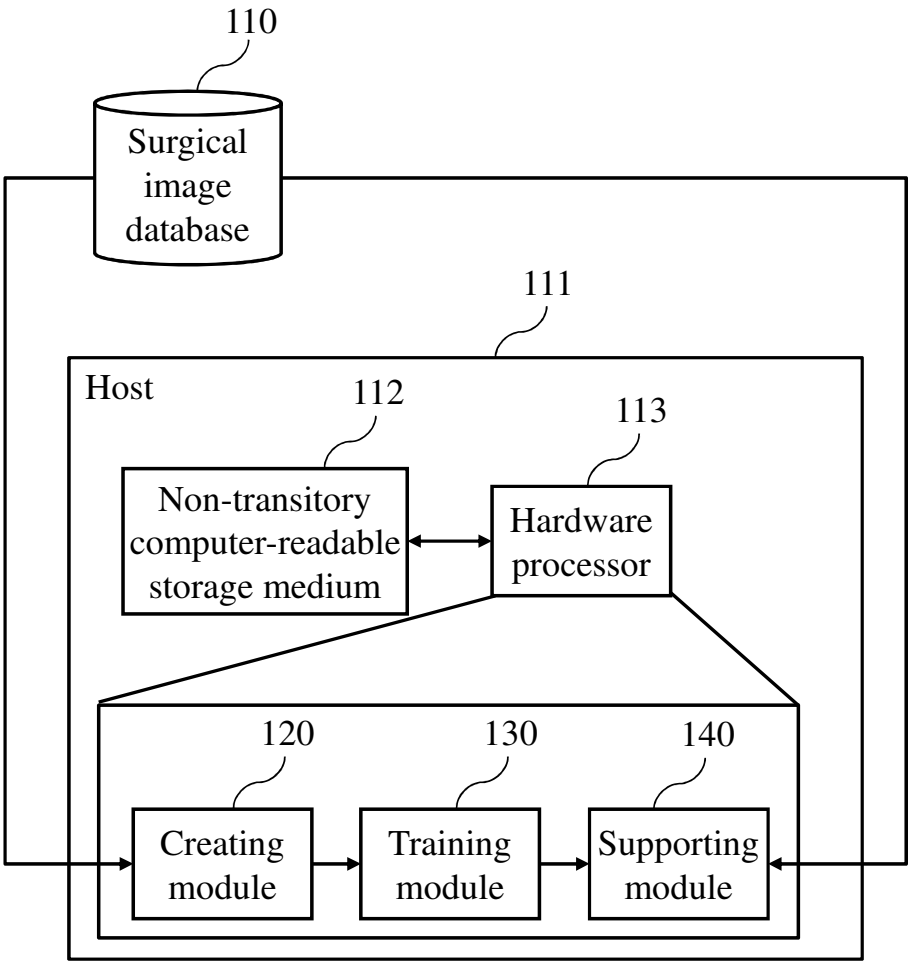

110
Surgical image database
111
Host
112
113
Non-transitory computer-readable storage medium
Hardware processor
120
130
140
Creating module
Training module
Supporting module

FIG. 1

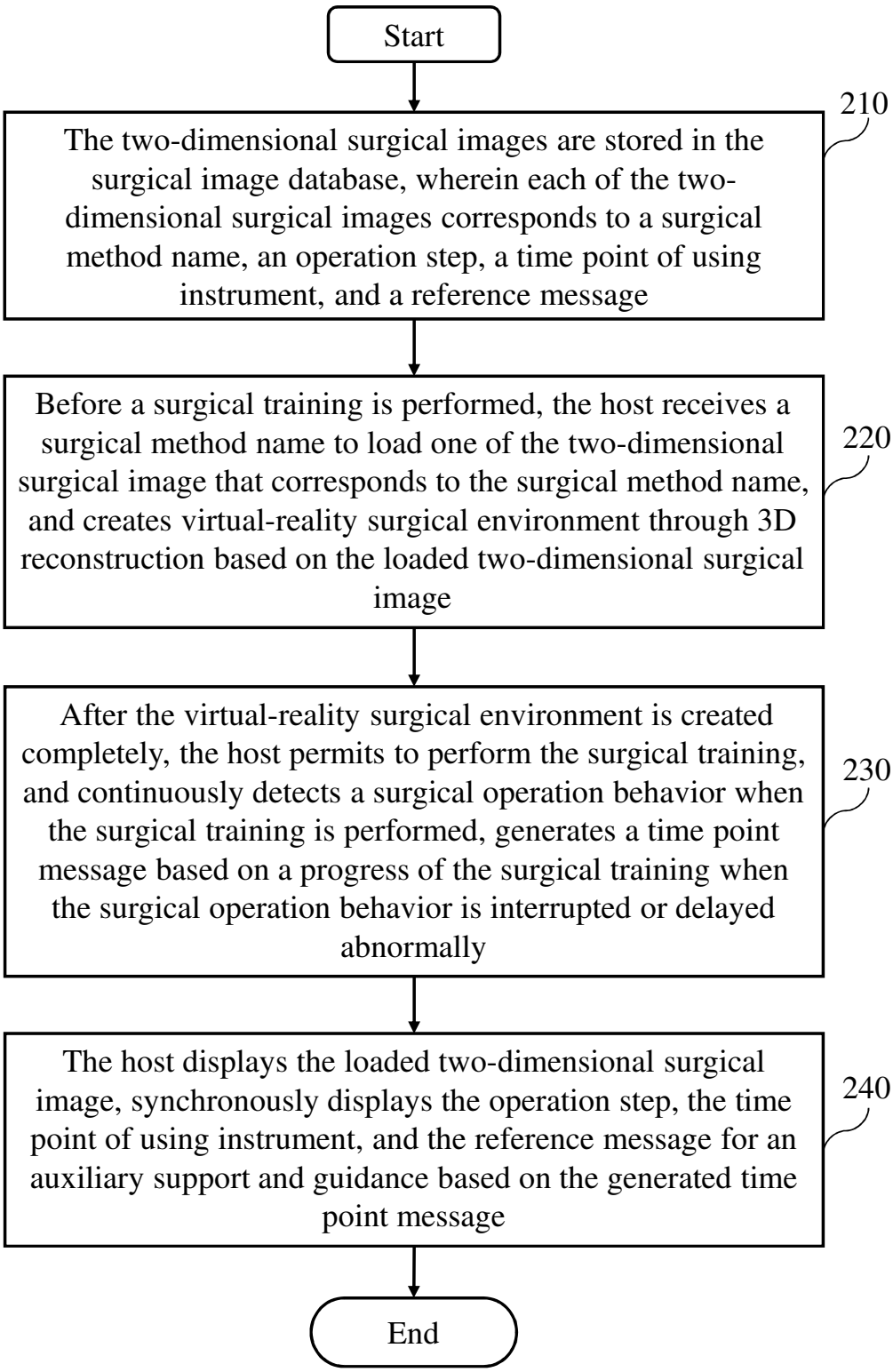

Start
The two-dimensional surgical images are stored in the surgical image database, wherein each of the two-dimensional surgical images corresponds to a surgical method name, an operation step, a time point of using instrument, and a reference message
210
Before a surgical training is performed, the host receives a surgical method name to load one of the two-dimensional surgical image that corresponds to the surgical method name, and creates virtual-reality surgical environment through 3D reconstruction based on the loaded two-dimensional surgical image
220
After the virtual-reality surgical environment is created completely, the host permits to perform the surgical training, and continuously detects a surgical operation behavior when the surgical training is performed, generates a time point message based on a progress of the surgical training when the surgical operation behavior is interrupted or delayed abnormally
230
The host displays the loaded two-dimensional surgical image, synchronously displays the operation step, the time point of using instrument, and the reference message for an auxiliary support and guidance based on the generated time point message
240
End

FIG. 2A

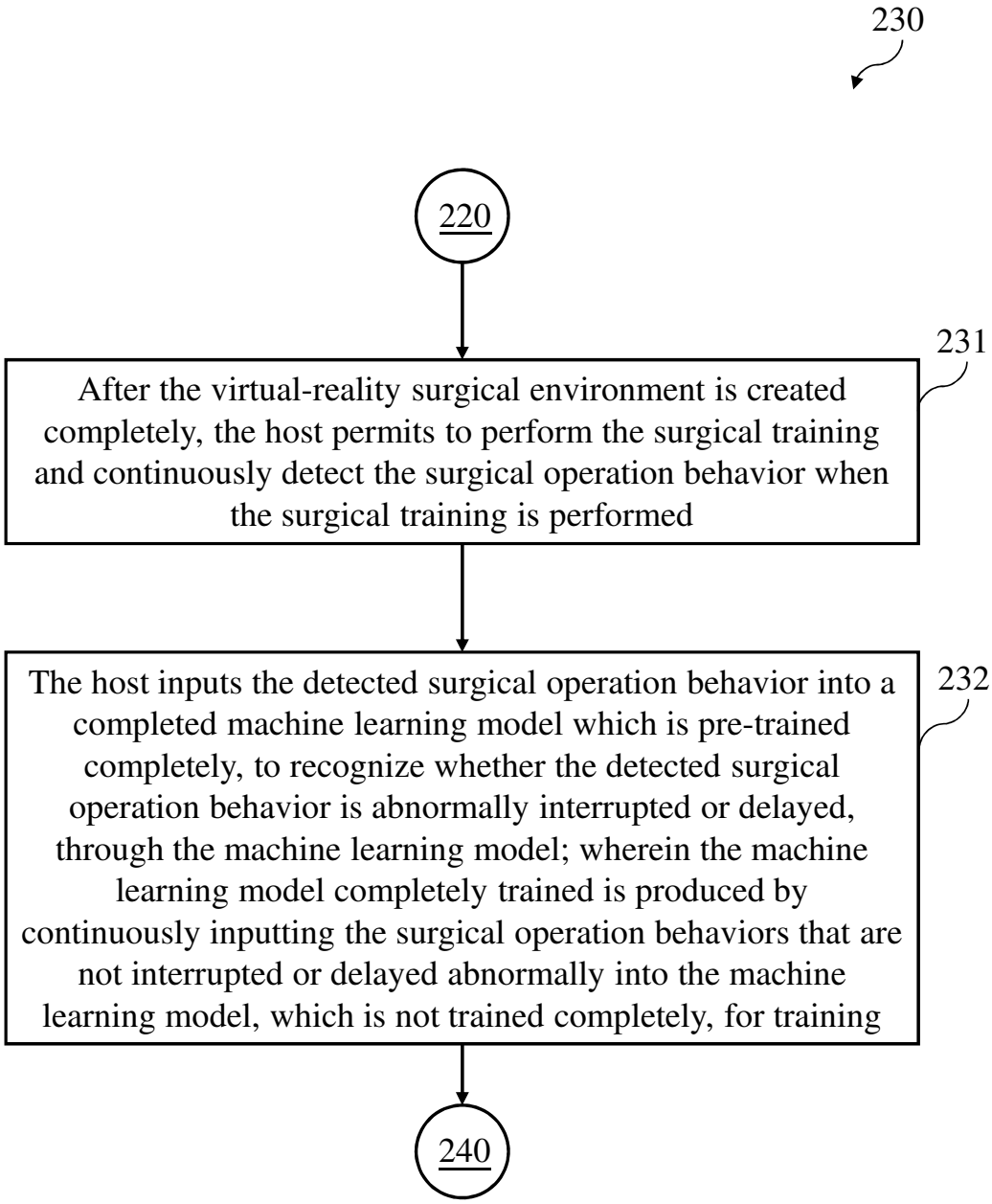

230
220
231
After the virtual-reality surgical environment is created completely, the host permits to perform the surgical training and continuously detect the surgical operation behavior when the surgical training is performed
232
The host inputs the detected surgical operation behavior into a completed machine learning model which is pre-trained completely, to recognize whether the detected surgical operation behavior is abnormally interrupted or delayed, through the machine learning model; wherein the machine learning model completely trained is produced by continuously inputting the surgical operation behaviors that are not interrupted or delayed abnormally into the machine learning model, which is not trained completely, for training
240

FIG. 2B

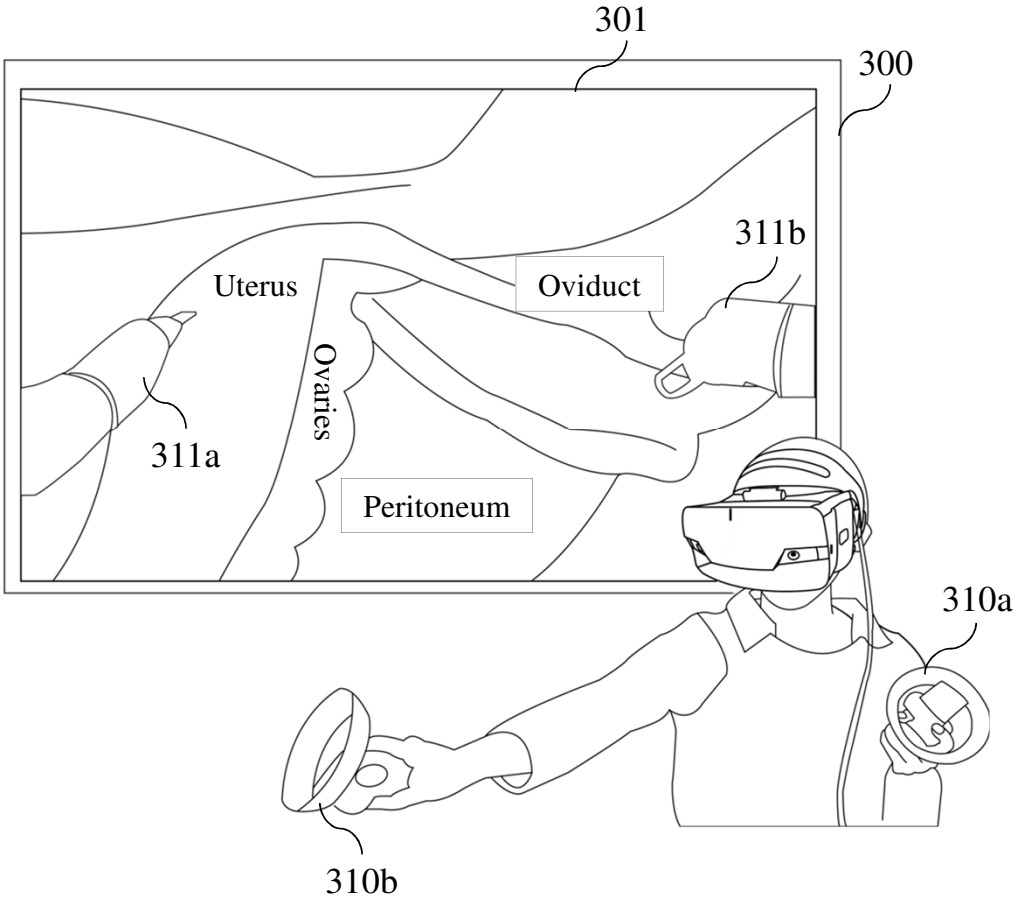

301
300
311b
Uterus
Oviduct
Ovaries
311a
Peritoneum
310a
310b

FIG. 3

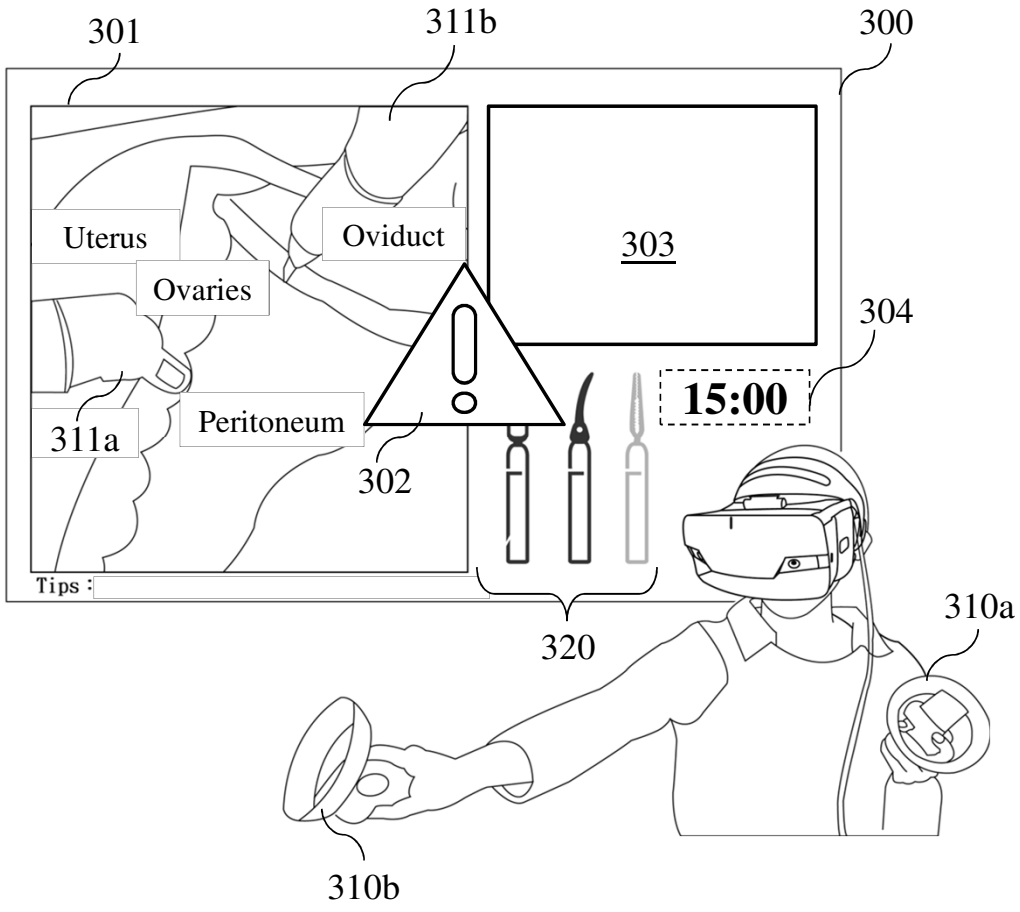

301
311b
300
Uterus
Oviduct
303
Ovaries
304
15:00
311a
Peritoneum
302
Tips :
320
310a
310b

FIG. 4