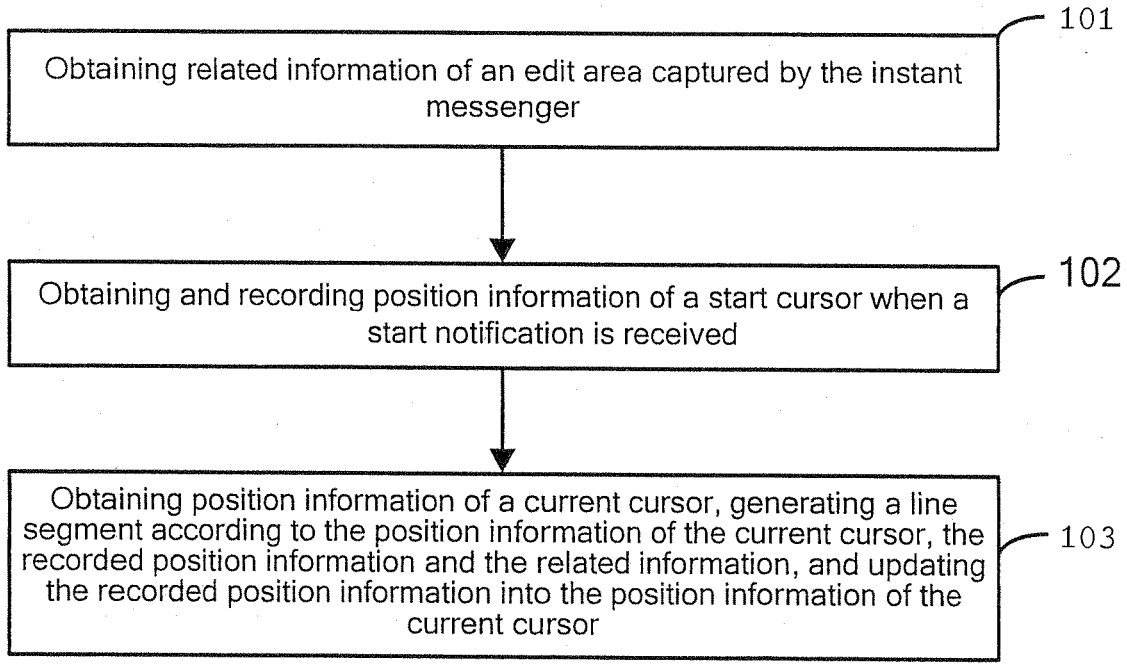
Obtaining related information of an edit area captured by the instant messenger
101
Obtaining and recording position information of a start cursor when a start notification is received
102
Obtaining position information of a current cursor, generating a line segment according to the position information of the current cursor, the recorded position information and the related information, and updating the recorded position information into the position information of the current cursor
103

Fig.1

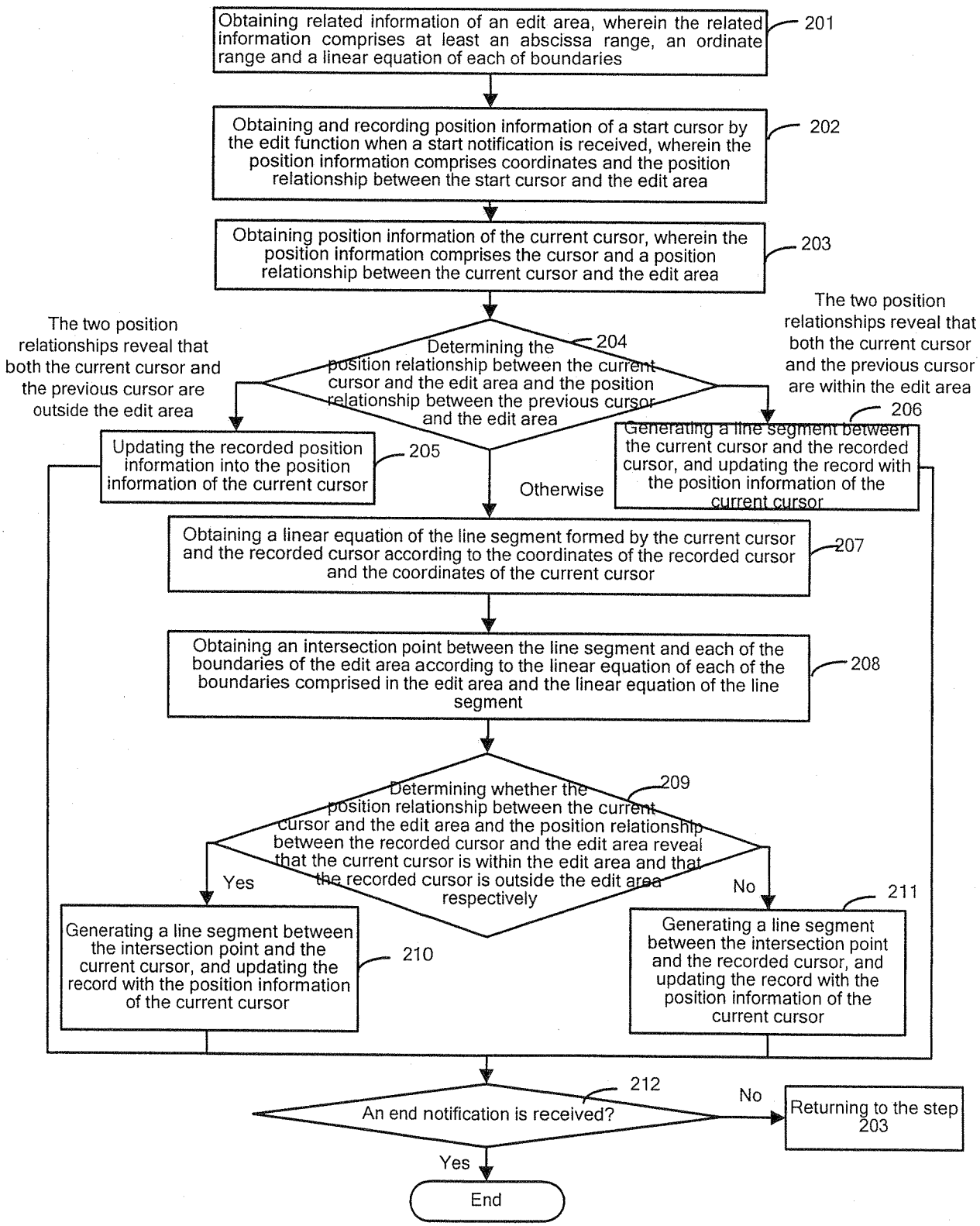
Obtaining related information of an edit area, wherein the related information comprises at least an abscissa range, an ordinate range and a linear equation of each of boundaries
201
Obtaining and recording position information of a start cursor by the edit function when a start notification is received, wherein the position information comprises coordinates and the position relationship between the start cursor and the edit area
202
Obtaining position information of the current cursor, wherein the position information comprises the cursor and a position relationship between the current cursor and the edit area
203
Determining the position relationship between the current cursor and the edit area and the position relationship between the previous cursor and the edit area
204
The two position relationships reveal that both the current cursor and the previous cursor are outside the edit area
The two position relationships reveal that both the current cursor and the previous cursor are within the edit area
Updating the recorded position information into the position information of the current cursor
205
Generating a line segment between the current cursor and the recorded cursor, and updating the record with the position information of the current cursor
206
Otherwise
Obtaining a linear equation of the line segment formed by the current cursor and the recorded cursor according to the coordinates of the recorded cursor and the coordinates of the current cursor
207
Obtaining an intersection point between the line segment and each of the boundaries of the edit area according to the linear equation of each of the boundaries comprised in the edit area and the linear equation of the line segment
208
Determining whether the position relationship between the current cursor and the edit area and the position relationship between the recorded cursor and the edit area reveal that the current cursor is within the edit area and that the recorded cursor is outside the edit area respectively
209
Yes
No
Generating a line segment between the intersection point and the current cursor, and updating the record with the position information of the current cursor
210
Generating a line segment between the intersection point and the recorded cursor, and updating the record with the position information of the current cursor
211
An end notification is received?
212
No
Returning to the step 203
Yes
End

Fig.2

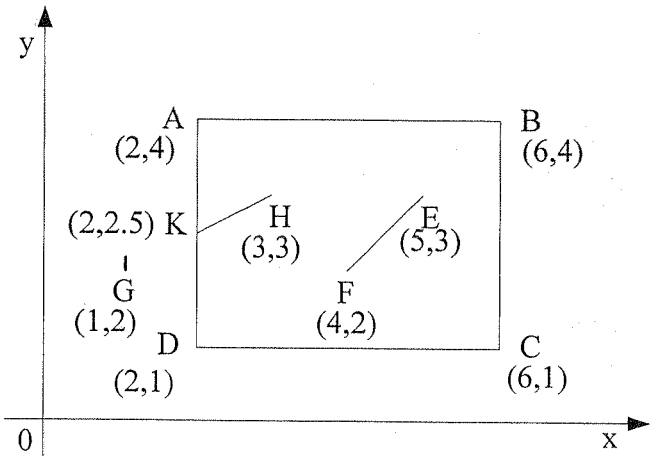

Fig.3

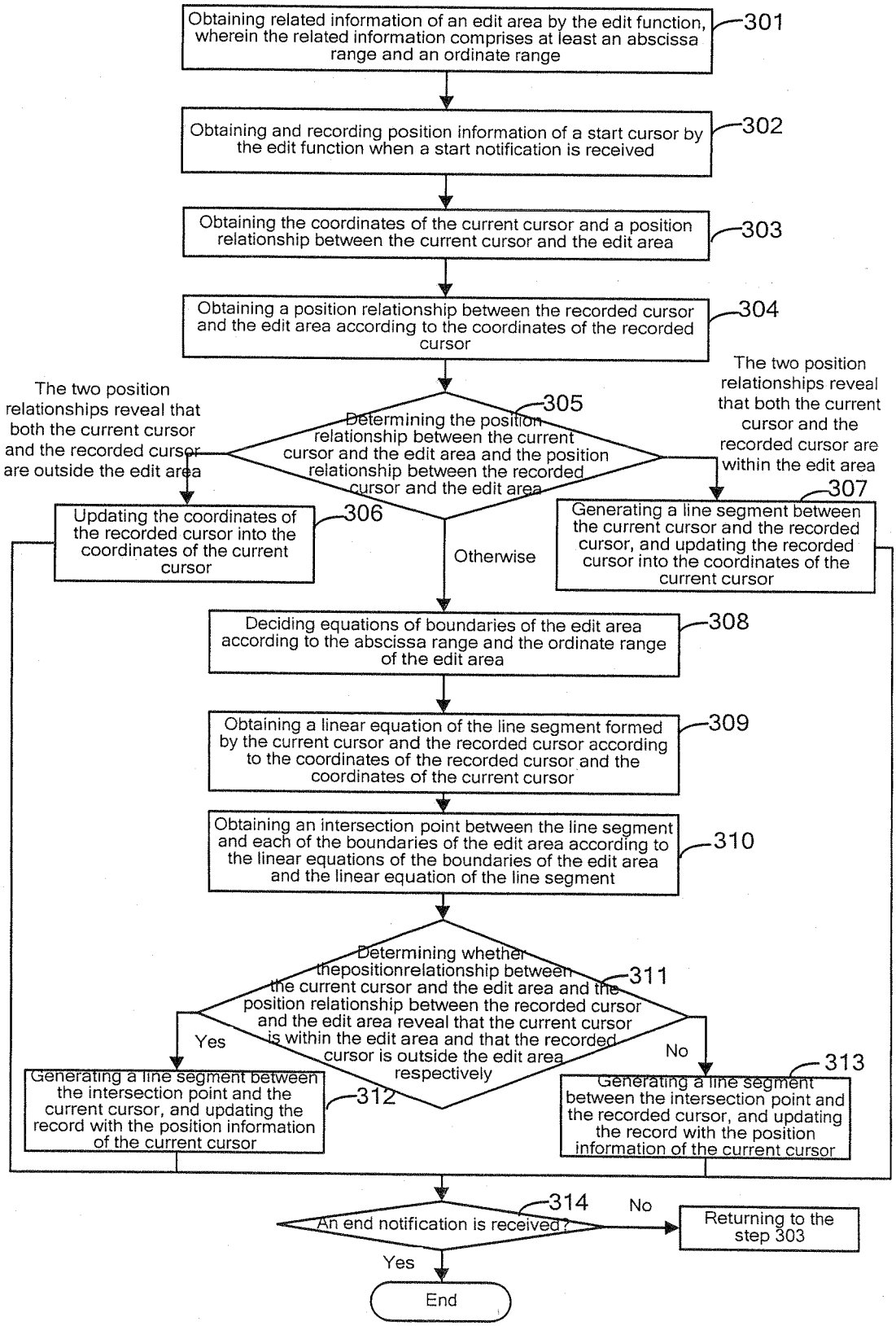
Obtaining related information of an edit area by the edit function, wherein the related information comprises at least an abscissa range and an ordinate range
301
Obtaining and recording position information of a start cursor by the edit function when a start notification is received
302
Obtaining the coordinates of the current cursor and a position relationship between the current cursor and the edit area
303
Obtaining a position relationship between the recorded cursor and the edit area according to the coordinates of the recorded cursor
304
The two position relationships reveal that both the current cursor and the recorded cursor are outside the edit area
Determining the position relationship between the current cursor and the edit area and the position relationship between the recorded cursor and the edit area
305
The two position relationships reveal that both the current cursor and the recorded cursor are within the edit area
Updating the coordinates of the recorded cursor into the coordinates of the current cursor
306
Otherwise
Generating a line segment between the current cursor and the recorded cursor, and updating the recorded cursor into the coordinates of the current cursor
307
Deciding equations of boundaries of the edit area according to the abscissa range and the ordinate range of the edit area
308
Obtaining a linear equation of the line segment formed by the current cursor and the recorded cursor according to the coordinates of the recorded cursor and the coordinates of the current cursor
309
Obtaining an intersection point between the line segment and each of the boundaries of the edit area according to the linear equations of the boundaries of the edit area and the linear equation of the line segment
310
Determining whether thepositionrelationship between the current cursor and the edit area and the position relationship between the recorded cursor and the edit area reveal that the current cursor is within the edit area and that the recorded cursor is outside the edit area respectively
311
Yes
No
Generating a line segment between the intersection point and the current cursor, and updating the record with the position information of the current cursor
312
Generating a line segment between the intersection point and the recorded cursor, and updating the record with the position information of the current cursor
313
An end notification is received?
314
No
Returning to the step 303
Yes
End

Fig.4

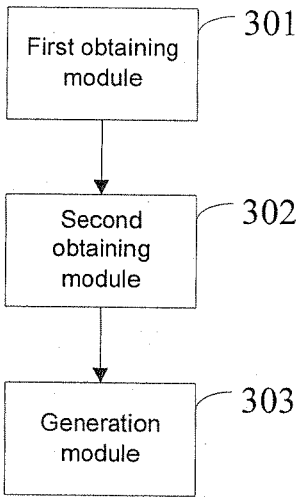
First obtaining module
301
Second obtaining module
302
Generation module
303

Fig.5