

CLAIMS

1. An audio broadcast method, applied to a smart broadcast device, the method comprising:
receiving (102) an audio broadcast instruction pushed by a payment server;

in response to the audio broadcast instruction, downloading (104) an audio file
5 corresponding to the audio broadcast instruction, wherein the audio file comprises a
marketing content related to a payment service carried on a payment client interfacing with
the payment server;

wherein the audio broadcast instruction comprises a verification value generated based on
an original content of the audio file using a verification value algorithm and the method
10 further comprises performing an integrity verification of the downloaded audio file to prevent
the original content of the audio file from being tampered with, comprising:

performing a verification calculation on the downloaded audio file using the
verification value algorithm to acquire a verification value; and

determining whether the acquired verification value matches the verification value
15 carried in the audio broadcast instruction;

the method further comprising playing (106) the audio file through an equipped audio
player if the acquired verification value matches the verification value carried in the audio
broadcast instruction.

2. The method according to claim 1, wherein receiving the audio broadcast instruction
20 pushed by the payment server comprises:

receiving the audio broadcast instruction pushed by the payment server through an
encrypted data connection channel.

3. The method according to claim 1, wherein the audio broadcast instruction further
25 comprises a file name corresponding to the audio file, and a download address corresponding
to the audio file;

downloading the audio file corresponding to the audio broadcast instruction comprises:

searching locally to determine whether an audio file corresponding to the file name in the
30 audio broadcast instruction is stored; and

if an audio instruction corresponding to the file name is not stored locally, downloading

the corresponding audio file based on the download address in the audio broadcast instruction.

4. The method according to claim 3, wherein the audio file is stored on a third-party storage platform separate from the payment server.

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5. The method according to claim 1, wherein the verification value generated based on the original file content of the audio file is a MD5 signature.

6. The method according to claim 1, wherein the audio broadcast instruction is actively pushed by the payment server based on a configuration, or pushed by the payment server in a triggering manner upon receiving an interface invoking with respect to an API related to the payment service, which is initiated by the payment client.

7. An audio broadcast apparatus (50), applied to a smart broadcast device, the apparatus (50) comprising:

a receiving module (501) configured to receive an audio broadcast instruction pushed by a payment server;

a download module (502) configured to, in response to the audio broadcast instruction, download an audio file corresponding to the audio broadcast instruction, wherein the audio file comprises a marketing content related to a payment service carried on a payment client interfacing with the payment server;

wherein the audio broadcast instruction comprises a verification value generated based on an original content of the audio file using a verification value algorithm and the download module is further configured to perform an integrity verification of the downloaded audio file to prevent the original content of the audio file from being tampered with, comprising:

performing a verification calculation on the downloaded audio file using the verification value algorithm to acquire a verification value; and

determining whether the acquired verification value matches the verification value carried in the audio broadcast instruction;

the audio broadcast apparatus further comprising a broadcast module (503) configured to play the audio file through an equipped audio player if the acquired verification value matches

the verification value carried in the audio broadcast instruction.

8. The apparatus according to claim 7, wherein the receiving module is further configured to:

5 receive the audio broadcast instruction pushed by the payment server through an encrypted data connection channel.

9. The apparatus according to claim 7, wherein the audio broadcast instruction further comprises a file name corresponding to the audio file, and a download address corresponding
10 to the audio file;

the download module is further configured to:

search whether the audio file corresponding to the file name in the audio broadcast instruction is stored locally; and

15 if an audio instruction corresponding to the file name is not stored locally, download the corresponding audio file based on the download address in the audio broadcast instruction,

wherein the audio file is stored on a third-party storage platform separate from the payment server.

10. The apparatus according to claim 7, wherein the verification value generated based on the
20 original file content of the audio file is a MD5 signature.

11. The apparatus according to claim 7, wherein the audio broadcast instruction is actively pushed by the payment server based on a configuration, or pushed by the payment server in a triggering manner upon receiving an interface invoking with respect to an API related to the
25 payment service, which is initiated by the payment client.

12. An audio broadcast system, comprising: a payment server, a payment client interfacing with the payment server, and a smart broadcast device interfacing with the payment server, wherein,

30 the payment server is configured to transmit an audio broadcast instruction to the smart

broadcast device, wherein the audio broadcast instruction is used to trigger the smart broadcast device to download an audio file corresponding to a marketing content related to a payment service carried on the payment client;

5 the smart broadcast device is configured to, in response to the audio broadcast instruction, download the audio file, and play the audio file through an equipped audio player;

wherein the audio broadcast instruction comprises a verification value generated based on an original content of the audio file using a verification value algorithm and the smart broadcast device is further configured to perform an integrity verification of the downloaded audio file to prevent the original content of the audio file from being tampered with,
10 comprising:

performing a verification calculation on the downloaded audio file using the verification value algorithm to acquire a verification value; and

determining whether the acquired verification value matches the verification value carried in the audio broadcast instruction;

15 wherein the smart broadcast device is configured to play the audio file through the equipped audio player if the acquired verification value matches the verification value carried in the audio broadcast instruction.

13. The system according to claim 12, wherein the payment server is further configured to:

20 actively push the audio broadcast instruction to the smart broadcast device based on a configuration; or

upon receiving an interface invoking with respect to an API related to the payment service initiated by the payment client, push the audio broadcast instruction to the smart broadcast device in a triggering manner.

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14. The system according to claim 12, wherein the audio broadcast instruction further comprises a file name corresponding to the audio file, and a download address corresponding to the audio file;

the smart broadcast device is further configured to:

30 search locally to determine whether an audio file corresponding to the file name in the audio broadcast instruction is stored; and

if an audio instruction corresponding to the file name is not stored locally, download the corresponding audio file based on the download address in the audio broadcast instruction,

the system further comprising:

5 a third-party storage platform configured to store the audio file corresponding to the audio broadcast instruction;

the smart broadcast device is further configured to:

download the corresponding audio file from the third-party storage platform based on the download address in the audio broadcast instruction.

10 15. The system according to claim 12, wherein the verification value generated based on the original file content of the audio file is a MD5 signature.