CLAIMS

1. A flight path determining method, comprising:

determining, according to position information of a flight origin of a target aircraft, position information of a flight destination of the target aircraft, and a topological graph corresponding to a plurality of blocks in a target space, a block path from the plurality of blocks, wherein

the block path is configured to represent a plurality of first blocks that the target aircraft passes through from the flight origin to the flight destination,

both the flight origin and the flight destination are in the target space,

there are a plurality of spatial points with first connection information in the target space, the first connection information is configured to represent whether every two spatial points in the target space are in connection, and

the block comprises a spatial point group determined by grouping the plurality of spatial points;

determining entrance and exit information corresponding to each of the plurality of first blocks according to position information of each spatial point, the first connection information, and the block path, wherein the entrance and exit information of the first block comprises:

an entrance spatial point of the target aircraft into the first block, and/or

an exit spatial point of the target aircraft out the first block; and

determining a flight path of the target aircraft from the flight origin to the flight destination according to the block path and the entrance and exit information corresponding to each of the plurality of first blocks, wherein the method further comprising:

grouping the plurality of spatial points according to the first connection information and fitness information and position information of each spatial point to determine the plurality of blocks, wherein the fitness information of the spatial point is configured to represent a frequency that an aircraft passes through the spatial point within a preset time period; and

determining second connection information corresponding to the plurality of blocks according to the first connection information to generate the topological graph, wherein the second connection information is configured to represent whether every two blocks of the plurality of blocks are in connection.

2. The method according to claim 1, wherein grouping the plurality of spatial points according to the first connection information and fitness information and position information of each spatial point to determine the plurality of blocks comprises:

performing a gridding process on the target space to divide the target space into a plurality of geometric regions;

for each spatial point, determining a fitness region of the spatial point according to the fitness information of the spatial point; and

grouping spatial points in a same geometric region and a same fitness region and in mutual connection into a same spatial point group as the block.

3. The method according to claim 2, wherein the fitness region comprises a dense region and a sparse region, and for each spatial point, determining the fitness region of the spatial point according to the fitness information of the spatial point comprises:

determining, in response to determining that the frequency that an aircraft passes through the spatial point within the preset time period is greater than a preset frequency, that the spatial point is in the dense region; or,

determining, in response to determining that the frequency that an aircraft passes through the spatial point within the preset time period is less than or equal to the preset frequency, that the spatial point is in the sparse region.

4. The method according to claim 1, wherein determining the second connection information corresponding to the plurality of blocks according to the first connection information to generate the topological graph comprises:

determining, in response to determining that a second spatial point in a second block is in connection with a third spatial point in a third block, that the second block is in connection with the third block to obtain the second connection information, wherein

the second block and the third block are any two of the plurality of blocks,

the second spatial point is any spatial point in the second block, and

the third spatial point is any spatial point in the third block; and

generating the topological graph according to the second connection information.

5. The method according to claim 1, wherein the block path is further configured to represent a connection sequence of the plurality of first blocks, and the determining, according to position information of the flight origin of the target aircraft and position information of the flight destination of the target aircraft, and the topological graph corresponding to the plurality of blocks in the target space, the block path from the plurality of blocks comprises:

determining an origin block corresponding to the flight origin and a destination block corresponding to the flight destination from the plurality of blocks according to the position information of the flight origin and the position information of the flight destination; and

determining the plurality of first blocks and the connection sequence through a preset path finding algorithm according to the origin block, the destination block, and the topological graph, wherein the plurality of first blocks comprise the origin block and the destination block.

6. The method according to any one of claims 1-5, wherein determining the entrance and exit information corresponding to each of the plurality of first blocks according to position information of each spatial point and the block path comprises:

determining a fourth spatial point closest to first block i+1 in the block path among a plurality of spatial points in first block i in the block path as an exit spatial point of first block i;

determining a connection path between the exit spatial point of first block i-1 in the block path and a fifth spatial point in first block i according to the first connection information, wherein the fifth spatial point is a spatial point closest to an exit spatial point of first block i-1 among the plurality of spatial points in first block i; and

determining a spatial point first found from first block i during path finding for the connection path as an entrance spatial point of first block i,

wherein i is an integer greater than or equal to 1, and a distance between a spatial point and the first block is a distance between the spatial point and a preset position in the first block.

7. The method according to any one of claims 1-5, wherein determining the flight path of the target aircraft from the flight origin to the flight destination according to the block path

and the entrance and exit information corresponding to each first block comprises:

for each first block, determining a straight path between an entrance spatial point of the first block and an exit spatial point of the first block according to the entrance and exit information corresponding to the first block;

detecting a collision risk on each straight path to determine a first flight sub-path in each first block;

determining a second flight sub-path between the flight origin and the entrance spatial point of the first block corresponding to the flight origin in the block path, and a third flight sub-path between the exit spatial point of the first block corresponding to the flight destination in the block path and the flight destination, according to the position information of each spatial point, the position information of the flight origin, the position information of the flight destination, the block path, and the entrance and exit information corresponding to each first block; and

connecting the second flight sub-path, respective first flight sub-paths, and the third flight sub-path in sequence to generate the flight path.

8. The method according to claim 7, wherein the detecting the collision risk on each straight path to determine the first flight sub-path in each first block comprises:

determining the straight path as the first flight sub-path in a case that there is no collision risk on the straight path; or,

determining the first flight sub-path through a preset path planning algorithm according to connections of spatial points in the first block in a case that there is the collision risk on the straight path.

9. A computer readable storage medium having a computer program stored thereon, when the computer program is executed by a processor, causing the processor to implement steps of the method of determining a flight path of any one of claims 1 to 8.

10. An electronic device comprising:

a memory having a computer program stored thereon;

a processor for executing the computer program in the memory to implement steps of

the method of determining a flight path of any one of claims 1 to 8.