CLAIMS

What is claimed is:

1. A data compression method, comprising:

obtaining a to-be-compressed object;

searching a recommendation record for ~~whether~~ a recommended compression coding rule that meets a compression rate condition ~~exists~~, wherein the recommendation record is~~be~~ configured~~ing used~~ to record a compression coding rule of a historical compressed object and corresponding compression rate information, ~~and~~ the historical compressed object is~~being~~ of the same type as the to-be-compressed object, and the compression rate condition includes a compression rate of the recommended compression coding rule being higher than a specified threshold;

~~if the recommended compression coding rule that meets the compression rate condition exists, compressing the to-be-compressed object by using the recommended compression coding rule;~~ and

when~~if~~ the recommended compression coding rule that meets the compression rate condition is not found~~does not exist~~, starting a regular compression coding process to obtain estimated compression rates of a plurality of compression coding rules for the to-be-compressed object, selecting a target compression coding rule based on at least the estimated compression rates, and compressing the to-be-compressed object by using the target compression coding rule, wherein the estimated compression rate of each of the plurality of compression coding rules is determined based on a ratio of a size of the to-be-compressed object after compression by the regular compression coding process to an original size of the to-be-compressed object.

2. The method according to claim 1, wherein the to-be-compressed object includes to-be-compressed data units obtained by splitting to-be-compressed data, and the historical compressed object includes other historical compressed data units obtained by splitting the to-be-compressed data.

3. The method according to claim 1, wherein the to-be-compressed object includes to-be-compressed data units obtained by splitting to-be-compressed data in a data table, and the historical compressed object includes historical compressed data

units corresponding to the data table.

4. The method according to claim 1, wherein the to-be-compressed object includes a column of to-be-compressed data in a data table, and the historical compressed object includes historical compressed data in the same column as the column of to-be-compressed data in the data table.

5. The method according to claim 1, wherein the to-be-compressed object includes a duplicate of a data table, and the historical compressed object includes a main data table corresponding to the duplicate of the data table.

~~6. The method according to claim 1, wherein the compression rate condition includes at least: compression rate information of the recommended compression coding rule is higher than a specified threshold.~~

6~~7~~. The method according to claim 1, further comprising:

after the compressing the to-be-compressed object, updating the recommendation record based on a compression coding rule used for the to-be-compressed object.

7~~8~~. The method according to claim 6~~7~~, wherein the updating the recommendation record based on the compression coding rule used for the to-be-compressed object includes:

obtaining an actual compression rate of the to-be-compressed object, and updating the recommendation record based on at least the actual compression rate and the compression coding rule used for the to-be-compressed object.

8~~9~~. The method according to claim 1,~~ 6, or 8,~~ wherein the method further comprises: obtaining access requirement information of the to-be-compressed object, wherein the access requirement information is related to decompression efficiency of the to-be-compressed object; and

the compression rate condition includes: the compression rate information of the recommended compression coding rule matches the access requirement information.

9~~10~~. The method according to claim 8~~9~~, wherein the selecting the target compression coding rule based on at least the estimated compression rates includes:

selecting the target compression coding rule based on the estimated compression rates and the access requirement information.

10~~1~~. The method according to claim 8~~9~~, wherein the access requirement information of the to-be-compressed object is determined by obtaining historical access data of one or more of the to-be-compressed object or the historical

compressed object.

112. The method according to claim 101, wherein the historical access data includes a historical access frequency.

123. The method according to claim 89, wherein the updating the recommendation record based on at least the actual compression rate and the compression coding rule used for the to-be-compressed object includes:

updating the recommendation record based on the actual compression rate, the access requirement information, and the compression coding rule used for the to-be-compressed object.

134. The method according to claim 123, wherein compression rate information of the compression coding rule includes a confidence level indicating the actual compression rate of the compression coding rule; and

the updating the recommendation record based on the actual compression rate, the access requirement information, and the compression coding rule used for the to-be-compressed object includes:

if the compression coding rule used for the to-be-compressed object is a recommended compression coding rule recorded in the recommendation record, and the actual compression rate of the to-be-compressed object matches the access requirement information, increasing a confidence level of the recommended compression coding rule; otherwise, reducing a confidence level of the recommended compression coding rule; and

if the compression coding rule used for the to-be-compressed object is different from a recommended compression coding rule recorded in the recommendation record, and the actual compression rate of the to-be-compressed object matches the access requirement information, replacing the recommended compression coding rule in the recommendation record with the compression coding rule used for the to-be-compressed object.

145. A data compression apparatus, the apparatus comprising:

a processor; and

a memory storing instructions executable by the processor,

wherein the processor is configured to:

~~an acquisition module, configured to~~ obtain a to-be-compressed object;

~~a searching module, configured to~~ search a recommendation record for ~~whether~~ a

recommended compression coding rule that meets a compression rate condition ~~exists~~, wherein the recommendation record ~~being~~is configured ~~used~~ to record a compression coding rule of a historical compressed object and corresponding compression rate information, ~~and~~ the historical compressed object is~~being~~ of the same type as the to-be-compressed object, and the compression rate condition includes a compression rate of the recommended compression coding rule being higher than a specified threshold;

~~a first compression module, configured to: if the recommended compression coding rule that meets the compression rate condition exists, compress the to-be-compressed object by using the recommended compression coding rule;~~ and

~~a second compression module, configured to: if~~when the recommended compression coding rule that meets the compression rate condition is~~does~~ not found~~exist~~, start a regular compression coding process to obtain estimated compression rates of a plurality of compression coding rules for the to-be-compressed object, select a target compression coding rule based on at least the estimated compression rates, and compress the to-be-compressed object by using the target compression coding rule, wherein the estimated compression rate of each of the plurality of compression coding rules is determined based on a ratio of a size of the to-be-compressed object after compression by the regular compression coding process to an original size of the to-be-compressed object.

~~16. A computer device, comprising a memory, a processor, and a computer program that is stored in the memory and that can run on the processor, the processor implementing the method according to any one of claims 1 to 14 when executing the program.~~