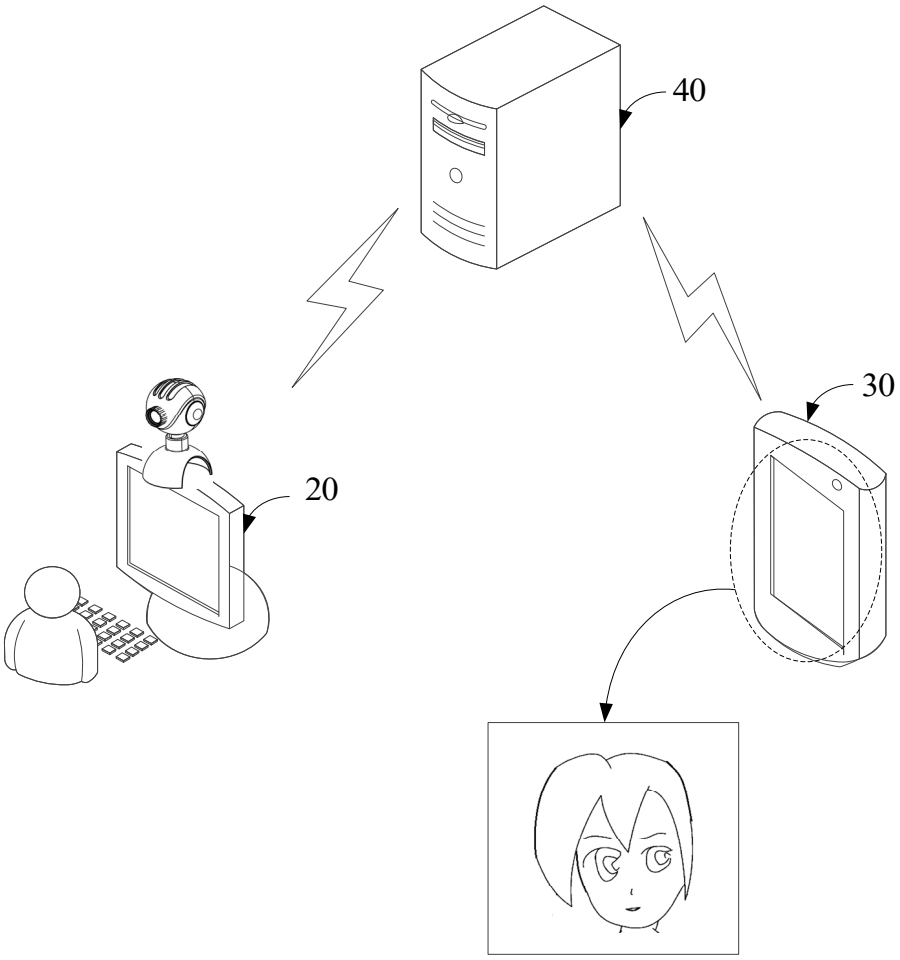
40
30
20

FIG. 1

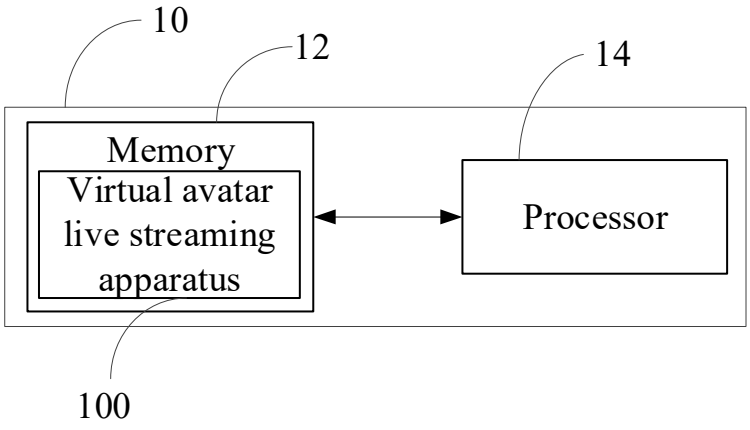
10
12
14
Memory
Virtual avatar live streaming apparatus
Processor
100

FIG. 2

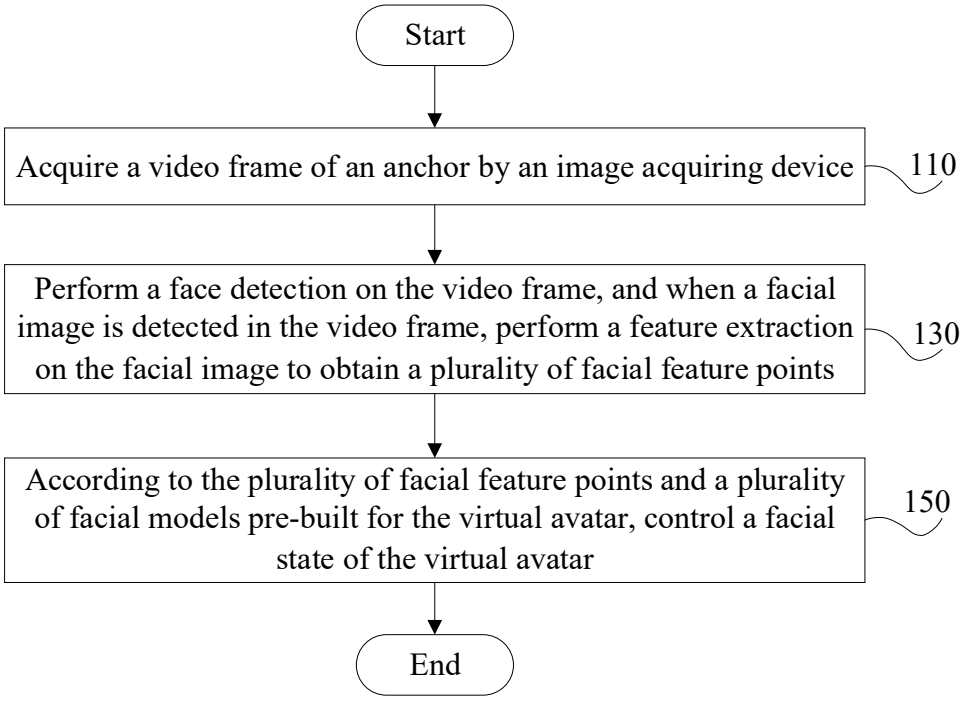
Start
Acquire a video frame of an anchor by an image acquiring device
110
Perform a face detection on the video frame, and when a facial image is detected in the video frame, perform a feature extraction on the facial image to obtain a plurality of facial feature points
130
According to the plurality of facial feature points and a plurality of facial models pre-built for the virtual avatar, control a facial state of the virtual avatar
150
End

FIG. 3

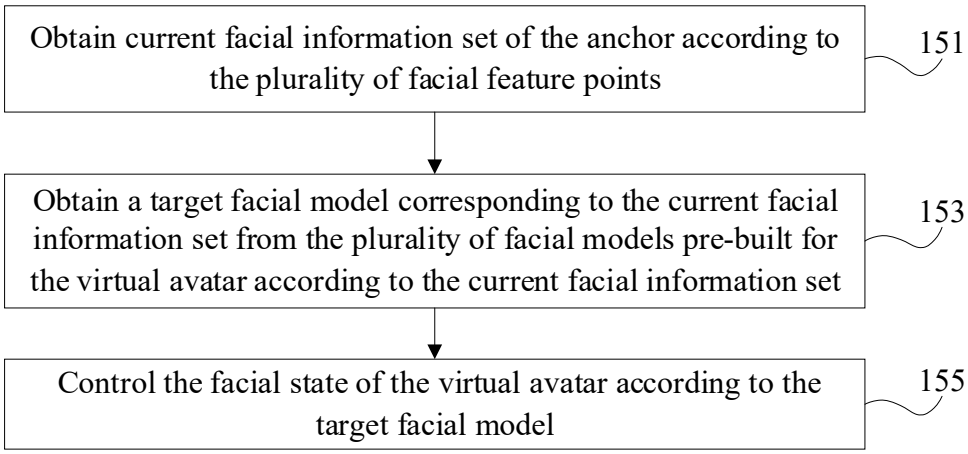
Obtain current facial information set of the anchor according to the plurality of facial feature points
151
Obtain a target facial model corresponding to the current facial information set from the plurality of facial models pre-built for the virtual avatar according to the current facial information set
153
Control the facial state of the virtual avatar according to the target facial model
155

FIG. 4

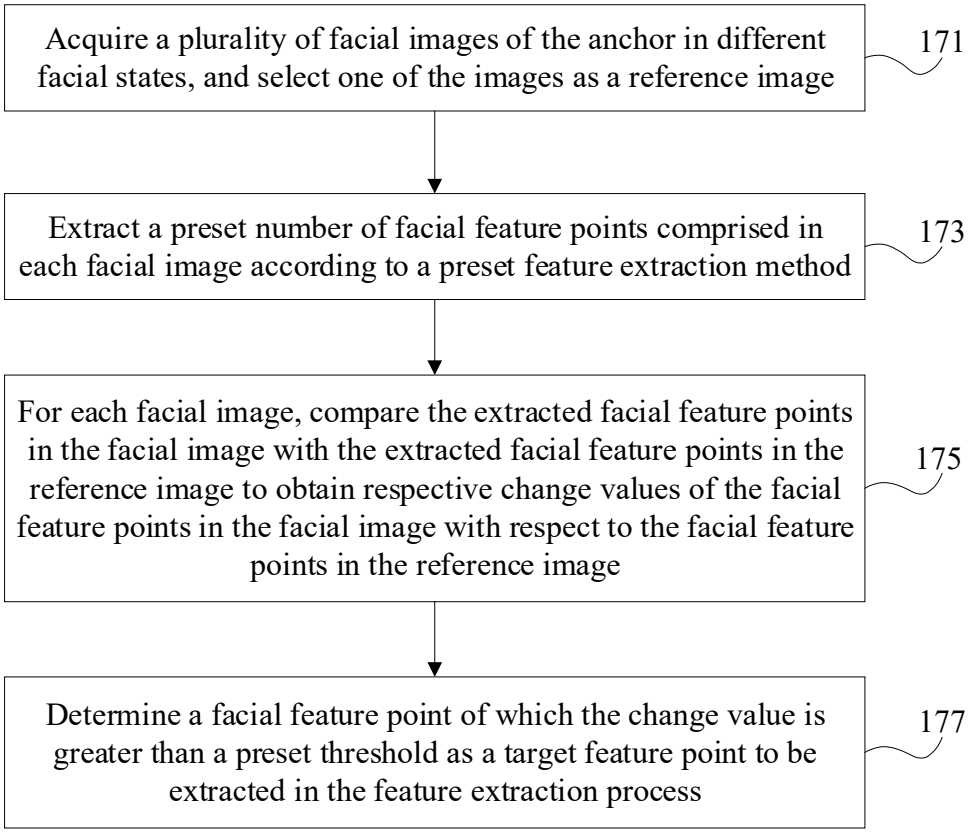
Acquire a plurality of facial images of the anchor in different facial states, and select one of the images as a reference image
171
Extract a preset number of facial feature points comprised in each facial image according to a preset feature extraction method
173
For each facial image, compare the extracted facial feature points in the facial image with the extracted facial feature points in the reference image to obtain respective change values of the facial feature points in the facial image with respect to the facial feature points in the reference image
175
Determine a facial feature point of which the change value is greater than a preset threshold as a target feature point to be extracted in the feature extraction process
177

FIG. 5

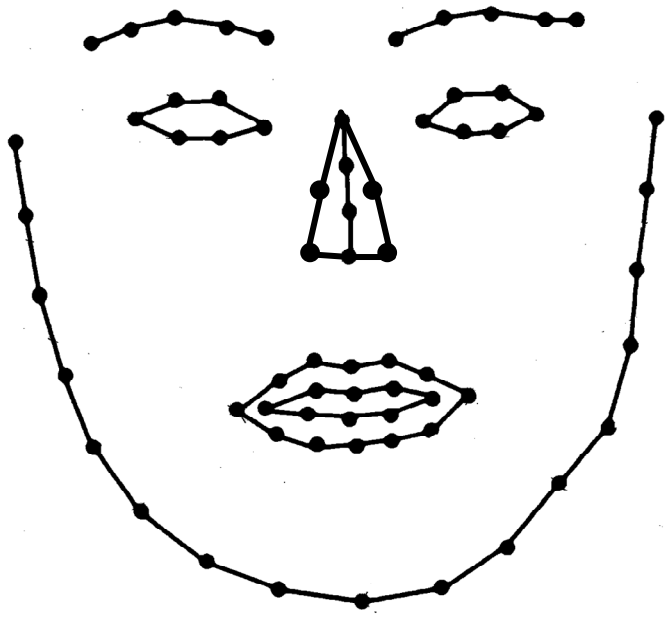

FIG. 6

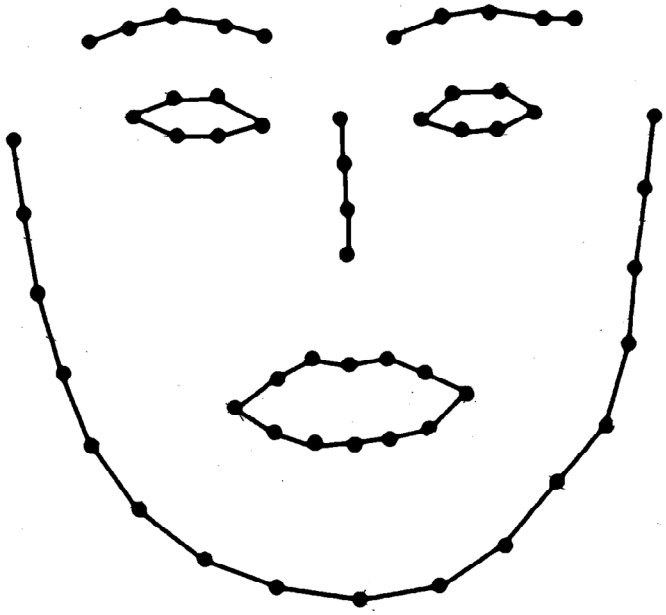

FIG. 7

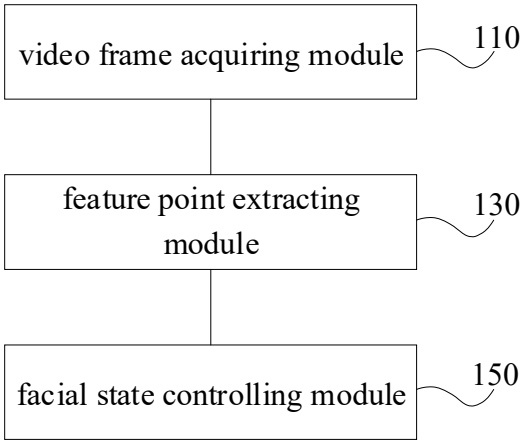
100
video frame acquiring module
110
feature point extracting module
130
facial state controlling module
150

FIG. 8