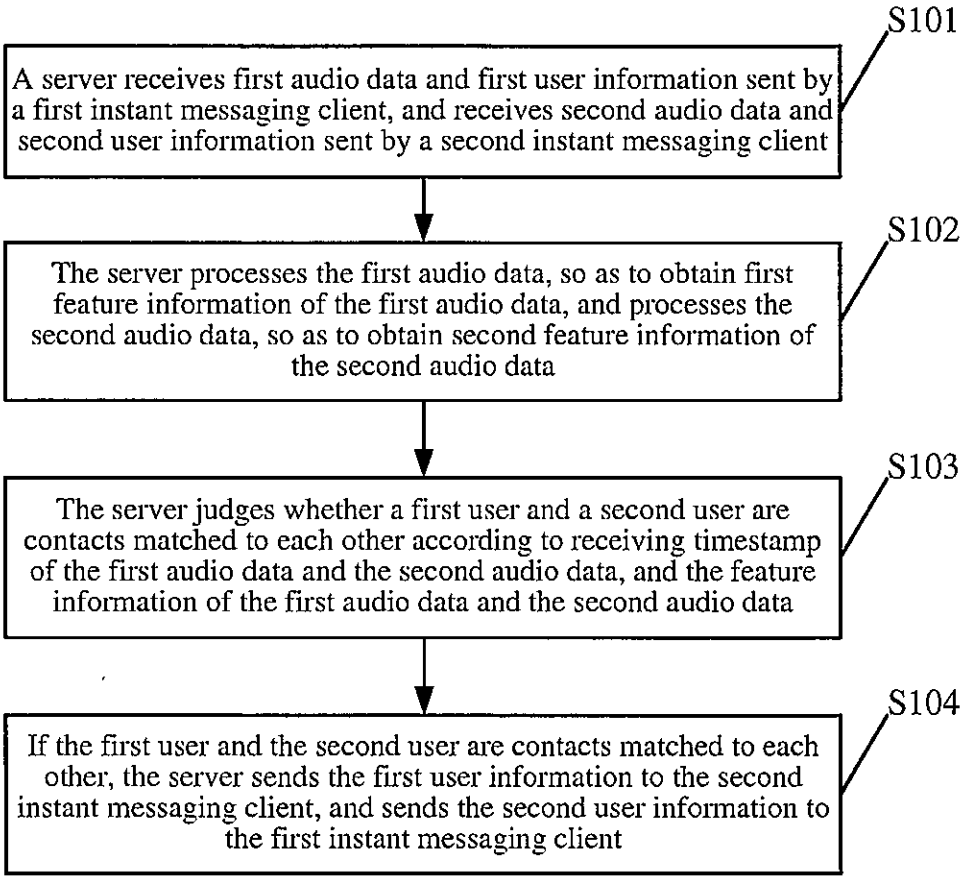
S101
A server receives first audio data and first user information sent by a first instant messaging client, and receives second audio data and second user information sent by a second instant messaging client
S102
The server processes the first audio data, so as to obtain first feature information of the first audio data, and processes the second audio data, so as to obtain second feature information of the second audio data
S103
The server judges whether a first user and a second user are contacts matched to each other according to receiving timestamp of the first audio data and the second audio data, and the feature information of the first audio data and the second audio data
S104
If the first user and the second user are contacts matched to each other, the server sends the first user information to the second instant messaging client, and sends the second user information to the first instant messaging client

FIG. 1

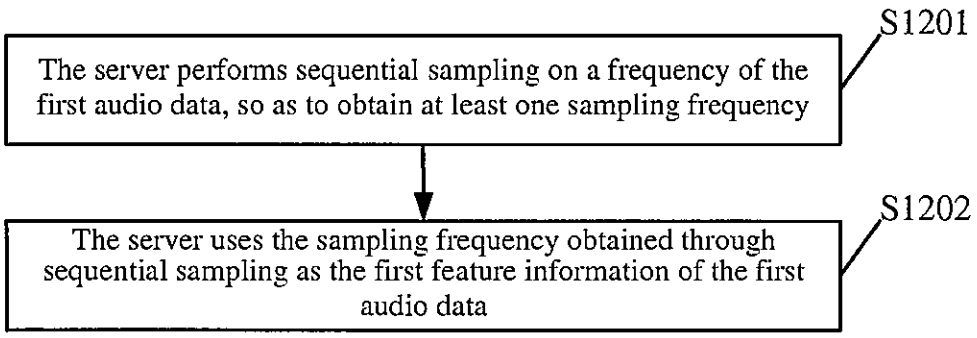
S1201
The server performs sequential sampling on a frequency of the first audio data, so as to obtain at least one sampling frequency
S1202
The server uses the sampling frequency obtained through sequential sampling as the first feature information of the first audio data

FIG. 2

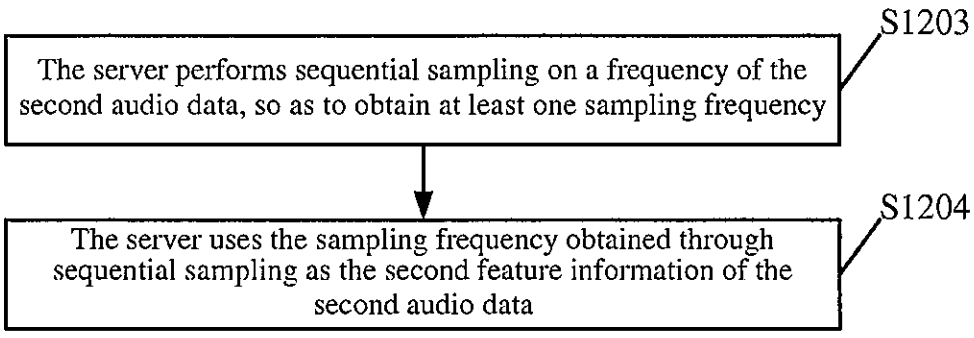
S1203
The server performs sequential sampling on a frequency of the second audio data, so as to obtain at least one sampling frequency
S1204
The server uses the sampling frequency obtained through sequential sampling as the second feature information of the second audio data

FIG. 3

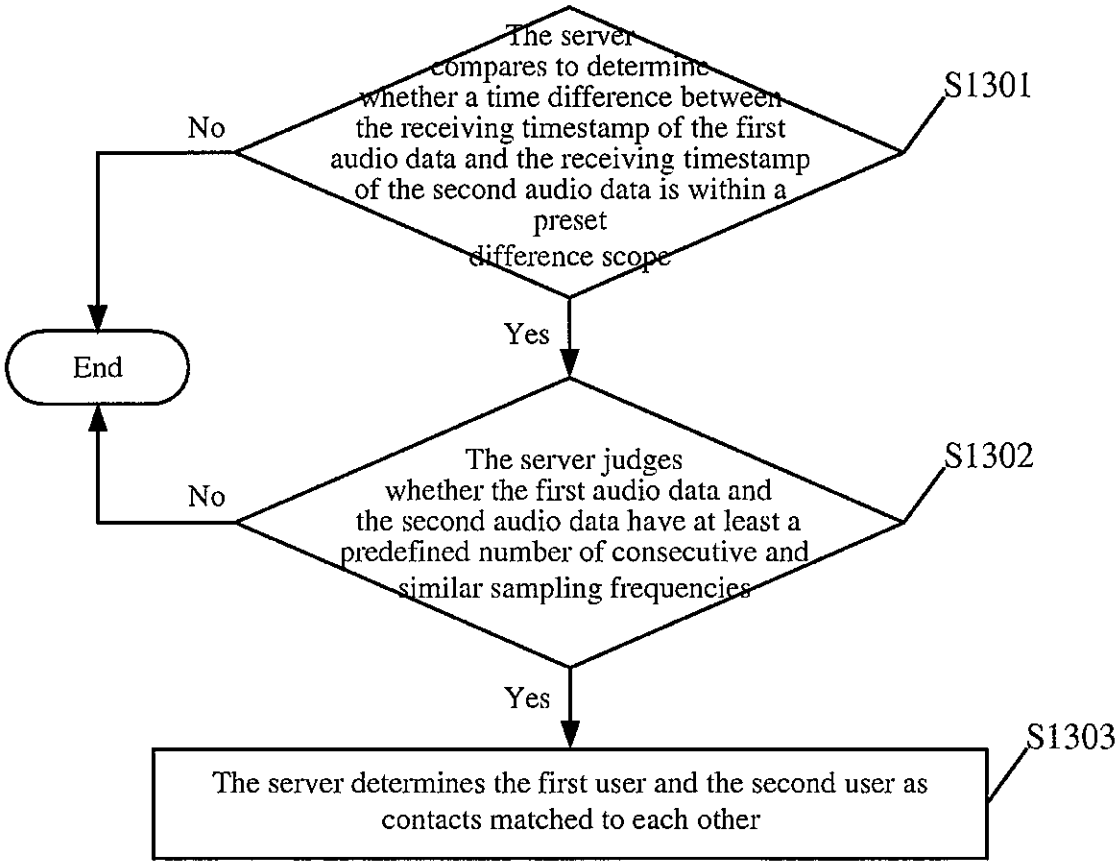
The server compares to determine whether a time difference between the receiving timestamp of the first audio data and the receiving timestamp of the second audio data is within a preset difference scope
S1301
No
Yes
End
The server judges whether the first audio data and the second audio data have at least a predefined number of consecutive and similar sampling frequencies
S1302
No
Yes
The server determines the first user and the second user as contacts matched to each other
S1303

FIG. 4

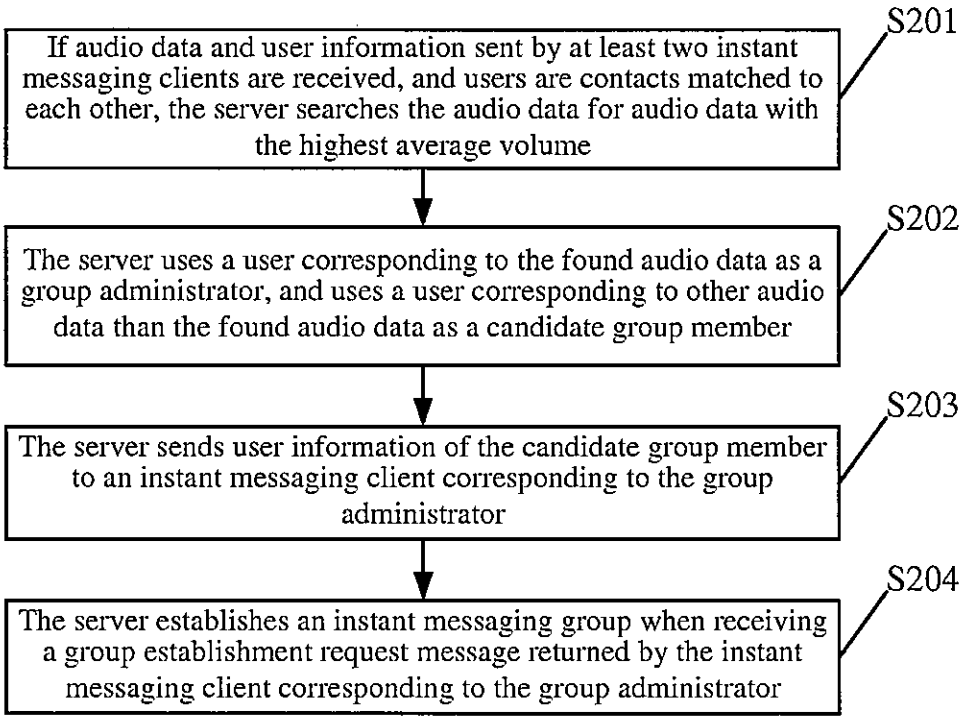
If audio data and user information sent by at least two instant messaging clients are received, and users are contacts matched to each other, the server searches the audio data for audio data with the highest average volume
S201
The server uses a user corresponding to the found audio data as a group administrator, and uses a user corresponding to other audio data than the found audio data as a candidate group member
S202
The server sends user information of the candidate group member to an instant messaging client corresponding to the group administrator
S203
The server establishes an instant messaging group when receiving a group establishment request message returned by the instant messaging client corresponding to the group administrator
S204

FIG. 5

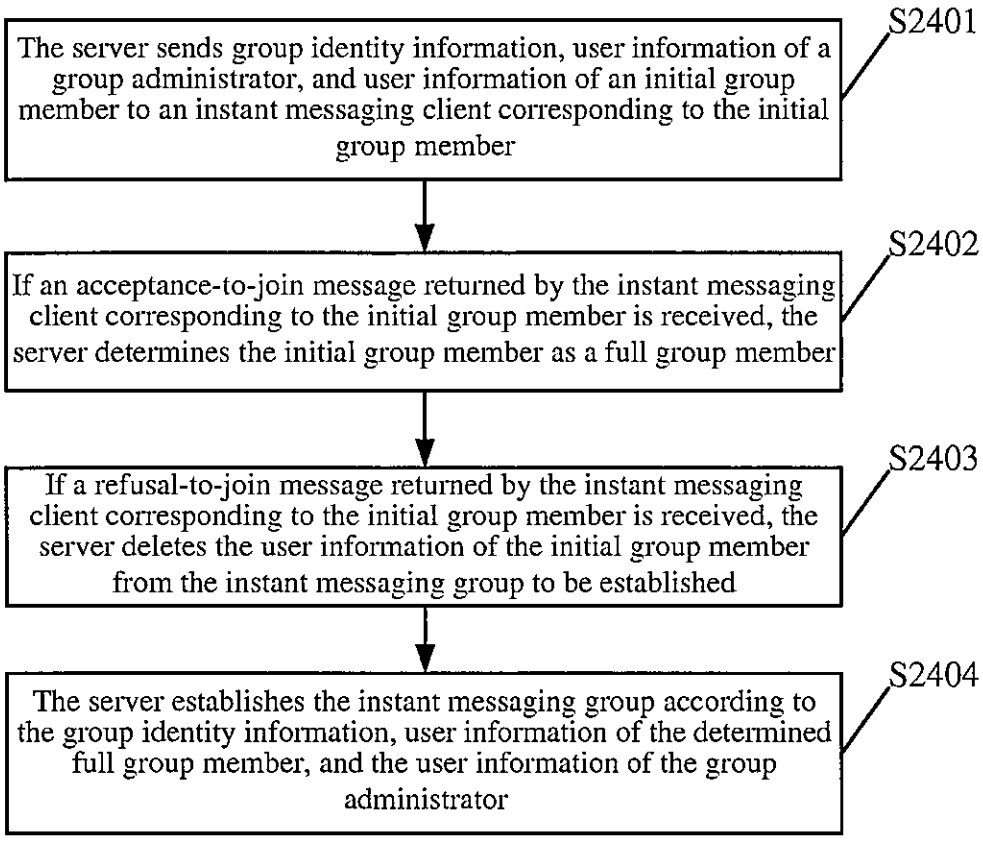
The server sends group identity information, user information of a group administrator, and user information of an initial group member to an instant messaging client corresponding to the initial group member
S2401
If an acceptance-to-join message returned by the instant messaging client corresponding to the initial group member is received, the server determines the initial group member as a full group member
S2402
If a refusal-to-join message returned by the instant messaging client corresponding to the initial group member is received, the server deletes the user information of the initial group member from the instant messaging group to be established
S2403
The server establishes the instant messaging group according to the group identity information, user information of the determined full group member, and the user information of the group administrator
S2404

FIG. 6

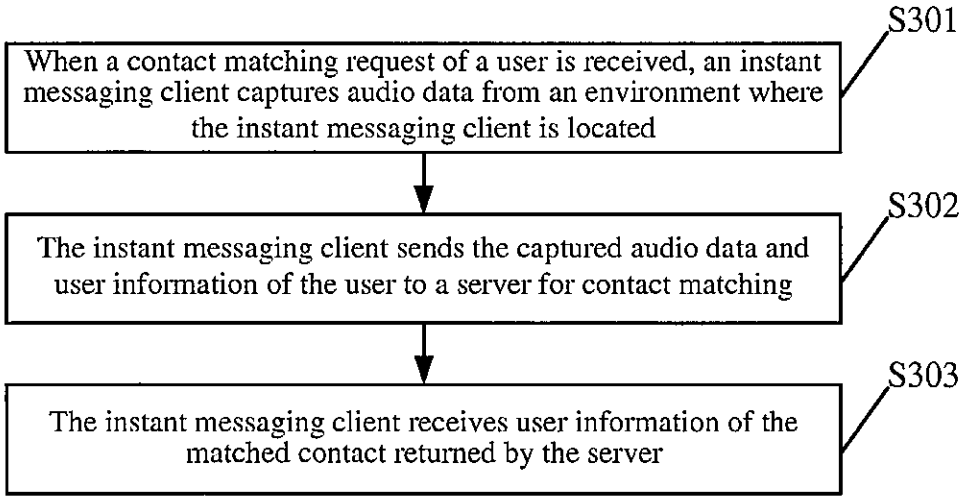
S301
When a contact matching request of a user is received, an instant messaging client captures audio data from an environment where the instant messaging client is located
S302
The instant messaging client sends the captured audio data and user information of the user to a server for contact matching
S303
The instant messaging client receives user information of the matched contact returned by the server

FIG. 7

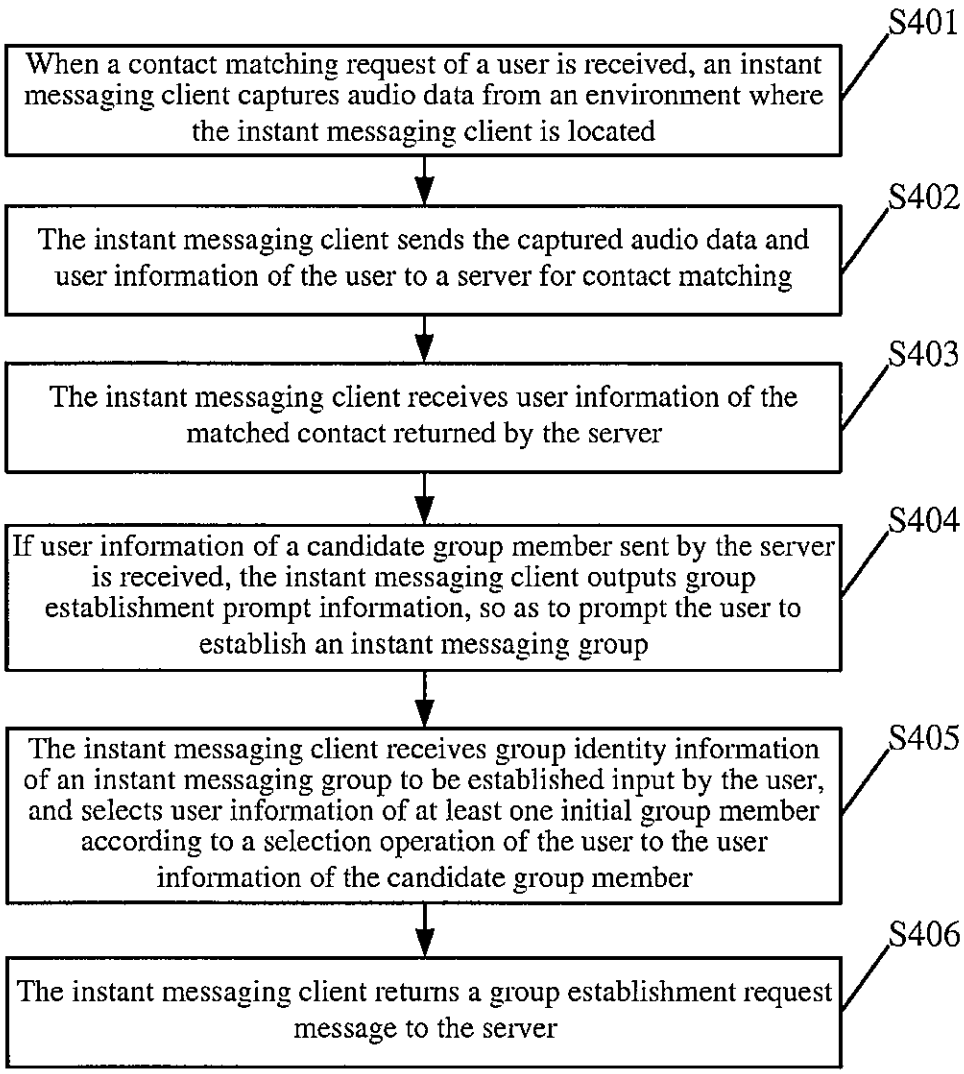
S401
When a contact matching request of a user is received, an instant messaging client captures audio data from an environment where the instant messaging client is located
S402
The instant messaging client sends the captured audio data and user information of the user to a server for contact matching
S403
The instant messaging client receives user information of the matched contact returned by the server
S404
If user information of a candidate group member sent by the server is received, the instant messaging client outputs group establishment prompt information, so as to prompt the user to establish an instant messaging group
S405
The instant messaging client receives group identity information of an instant messaging group to be established input by the user, and selects user information of at least one initial group member according to a selection operation of the user to the user information of the candidate group member
S406
The instant messaging client returns a group establishment request message to the server

FIG. 8

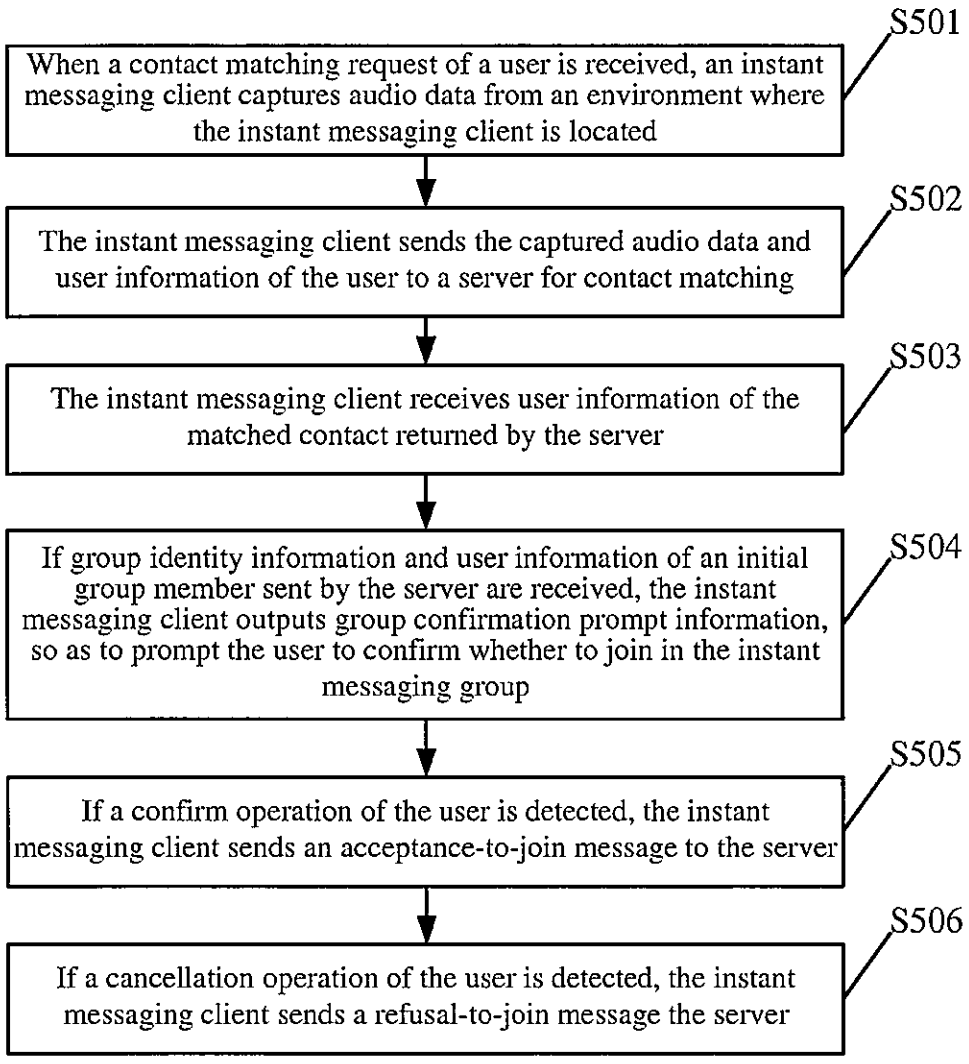
S501
When a contact matching request of a user is received, an instant messaging client captures audio data from an environment where the instant messaging client is located
S502
The instant messaging client sends the captured audio data and user information of the user to a server for contact matching
S503
The instant messaging client receives user information of the matched contact returned by the server
S504
If group identity information and user information of an initial group member sent by the server are received, the instant messaging client outputs group confirmation prompt information, so as to prompt the user to confirm whether to join in the instant messaging group
S505
If a confirm operation of the user is detected, the instant messaging client sends an acceptance-to-join message to the server
S506
If a cancellation operation of the user is detected, the instant messaging client sends a refusal-to-join message the server

FIG. 9

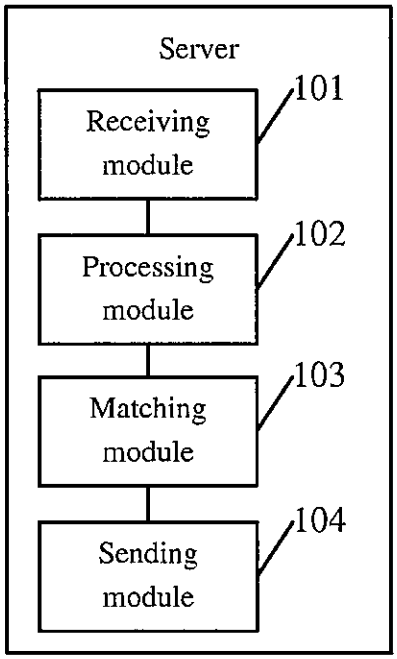
Server
Receiving module
101
Processing module
102
Matching module
103
Sending module
104

FIG. 10

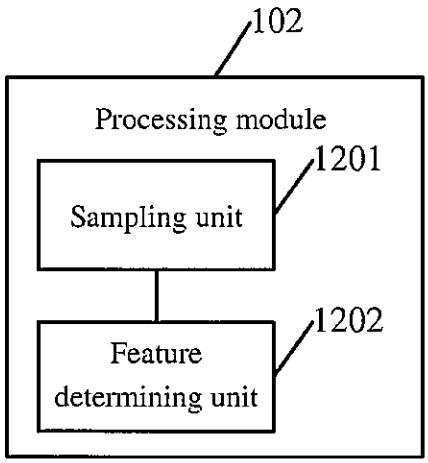
102
Processing module
1201
Sampling unit
1202
Feature determining unit

FIG. 11

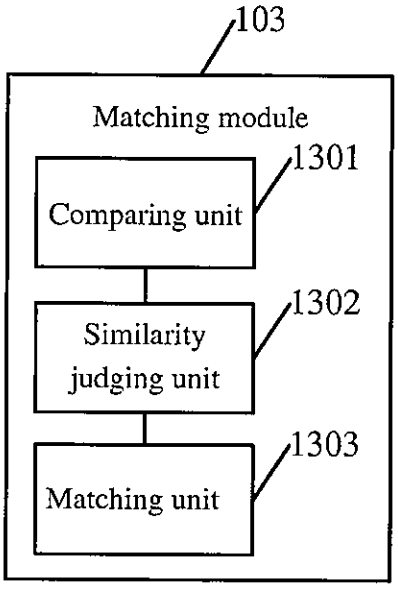
103
Matching module
1301
Comparing unit
1302
Similarity judging unit
1303
Matching unit

FIG. 12

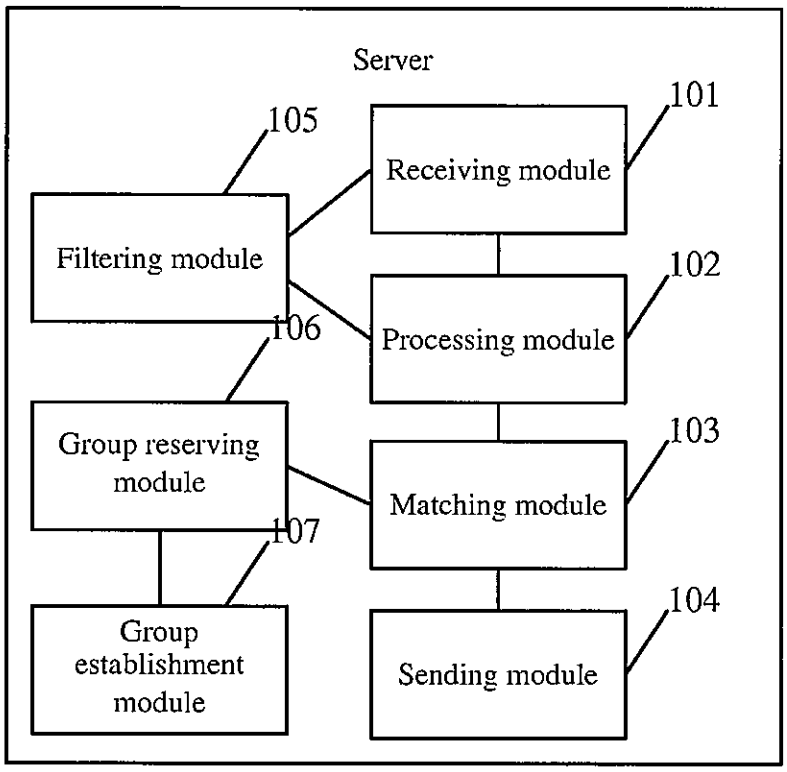
Server
101
105
Receiving module
Filtering module
102
106
Processing module
Group reserving module
103
Matching module
107
Group establishment module
104
Sending module

FIG. 13

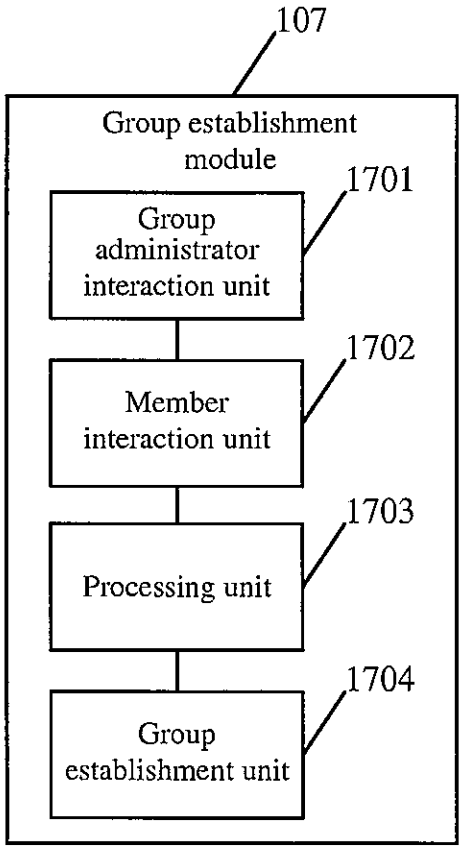
107
Group establishment module
1701
Group administrator interaction unit
1702
Member interaction unit
1703
Processing unit
1704
Group establishment unit

FIG. 14

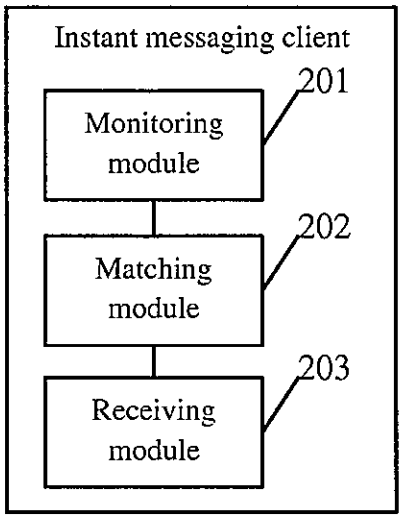
Instant messaging client
201
Monitoring module
202
Matching module
203
Receiving module

FIG. 15

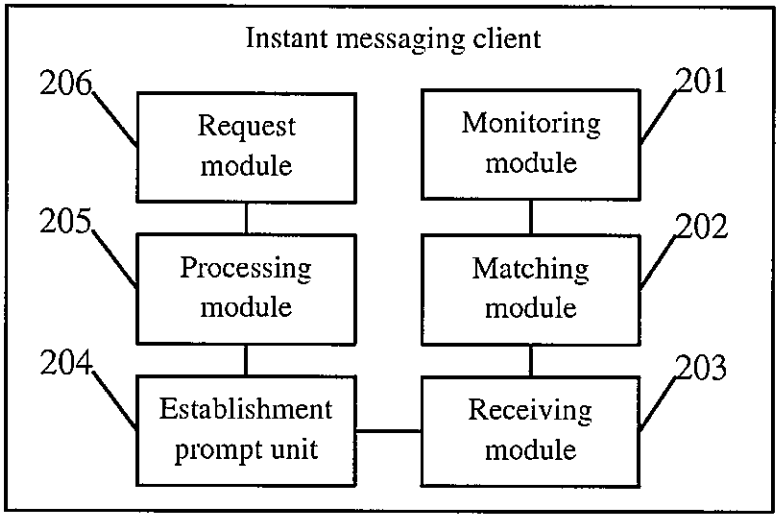
Instant messaging client
206
Request module
201
Monitoring module
205
Processing module
202
Matching module
204
Establishment prompt unit
203
Receiving module

FIG. 16

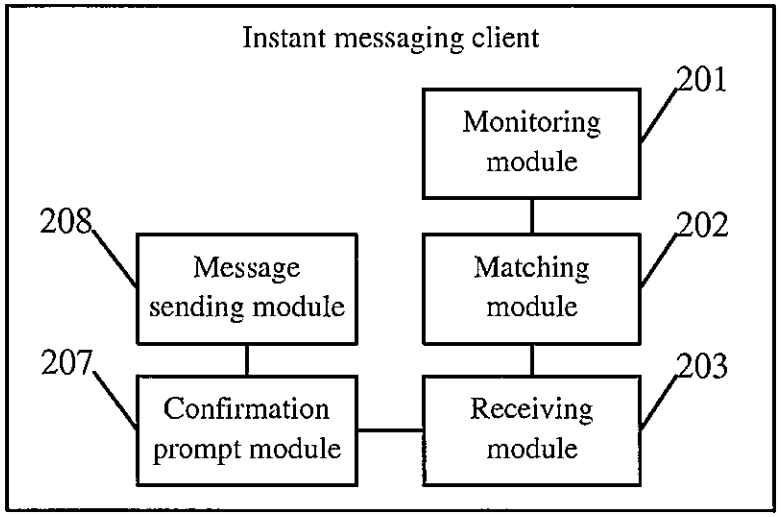
Instant messaging client
201
Monitoring module
208
Message sending module
202
Matching module
207
Confirmation prompt module
203
Receiving module

FIG. 17