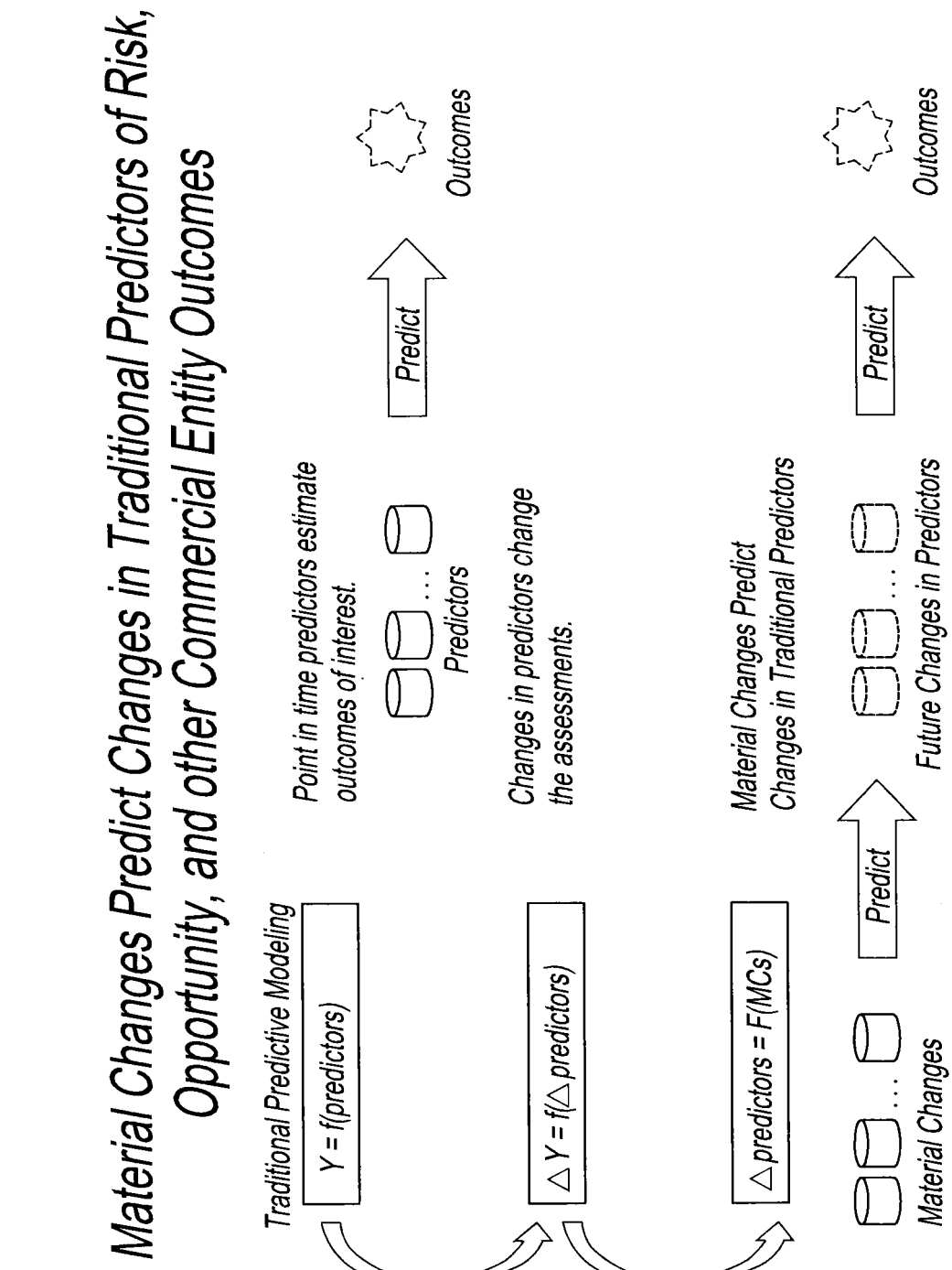

Material Changes Predict Changes in Traditional Predictors of Risk, Opportunity, and other Commercial Entity Outcomes
Traditional Predictive Modeling
Y = f(predictors)
Point in time predictors estimate outcomes of interest.
Predictors
Predict
Outcomes
Δ Y = f(Δ predictors)
Changes in predictors change the assessments.
Δ predictors = F(MCs)
Material Changes Predict Changes in Traditional Predictors
Predict
Outcomes
Material Changes
Predict
Future Changes in Predictors

FIG. 1

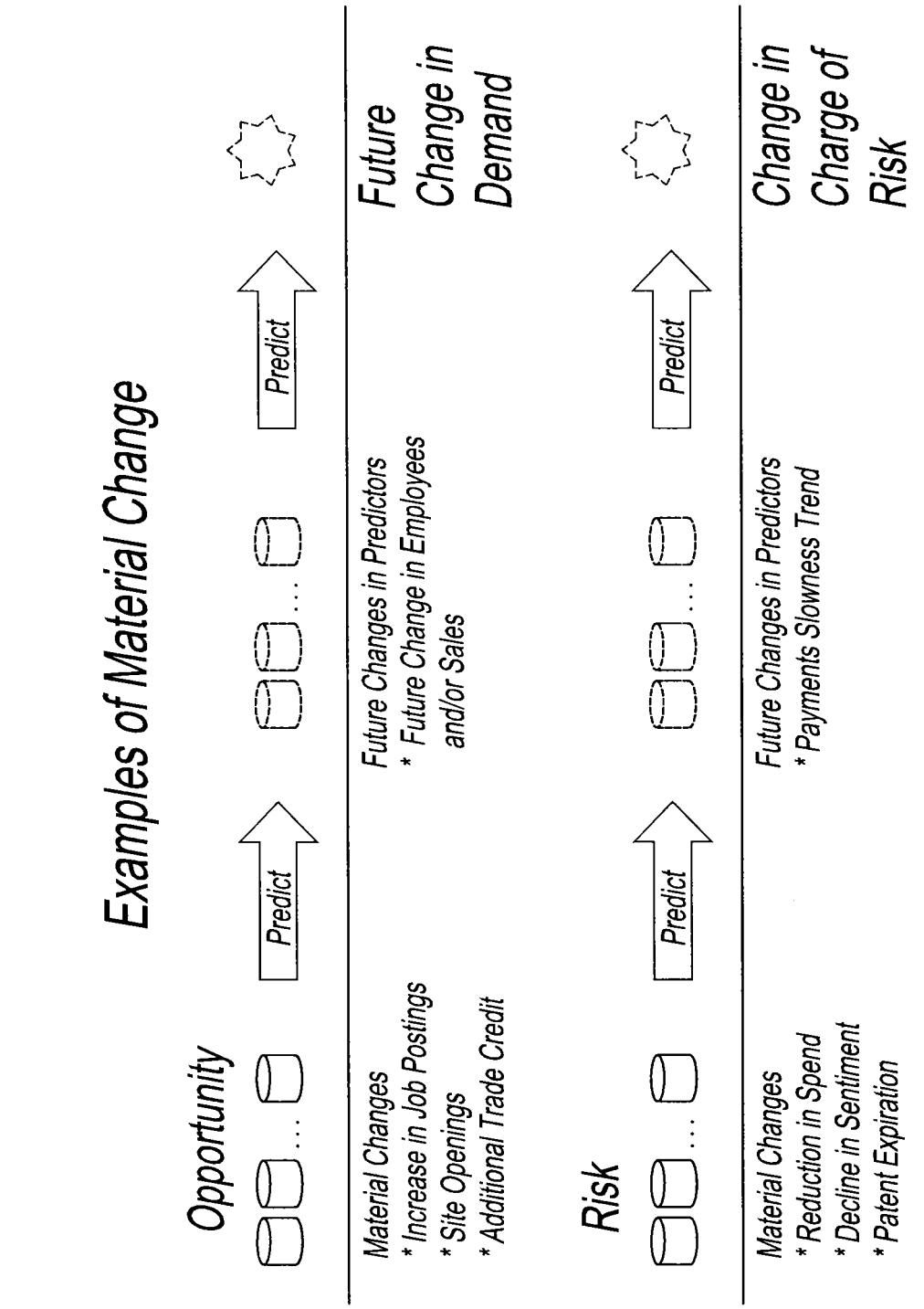

Examples of Material Change
Opportunity
Predict
Predict
Material Changes
* Increase in Job Postings
* Site Openings
* Additional Trade Credit
Future Changes in Predictors
* Future Change in Employees and/or Sales
Future Change in Demand
Risk
Predict
Predict
Material Changes
* Reduction in Spend
* Decline in Sentiment
* Patent Expiration
Future Changes in Predictors
* Payments Slowness Trend
Change in Charge of Risk

FIG. 2

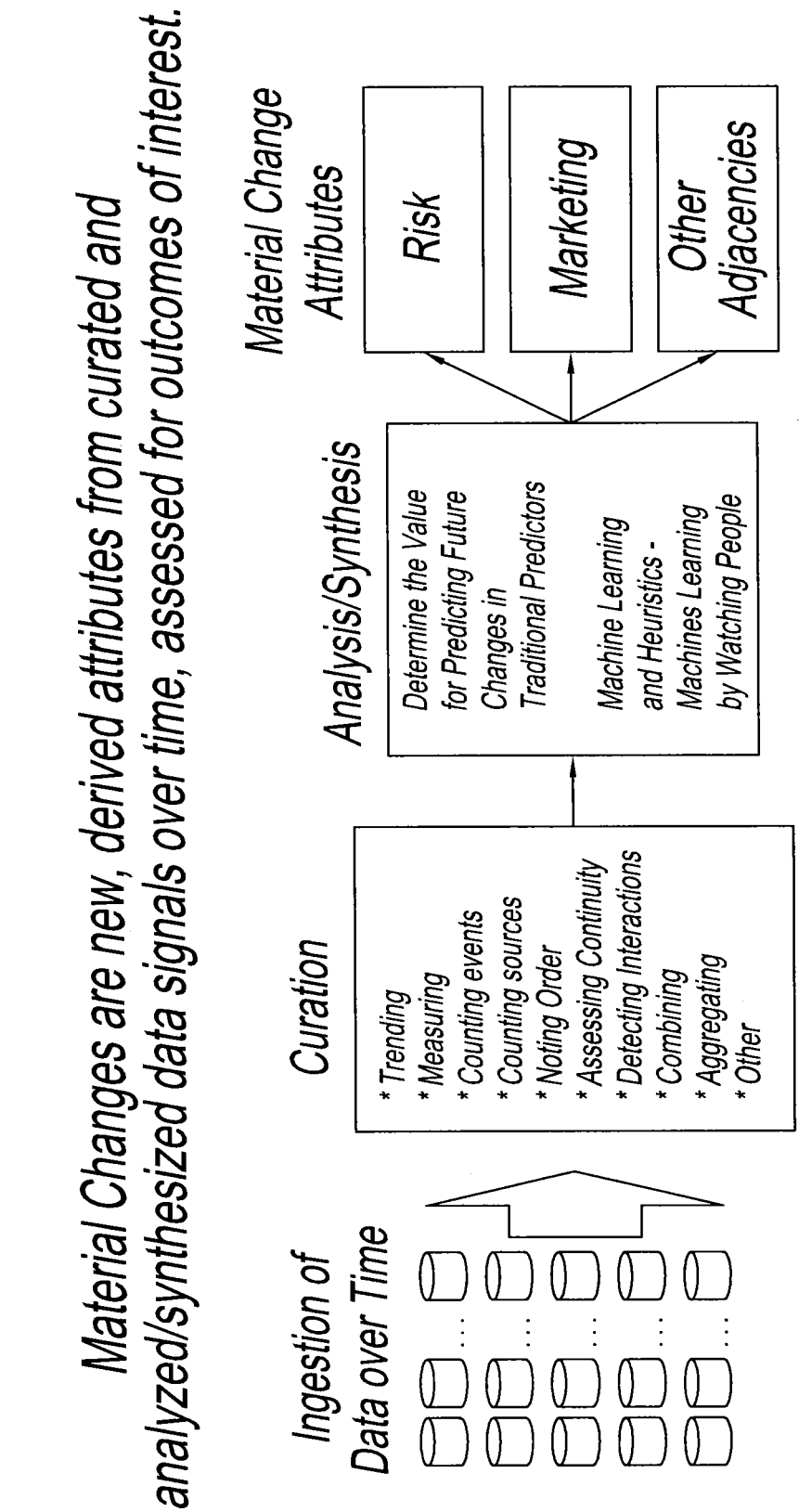

Material Changes are new, derived attributes from curated and analyzed/synthesized data signals over time, assessed for outcomes of interest.
Ingestion of Data over Time
Curation
* Trending
* Measuring
* Counting events
* Counting sources
* Noting Order
* Assessing Continuity
* Detecting Interactions
* Combining
* Aggregating
* Other
Analysis/Synthesis
Determine the Value for Predicting Future Changes in Traditional Predictors
Machine Learning and Heuristics - Machines Learning by Watching People
Material Change Attributes
Risk
Marketing
Other Adjacencies

FIG. 3

Discovery, curation and synthesis processes will include learning and sensing techniques to address aspects of massive data, as well as proprietary techniques to adjudicate veracity and precedence

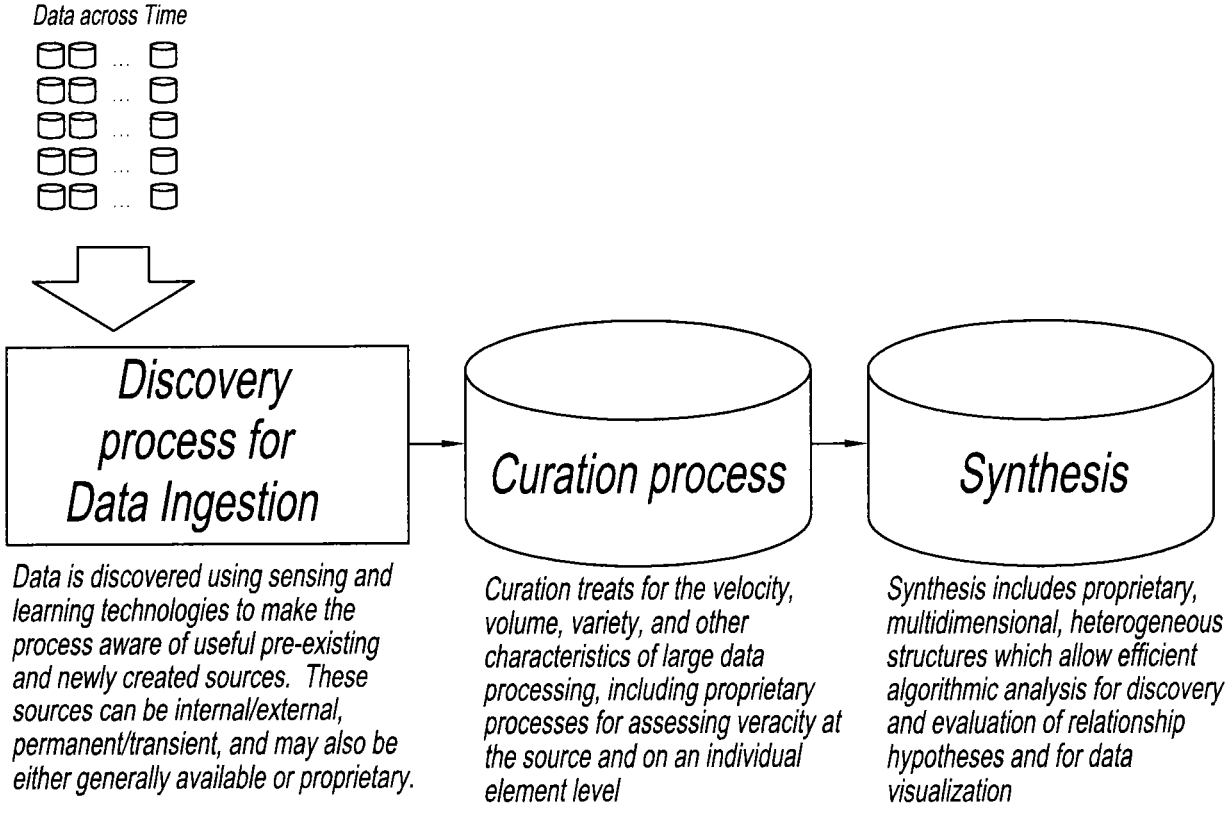


FIG. 4

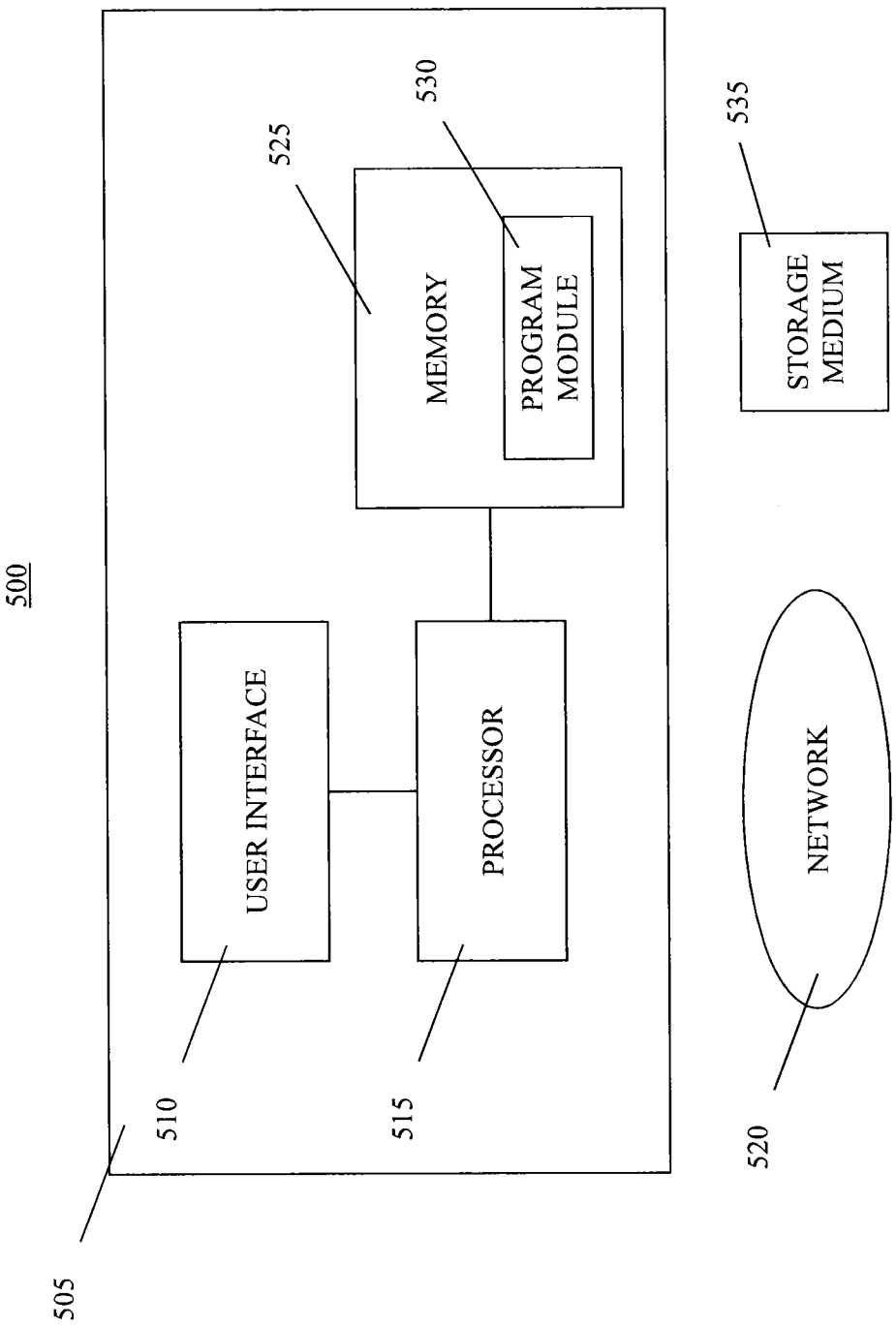

500
505
510
USER INTERFACE
515
PROCESSOR
525
MEMORY
530
PROGRAM MODULE
535
STORAGE MEDIUM
520
NETWORK

FIG. 5

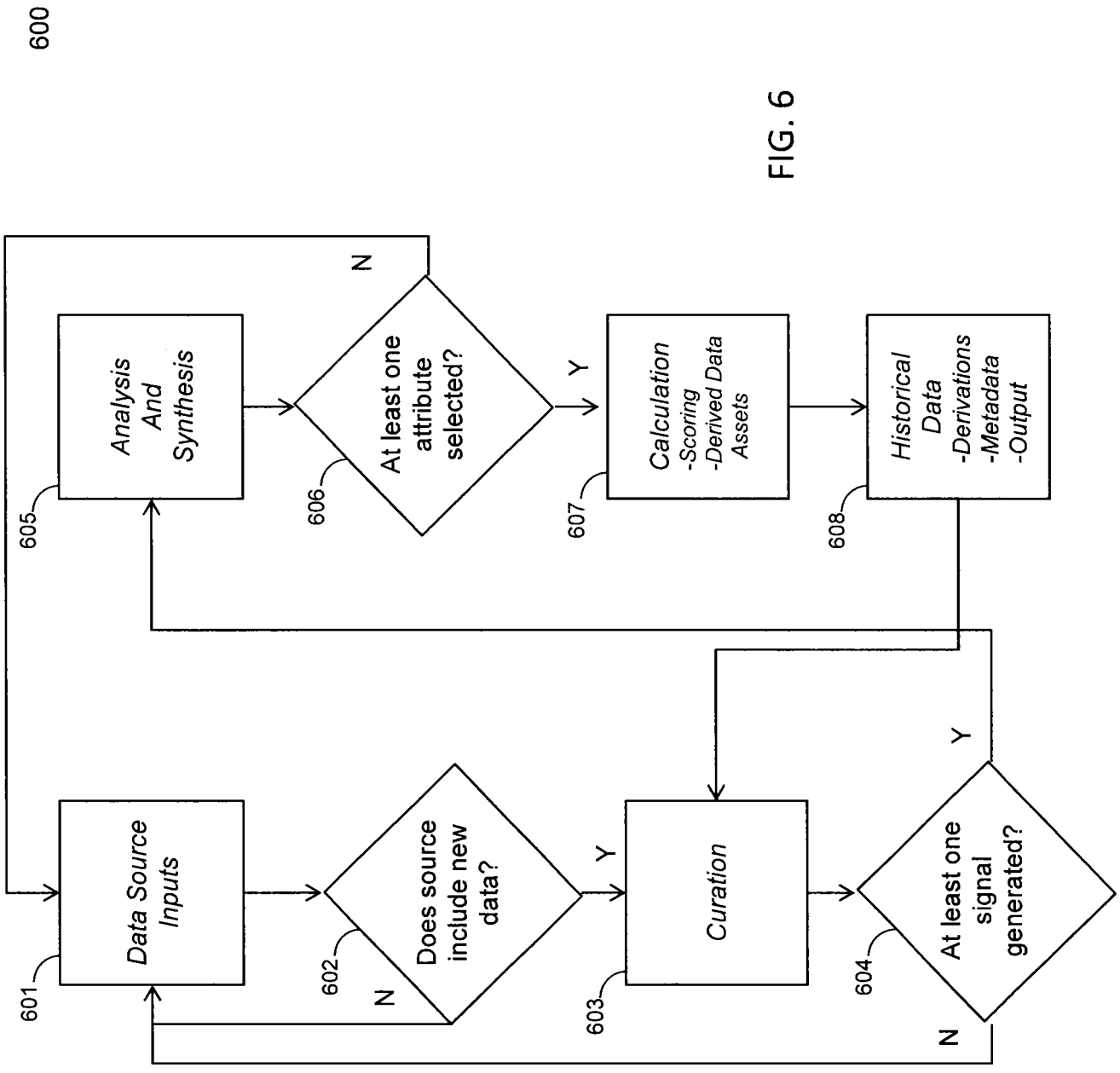

600
Data Source Inputs
601
Does source include new data?
602
N
Y
Curation
603
At least one signal generated?
604
Y
N
Analysis And Synthesis
605
At least one attribute selected?
606
N
Y
Calculation -Scoring -Derived Data Assets
607
Historical Data -Derivations -Metadata -Output
608

FIG. 6