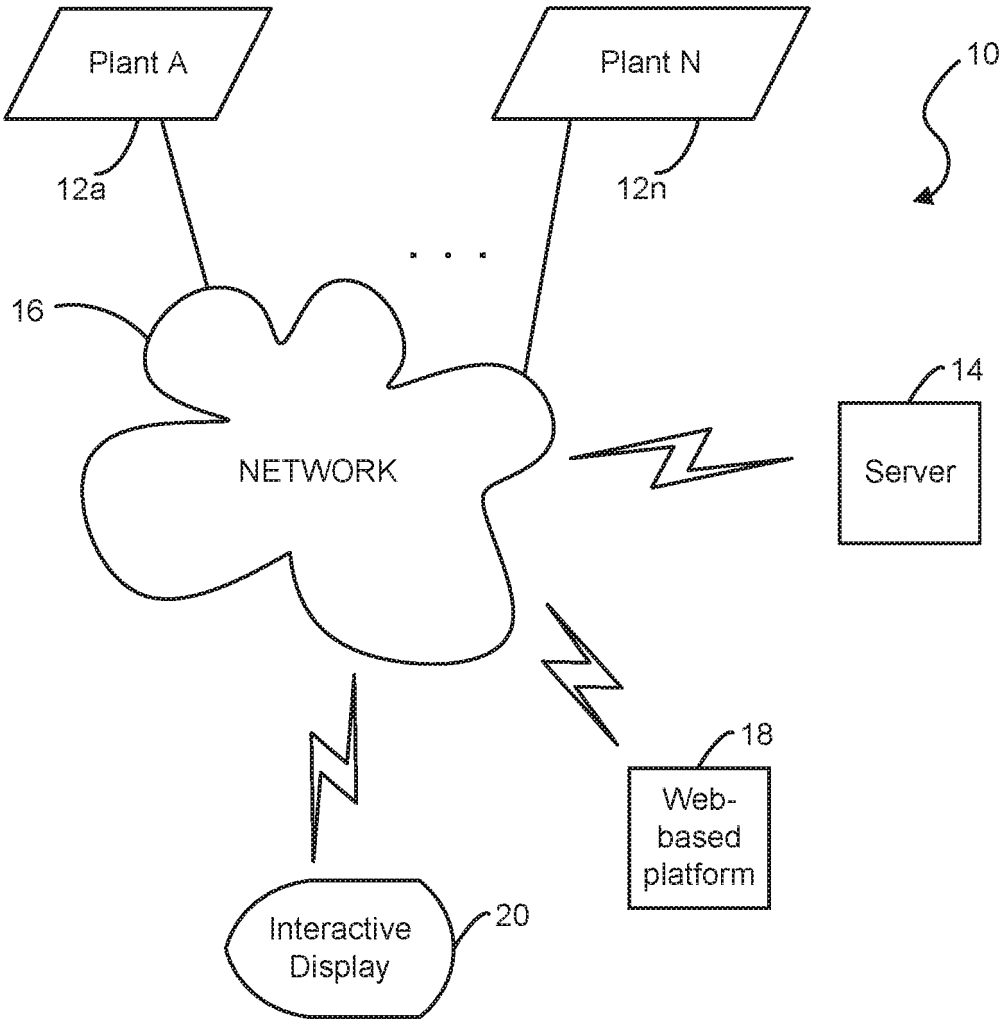

Plant A
Plant N
10
12a
12n
16
NETWORK
14
Server
18
Web-based platform
Interactive Display
20

FIG. 1

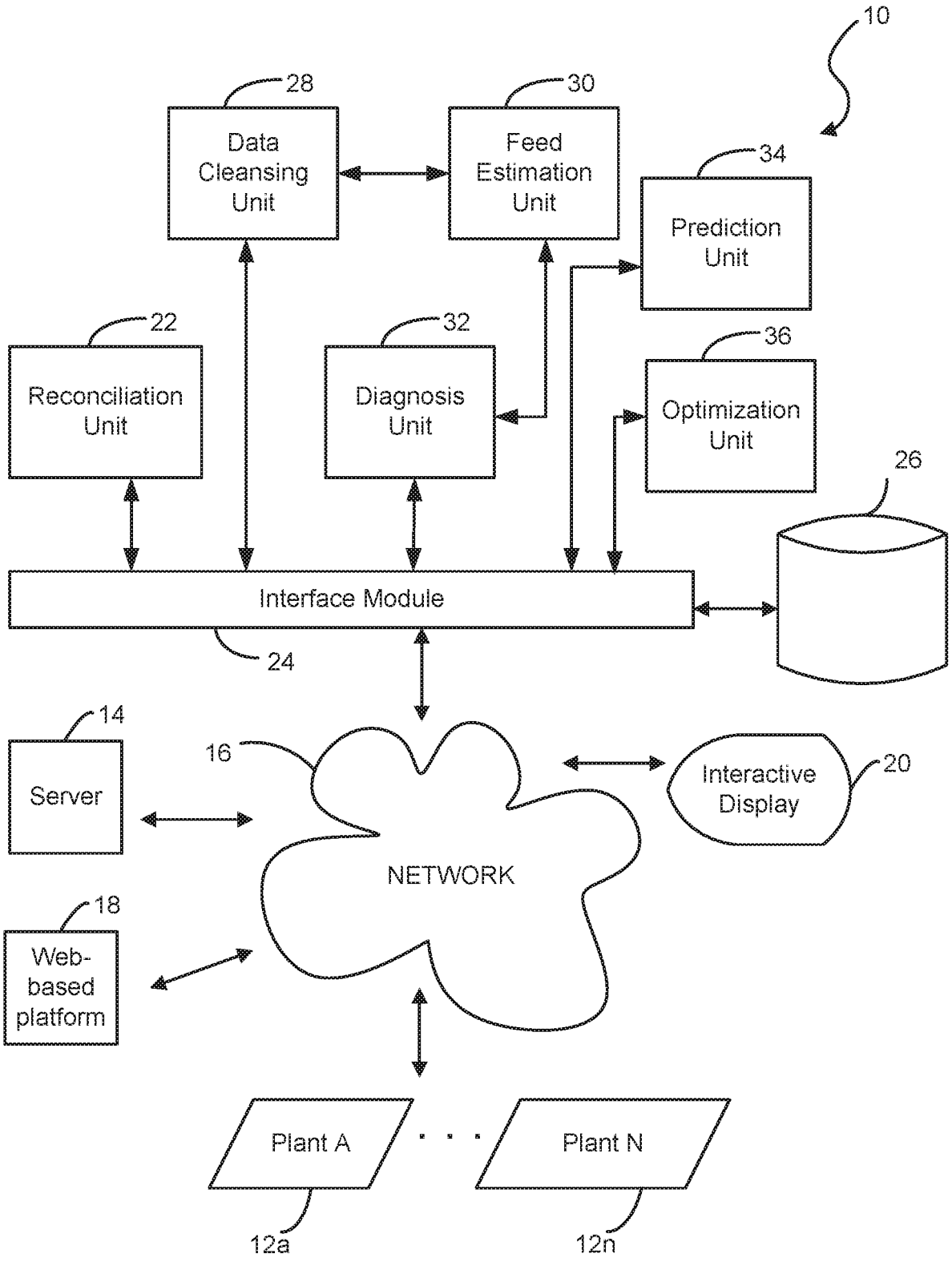

10
28
Data Cleansing Unit
30
Feed Estimation Unit
34
Prediction Unit
22
Reconciliation Unit
32
Diagnosis Unit
36
Optimization Unit
26
Interface Module
24
14
Server
16
NETWORK
Interactive Display
20
18
Web-based platform
Plant A
Plant N
12a
12n

FIG. 2

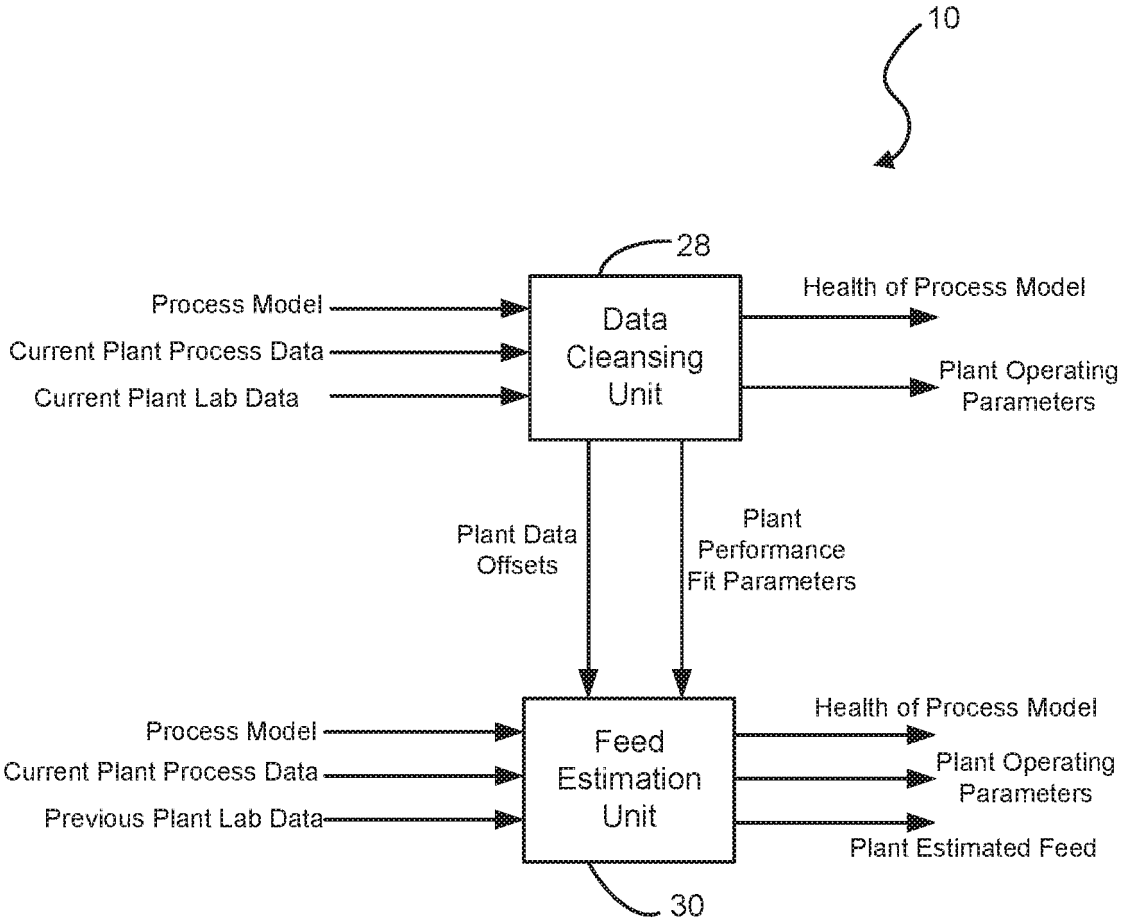

10
28
Process Model
Current Plant Process Data
Current Plant Lab Data
Data Cleansing Unit
Health of Process Model
Plant Operating Parameters
Plant Data Offsets
Plant Performance Fit Parameters
Process Model
Current Plant Process Data
Previous Plant Lab Data
Feed Estimation Unit
Health of Process Model
Plant Operating Parameters
Plant Estimated Feed
30

FIG. 3

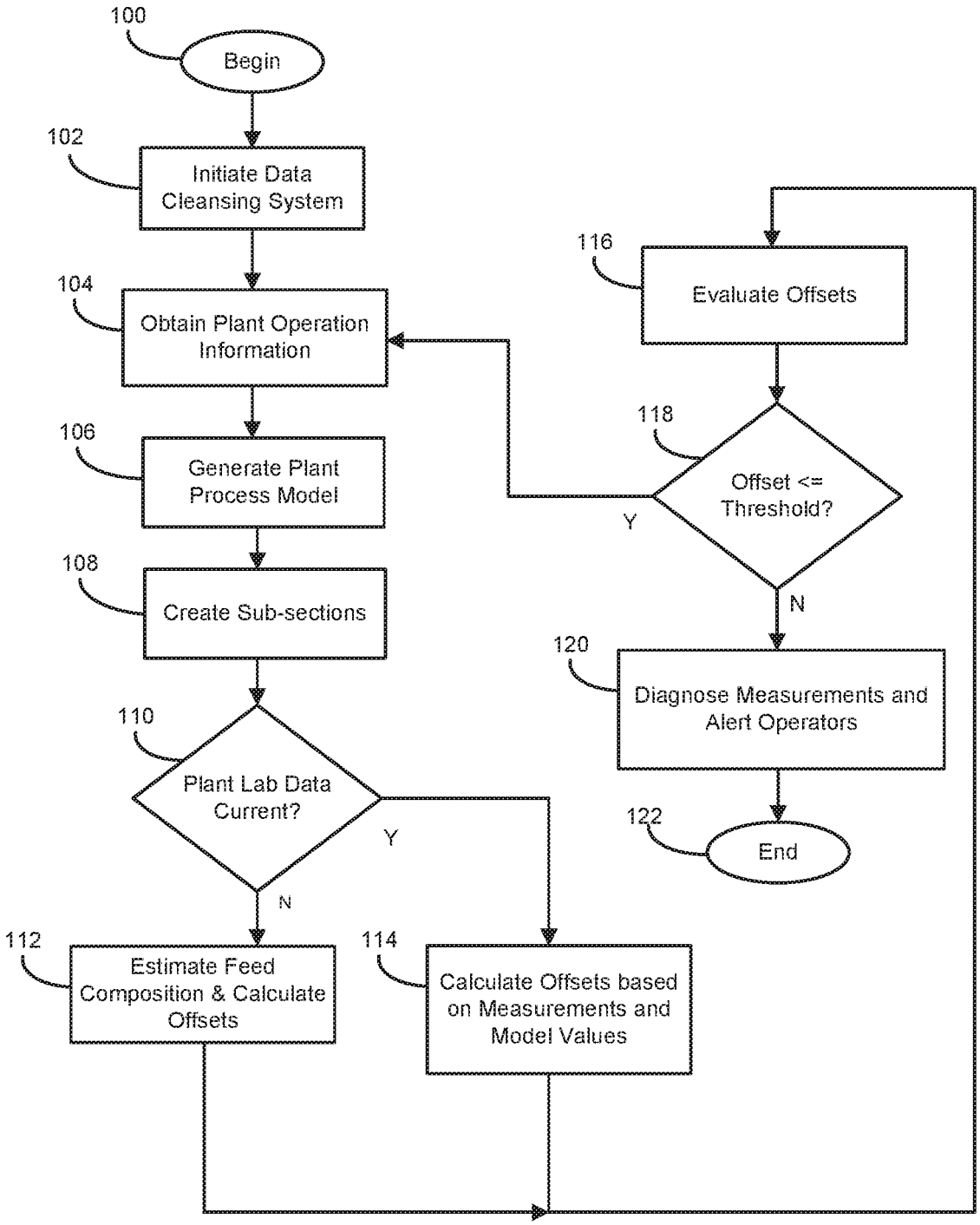

100
Begin
102
Initiate Data Cleansing System
104
Obtain Plant Operation Information
106
Generate Plant Process Model
108
Create Sub-sections
110
Plant Lab Data Current?
Y
N
112
Estimate Feed Composition & Calculate Offsets
114
Calculate Offsets based on Measurements and Model Values
116
Evaluate Offsets
118
Offset <= Threshold?
Y
N
120
Diagnose Measurements and Alert Operators
122
End

FIG. 4