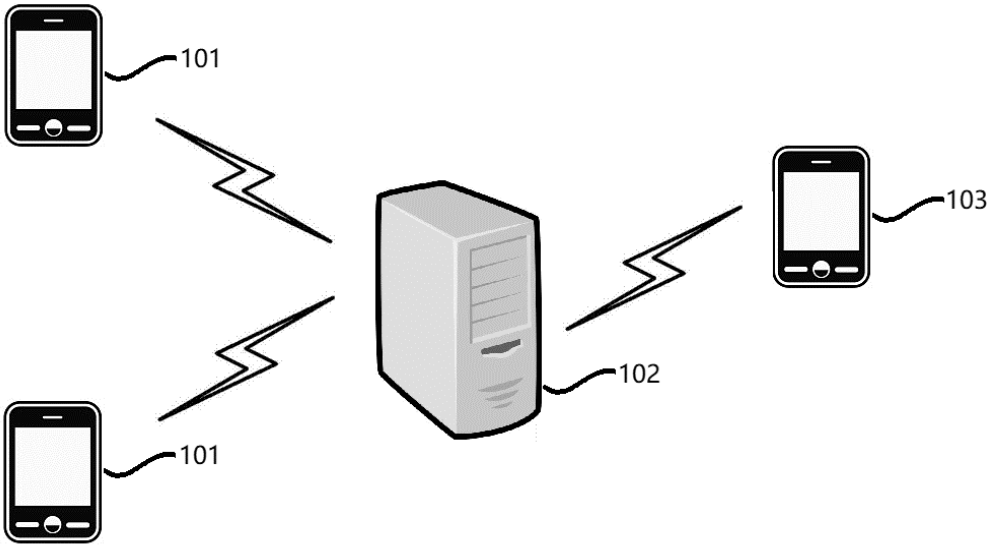

FIG. 1

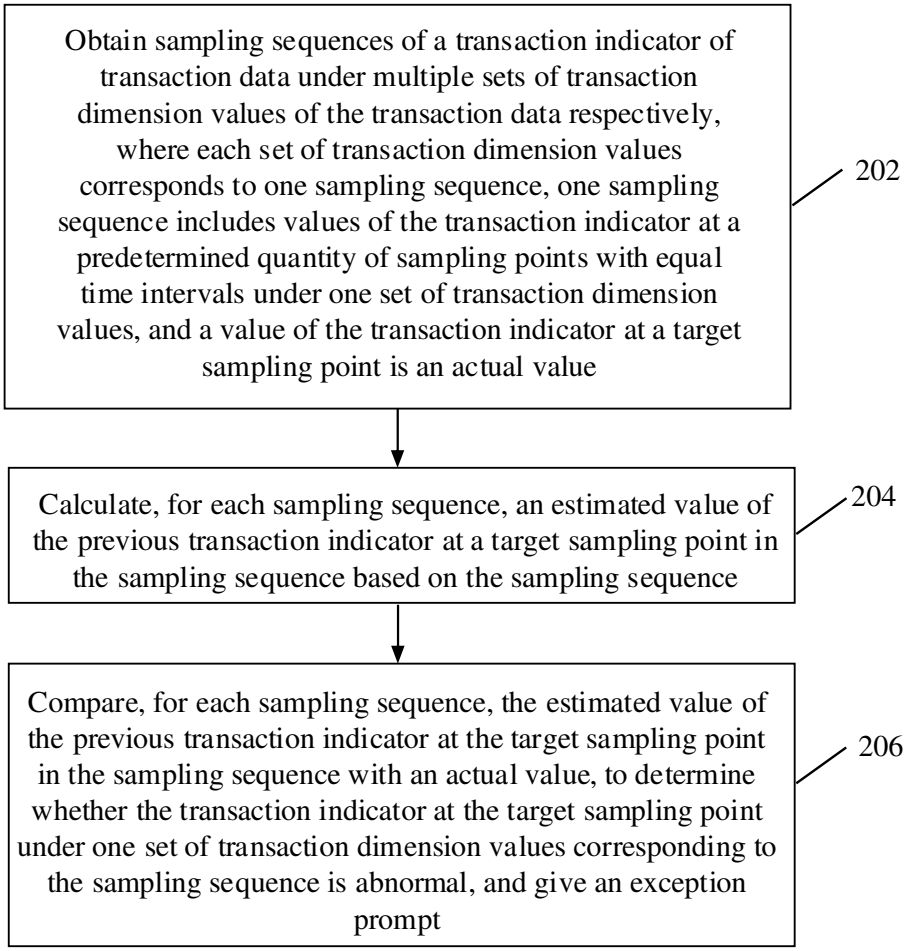
Obtain sampling sequences of a transaction indicator of transaction data under multiple sets of transaction dimension values of the transaction data respectively, where each set of transaction dimension values corresponds to one sampling sequence, one sampling sequence includes values of the transaction indicator at a predetermined quantity of sampling points with equal time intervals under one set of transaction dimension values, and a value of the transaction indicator at a target sampling point is an actual value
202
Calculate, for each sampling sequence, an estimated value of the previous transaction indicator at a target sampling point in the sampling sequence based on the sampling sequence
204
Compare, for each sampling sequence, the estimated value of the previous transaction indicator at the target sampling point in the sampling sequence with an actual value, to determine whether the transaction indicator at the target sampling point under one set of transaction dimension values corresponding to the sampling sequence is abnormal, and give an exception prompt
206

FIG. 2

data set
graph
component
application
alipayda_us_dev.hk_test_...
alipayda_us_dev.hk_rejec...
alipayda_us_dev.hk_test_...
abnormality detection
XTABLE
enter key words
report_date
Abc auth_decision
Abc avs_result
Abc bank_country
Abc card_brand
Abc card_category
Abc card_type
Abc cvv_result
Abc decision
Abc eci_value
Abc ip_city
Abc is_hk
Abc issuer
Abc merchantmcc
Abc pay_cnt_cat
Abc pay_fail_cnt_cat
Abc pay_method_new
Abc pay_success_cnt...
new calculation field

FIG. 3

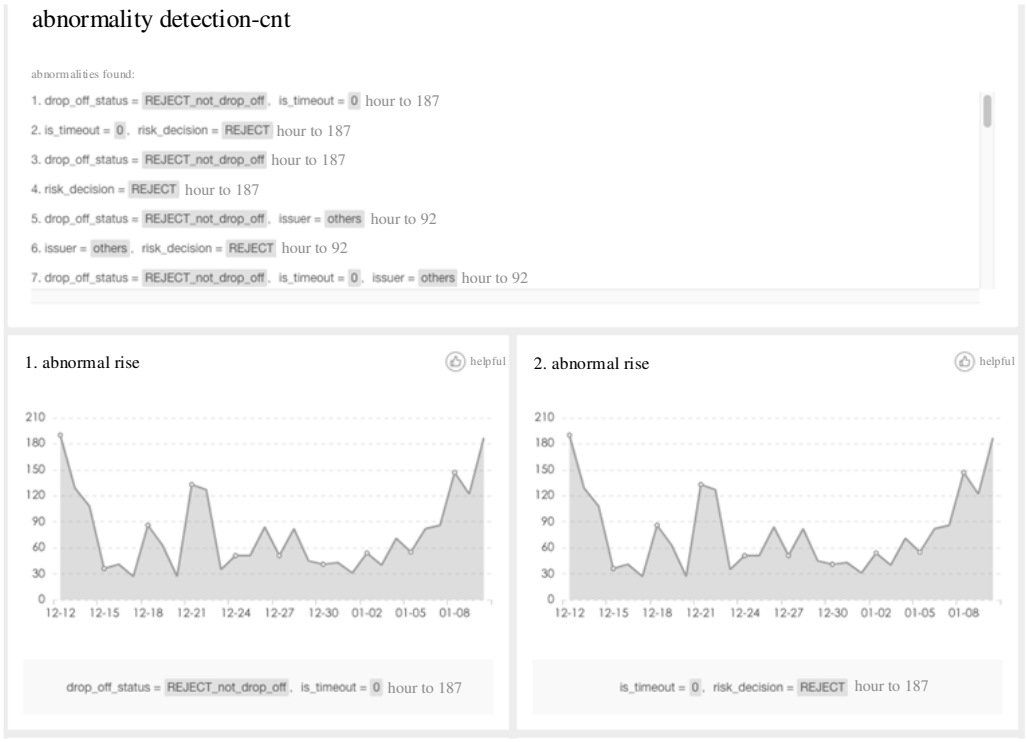
abnormality detection-cnt
abnormalities found:
1. drop_off_status = REJECT_not_drop_off, is_timeout = 0 hour to 187
2. is_timeout = 0, risk_decision = REJECT hour to 187
3. drop_off_status = REJECT_not_drop_off hour to 187
4. risk_decision = REJECT hour to 187
5. drop_off_status = REJECT_not_drop_off, issuer = others hour to 92
6. issuer = others, risk_decision = REJECT hour to 92
7. drop_off_status = REJECT_not_drop_off, is_timeout = 0, issuer = others hour to 92
1. abnormal rise
helpful
210
180
150
120
90
60
30
0
12-12 12-15 12-18 12-21 12-24 12-27 12-30 01-02 01-05 01-08
drop_off_status = REJECT_not_drop_off, is_timeout = 0 hour to 187
2. abnormal rise
helpful
210
180
150
120
90
60
30
0
12-12 12-15 12-18 12-21 12-24 12-27 12-30 01-02 01-05 01-08
is_timeout = 0, risk_decision = REJECT hour to 187

FIG. 4

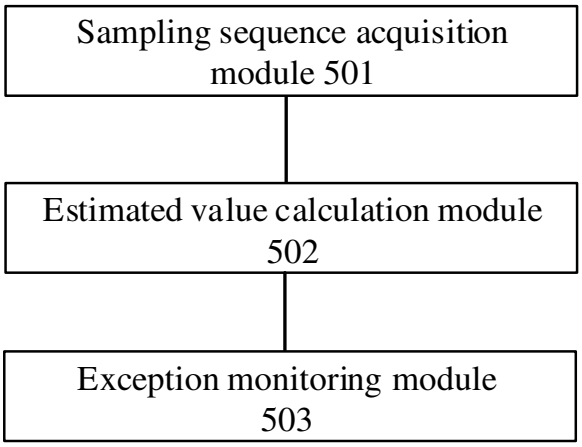
Sampling sequence acquisition module 501
Estimated value calculation module 502
Exception monitoring module 503

FIG. 5