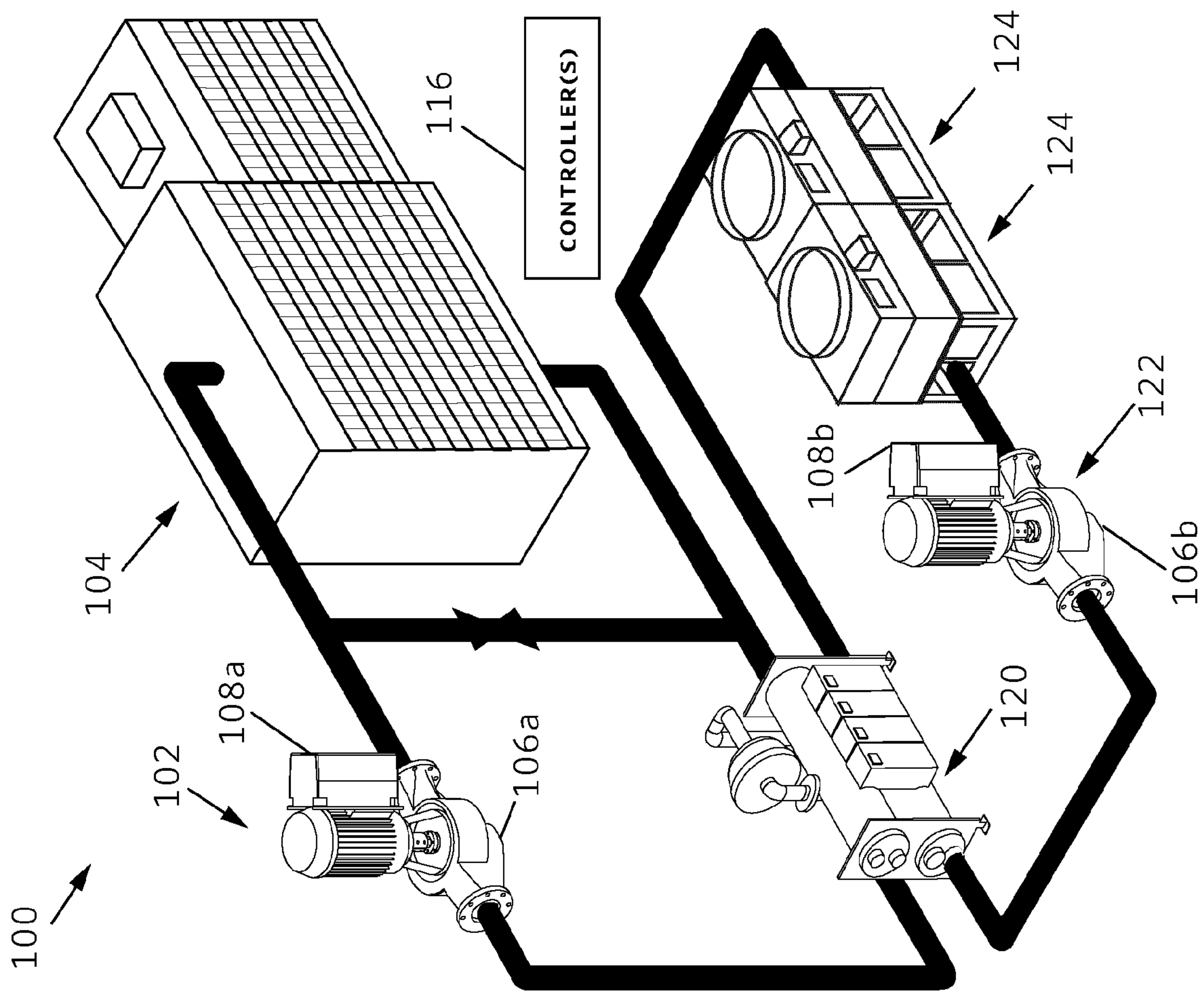
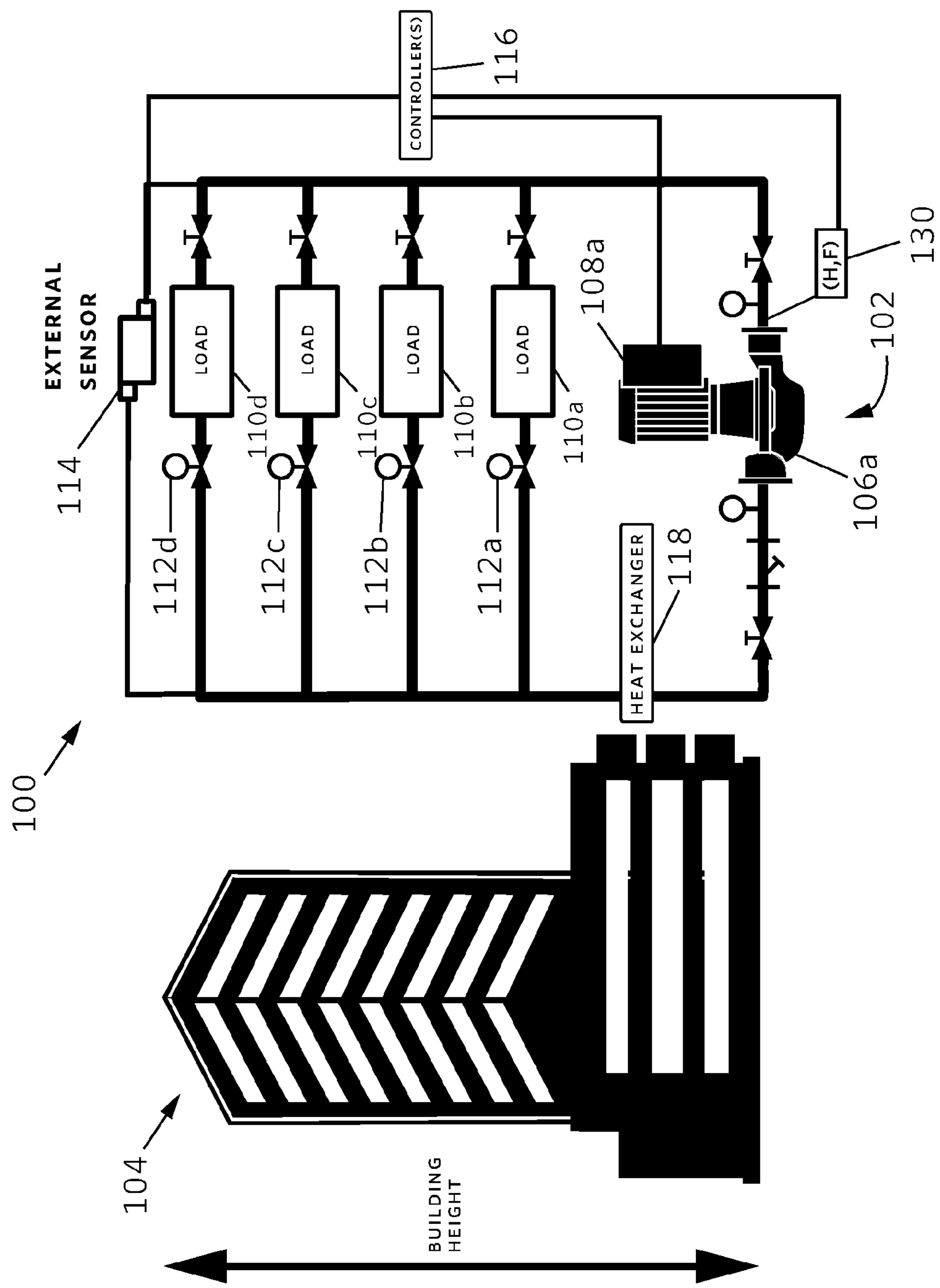
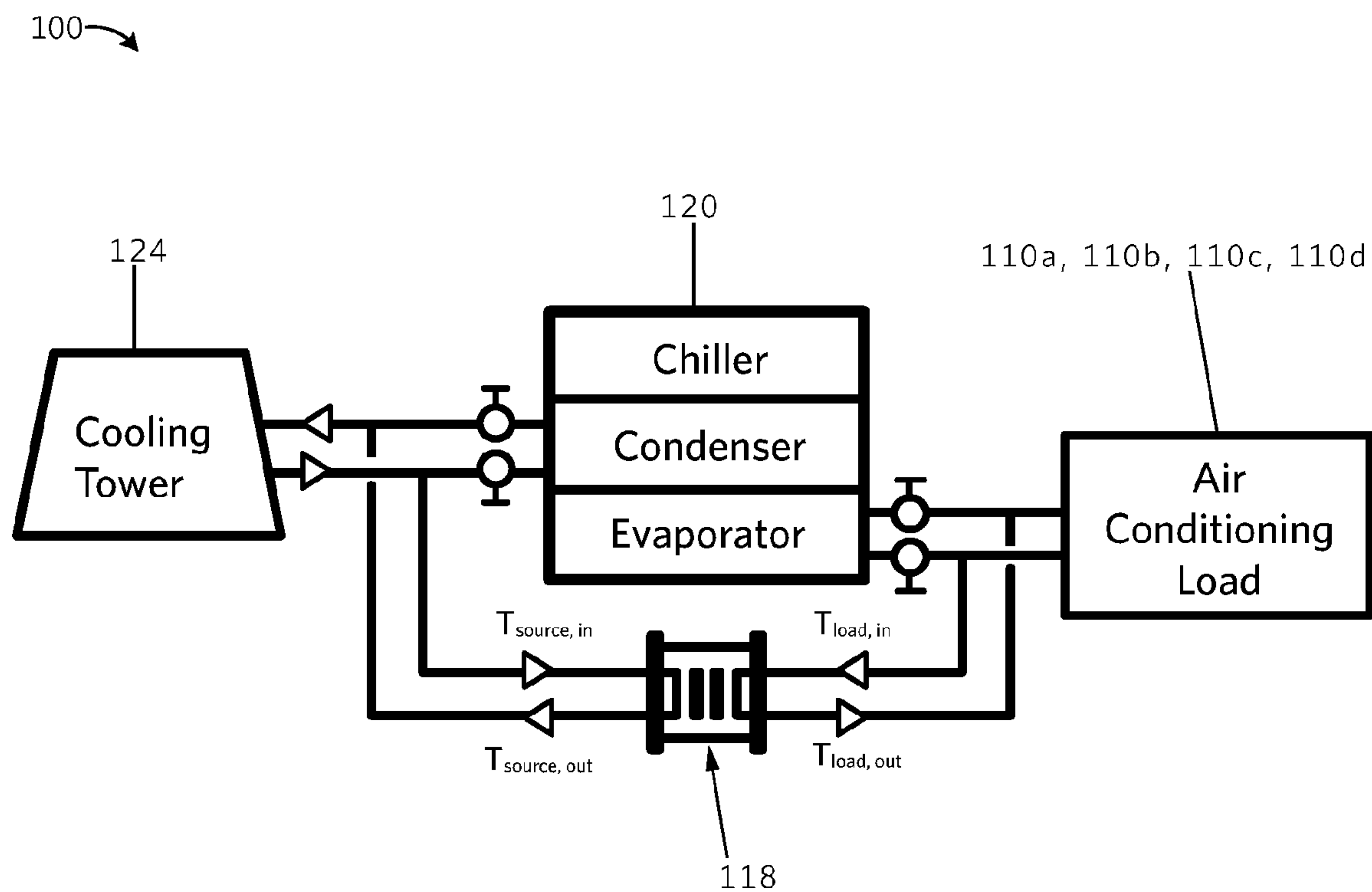




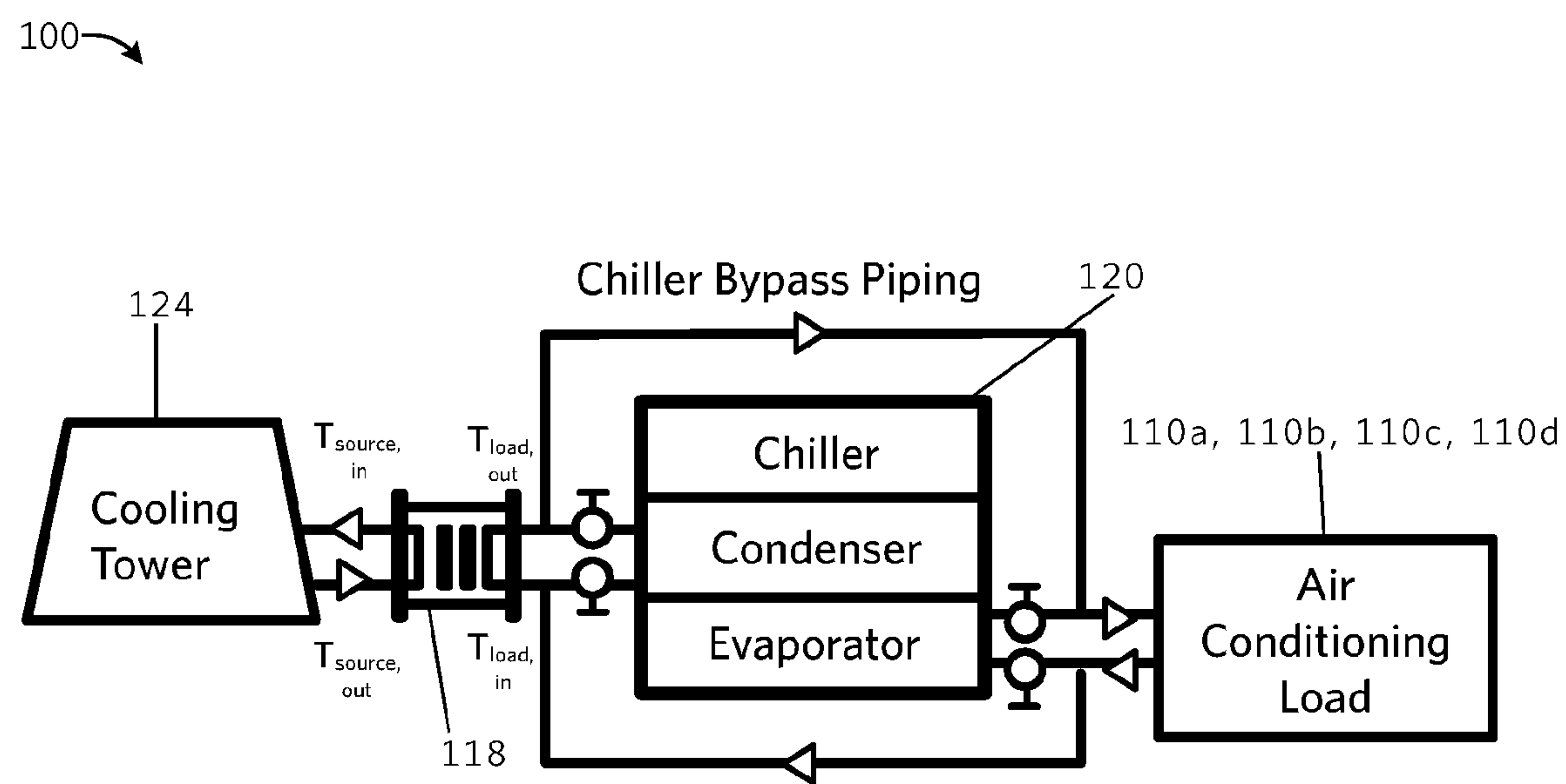
**FIGURE 1A**



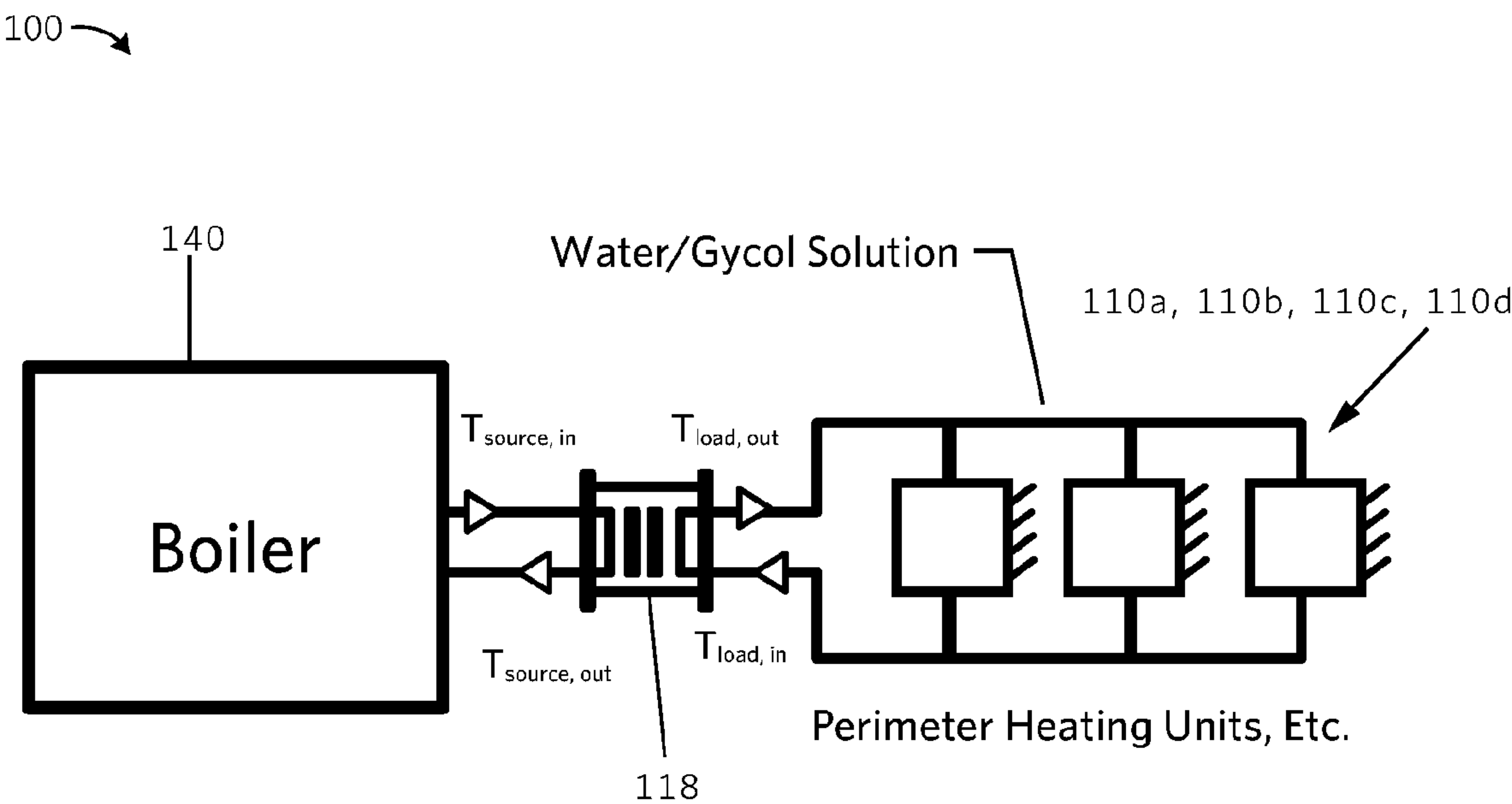
**FIGURE 1B**



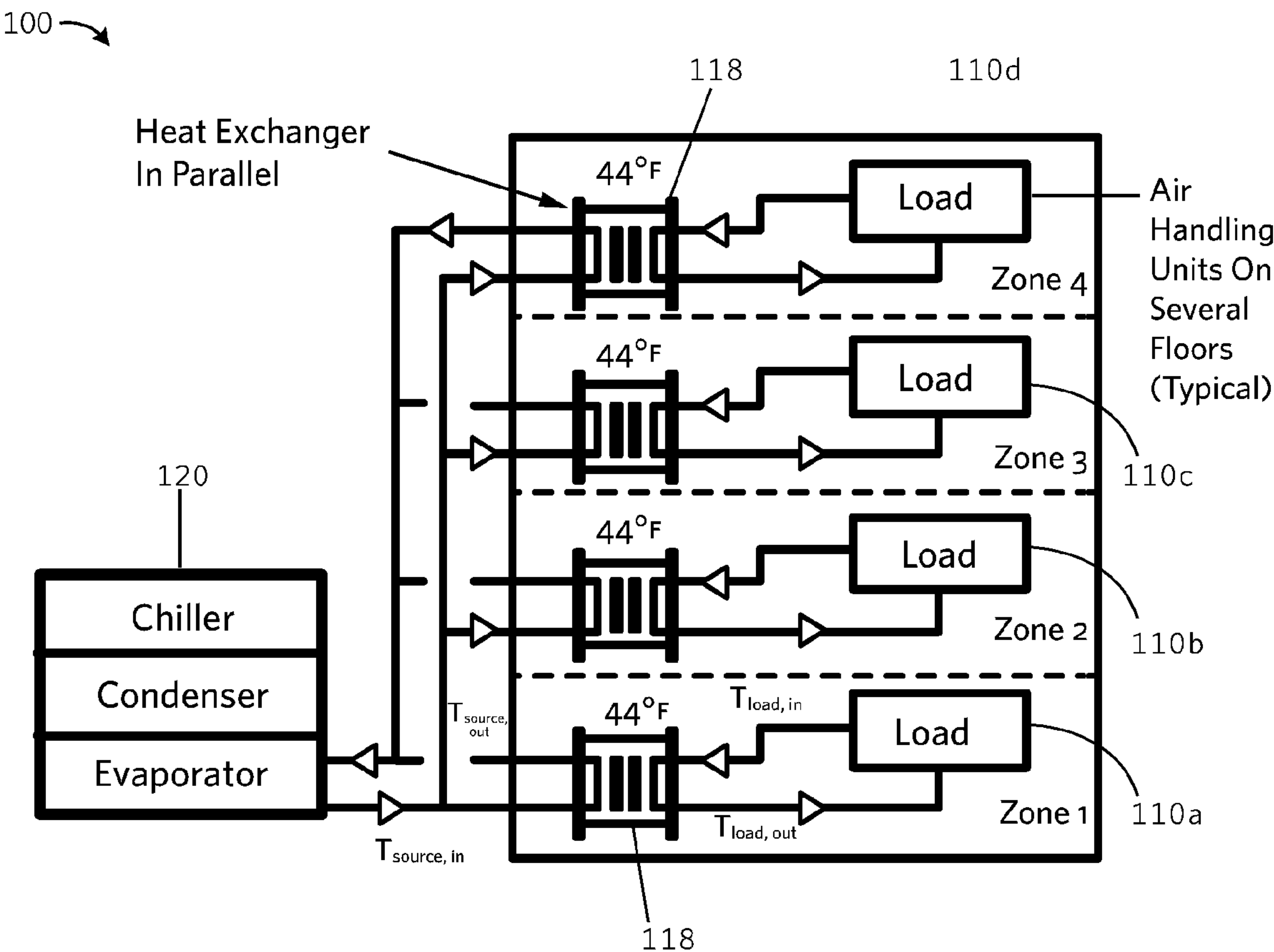
**FIGURE 1C**



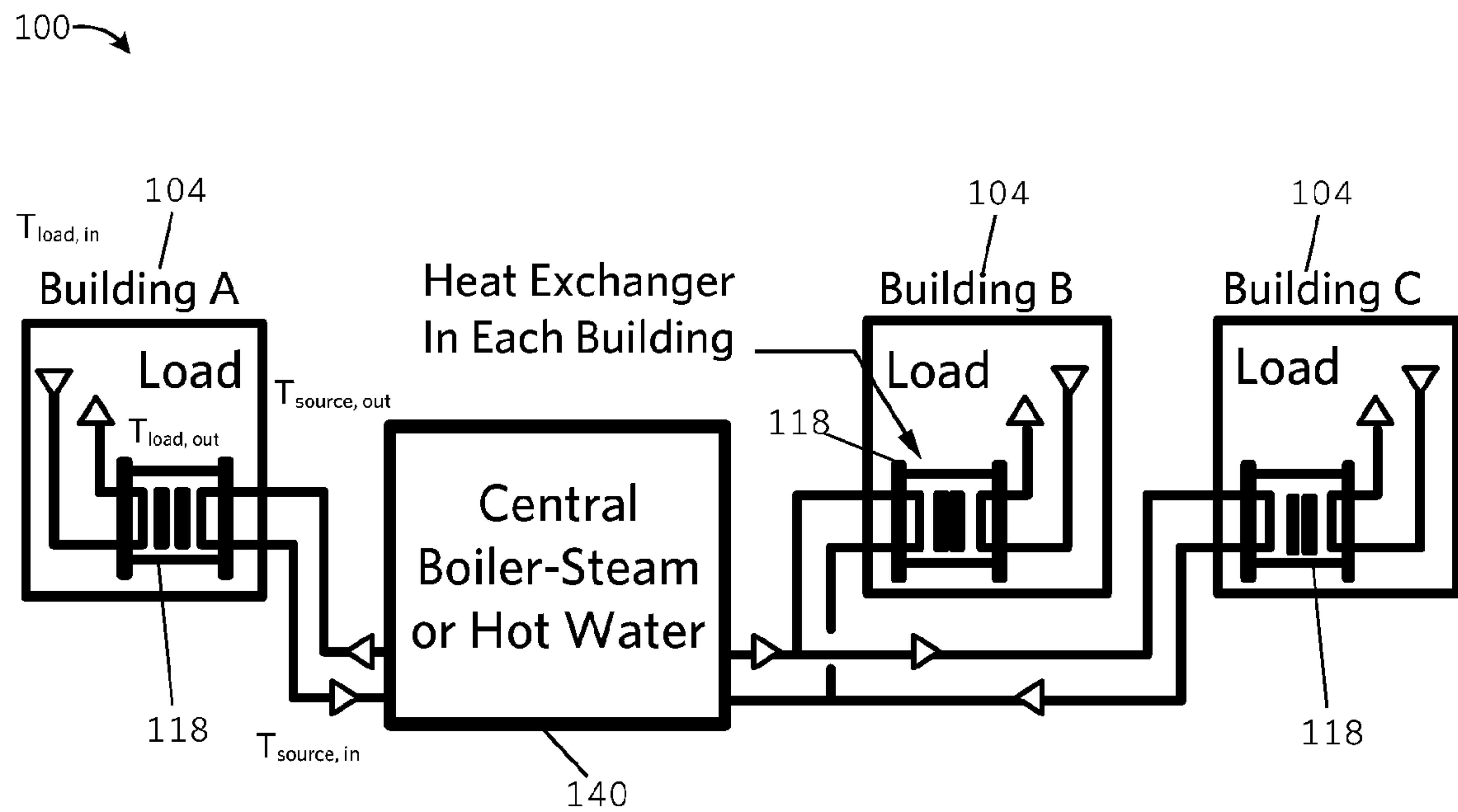
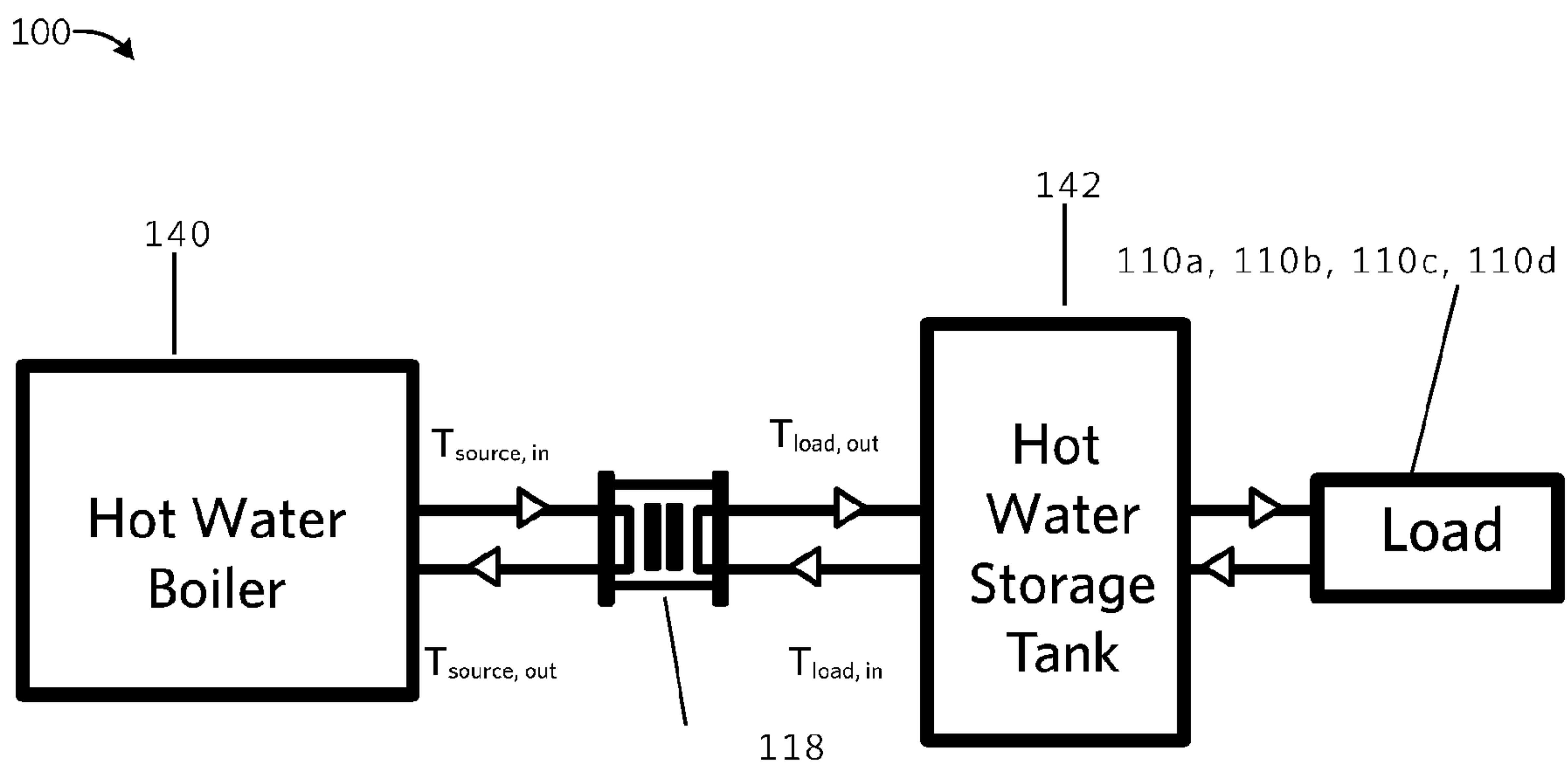
**FIGURE 1D**



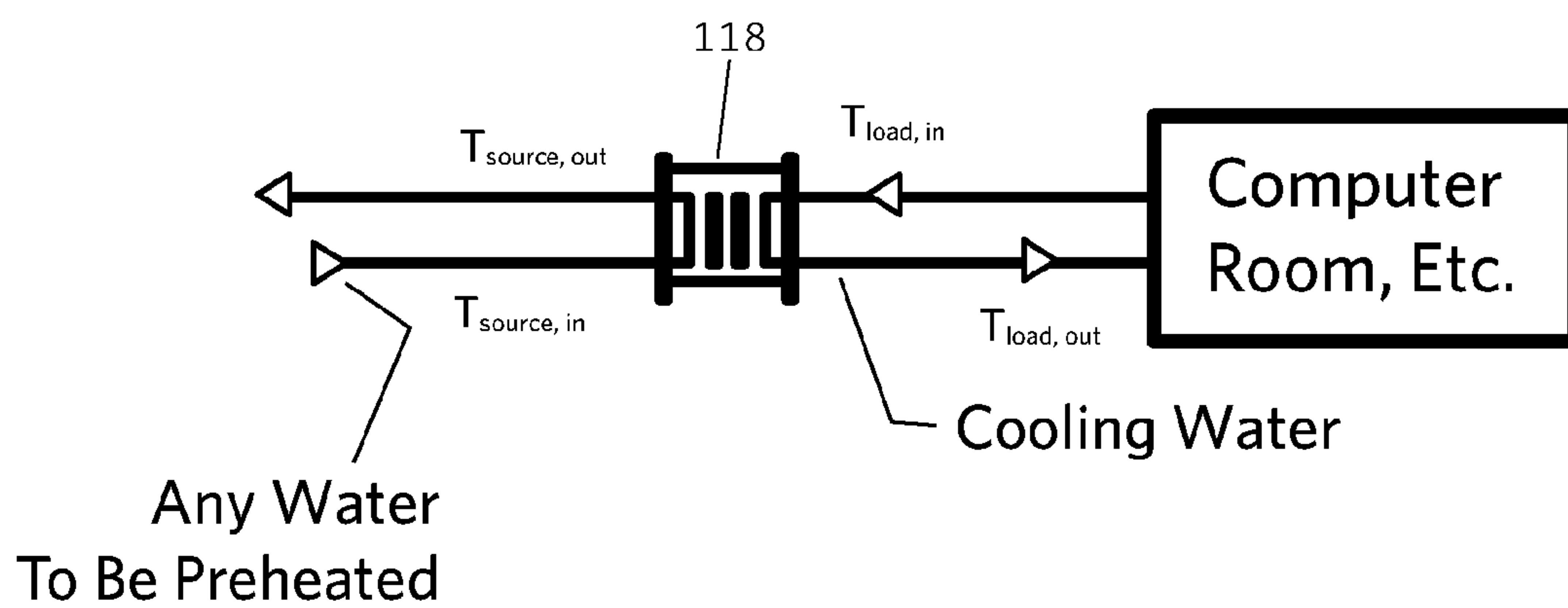
**FIGURE 1E**



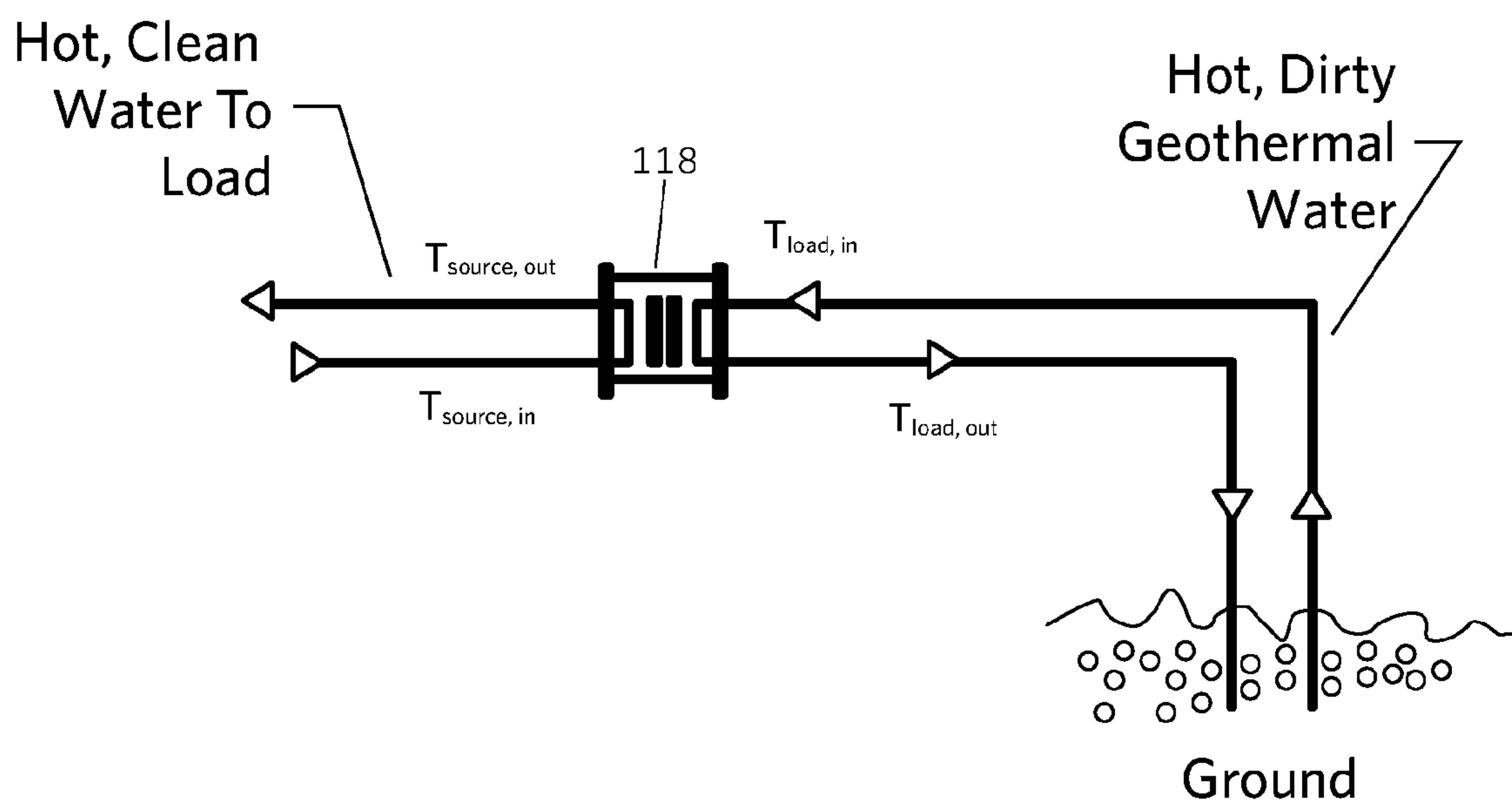
**FIGURE 1F**

**FIGURE 1G****FIGURE 1H**

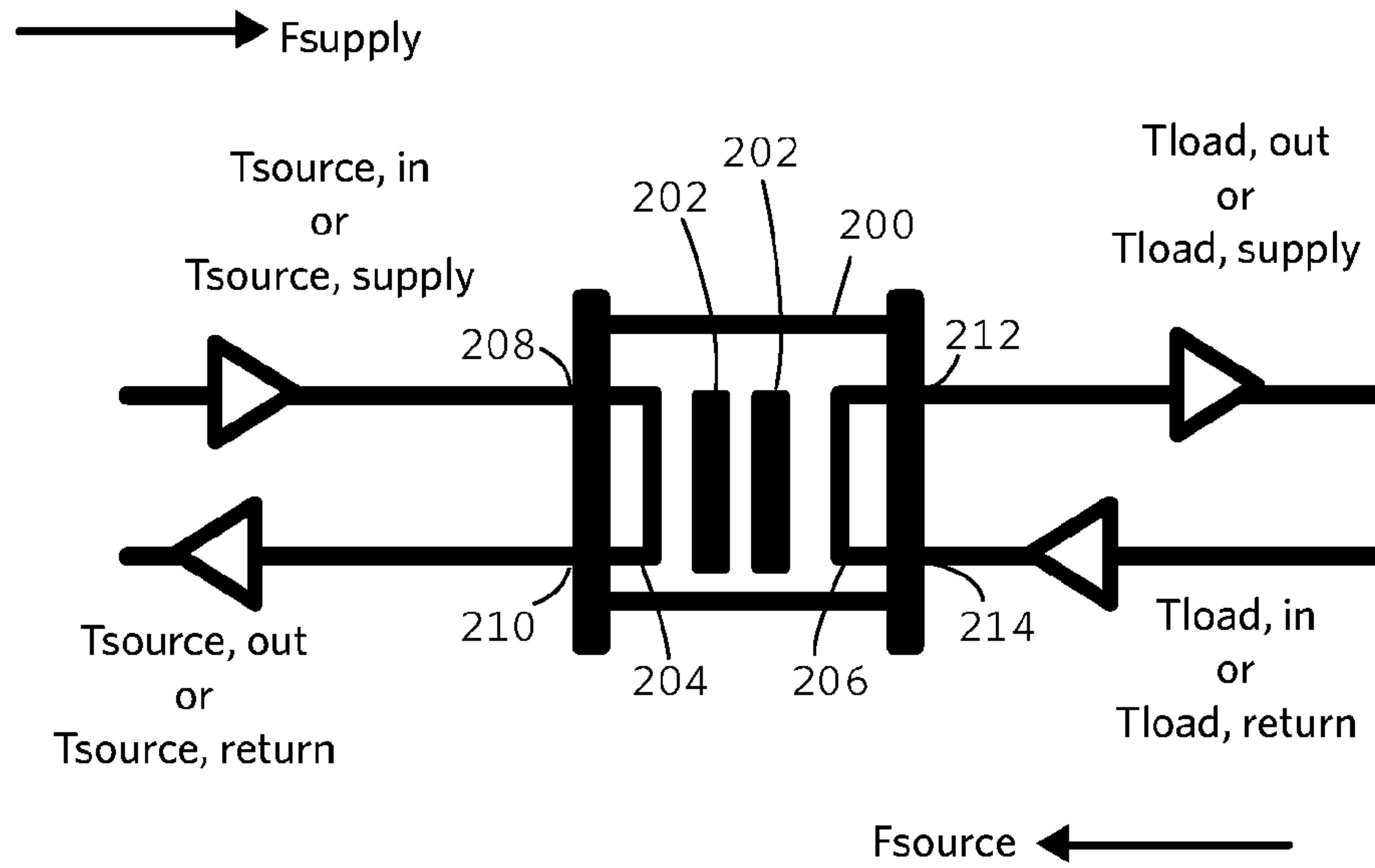
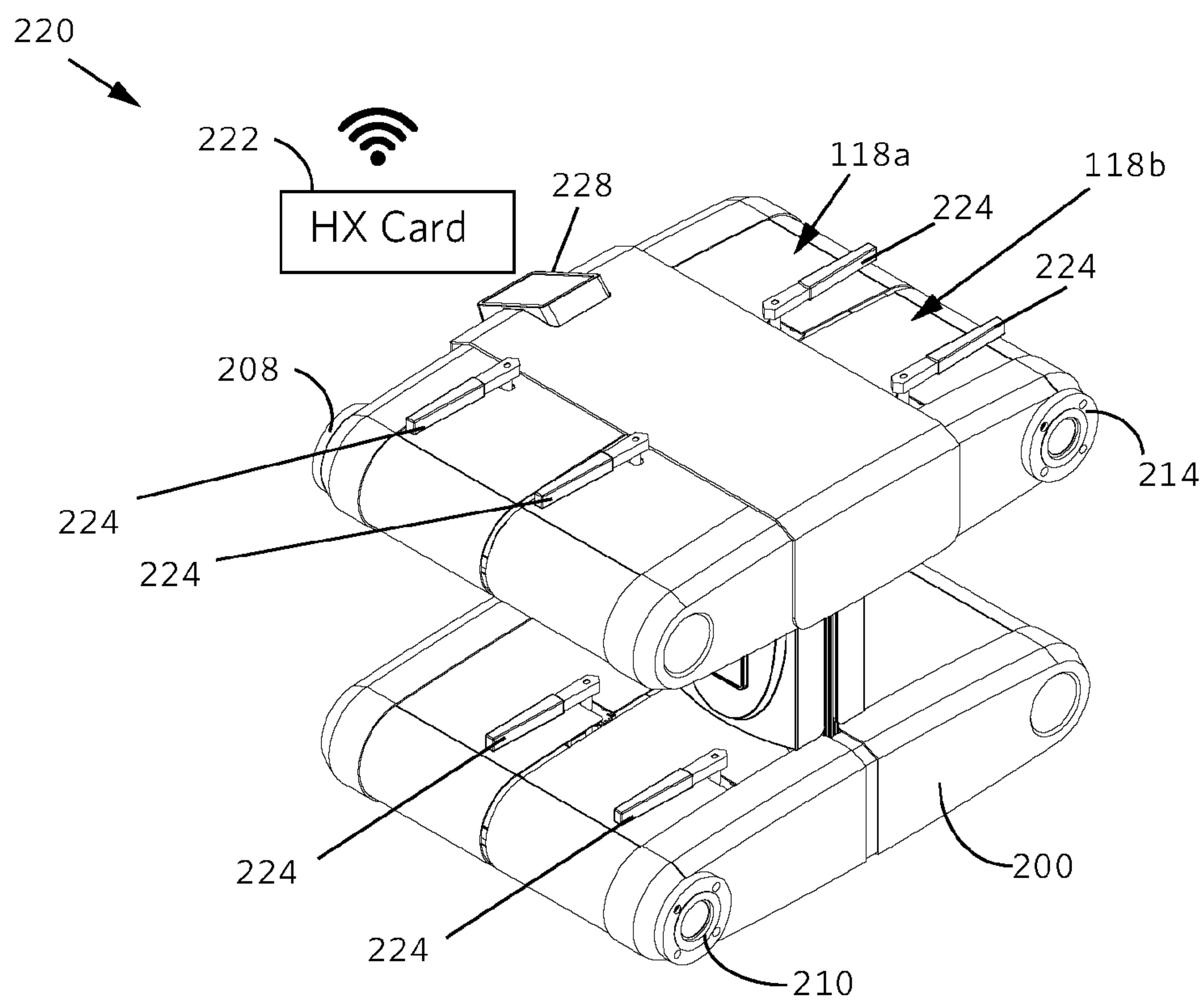
100

**FIGURE 1I**

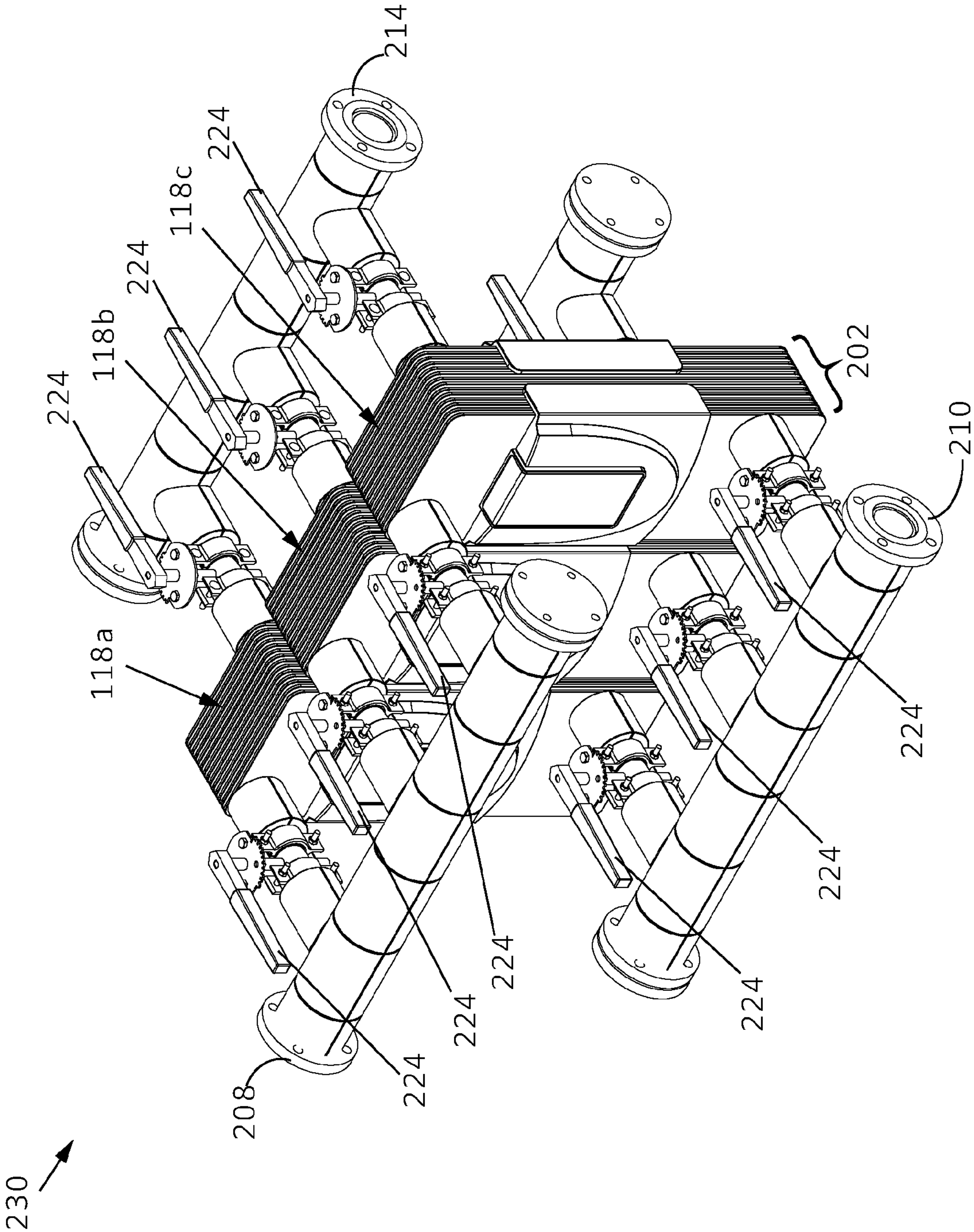
100

**FIGURE 1J**

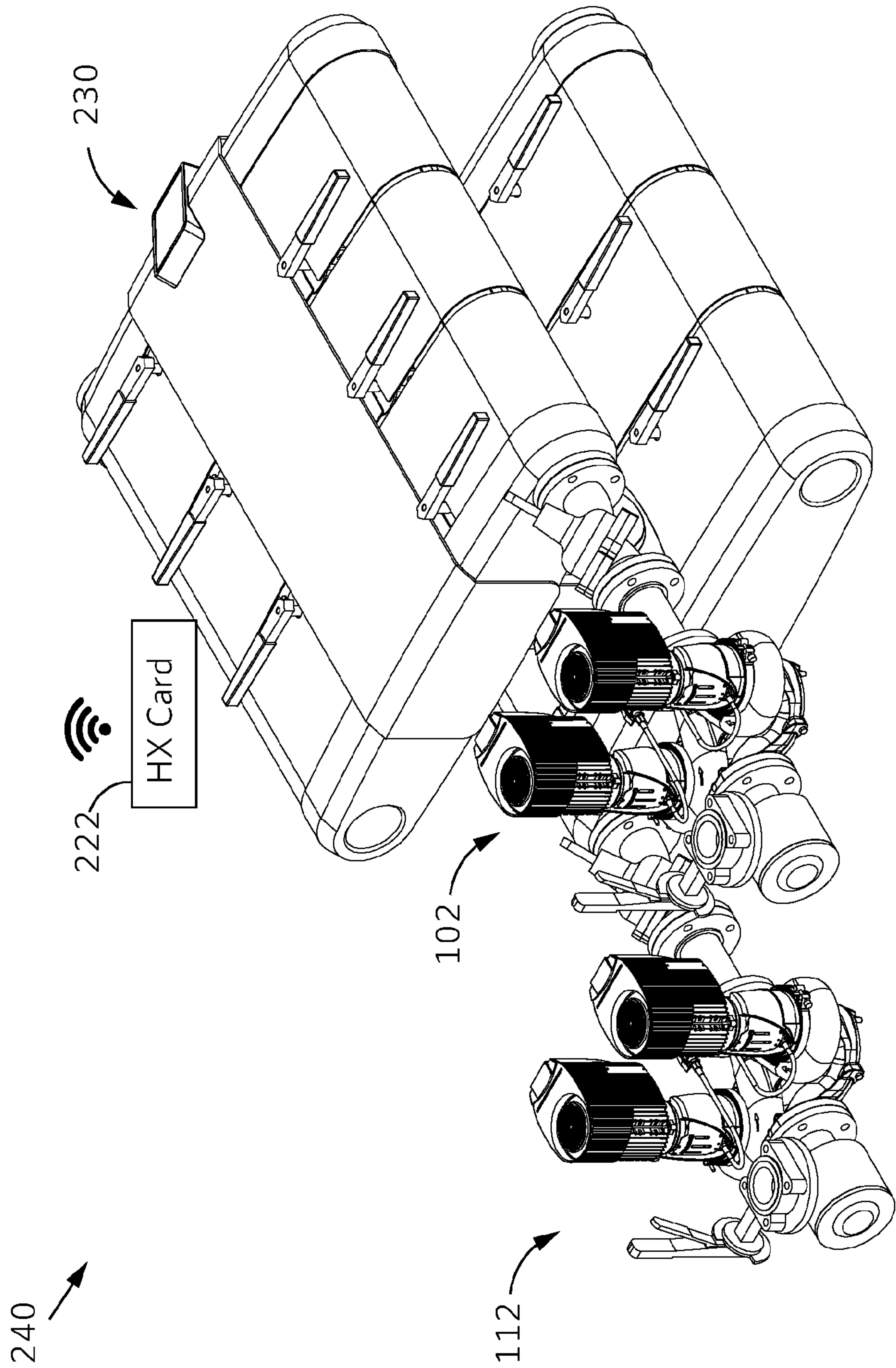
118

**FIGURE 2A****FIGURE 2B**

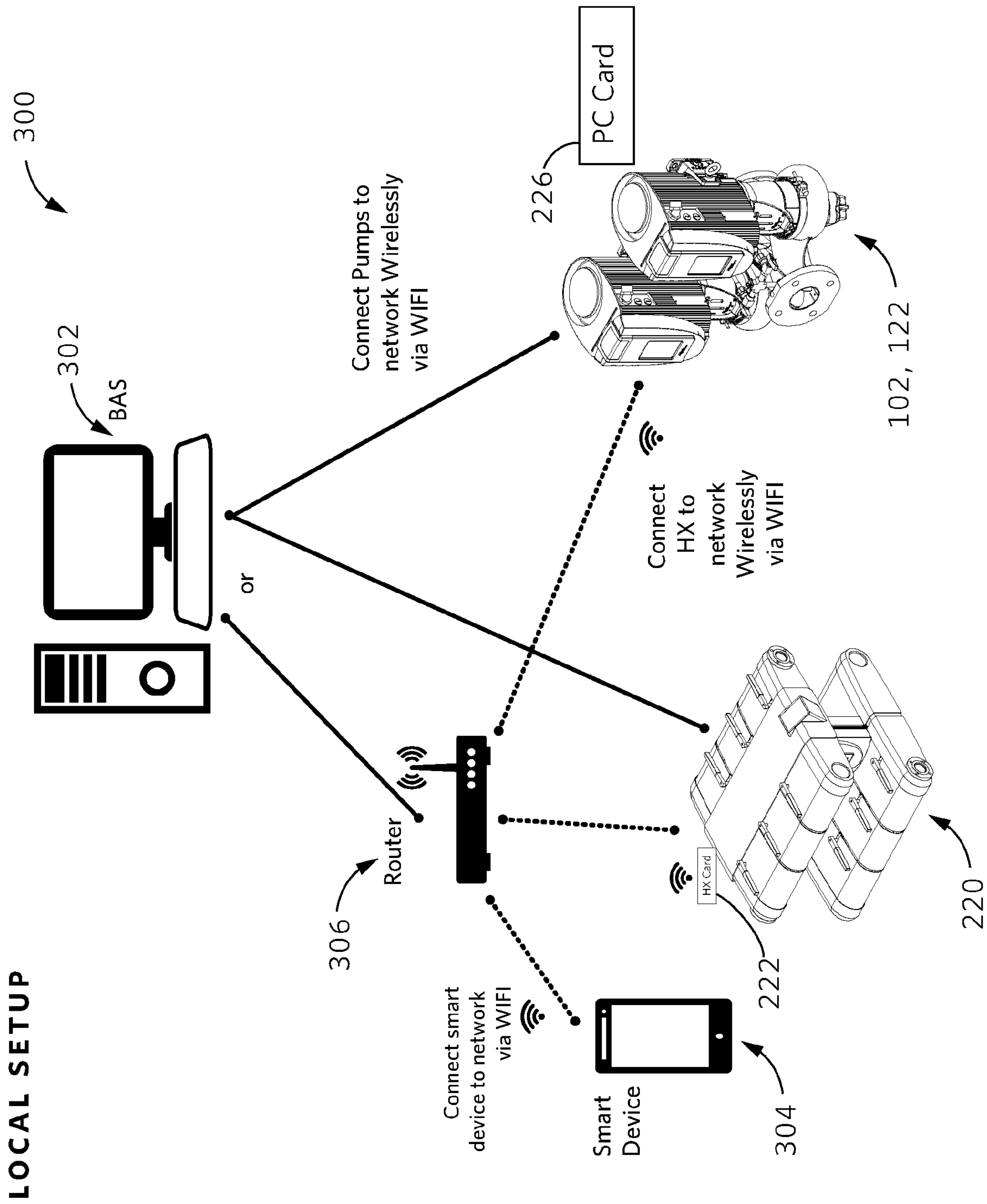




**FIGURE 2D**



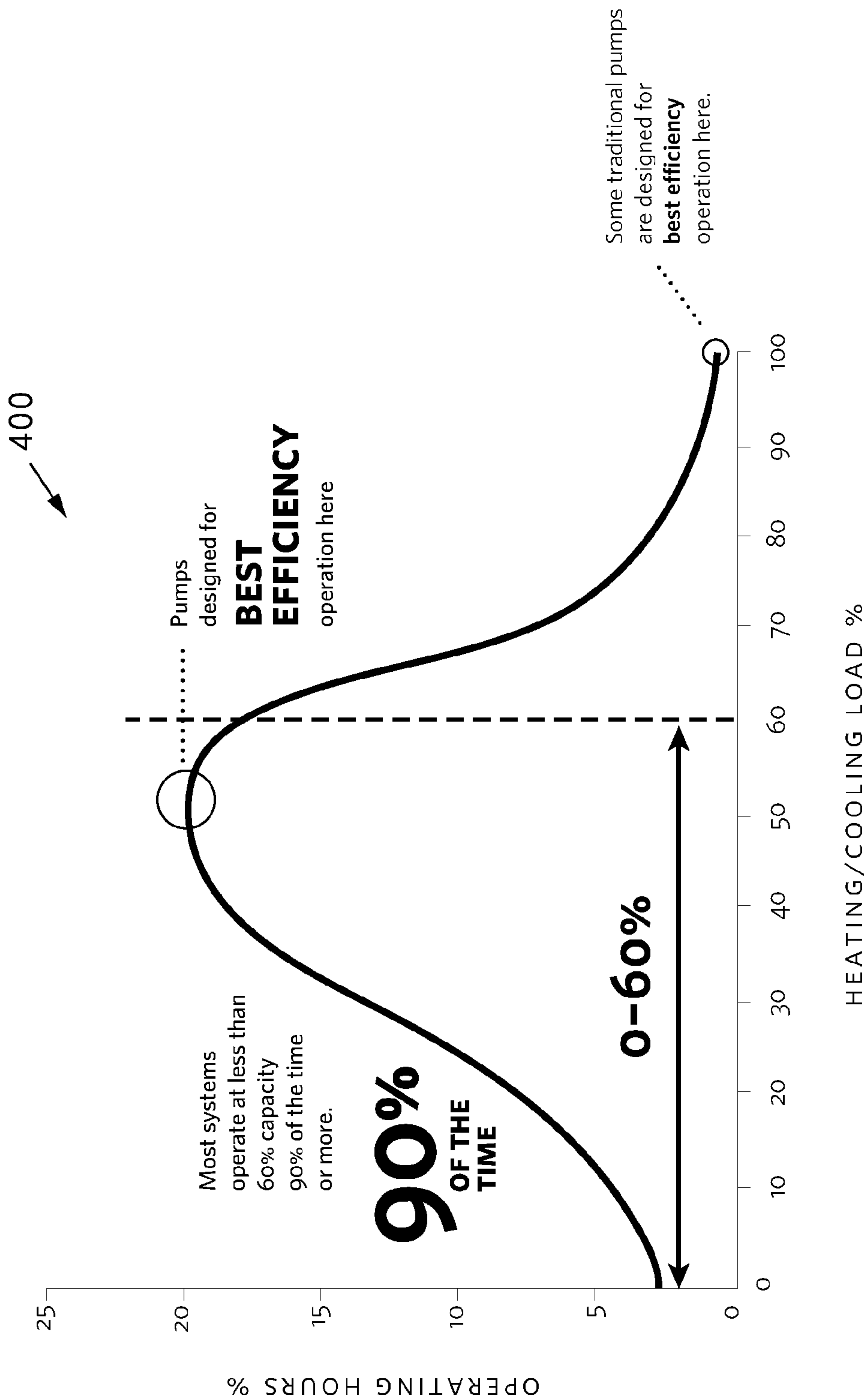
**FIGURE 2E**



**FIGURE 3A**



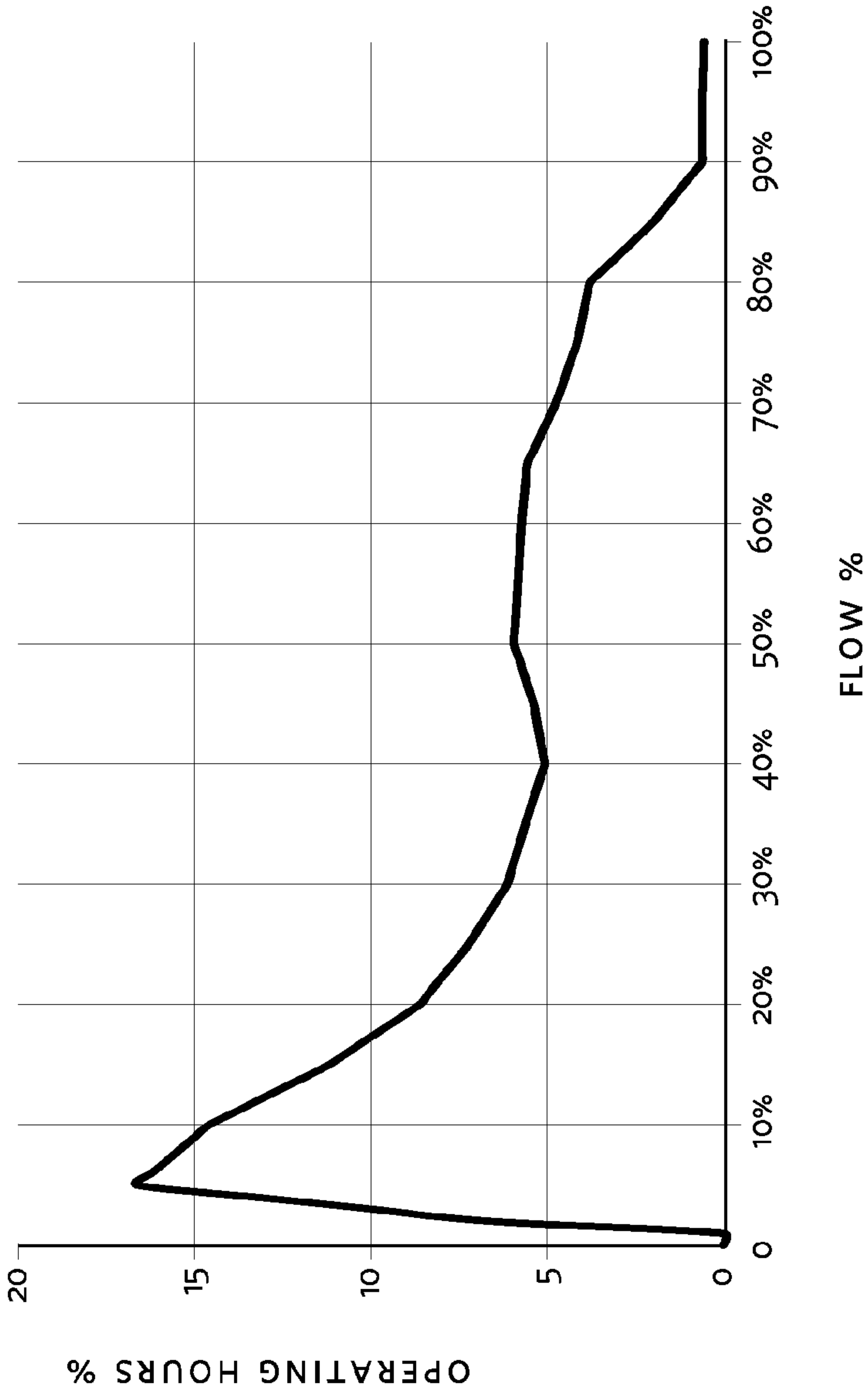
# BUILDING LOAD PROFILE



**FIGURE 4A**

**BUILDING LOAD PROFILE**

420 ↘



**FIGURE 4B**

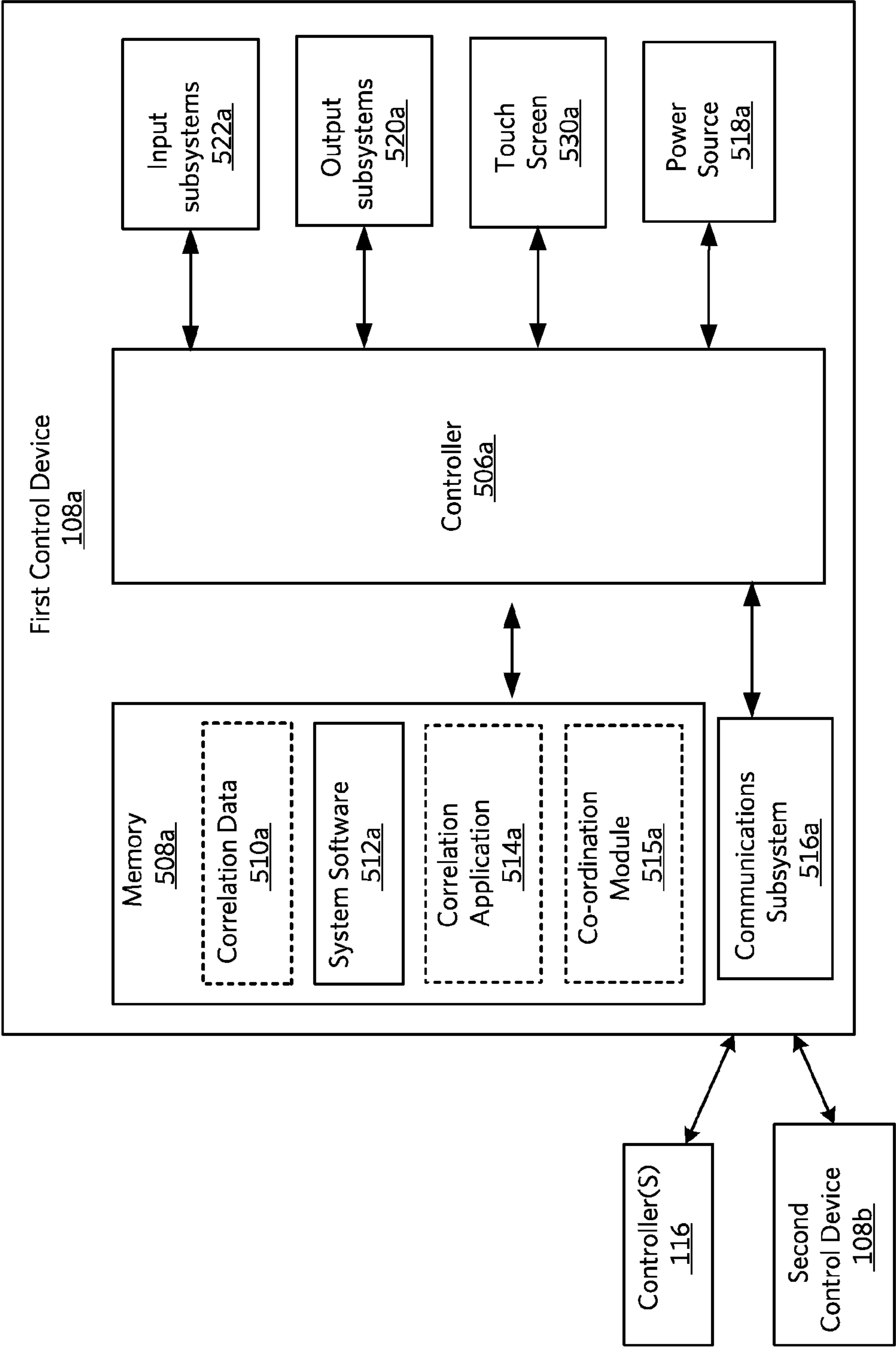
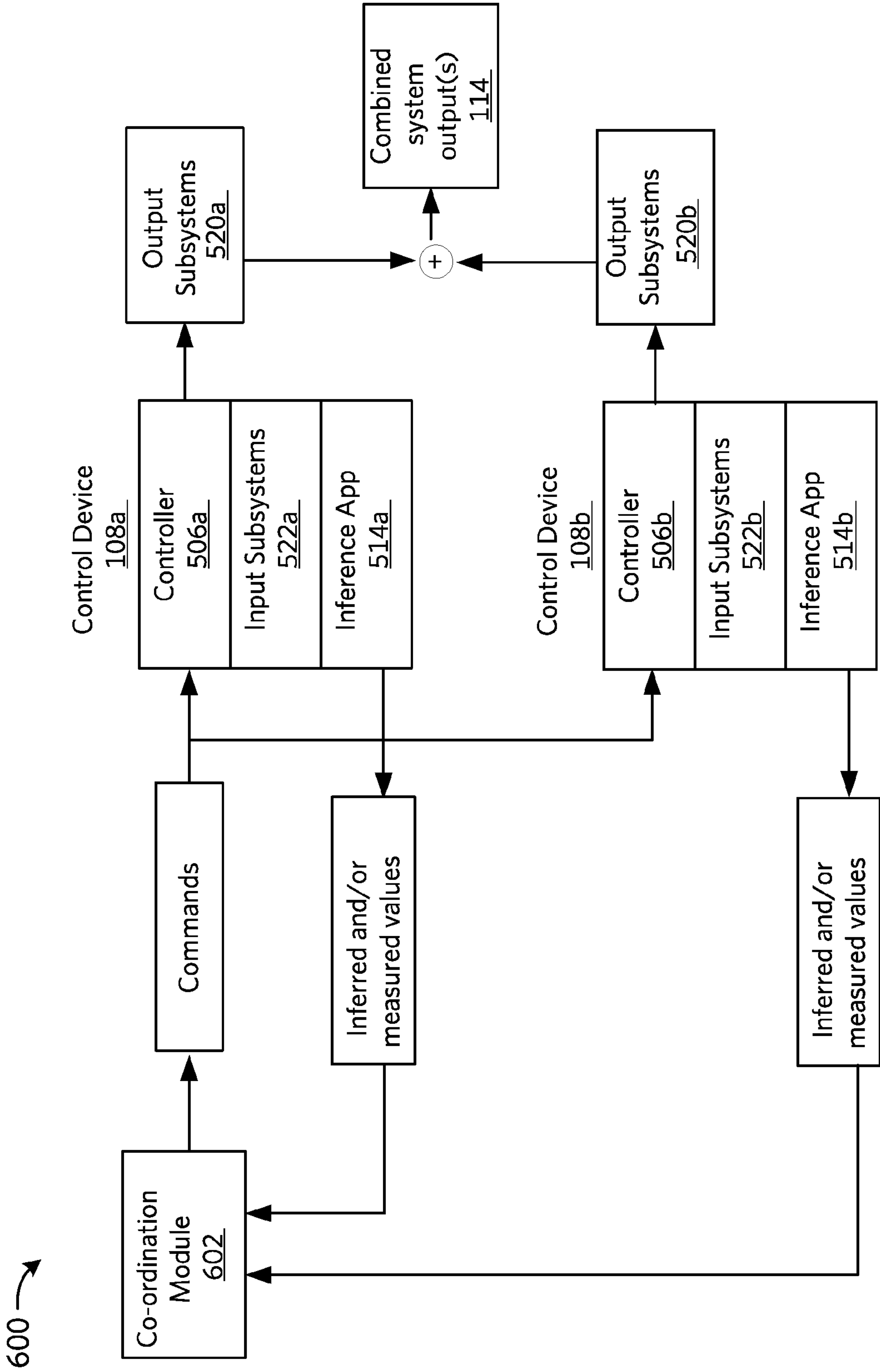
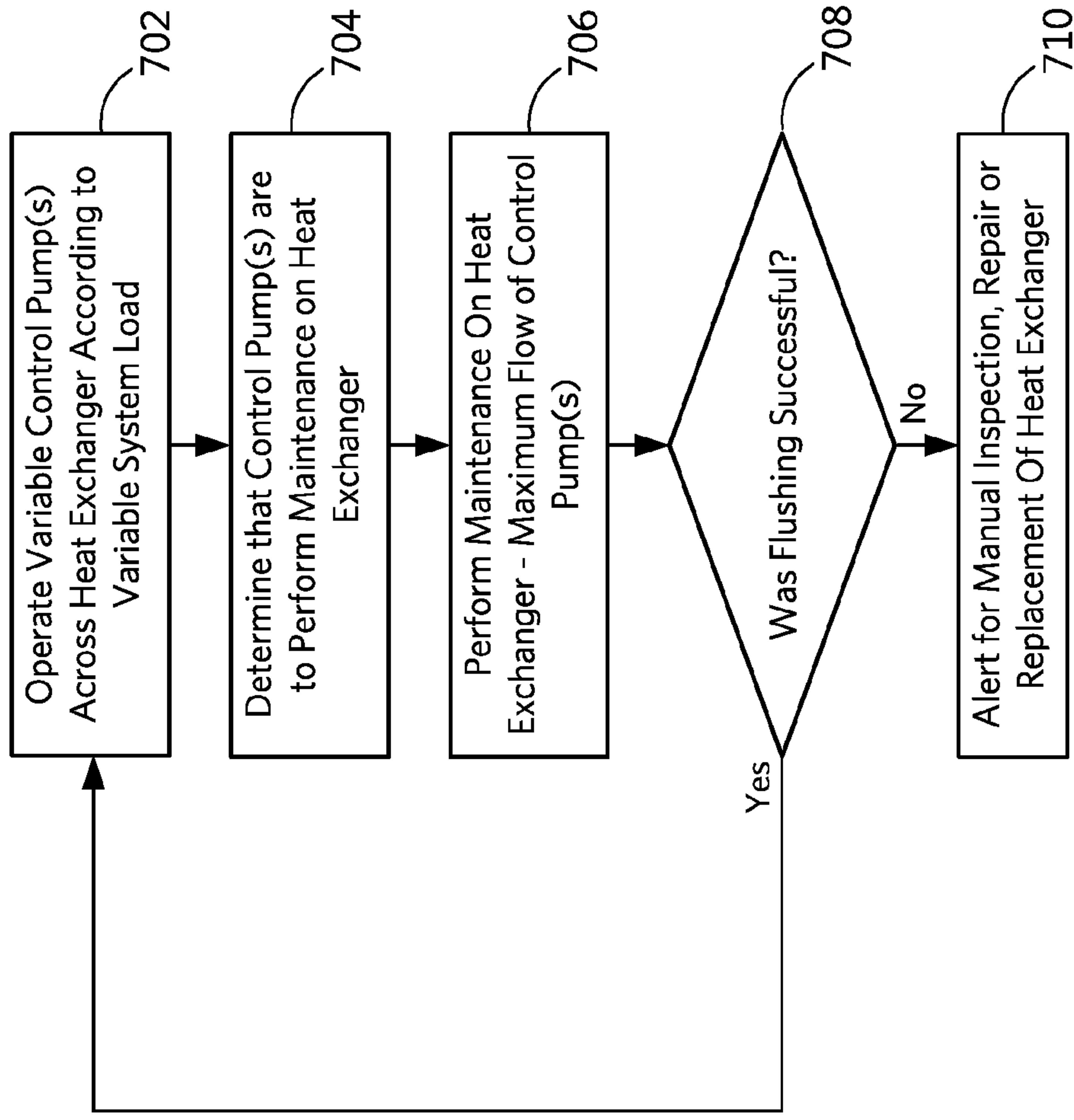


FIGURE 5



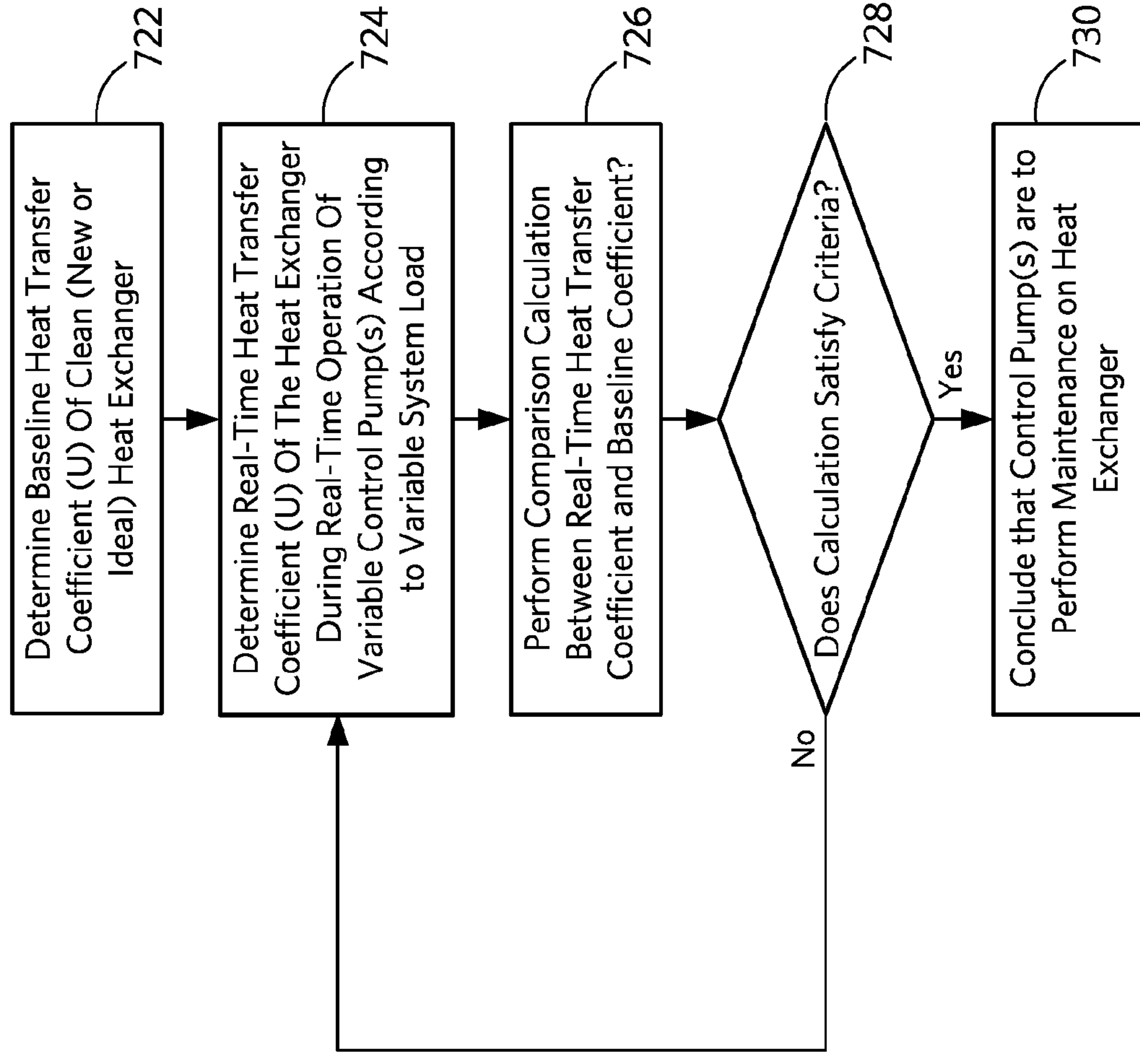
**FIGURE 6**

700 →



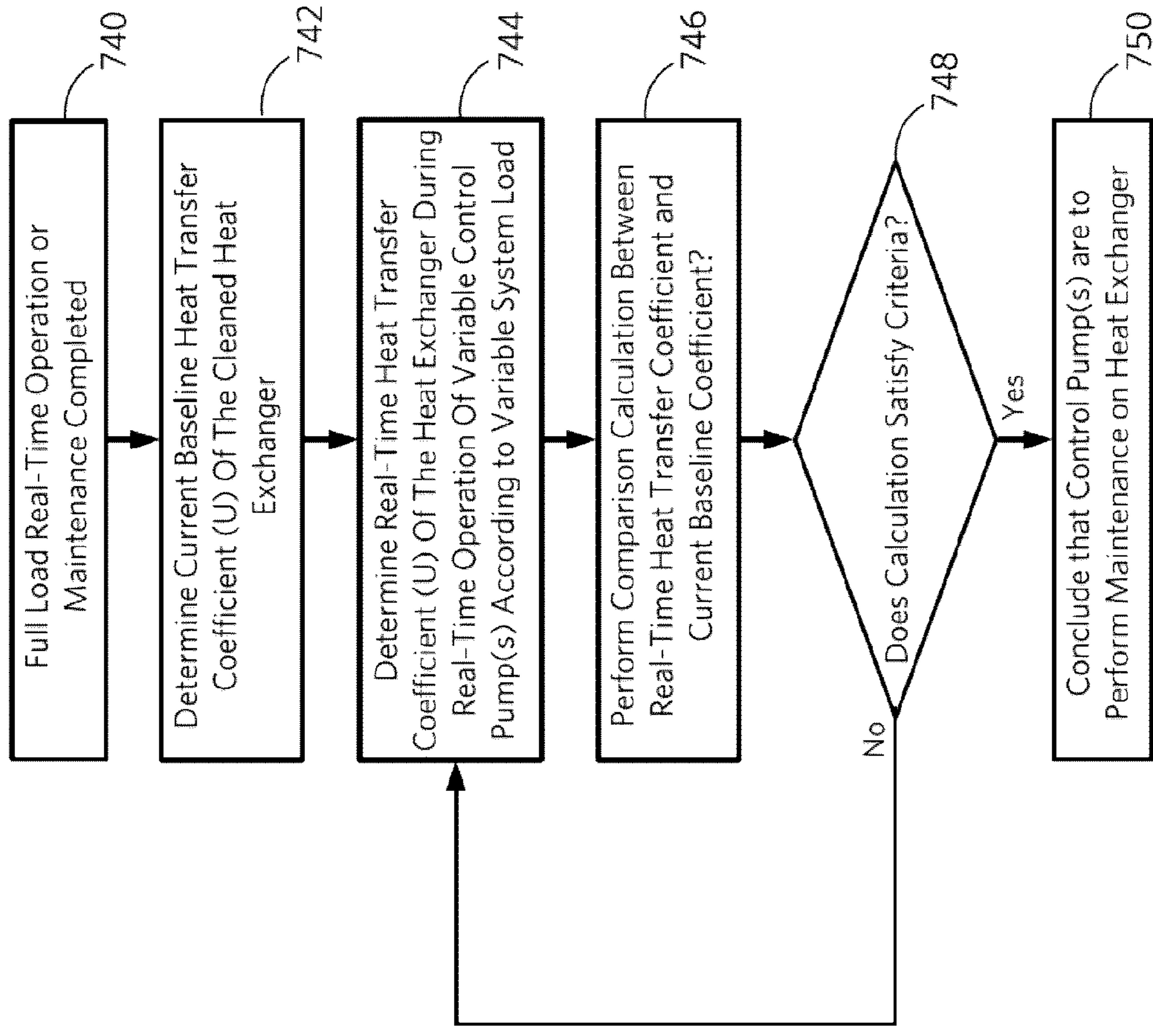
**FIGURE 7A**

704 → (Determine that Control Pump(s) are to Perform Maintenance on Heat Exchanger )



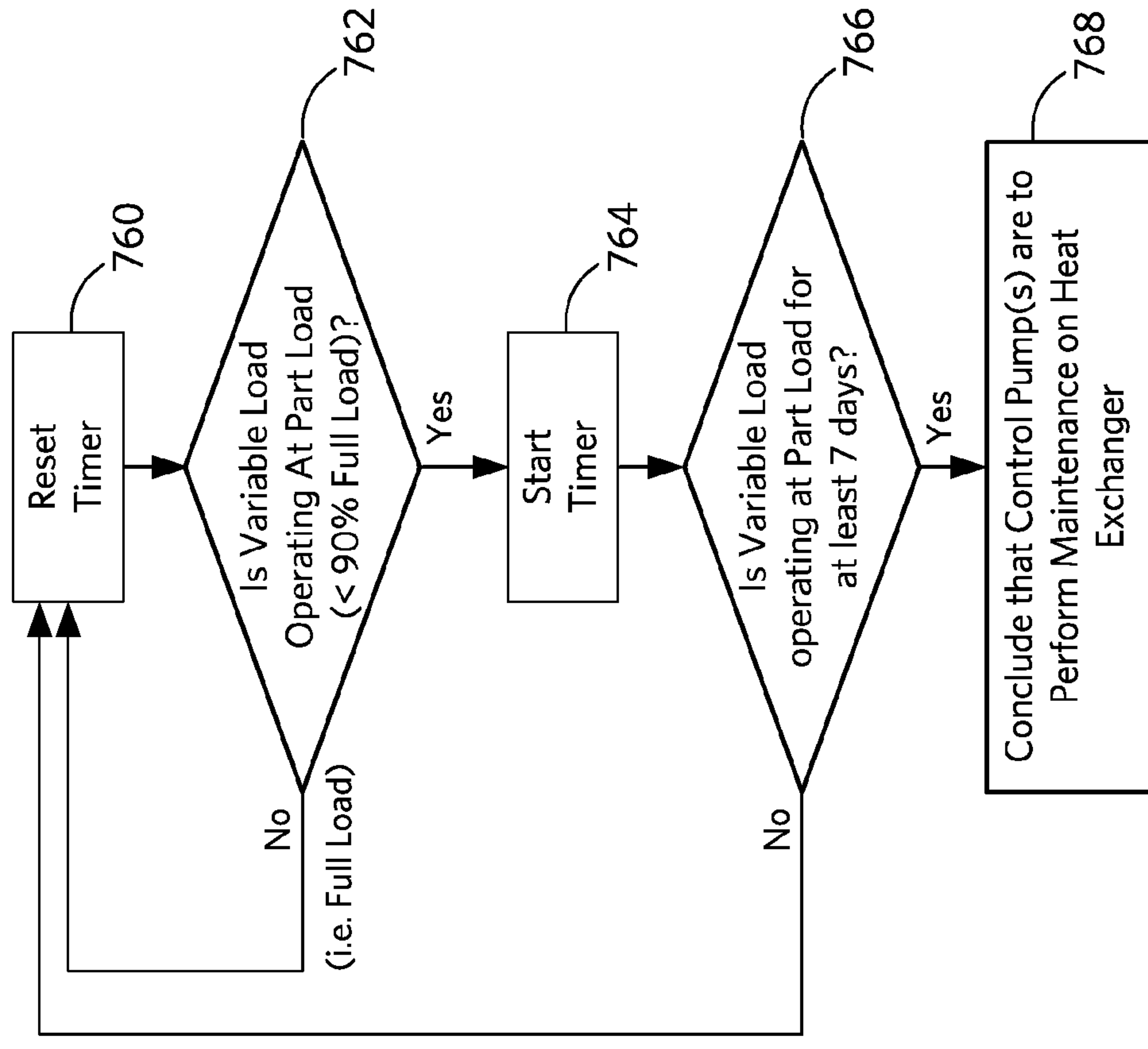
**FIGURE 7B**

704 → (Determine that Control Pump(s) are to Perform Maintenance on Heat Exchanger )



**FIGURE 7C**

704 → (Determine that Control Pump(s) are to Perform Maintenance on Heat Exchanger )



**FIGURE 7D**

800 →

DETERMINATION OF FOULING/ PERFORMANCE DEGRADATION IN REAL TIME

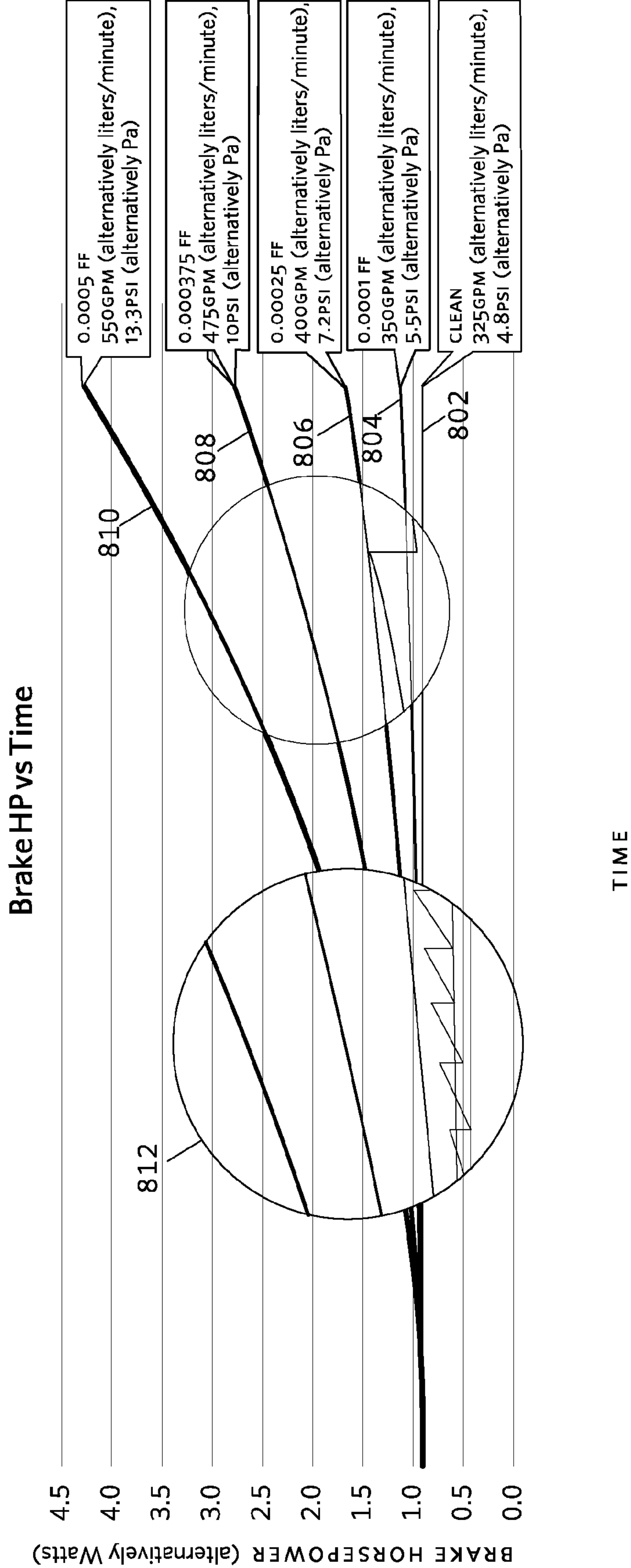
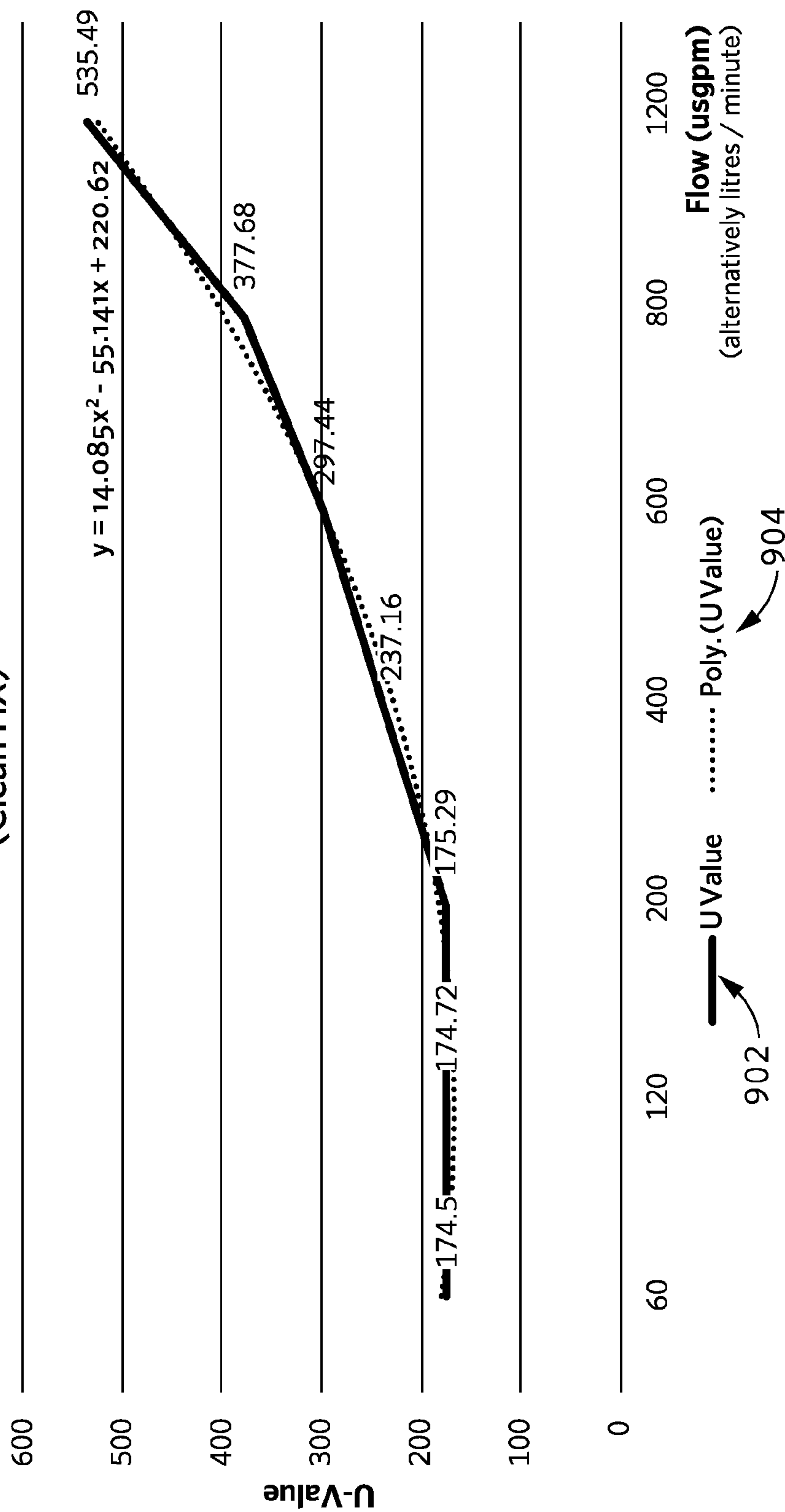


FIGURE 8

900→

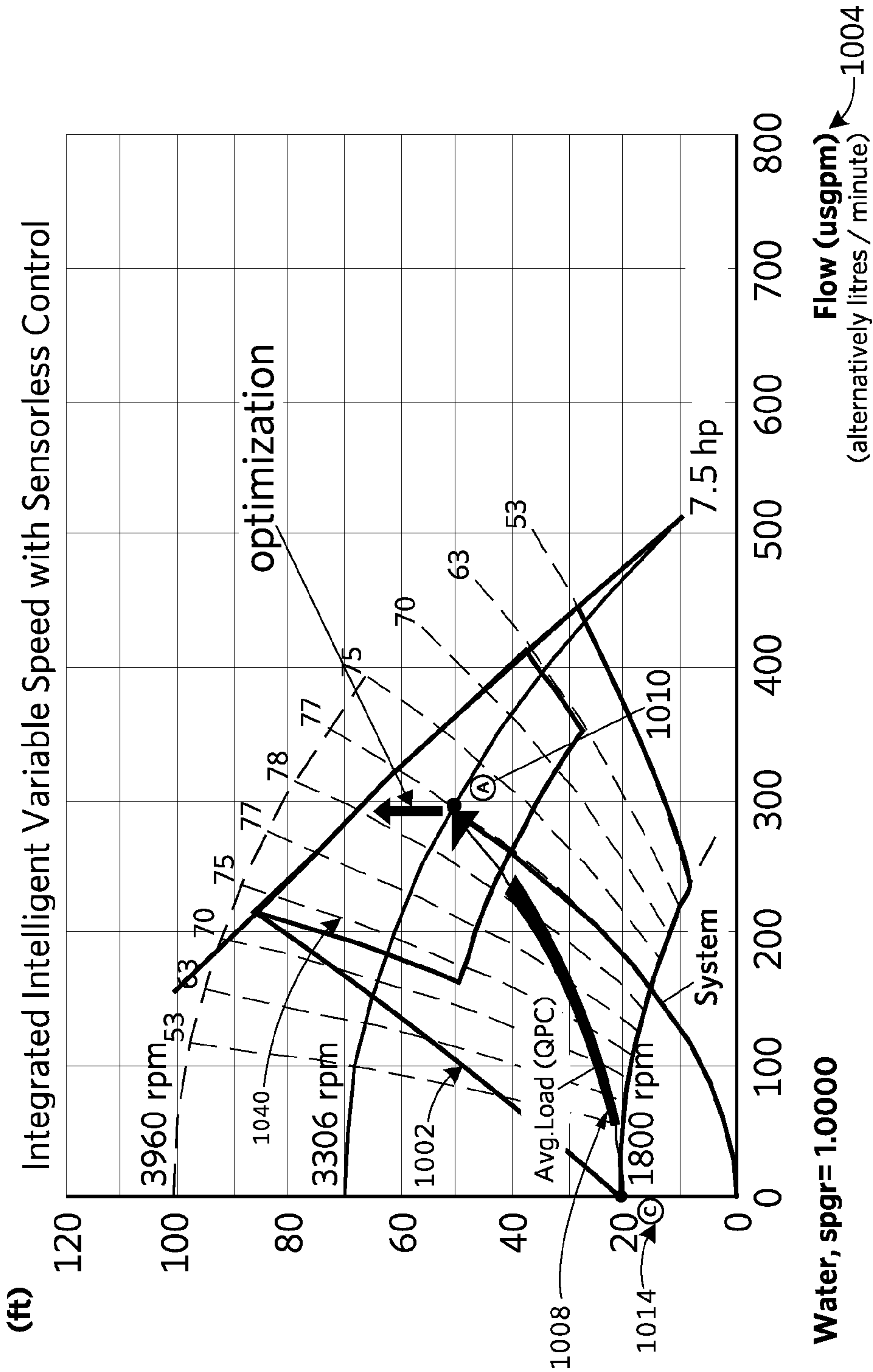
### U-Value vs Flow (Clean HX)



**FIGURE 9**

1000 →

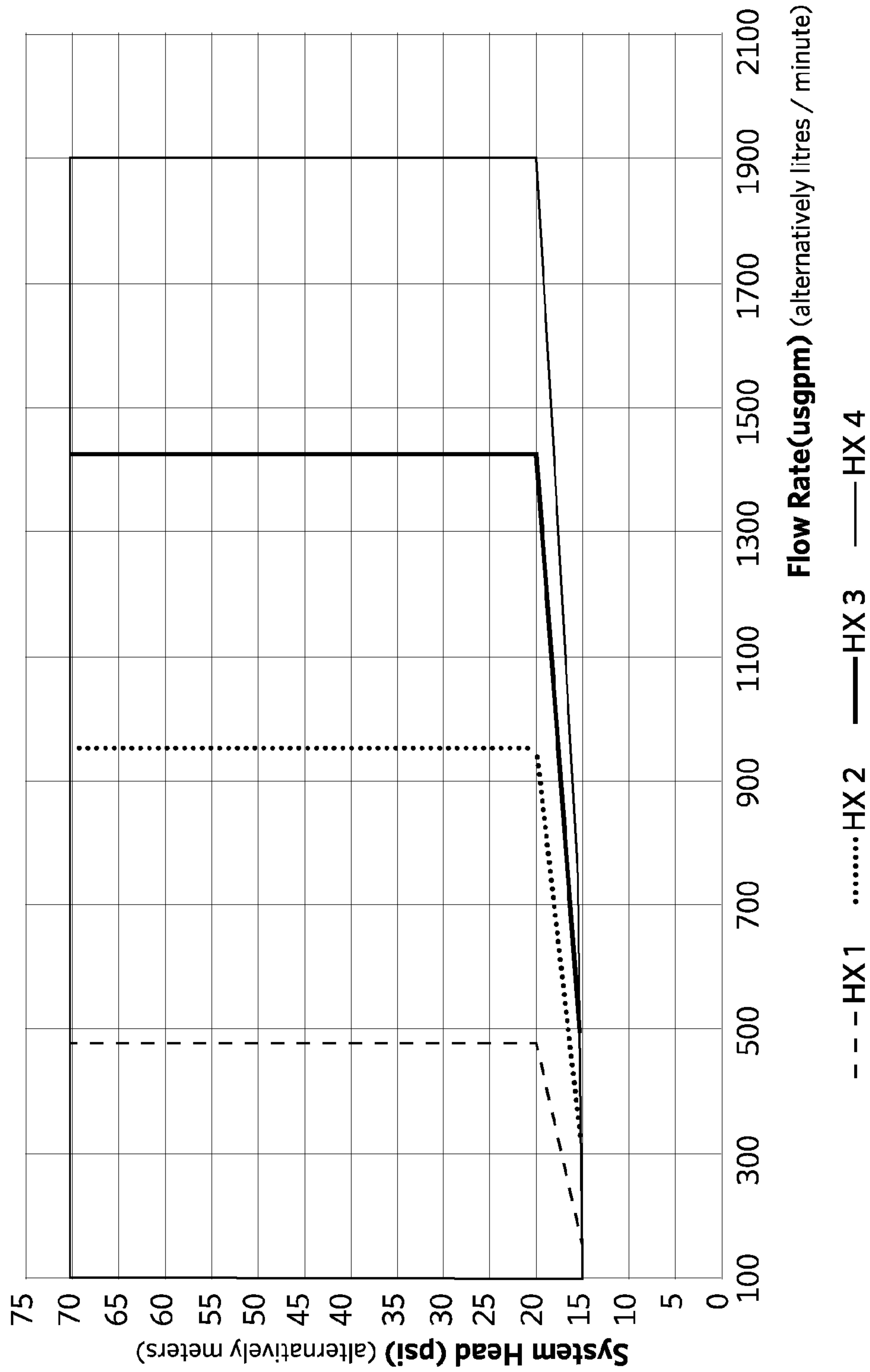
→ 1006  
**Head** (alternatively meters)



**FIGURE 10**

1100 →

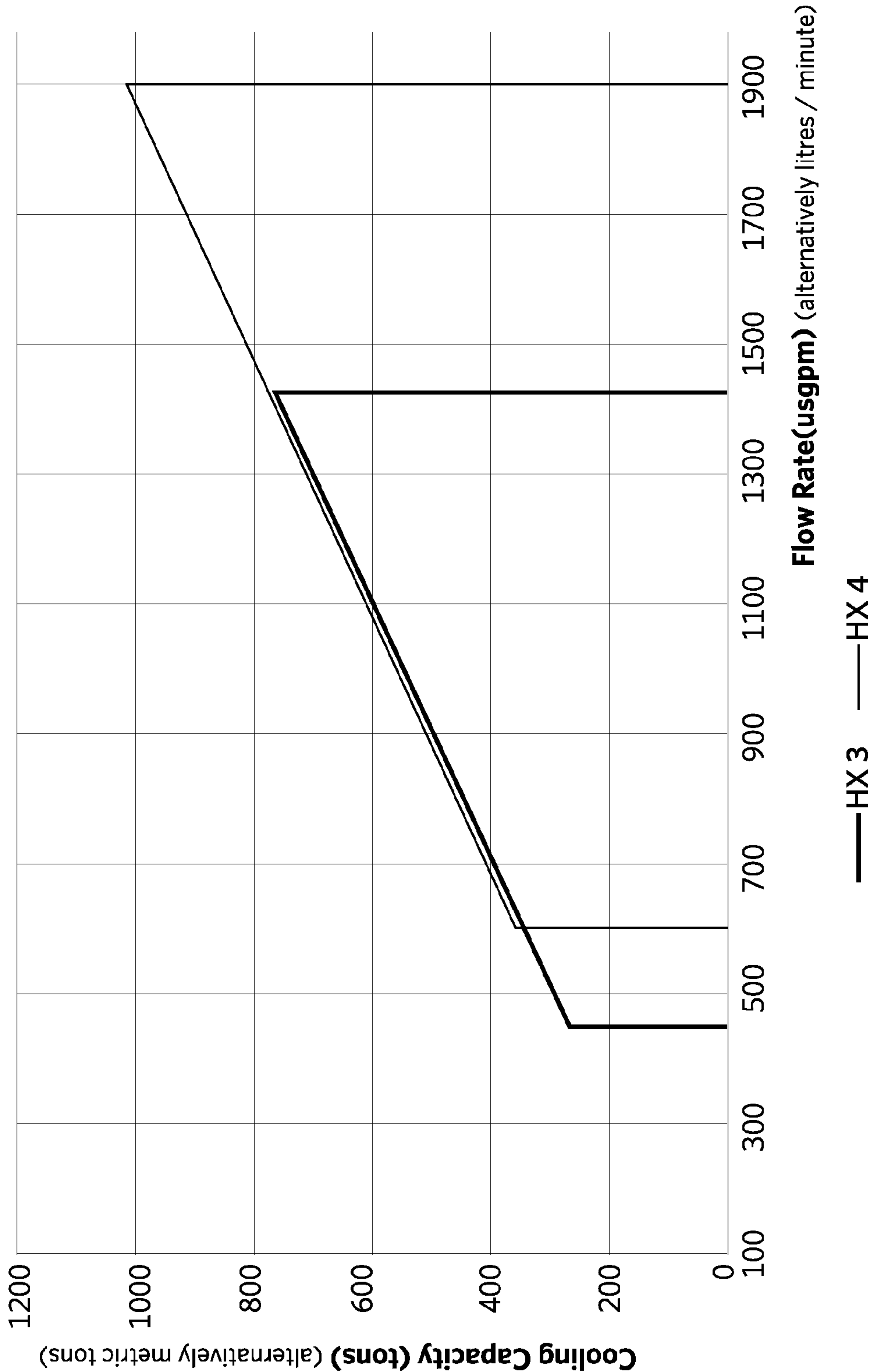
### Brazed Plate Heat Exchanger Envelopes



**FIGURE 11A**

1120 →

Brazed Plate Heat Exchanger Envelopes (13.9°C / 6.7°C - 4.4°C / 11.7°C)  
(57°F / 44°F - 40°F / 53°F)



**FIGURE 11B**

1140 →

Brazed Plate Heat Exchanger Envelopes (60°C / 48.9°C - 43.3°C / 54.4°C)  
(140°F / 120°F - 110°F / 130°F)

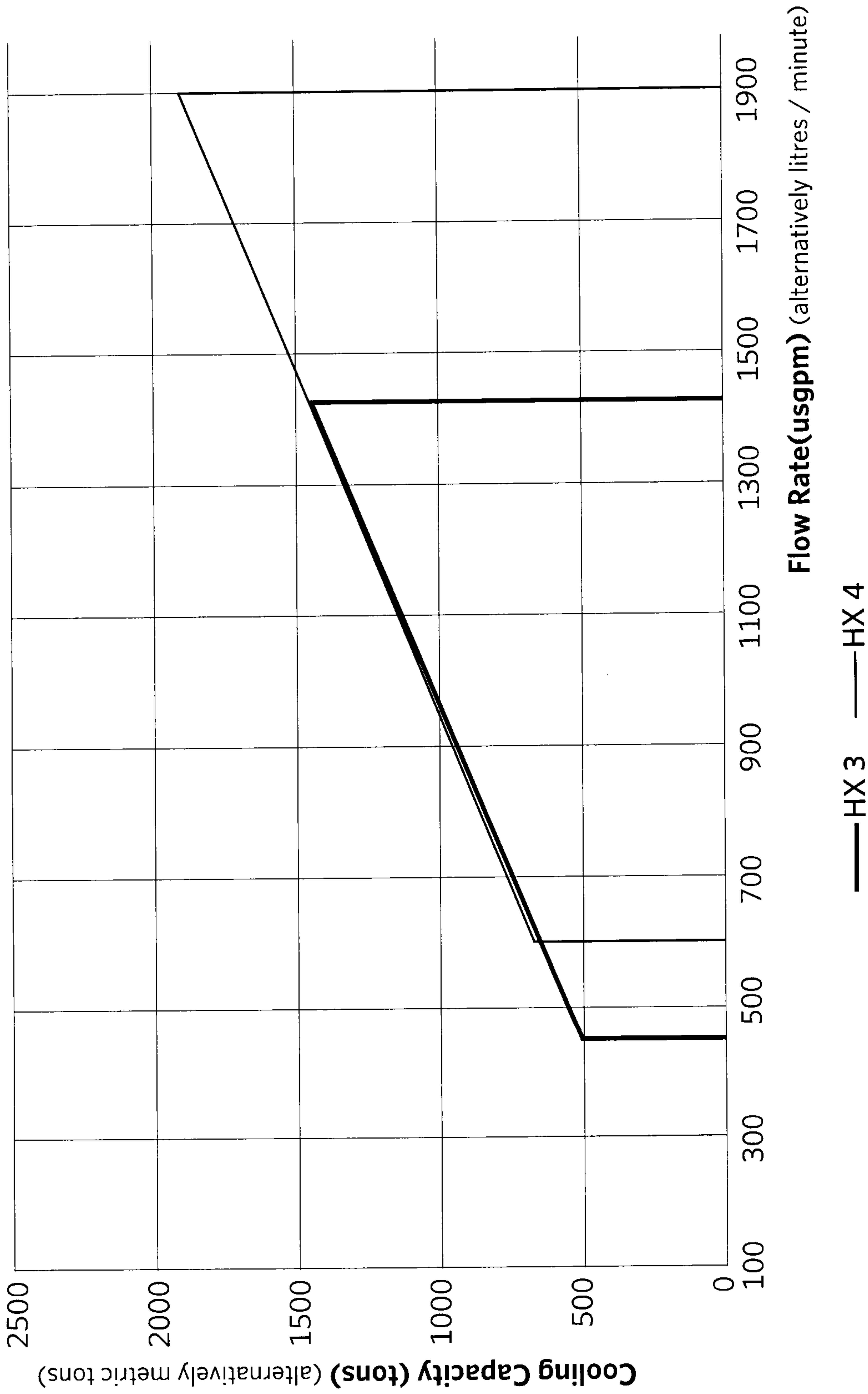


FIGURE 11C

1200

Pre-Select

Building Type

Apartment - Condo

Location

Toronto, Canada

Pump Redundancy

50%

Heat Exchanger Redundancy

66%

Heat Load

Heat Load Unit

Btu/hr

COLD SIDE

Fluid

Water

Temperature In

Temperature In Unit

°F

Temperature Out

Temperature Out Unit

°F

Fluid Flow Rate

Fluid Flow Rate Unit

USgpm

System Head w/o Heat Exchanger

HEAD UNIT

psi

HOT SIDE

Fluid

Water

Temperature In

Temperature In Unit

°F

Temperature Out

Temperature Out Unit

°F

Fluid Flow Rate

Fluid Flow Rate Unit

USgpm

System Head w/o Heat Exchanger

HEAD UNIT

psi

Excess Surface Area

0

Excess Surface Area Unit

%

Get Result

FIGURE 12A

1220

Advanced Options

OPTIMIZATION OPTIONS

Load Profile

Discounting Period

3

Discounting Period Unit

Years

Discounting Rate

0

Discounting Rate Unit

%

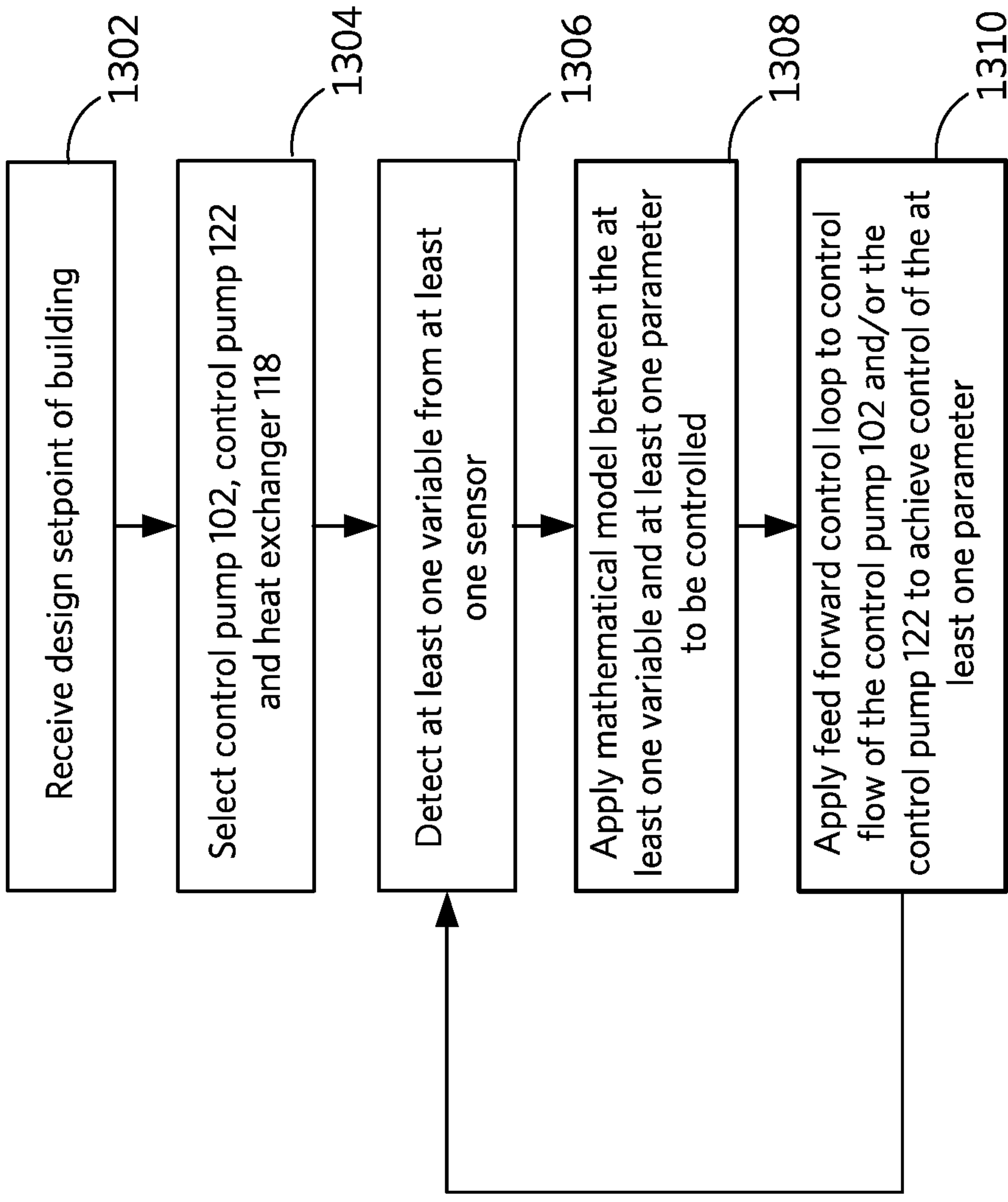
Operating Mode

☒ Design

☐ Rating

FIGURE 12B

1300 →



**FIGURE 13**