

Claims

1. A target location search method, wherein it comprises the following steps:
determining a location designated by a target search request;
determining a grid corresponding to the location in a pre-set gridded location area; and
determining the grid's corresponding optimal search radius from pre-set correspondence relationships between grids and optimal search radiuses, and using the optimal search radius to perform a search for the target and obtain returned results,
determining whether a number of the returned results is less than a pre-set lower limit of returned number; and
if the number of the returned results is less than the lower limit of returned number, performing the search with a gradually expanding search radius for the searched target, until the number of returned results reaches the lower limit of returned number.
2. The target location search method according to Claim 1, wherein the gridded location area is obtained by:
within a set area, determining latitude and longitude information specified by all target search requests received by a system within a set historical time range; and
based on a Geohash algorithm, mapping the latitude and longitude information to the gridded location area with square grids of equal length and width.
3. The target location search method according to Claim 1 or Claim 2, wherein the correspondence relationships between the grids and optimal search radiuses are obtained by:
respectively making the center point of each of the grids in the gridded location area a center of a circle, and performing a target search using an incrementally increasing radius, to obtain a minimum search radius for the each grid corresponding to the returned results when reaching a pre-set returned number threshold; and
using the minimum search radius as the grid's optimal search radius.
4. The target location search method according to Claim 1, wherein the pre-set gridded location area and the pre-set correspondence relationships between the grids and optimal search radiuses are regularly updated.
5. The target location search method according to Claim 2, wherein mapping the latitude

and longitude information to the gridded location area with square grids of equal length and width based on a Geohash algorithm comprises:

mapping latitude and longitude information corresponding to popular locations in the latitude and longitude information to the gridded location area with square grids of equal length and width based on a Geohash algorithm, the popular locations comprising locations for which a search volume is no less than a pre-set value.

6. A target location search apparatus, wherein it comprises:

a location determination module, configured to determine a location designated by a target search request;

a grid determination module, configured to determine a grid corresponding to the location in a pre-set gridded location area;

a search range determination module, configured to determine the grid's corresponding optimal search radius from pre-set correspondence relationships between grids and optimal search radiuses; and

a returned results acquisition module, configured to perform a search for the target using the optimal search radius and obtain returned results,

a returned results optimization module, configured to determine whether a number of the returned results is less than a pre-set lower limit of returned number after the returned results acquisition module obtains the returned results; and if the number of returned results is less than the lower limit of returned number, perform the search with a gradually expanding search radius for the searched target, until the number of returned results reaches the lower limit of returned number.

7. The target location search apparatus according to Claim 6, wherein the gridded location area is obtained by:

within a set area, determining latitude and longitude information specified by all target search requests received by a system within a set historical time range; and

based on a Geohash algorithm, mapping the latitude and longitude information to the gridded location area with square grids of equal length and width.

8. The target location search apparatus according to Claim 6 or Claim 7, wherein the correspondence relationships between the grids and optimal search radiuses are obtained by:

respectively making the center point of each of the grids in the gridded location area a center of a circle, and performing a target search using an incrementally increasing radius, to obtain a minimum search radius for the each grid corresponding to the returned results when reaching a pre-set returned number threshold; and

using the minimum search radius as the grid's optimal search radius.

9. The target location search apparatus according to Claim 6, wherein the pre-set gridded location area and the pre-set correspondence relationships between the grids and optimal search radiuses are regularly updated.

10. The target location search apparatus according to Claim 7, wherein mapping the latitude and longitude information to the gridded location area with square grids of equal length and width based on a Geohash algorithm comprises:

mapping latitude and longitude information corresponding to popular locations in the latitude and longitude information to the gridded location area with square grids of equal length and width based on a Geohash algorithm, the popular locations comprising locations for which a search volume is no less than a pre-set value.