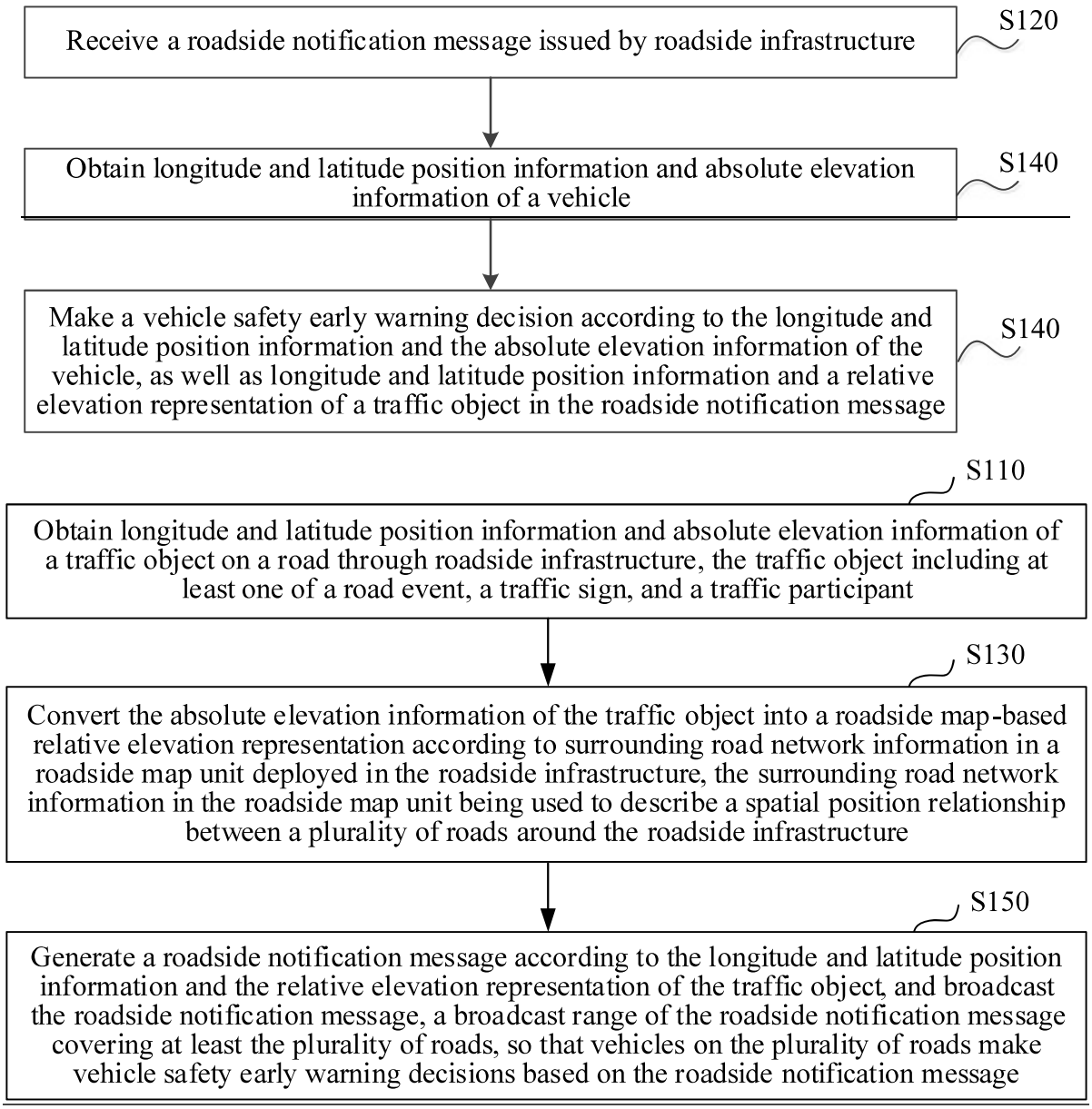

Receive a roadside notification message issued by roadside infrastructure
S120
Obtain longitude and latitude position information and absolute elevation information of a vehicle
S140
Make a vehicle safety early warning decision according to the longitude and latitude position information and the absolute elevation information of the vehicle, as well as longitude and latitude position information and a relative elevation representation of a traffic object in the roadside notification message
S140
S110
Obtain longitude and latitude position information and absolute elevation information of a traffic object on a road through roadside infrastructure, the traffic object including at least one of a road event, a traffic sign, and a traffic participant
S130
Convert the absolute elevation information of the traffic object into a roadside map-based relative elevation representation according to surrounding road network information in a roadside map unit deployed in the roadside infrastructure, the surrounding road network information in the roadside map unit being used to describe a spatial position relationship between a plurality of roads around the roadside infrastructure
S150
Generate a roadside notification message according to the longitude and latitude position information and the relative elevation representation of the traffic object, and broadcast the roadside notification message, a broadcast range of the roadside notification message covering at least the plurality of roads, so that vehicles on the plurality of roads make vehicle safety early warning decisions based on the roadside notification message

FIG. 4A

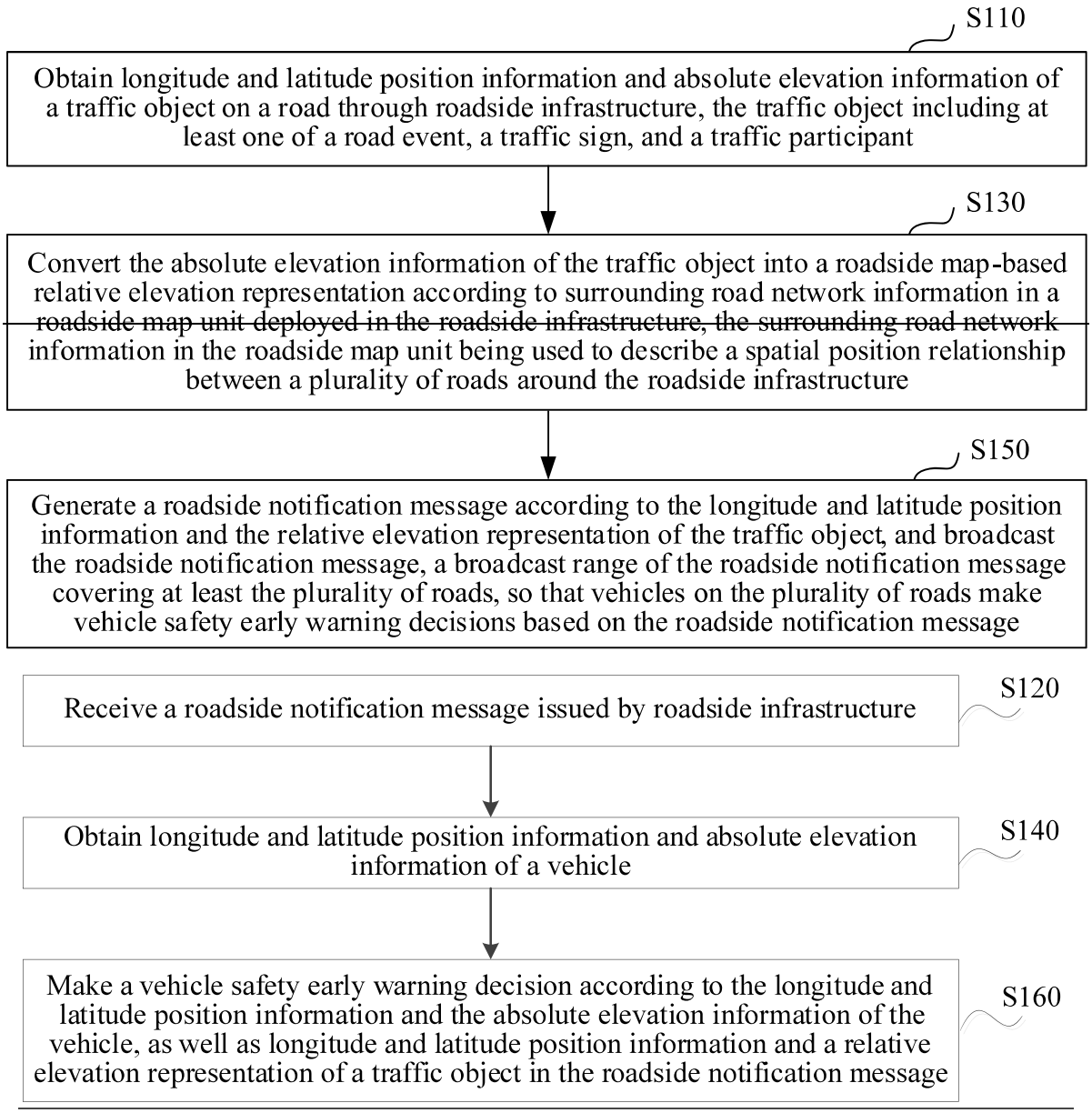

S110
Obtain longitude and latitude position information and absolute elevation information of a traffic object on a road through roadside infrastructure, the traffic object including at least one of a road event, a traffic sign, and a traffic participant
S130
Convert the absolute elevation information of the traffic object into a roadside map-based relative elevation representation according to surrounding road network information in a roadside map unit deployed in the roadside infrastructure, the surrounding road network information in the roadside map unit being used to describe a spatial position relationship between a plurality of roads around the roadside infrastructure
S150
Generate a roadside notification message according to the longitude and latitude position information and the relative elevation representation of the traffic object, and broadcast the roadside notification message, a broadcast range of the roadside notification message covering at least the plurality of roads, so that vehicles on the plurality of roads make vehicle safety early warning decisions based on the roadside notification message
Receive a roadside notification message issued by roadside infrastructure
S120
Obtain longitude and latitude position information and absolute elevation information of a vehicle
S140
Make a vehicle safety early warning decision according to the longitude and latitude position information and the absolute elevation information of the vehicle, as well as longitude and latitude position information and a relative elevation representation of a traffic object in the roadside notification message
S160

FIG. 4B