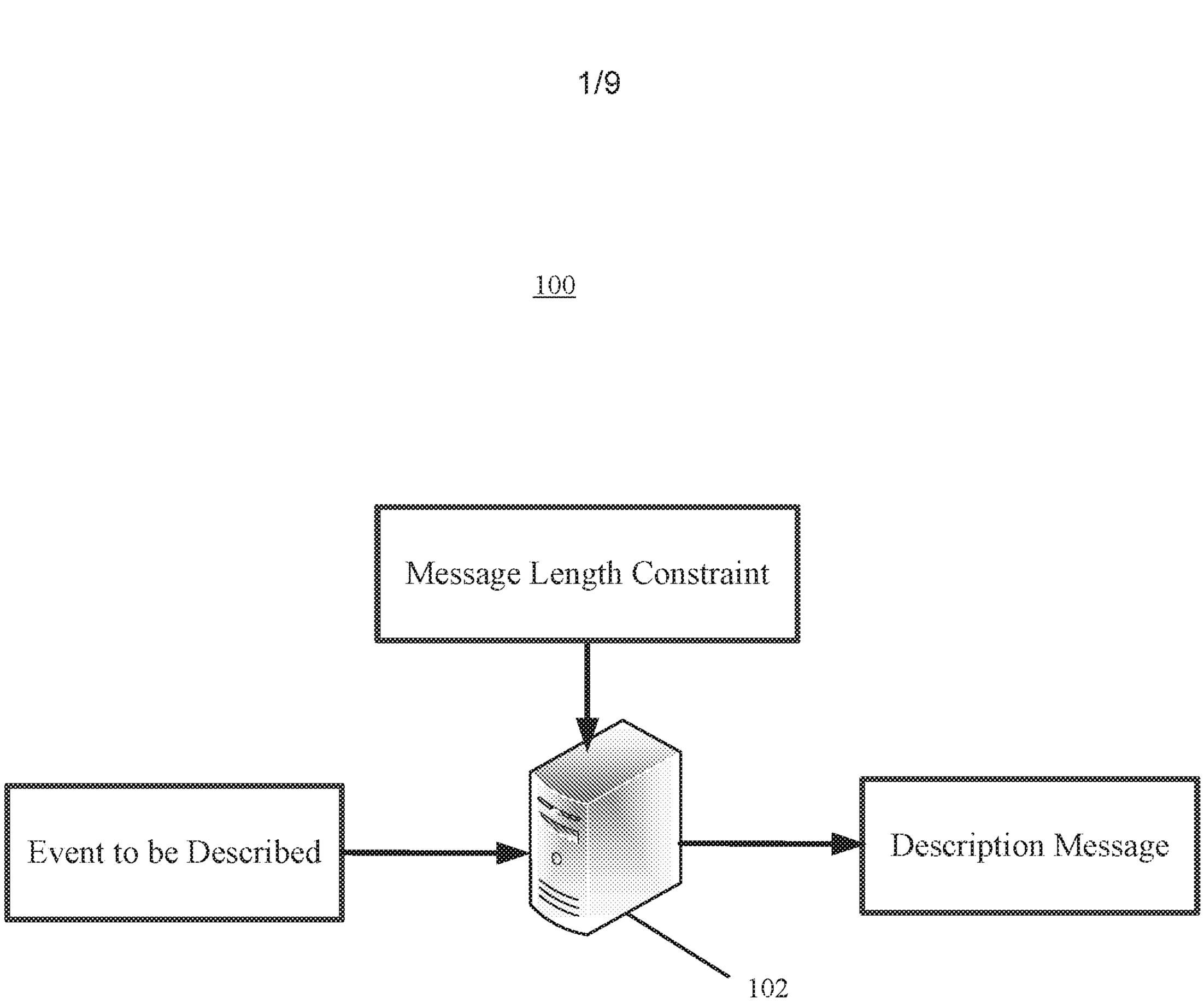

100
Message Length Constraint
Event to be Described
Description Message
102

FIG. 1

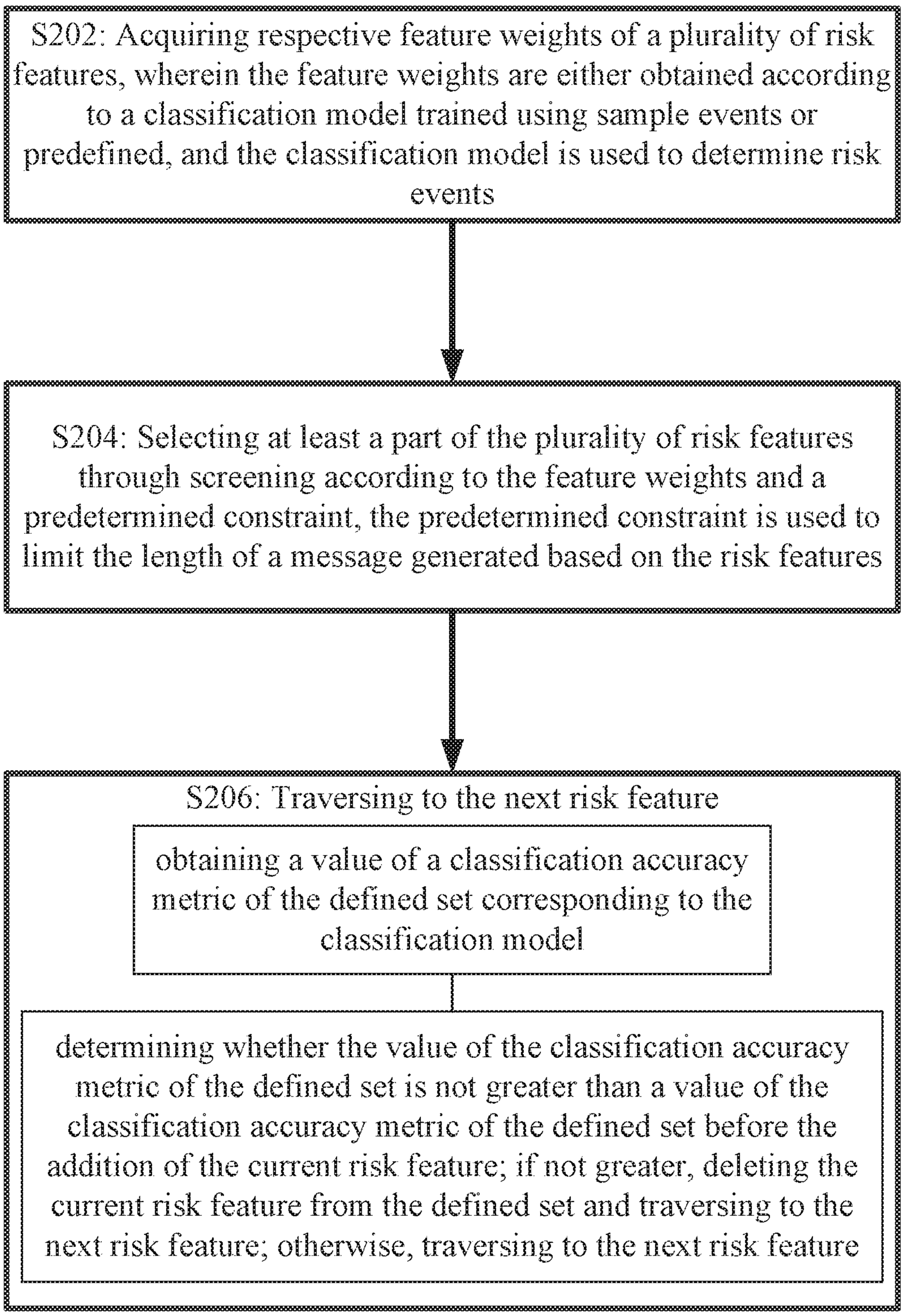

200
S202: Acquiring respective feature weights of a plurality of risk features, wherein the feature weights are either obtained according to a classification model trained using sample events or predefined, and the classification model is used to determine risk events
S204: Selecting at least a part of the plurality of risk features through screening according to the feature weights and a predetermined constraint, the predetermined constraint is used to limit the length of a message generated based on the risk features
S206: Traversing to the next risk feature
obtaining a value of a classification accuracy metric of the defined set corresponding to the classification model
determining whether the value of the classification accuracy metric of the defined set is not greater than a value of the classification accuracy metric of the defined set before the addition of the current risk feature; if not greater, deleting the current risk feature from the defined set and traversing to the next risk feature; otherwise, traversing to the next risk feature

FIG. 2

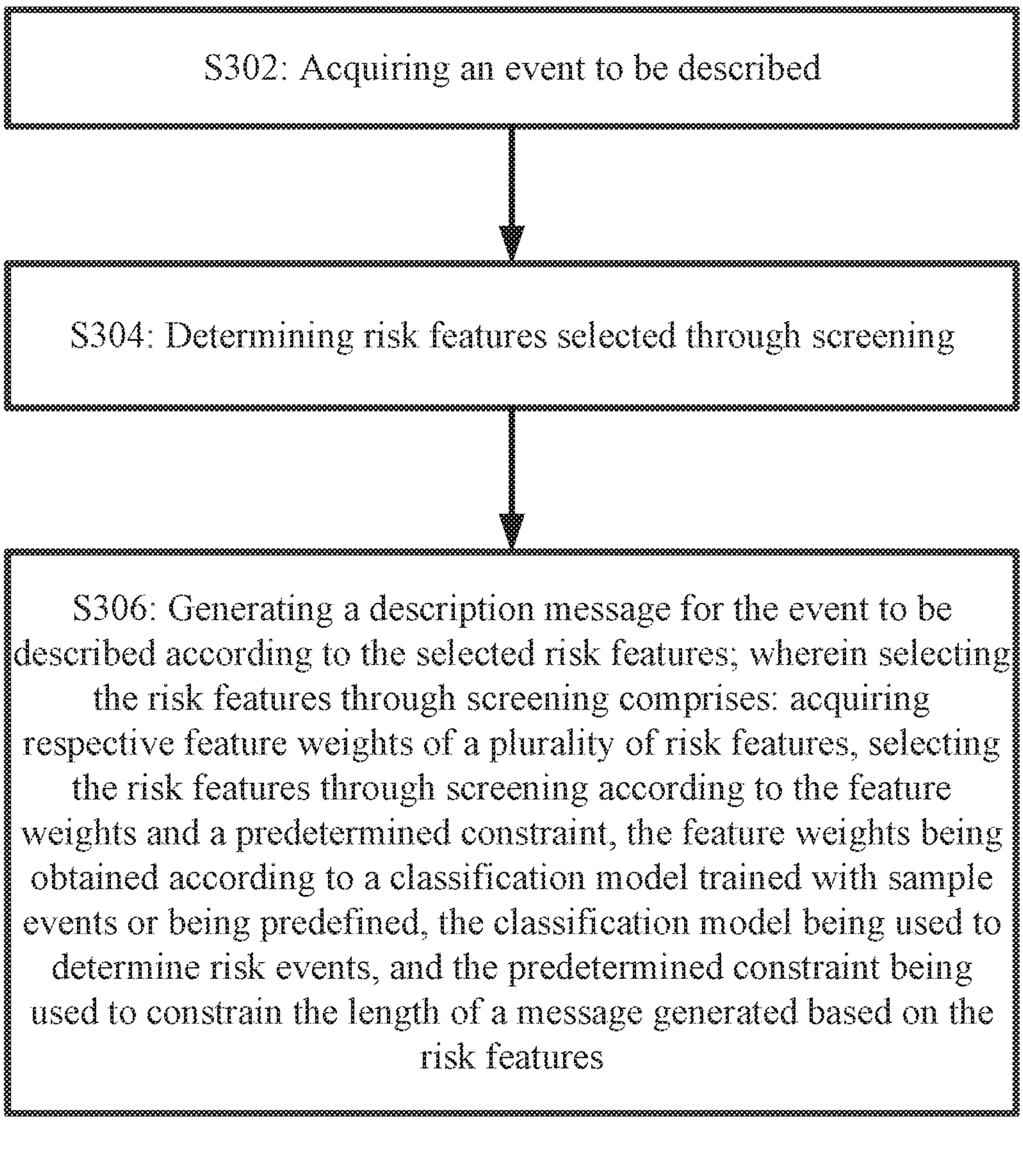

S302: Acquiring an event to be described
S304: Determining risk features selected through screening
S306: Generating a description message for the event to be described according to the selected risk features; wherein selecting the risk features through screening comprises: acquiring respective feature weights of a plurality of risk features, selecting the risk features through screening according to the feature weights and a predetermined constraint, the feature weights being obtained according to a classification model trained with sample events or being predefined, the classification model being used to determine risk events, and the predetermined constraint being used to constrain the length of a message generated based on the risk features

FIG. 3

Suspicious Transaction Report on [******]

[Anti-money-laundering Department of Branch] ****** of the People's Bank of China:

This bank has recently found [a brief summary ****]. It is hereby reported as follows:

I. Findings

[*********]

II. Basic information of [** organization or ** individual]

... ...

FIG. 4

Algorithm 1: automatic message algorithm StrSmith

Input: training sample D = {X, Y}, classification model f (X, Y)

constrained message length λ, uncertain message length θ,

Output: message M (S*)

Step 0: initialize S*← ϕ

Step 1: train the classification model f (X, Y)

Step 2: generate S'={$S^{(1)}$ .... $S^{(d)}$} according to the reversed ranking list of the features corresponding to f

Step 3: for i = 1.... d

Step 3.1: generate sub-message M ($S^{(i)}$)

Step 3.2: if |M (S*U$S^{(i)}$)| ≤ λ−θ then

M (S*)← M (S*U$S^{(i)}$)

Step 4: Return M (S*)

FIG. 5

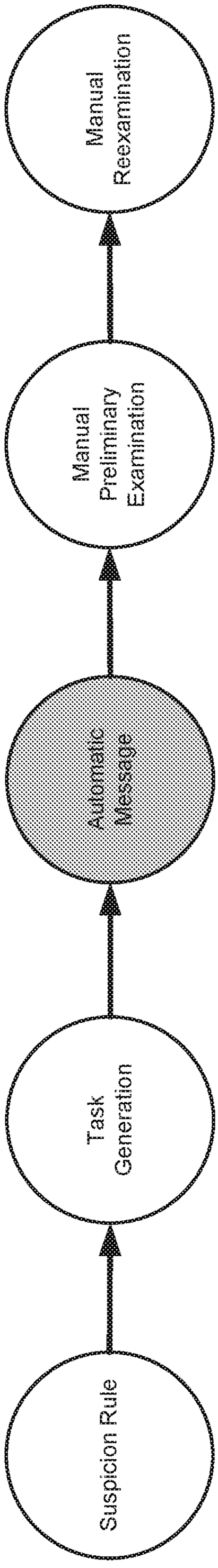

Manual Reexamination
Manual Preliminary Examination
Automatic Message
Task Generation
Suspicion Rule

FIG. 6

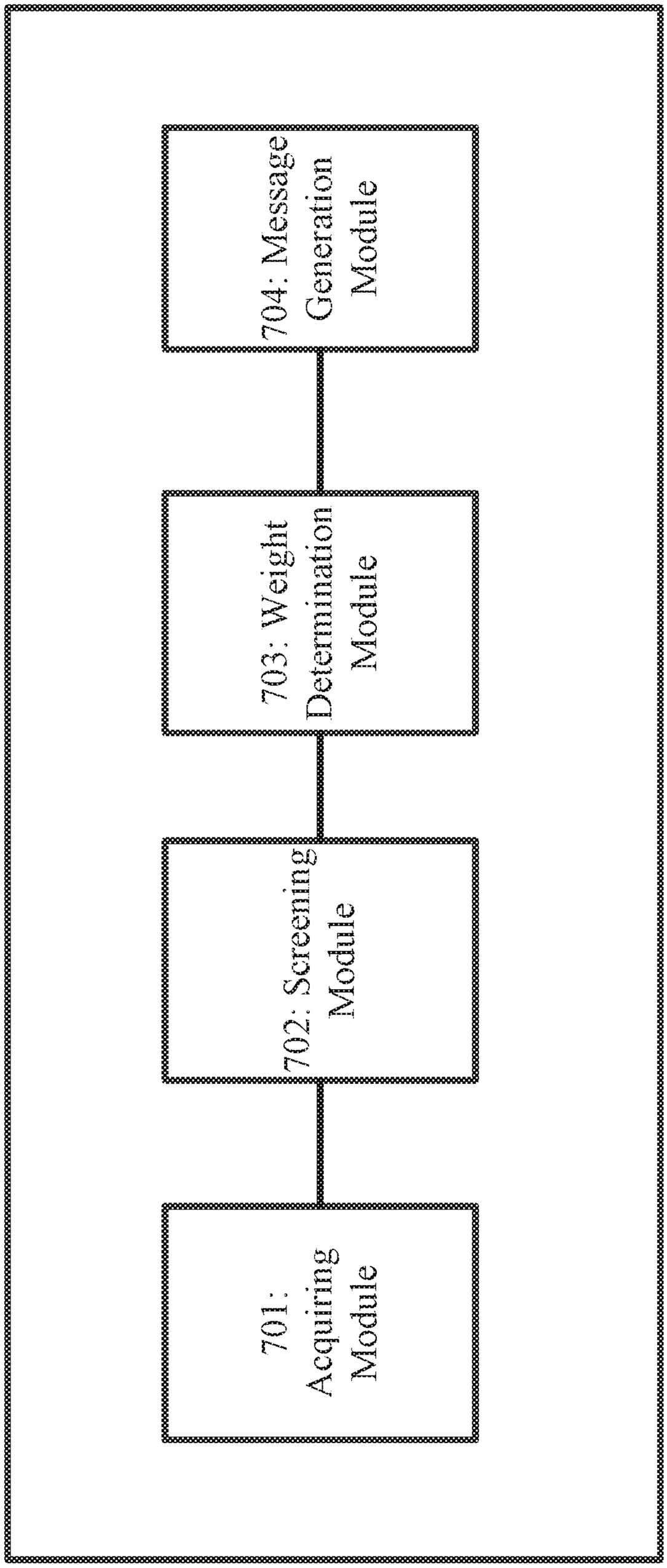

701: Acquiring Module
702: Screening Module
703: Weight Determination Module
704: Message Generation Module

FIG. 7

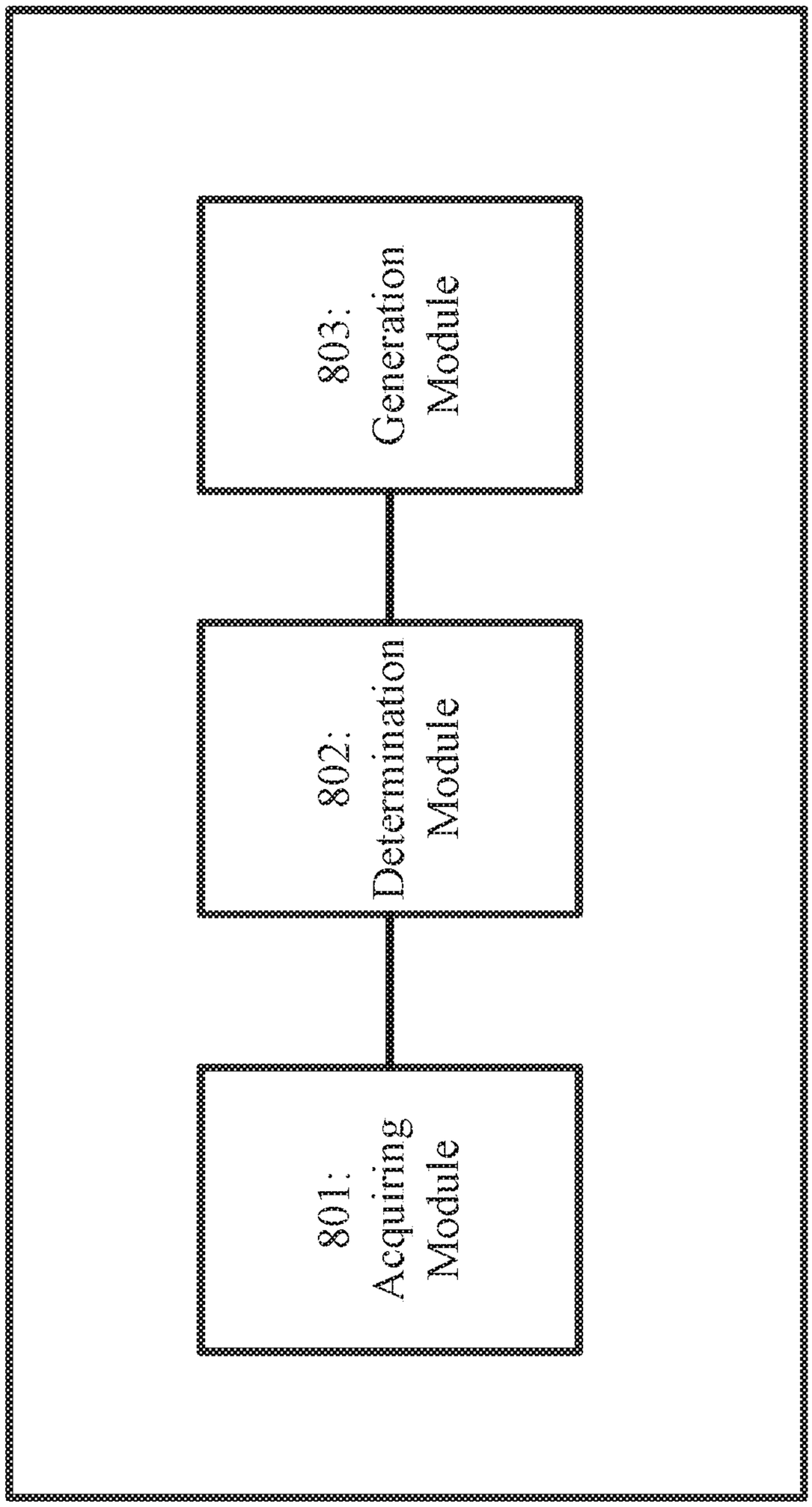

801: Acquiring Module
802: Determination Module
803: Generation Module

FIG. 8

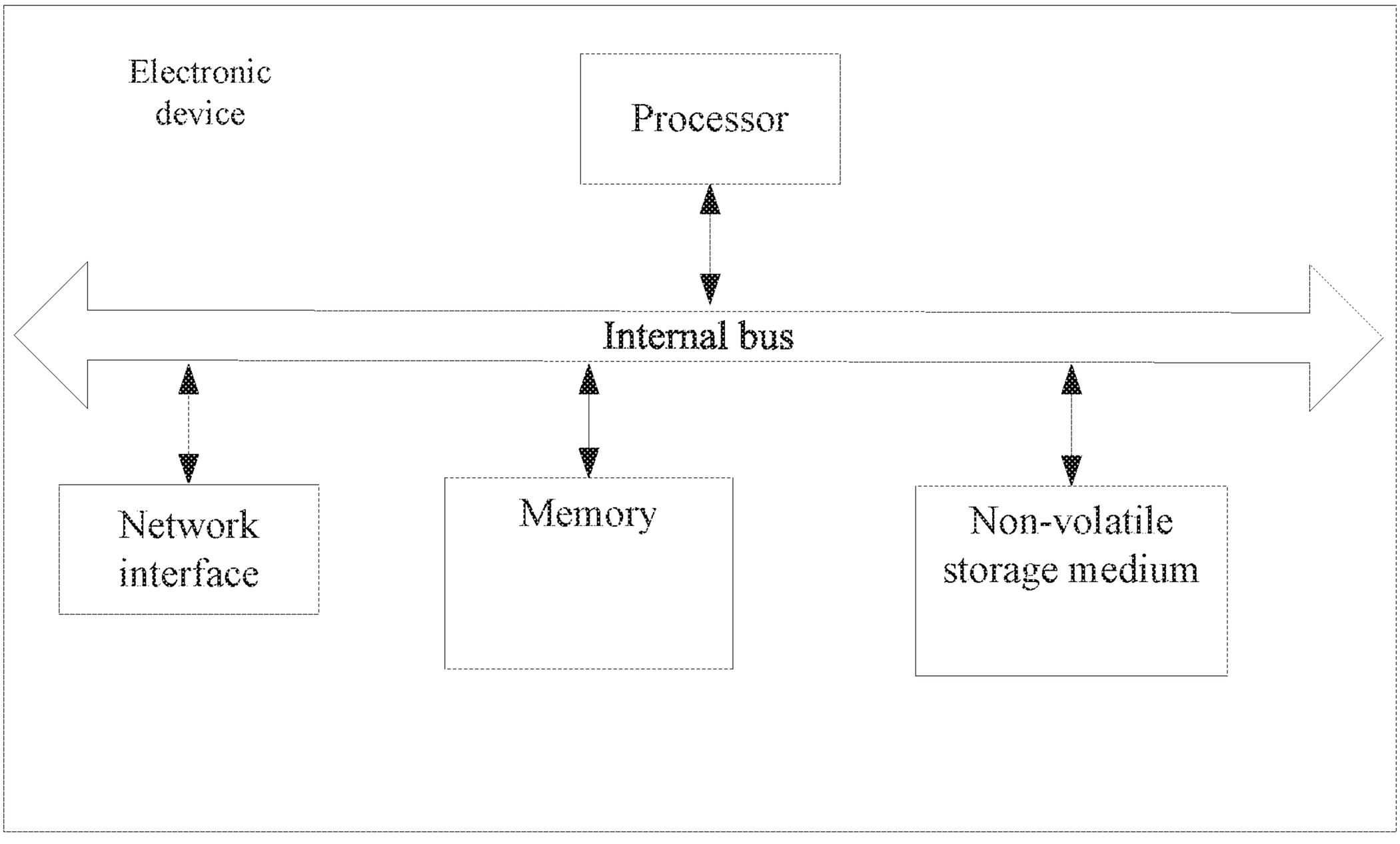

Electronic device
Processor
Internal bus
Network interface
Memory
Non-volatile storage medium

FIG. 9