CLAIMS

1. A video processing method, performed by a terminal, the method comprising:

acquiring video substreams through at least two channels, to obtain at least two video substreams each having a one-to-one correspondence with one of the at least two channels;

extracting video slice numbers from supplemental enhancement information ,SEI, frames of the at least two video substreams;

determining a missing video slice missed from corresponding video substreams of the at least two video substreams according to the extracted video slice numbers;

downloading the missing video slice from a video source corresponding to the corresponding video substreams; and

playing the downloaded video slice and the at least two video substreams according to a sequence of the video slice numbers;

wherein before downloading a video stream through the at least two channels, the method further comprises:

acquiring a video playing instruction;

downloading, in response to the video playing instruction, an entire video stream within a preset time range from a target server in a content delivery network CDN) system, both the entire video stream and the at least two video substreams belonging to data streams of a same video;

playing the entire video stream by using a client; and

downloading the video substreams divided from the video stream through the at least two channels when the client reaches a stable playing state during playing the entire video stream.

2. The method according to claim 1, wherein the acquiring video substreams through at least two channels, to obtain at least two video substreams each having the one-to-one correspondence with one of the at least two channels comprises:

dividing a video stream to be downloaded into at least two video substreams; and

downloading the at least two video substreams from a target server in a CDN system through the at least two channels respectively.

3. The method according to claim 1, wherein the acquiring video substreams through at least two channels comprises:

downloading at least one of the video substreams from another client; and

downloading the remaining video substream from a target server in a CDN system.

4. The method according to claim 3, wherein the downloading at least one of the video substreams from another client comprises:

selecting at least one target video substream from the at least two video substreams; and

downloading the target video substream from the another client; and

the method further comprises: pausing the download of the target video substream from the target server when determining to download the target video substream from the another client.

5. The method according to claim 1, the determining the missing video slice missed from corresponding video substreams of the at least two video substreams according to the extracted video slice numbers comprising:

determining whether a video slice number is missing in the at least two video substreams; and

determining, when the video slice number is missing in at least one video substream, the missing video slice in the at least one video substream according to the missing video slice number.

6. The method according to claim 1, wherein the playing the downloaded video slice and the at least two video substreams according to a sequence of the video slice numbers comprises:

saving the downloaded video slice and the at least two video substreams;

loading the saved video slices and video substreams to a client sequentially according to the sequence of the video slice numbers, to obtain a corresponding video stream to be played;

rendering the loaded video slices in the video stream to be played sequentially, to obtain an image sequence to be played; and

playing the image sequence to be played by using the client.

7. The method according to any one of claims 1 to 6, wherein the video stream is obtained by a server sequentially slicing an original video stream, the original video stream is pushed by a video capture system to the server; and the video slice numbers of video slices are numbered by the server.

8. The method according to claim 7, wherein the original video stream and the video stream both are video streams in a Flash Video FLV,streaming media format.

9. A video processing apparatus, comprising:

a first downloading module, configured to acquire video substreams through at least two channels, to obtain at least two video substreams each having a one-to-one correspondence with one of the at least two channels;

an extraction module, configured to extract video slice numbers from supplemental enhancement information, SEI, frames of the at least two video substreams;

a determining module, configured to determine a missing video slice missed from corresponding video substreams of the at least two video substreams according to the extracted video slice numbers;

a second downloading module, configured to download the missing video slices from a video source end corresponding to the corresponding video substreams; and

a playing module, configured to play the downloaded video slices and the at least two video substreams according to a sequence of the video slice numbers; wherein the apparatus further comprises:

an acquisition module, configured to acquire a video playing instruction, wherein

the first downloading module is further configured to download, in response to the video playing instructions, an entire video stream within a preset time range from a target server in a content delivery network, CDN, system, both the entire video stream and the at least two video substreams belonging to data streams of a same video;

the playing module is further configured to play the entire video stream by using a client; and

the first downloading module is further configured to download the video substreams divided from the video stream through the at least two channels when the client reaches a stable playing state during playing the entire video stream.

10. The apparatus according to claim 9, wherein the first downloading module is further configured to download at least one of the video substreams from another client, and download the remaining video substream from a target server in a CDN system.

11. The apparatus according to claim 10, wherein the first downloading module is further configured to select at least one target video substream from the at least two video substreams, download the target video substream from the another client, and pause the download of the target video substream from the target server when determining to download the target video substream from the another client.

12. The apparatus according to claim 9, wherein the determining module is further configured

to determine whether a video slice number is missing in the at least two video substreams, and determine, when the video slice number is missing in at least one video substream, the missing video slice in the at least one video substream according to the missing video slice number.

13. The apparatus according to claim 9, wherein the playing module is further configured to save the downloaded video slices and the at least two video substreams, load the saved video slices and video substreams to a client sequentially according to the sequence of the video slice numbers, to obtain a corresponding video stream to be played, render the loaded video slices in the video stream to be played sequentially, to obtain an image sequence to be played, and play the image sequence to be played by using the client.

14. A computer device, comprising a memory and a processor, the memory storing a computer program, the processor, when executing the computer program, performing the operations of the method according to any one of claims 1 to 8.

15. A computer-readable storage medium, storing a computer program, the computer program, when executed by a processor, performing the operations of the method according to any one of claims 1 to 8.