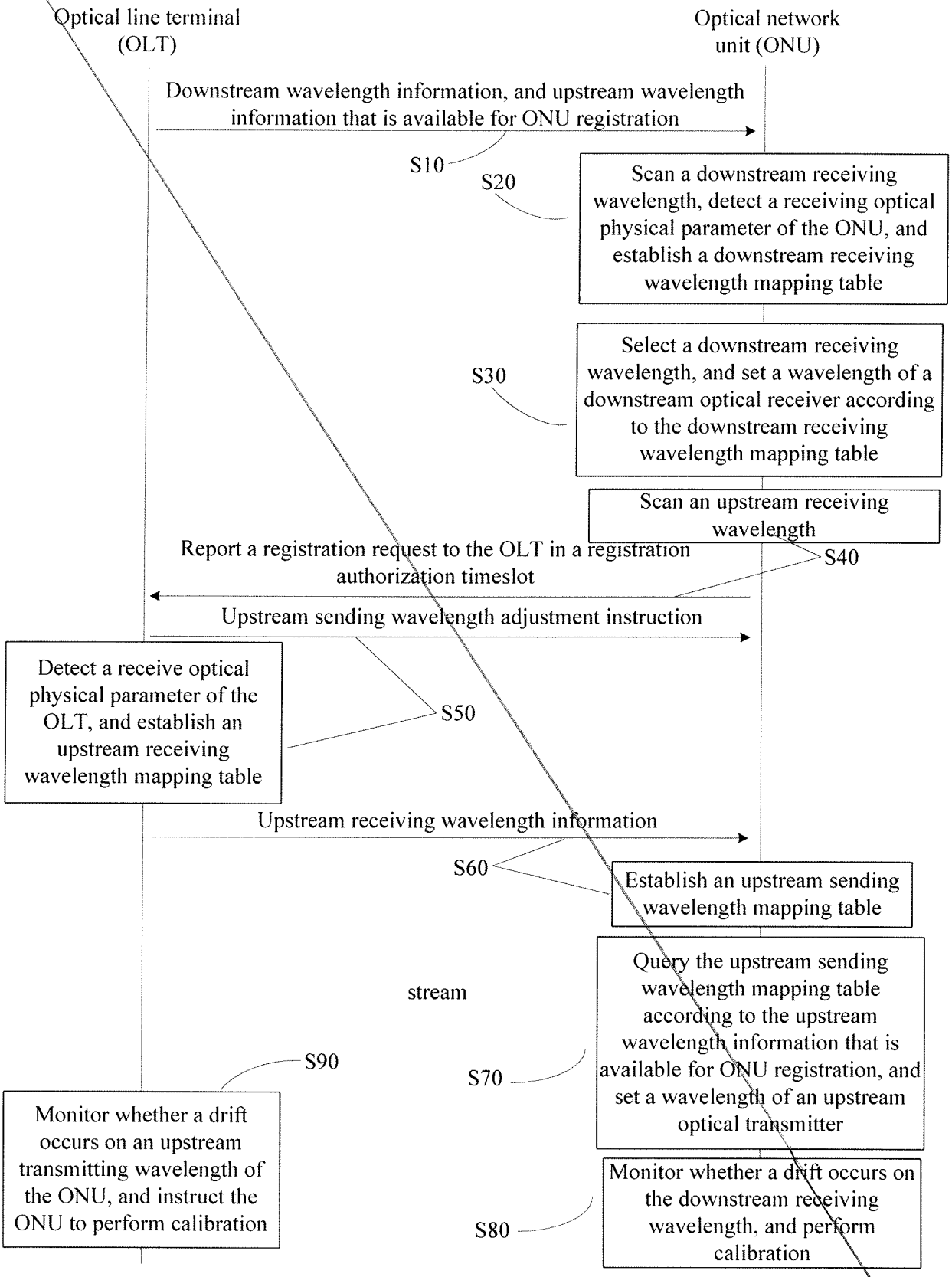
Optical line terminal (OLT)
Optical network unit (ONU)
Downstream wavelength information, and upstream wavelength information that is available for ONU registration
S10
S20
Scan a downstream receiving wavelength, detect a receiving optical physical parameter of the ONU, and establish a downstream receiving wavelength mapping table
S30
Select a downstream receiving wavelength, and set a wavelength of a downstream optical receiver according to the downstream receiving wavelength mapping table
Scan an upstream receiving wavelength
S40
Report a registration request to the OLT in a registration authorization timeslot
Upstream sending wavelength adjustment instruction
Detect a receive optical physical parameter of the OLT, and establish an upstream receiving wavelength mapping table
S50
Upstream receiving wavelength information
S60
Establish an upstream sending wavelength mapping table
stream
Query the upstream sending wavelength mapping table according to the upstream wavelength information that is available for ONU registration, and set a wavelength of an upstream optical transmitter
S70
S90
Monitor whether a drift occurs on an upstream transmitting wavelength of the ONU, and instruct the ONU to perform calibration
Monitor whether a drift occurs on the downstream receiving wavelength, and perform calibration
S80

FIG. 3

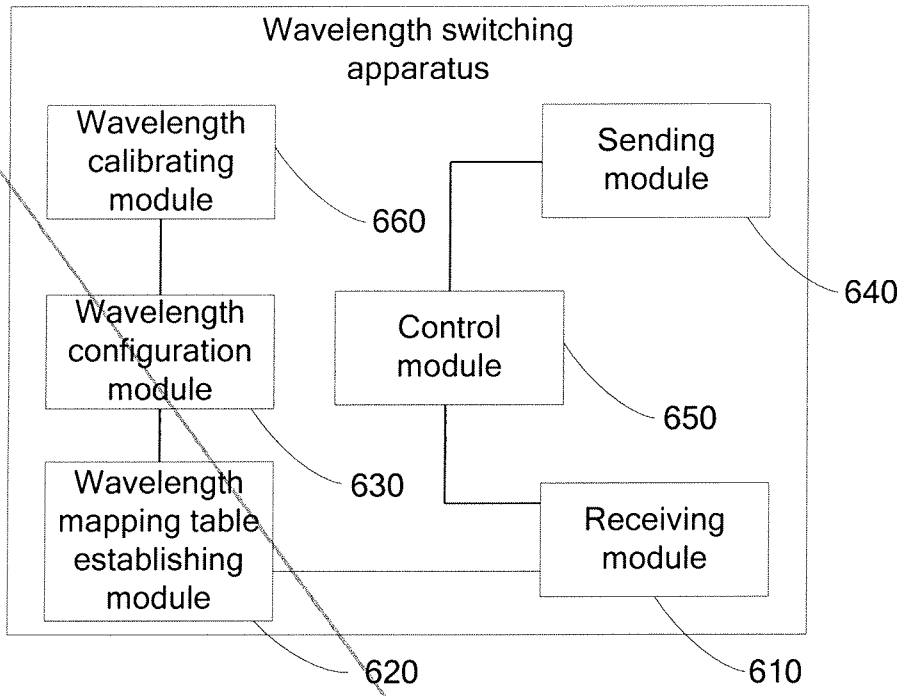
Wavelength switching apparatus
Wavelength calibrating module
660
Sending module
640
Wavelength configuration module
Control module
650
630
Wavelength mapping table establishing module
Receiving module
620
610

FIG. 6

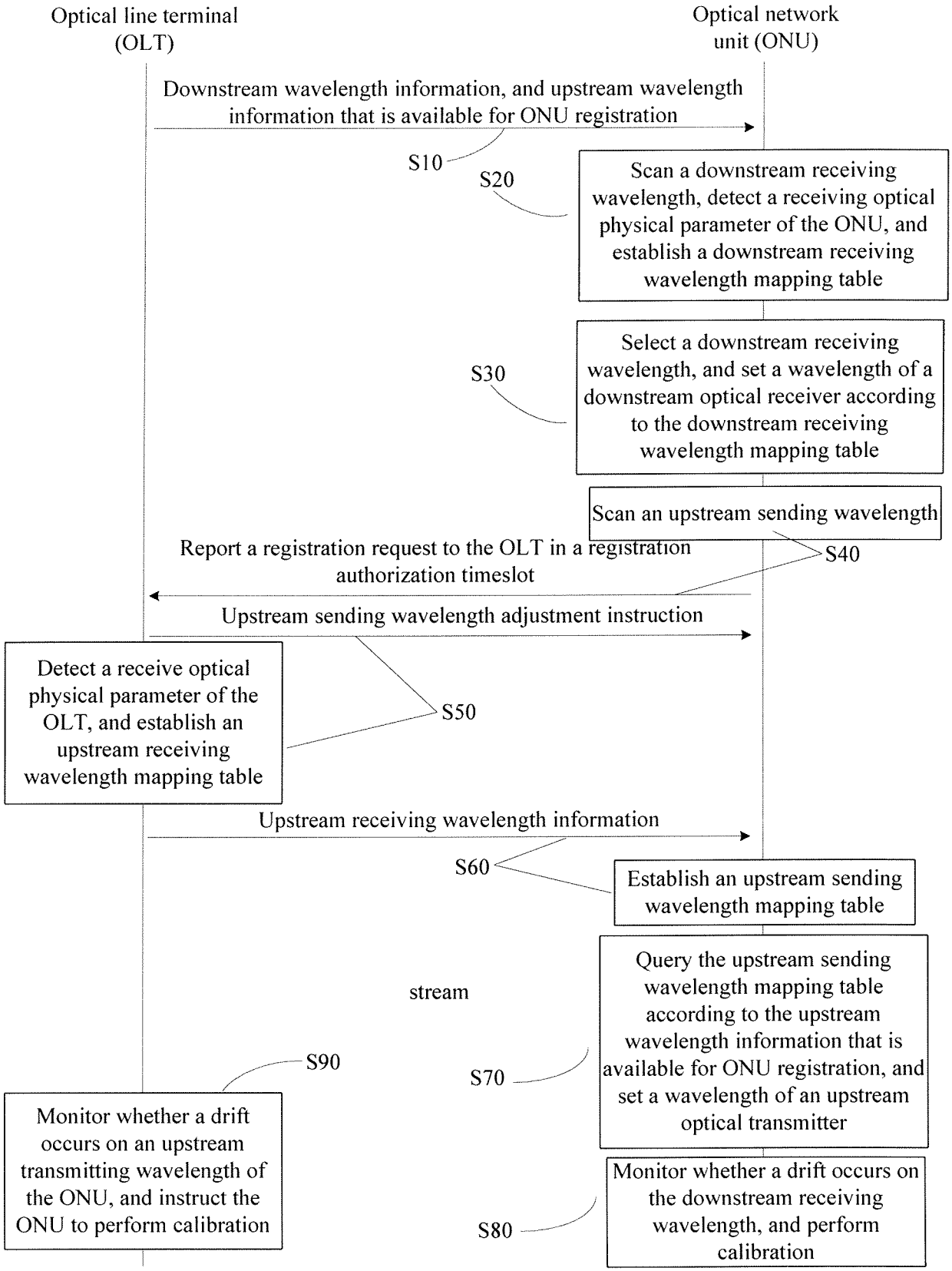
Optical line terminal (OLT)
Optical network unit (ONU)
Downstream wavelength information, and upstream wavelength information that is available for ONU registration
S10
S20
Scan a downstream receiving wavelength, detect a receiving optical physical parameter of the ONU, and establish a downstream receiving wavelength mapping table
S30
Select a downstream receiving wavelength, and set a wavelength of a downstream optical receiver according to the downstream receiving wavelength mapping table
Scan an upstream sending wavelength
S40
Report a registration request to the OLT in a registration authorization timeslot
Upstream sending wavelength adjustment instruction
Detect a receive optical physical parameter of the OLT, and establish an upstream receiving wavelength mapping table
S50
Upstream receiving wavelength information
S60
Establish an upstream sending wavelength mapping table
stream
Query the upstream sending wavelength mapping table according to the upstream wavelength information that is available for ONU registration, and set a wavelength of an upstream optical transmitter
S70
S90
Monitor whether a drift occurs on an upstream transmitting wavelength of the ONU, and instruct the ONU to perform calibration
Monitor whether a drift occurs on the downstream receiving wavelength, and perform calibration
S80

FIG. 3

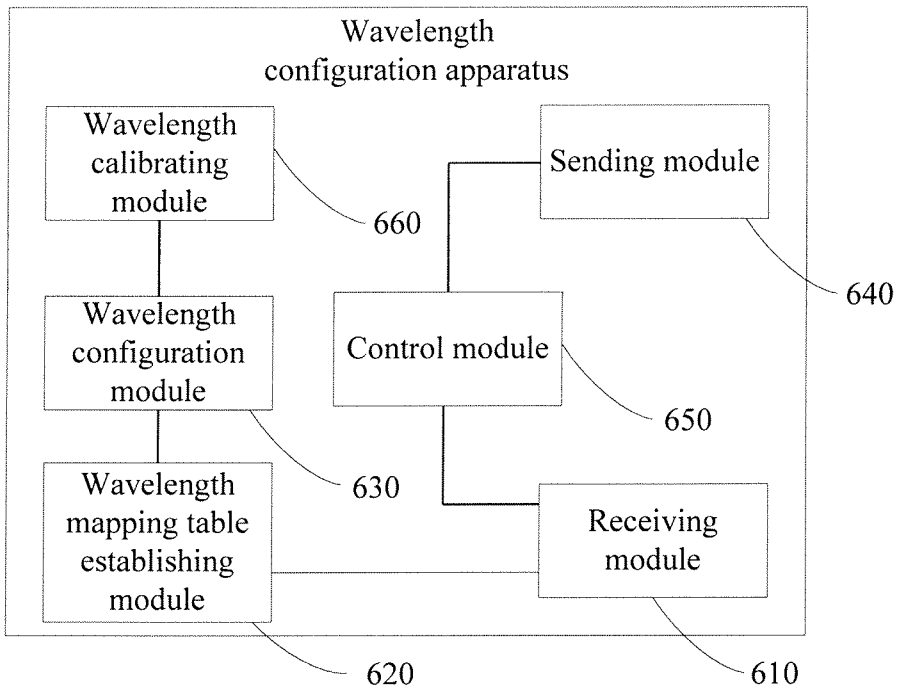
Wavelength configuration apparatus
Wavelength calibrating module
660
Sending module
640
Wavelength configuration module
Control module
650
630
Wavelength mapping table establishing module
Receiving module
620
610

FIG. 6