

## CLAIMS

1. A method for restoring system file index, comprising:

step A. when a storage medium is loaded, judging whether an index information set is read or not, if no, executing a step E, if yes, executing a step B;

step B. judging whether an index in the index information set is correct or not, if no, executing the step E;

step C. when executing a read operation for a first file in the storage medium, judging whether an index of the first file in the index information set corresponds to a backup index in the first file or not, if no, executing the step E;

step D. when executing a writing operation for a second file in the storage medium, judging whether an index of the second file in the index information set corresponds to a backup index in the second file or not, if no, executing the step E;

step E. updating backup indexes of all files in the storage medium, and restoring or re-establishing the index information set.

2. The method according to claim 1, further comprising:

before each of the step A, the step C, and the step D, allocating an address room for a file to be established, adding an index of the file to be established into the index information set, and storing a corresponding backup index into the file to be established.

3. The method according to claim 1, wherein when the step E is updating the backup indexes of all files in the storage medium and restoring the index information set, the step E comprises:

reading all data in the storage medium;

updating backup indexes of all files in the storage medium, and replacing the indexes in the index information set with the backup indexes of all files after updating;

when the step E is updating backup the indexes of all files in the storage

medium and re-establishing the index information set, the step E comprises:

reading all data in the storage medium;

updating the backup indexes of all files in the storage medium, deleting the index information set, and storing the backup indexes of all files after updating in the form of a one-dimensional array to re-establish the index information set.

4. The method according to claim 1, wherein judging whether the indexes in the index information set are correct or not comprises:

judging whether the indexes in the index information set correspond to the backup indexes of corresponding files or not one by one.

5. The method according to claim 1, wherein judging whether the index information set is read or not comprises:

reading all data in the storage medium, and judging whether there is the index information index in the data or not.

6. A device for restoring system file index, wherein the device comprises:

a first judging module configured for judging whether an index information set is read or not when a storage medium is loaded;

a second judging module configured for judging whether an index in the index information set is correct or not;

a third judging module configured for judging whether an index of a first file in the index information set corresponds to a backup index in the first file or not when executing a read operation for the first file in the storage medium;

a fourth judging module configured for judging whether an index of a second file in the index information set corresponds to a backup index in the second file or not when executing a write operation for the second file in the storage medium;

a restoring and re-establishing module configured for updating backup indexes of all files in the storage medium, and restoring or re-establishing the index information set.

7. The device according to claim 6, wherein the device further comprises:

an establishing module configured for allocating an address room for a file to be established, adding an index of the file to be established into the index information set, and storing a corresponding backup index into the file to be established.

8. The device according to claim 6, wherein, when the restoring and re-establishing module restores the index information set, the restoring and re-establishing module comprises:

a first reading unit configured for reading all data in the storage medium;

a restoring unit configured for updating all backup indexes of all files in the storage medium, and updating, and replacing the indexes in the index information set with the backup indexes of all files after updating;

when the restoring and re-establishing module re-establishes the index information set, the restoring and re-establishing module comprises:

a second reading unit configured for reading all data in the storage medium;

a re-establishing unit configured for updating the backup indexes of all files in the storage medium, deleting the index information set, and storing the backup indexes of all files after updating in the form of a one dimensional array so as to re-establish the index information set.

9. The device according to claim 6, wherein the second judging module judges whether the indexes in the index information set are correct or not by:

judging whether the indexes in the index information set correspond to the backup indexes in corresponding files or not one by one.

10. The device according to claim 6, wherein the first judging module judges whether the index information set is read or not by:

reading all data in the storage medium, and judging whether there exist the index information set in the data or not.