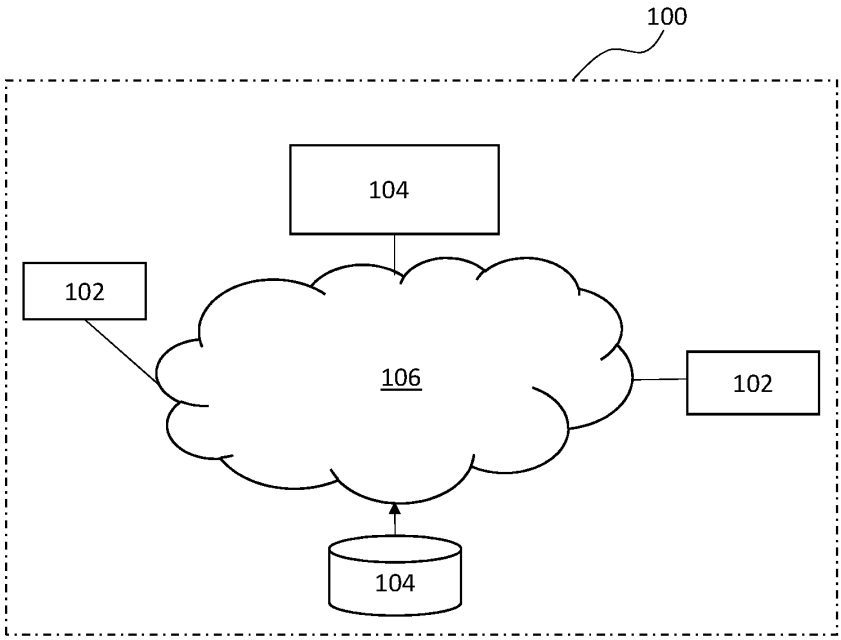

Fig.1

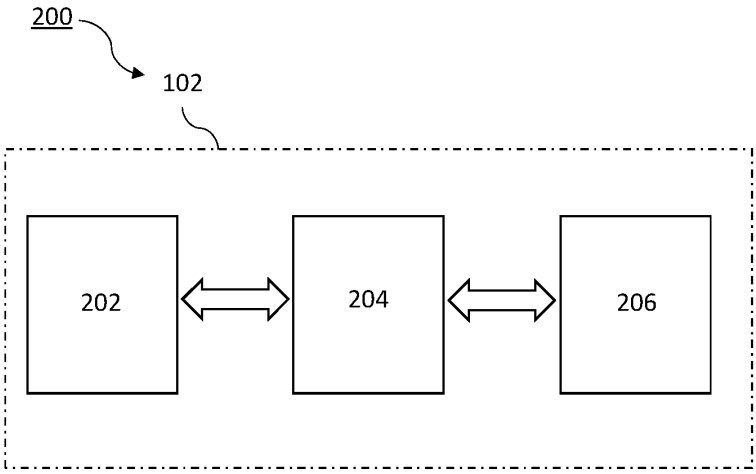

Fig.2

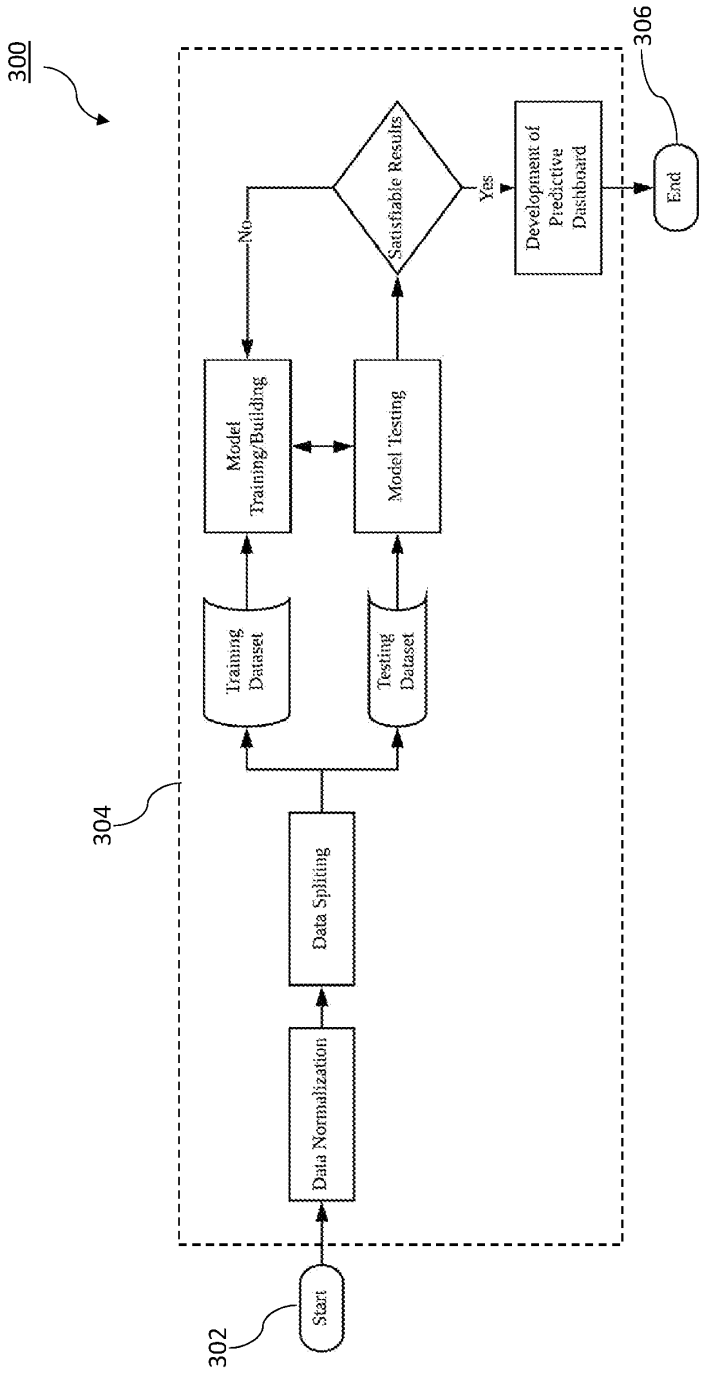
300
306
304
302
Start
Data Normalization
Data Splitting
Training Dataset
Testing Dataset
Model Training/Building
Model Testing
Satisfiable Results
No
Yes
Development of Predictive Dashboard
End

Fig.3

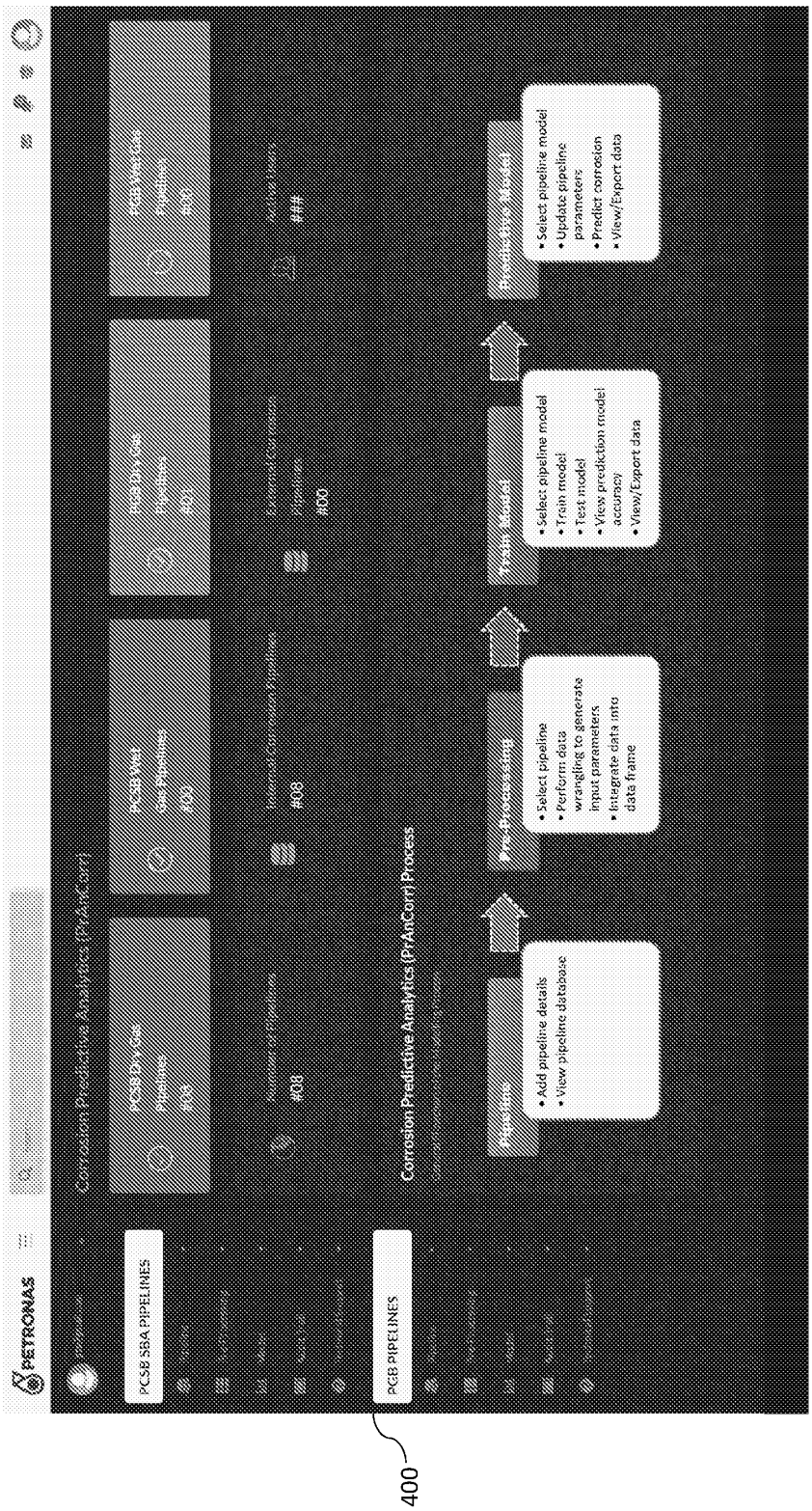
PETRONAS
PCSB SBA PIPELINES
PCB PIPELINES
Corrosion Predictive Analytics (PrAnCorr) Process
Pipeline
• Add pipeline details
• View pipeline database
Pre-Processing
• Select pipeline
• Perform data wrangling to generate input parameters
• Integrate data into data frame
Train Model
• Select pipeline model
• Train model
• Test model
• View prediction model accuracy
• View/Export data
Prediction Model
• Select pipeline model
• Update pipeline parameters
• Predict corrosion
• View/Export data
400

Fig.4

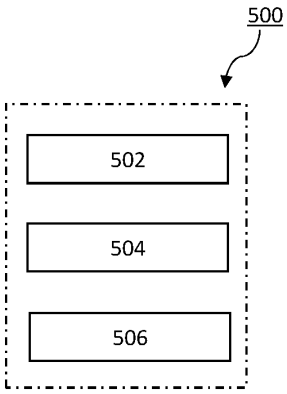

Fig.5