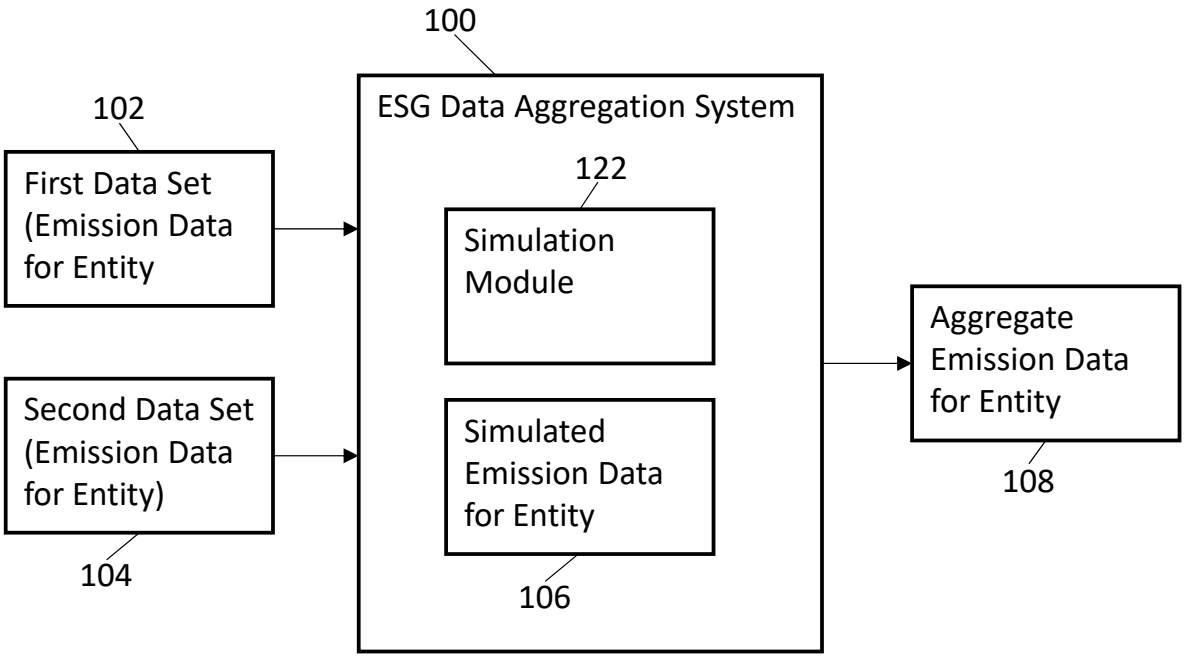
100
ESG Data Aggregation System
102
First Data Set (Emission Data for Entity
122
Simulation Module
Second Data Set (Emission Data for Entity)
Simulated Emission Data for Entity
Aggregate Emission Data for Entity
104
106
108

FIG.1

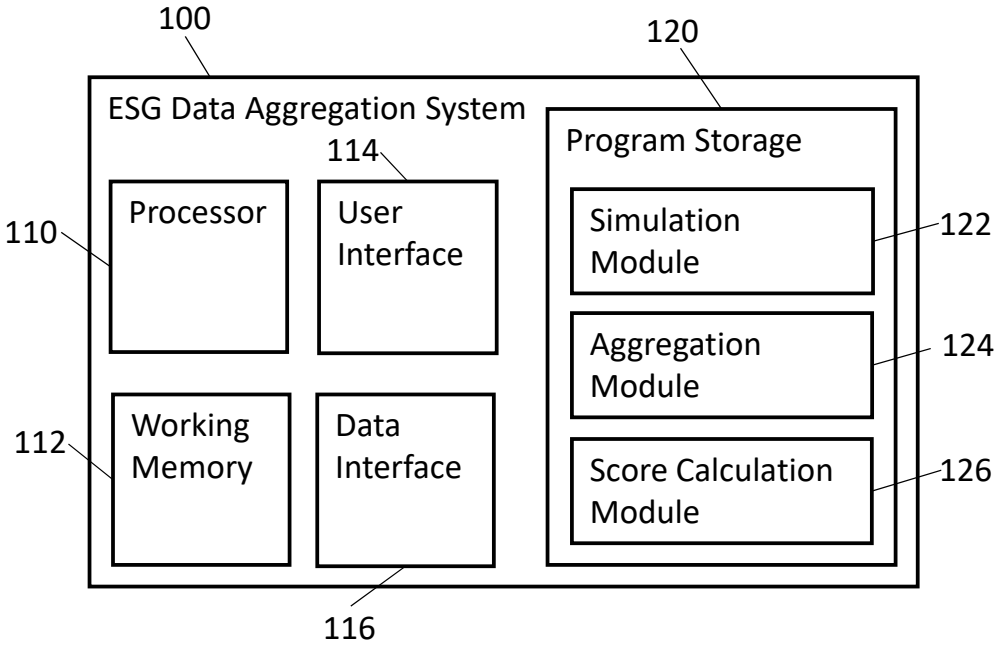
100
120
ESG Data Aggregation System
Program Storage
114
Processor
User Interface
Simulation Module
110
122
Aggregation Module
124
Working Memory
Data Interface
112
Score Calculation Module
126
116

FIG.2

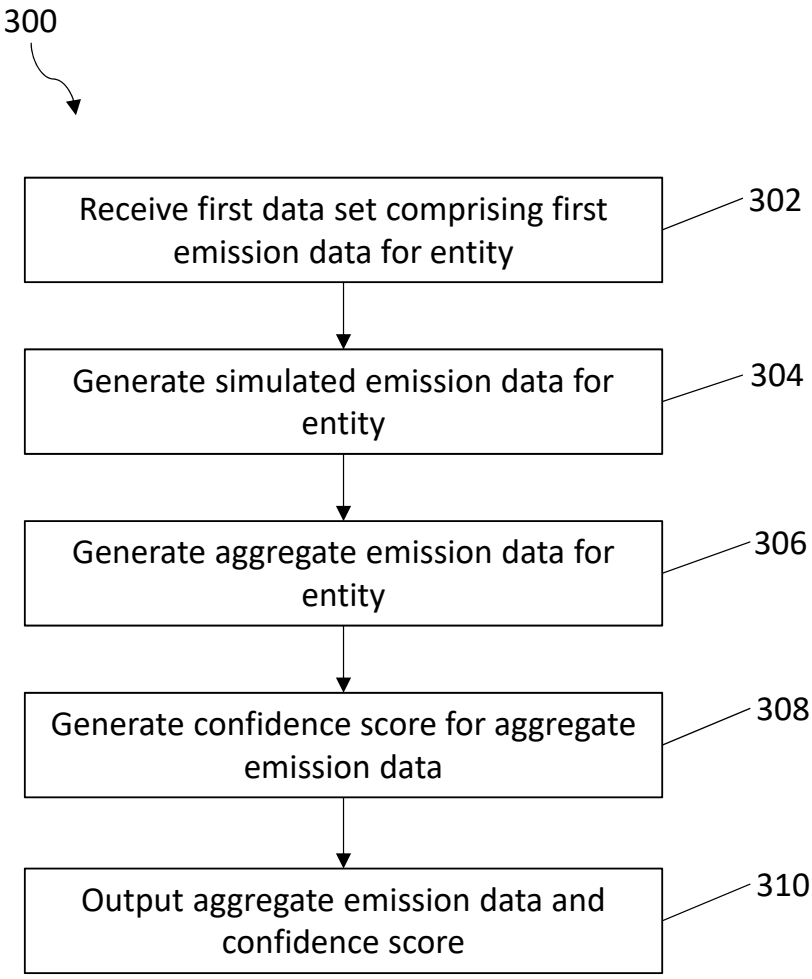
300
Receive first data set comprising first emission data for entity
302
Generate simulated emission data for entity
304
Generate aggregate emission data for entity
306
Generate confidence score for aggregate emission data
308
Output aggregate emission data and confidence score
310

FIG.3

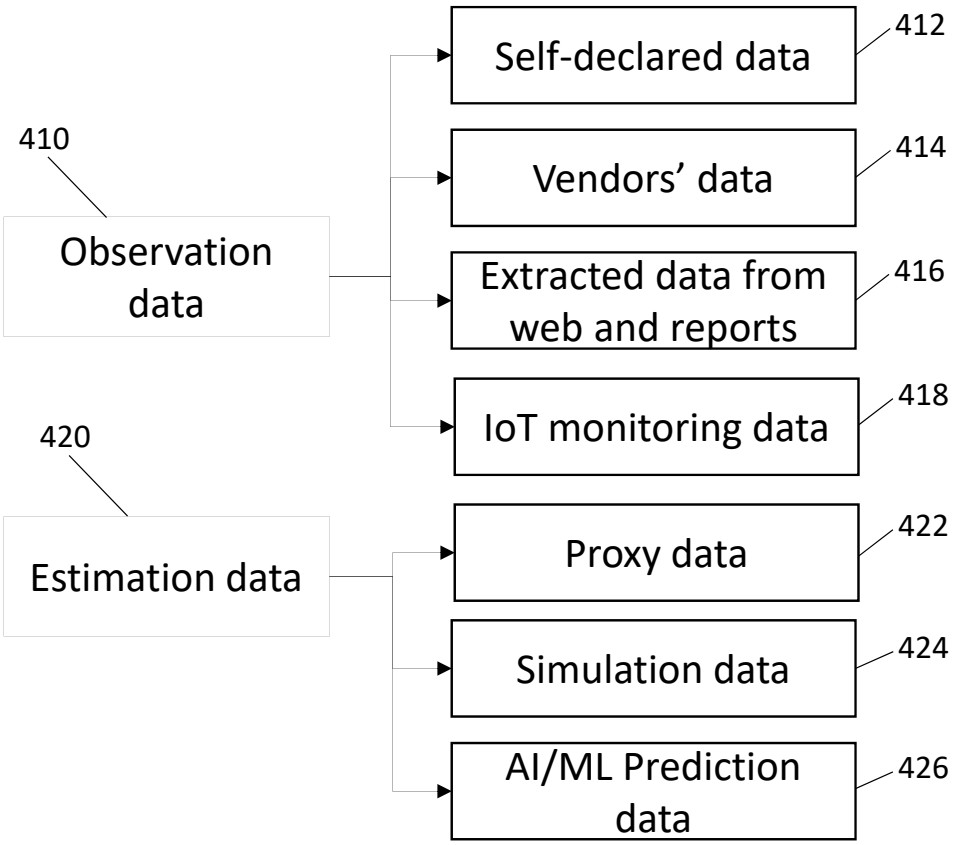
410
Observation data
420
Estimation data
Self-declared data
412
Vendors' data
414
Extracted data from web and reports
416
IoT monitoring data
418
Proxy data
422
Simulation data
424
AI/ML Prediction data
426

FIG.4

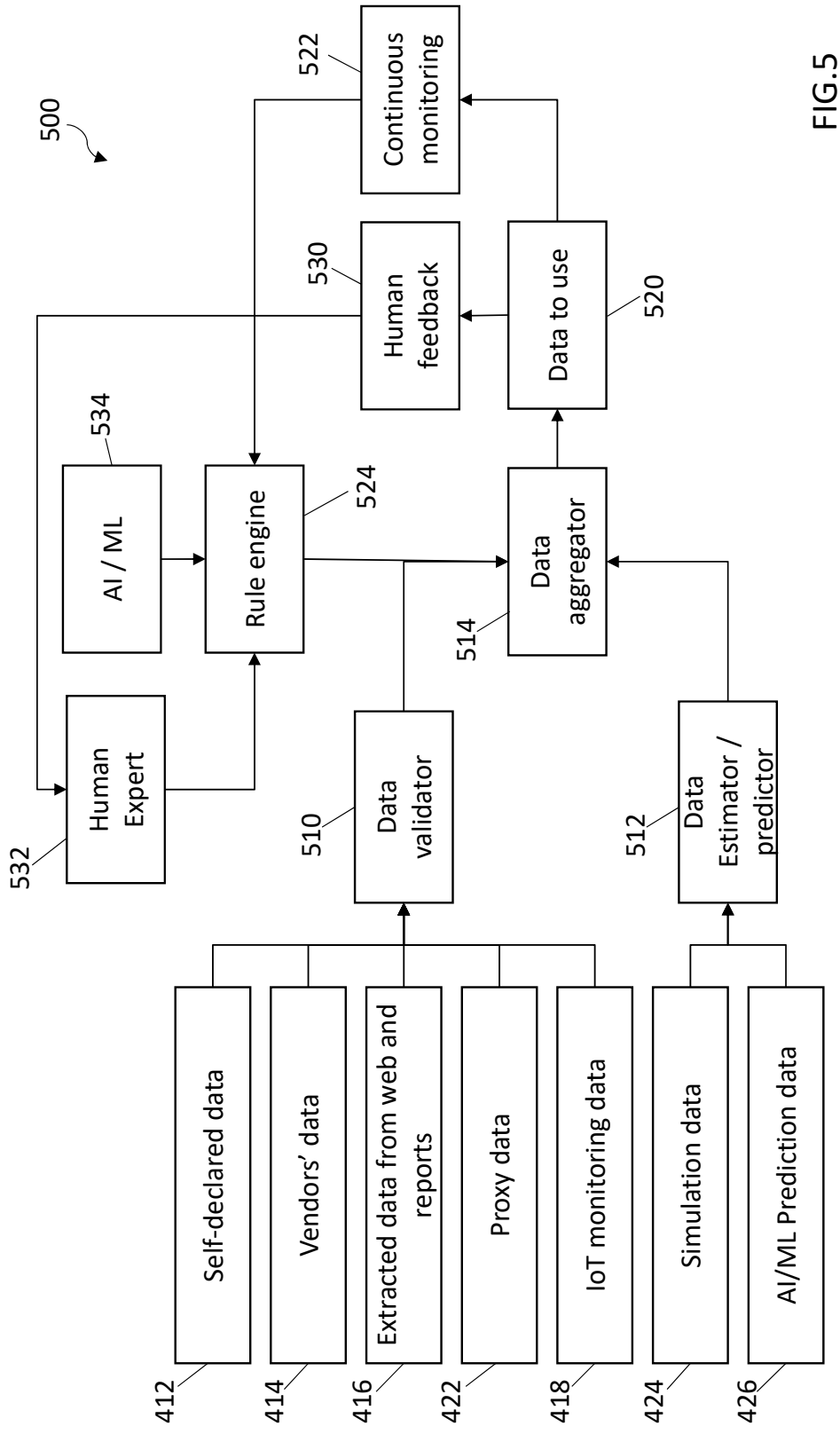
500
522
Continuous monitoring
530
Human feedback
520
Data to use
534
AI / ML
524
Rule engine
514
Data aggregator
532
Human Expert
510
Data validator
512
Data Estimator / predictor
412
Self-declared data
414
Vendors' data
416
Extracted data from web and reports
422
Proxy data
418
IoT monitoring data
424
Simulation data
426
AI/ML Prediction data

FIG.5

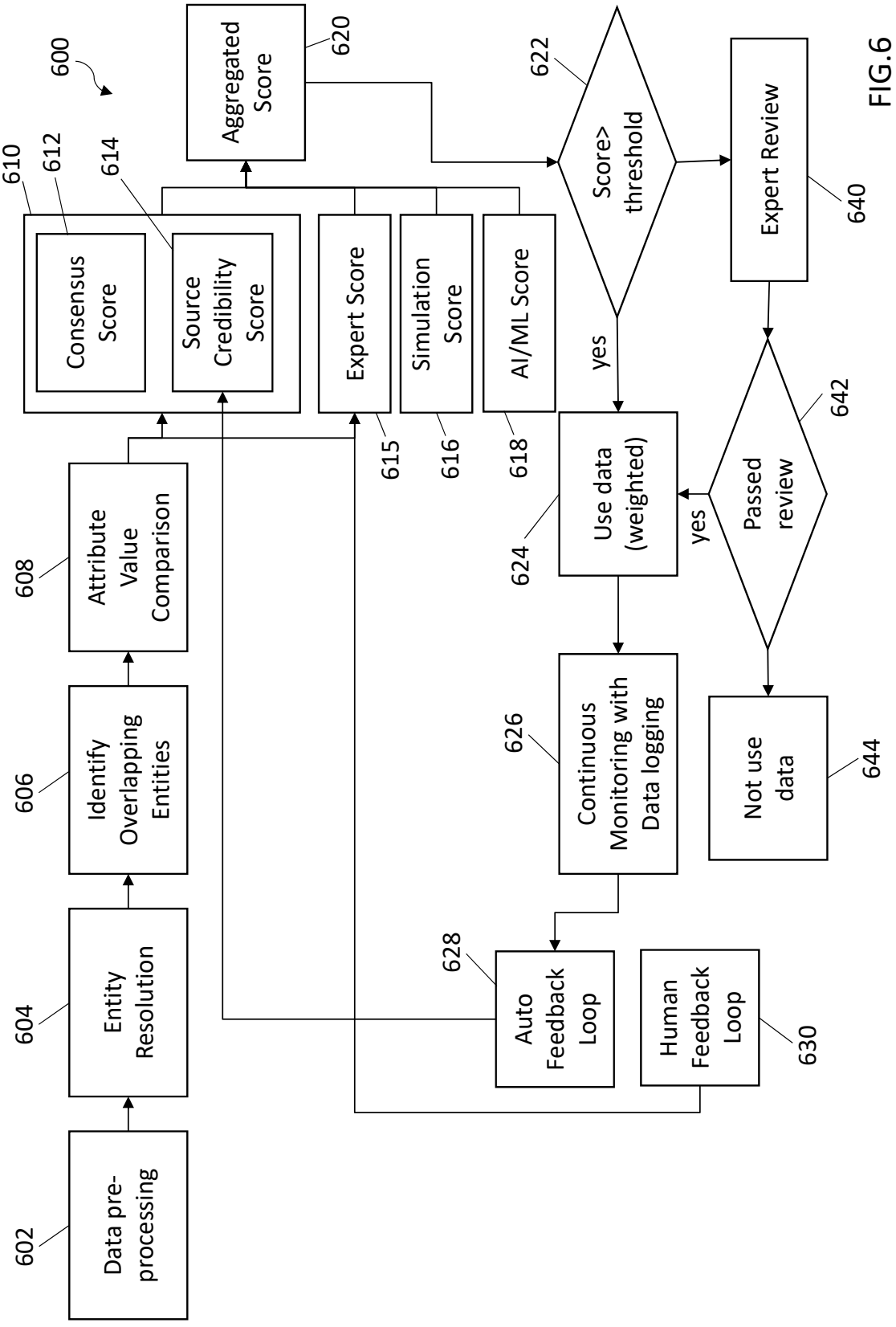
600
602
Data pre-processing
604
Entity Resolution
606
Identify Overlapping Entities
608
Attribute Value Comparison
610
Consensus Score
612
614
Source Credibility Score
615
Expert Score
616
Simulation Score
618
AI/ML Score
620
Aggregated Score
622
Score> threshold
yes
624
Use data (weighted)
626
Continuous Monitoring with Data logging
628
Auto Feedback Loop
630
Human Feedback Loop
640
Expert Review
642
Passed review
yes
644
Not use data

FIG.6