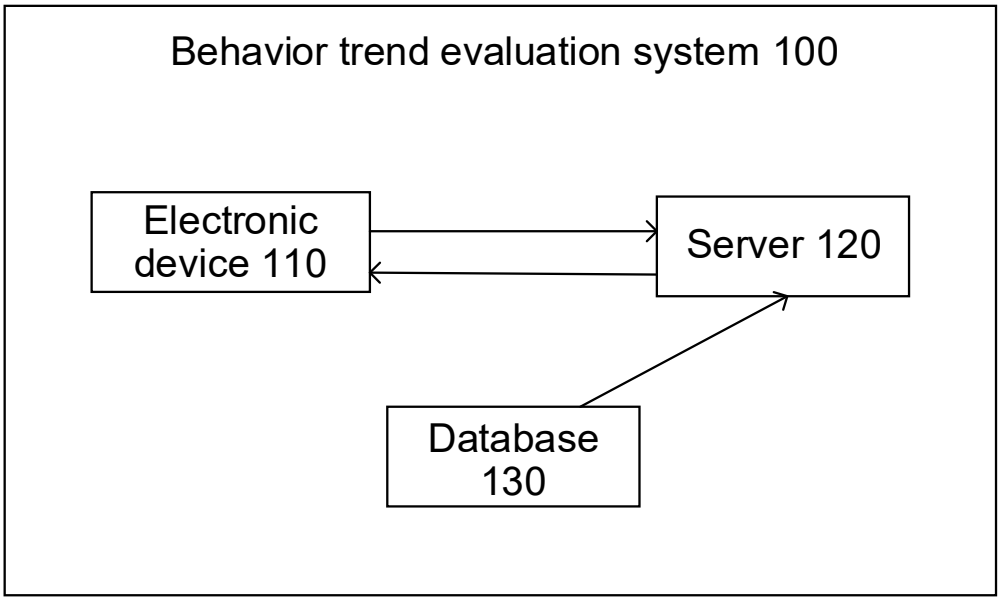

Behavior trend evaluation system 100
Electronic device 110
Server 120
Database 130

FIG. 1

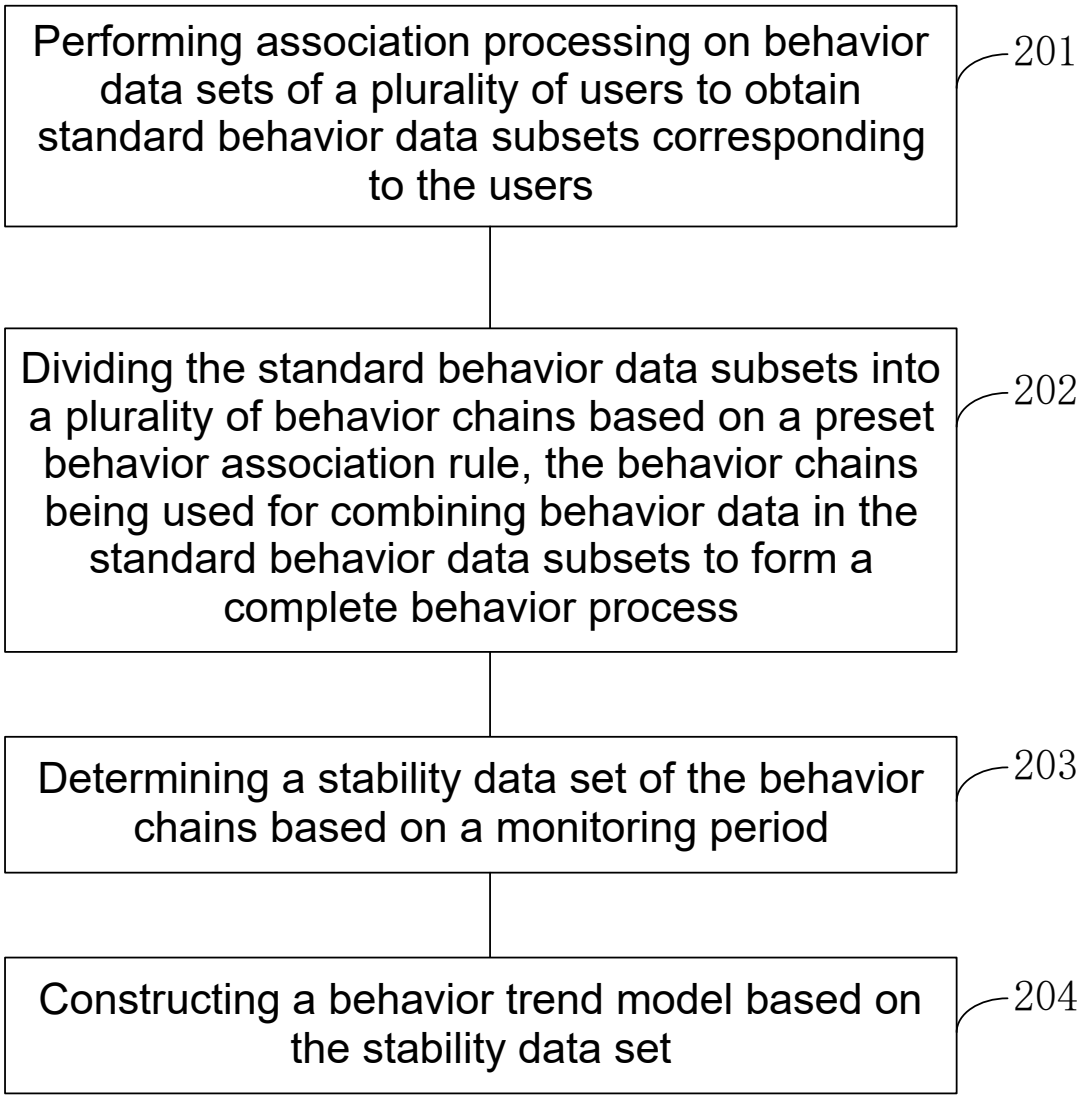

Performing association processing on behavior data sets of a plurality of users to obtain standard behavior data subsets corresponding to the users
201
Dividing the standard behavior data subsets into a plurality of behavior chains based on a preset behavior association rule, the behavior chains being used for combining behavior data in the standard behavior data subsets to form a complete behavior process
202
Determining a stability data set of the behavior chains based on a monitoring period
203
Constructing a behavior trend model based on the stability data set
204

FIG. 2

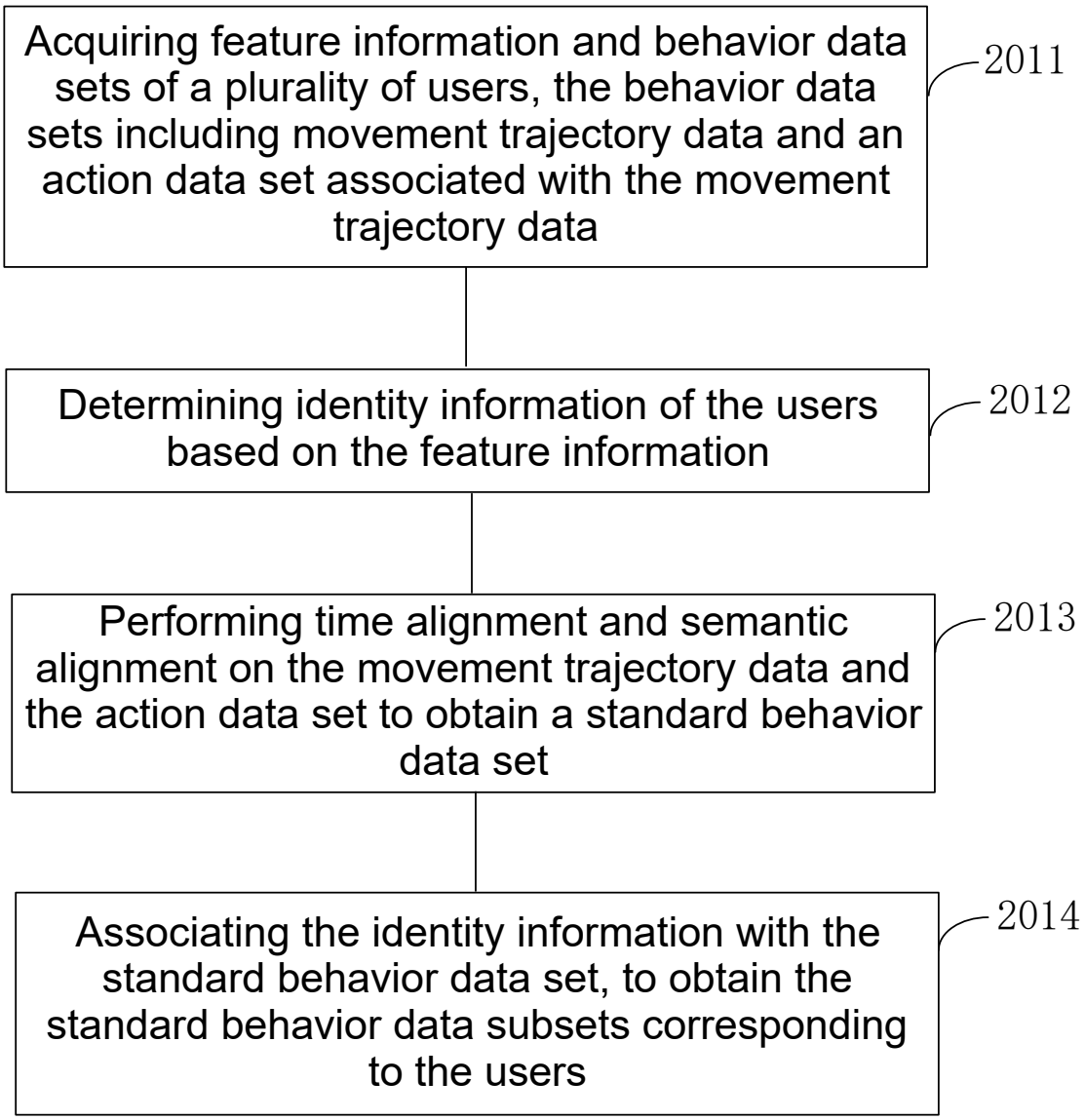

Acquiring feature information and behavior data sets of a plurality of users, the behavior data sets including movement trajectory data and an action data set associated with the movement trajectory data
2011
Determining identity information of the users based on the feature information
2012
Performing time alignment and semantic alignment on the movement trajectory data and the action data set to obtain a standard behavior data set
2013
Associating the identity information with the standard behavior data set, to obtain the standard behavior data subsets corresponding to the users
2014

FIG. 3

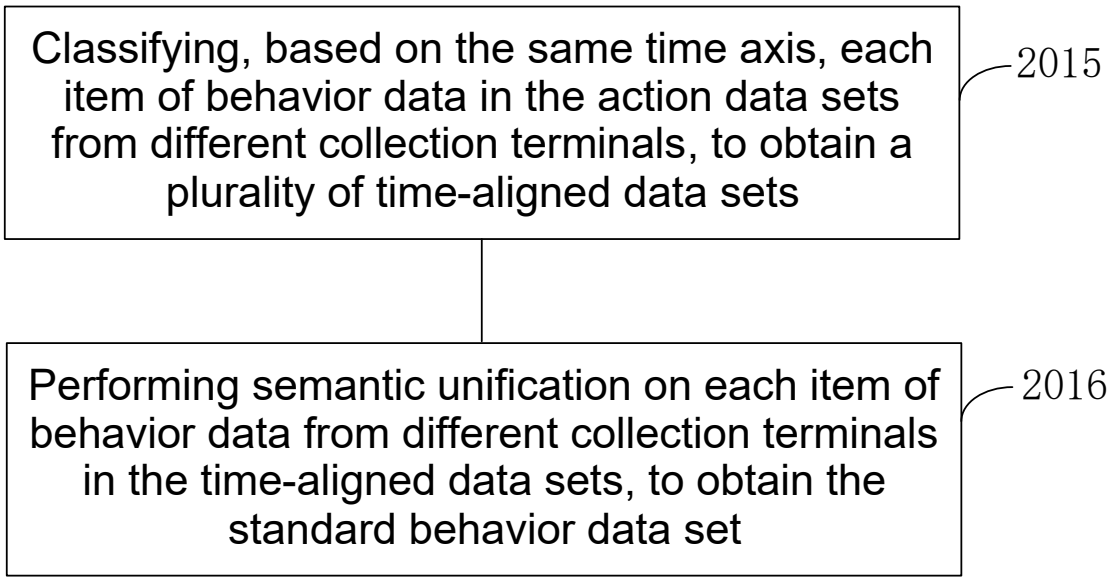

Classifying, based on the same time axis, each item of behavior data in the action data sets from different collection terminals, to obtain a plurality of time-aligned data sets
2015
Performing semantic unification on each item of behavior data from different collection terminals in the time-aligned data sets, to obtain the standard behavior data set
2016

FIG. 4

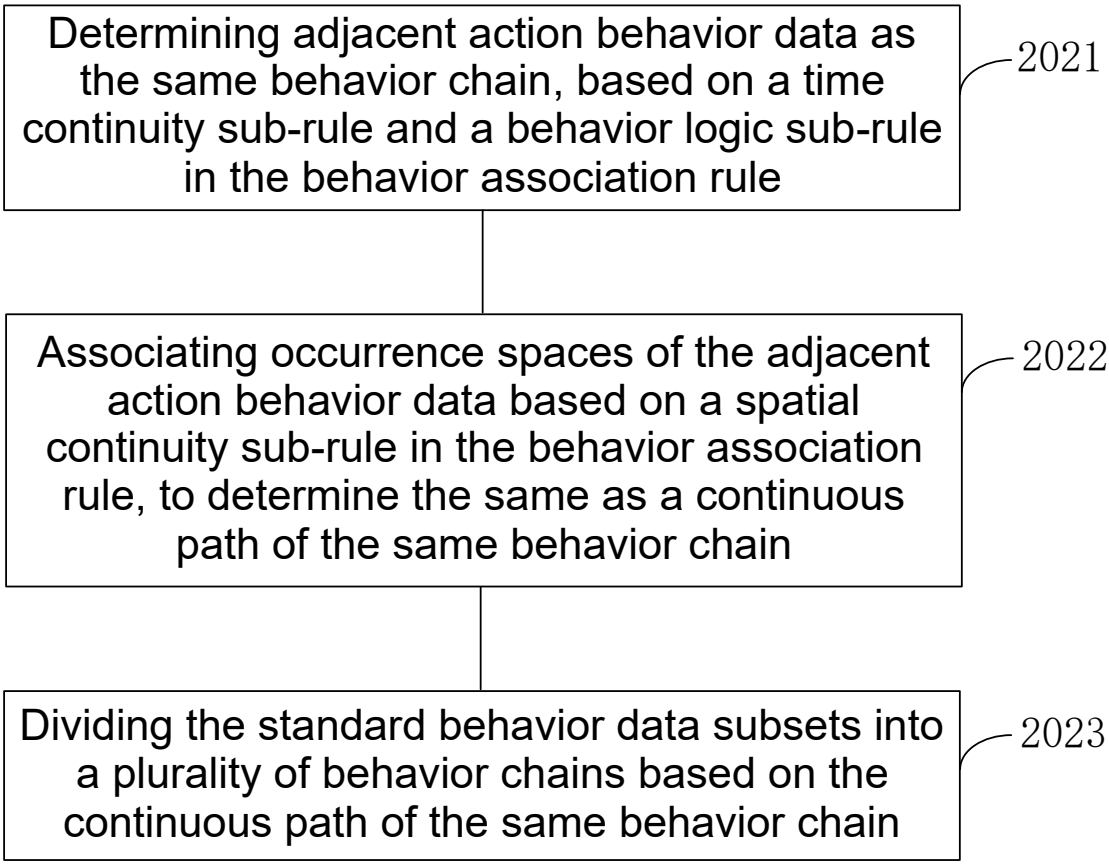

Determining adjacent action behavior data as the same behavior chain, based on a time continuity sub-rule and a behavior logic sub-rule in the behavior association rule
2021
Associating occurrence spaces of the adjacent action behavior data based on a spatial continuity sub-rule in the behavior association rule, to determine the same as a continuous path of the same behavior chain
2022
Dividing the standard behavior data subsets into a plurality of behavior chains based on the continuous path of the same behavior chain
2023

FIG. 5

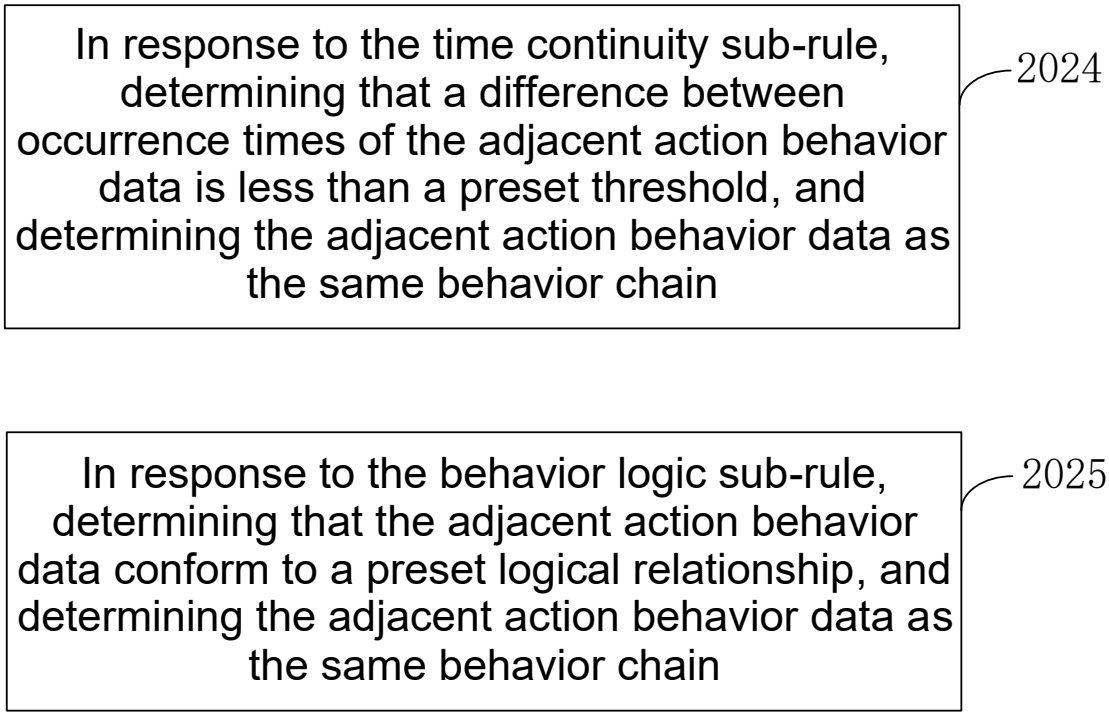

In response to the time continuity sub-rule, determining that a difference between occurrence times of the adjacent action behavior data is less than a preset threshold, and determining the adjacent action behavior data as the same behavior chain
2024
In response to the behavior logic sub-rule, determining that the adjacent action behavior data conform to a preset logical relationship, and determining the adjacent action behavior data as the same behavior chain
2025

FIG. 6

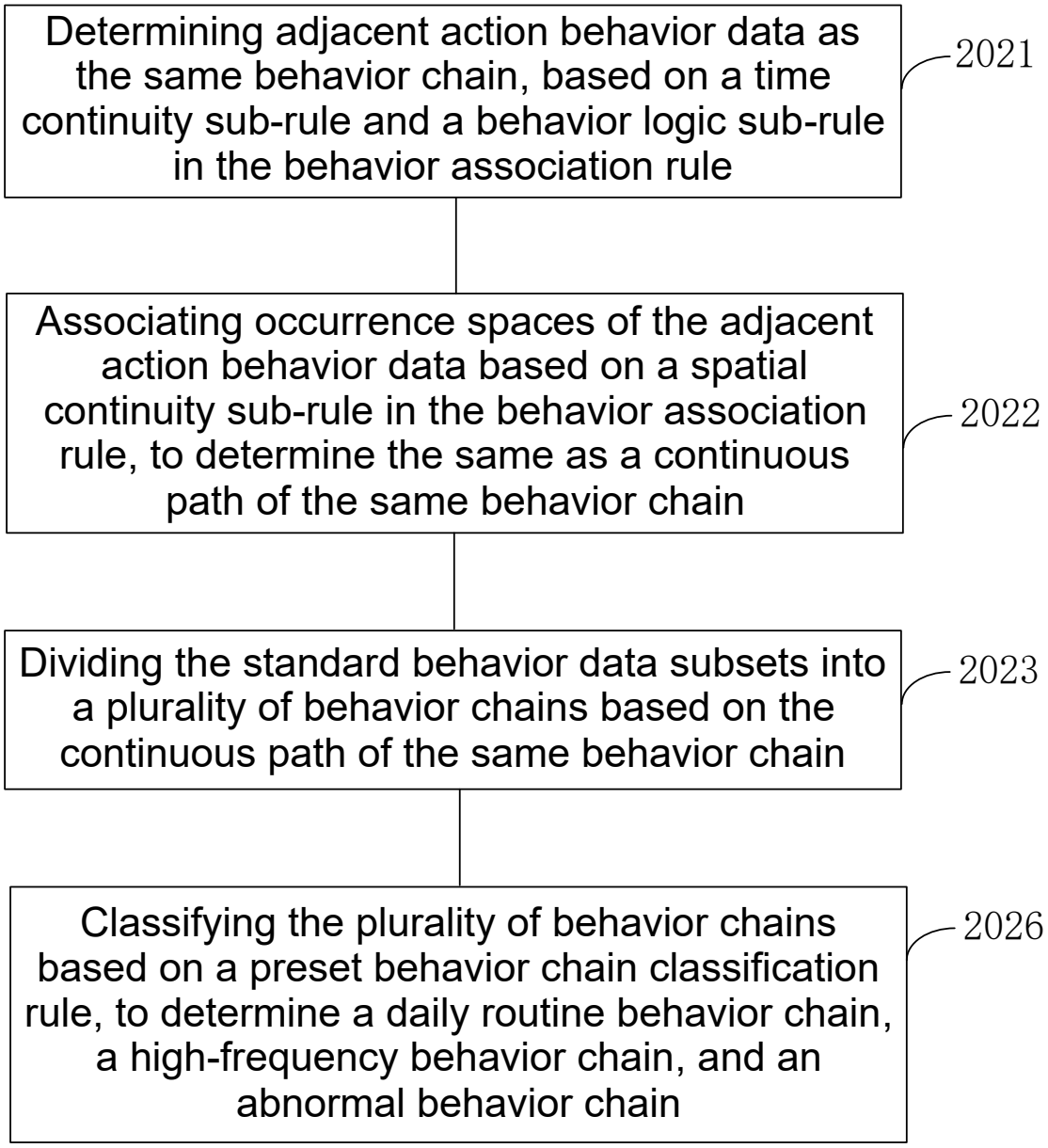

Determining adjacent action behavior data as the same behavior chain, based on a time continuity sub-rule and a behavior logic sub-rule in the behavior association rule
2021
Associating occurrence spaces of the adjacent action behavior data based on a spatial continuity sub-rule in the behavior association rule, to determine the same as a continuous path of the same behavior chain
2022
Dividing the standard behavior data subsets into a plurality of behavior chains based on the continuous path of the same behavior chain
2023
Classifying the plurality of behavior chains based on a preset behavior chain classification rule, to determine a daily routine behavior chain, a high-frequency behavior chain, and an abnormal behavior chain
2026

FIG. 7

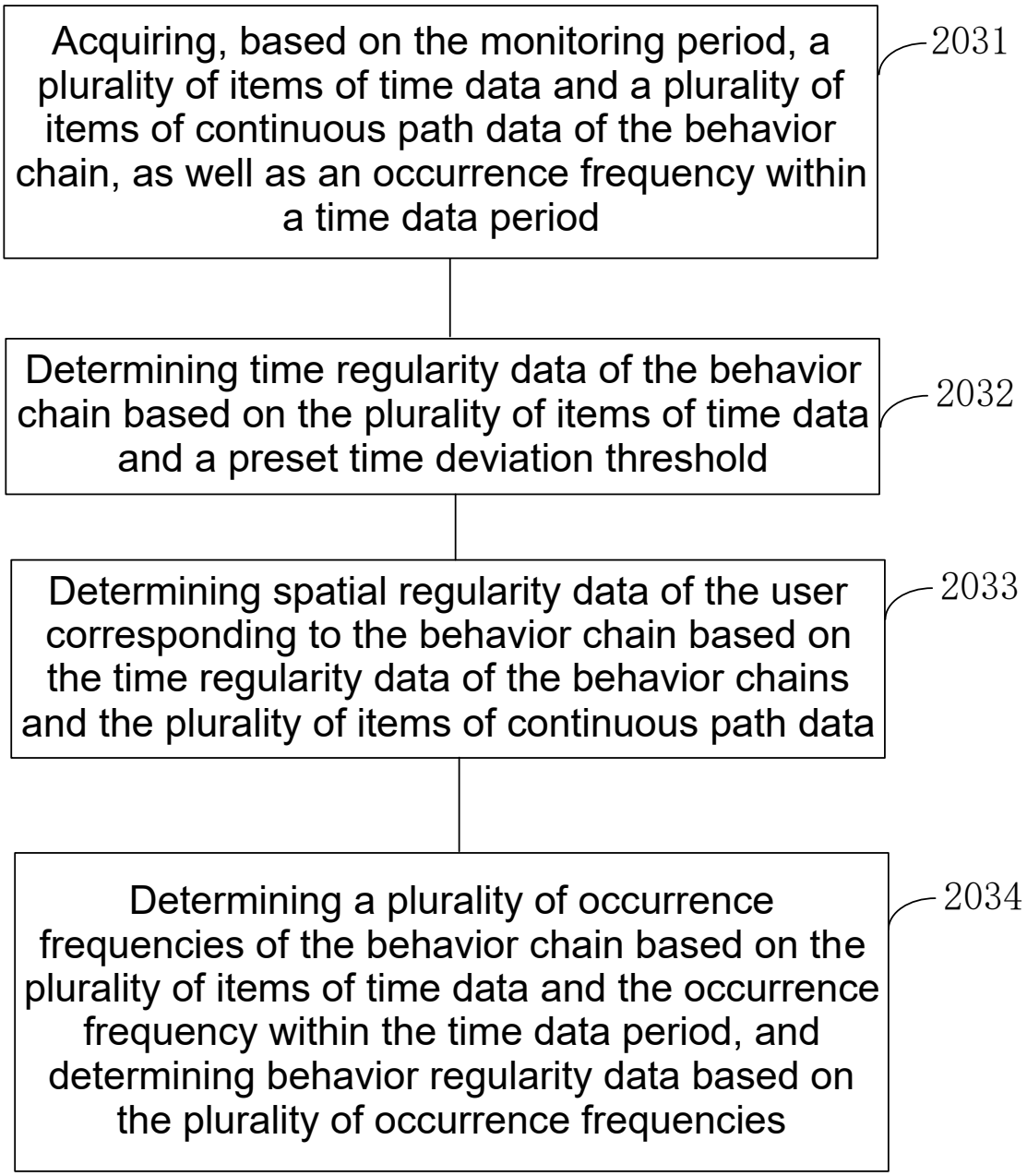

Acquiring, based on the monitoring period, a plurality of items of time data and a plurality of items of continuous path data of the behavior chain, as well as an occurrence frequency within a time data period
2031
Determining time regularity data of the behavior chain based on the plurality of items of time data and a preset time deviation threshold
2032
Determining spatial regularity data of the user corresponding to the behavior chain based on the time regularity data of the behavior chains and the plurality of items of continuous path data
2033
Determining a plurality of occurrence frequencies of the behavior chain based on the plurality of items of time data and the occurrence frequency within the time data period, and determining behavior regularity data based on the plurality of occurrence frequencies
2034

FIG. 8

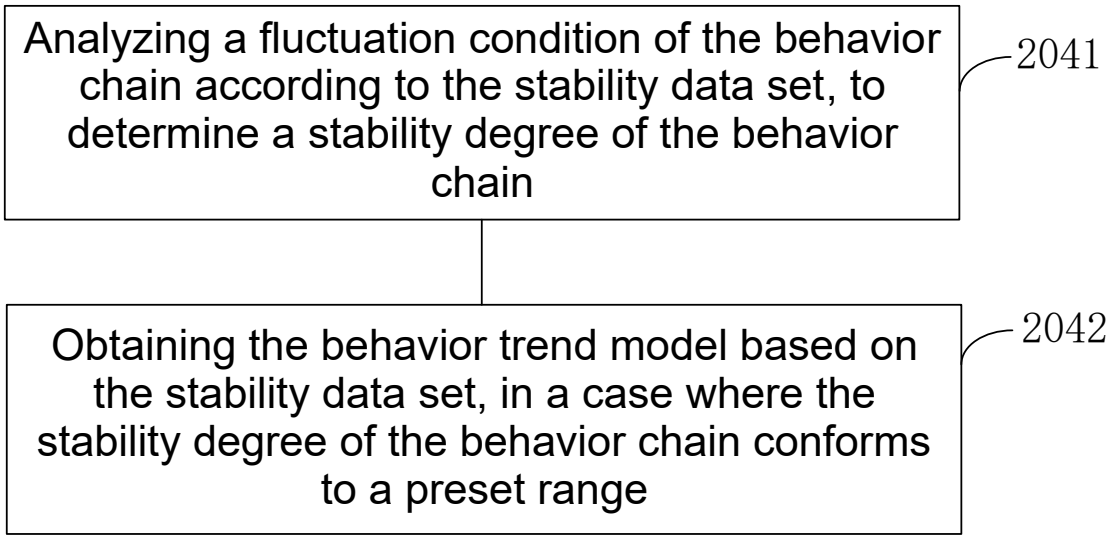

Analyzing a fluctuation condition of the behavior chain according to the stability data set, to determine a stability degree of the behavior chain
2041
Obtaining the behavior trend model based on the stability data set, in a case where the stability degree of the behavior chain conforms to a preset range
2042

FIG. 9

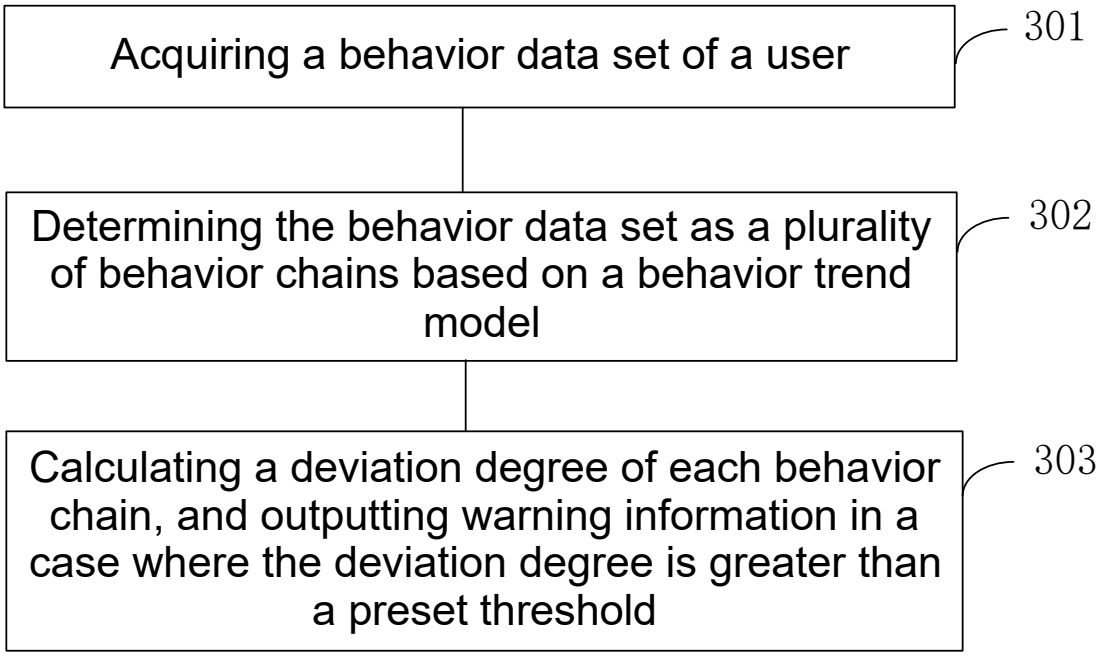

Acquiring a behavior data set of a user
301
Determining the behavior data set as a plurality of behavior chains based on a behavior trend model
302
Calculating a deviation degree of each behavior chain, and outputting warning information in a case where the deviation degree is greater than a preset threshold
303

FIG. 10

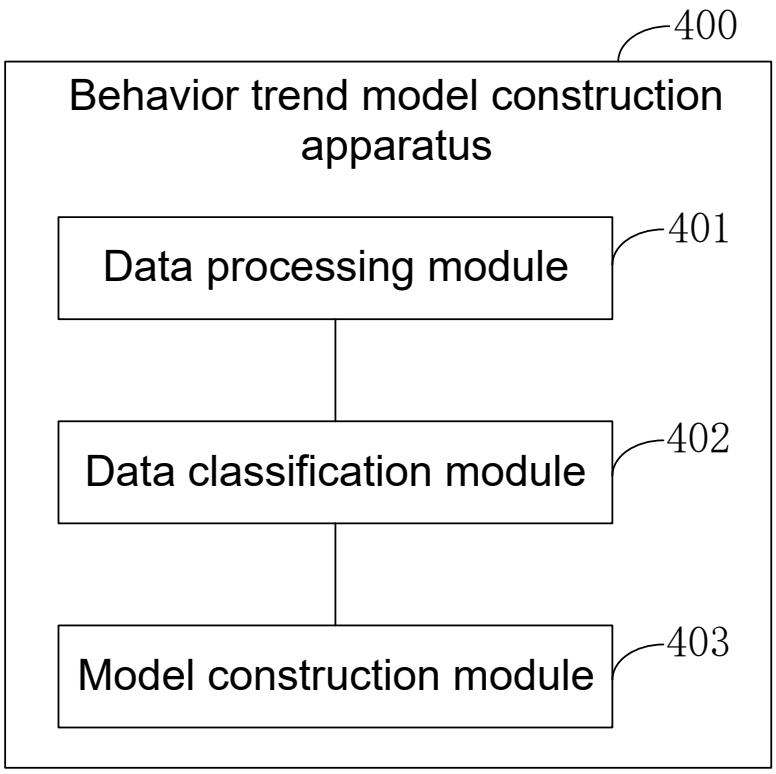

400
Behavior trend model construction apparatus
401
Data processing module
402
Data classification module
403
Model construction module

FIG. 11

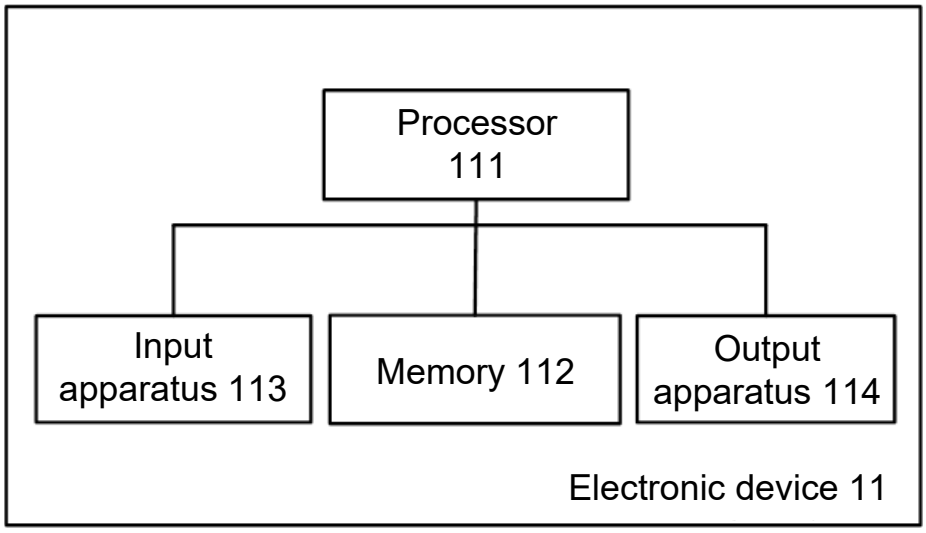

Processor 111
Input apparatus 113
Memory 112
Output apparatus 114
Electronic device 11

FIG. 12