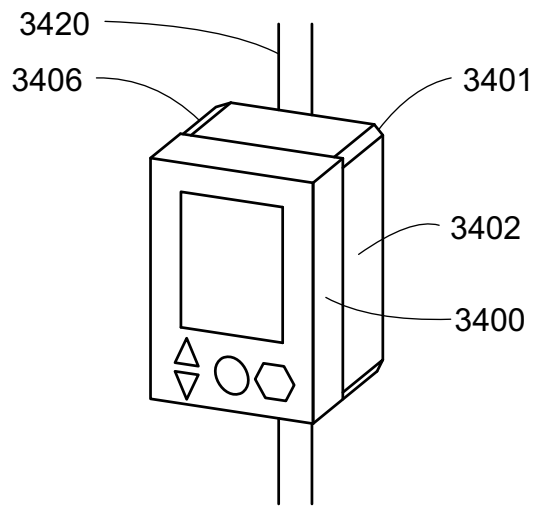


FIG. 33

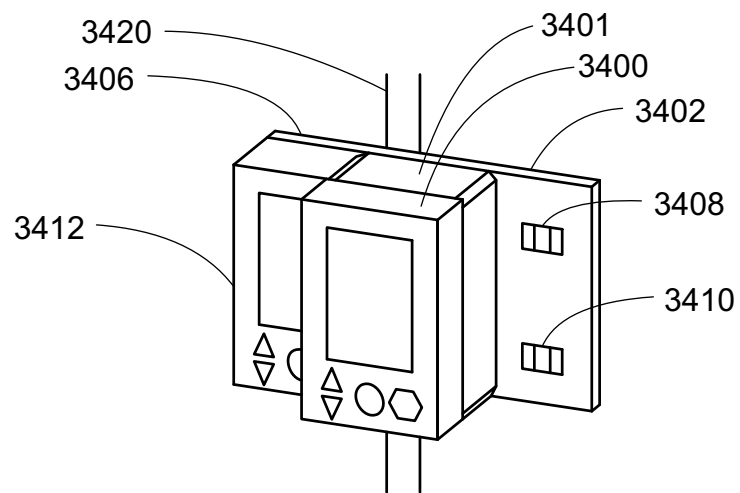


FIG. 34

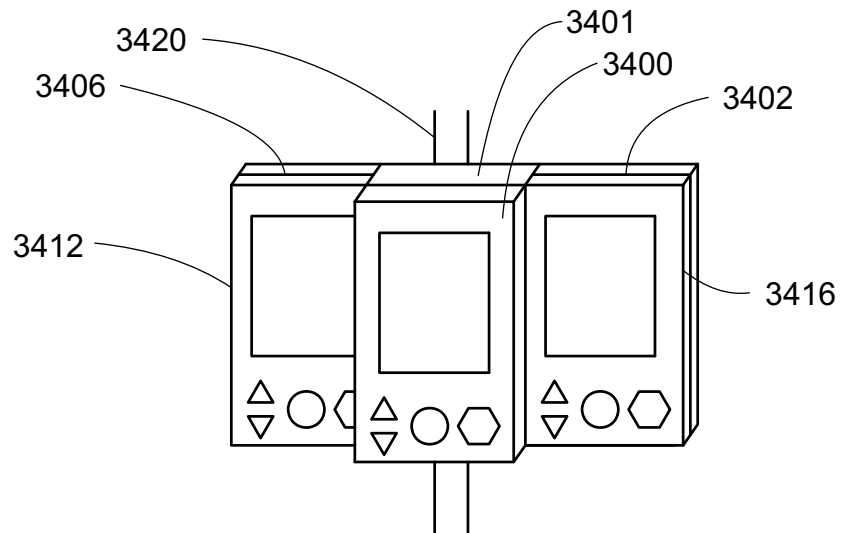


FIG. 35

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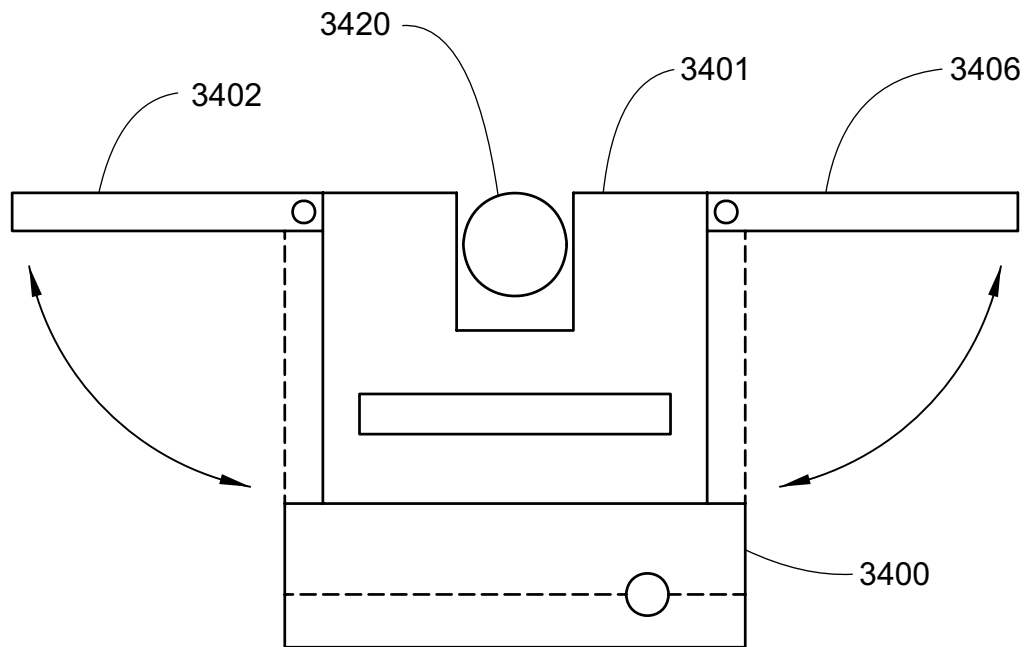


FIG. 36

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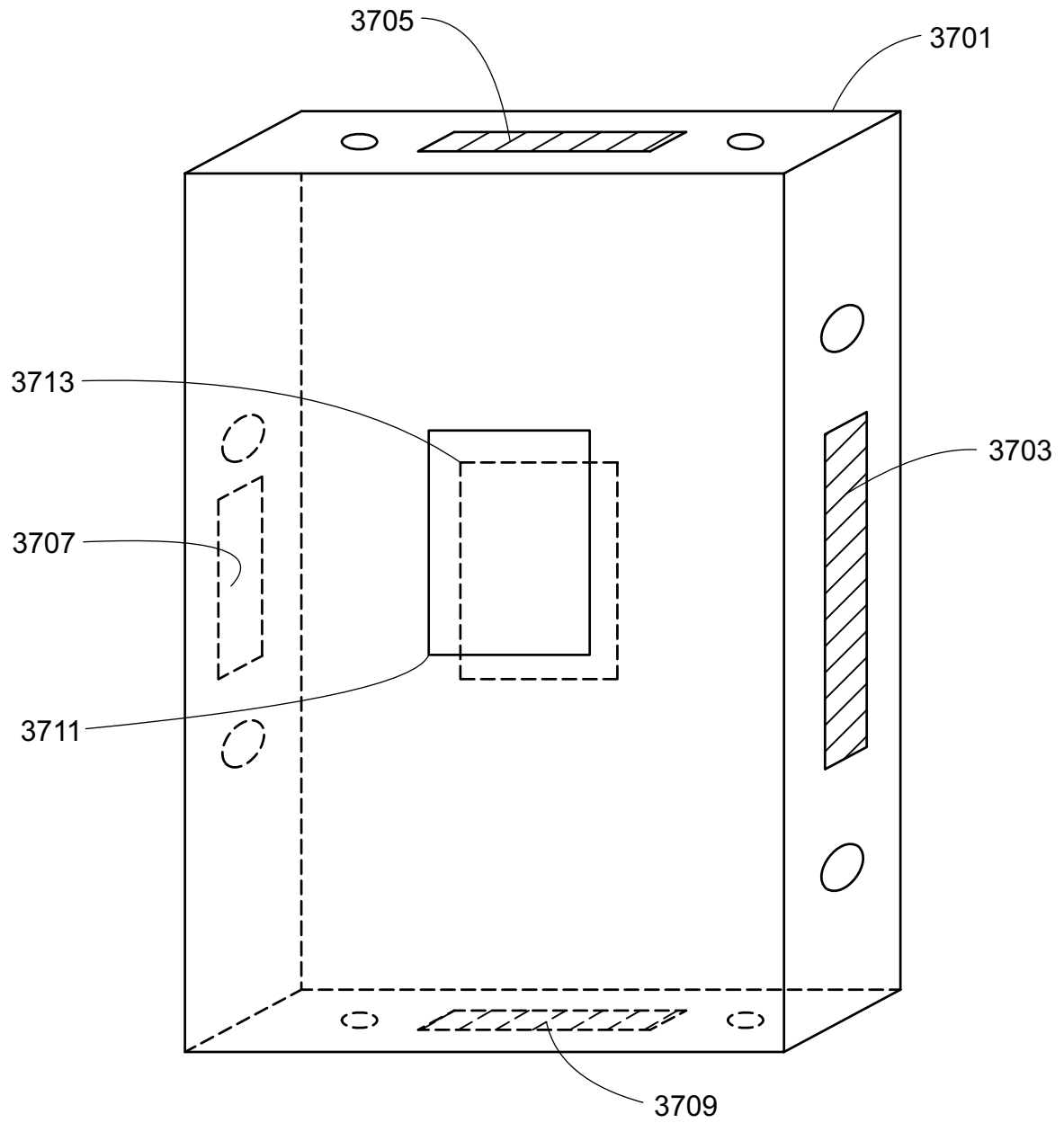


FIG. 37

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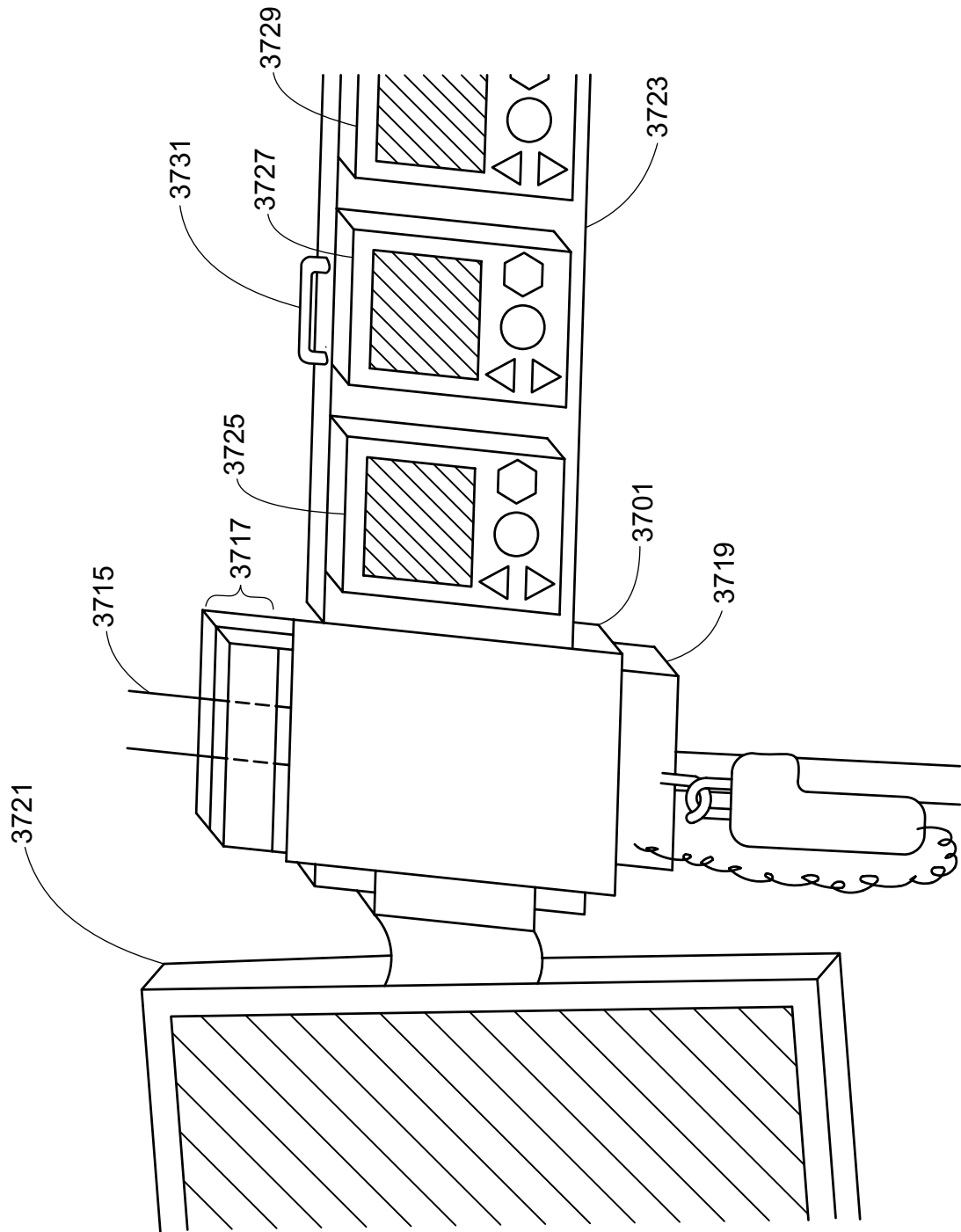


FIG. 38

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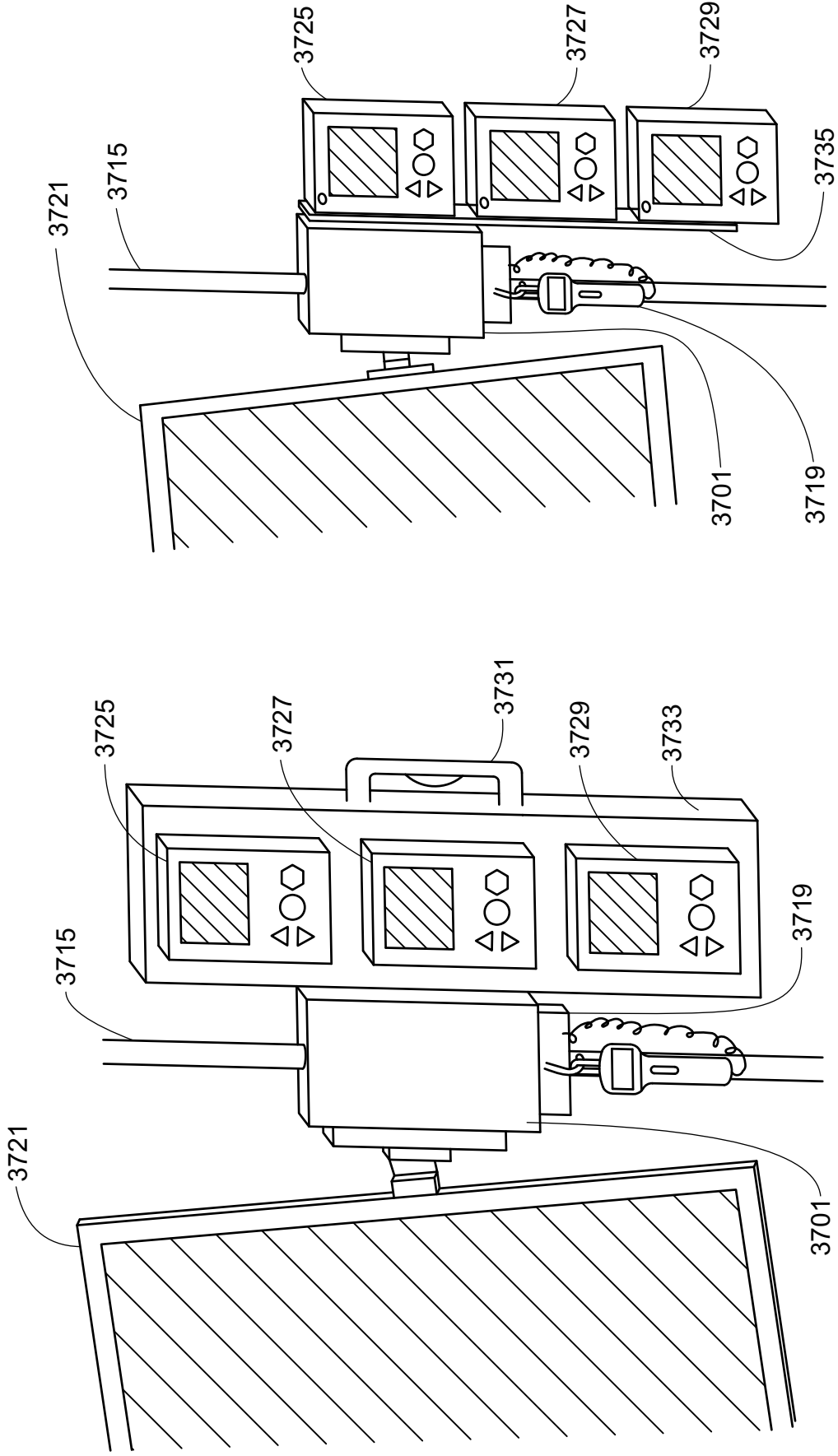


FIG. 39

FIG. 40

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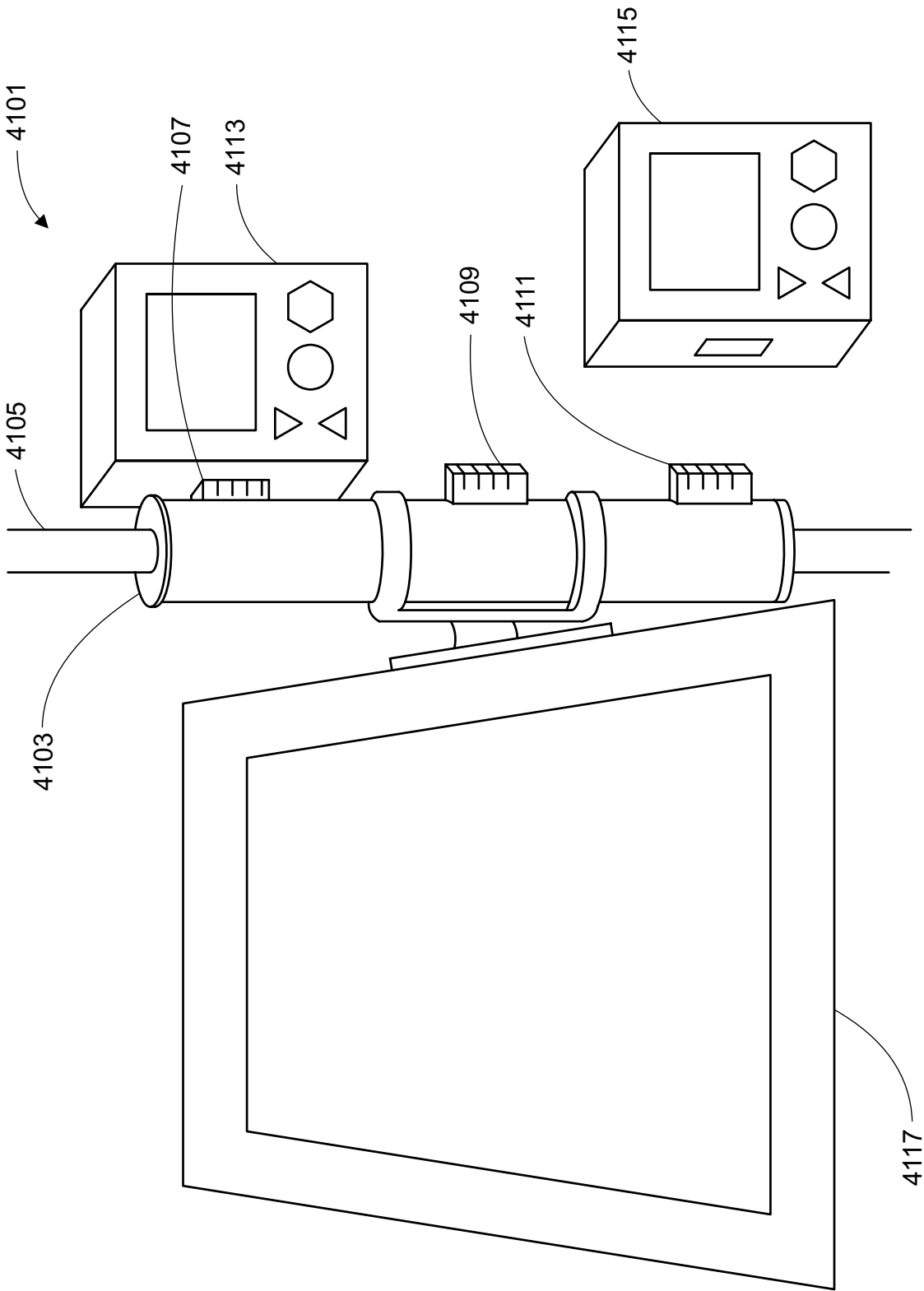


FIG. 41

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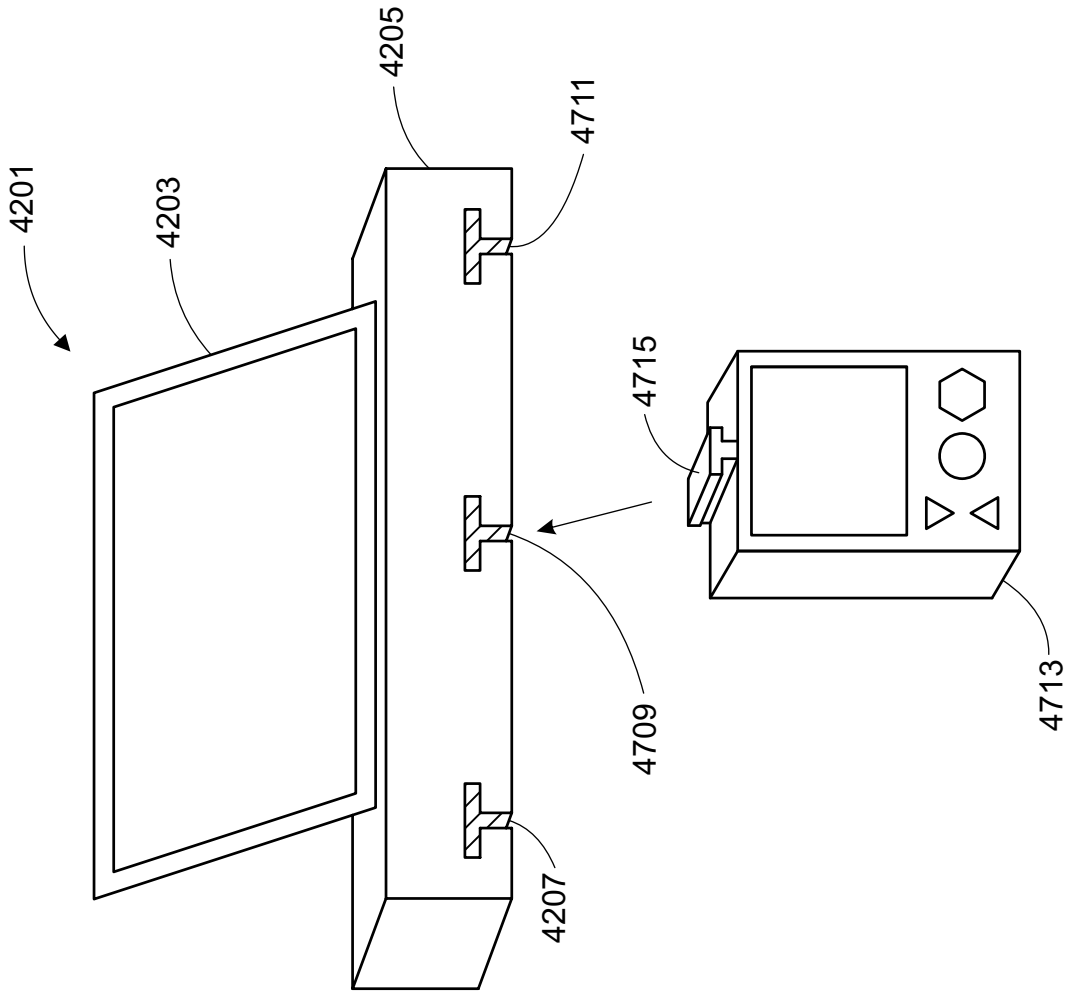


FIG. 42

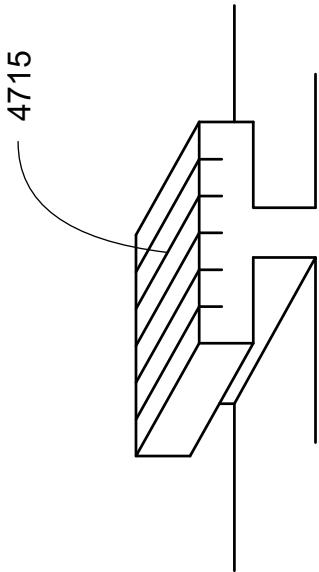


FIG. 43

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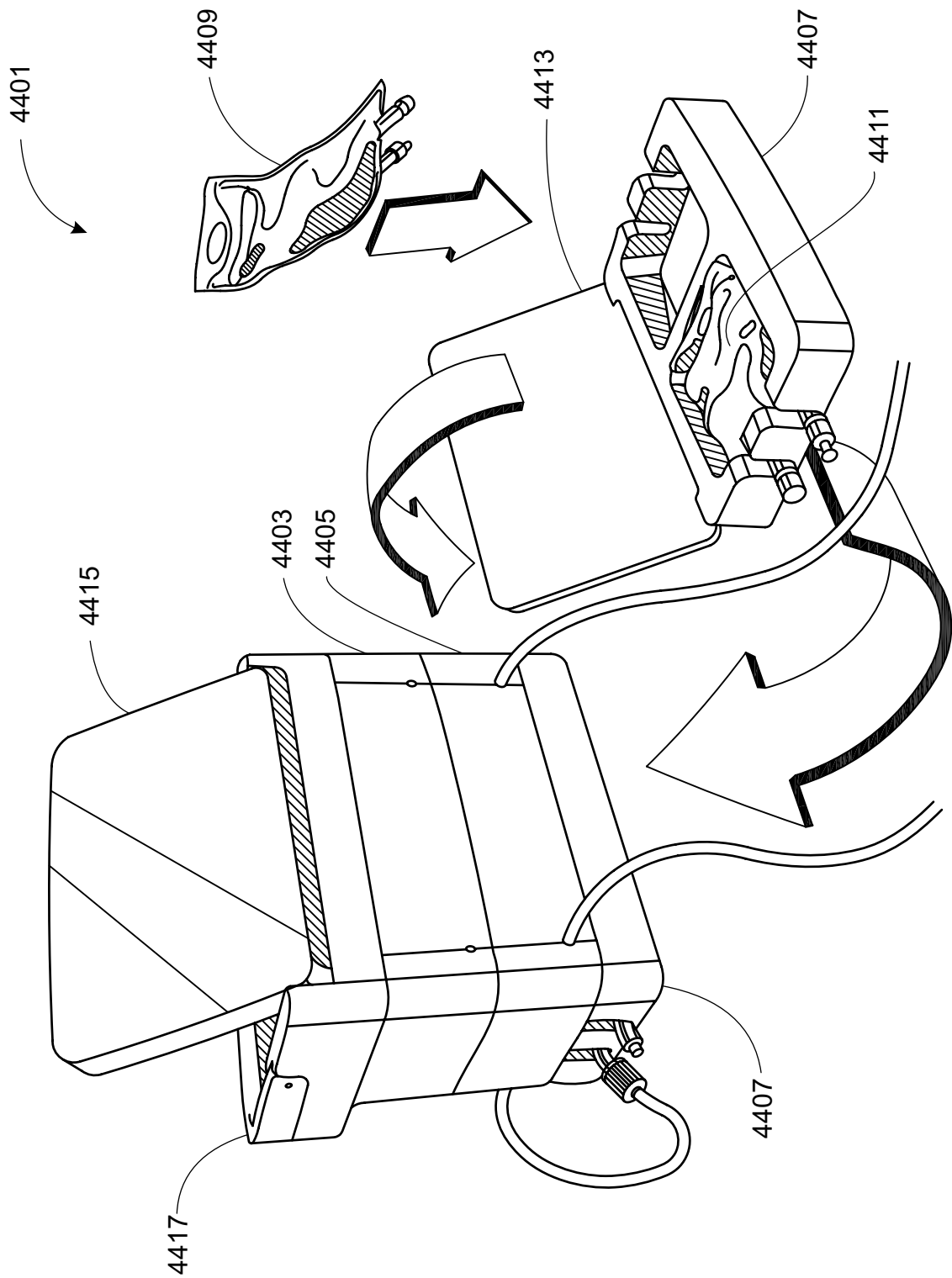


FIG. 44

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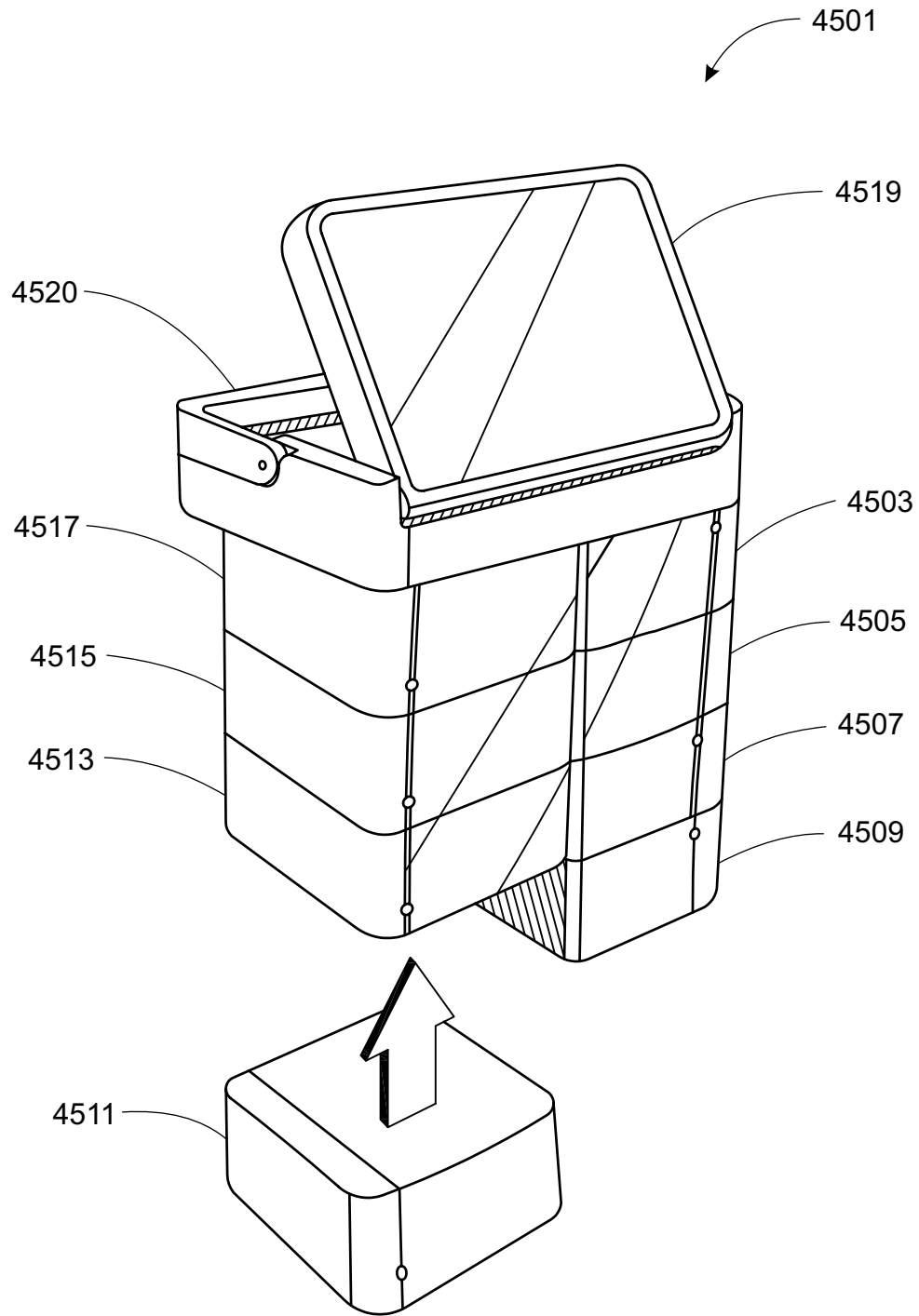


FIG. 45

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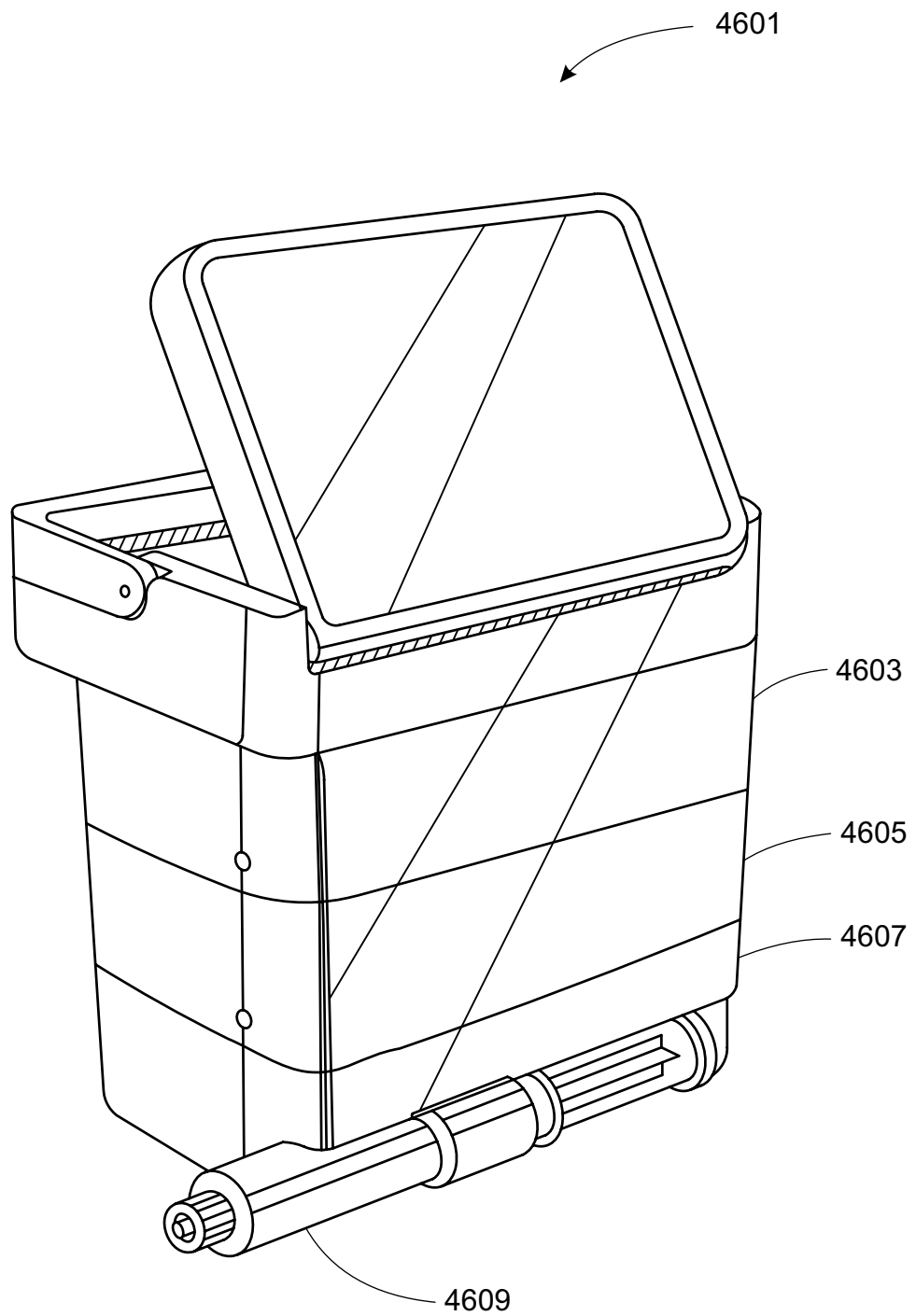


FIG. 46

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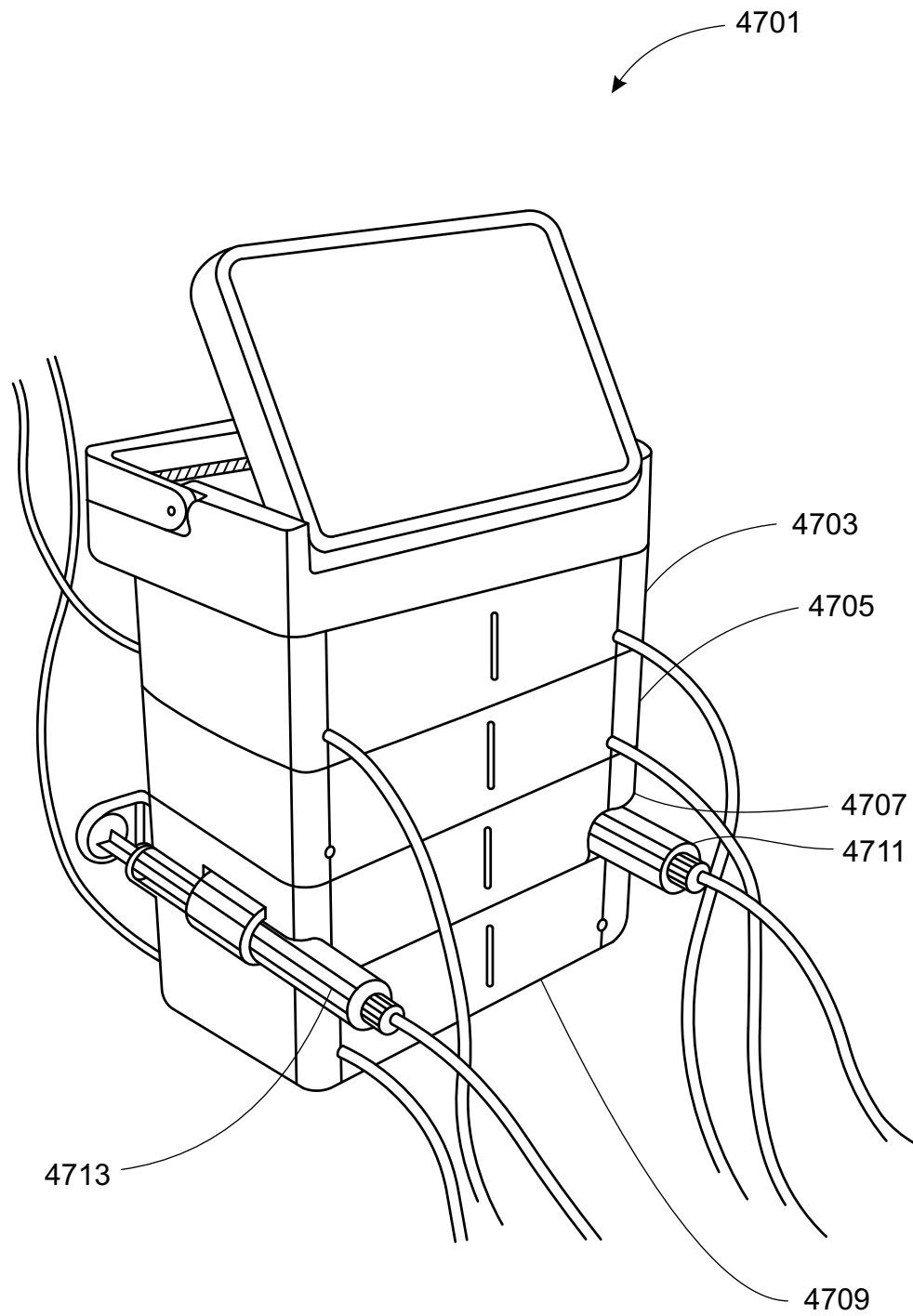


FIG. 47

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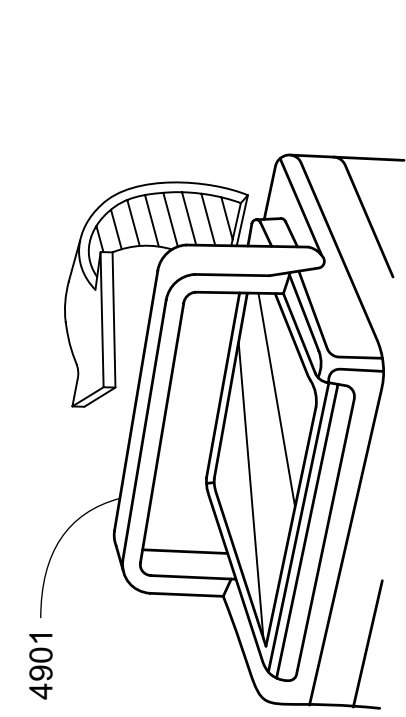


FIG. 49

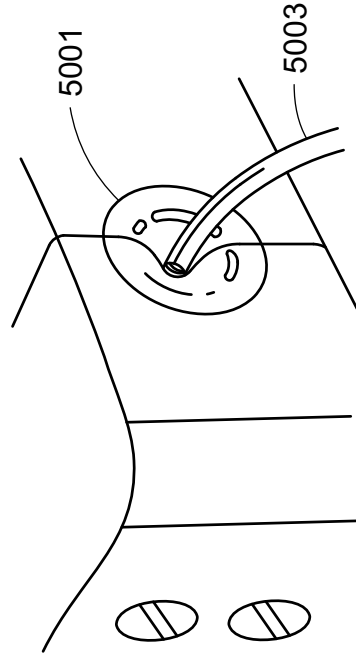


FIG. 50

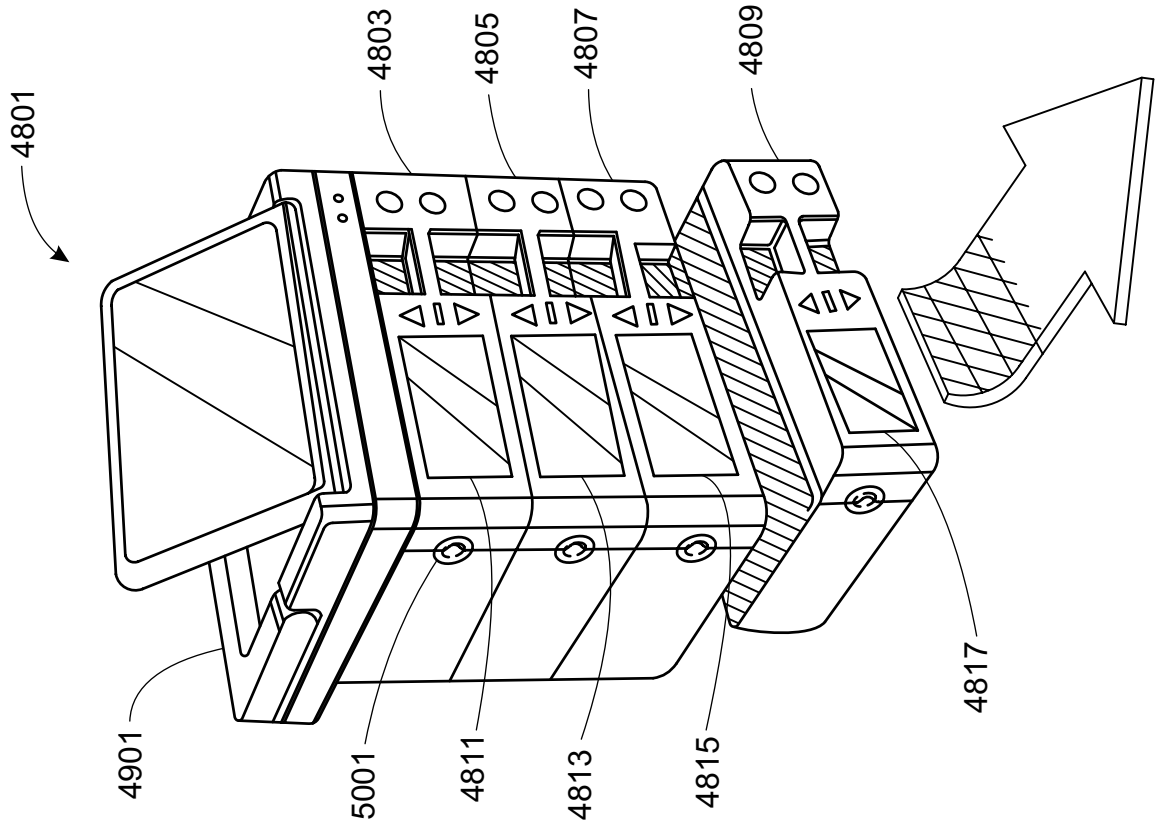


FIG. 48

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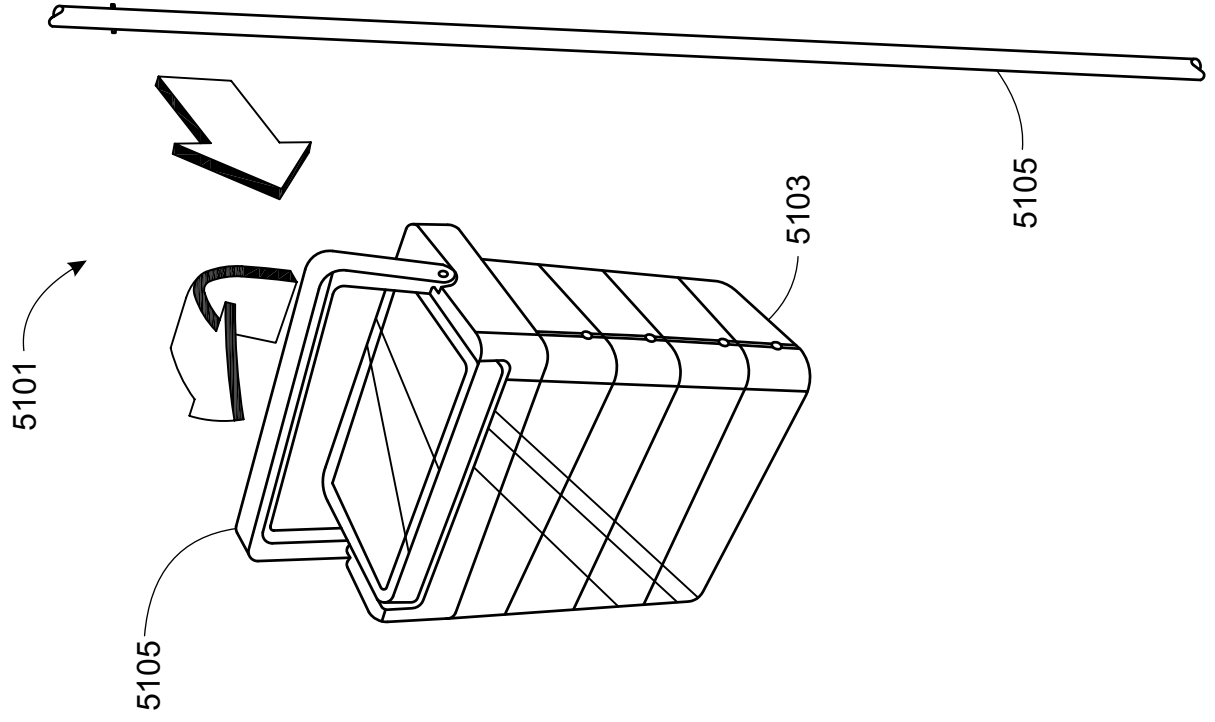


FIG. 52

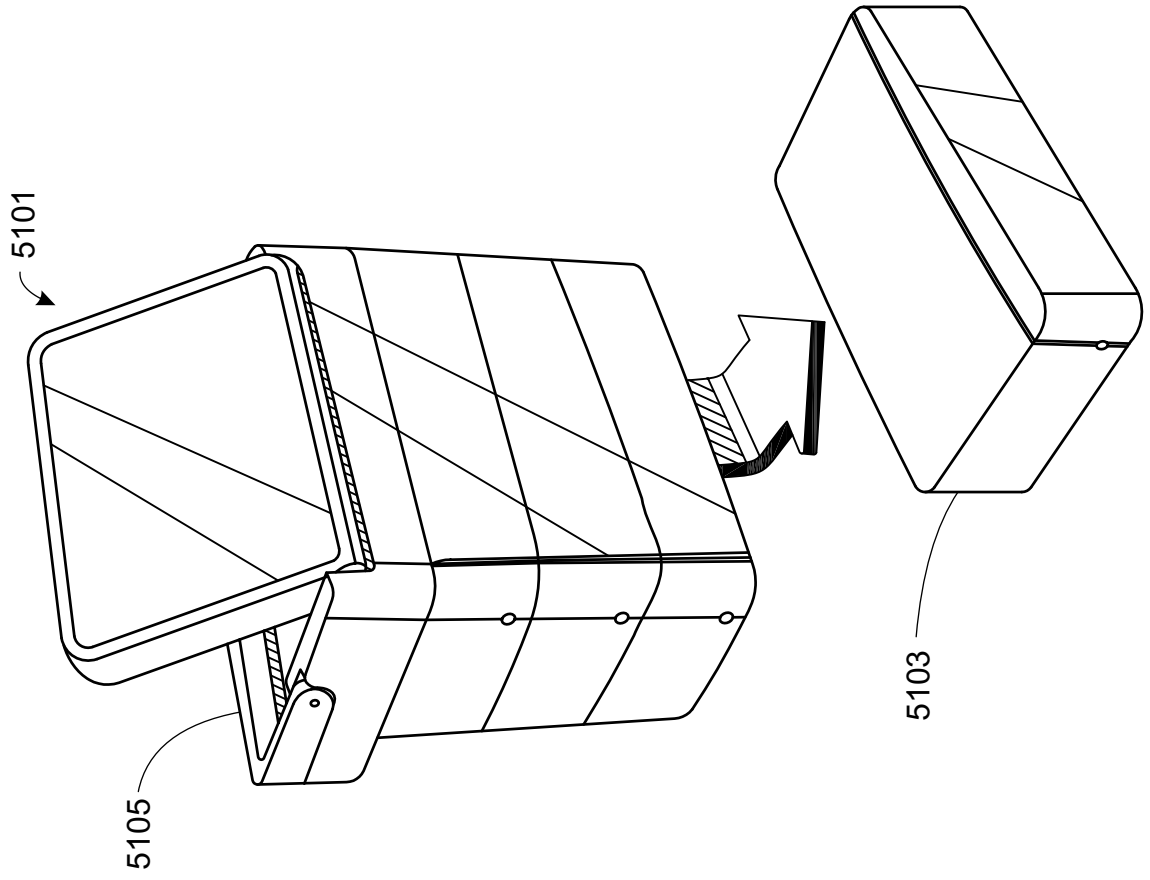


FIG. 51

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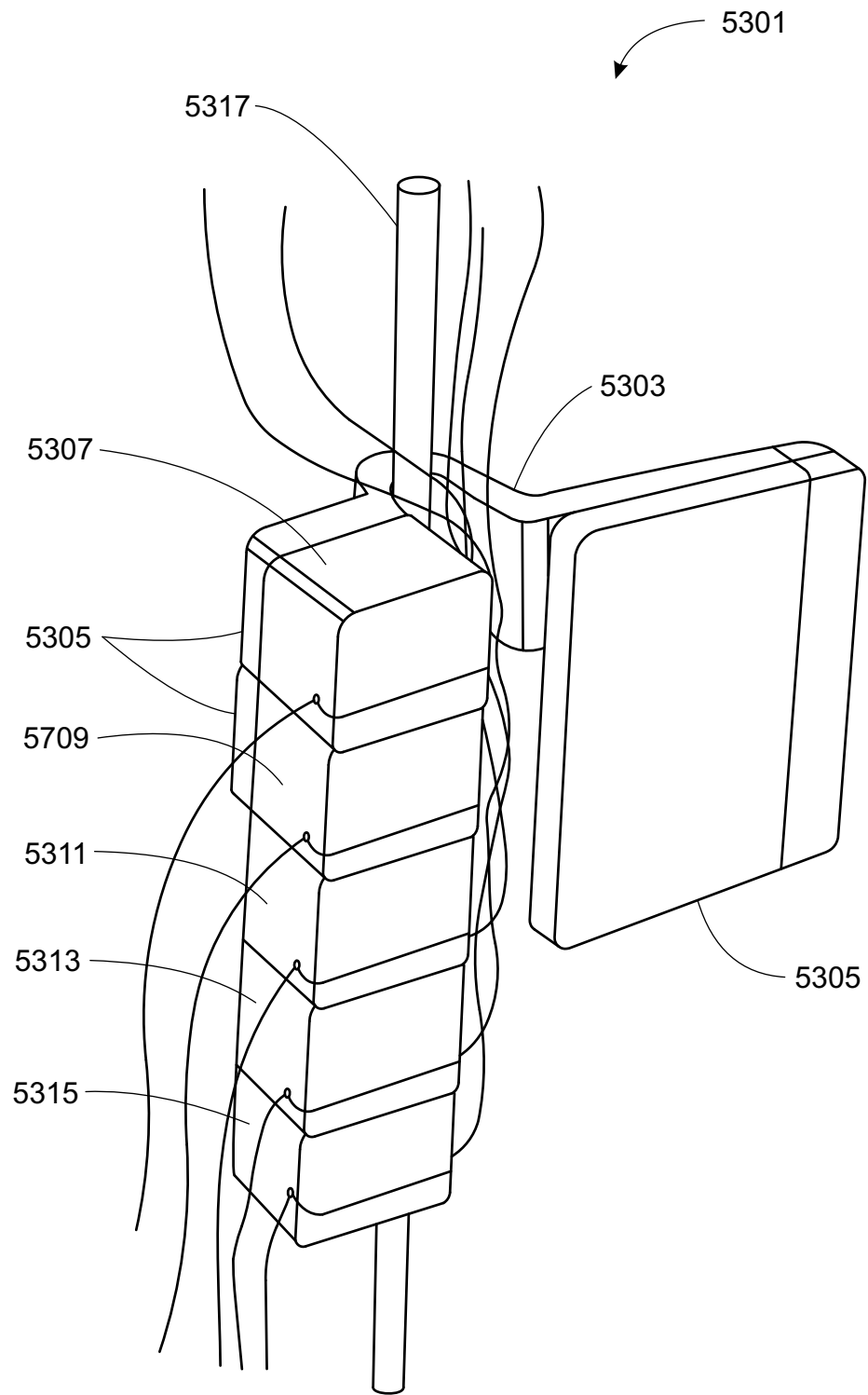


FIG. 53

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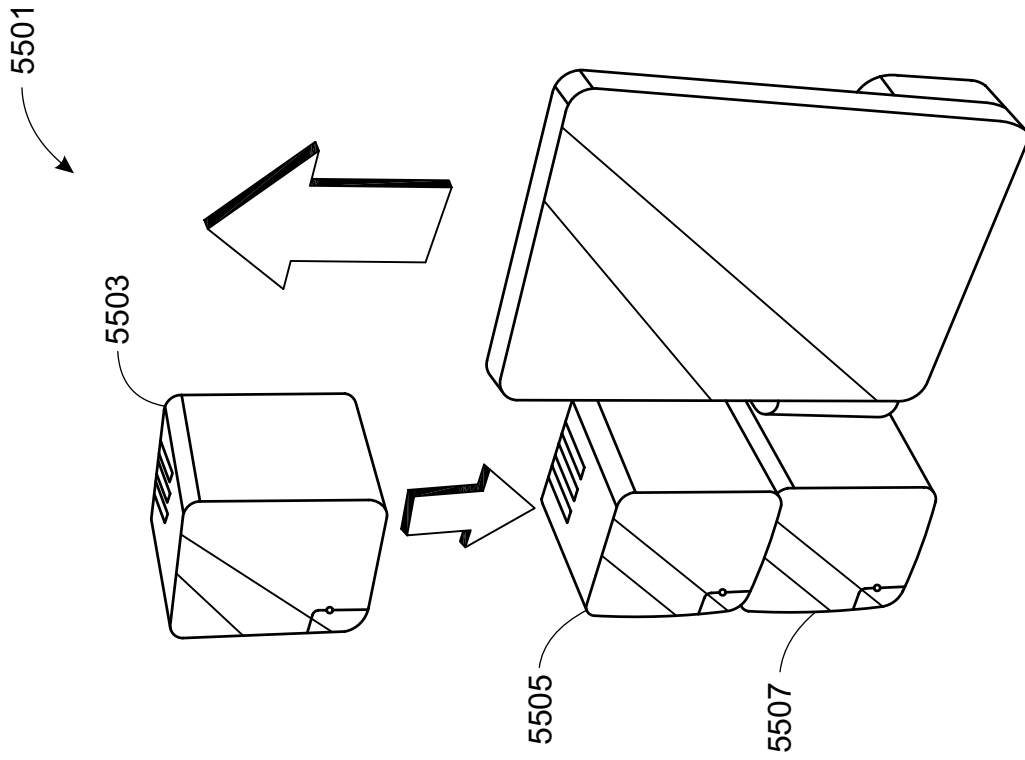


FIG. 55

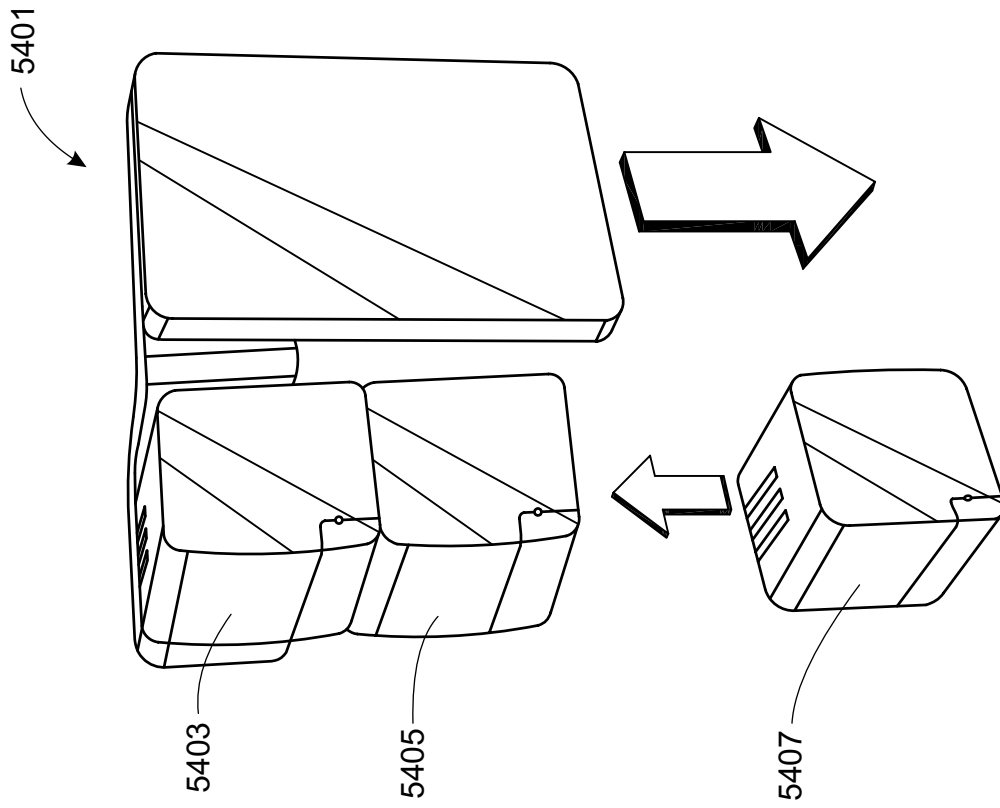


FIG. 54

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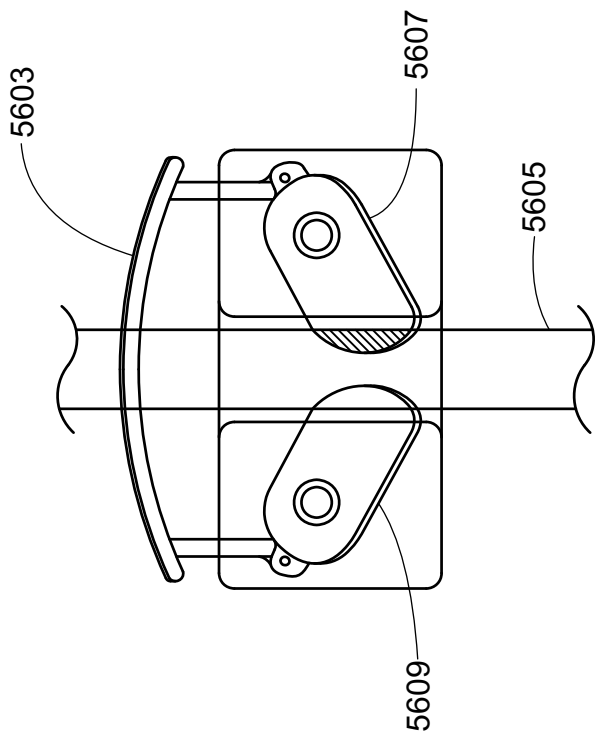


FIG. 57

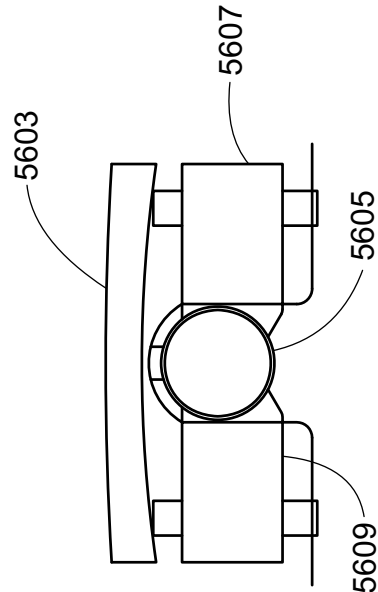


FIG. 58

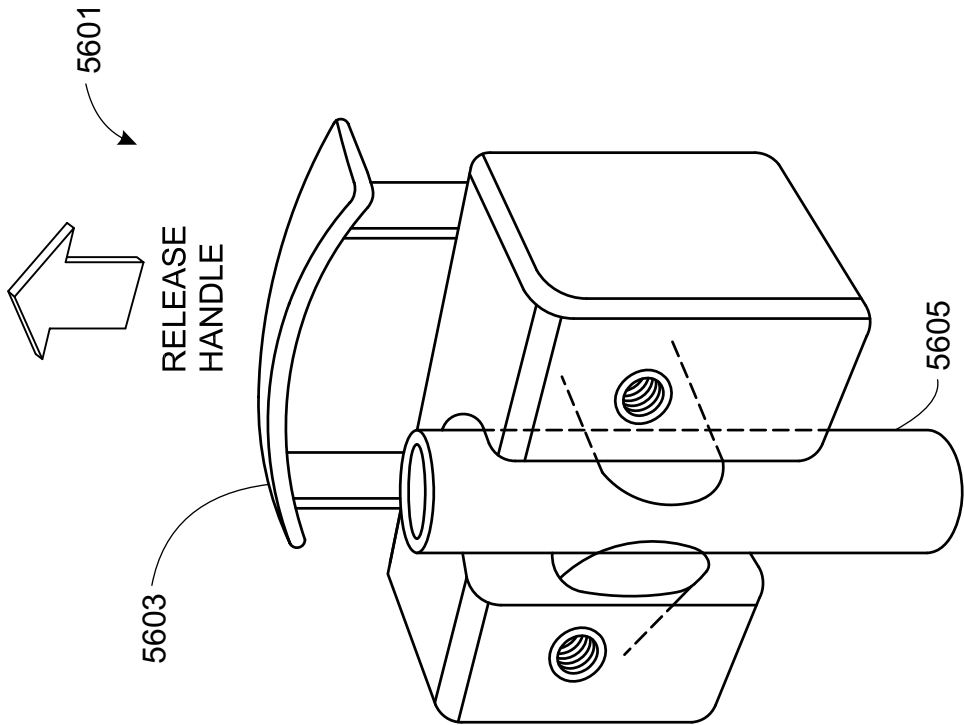


FIG. 56

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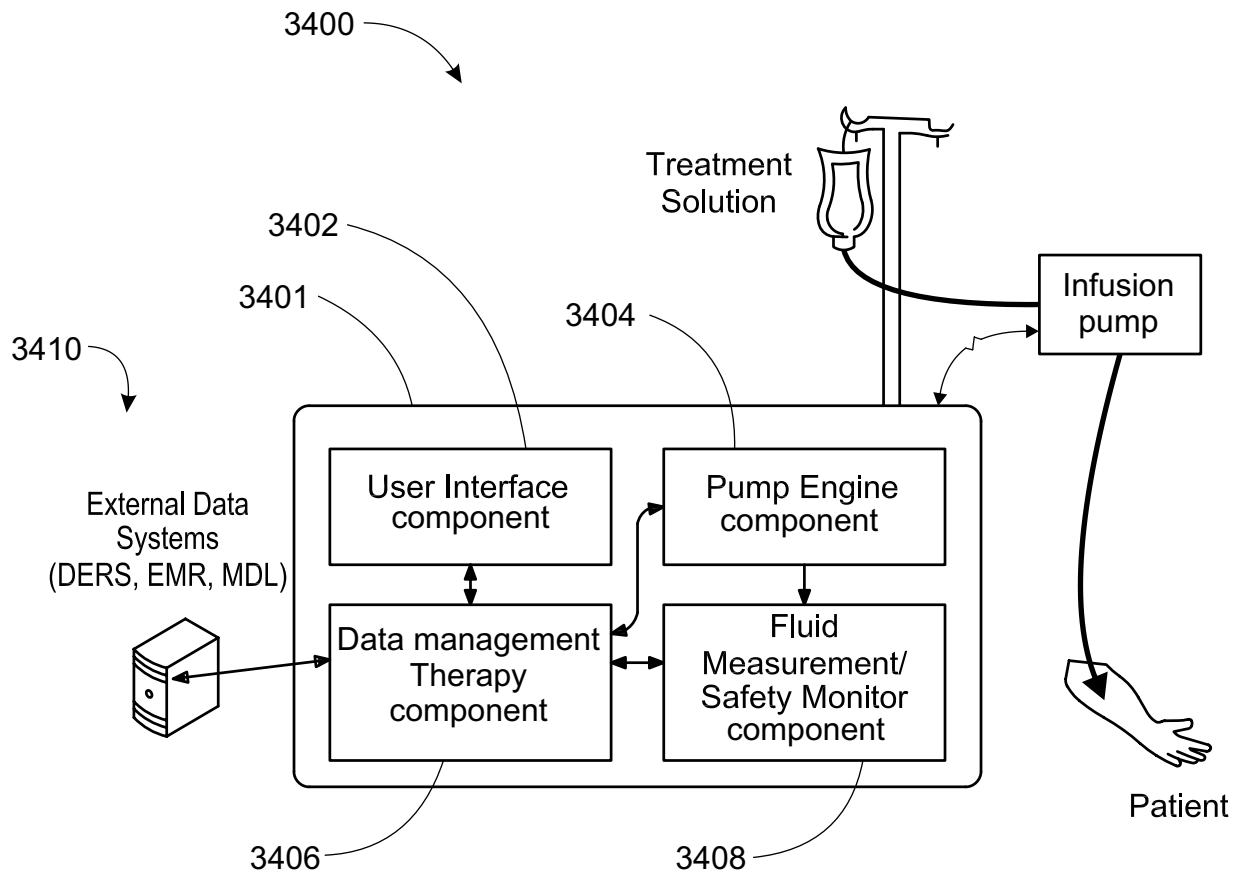


FIG. 59

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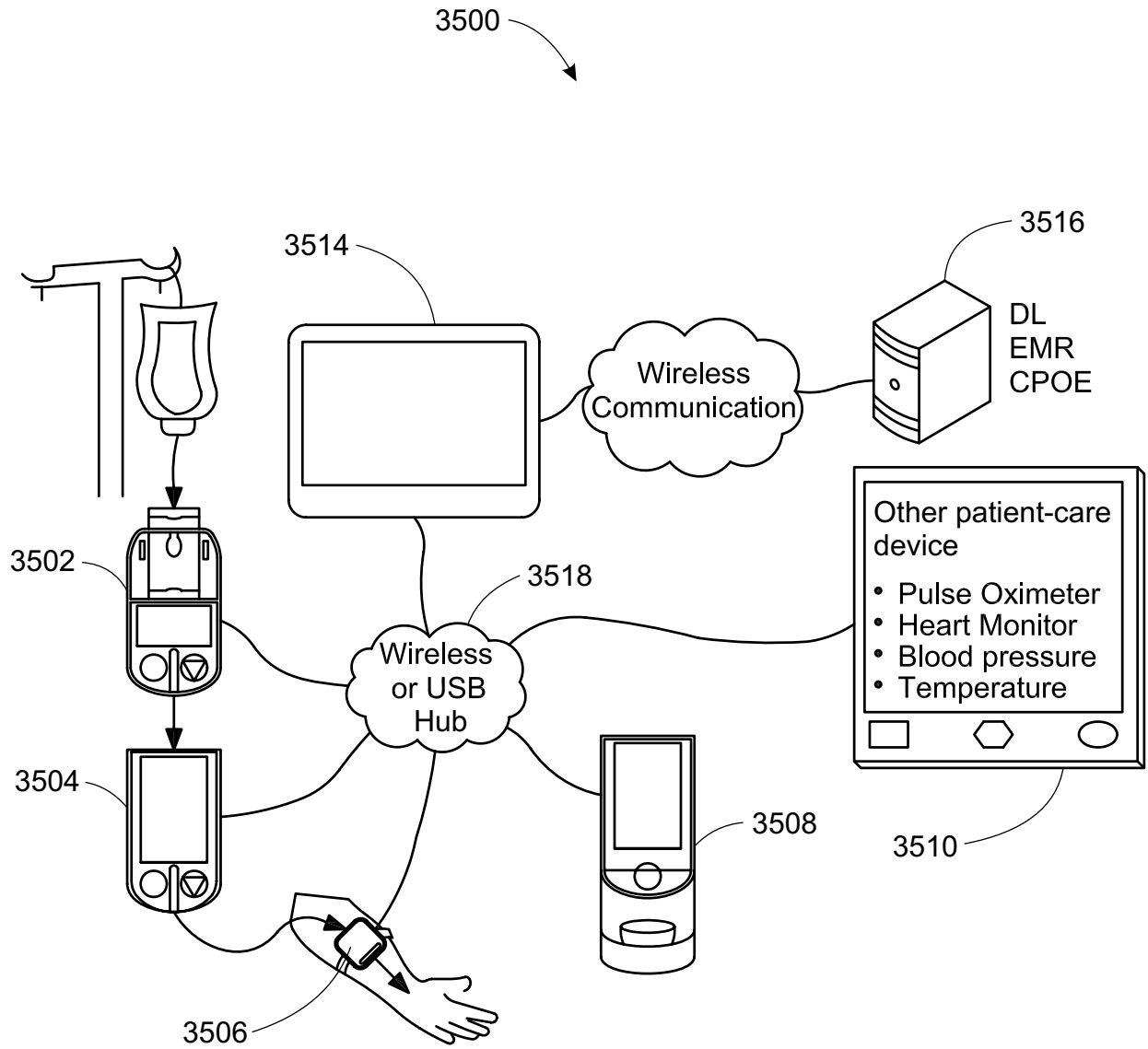


FIG. 60

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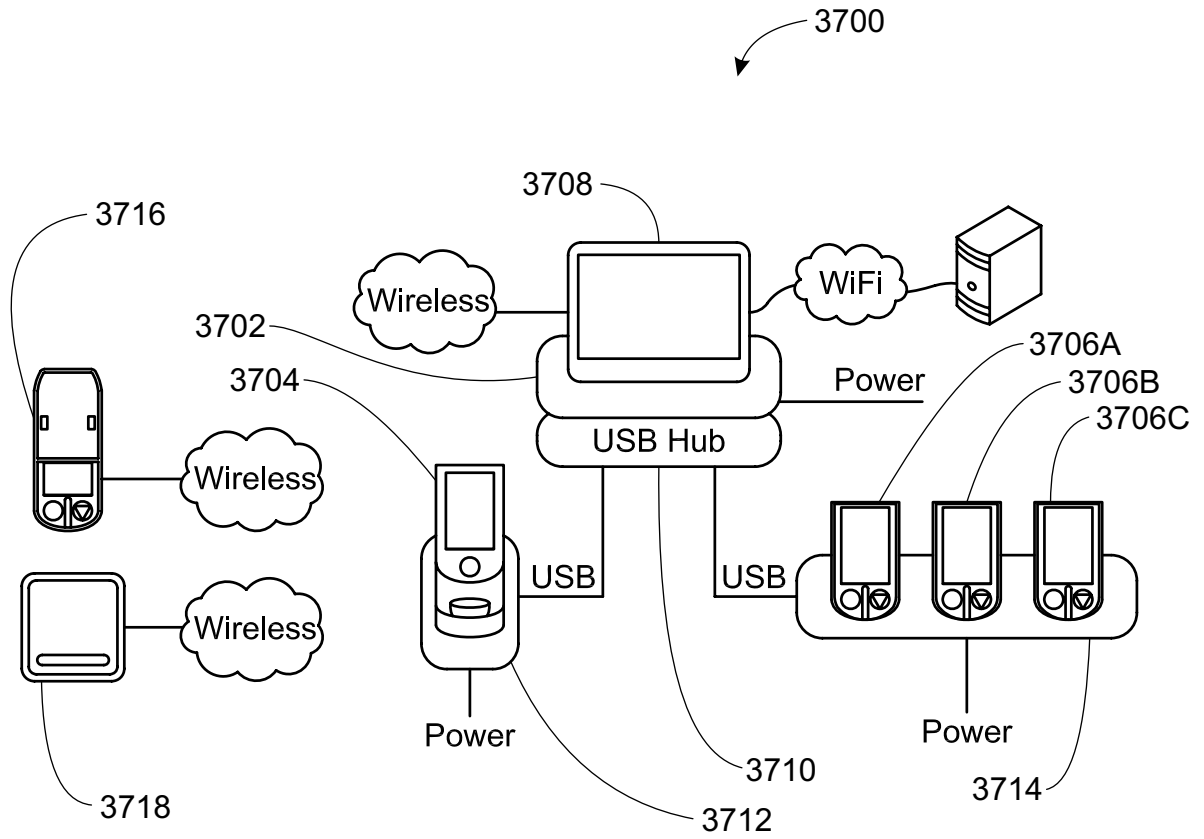


FIG. 61

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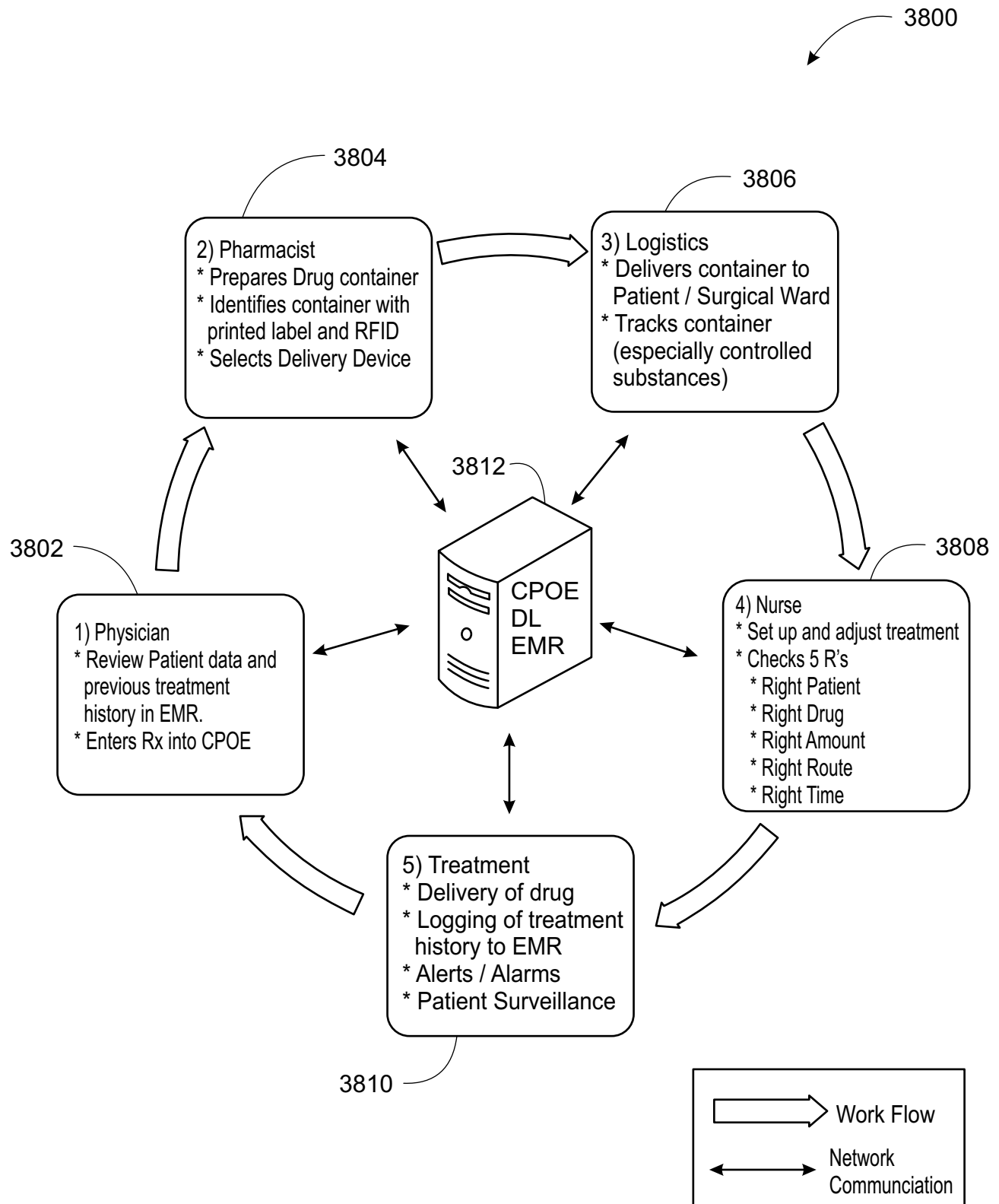


FIG. 62

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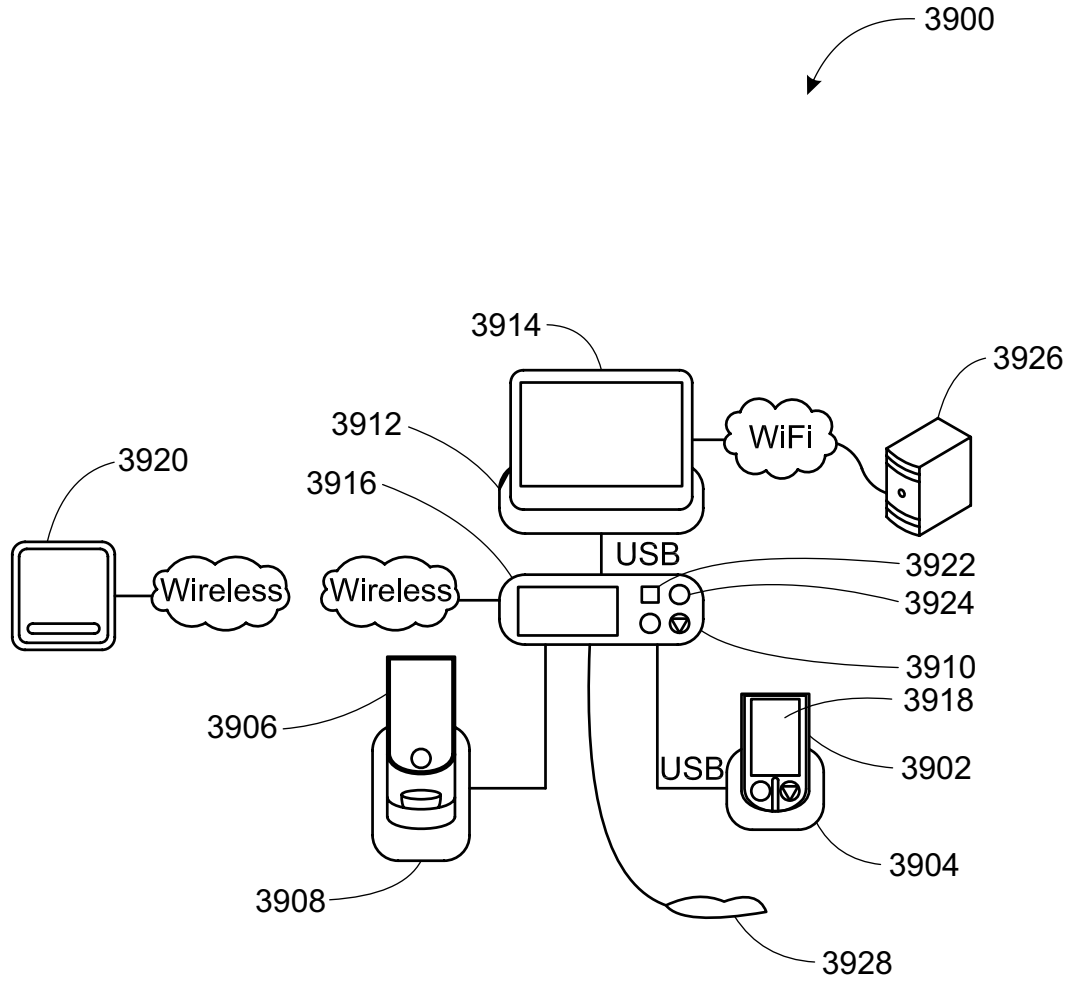


FIG. 63

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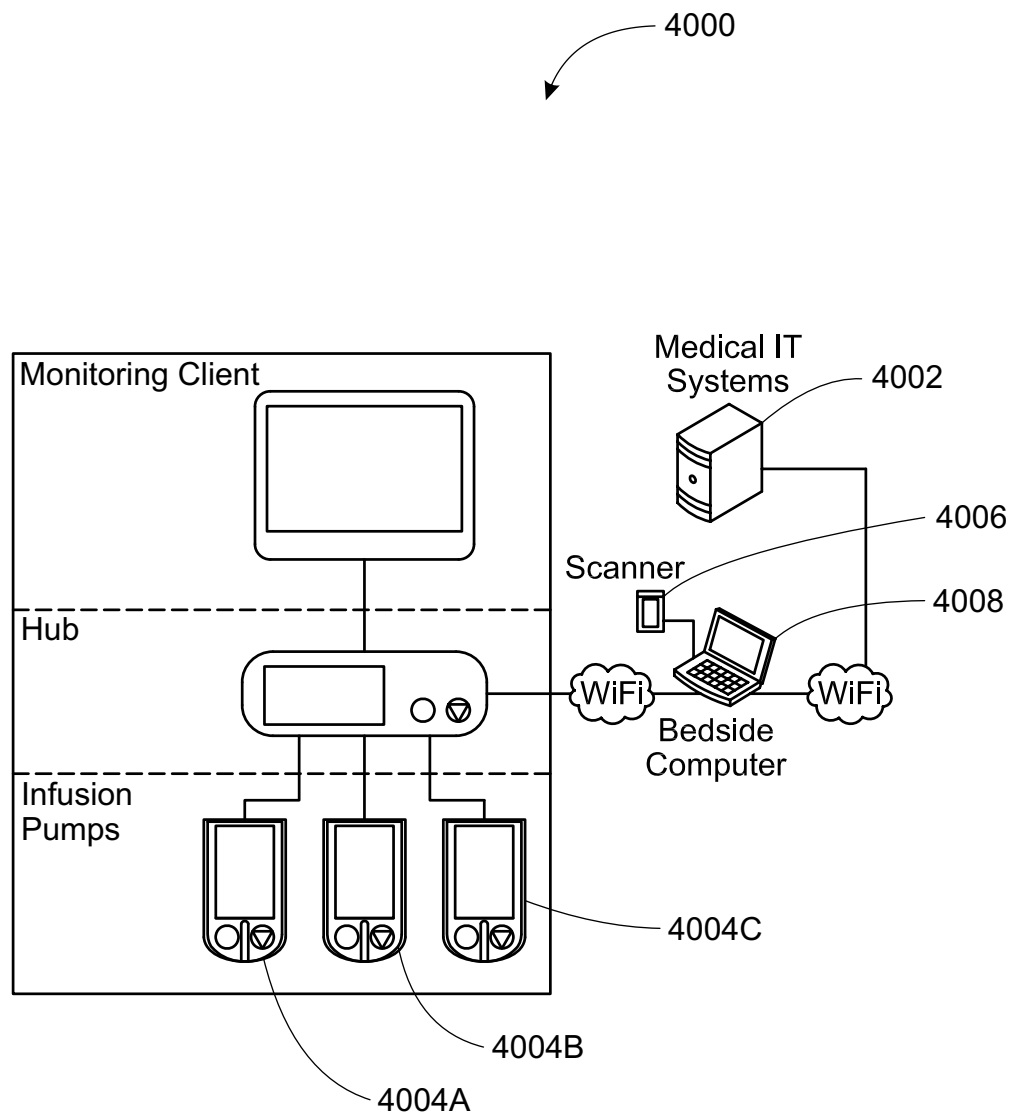


FIG. 64

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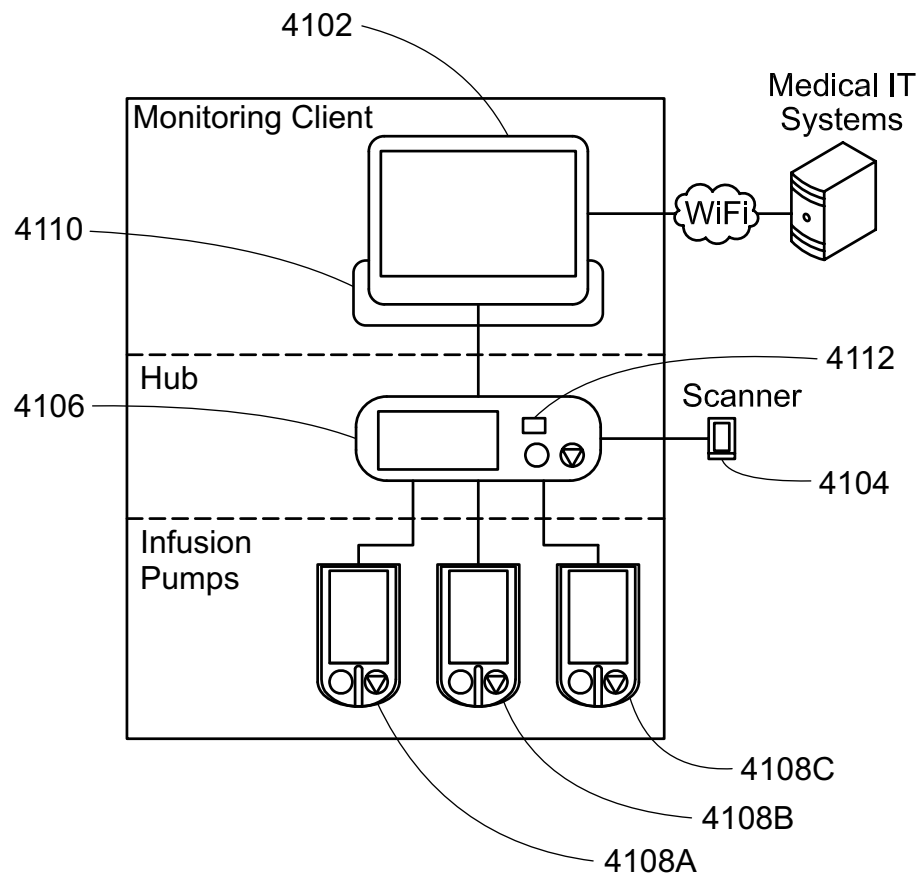


FIG. 65

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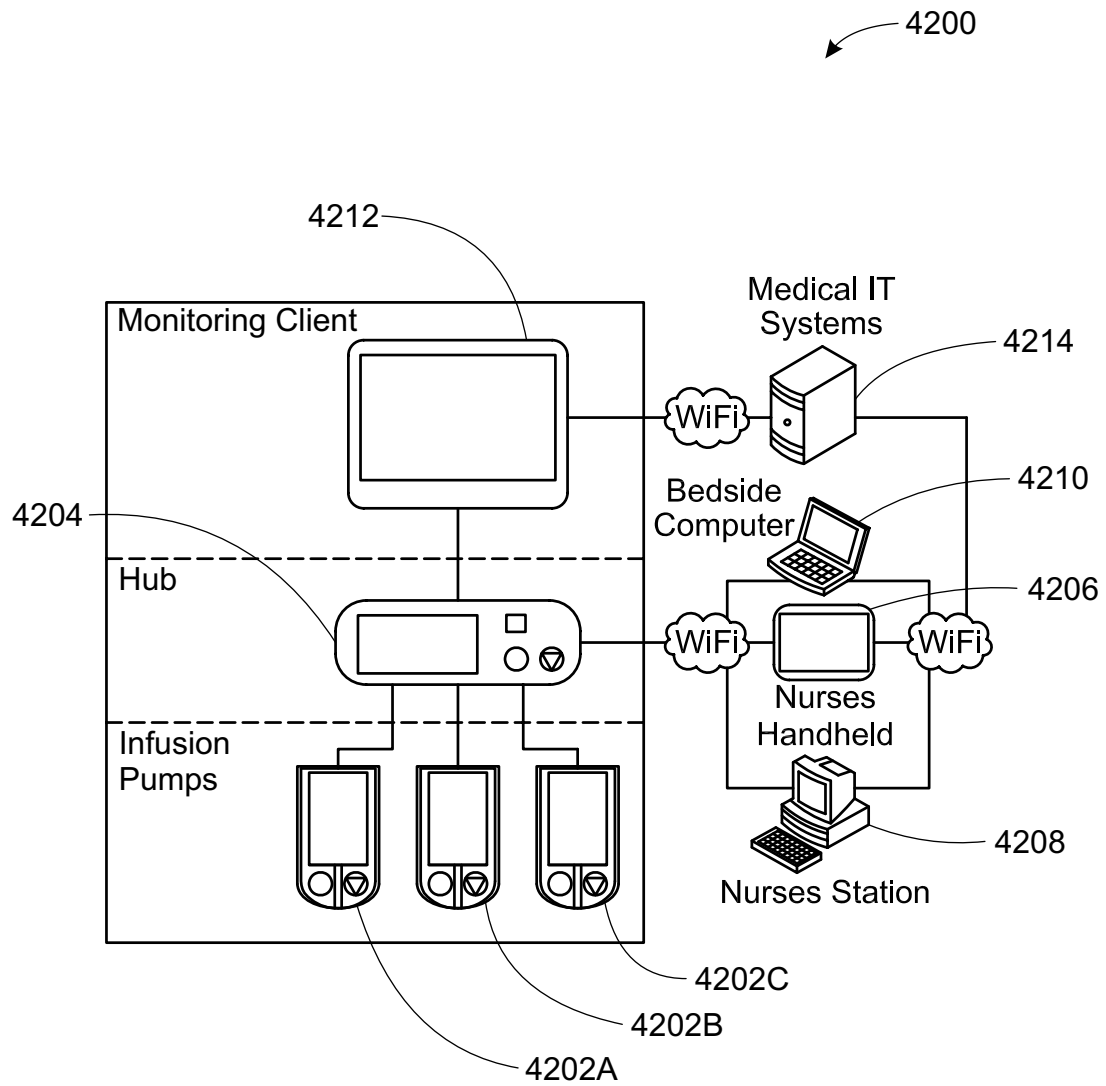


FIG. 66



FIG. 67

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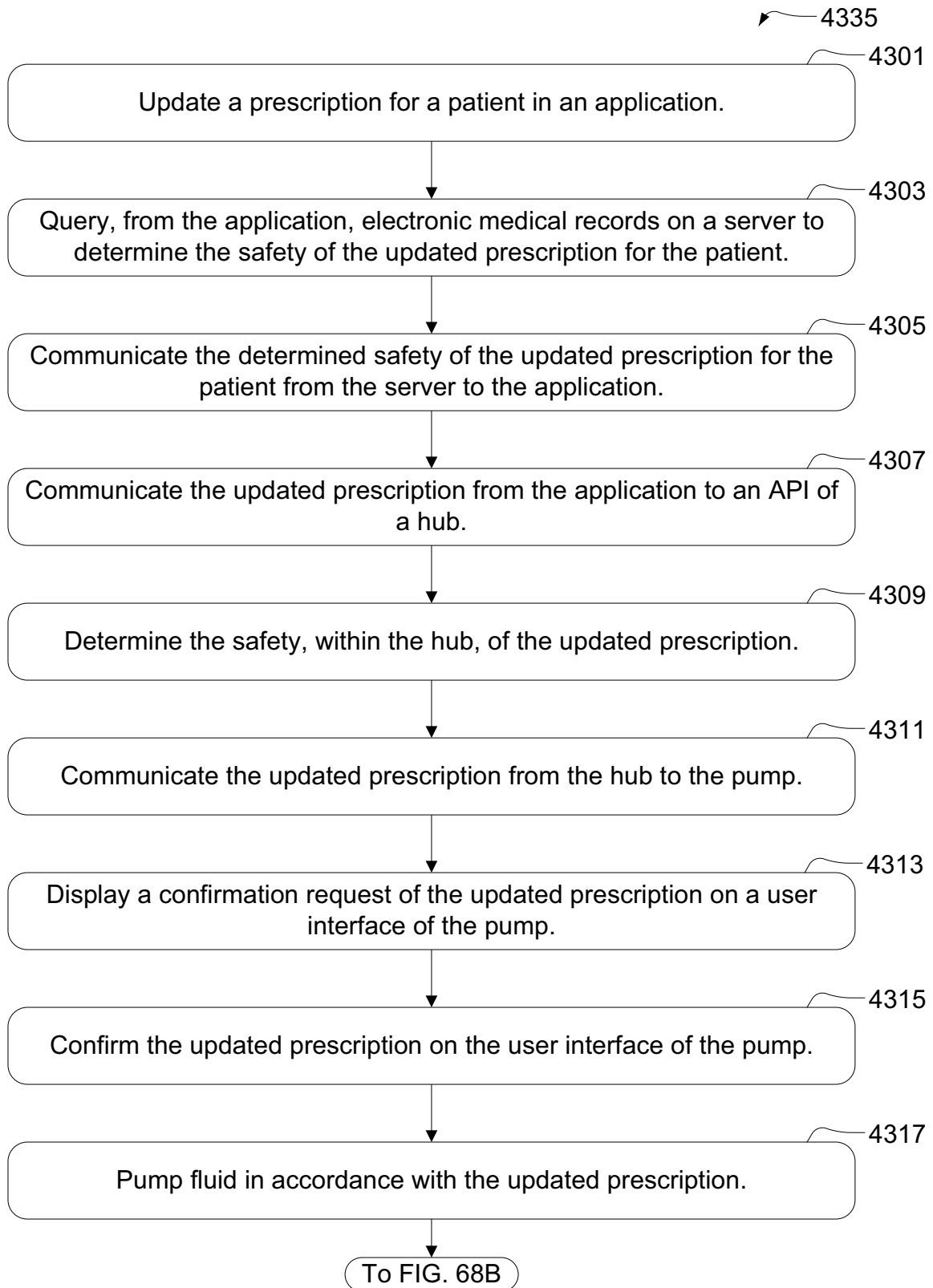


FIG. 68A

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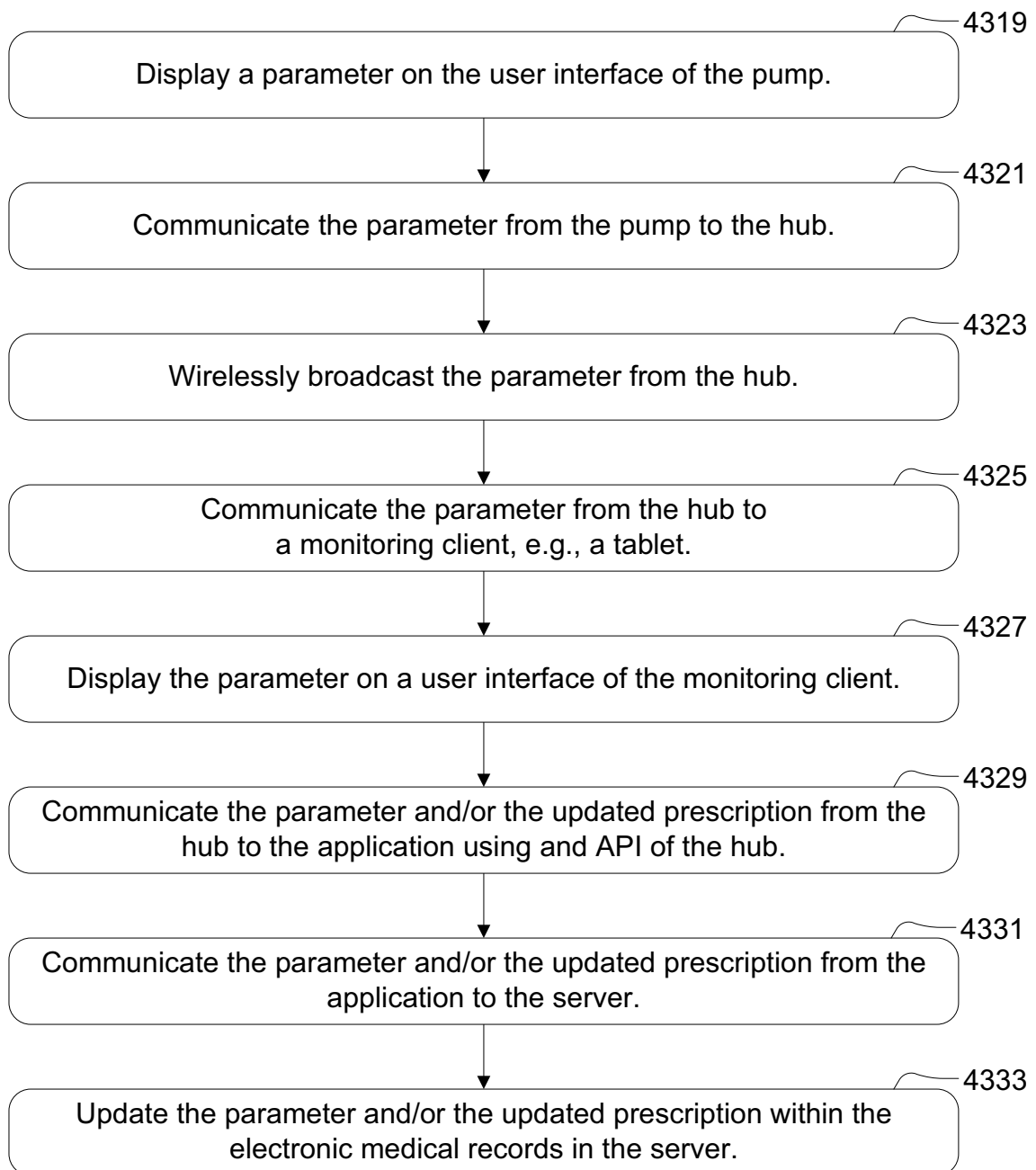


FIG. 68B

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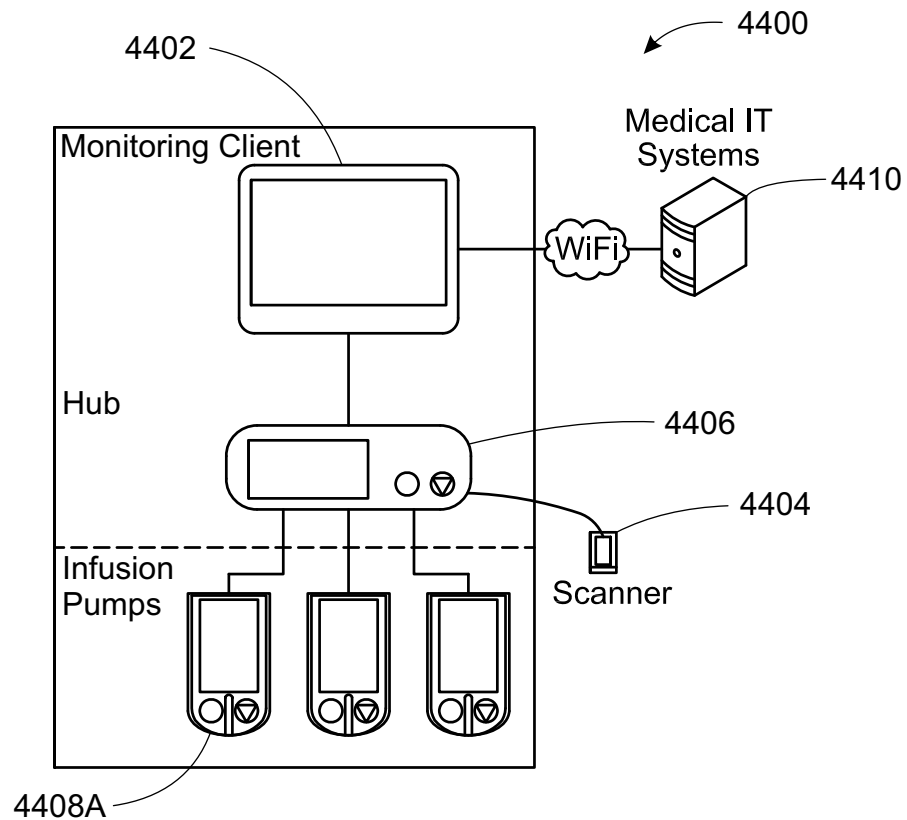


FIG. 69

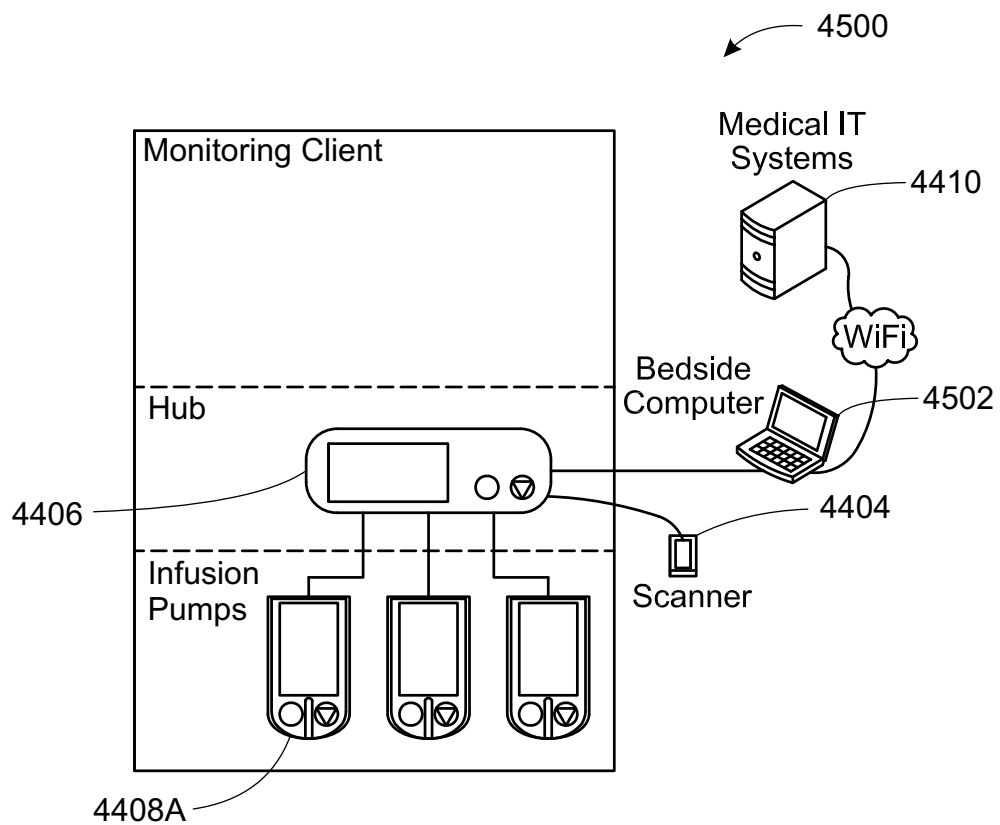


FIG. 70

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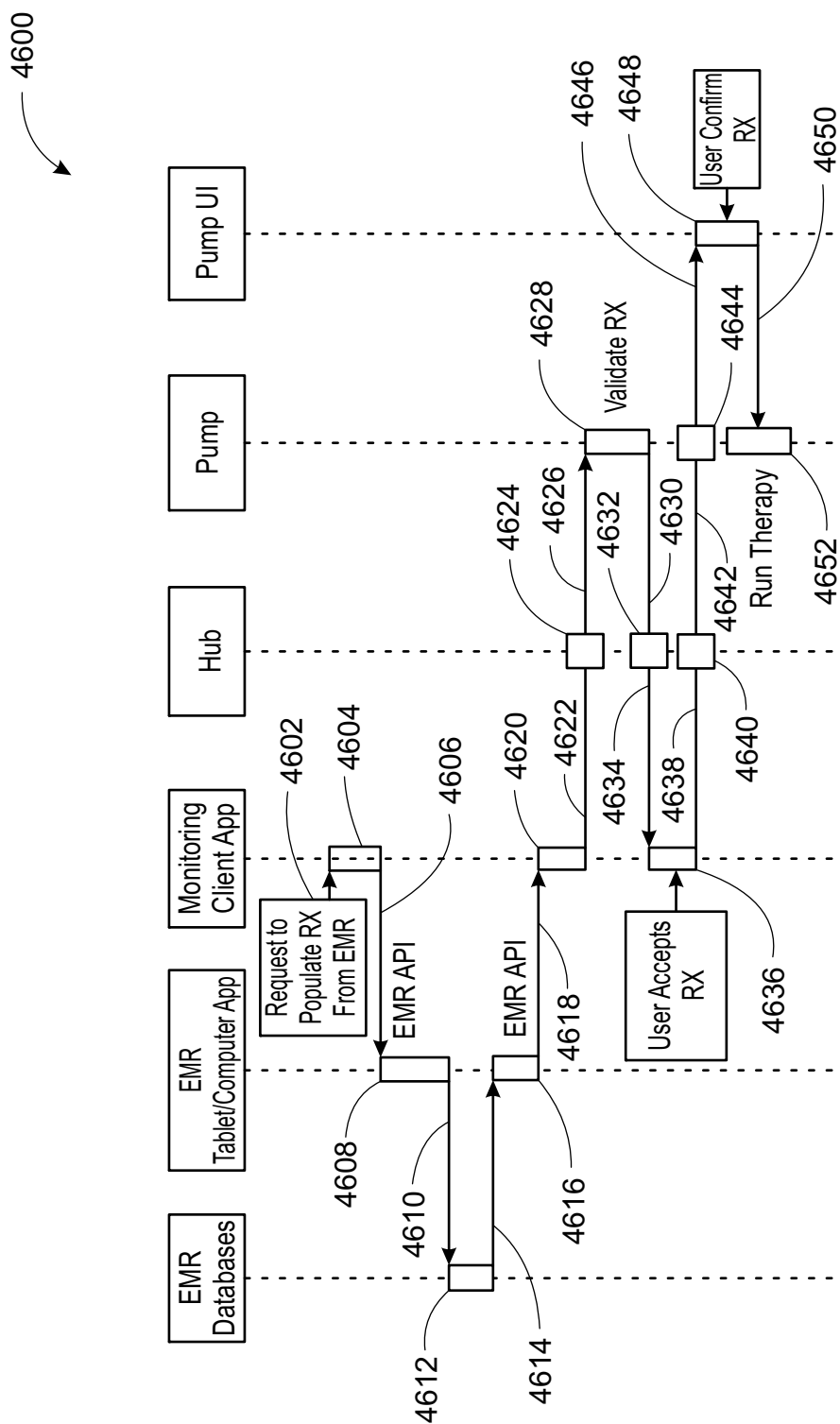


FIG. 71

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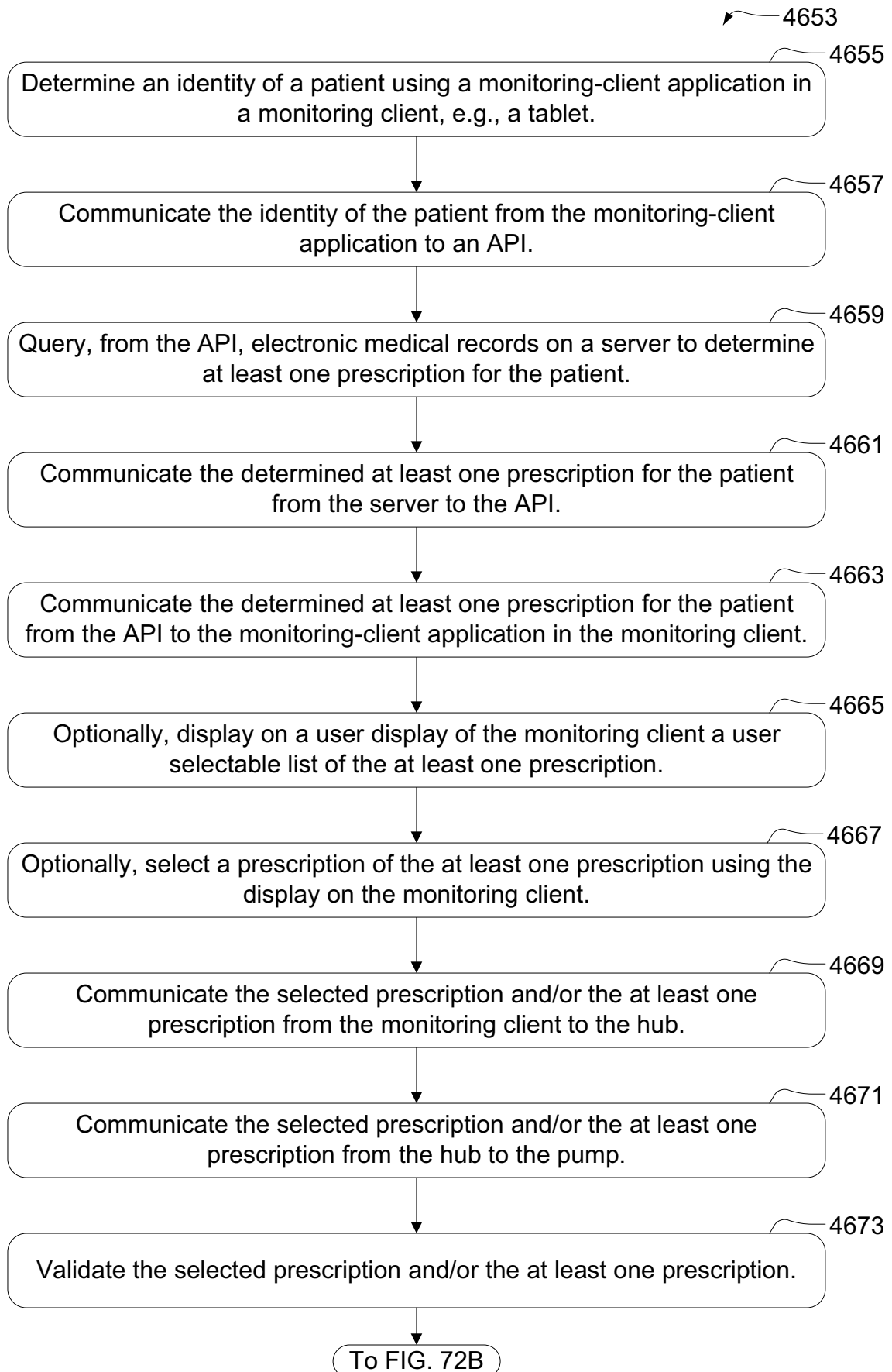


FIG. 72A

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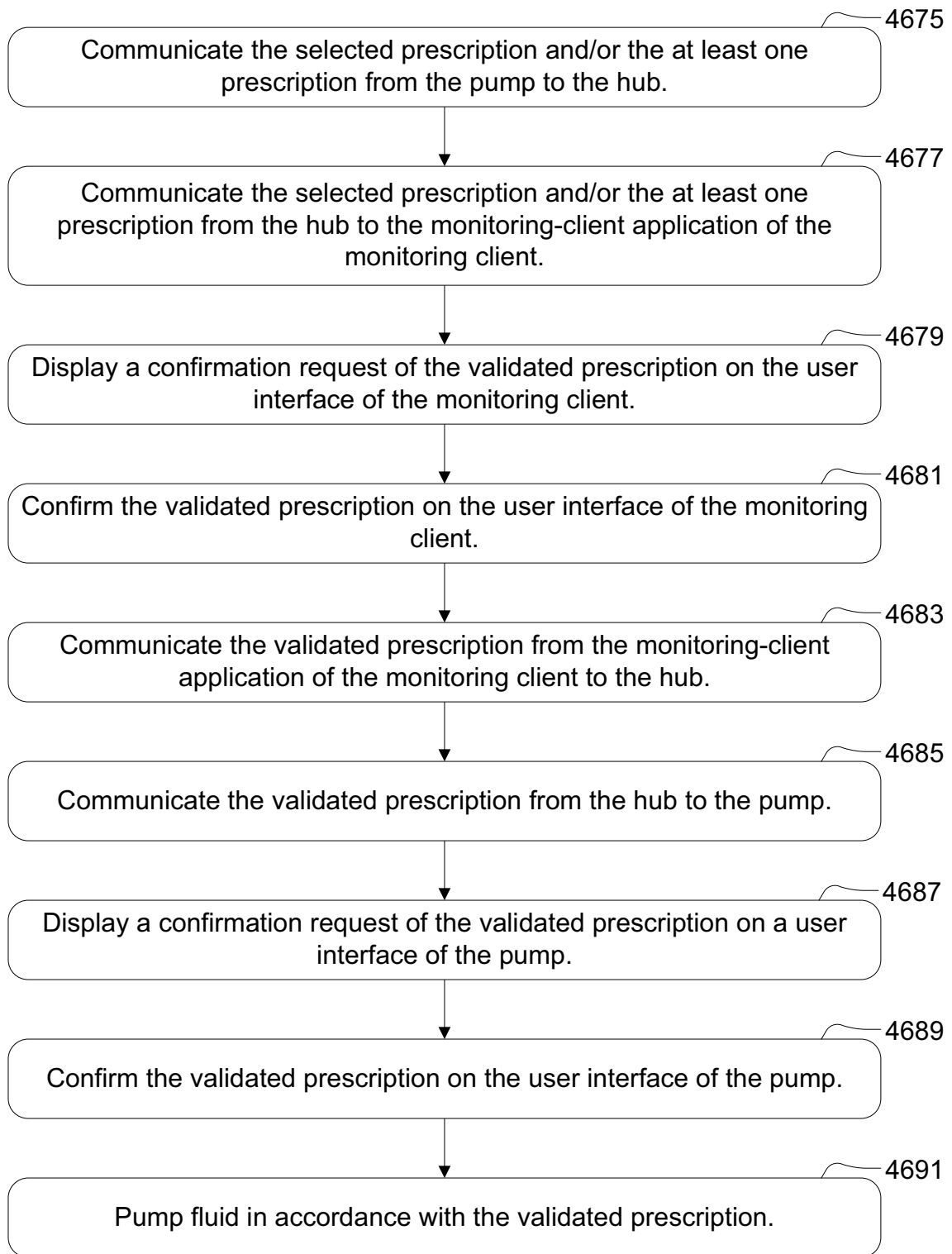


FIG. 72B

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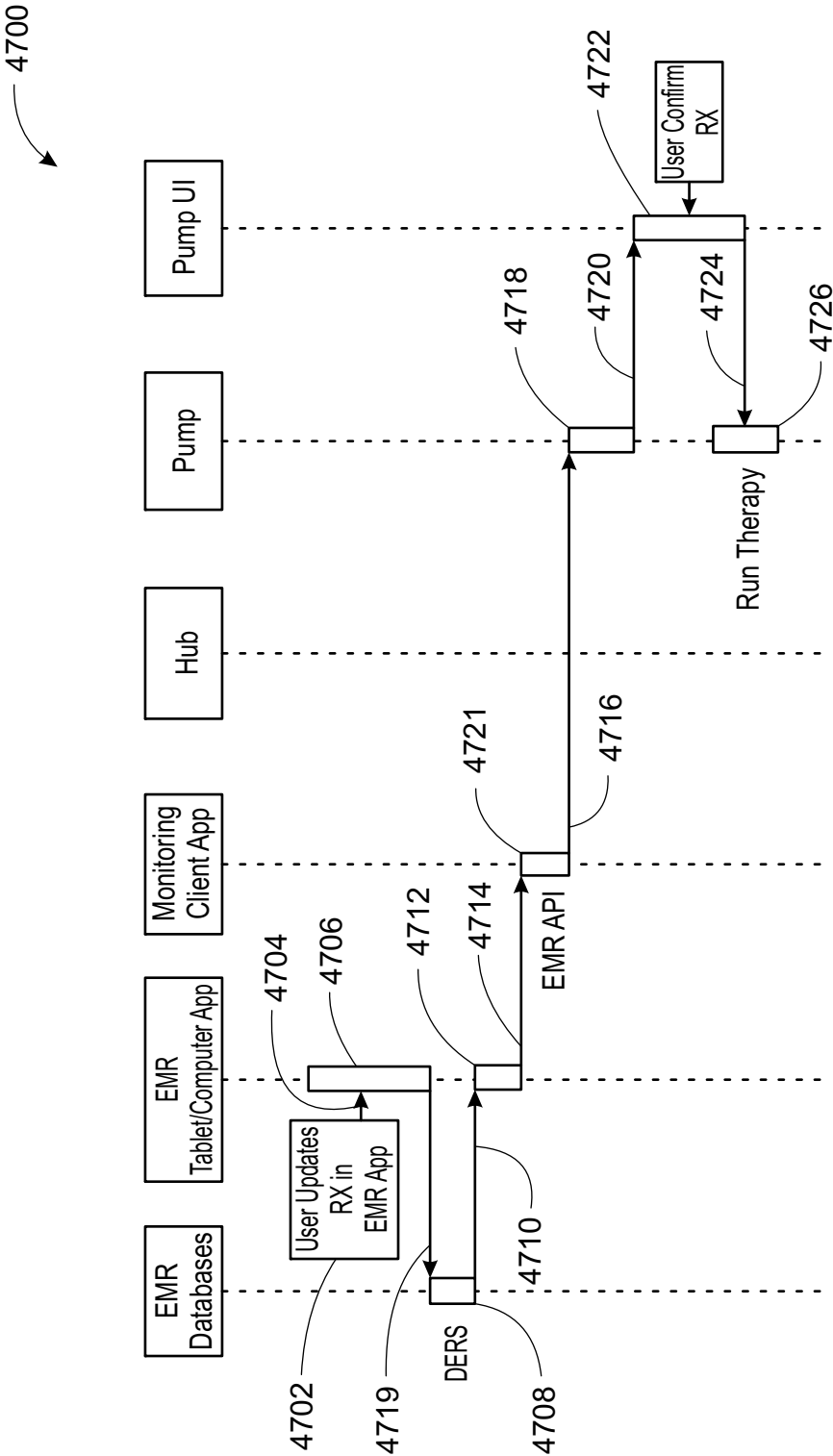


FIG. 73

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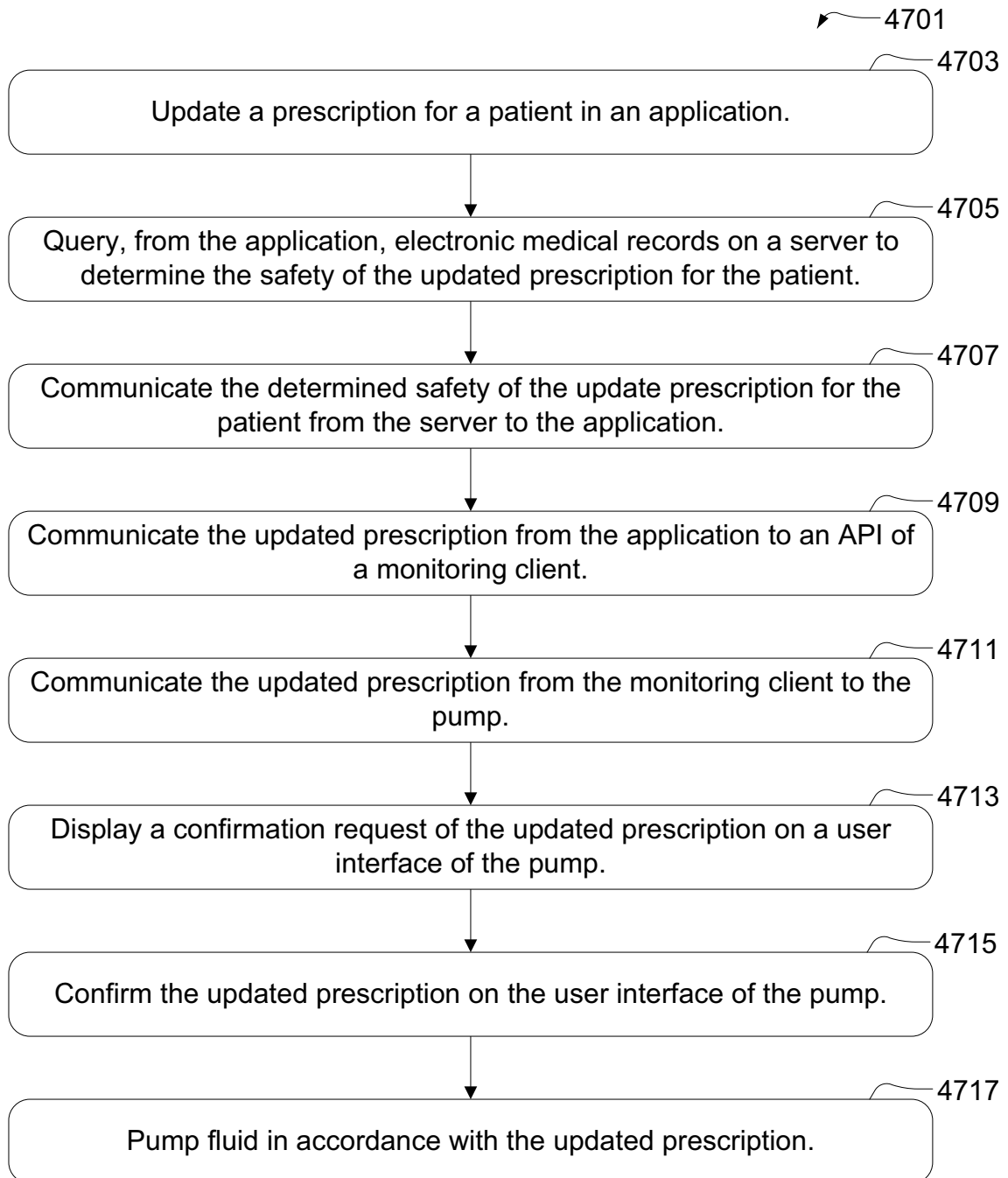


FIG. 74

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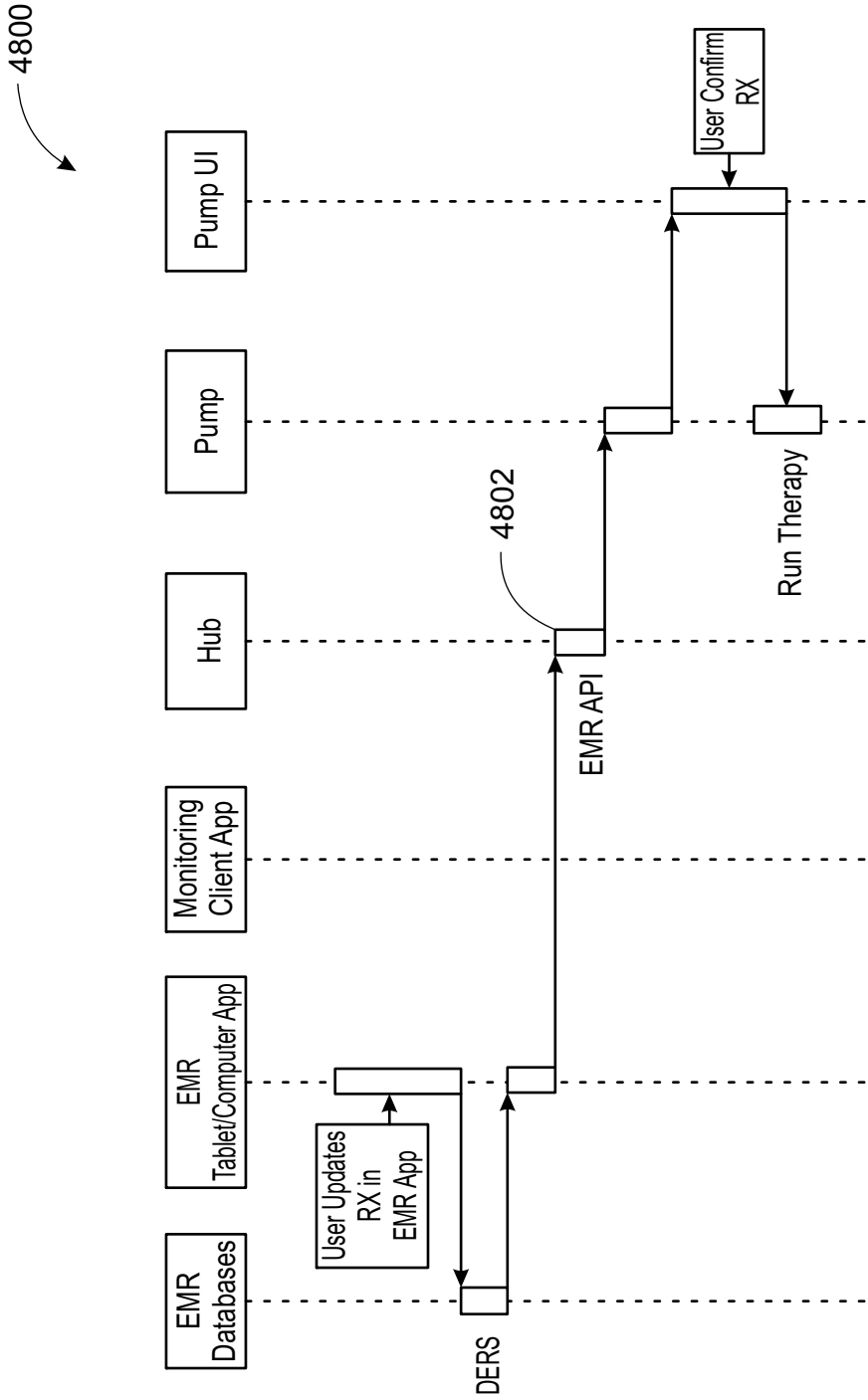


FIG. 75

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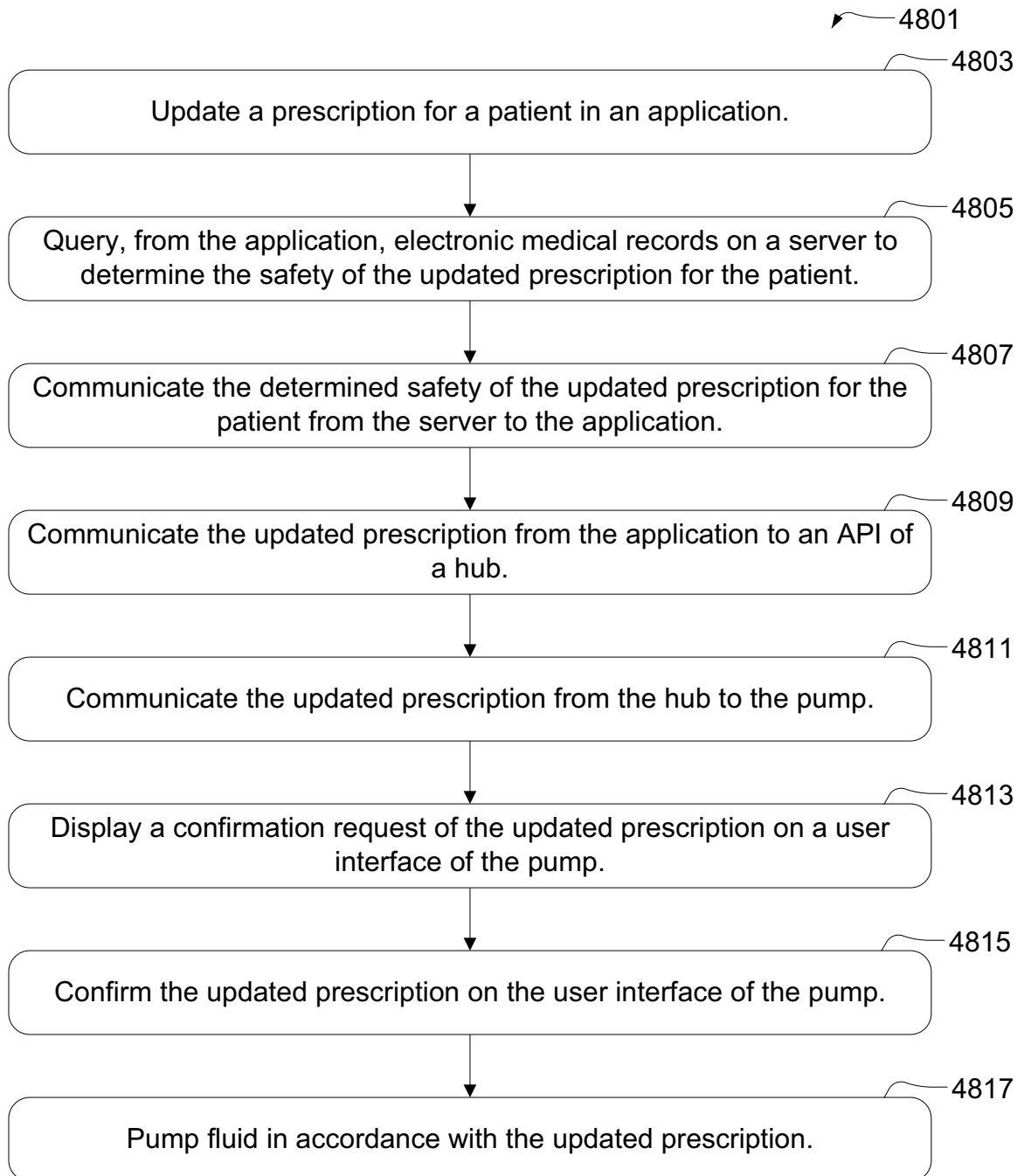


FIG. 76

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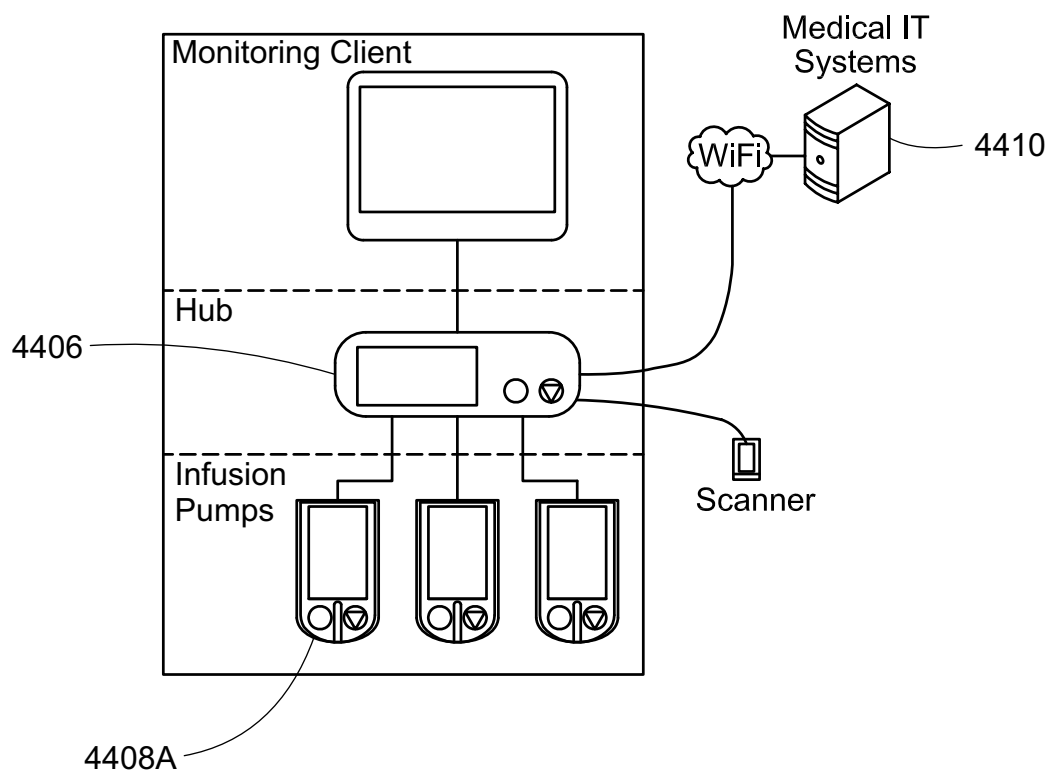


FIG. 77

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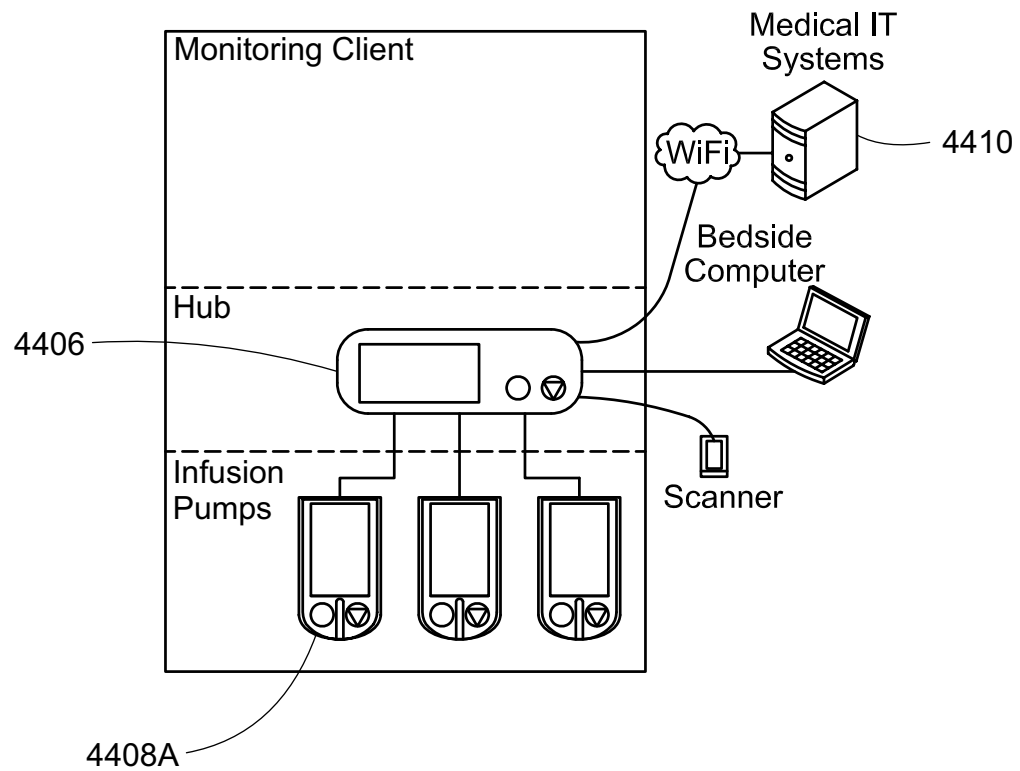


FIG. 78

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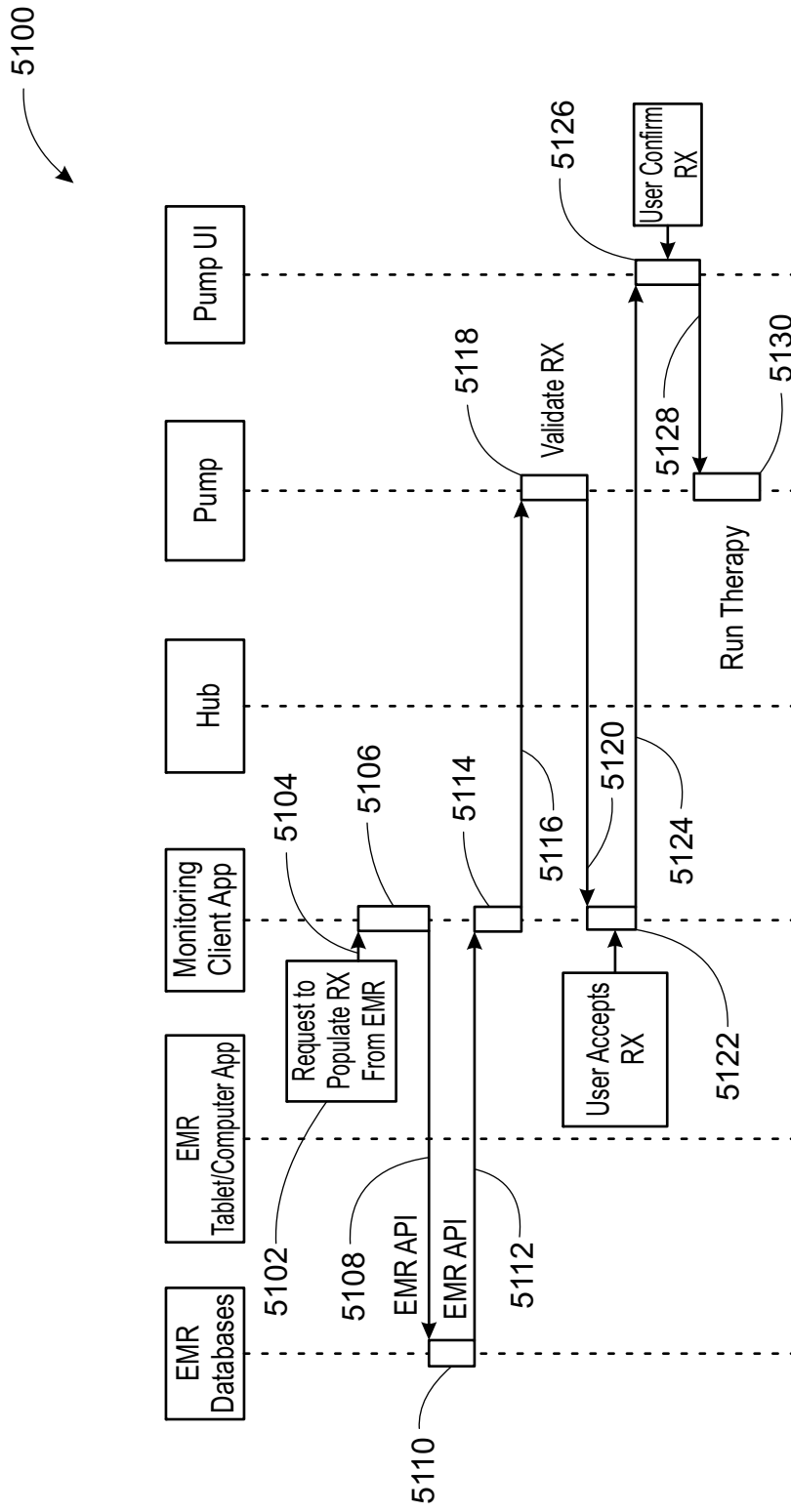


FIG. 79

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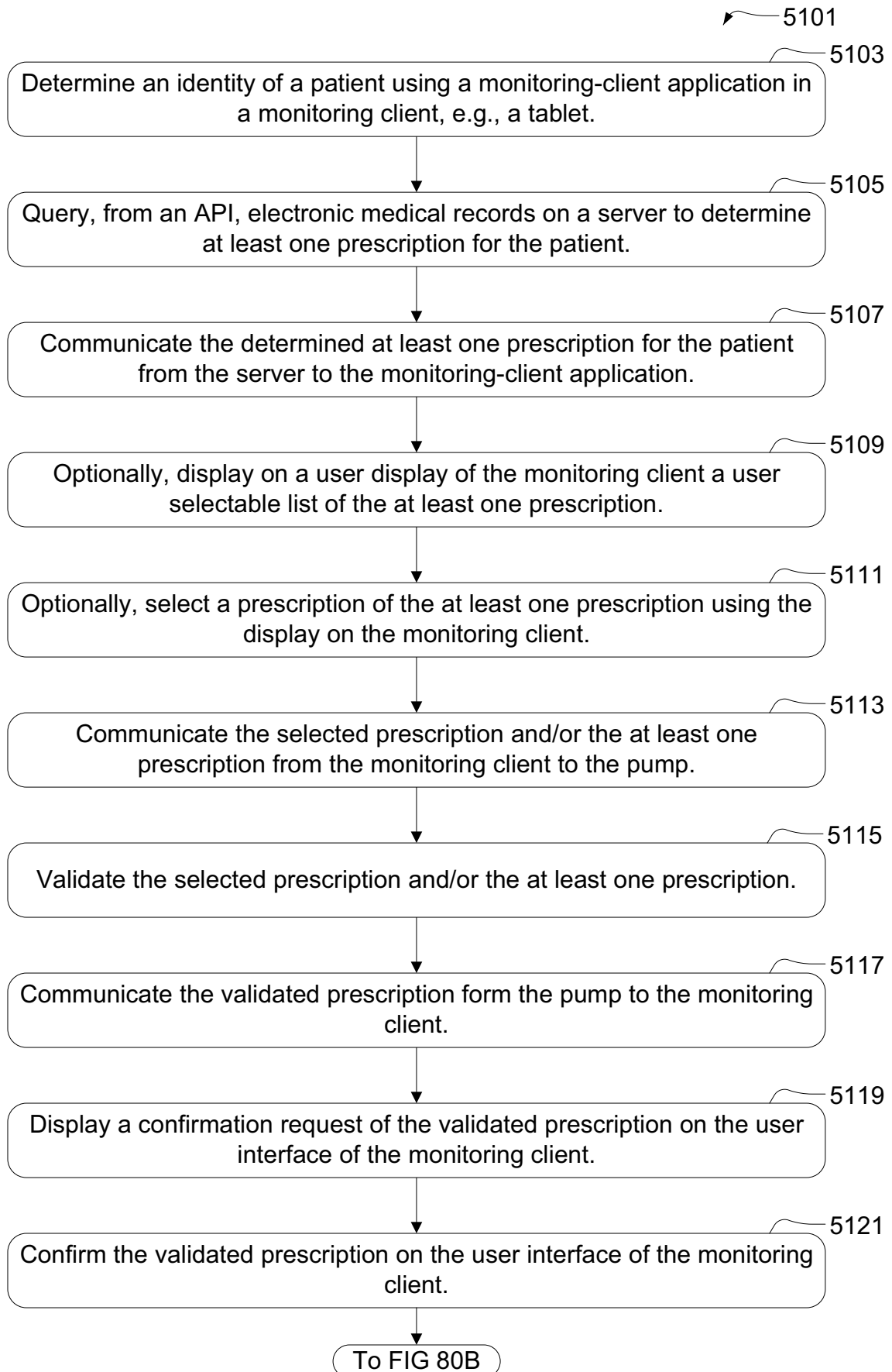


FIG. 80A

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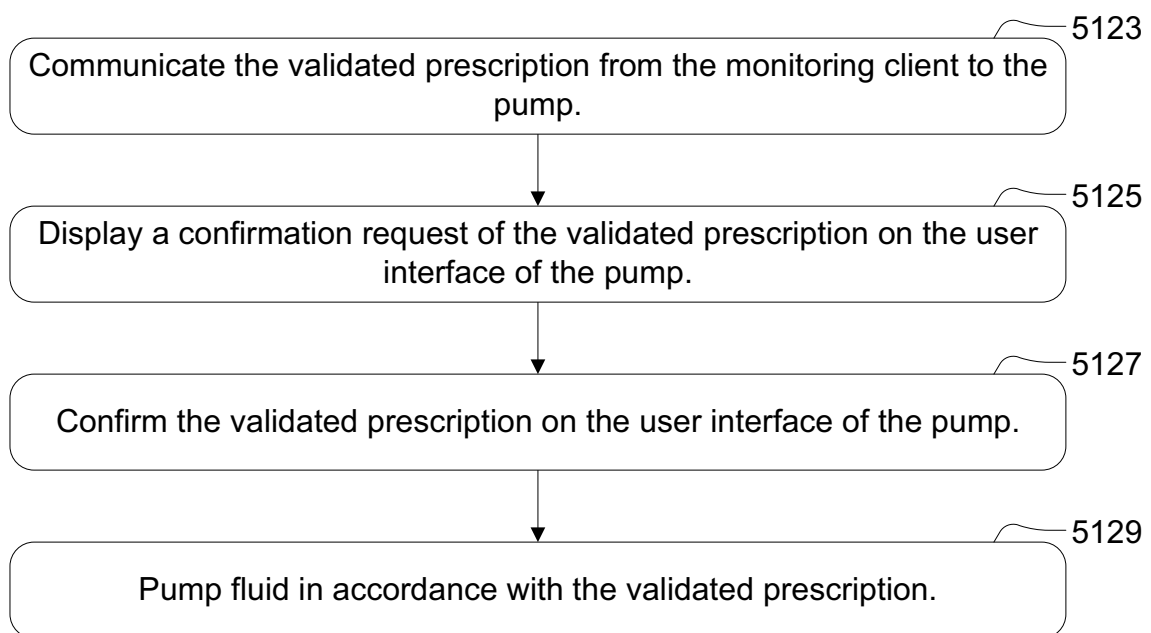


FIG. 80B

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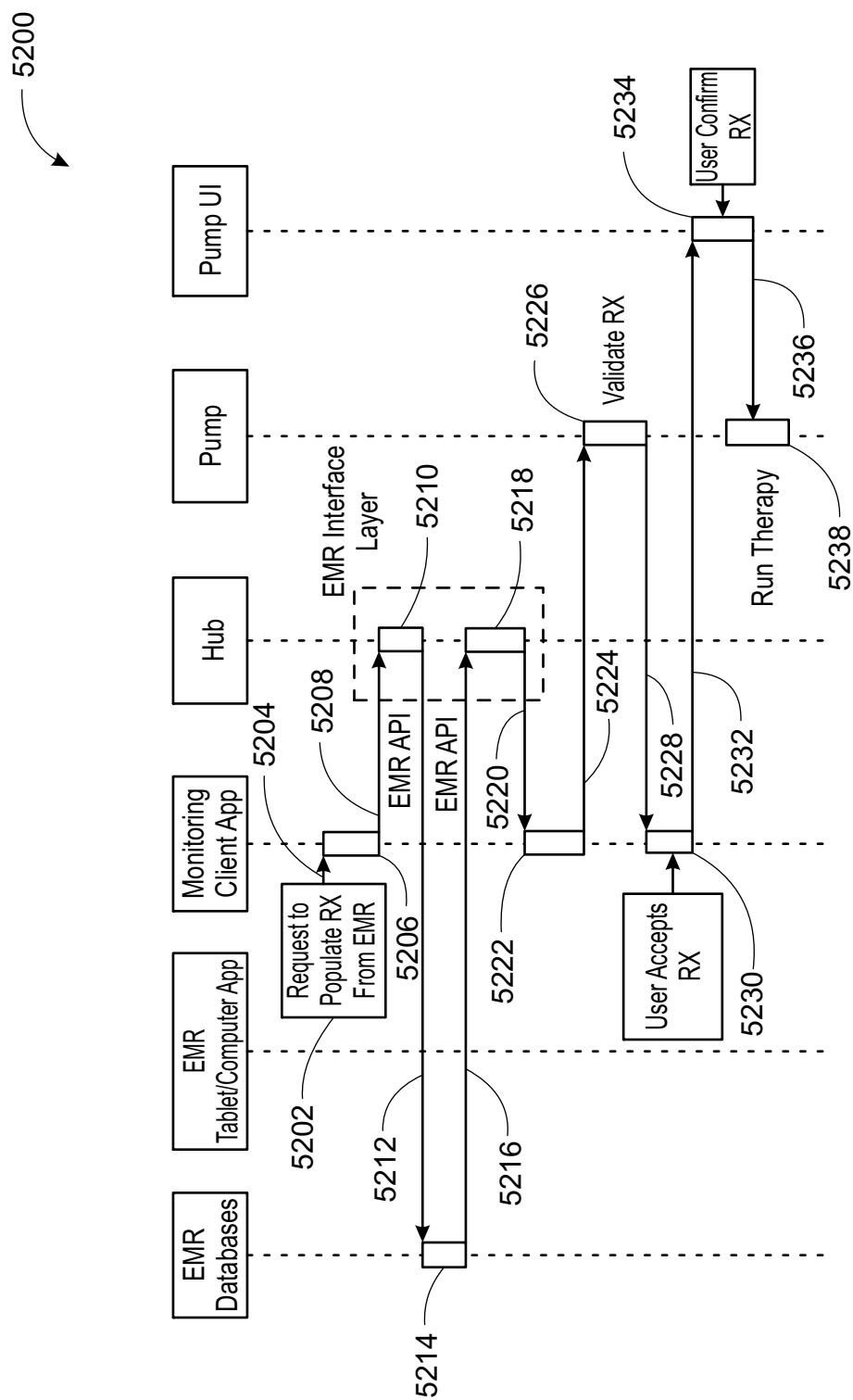


FIG. 81

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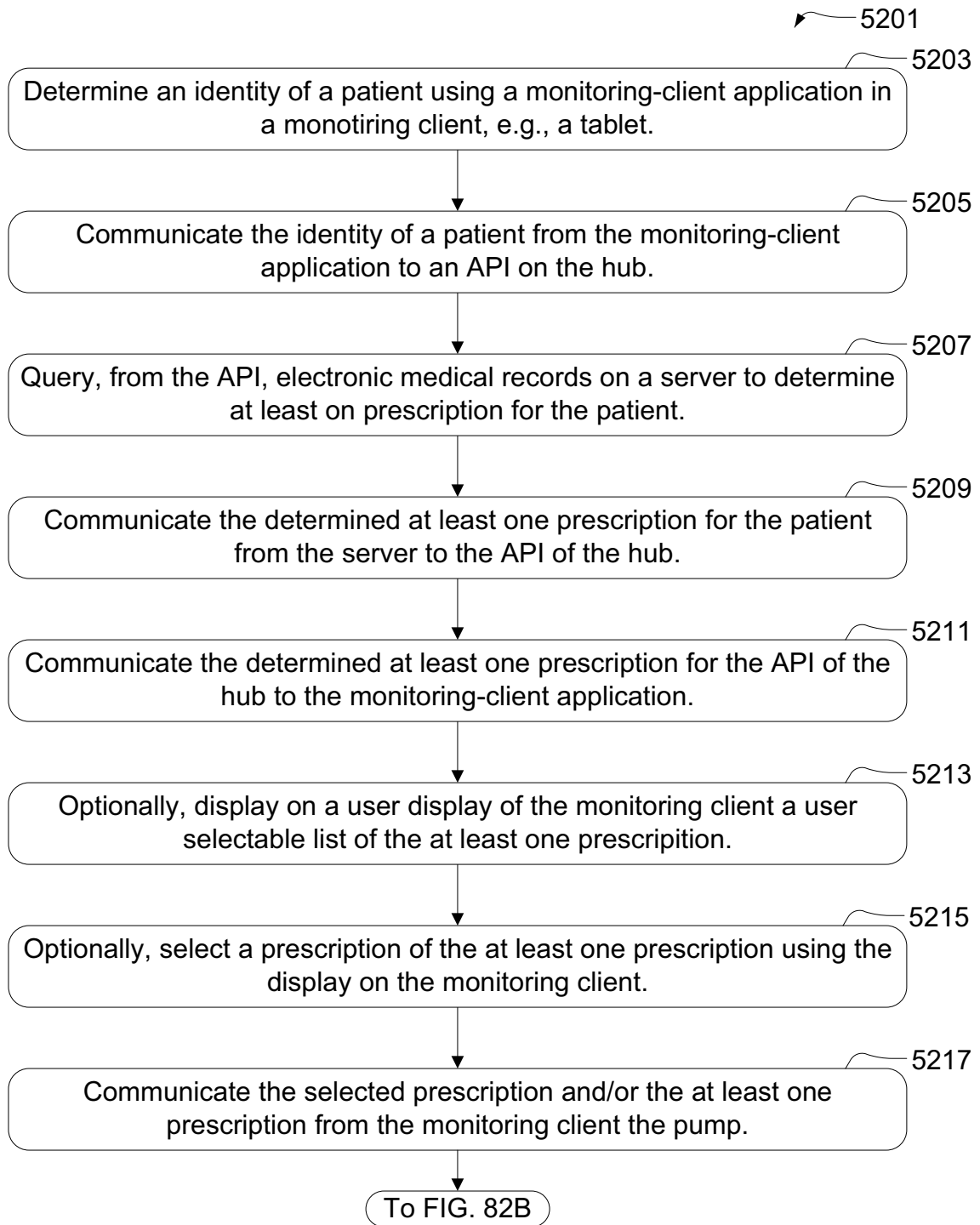


FIG. 82A

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FIG. 82B

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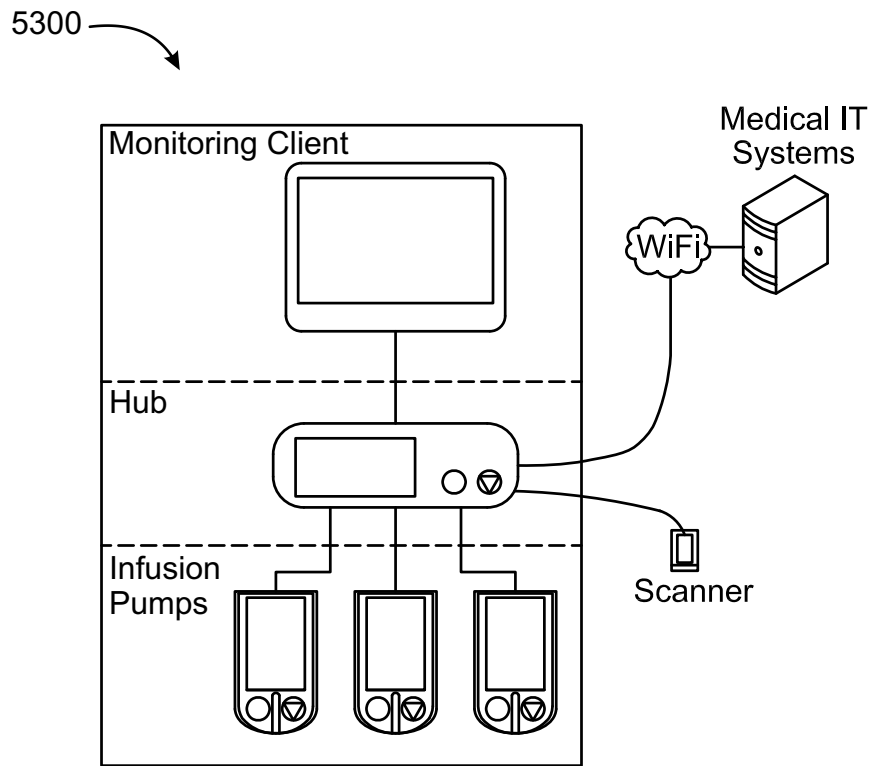


FIG. 83

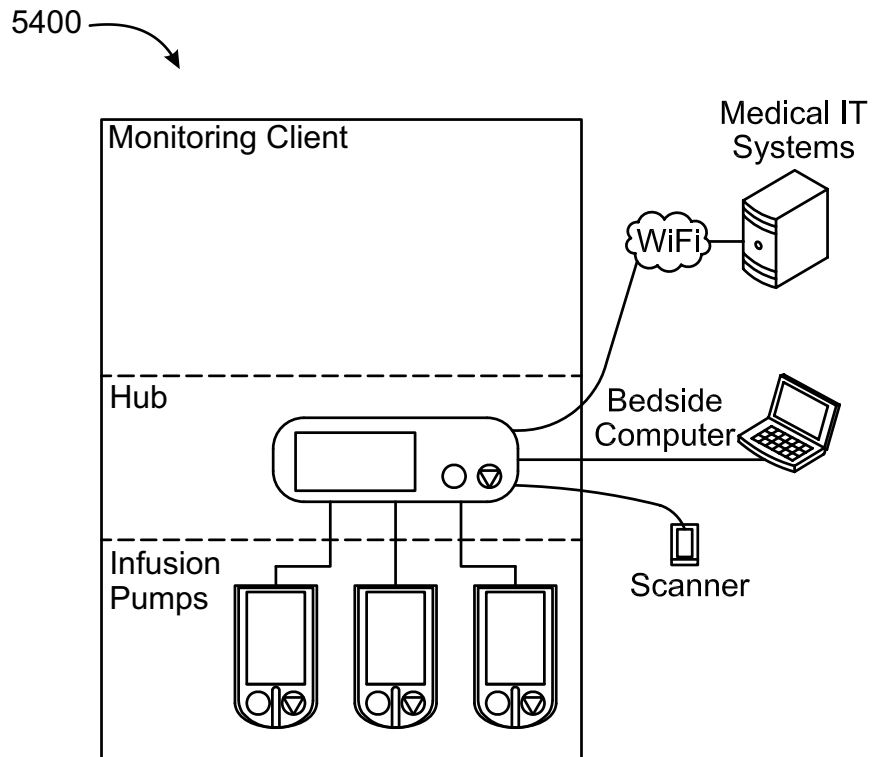


FIG. 84

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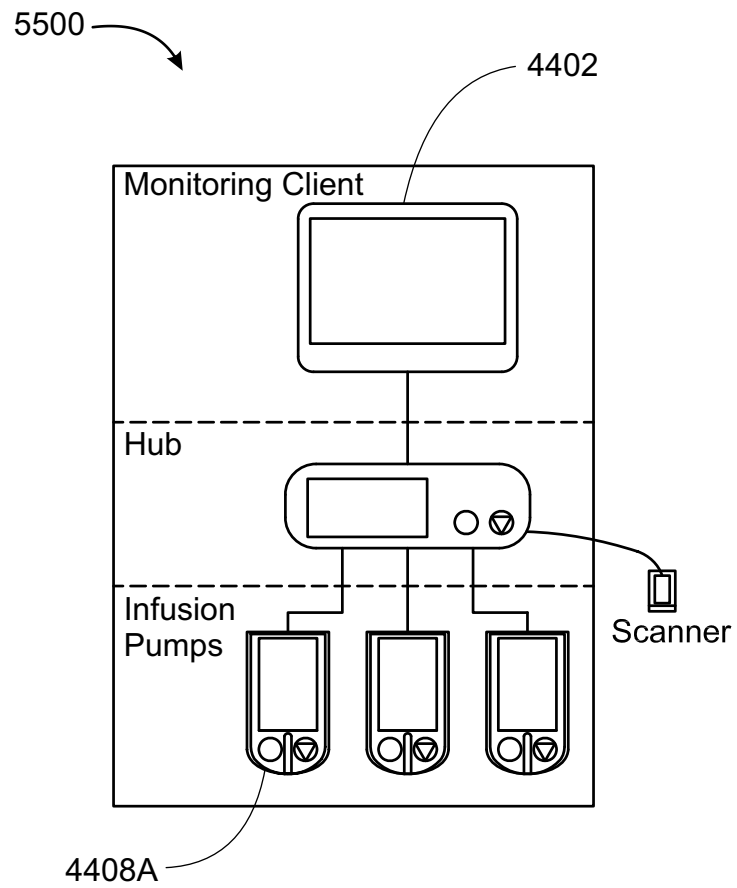


FIG. 85

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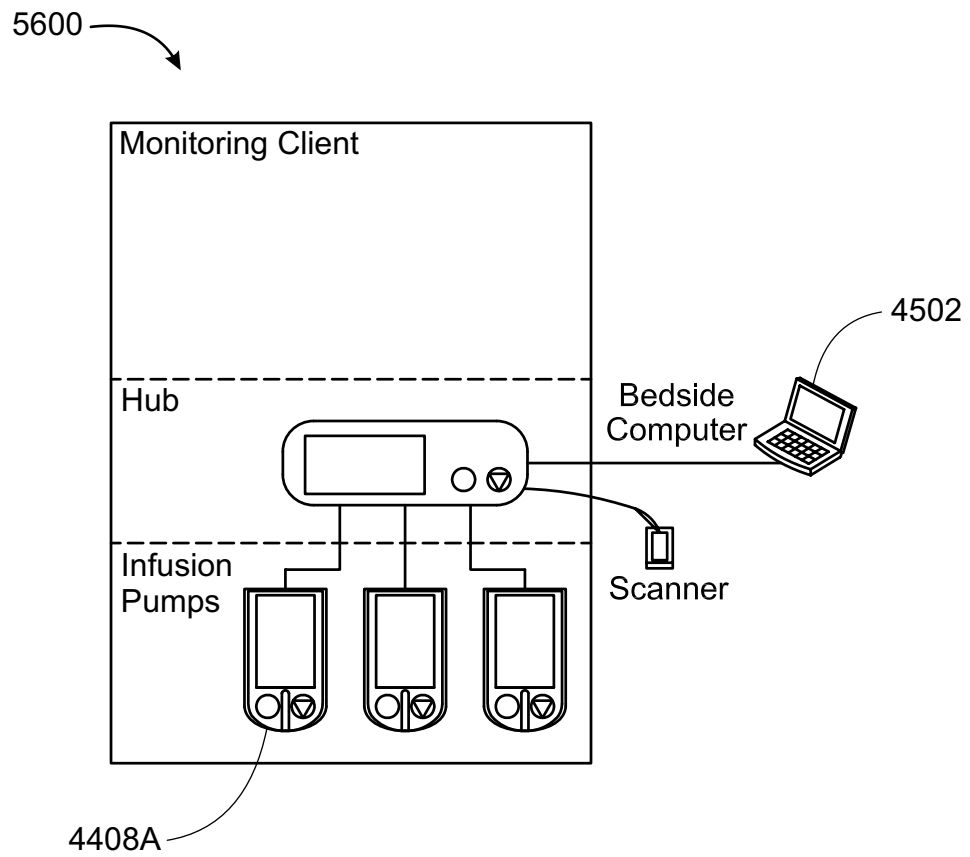


FIG. 86

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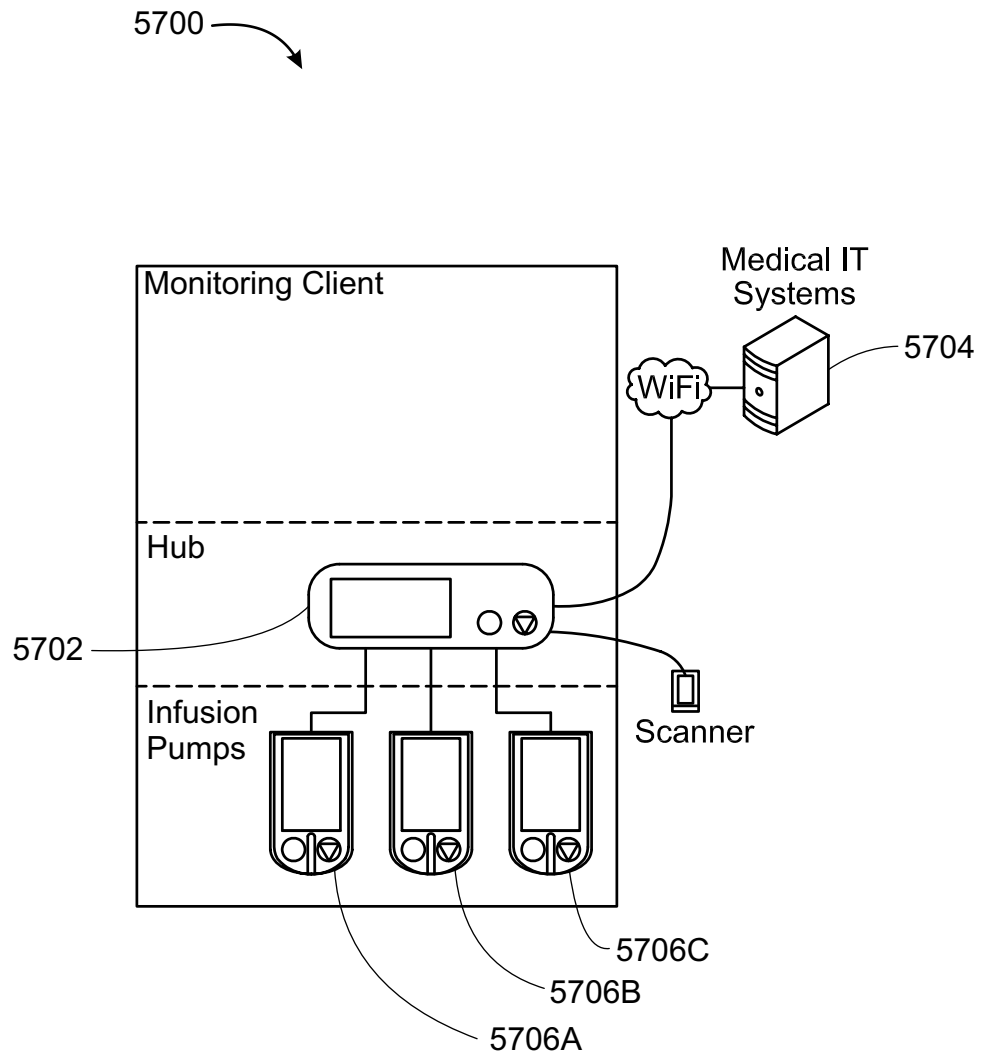


FIG. 87

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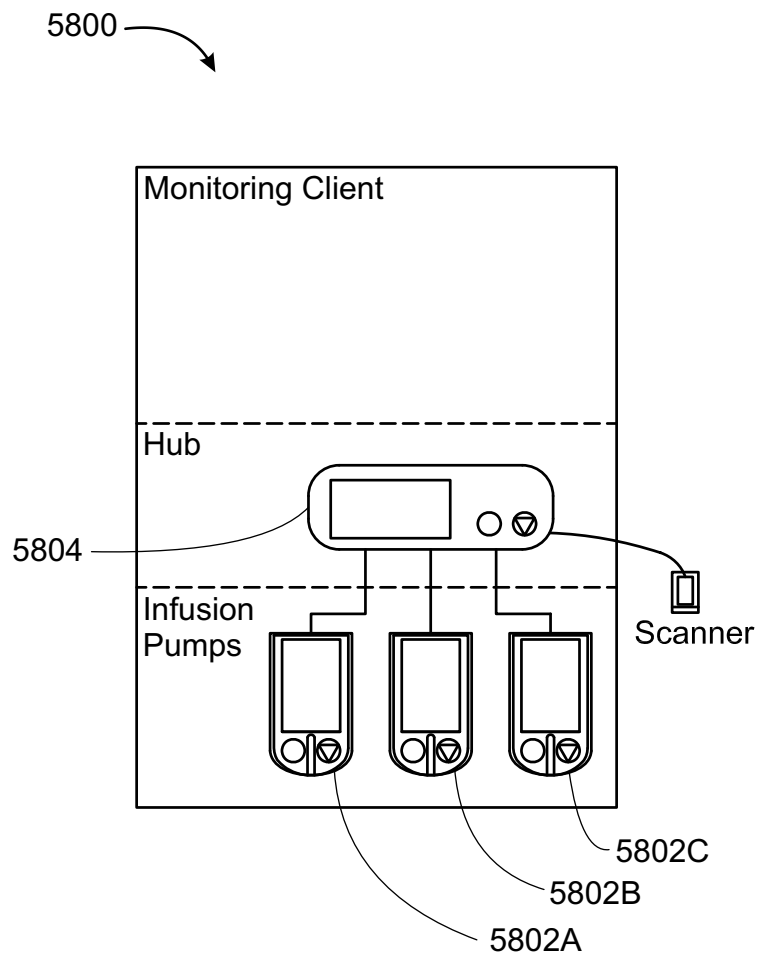


FIG. 88

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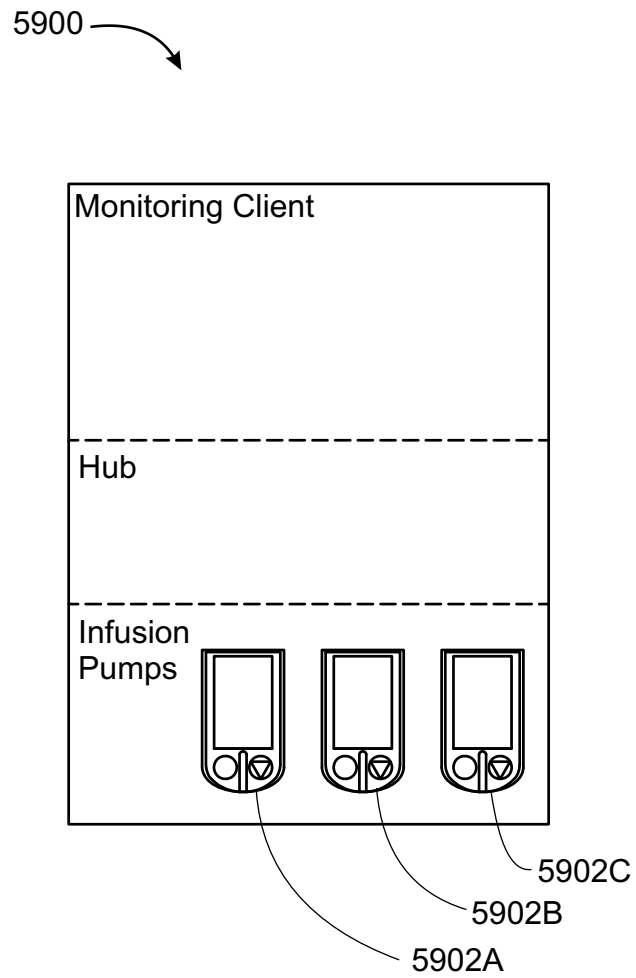
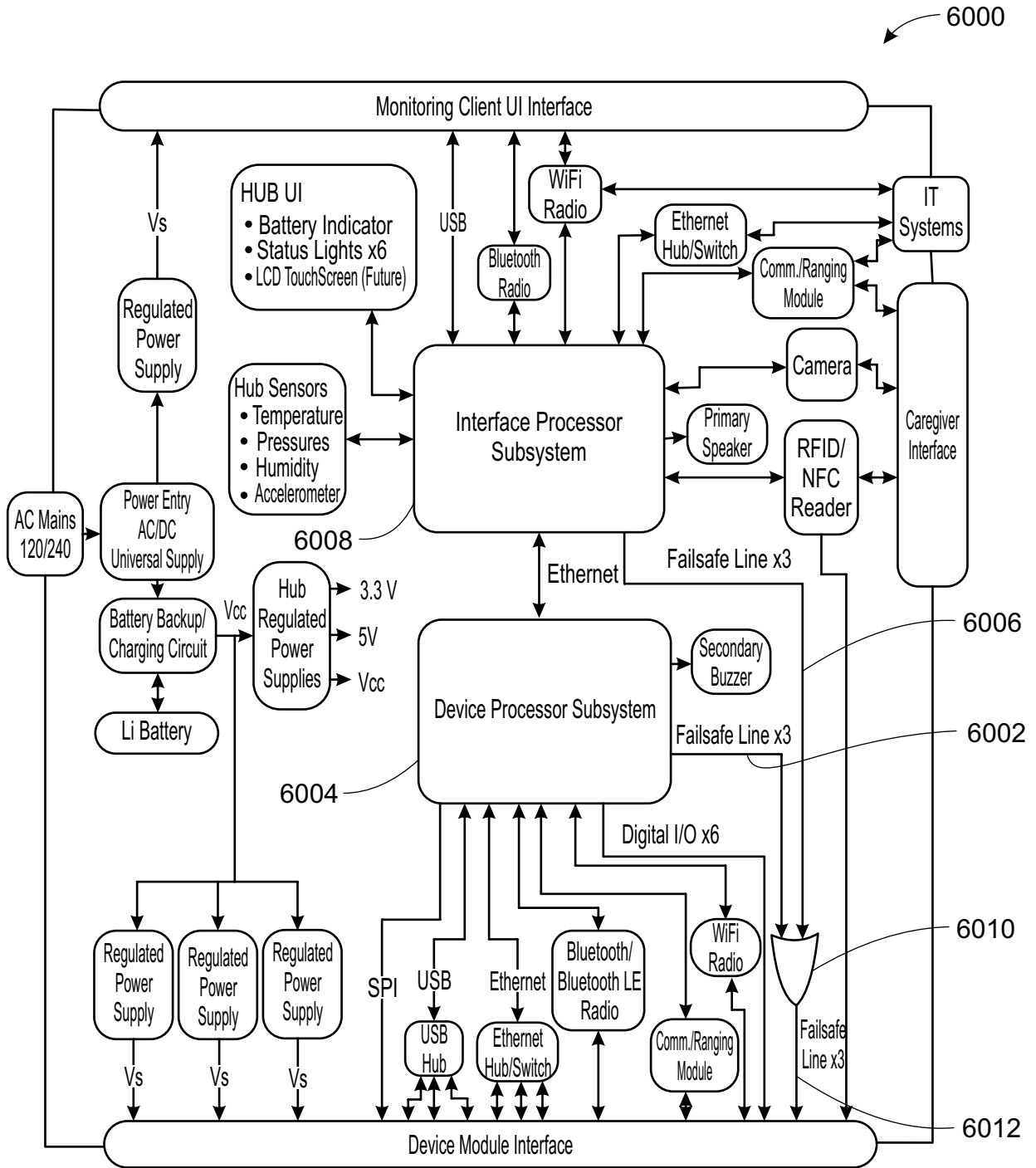


FIG. 89

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Note 1: The supply voltage (Vs) to the Devices could be programmed or a constant

FIG. 90

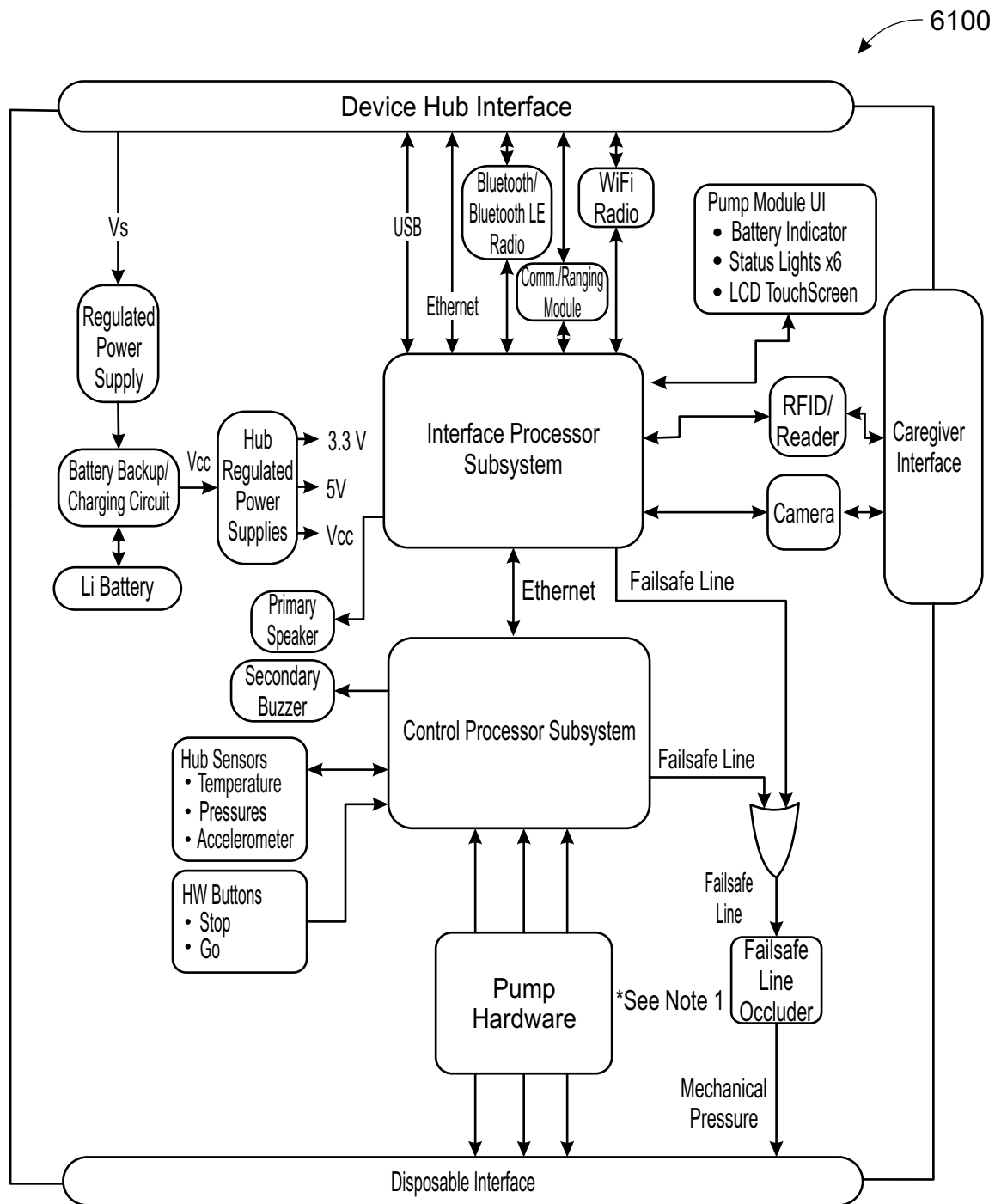


FIG. 91

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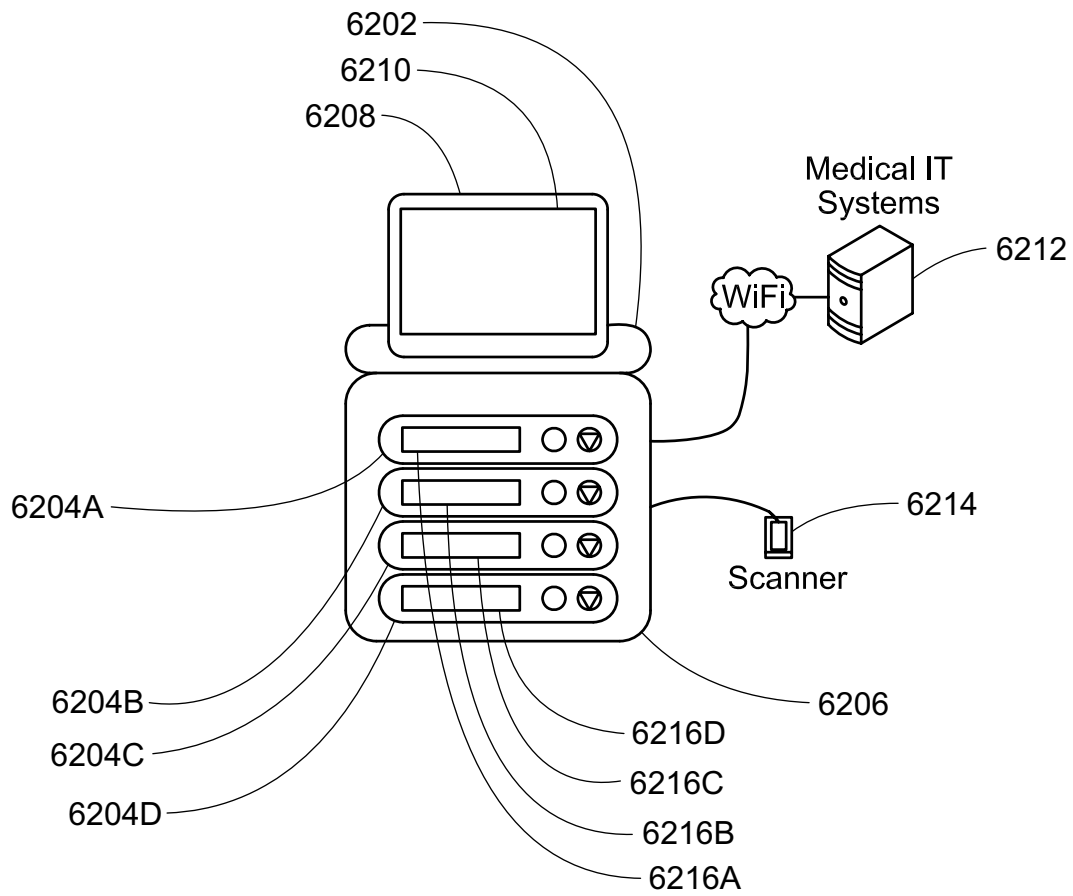


FIG. 92

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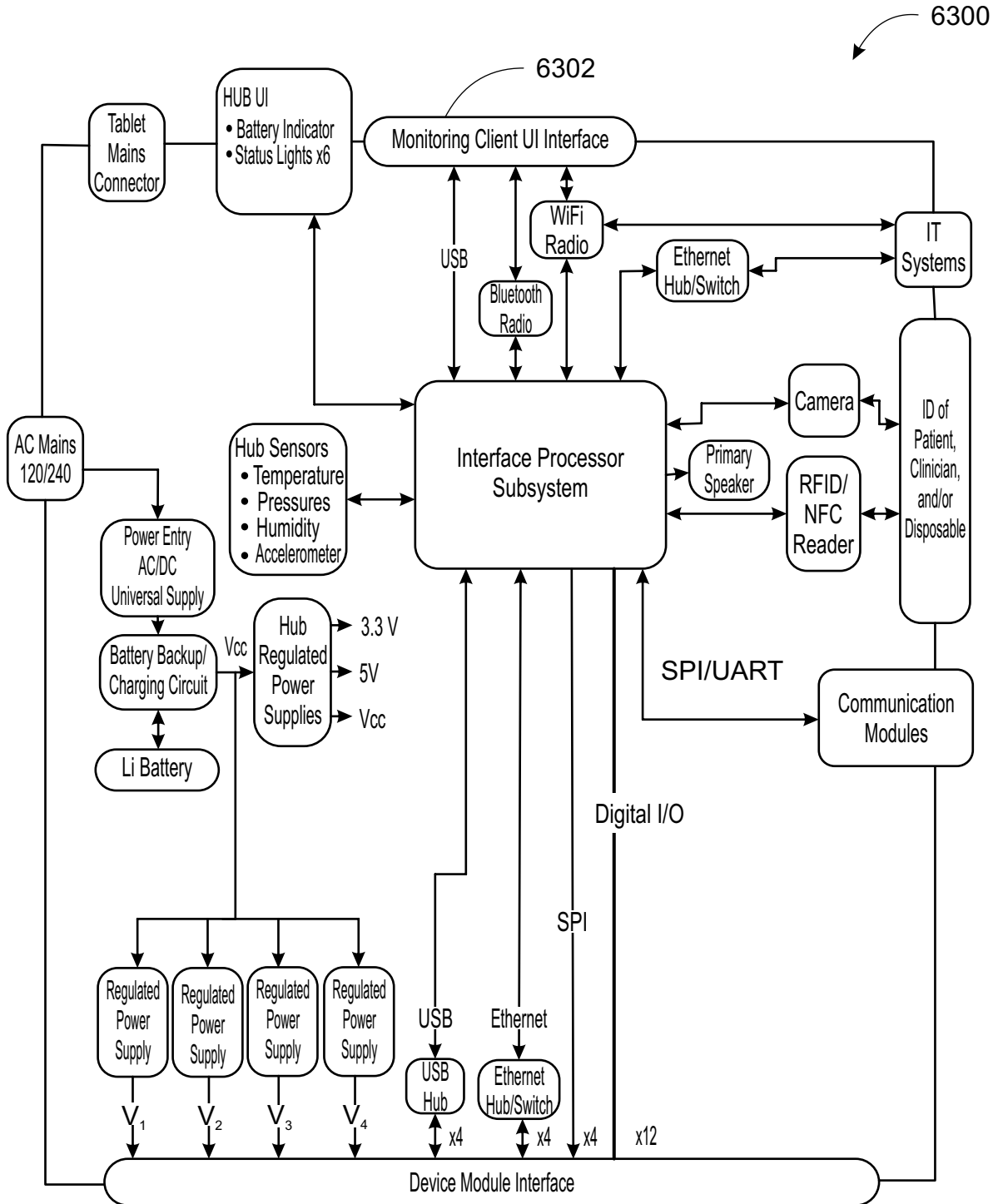


FIG. 93

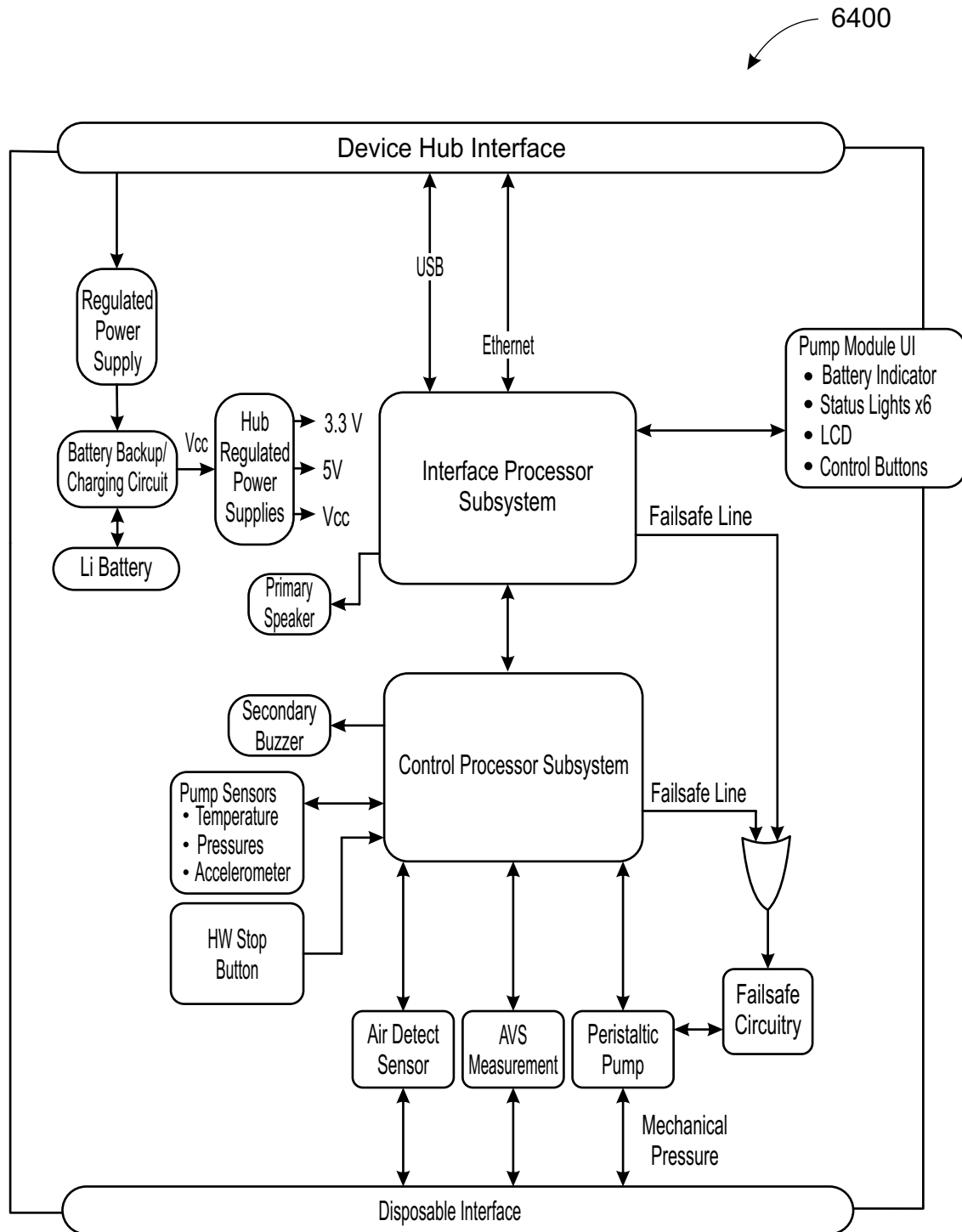


FIG. 94

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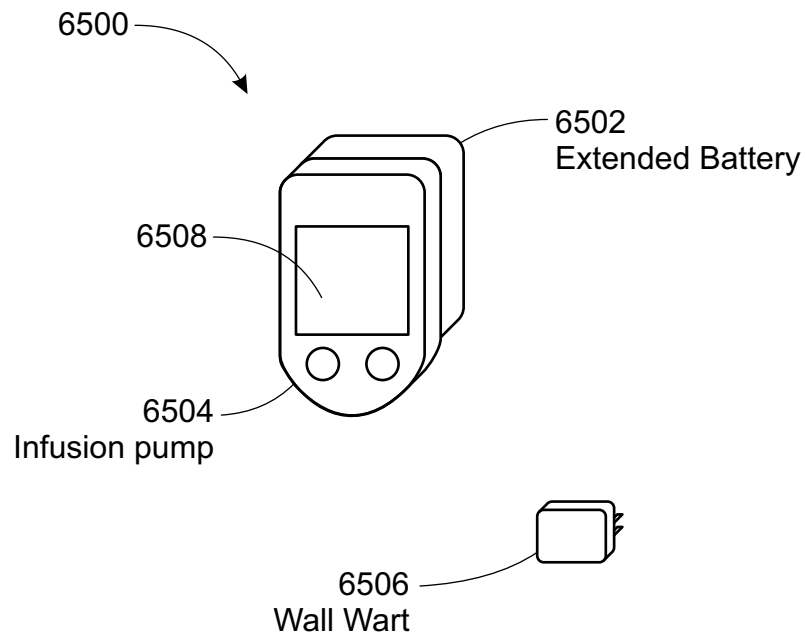


FIG. 95

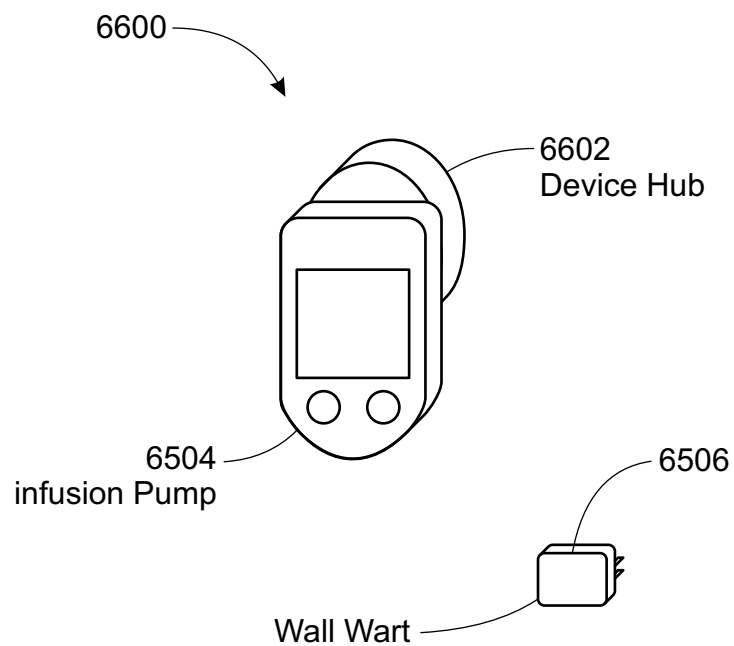


FIG. 96

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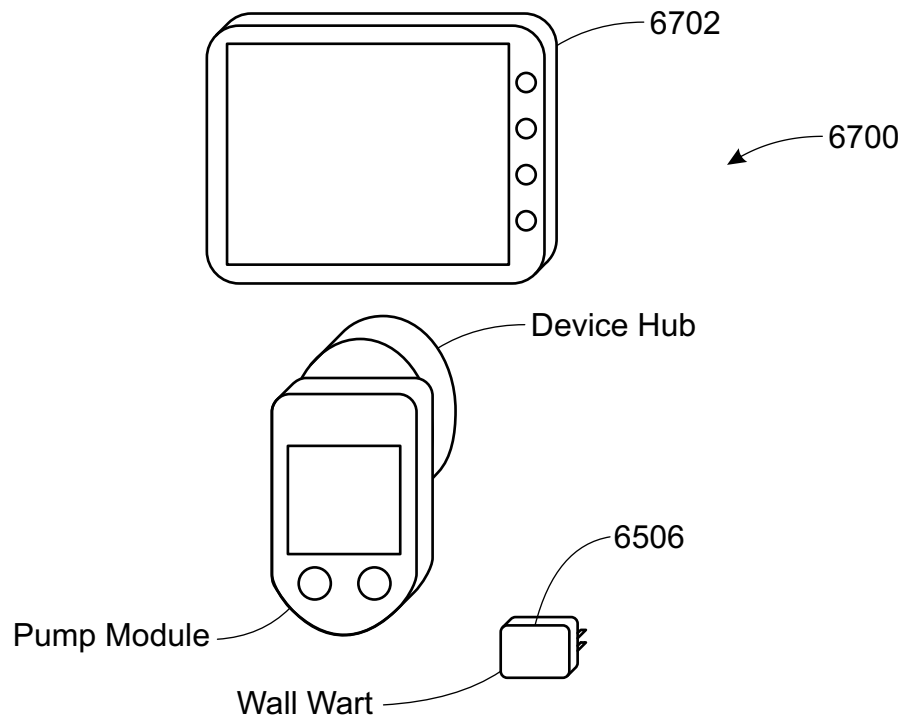


FIG. 97

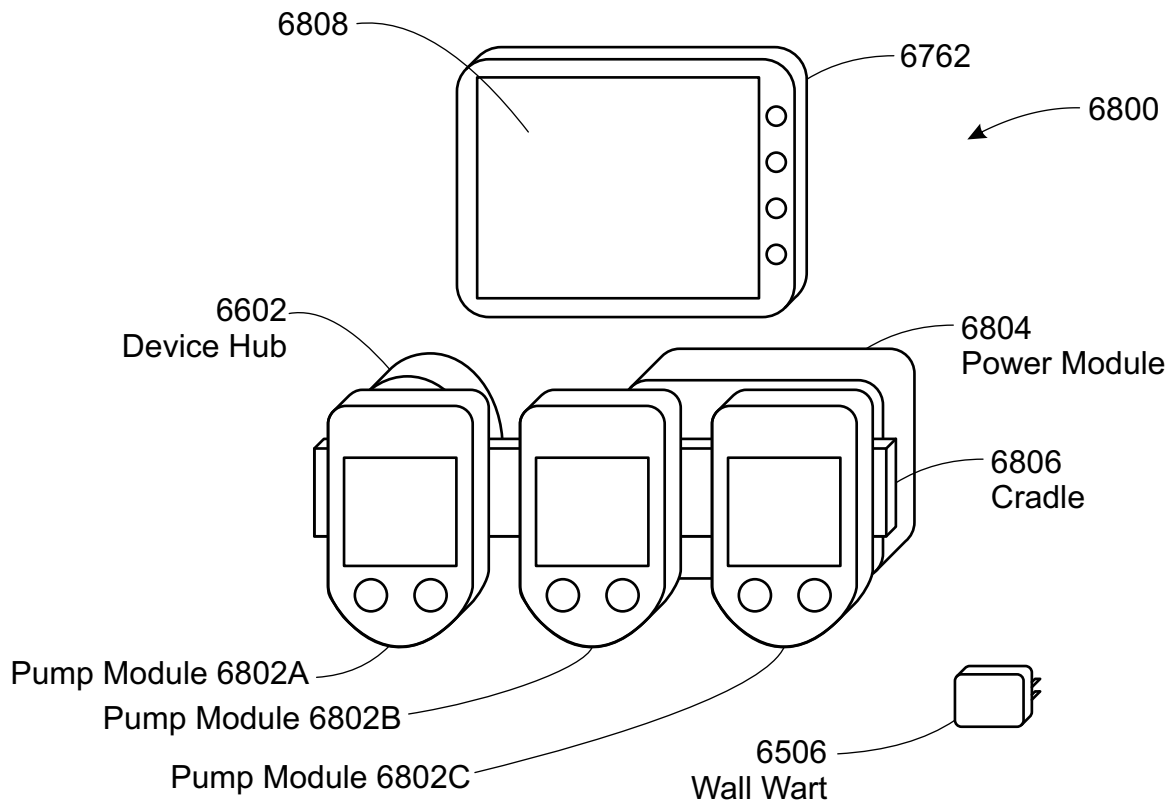


FIG. 98

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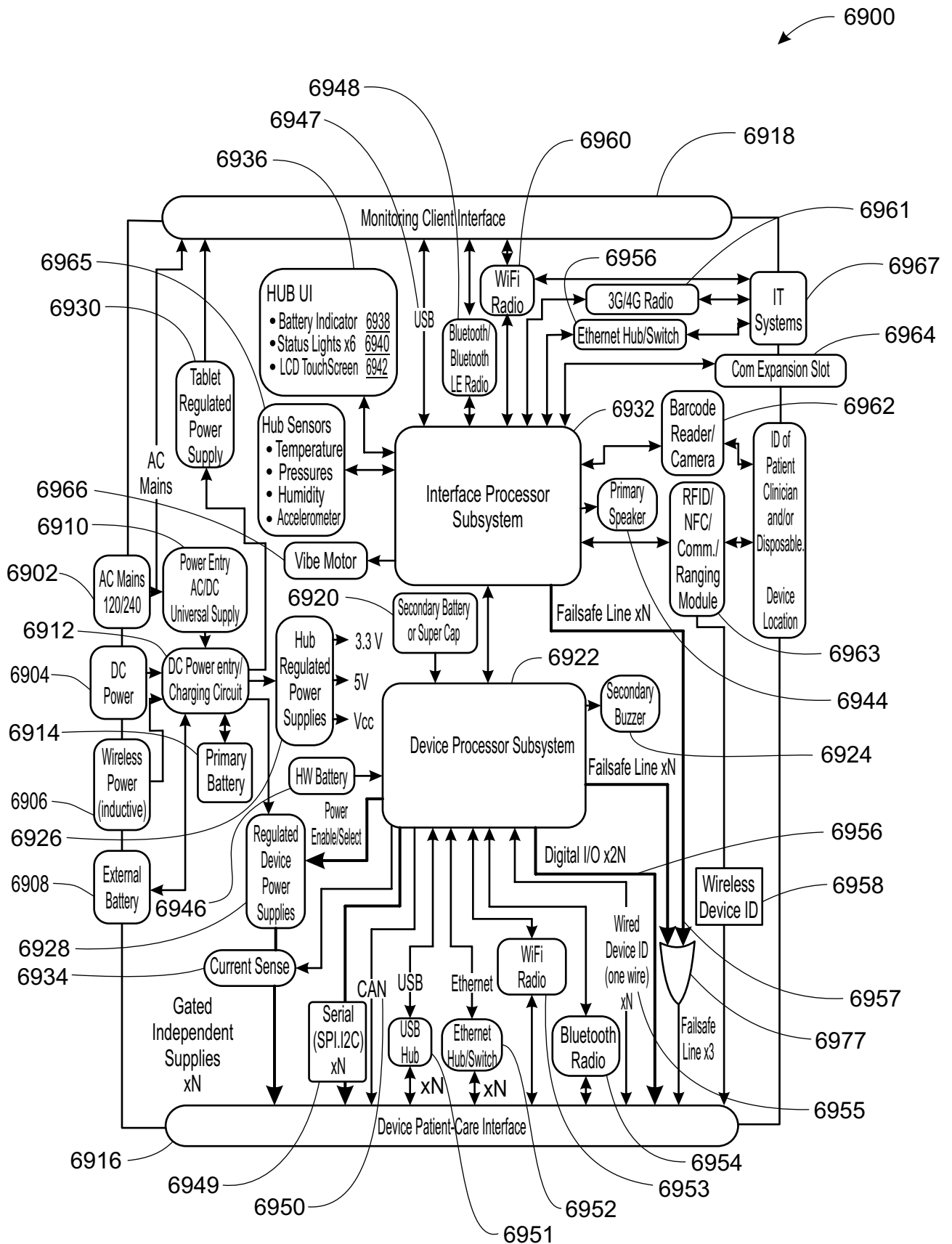


FIG. 99

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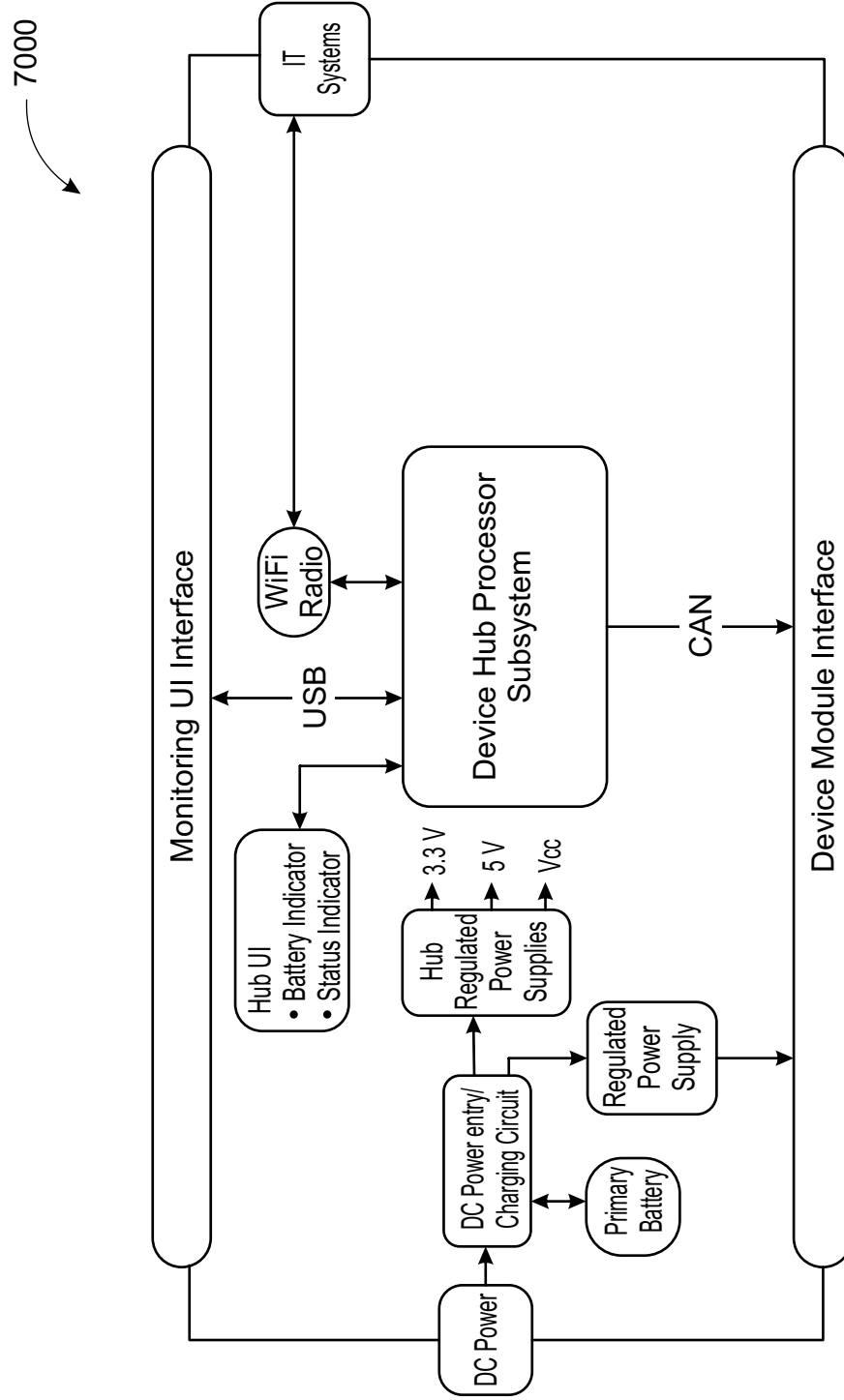


FIG. 100

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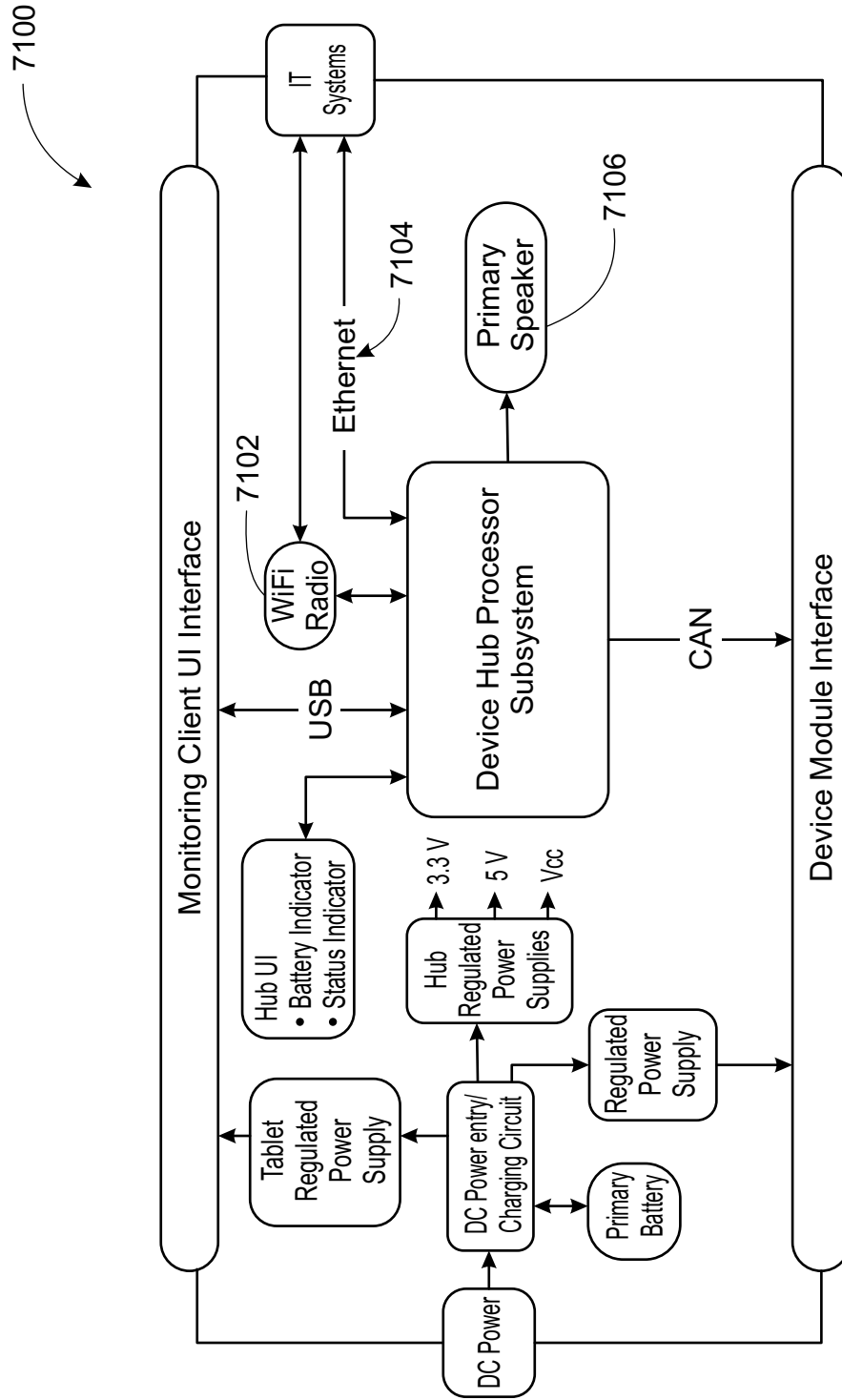


FIG. 101

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7200

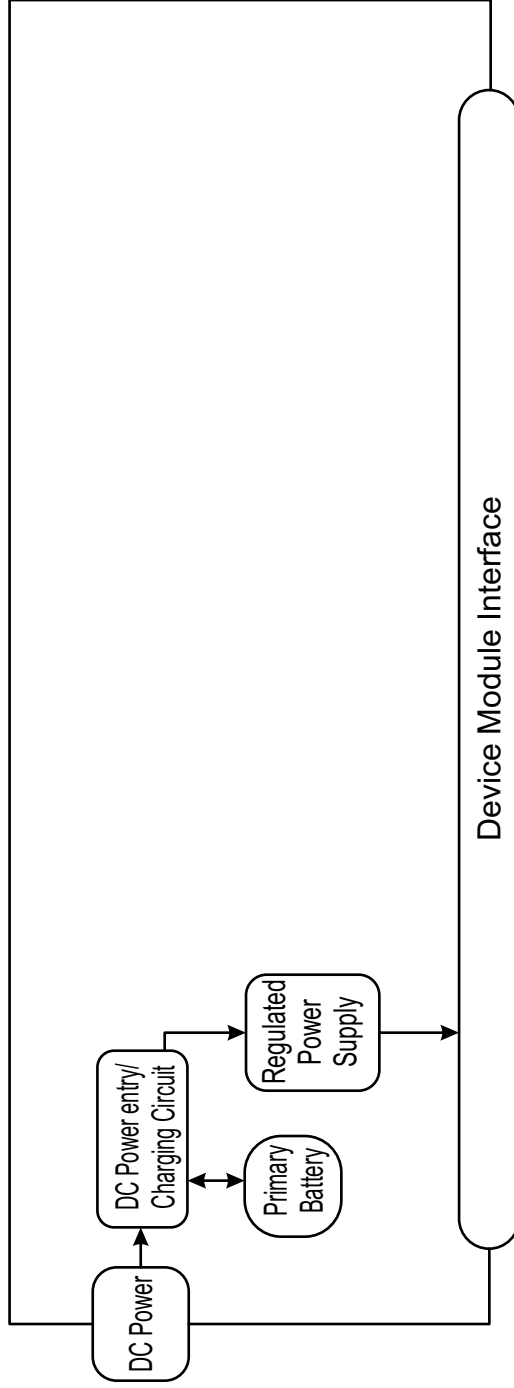


FIG. 102

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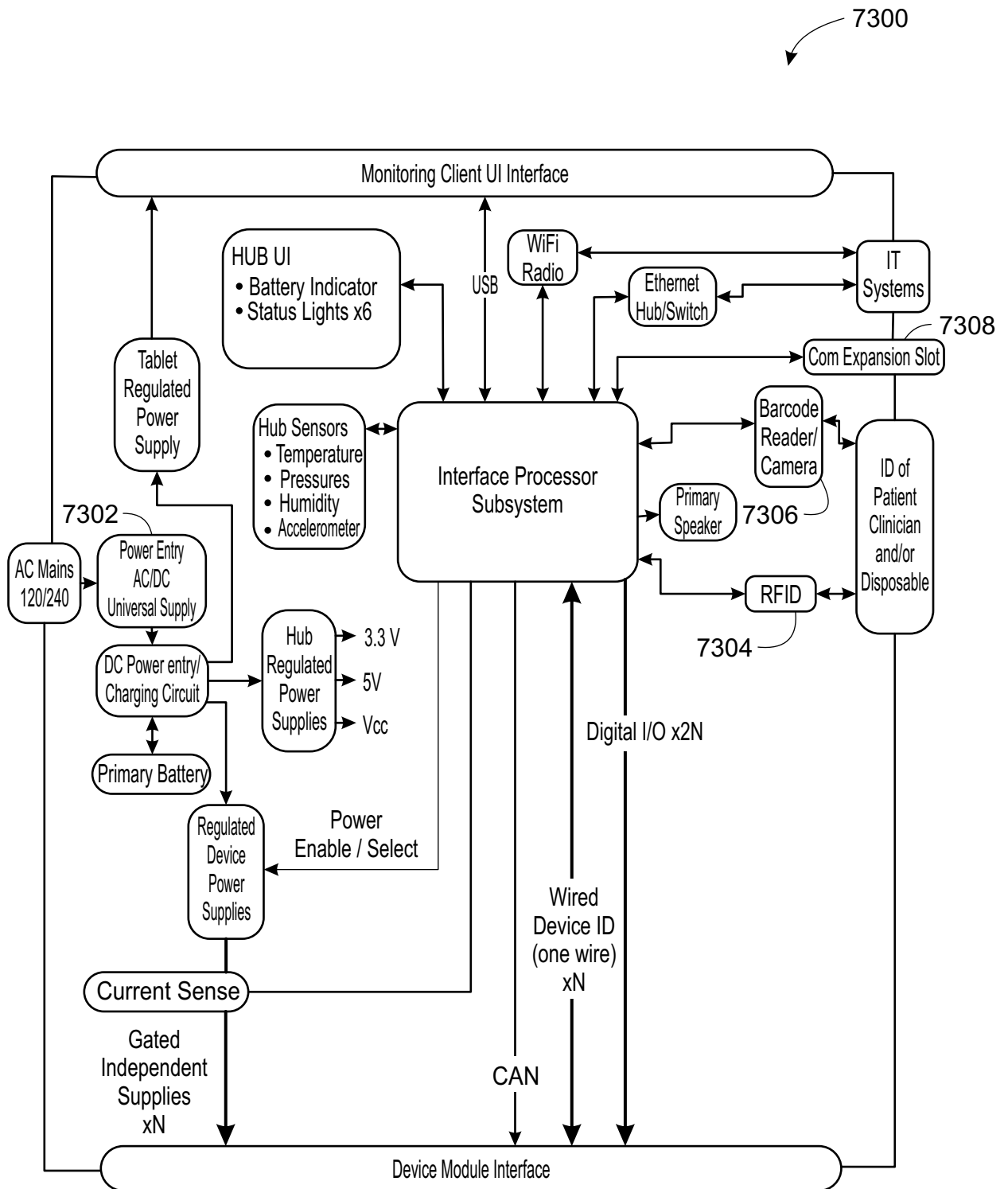


FIG. 103

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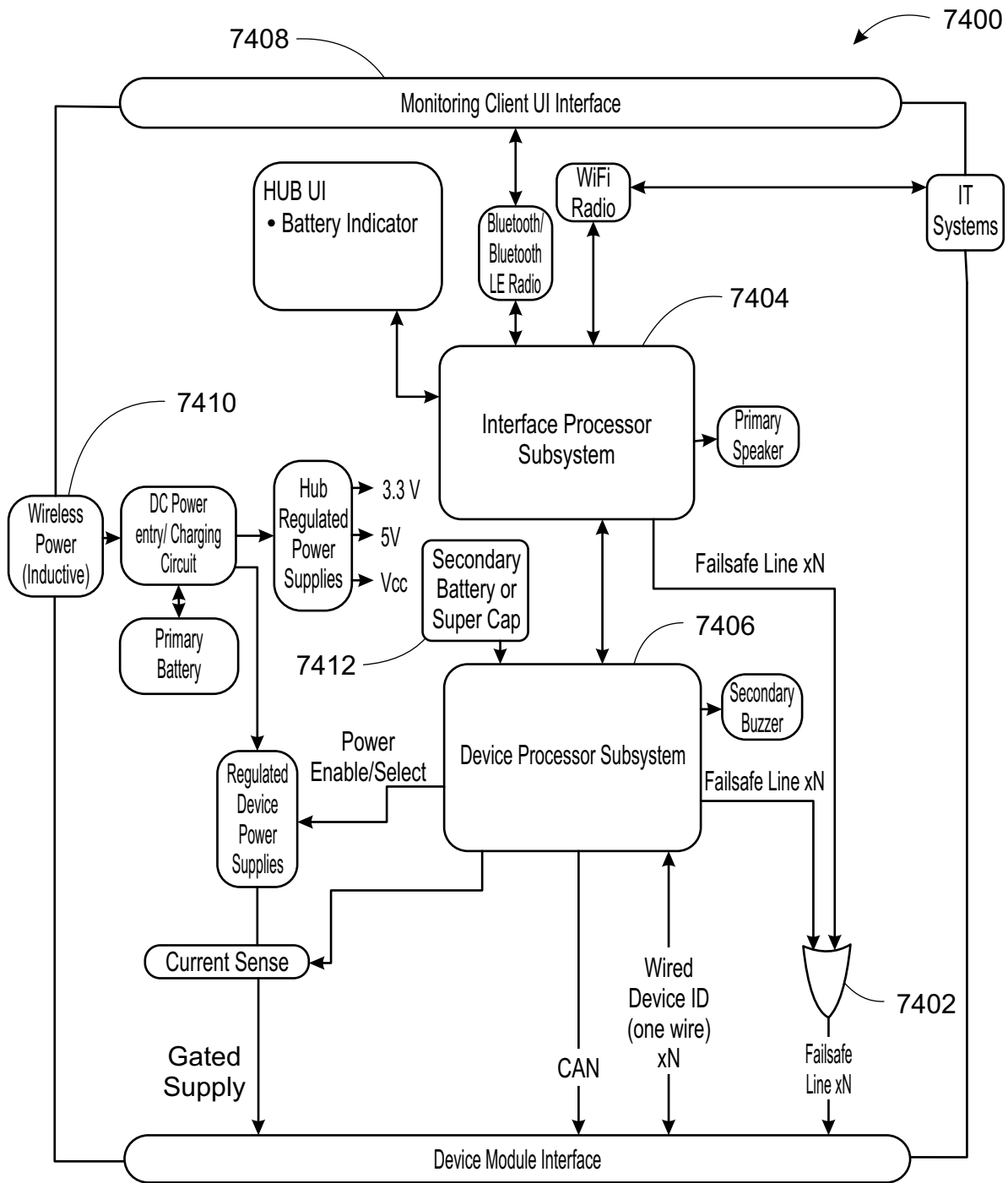


FIG. 104

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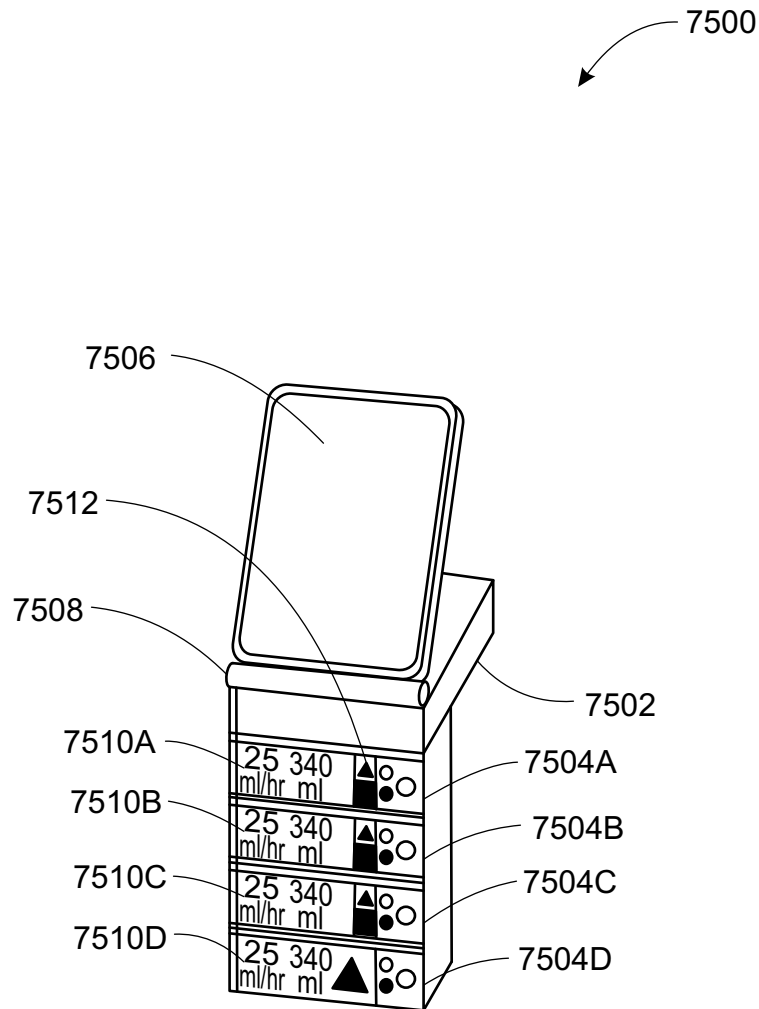


FIG. 105

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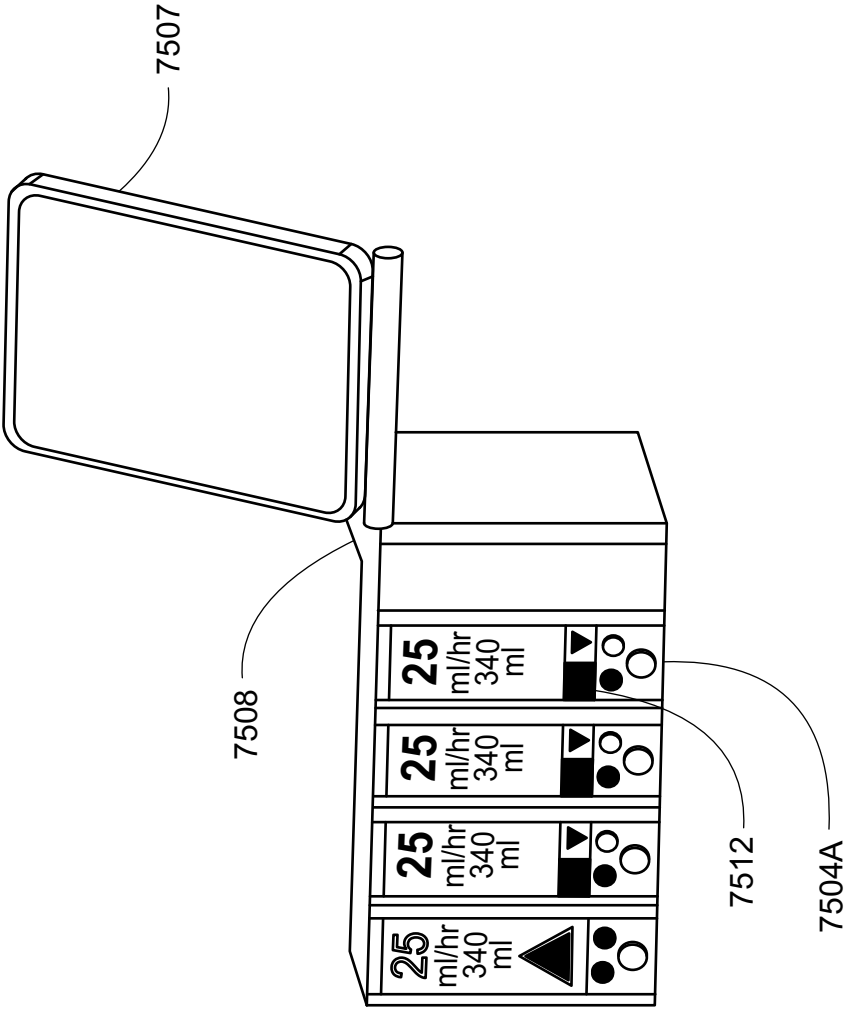


FIG. 106

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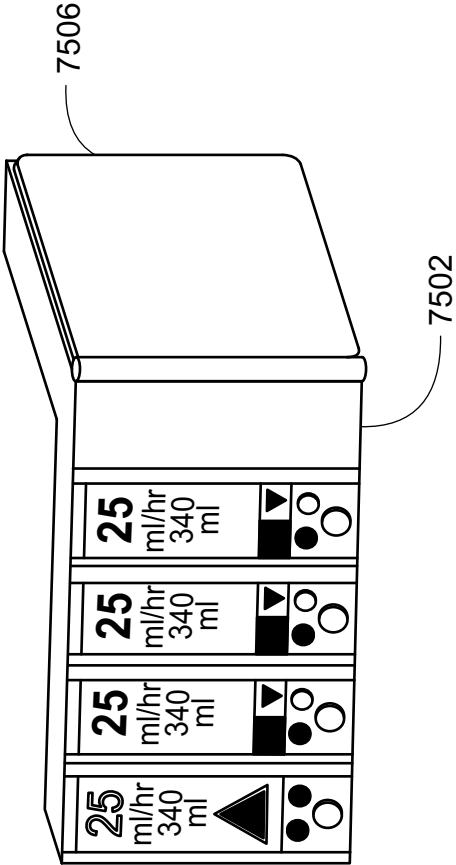


FIG. 107

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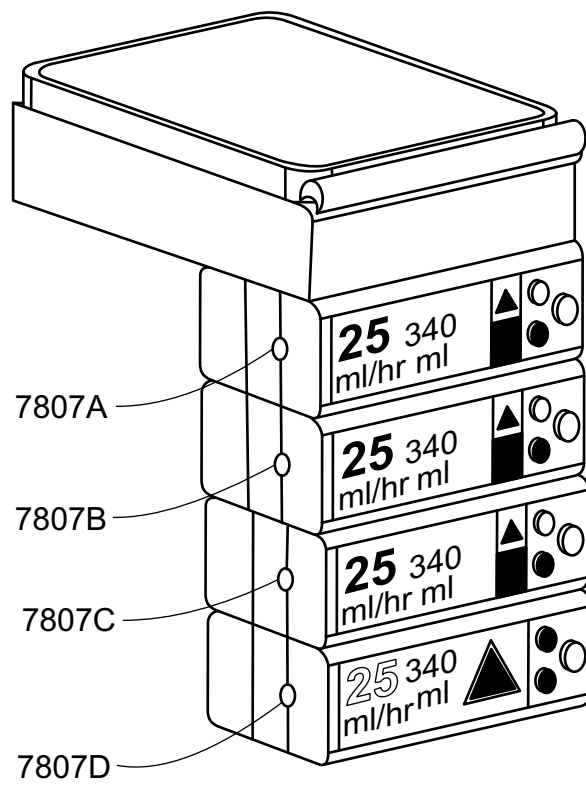


FIG. 108

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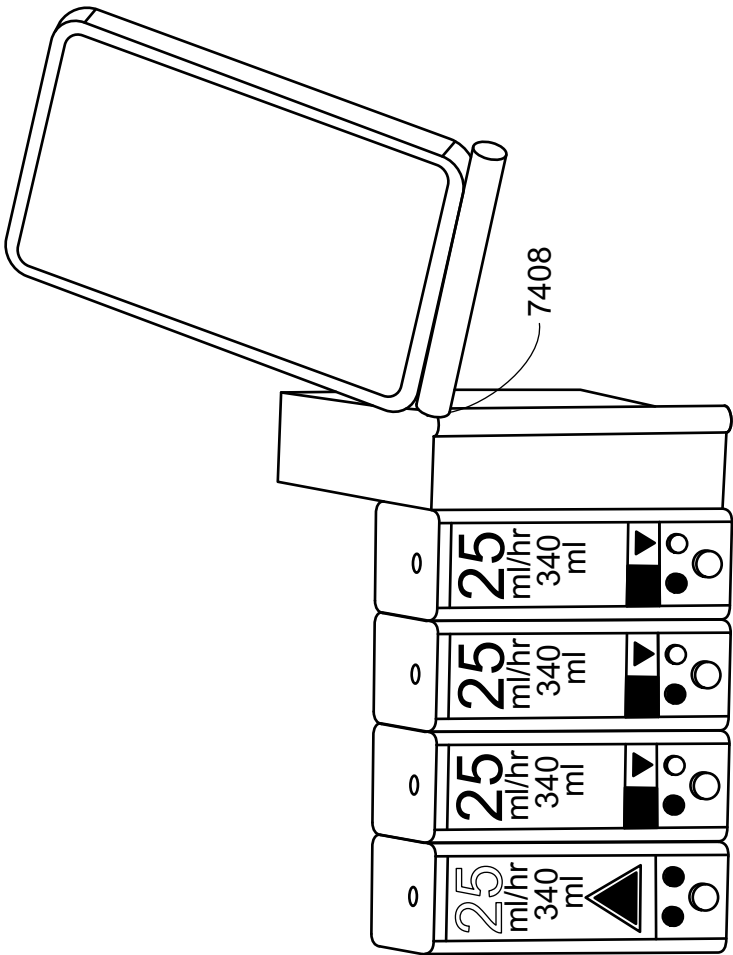


FIG. 109

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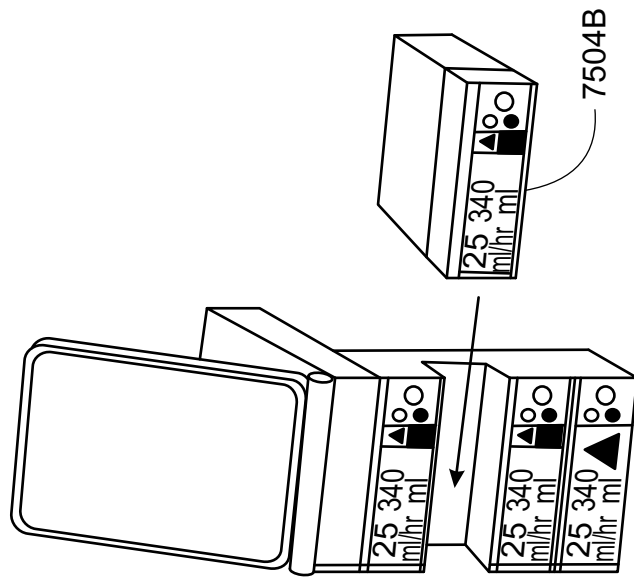


FIG. 110

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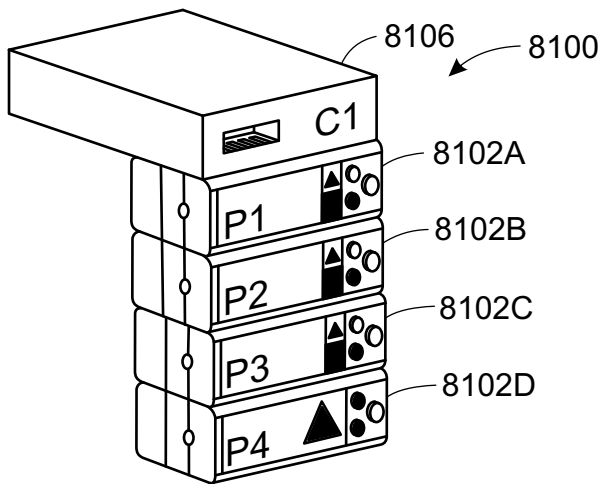


FIG. 111

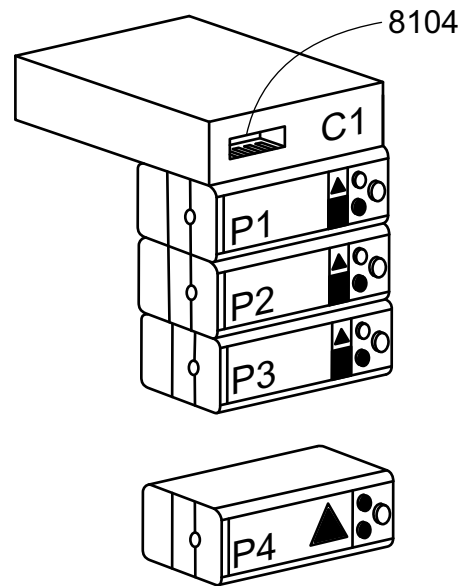


FIG. 112

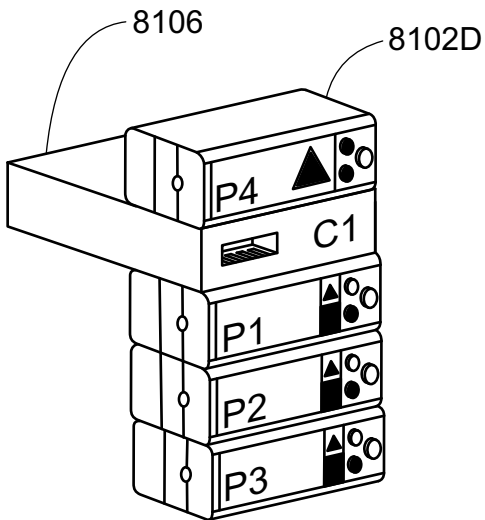


FIG. 113

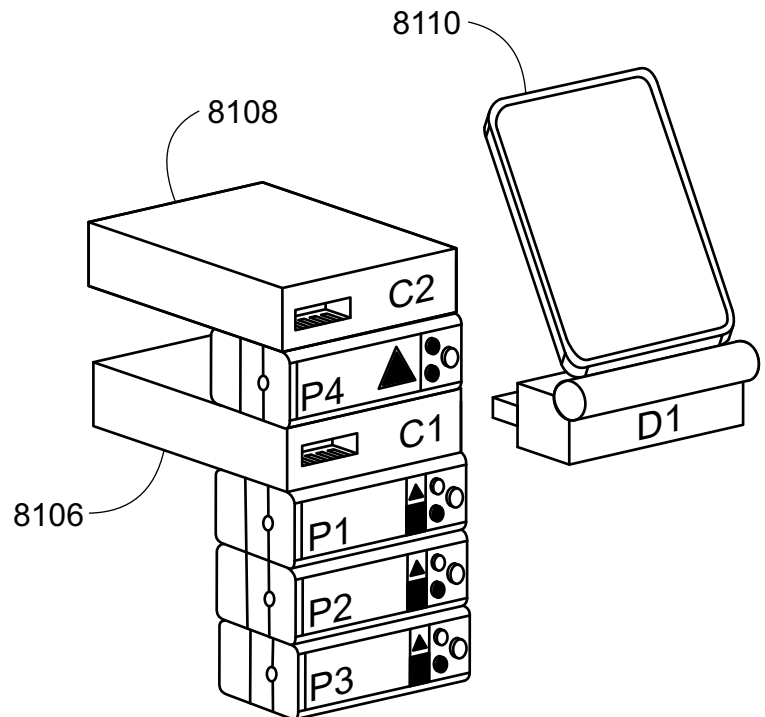


FIG. 114

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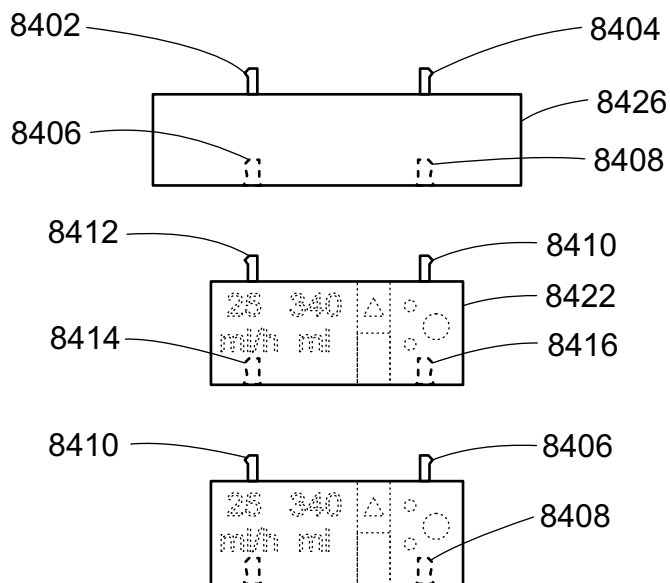


FIG. 115

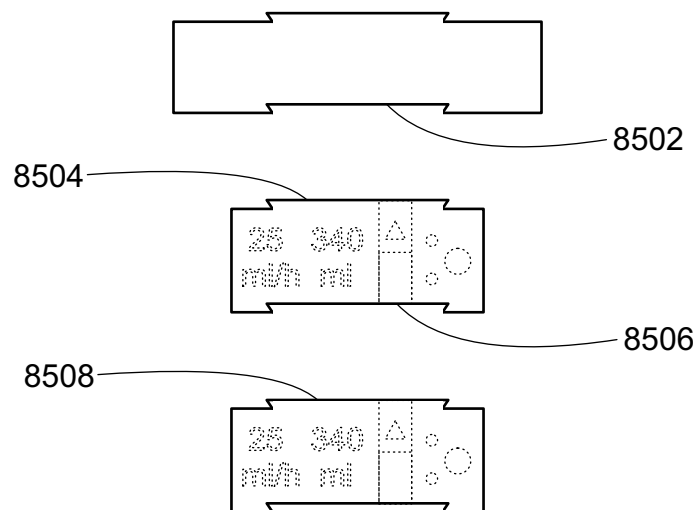


FIG. 116

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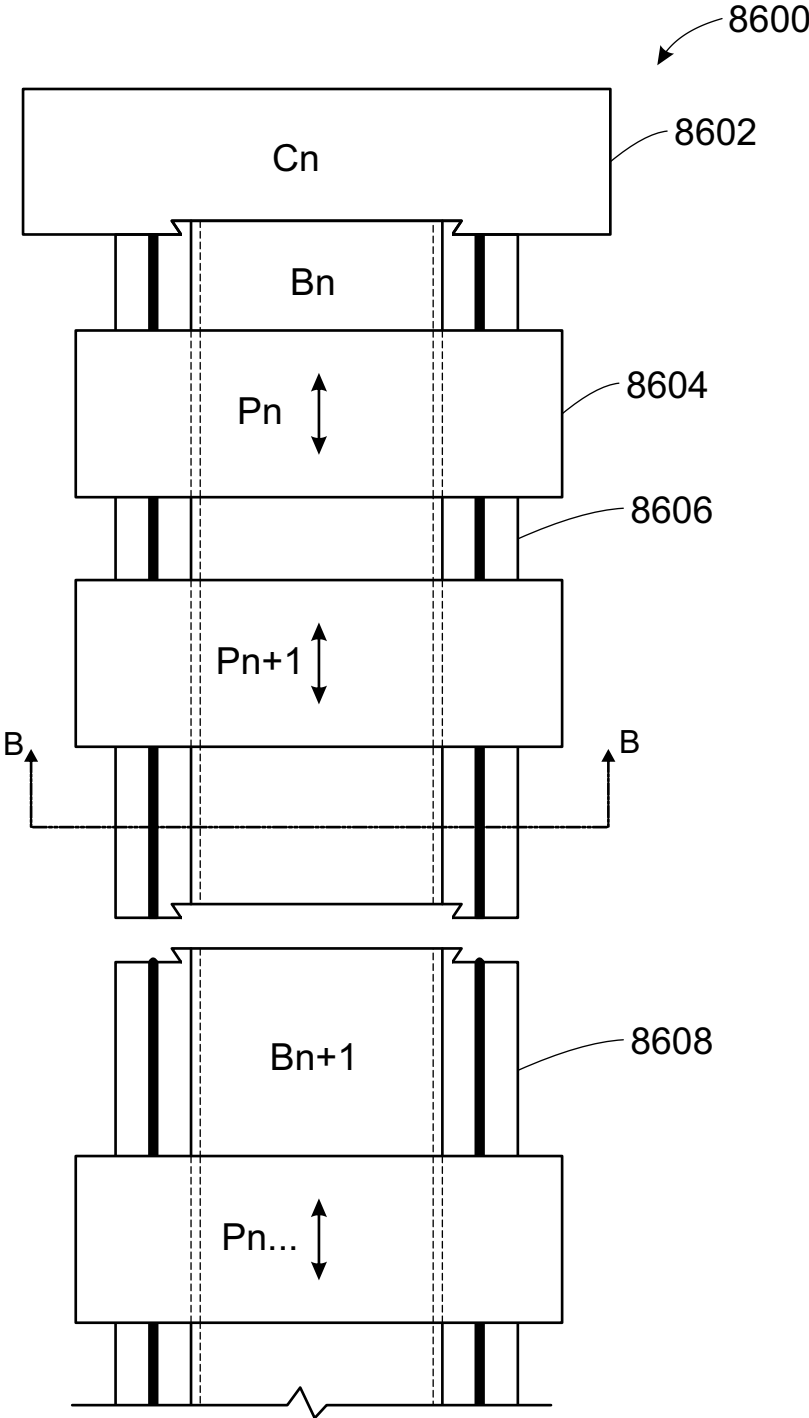


FIG. 117

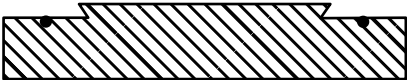


FIG. 118

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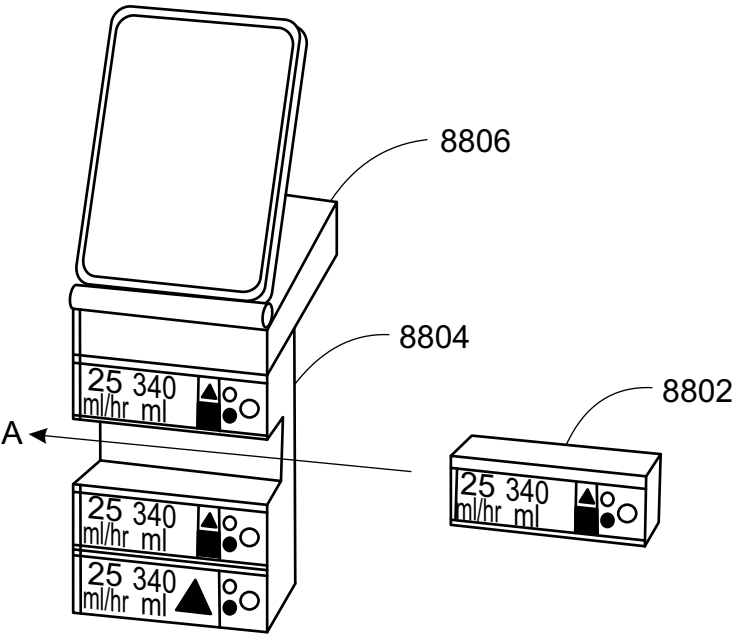


FIG. 119

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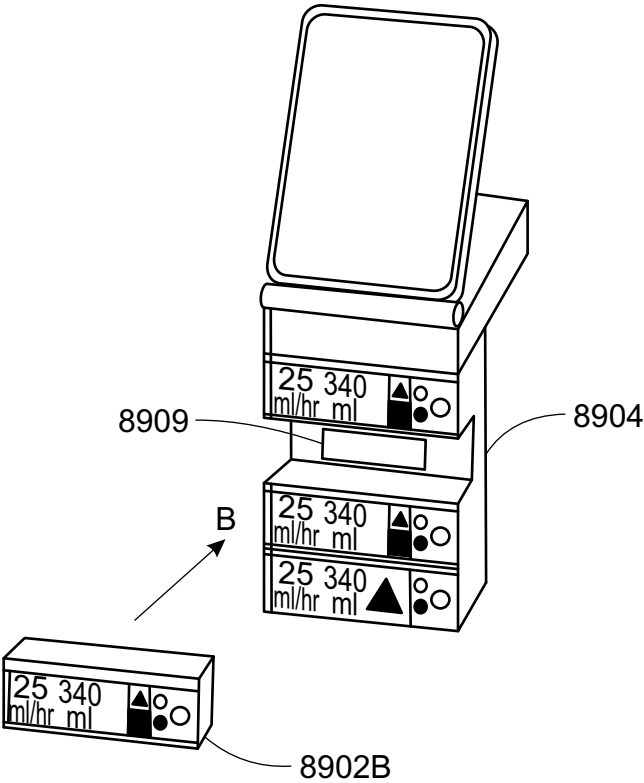


FIG. 120

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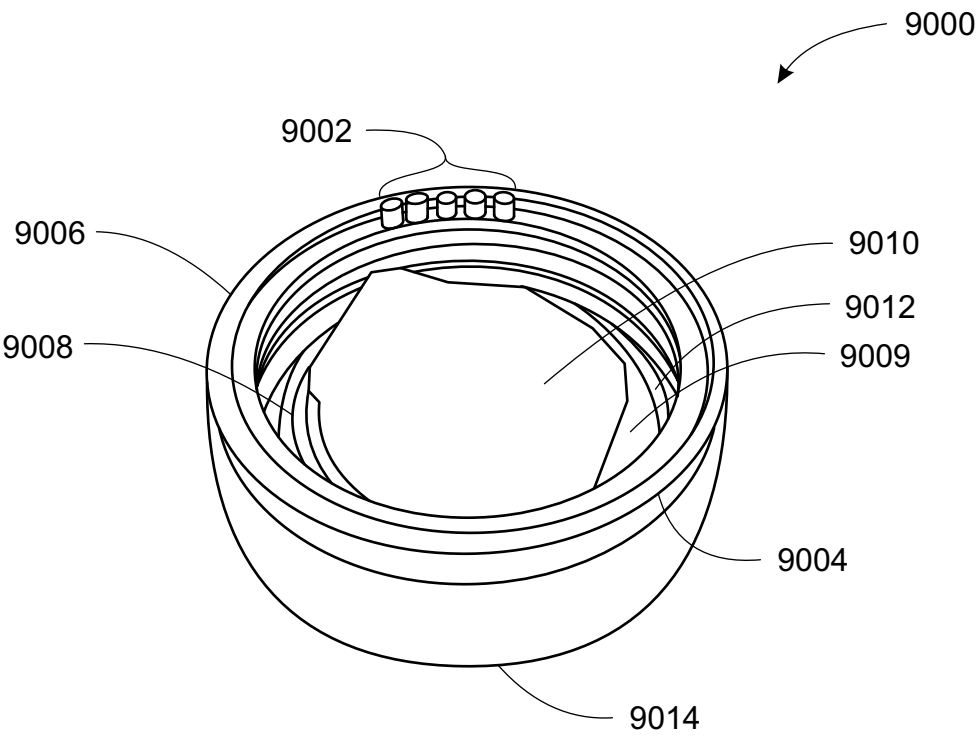


FIG. 121

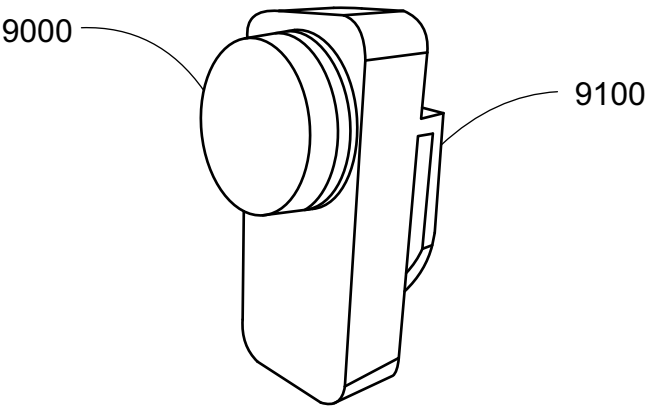


FIG. 122

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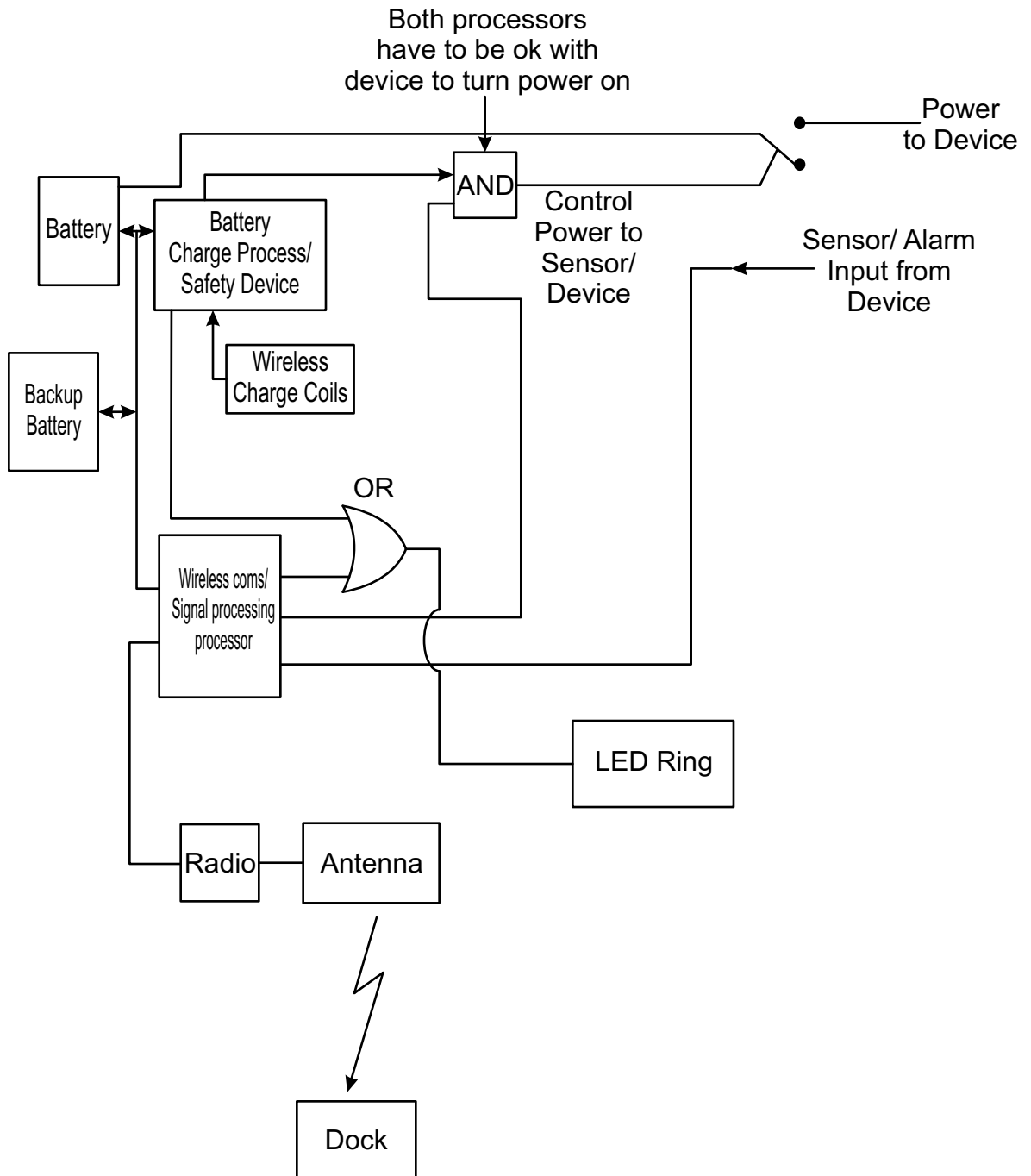


FIG. 123

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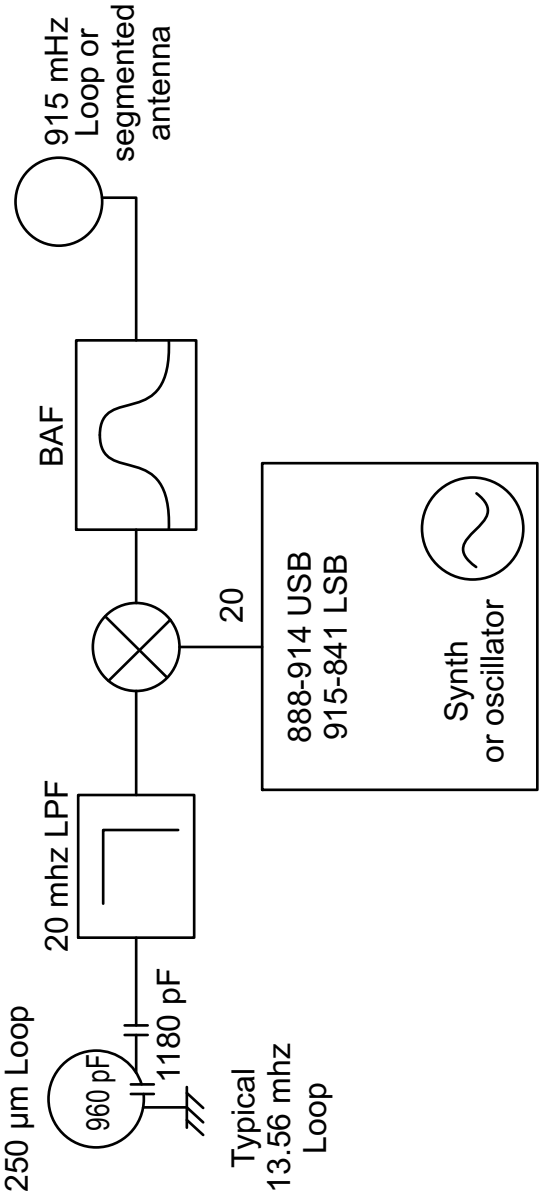


FIG. 124

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12500

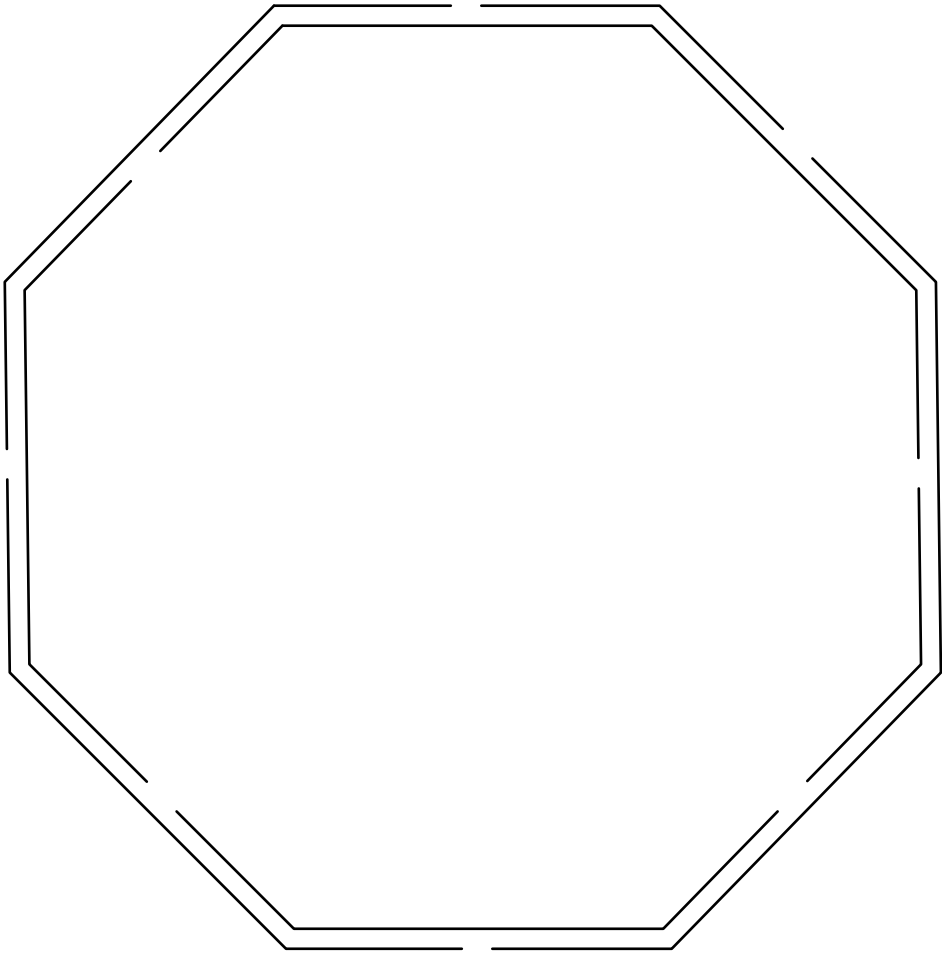


FIG. 125

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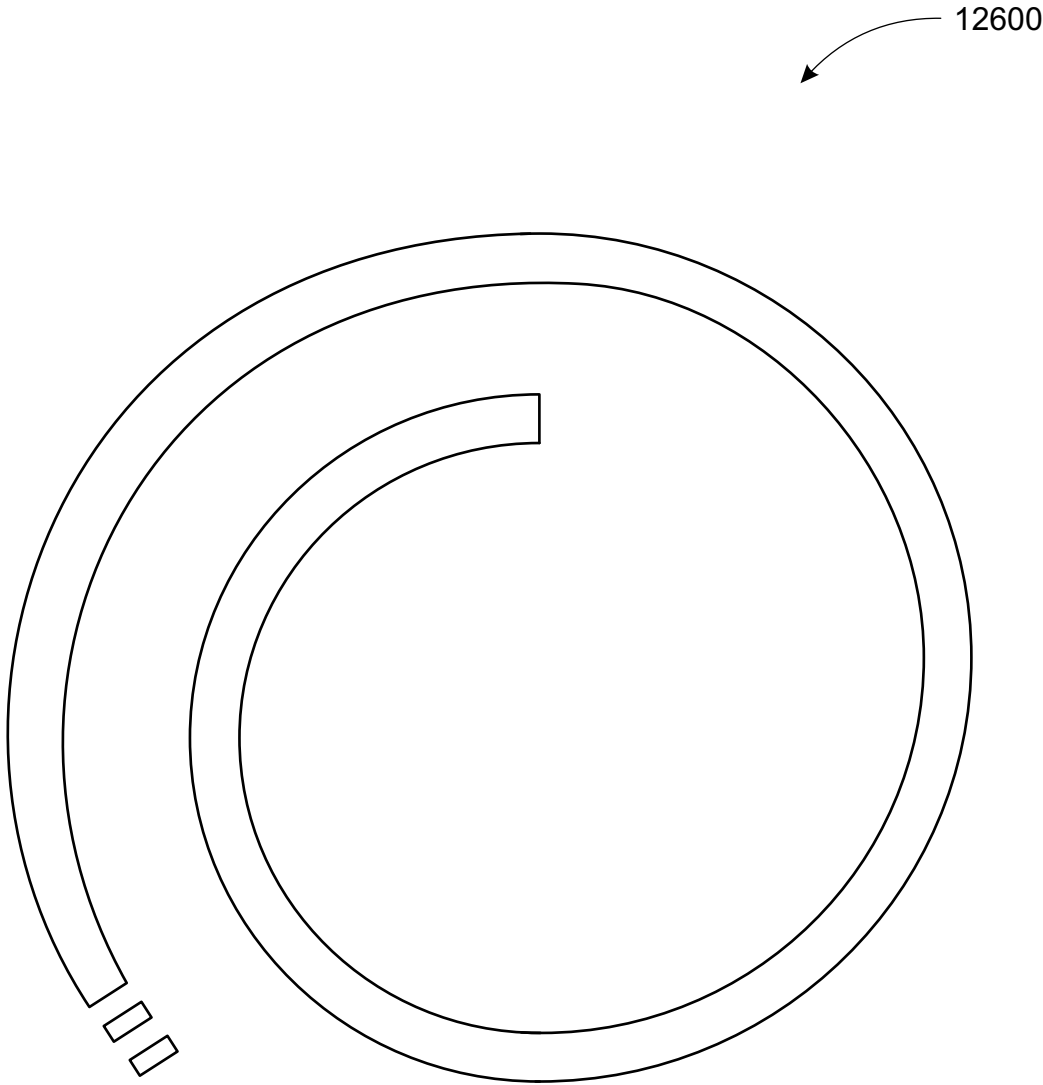


FIG. 126

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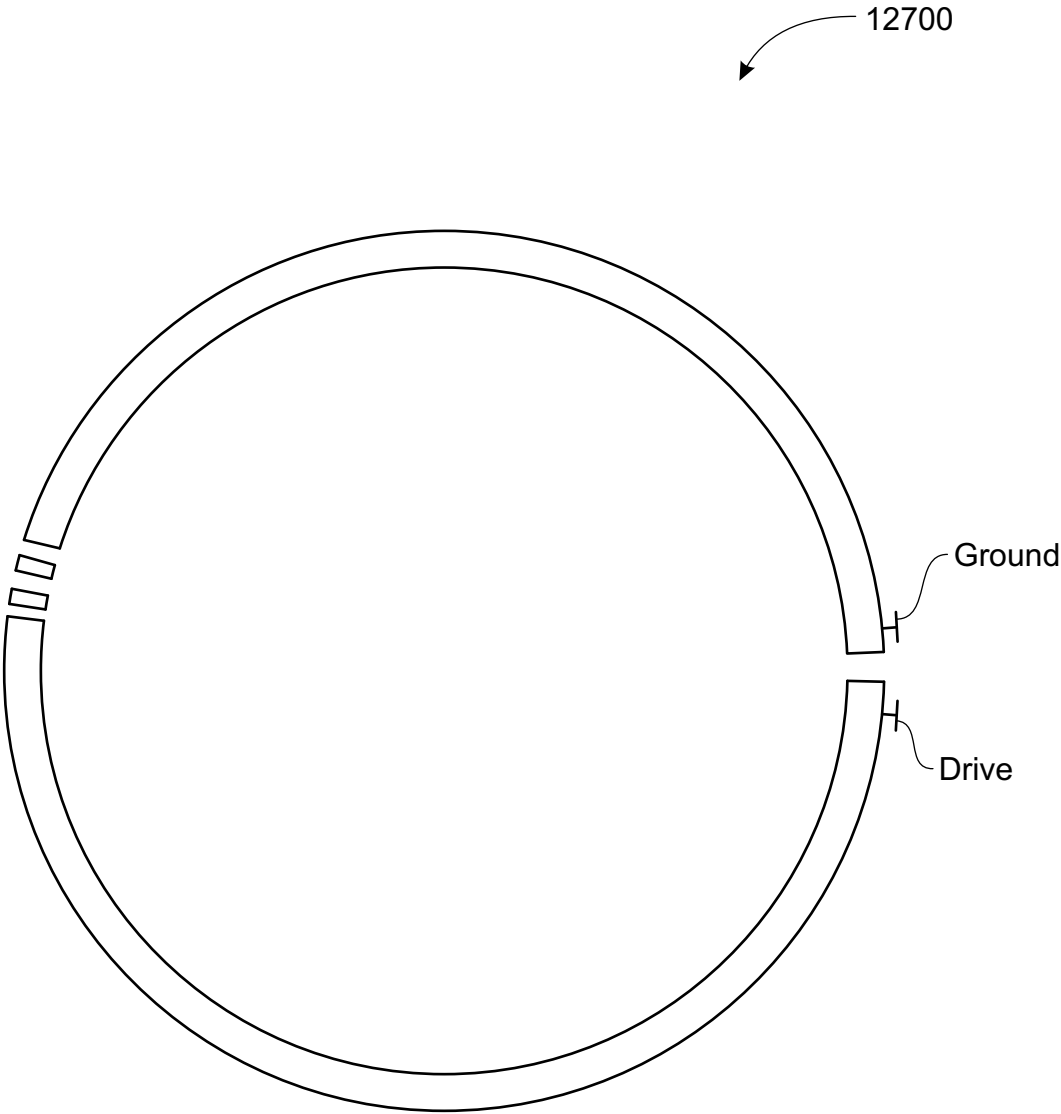


FIG. 127

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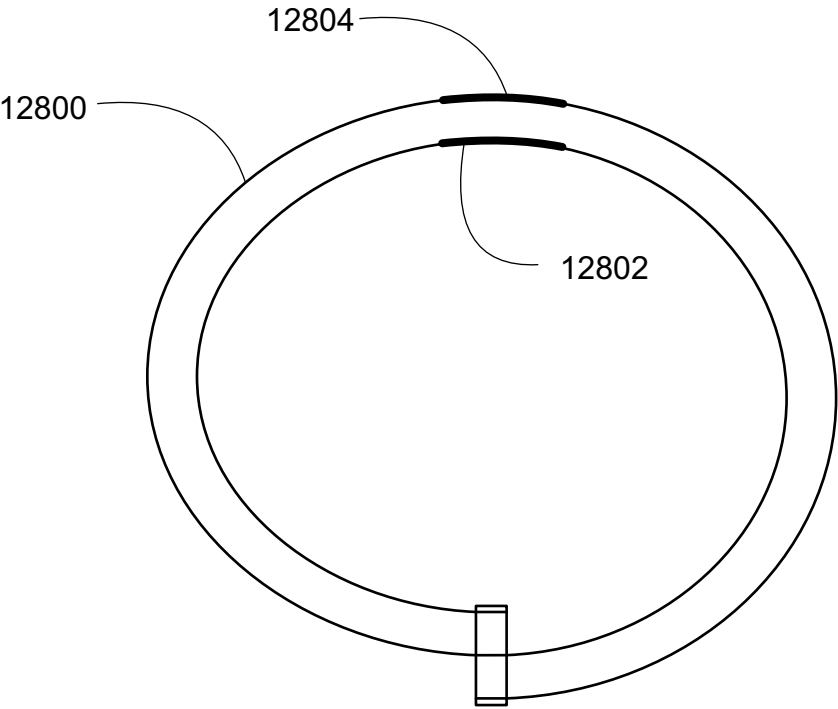


FIG. 128

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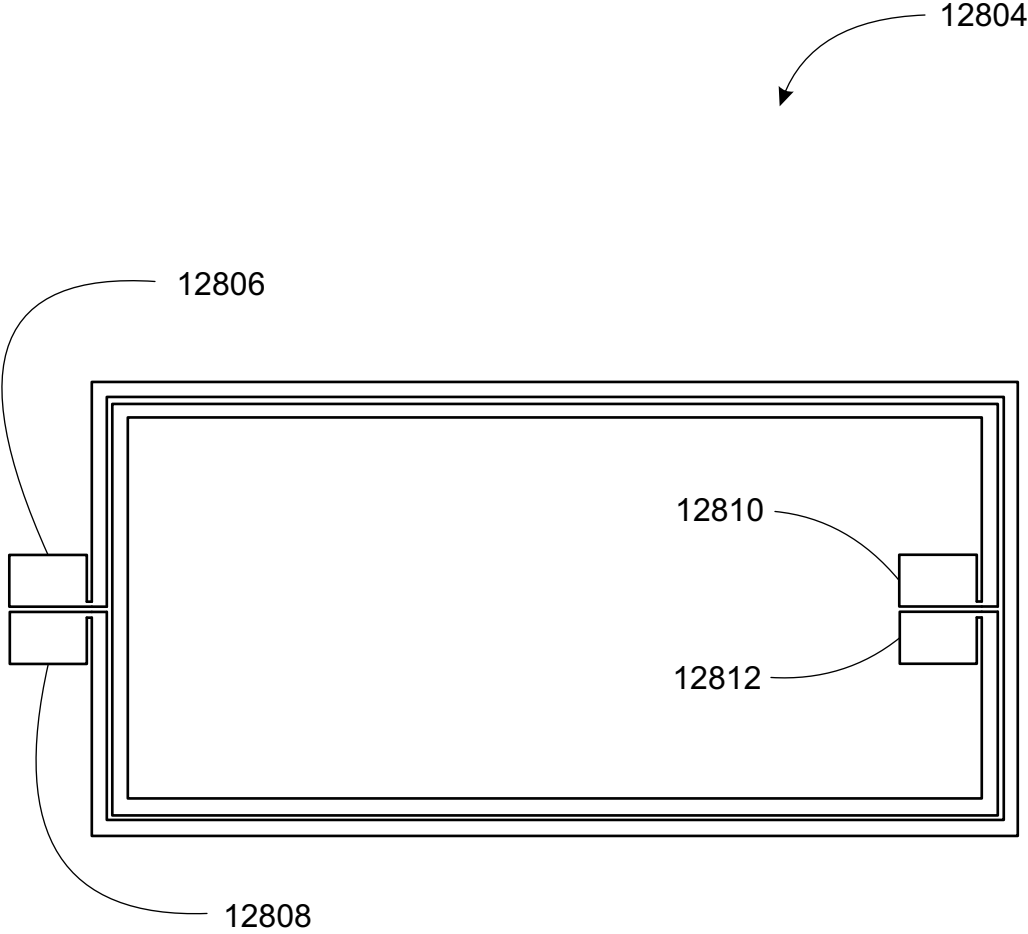


FIG. 129

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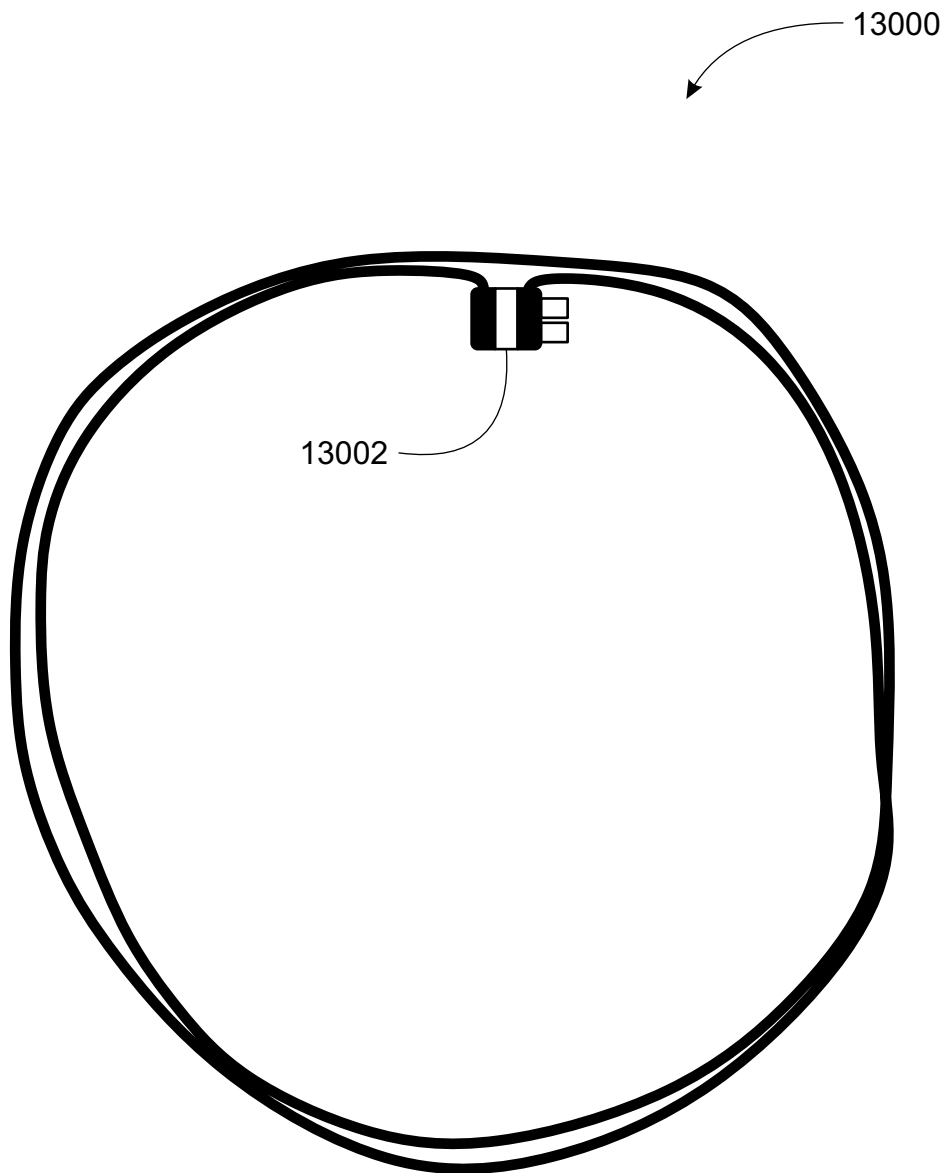


FIG. 130

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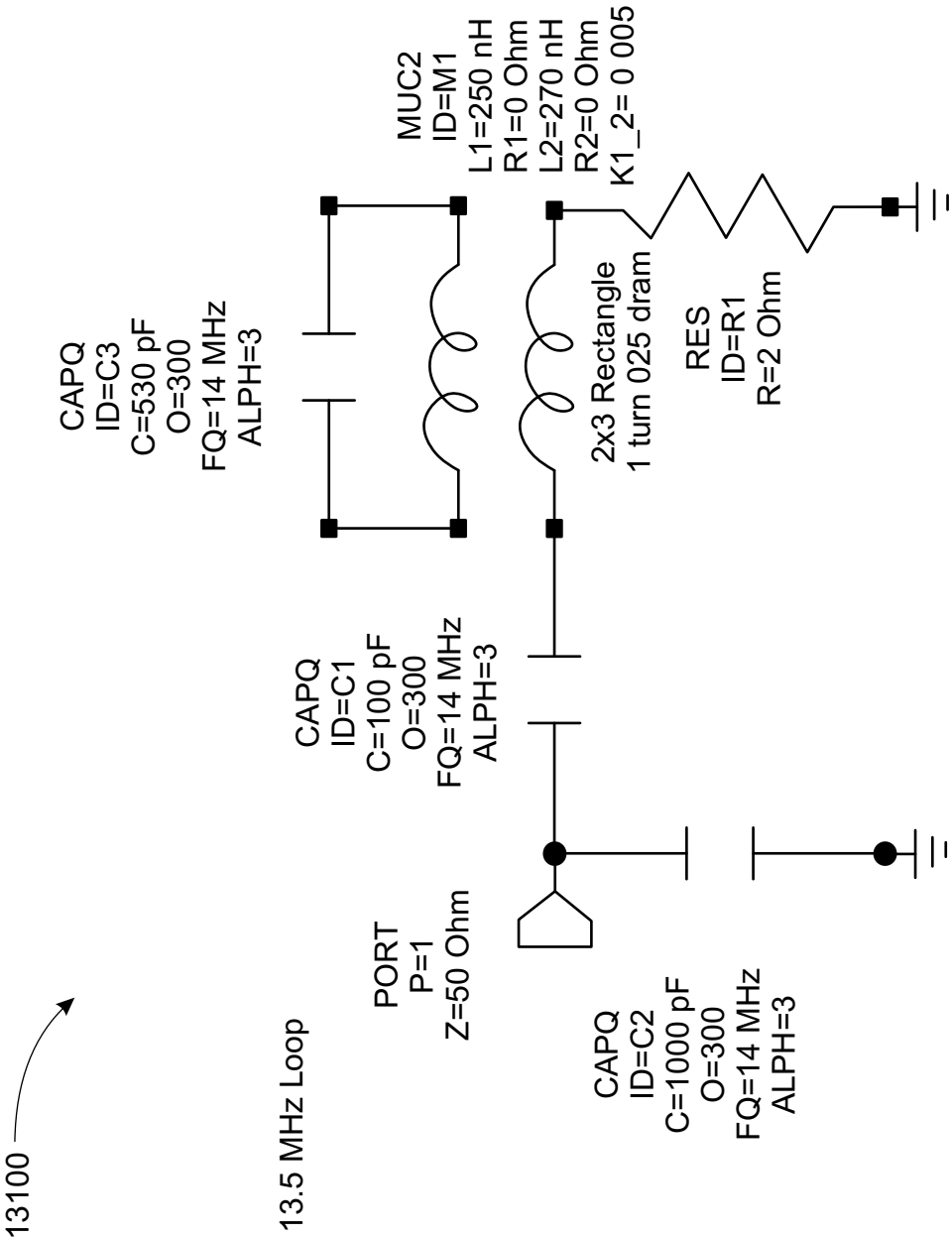


FIG. 131

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5 R's Confirmed

- ☐ Right Patient
- ☐ Right Route
- ☐ Right Dose
- ☐ Right Time
- ☐ Right Medicine



Cancel



Next

FIG. 132

Occlusion Checklist

- ☐ Inspect infusion site
- ☐ Inspect the catheter
- ☐ Inspect the entire IV line for kinks or other obstructions
- ☐ Inspect for any visible obstructions in the IV tubing

Check for occlusion?

☒ Silence	 Home	☒ Yes
---	--	---

FIG. 133

PT List	IV List	
McKnight, James	01-Apr-1960	
MRN: 23478654	M	2 days
2 East/2145		75 kg
■ Pump Pod 1		
Channel A	Channel B	
Nitroglycerin	Abciximab	
5 mcg/kg/min	0.125 mcg/kg/min	
3mL/hour	5.25 mL/hour	
■ Pump Pod 2		
Channel A		
Clarithromycin		
500 mg		
IVSS Q12H		
● Micro Pump 1		
Insulin		
U100		
5 units/hour		

FIG. 134

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2:51 PM

 Patient List

General Hospital

	<div>Adams, M</div> <div>72/M Account: A0015077</div> <div>Pneumonia</div>	<div>26</div> <div>27</div>
	<div> Arterburn, A</div> <div>60/F Account: A0001875</div> <div>Acute Coronary Syndrome</div>	
	<div>Holcomb, V</div> <div>45/F Account: H00858183</div> <div>Acute Renal Failure</div>	
	<div>Ignatoski, M</div> <div>36/M Account: I00058533</div> <div>Diverticulitis</div>	
	<div> Jones, A</div>	

11

FIG. 135

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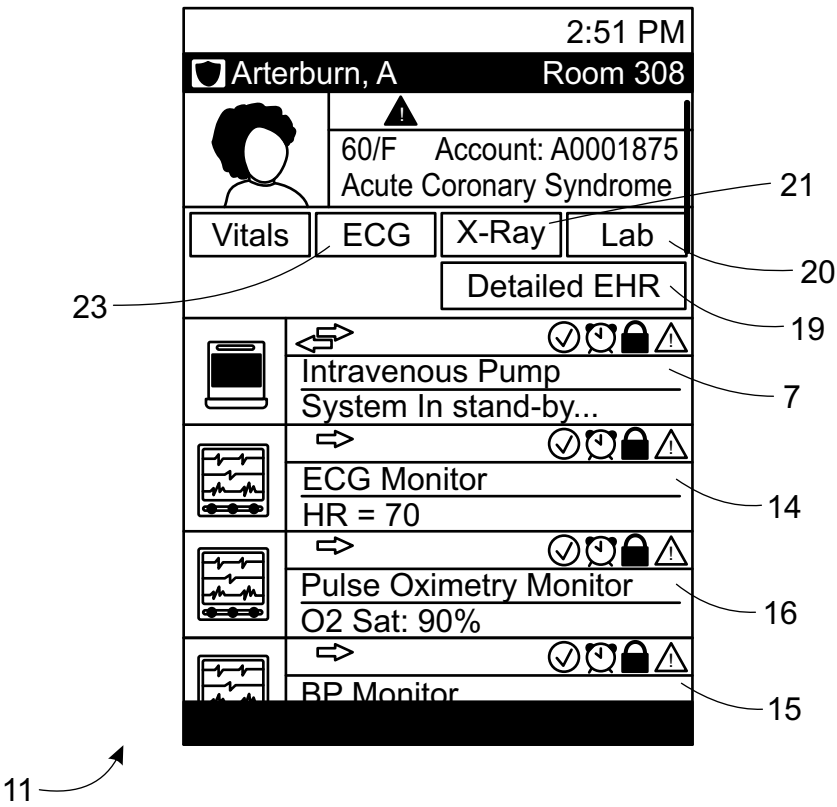


FIG. 136

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2:51 PM

Arterburn, A

Room 308



60/F

Account: A0001875

Acute Coronary Syndrome



Intravenous Pump

System In stand-by...

✓

🕒

🔒

⚠️

Nitroglycerin: IV

PDR

Usual range: 5-10 mcg/minute

5-10

mcg/minute

dose

NS

type

100

cc/hr

fluid rate

Submit Prescription

11

30

28

29

31

FIG. 137

+

+

2:51 PM

Arterburn, A

Room 308

WARNING:

Medication Database

Nitroglycerin and Zanaflex

(1 of 2) Clinically Significant Adverse table: hypotension, liver injury and sedation...

(2 of 2) Additive hypotensive effect: Zanaflex (tizanidine) 4mg, four times a day

RECOMMENDATION

Decrease rate 50% from mcg/minute to:

Change to 2.5 mcg/minute

PDR

Manually adjust dose

Add note

32

5

33

11

FIG. 138

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2:51 PM

Arterburn, ARoom 308



!

60/F Account: A0001875
Acute Coronary Syndrome



↔

✓🕒🔒⚠

Intravenous Pump
System In stand-by...

Nitroglycerin: IV

PDR

Usual range: 5-10 mcg/minute

2.5

mcg/minute

dose

NS

type

100

cc/hr

fluid rate

Submit Prescription

Corrective Actions

CAR-040539 Jan. 22, 2012 14:51
Nitroglycerin and Zanaflex

11

33

34

FIG. 139

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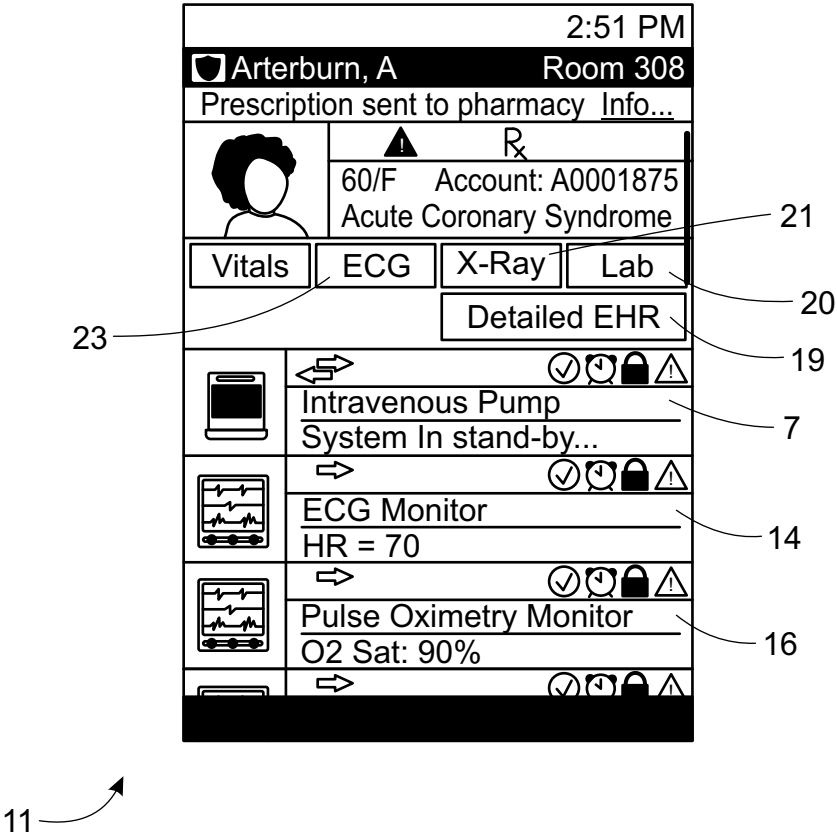


FIG. 140

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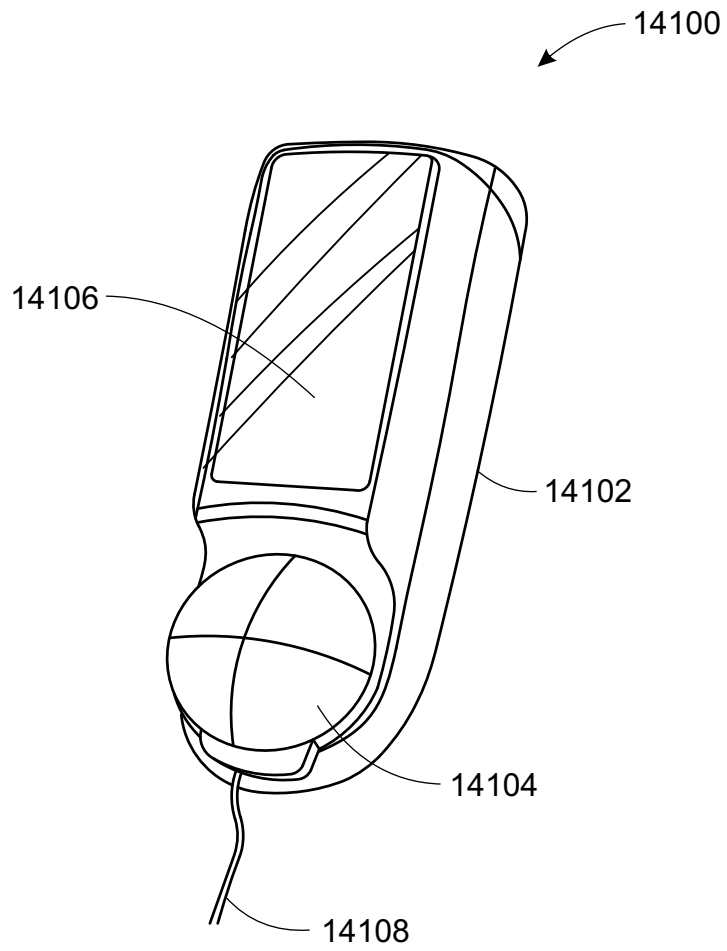


FIG. 141

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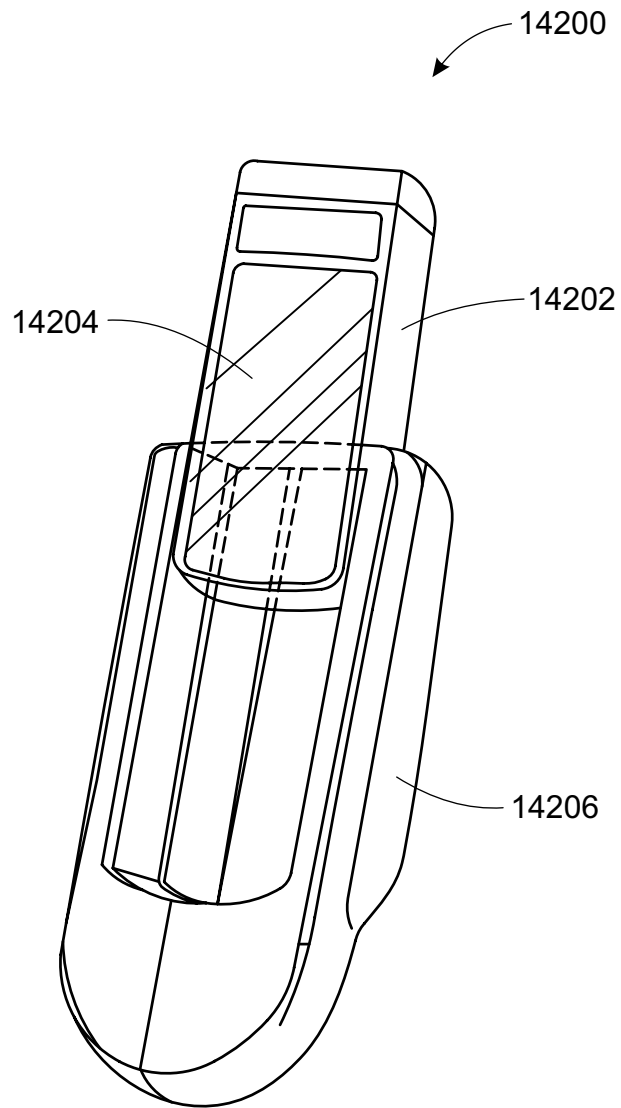


FIG. 142

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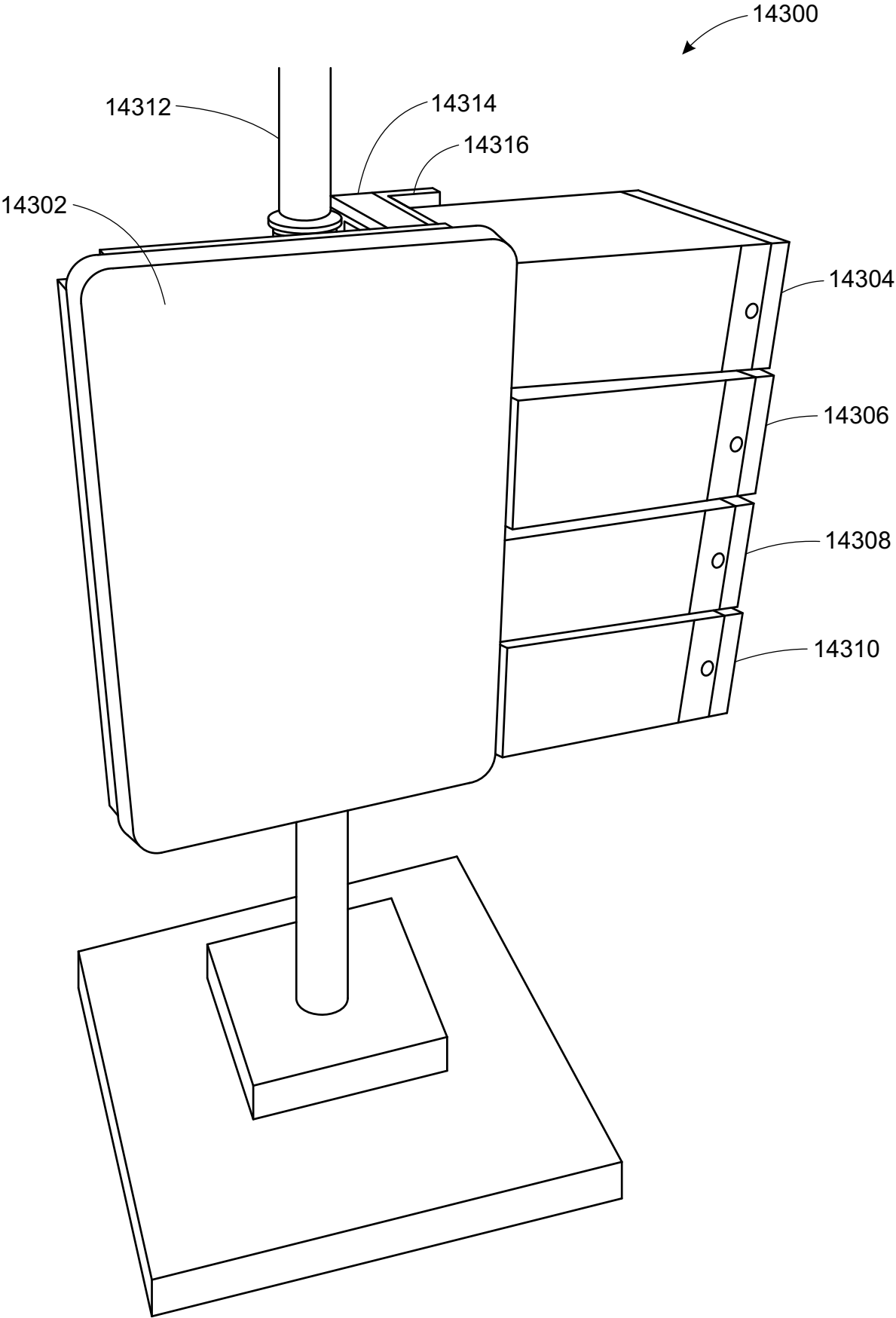


FIG. 143

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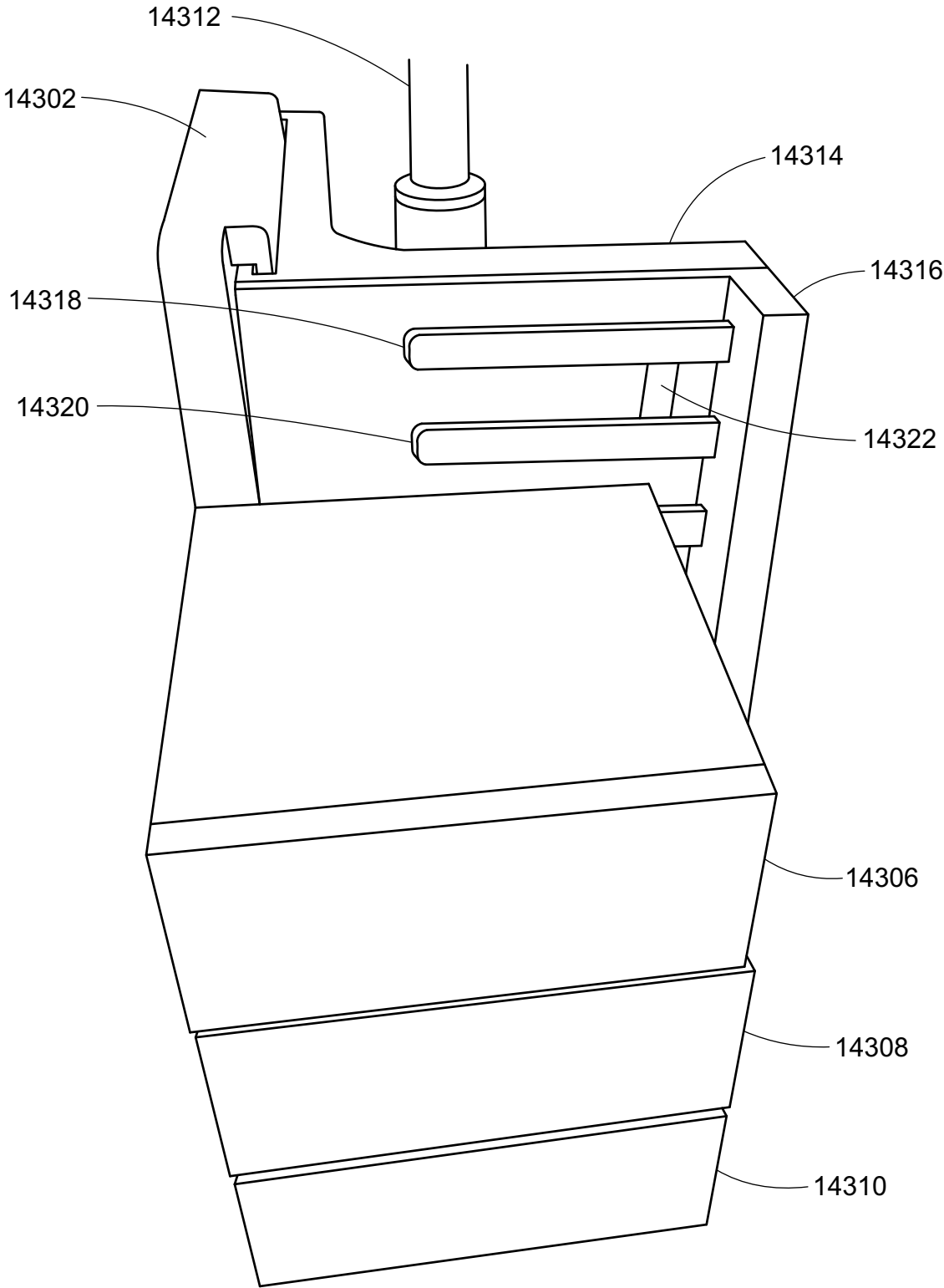


FIG. 144

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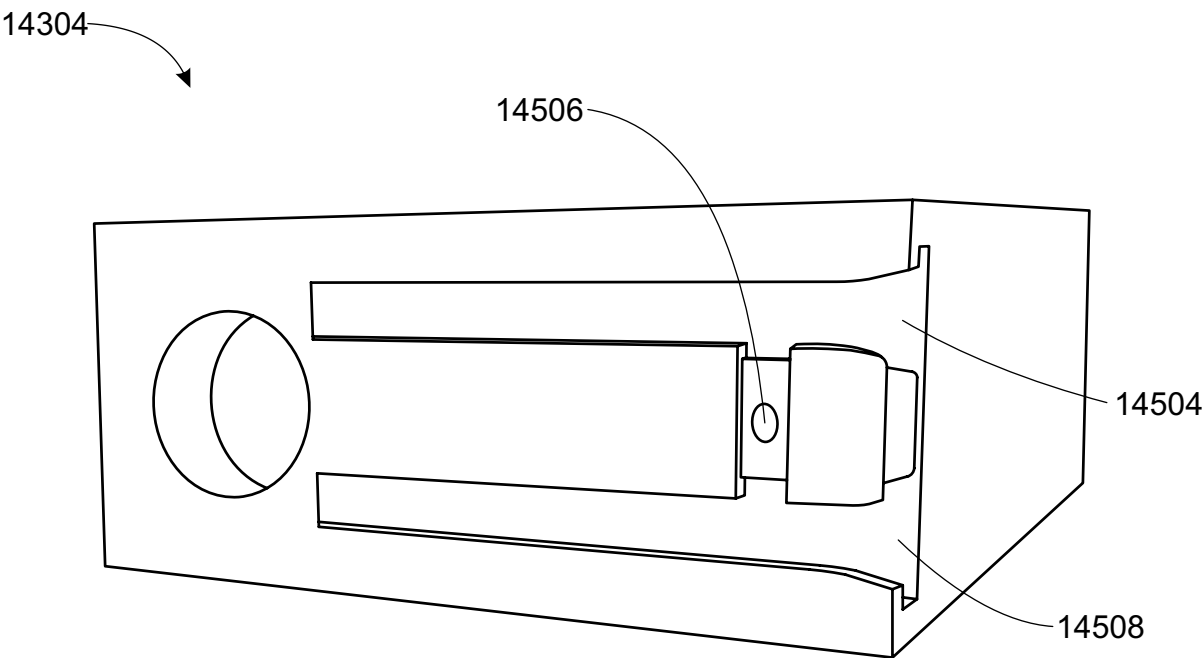


FIG. 145

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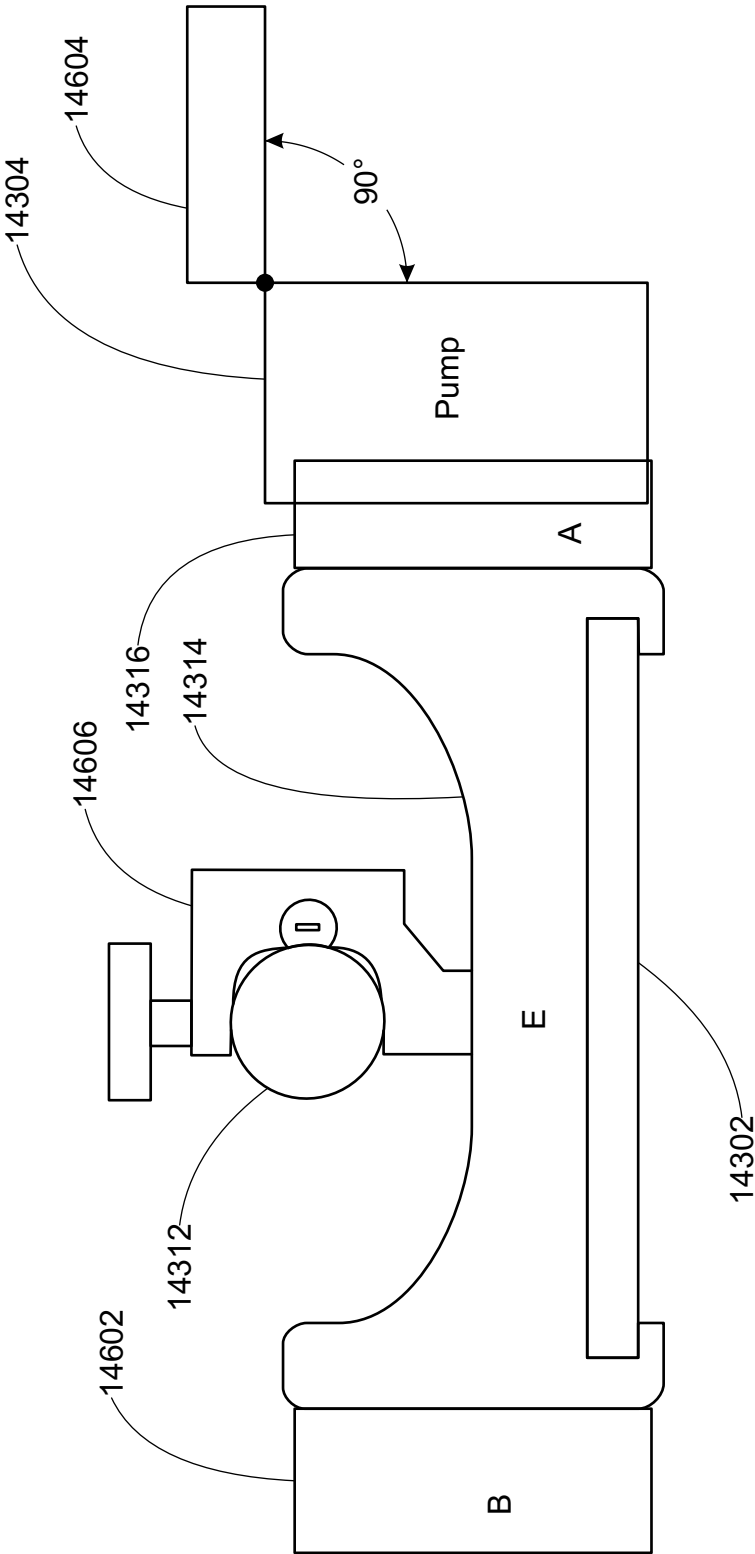


FIG. 146

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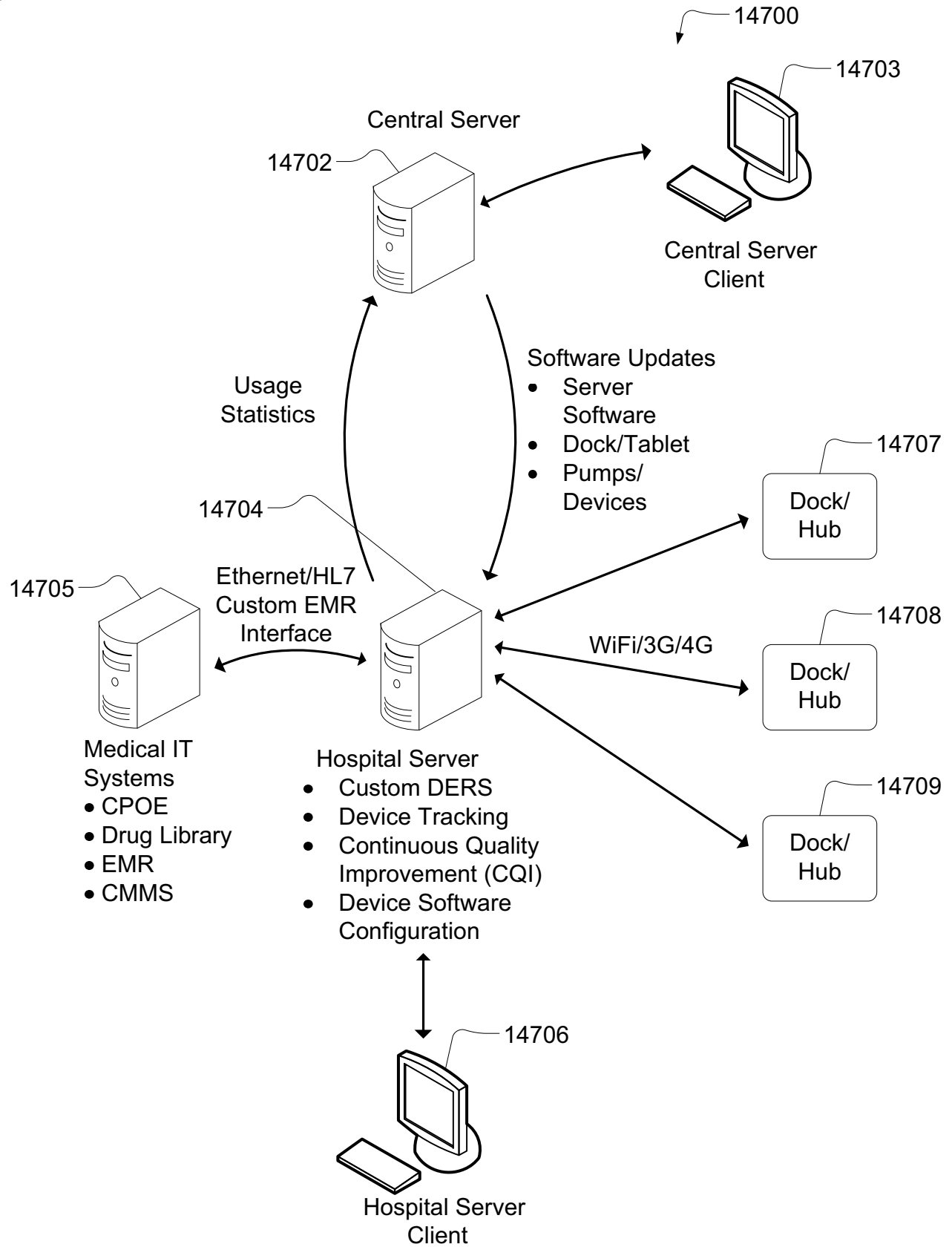


FIG. 147

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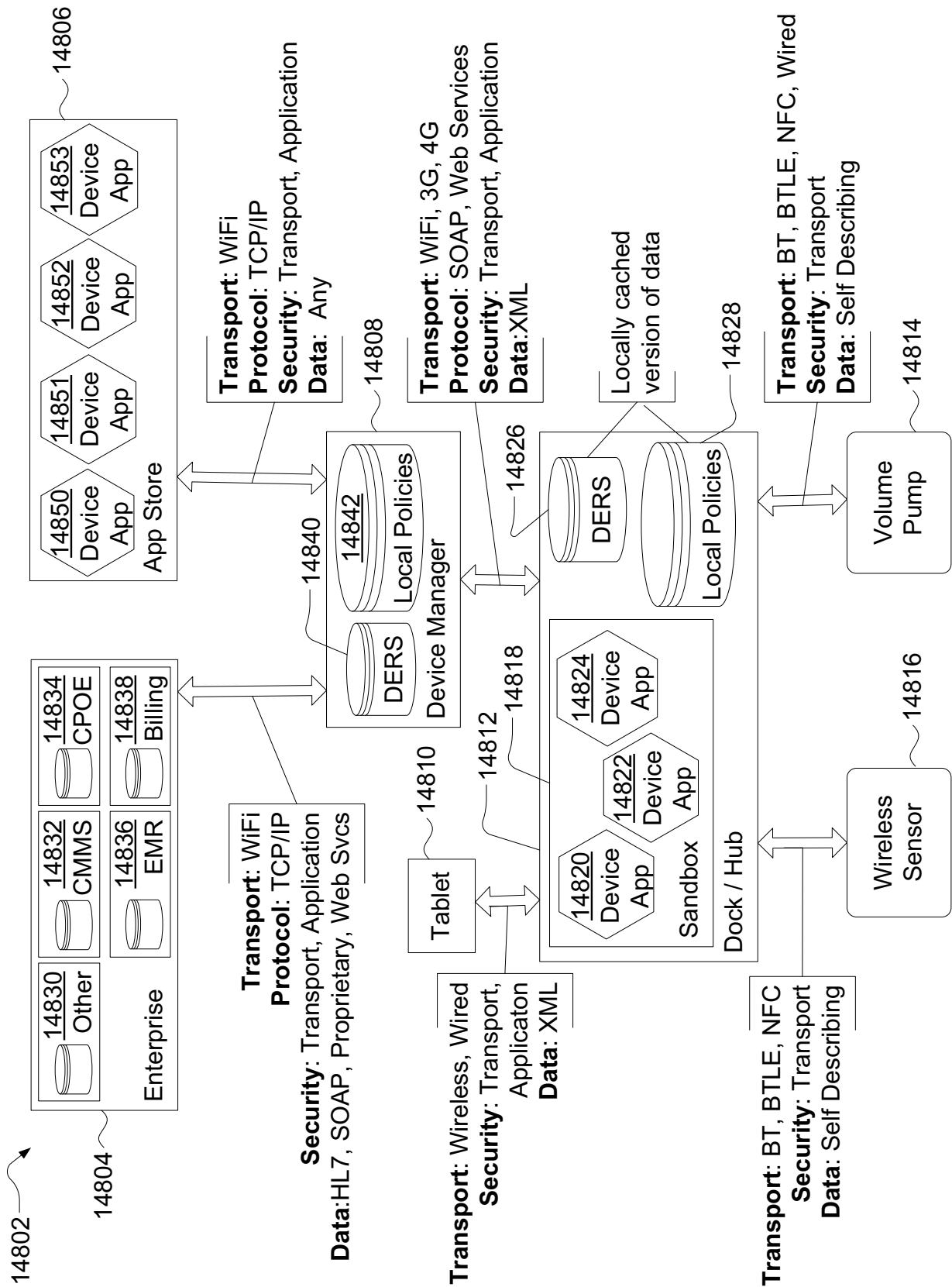


FIG. 148

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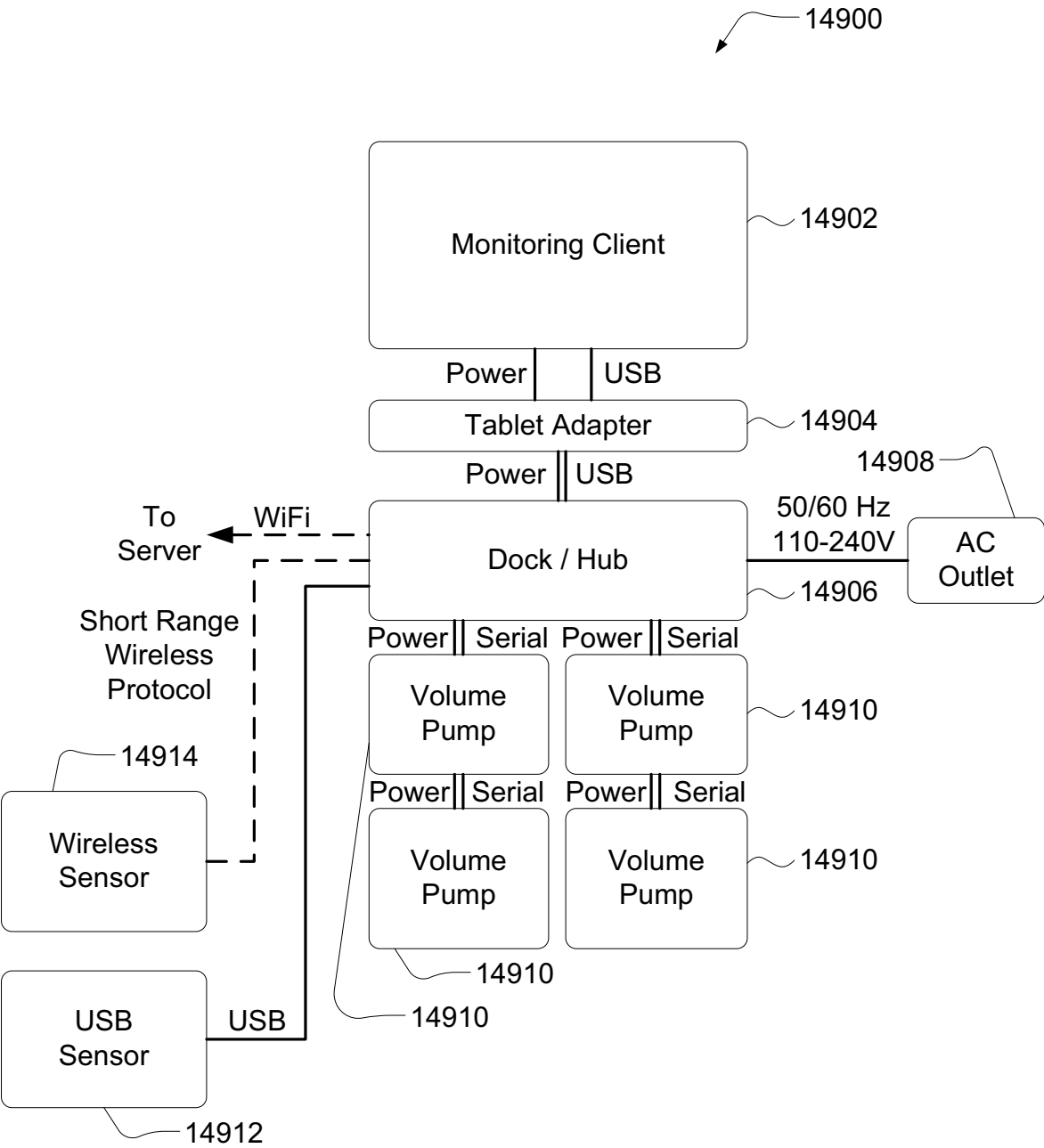


FIG. 149

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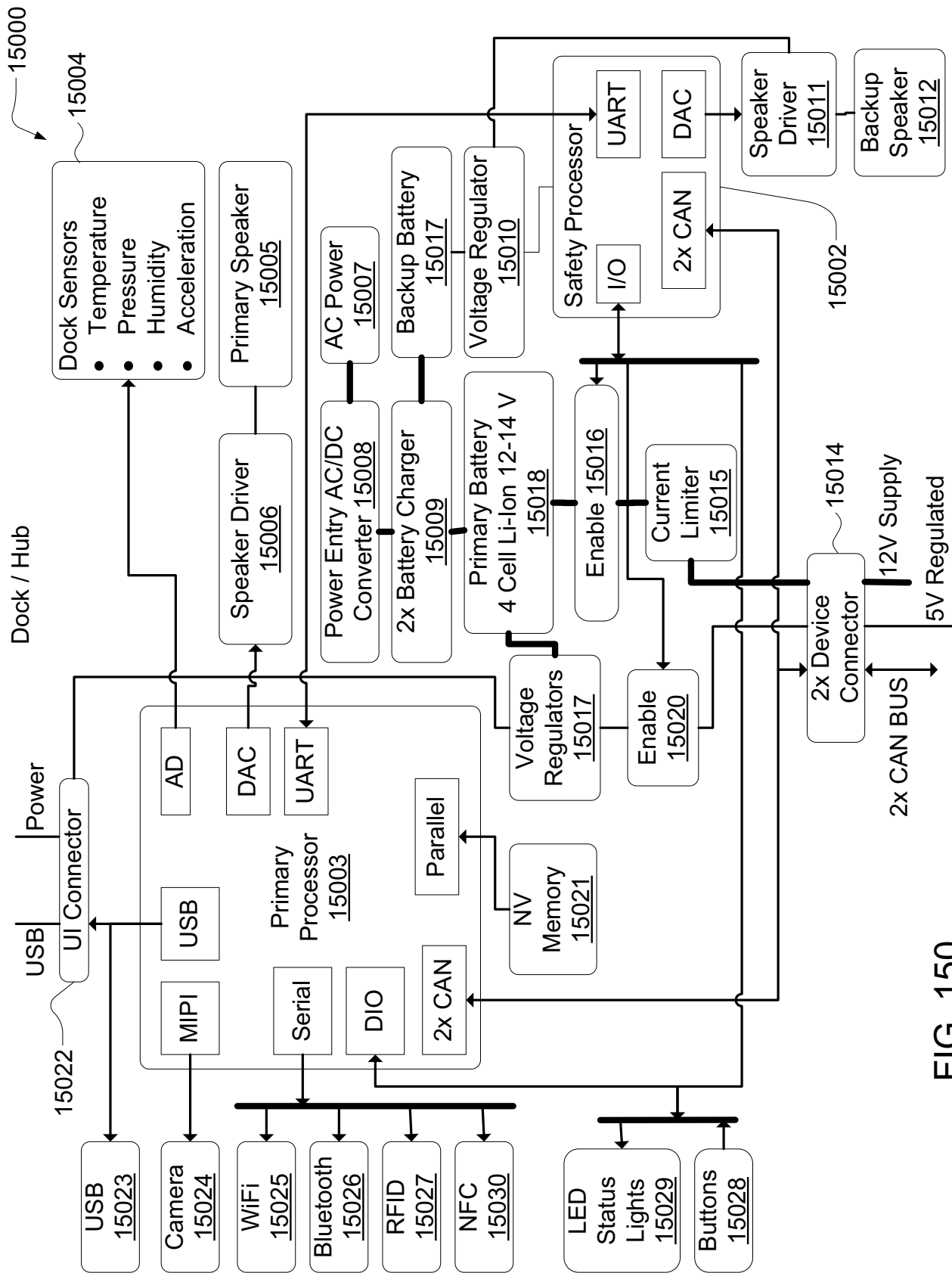


FIG. 150

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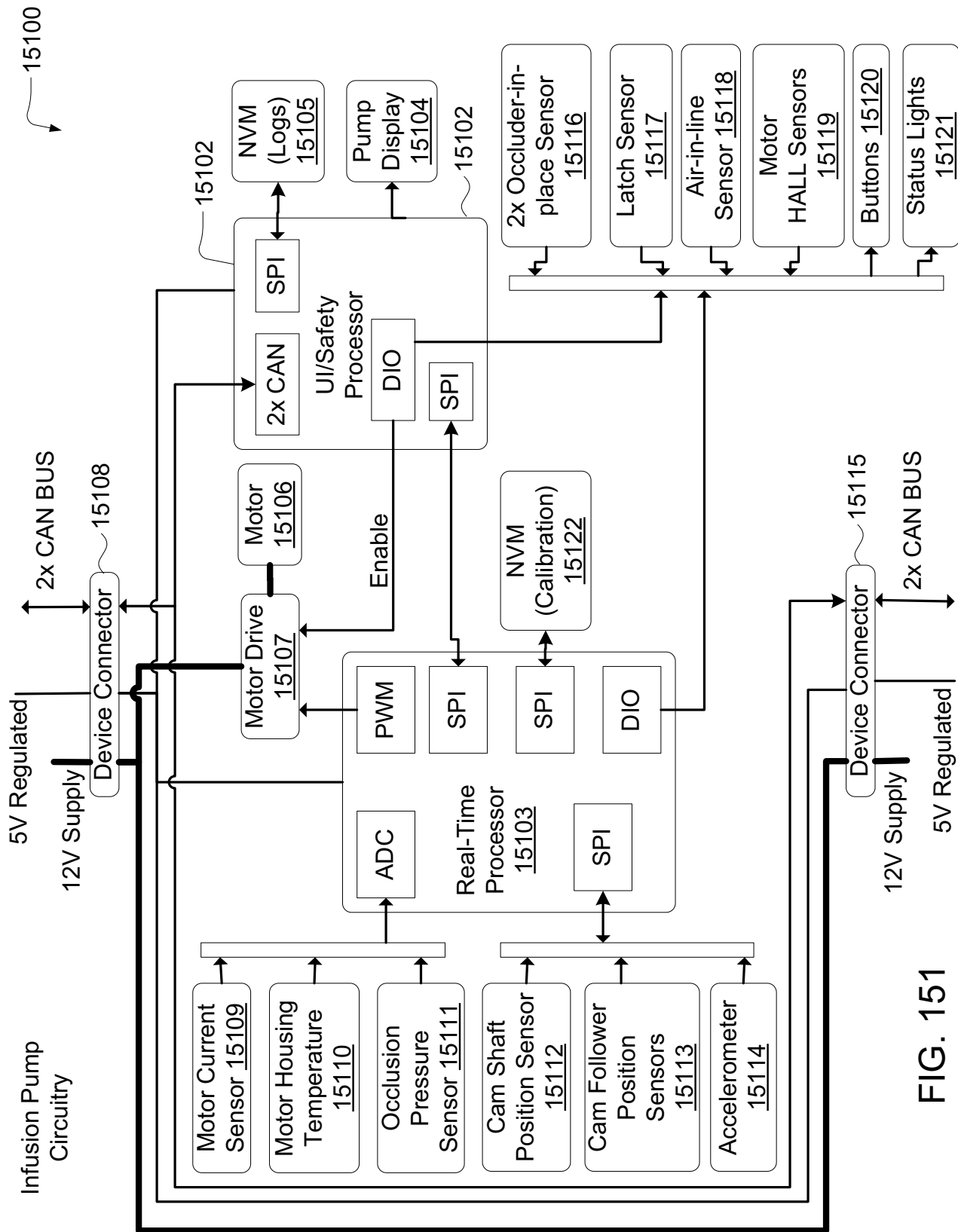


FIG. 151

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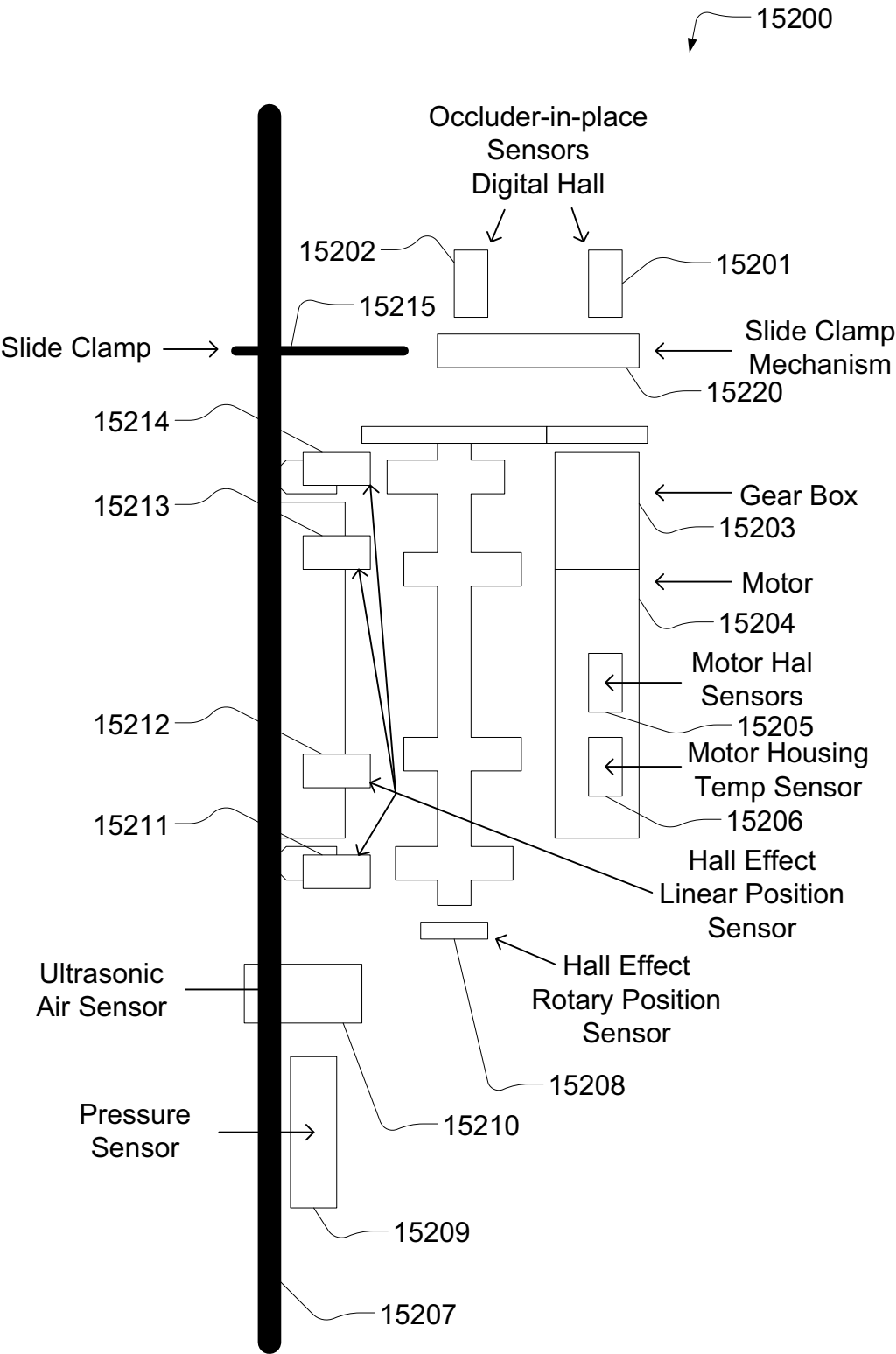


FIG. 152

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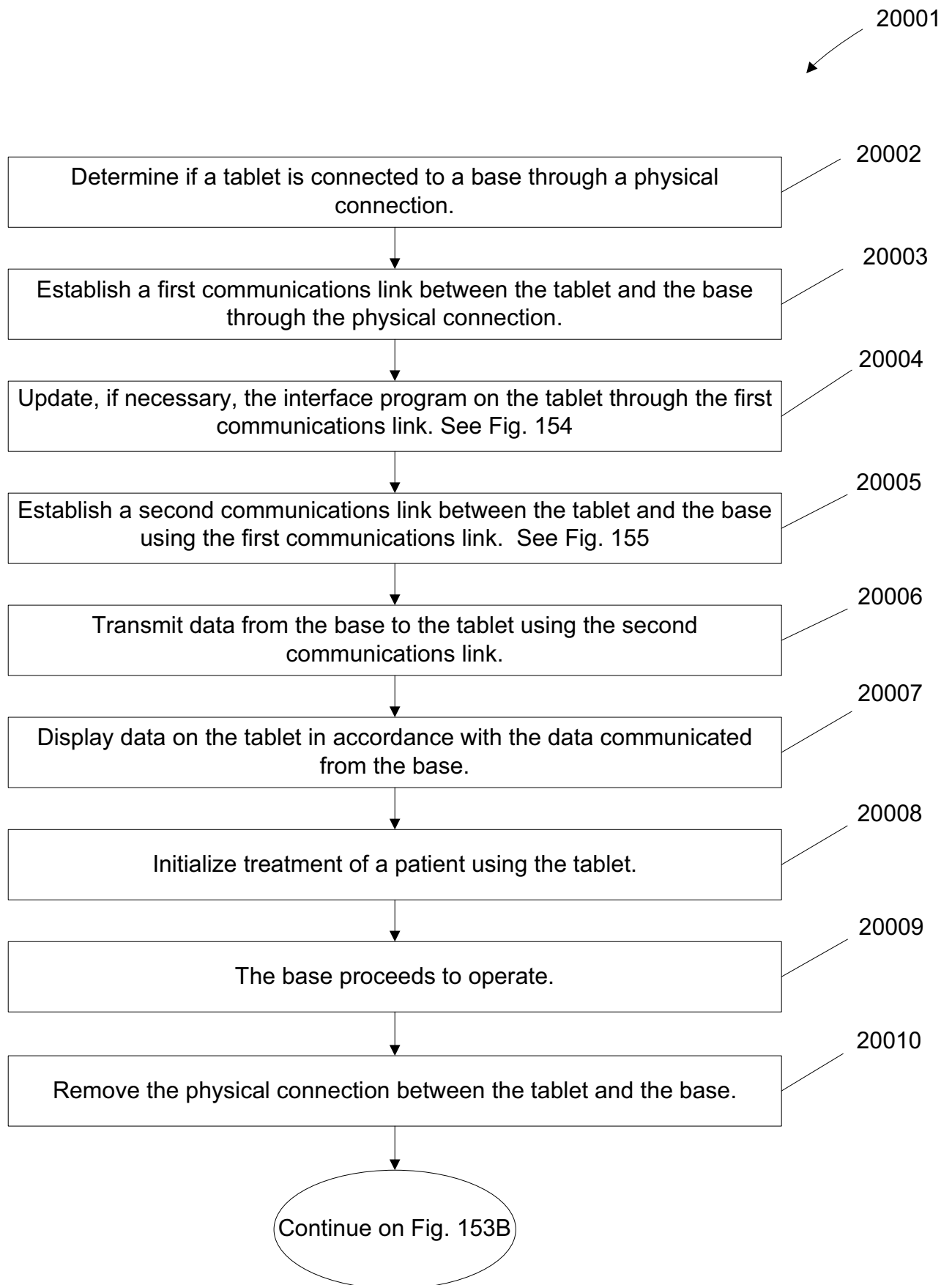


Fig. 153A

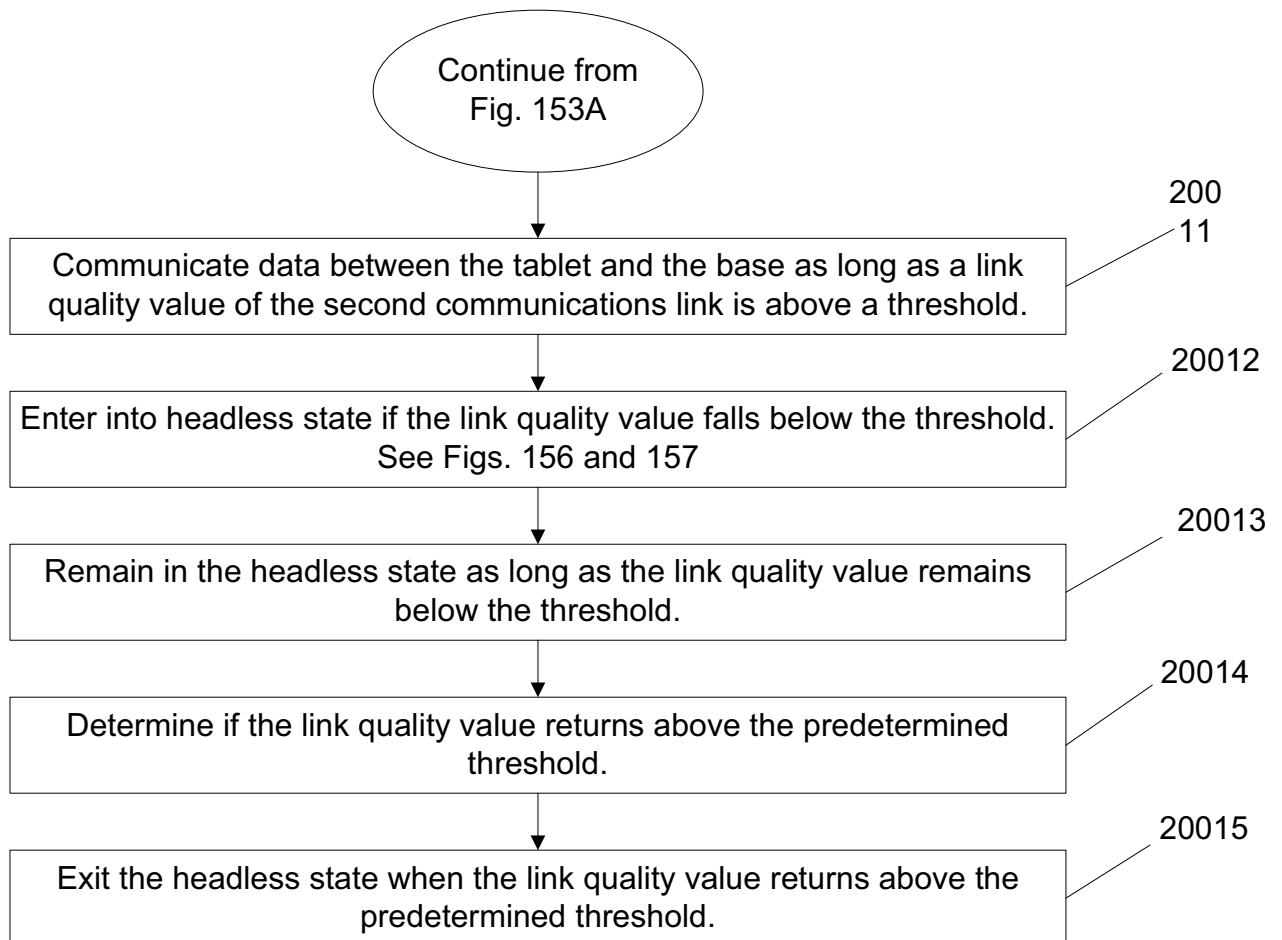


Fig. 153B

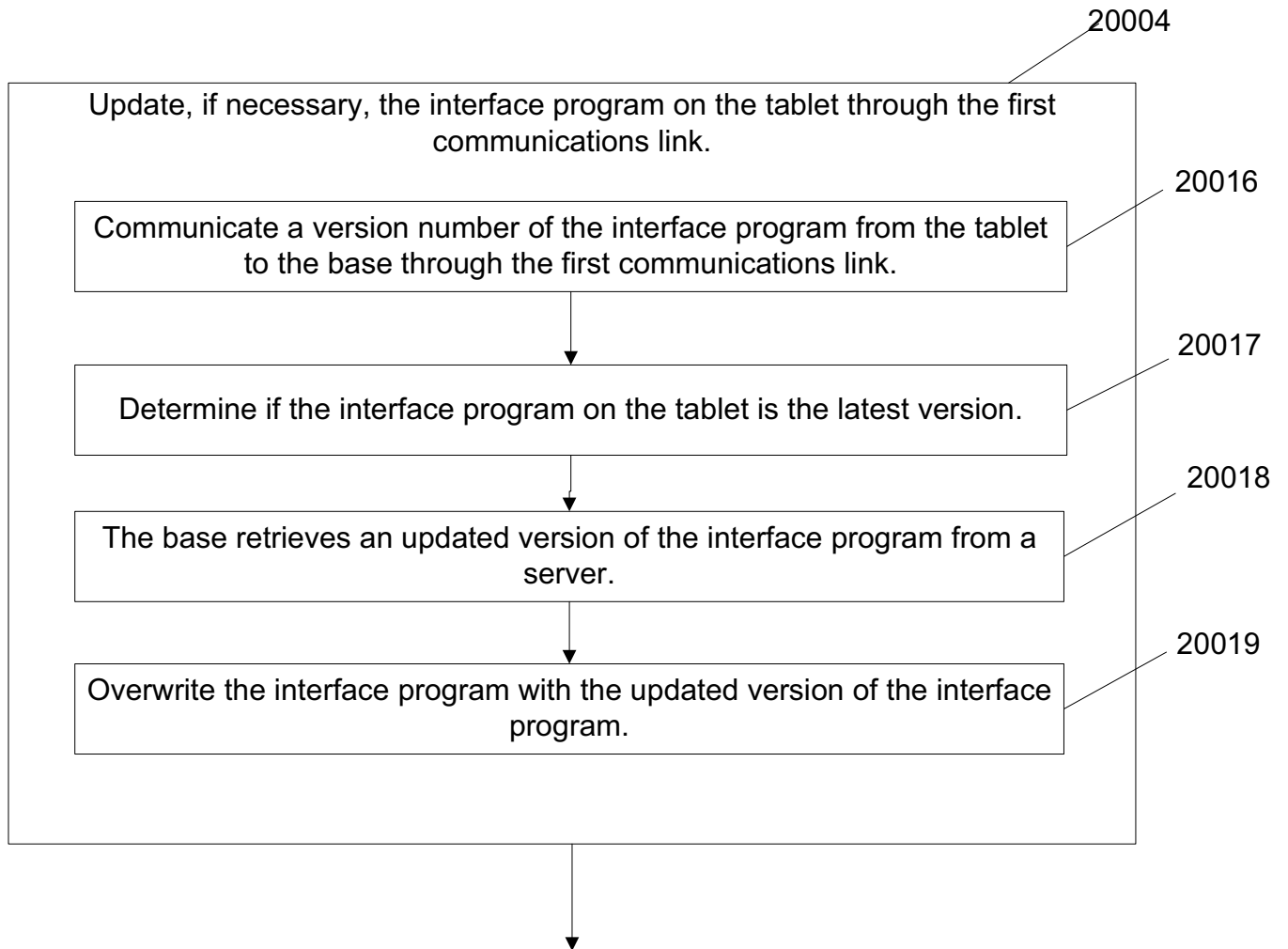


Fig. 154

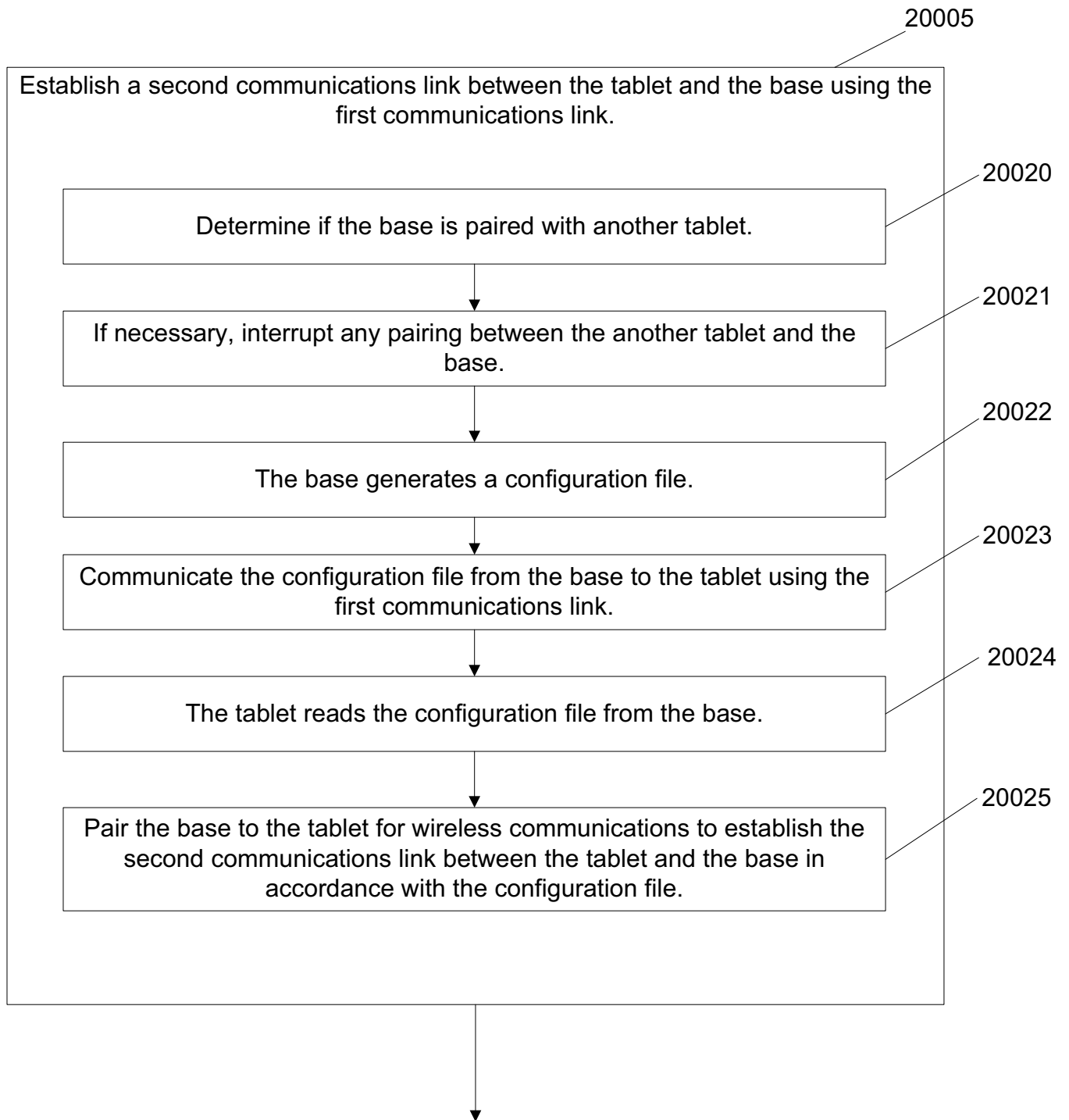


Fig. 155

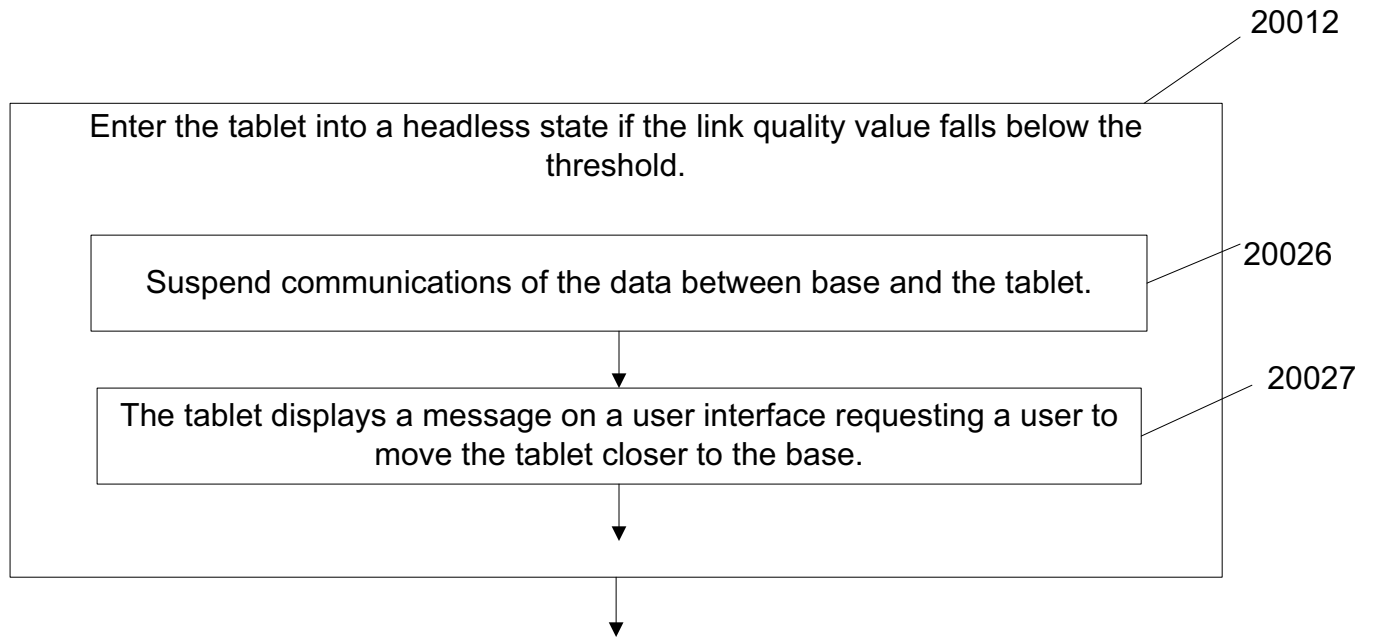


Fig. 156

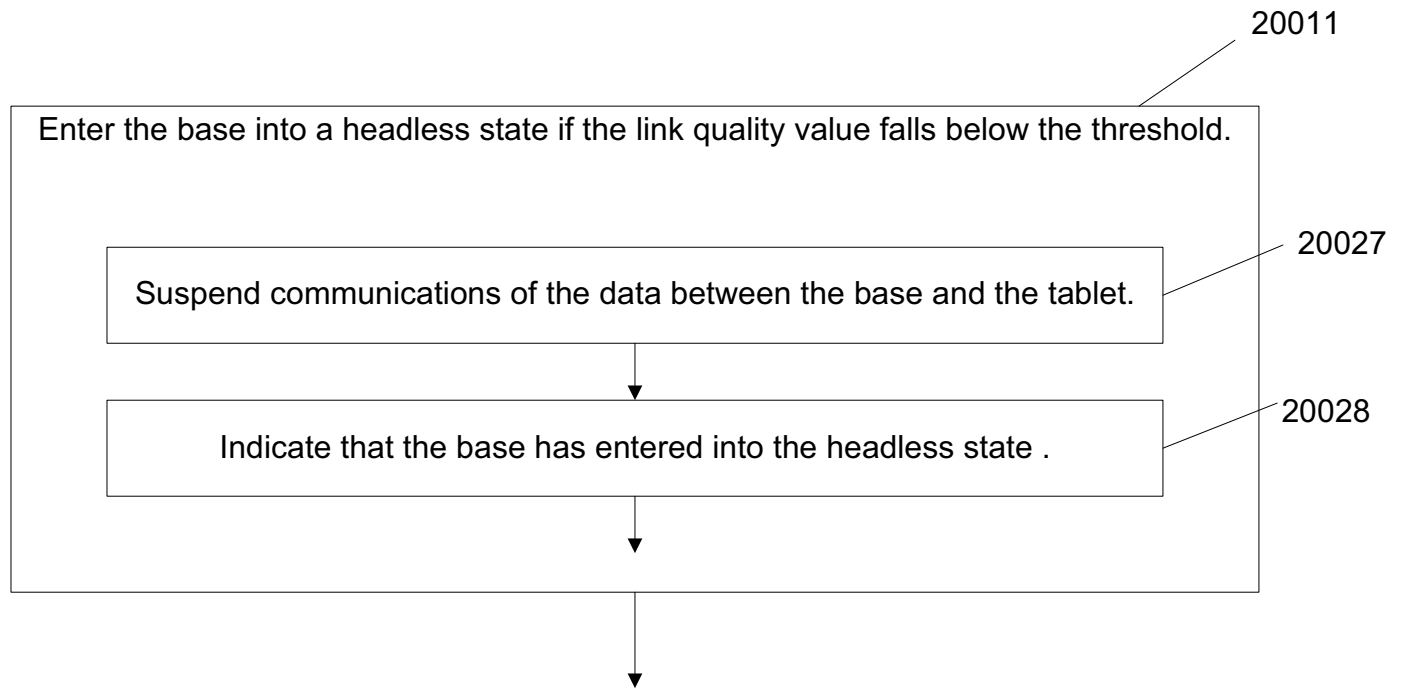


Fig. 157

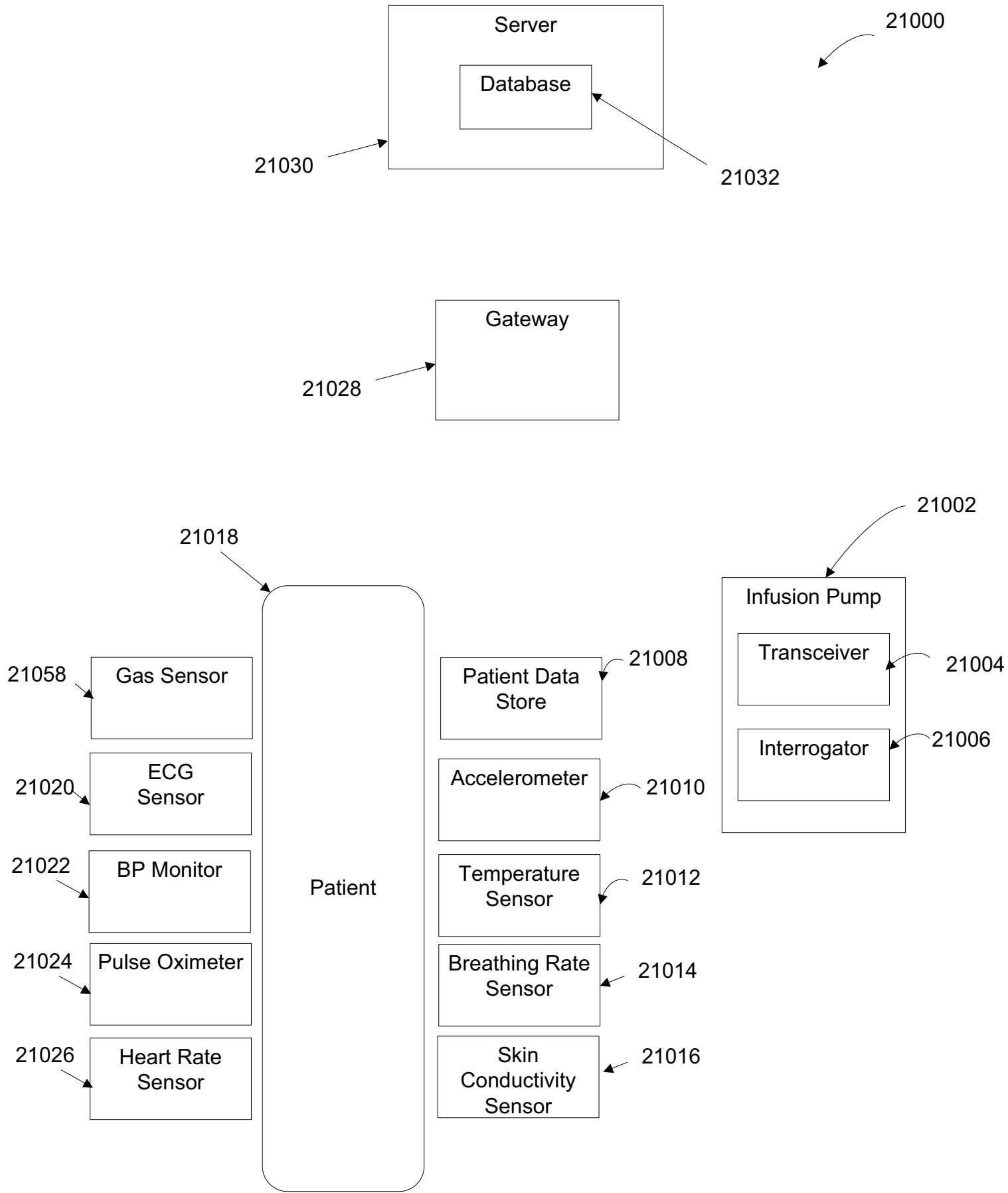


Fig. 158

21040

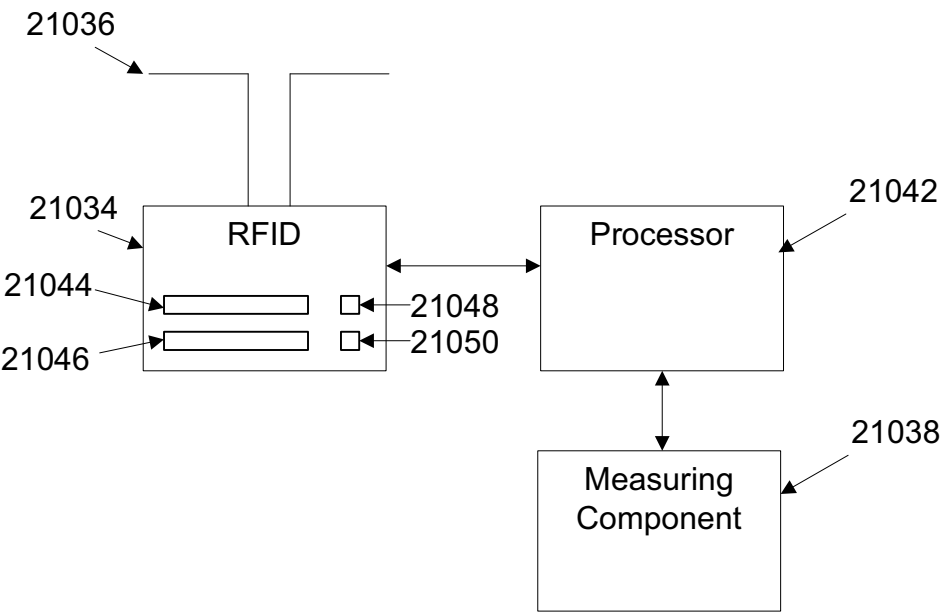


Fig. 159

Physiological variable	Sensor	Example medical condition
Heart activity	Electrocardiogram (EKG)	Heart attack
Body Temperature	Thermometer	Fever
Regional temperature	Thermometer	Diabetes
Blood-O ₂ saturation	Pulse oximetry	Heart attack
Pulse	Plethysmograph	Heart attack
Blood pressure	Sphygmomanometer	Hypertension
Heart rate	Heart rate monitor	Heart attack
Blood glucose	Blood glucose meter	Diabetes
Respiration rate	Costal expansion meter	Chronic obstructive pulmonary disease
Galvanic skin response	Ohmeter	Stress
Skin surface temperature	Thermometer	Fever
Ventricular pressure	Pressure transducer	Aortic stenosis
Muscle activity	Electromyography (EMG)	Seizure
Brain activity	Electroencephalogram (EEG)	Seizure
Body position	Accelerometer	Pressure ulcers
Heart image	Echocardiogram, cardiac computerized tomography, magnetic resonance imaging	Heart attack
Artery diameter	Angiogram	Atherosclerosis
Blood chemistry	Serum assay	
Creatine kinase		Heart attack
Lactate dehydrogenase		Heart attack
Cortisol levels		Stress
Troponin		Heart attack
Aspartate aminotransferase		Liver disease
myoglobin		Muscle damage
Ischemia modified albumin		Ischemia
Brain natriuretic peptide		Heart failure
Glycogen phosphorylase isoenzyme		Acute coronary syndrome
Acid-base balance	pH meter	Gastroesophageal reflux
Functional lung volume	Spirometer	Asthma

Fig. 160

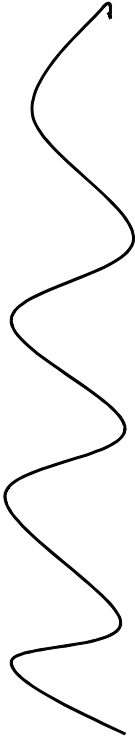
Sensor	Representative graph	Pattern
EKG		Increased heart rate
Serum assay		No troponin level change
Thermometer		No temperature change
Pulse oximetry		No blood – O ₂ saturation change

Fig. 161

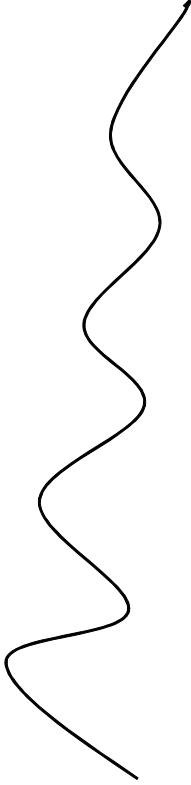
Sensor	Representative graph	Pattern
EKG		Increased heart rate
Serum assay		Increased troponin levels
Thermometer		No temperature change
Pulse oximetry		Decreased blood – O ₂ saturation

Fig. 162

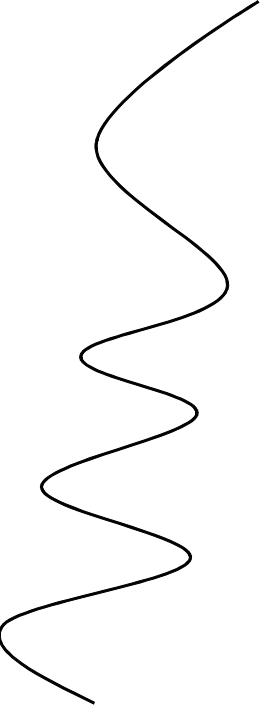
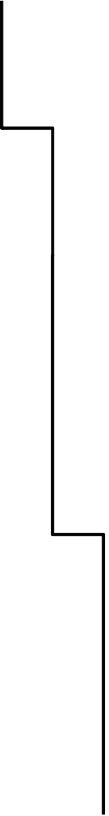
Signal	Representative graph	Pattern
EKG		Decreased heart rate
Sphygmomanometer		Decreased blood pressure
Thermometer		No temperature change
Pump infusion rate		Increased <i>propofol</i> levels

Fig. 163

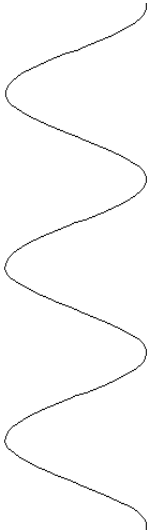
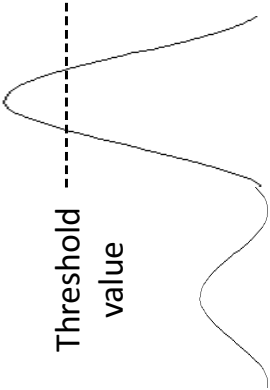
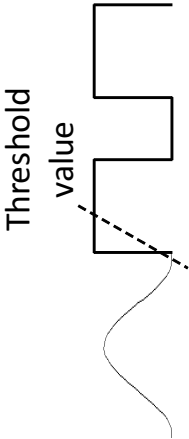
Change in Variable	Representative graph	Pattern detection response
Resting value		None
Magnitude doubles		Increased signal
Duration doubles		Increased signal
Value exceeds a threshold		Alarm triggered
Slope exceeds a threshold		Increased signal

Fig. 164

Heart rate	Blood pressure	Response
normal	normal	no alert
low increase	normal	no alert
medium increase	normal	alert
low increase	low increase	alert

Fig. 165

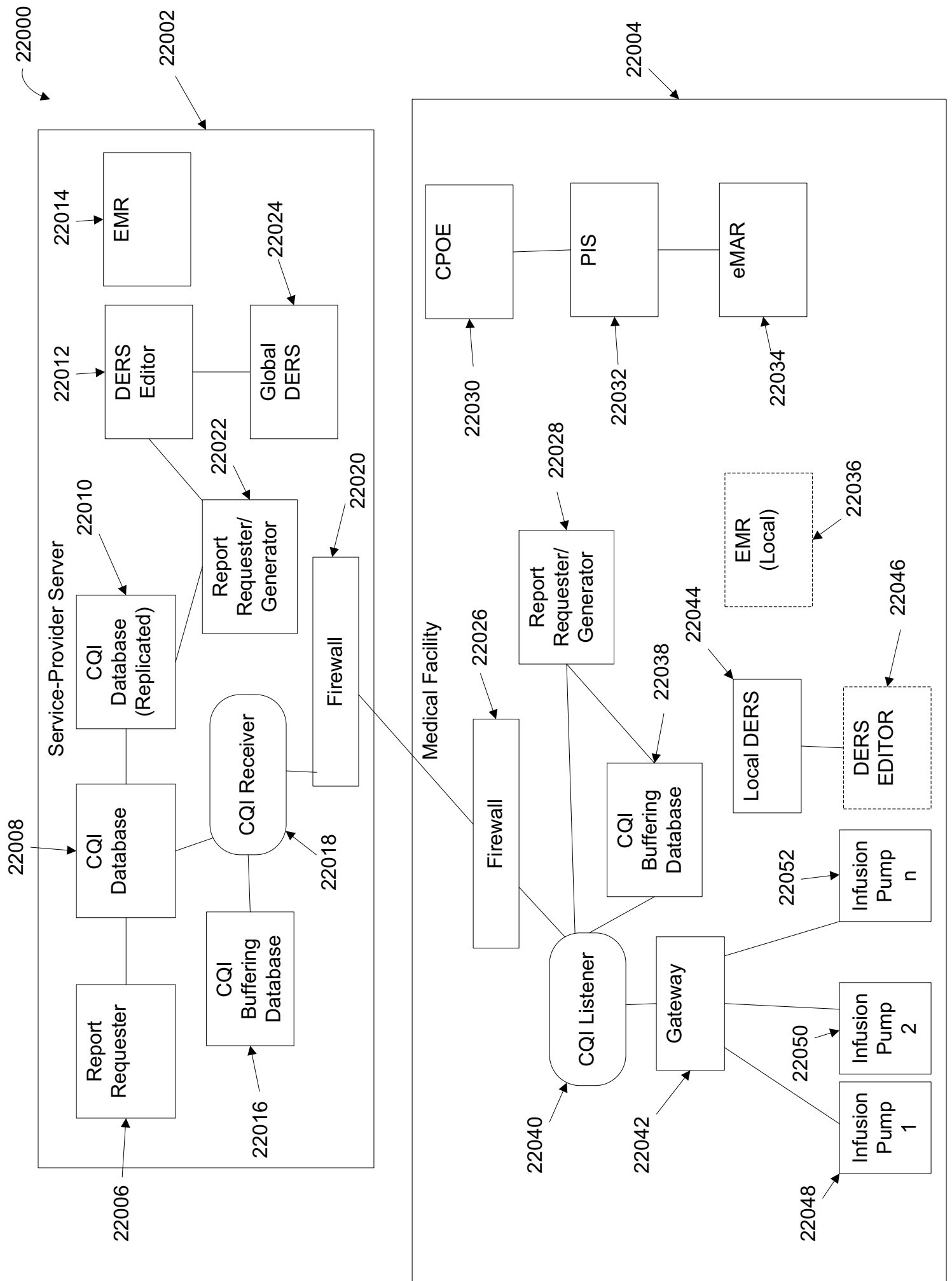


Fig. 166

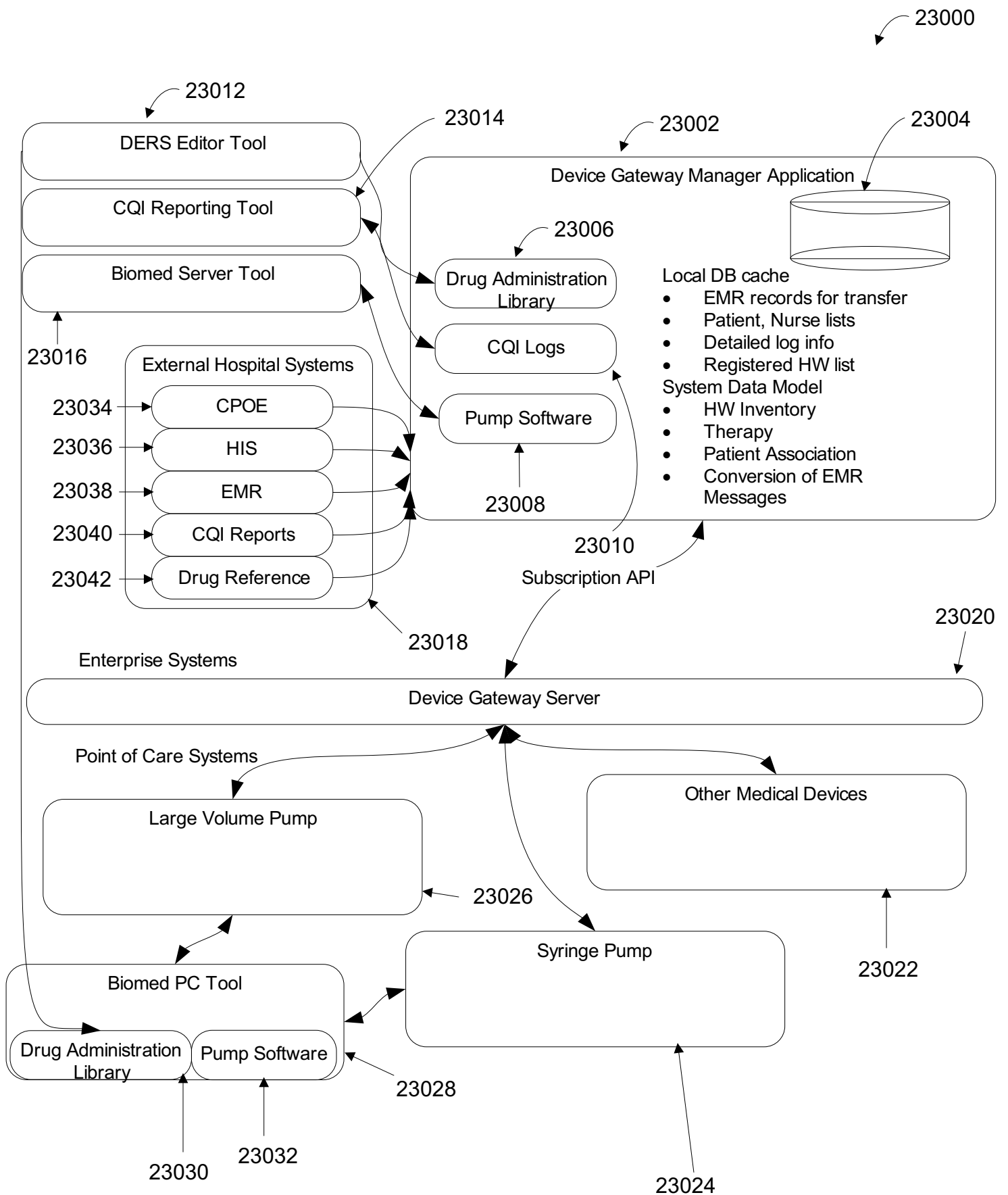


Fig. 167