CLAIMS

1. A method for a device to access a network, comprising:

generating, by an access point, a broadcast frame, wherein the broadcast frame comprises feature information of a network access device~~;~~, ~~and~~ wherein the feature information ~~is used for indicating a feature of the network access device~~comprises identity information of the network access device; and

broadcasting, by the access point, the broadcast frame, so that a specific network access device, having identity information that matches the identity information in the broadcast frame, initiates a network access procedure to the access point upon receiving the broadcast frame,

wherein the identity information of the network access device comprises a value of one specific bit in a Media Access Control (MAC) address of the network access device, or values of multiple specific bits in the MAC address of the network access device; or a result value obtained by performing a specific operation on a value of one specific bit in the MAC address of the network access device, or result values obtained by performing a specific operation on values of multiple specific bits in the MAC address of the network access device~~, wherein the specific network access device is a network access device which receives the broadcast frame and has the feature indicated by the feature information.~~.

2. The method according to claim 1, wherein the feature information is valid within an access duration corresponding to the broadcast frame.

~~3. The method according to claim 1 or 2, wherein the feature information is specifically used for indicating a feature of identity information of the network access device; and~~

~~the specific network access device is specifically a network access device which receives the broadcast frame and of which identity information has the feature indicated by the feature information.~~

4~~3~~. The method according to any one of claims 1 to 2~~3~~, wherein the broadcasting, by the access point, the broadcast frame comprises:

within a certain period of time, broadcasting, by the access point, M broadcast frames which carry N pieces of feature information, wherein each of the M broadcast frames carries one of the N pieces of feature information, N is an integer greater than or equal to 1, and M is an integer greater than or equal to N; and sets of network access devices having a feature indicated by one of the N pieces of feature information constitute a whole set of all network access devices.

~~5. The method according to claim 3, wherein the identity information of the network access device is a media access control MAC address of the network access device.~~

~~6. The method according to claim 5, wherein the feature indicated by the feature information is that: a value of one specific bit in the MAC address of the network access device is a value indicated by the feature information, or values of multiple specific bits in the MAC address of the network access device are values indicated by the feature information; ora result value obtained by performing a specific operation on a value of one specific bit in the MAC address of the network access device is a value indicated by the feature information, or result values obtained by performing a specific operation on values of multiple specific bits in the MAC address of the network access device are values indicated by the feature information.~~

~~7~~4. A method for a device to access a network, comprising:

receiving, by a first network access device, a broadcast frame broadcast by an access point, wherein the broadcast frame comprises feature information of a network access device, wherein the feature information comprises identity information of the network access device; ~~and the feature information is used for indicating a feature of the network access device; and~~

determining, by the first network access device, whether identity information of the first network access device ~~has~~matches the ~~feature~~ identity information indicated by the feature information in the received broadcast frame, and if the identity information of the first network access device ~~has~~ matches the identity information ~~the feature~~ indicated by the feature information in the received broadcast frame, initiating a network access procedure to the access point,

wherein the identity information of the network access device comprises ,a value of one specific bit in the MAC address of the network access device, or values of multiple specific bits in the MAC address of the network access device; and

the determining, by the first network access device, whether the identity information of the first network access device matches the identity information indicated by the feature information in the received broadcast frame specifically comprises:

determining, by the first network access device, whether in a MAC address of the first network access device, a value of one specific bit is a value indicated by the identity information indicated by the feature information in the received broadcast frame, or values of multiple specific bits are values indicated by the identity information indicated by the feature information in the received broadcast frame; or

the feature indicated by the identity information is that: a result value obtained by performing a specific operation on a value of one specific bit in the MAC address of the

network access device is a value indicated by the identity information indicated by the feature information in the received broadcast frame, or result values obtained by performing a specific operation on values of multiple specific bits in the MAC address of the network access device are values indicated by the identity information indicated by the feature information in the received broadcast frame; and

the determining, by the first network access device, whether the first network access device has the identity information indicated by the feature information in the received broadcast frame specifically comprises:

determining, by the first network access device, whether in the MAC address of the first network access device, after the specific operation is implemented, the result value of the value of the specific bit is the value indicated by the identity information indicated by the feature information in the received broadcast frame, or the result values of the values of the multiple specific bits are the values indicated by the identity information indicated by the feature information in the received broadcast frame.

8~~4~~5. The method according to claim ~~7~~4, wherein the feature information is valid within an access duration corresponding to the broadcast frame.

~~9. The method according to claim 7 or 8, wherein the feature information is specifically used for indicating a feature of identity information of the network access device; and~~

~~the determining, by the first network access device, whether the first network access device has the feature indicated by the feature information is specifically:~~

~~determining, by the first network access device, whether identity information of the first network access device has the feature indicated by the feature information.~~

~~10. The method according to claim 9, wherein the identity information of the network access device is a media access control MAC address of the network access device.~~

~~11. The method according to claim 10, wherein the feature indicated by the feature information is that: a value of one specific bit in the MAC address of the network access device is a value indicated by the feature information, or values of multiple specific bits in the MAC address of the network access device are values indicated by the feature information; and~~

~~the determining, by the first network access device, whether the first network access device has the feature indicated by the feature information is specifically:~~

~~determining, by the first network access device, whether in a MAC address of the first network~~

~~access device, a value of one specific bit is a value indicated by the feature information, or values of multiple specific bits are values indicated by the feature information; or~~

~~the feature indicated by the feature information is that: a result value obtained by performing a specific operation on a value of one specific bit in the MAC address of the network access device is a value indicated by the feature information, or result values obtained by performing a specific operation on values of multiple specific bits in the MAC address of the network access device are values indicated by the feature information; and~~

~~the determining, by the first network access device, whether the first network access device has the feature indicated by the feature information is specifically:~~

~~determining, by the first network access device, whether in the MAC address of the first network access device, after the specific operation is implemented, the result value of the value of the specific bit is the value indicated by the feature information, or the result values of the values of the multiple specific bits are the values indicated by the feature information.~~

~~12~~6. An access point, comprising:

a generating module, configured to generate a broadcast frame, wherein the broadcast frame comprises feature information of a network access device~~; and the feature information is used for indicating a feature of the network access device~~, wherein the feature information comprises identity information of the network access device; and

a broadcasting module, configured to broadcast the broadcast frame, so that a specific network access device having identity information that matches the identity information in the broadcast frame, initiates a network access procedure to the access point upon receiving the broadcast frame,

wherein the identity information of the network access device comprises a value of one specific bit in a Media Access Control (MAC) address of the network access device, or values of multiple specific bits in the MAC address of the network access device; or a result value obtained by performing a specific operation on a value of one specific bit in the MAC address of the network access device, or result values obtained by performing a specific operation on values of multiple specific bits in the MAC address of the network access device ~~wherein the specific network access device is a network access device which receives the broadcast frame and has the feature indicated by the feature information~~.

~~13. The access point according to claim 12, wherein the feature information is specifically used for indicating a feature of identity information of the network access device; and~~

~~the specific network access device is specifically a network access device which receives the broadcast frame and of which identity information has the feature indicated by the feature~~

~~information.~~

~~14~~7. The access point according to claim ~~12 or 13~~6, wherein

the broadcasting module is specifically configured to: within a certain period of time, broadcast M broadcast frames which carry N pieces of feature information, wherein each of the M broadcast frames carries one of the N pieces of feature information, N is an integer greater than or equal to 1, and M is an integer greater than or equal to N; and sets of network access devices separately having a feature indicated by the N pieces of feature information constitute a whole set of all network access devices.

~~15. The access point according to claim 13, wherein an identity of the network access device is a media access control MAC address of the network access device.~~

~~16. The access point according to claim 14, wherein the feature indicated by the feature information is that: a value of one specific bit in the MAC address of the network access device is a value indicated by the feature information, or values of multiple specific bits in the MAC address of the network access device are values indicated by the feature information; or a result value obtained by performing a specific operation on a value of one specific bit in the MAC address of the network access device is a value indicated by the feature information, or result values obtained by performing a specific operation on values of multiple specific bits in the MAC address of the network access device are values indicated by the feature information.~~

~~17~~8. A network access device, comprising:

an obtaining module, configured to receive a broadcast frame broadcast by an access point, wherein the broadcast frame comprises feature information of the network access device, wherein the feature information comprises identity information of the network access device; ~~and the feature information is used for indicating a feature of the network access device~~;

a determining module, configured to determine whether identity information of the network access device matches the identity information indicated by the feature information in the received broadcast frame~~whether the network access device has the feature indicated by the feature information~~; and

an accessing module, configured to initiate a network access procedure to the access point, when a determination result of the determining module is yes~~.~~,

wherein the identity information of the network access device comprises a value of one specific bit in the Media Access Control (MAC) address of the network access device, or values of multiple specific bits in the MAC address of the network access device; and

the determining module is specifically configured to determine whether the value of the

specific bit in the MAC address of the network access device is the value indicated by the identity information indicated by the feature information in the received broadcast frame, or the values of the multiple specific bits in the MAC address of the network access device are the values indicated by the identity information indicated by the feature information in the received broadcast frame; or

the identity information indicated by the feature information in the received broadcast frame comprises: a result value obtained by performing a specific operation on a value of one specific bit in the MAC address of the network access device, or result values obtained by performing a specific operation on values of multiple specific bits in the MAC address of the network access device; and

the determining module is specifically configured to determine after the specific operation is implemented, the result value of the value of the specific bit in the MAC address of the network access device is the value indicated by the identity information indicated by the feature information in the received broadcast frame, or the result values of the values of the multiple specific bits in the MAC address of the network access device are the values indicated by the identity information indicated by the feature information in the received broadcast frame.

~~18. The network access device according to claim 17, wherein the feature information is specifically used for indicating a feature of identity information of the network access device; and~~

~~the determining module is specifically configured to determine whether identity information of the network access device has the feature indicated by the feature information.~~

~~19. The network access device according to claim 18, wherein an identity of the network access device is a media access control MAC address of the network access device.~~

~~20. The method according to claim 19, wherein the feature indicated by the feature information is that: a value of one specific bit in the MAC address of the network access device is a value indicated by the feature information, or values of multiple specific bits in the MAC address of the network access device are values indicated by the feature information; and~~

~~the determining module is specifically configured to determine whether the value of the specific bit in the MAC address of the network access device is the value indicated by the feature information, or the values of the multiple specific bits in the MAC address of the network access device are the values indicated by the feature information; or~~

~~the feature indicated by the feature information is that: a result value obtained by performing a specific operation on a value of one specific bit in the MAC address of the network access device is a value indicated by the feature information, or result values obtained by performing a specific operation on values of multiple specific bits in the MAC address of the network access device are values indicated by the feature information; and~~

~~the determining module is specifically configured to determine after the specific operation is implemented, the result value of the value of the specific bit in the MAC address of the network access device is the value indicated by the feature information, or the result values of the values of the multiple specific bits in the MAC address of the network access device are the values indicated by the feature information.~~

~~21~~9. A wireless fidelity network system, comprising: an access point, ~~configured to generate and broadcast a broadcast frame, wherein the broadcast frame comprises feature information of a network access device; and the feature information is used for indicating a feature of the network access device; and~~

~~one or more network access devices, configured to receive the broadcast frame broadcast by the access point; determine whether the network access device has the feature indicated by the feature information, and initiate a network access procedure to the access point if the network access device has the feature indicated by the feature information~~according to claim 6 or 7 and one or more network devices according to claim 8.