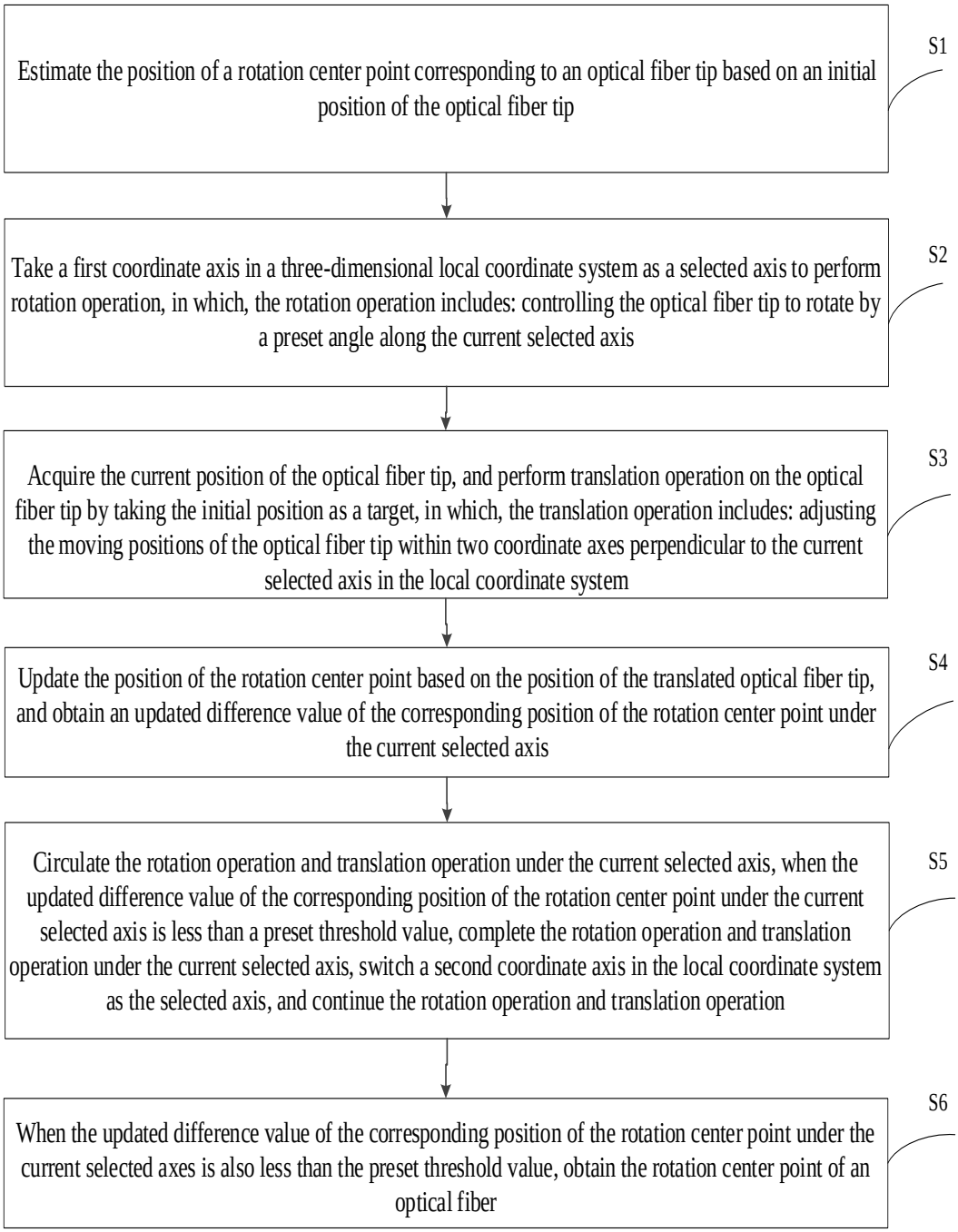
Estimate the position of a rotation center point corresponding to an optical fiber tip based on an initial position of the optical fiber tip
S1
Take a first coordinate axis in a three-dimensional local coordinate system as a selected axis to perform rotation operation, in which, the rotation operation includes: controlling the optical fiber tip to rotate by a preset angle along the current selected axis
S2
Acquire the current position of the optical fiber tip, and perform translation operation on the optical fiber tip by taking the initial position as a target, in which, the translation operation includes: adjusting the moving positions of the optical fiber tip within two coordinate axes perpendicular to the current selected axis in the local coordinate system
S3
Update the position of the rotation center point based on the position of the translated optical fiber tip, and obtain an updated difference value of the corresponding position of the rotation center point under the current selected axis
S4
Circulate the rotation operation and translation operation under the current selected axis, when the updated difference value of the corresponding position of the rotation center point under the current selected axis is less than a preset threshold value, complete the rotation operation and translation operation under the current selected axis, switch a second coordinate axis in the local coordinate system as the selected axis, and continue the rotation operation and translation operation
S5
When the updated difference value of the corresponding position of the rotation center point under the current selected axes is also less than the preset threshold value, obtain the rotation center point of an optical fiber
S6

FIG. 1

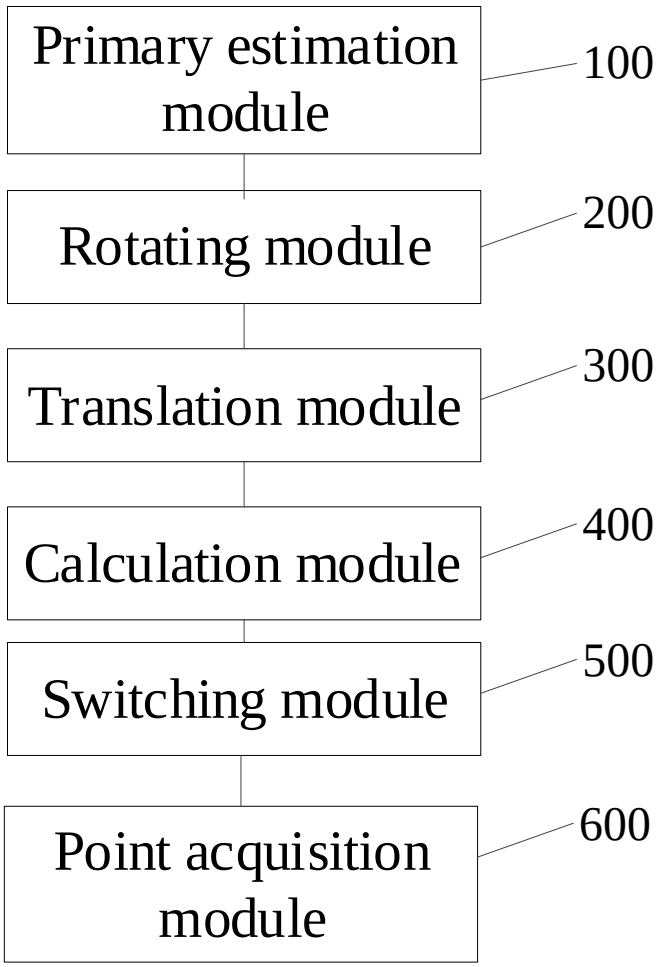
Primary estimation module
100
Rotating module
200
Translation module
300
Calculation module
400
Switching module
500
Point acquisition module
600

FIG. 2

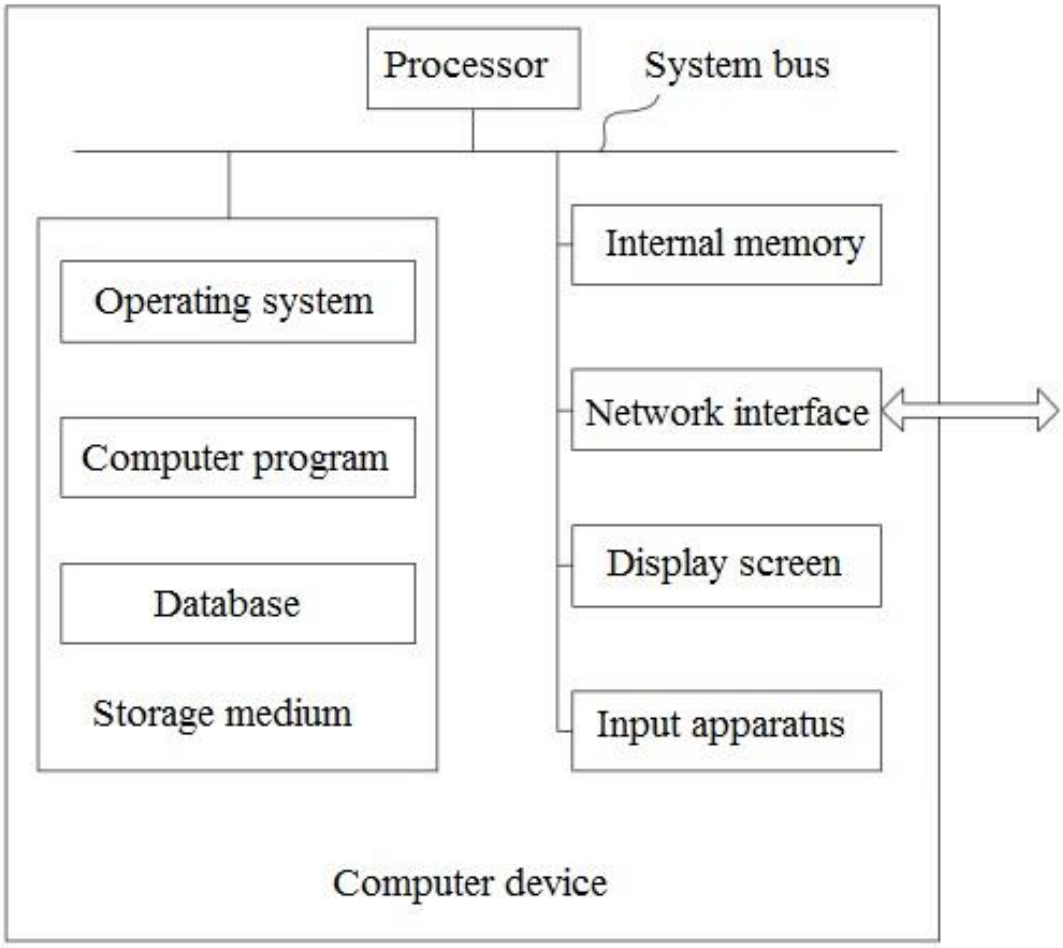
Processor
System bus
Internal memory
Operating system
Network interface
Computer program
Display screen
Database
Storage medium
Input apparatus
Computer device

FIG.3