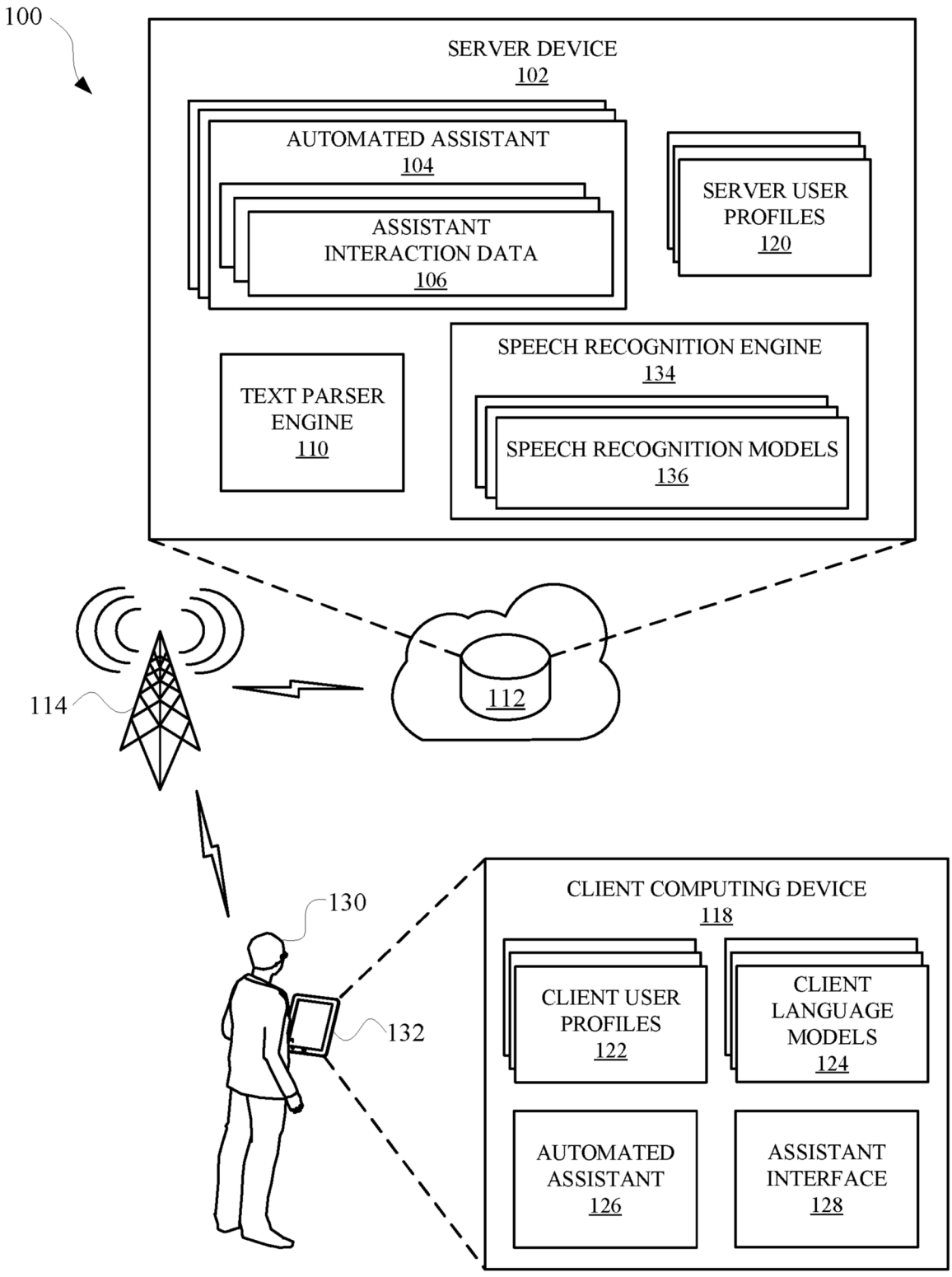

100
SERVER DEVICE
102
AUTOMATED ASSISTANT
104
ASSISTANT
INTERACTION DATA
106
SERVER USER
PROFILES
120
TEXT PARSER
ENGINE
110
SPEECH RECOGNITION ENGINE
134
SPEECH RECOGNITION MODELS
136
114
112
130
132
CLIENT COMPUTING DEVICE
118
CLIENT USER
PROFILES
122
CLIENT
LANGUAGE
MODELS
124
AUTOMATED
ASSISTANT
126
ASSISTANT
INTERFACE
128

FIG. 1

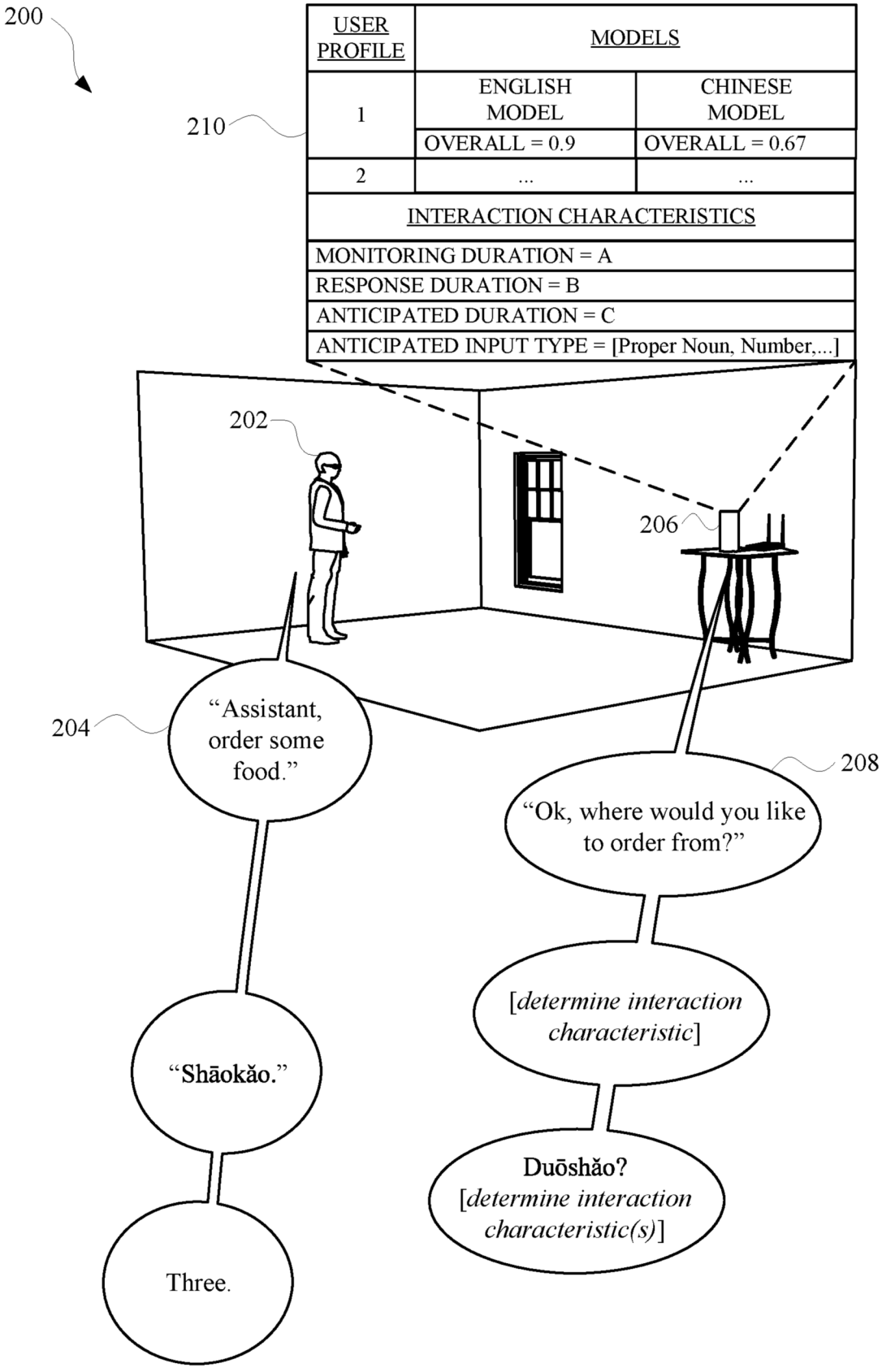

200
210
USER PROFILE
MODELS
1
ENGLISH MODEL
CHINESE MODEL
OVERALL = 0.9
OVERALL = 0.67
2
...
...
INTERACTION CHARACTERISTICS
MONITORING DURATION = A
RESPONSE DURATION = B
ANTICIPATED DURATION = C
ANTICIPATED INPUT TYPE = [Proper Noun, Number,...]
202
206
204
"Assistant, order some food."
208
"Ok, where would you like to order from?"
[determine interaction characteristic]
"Shāokǎo."
Duōshǎo?
[determine interaction characteristic(s)]
Three.

FIG. 2

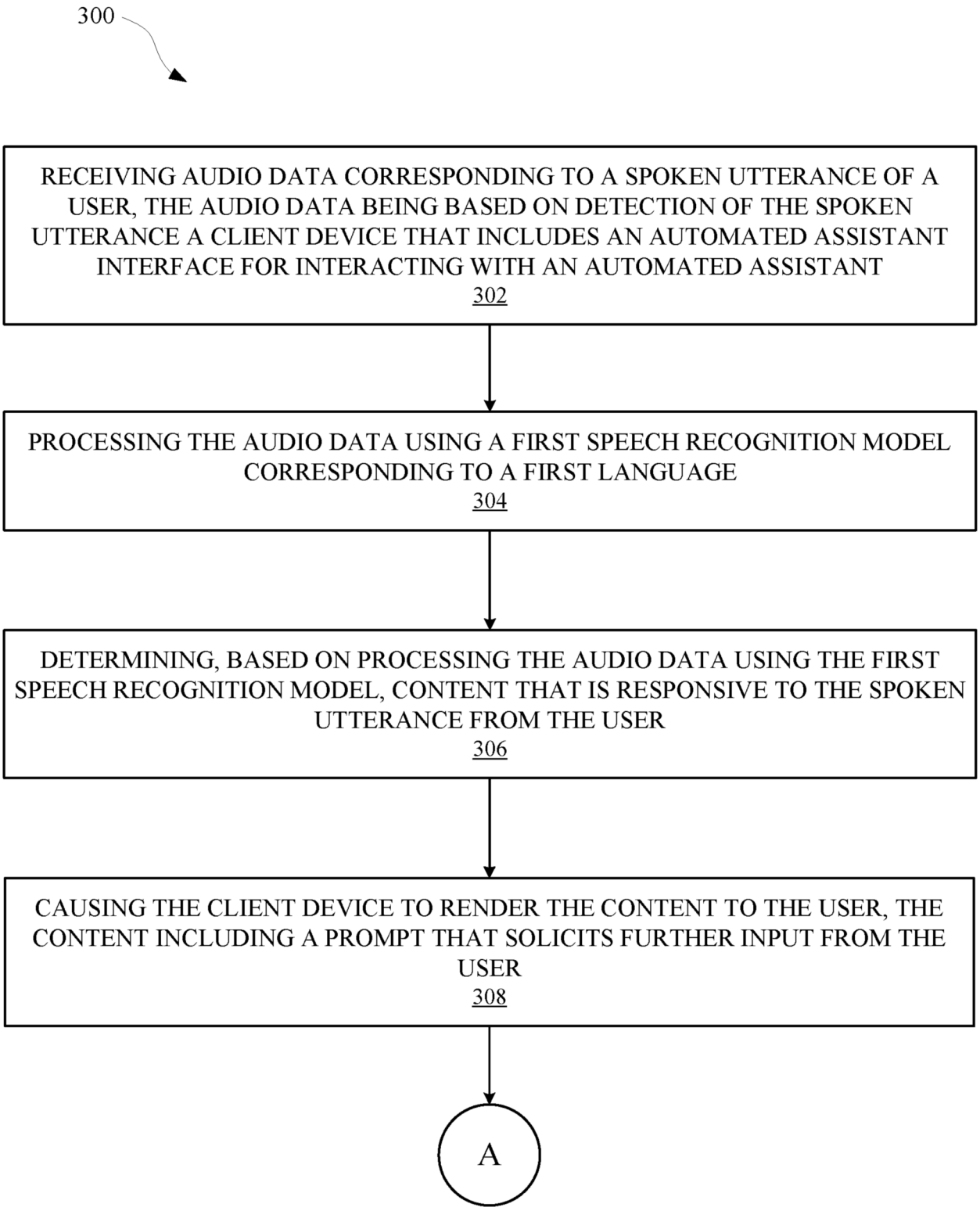

300
RECEIVING AUDIO DATA CORRESPONDING TO A SPOKEN UTTERANCE OF A USER, THE AUDIO DATA BEING BASED ON DETECTION OF THE SPOKEN UTTERANCE A CLIENT DEVICE THAT INCLUDES AN AUTOMATED ASSISTANT INTERFACE FOR INTERACTING WITH AN AUTOMATED ASSISTANT
302
PROCESSING THE AUDIO DATA USING A FIRST SPEECH RECOGNITION MODEL CORRESPONDING TO A FIRST LANGUAGE
304
DETERMINING, BASED ON PROCESSING THE AUDIO DATA USING THE FIRST SPEECH RECOGNITION MODEL, CONTENT THAT IS RESPONSIVE TO THE SPOKEN UTTERANCE FROM THE USER
306
CAUSING THE CLIENT DEVICE TO RENDER THE CONTENT TO THE USER, THE CONTENT INCLUDING A PROMPT THAT SOLICITS FURTHER INPUT FROM THE USER
308
A

FIG. 3A

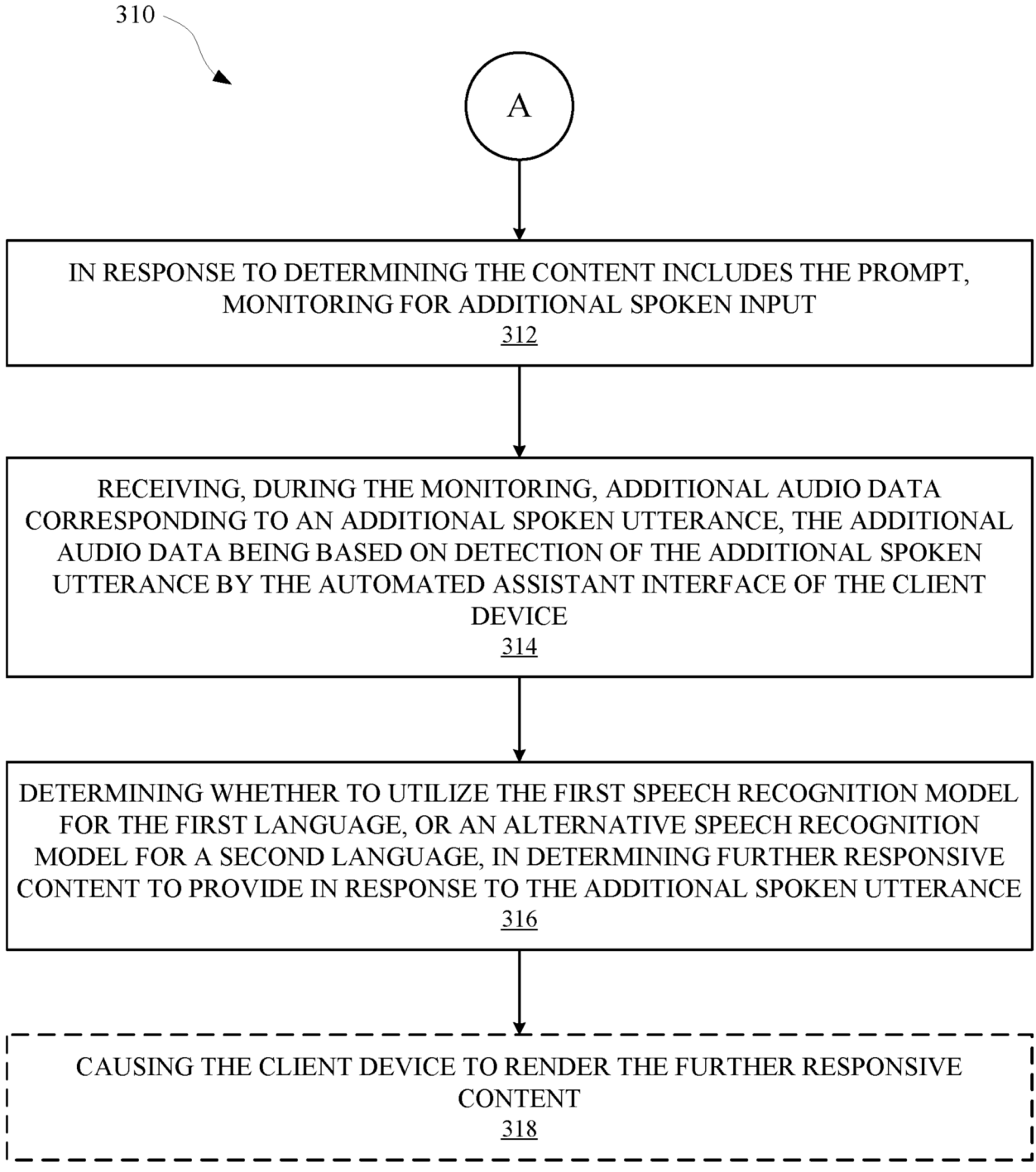

310
A
IN RESPONSE TO DETERMINING THE CONTENT INCLUDES THE PROMPT, MONITORING FOR ADDITIONAL SPOKEN INPUT
312
RECEIVING, DURING THE MONITORING, ADDITIONAL AUDIO DATA CORRESPONDING TO AN ADDITIONAL SPOKEN UTTERANCE, THE ADDITIONAL AUDIO DATA BEING BASED ON DETECTION OF THE ADDITIONAL SPOKEN UTTERANCE BY THE AUTOMATED ASSISTANT INTERFACE OF THE CLIENT DEVICE
314
DETERMINING WHETHER TO UTILIZE THE FIRST SPEECH RECOGNITION MODEL FOR THE FIRST LANGUAGE, OR AN ALTERNATIVE SPEECH RECOGNITION MODEL FOR A SECOND LANGUAGE, IN DETERMINING FURTHER RESPONSIVE CONTENT TO PROVIDE IN RESPONSE TO THE ADDITIONAL SPOKEN UTTERANCE
316
CAUSING THE CLIENT DEVICE TO RENDER THE FURTHER RESPONSIVE CONTENT
318

FIG. 3B

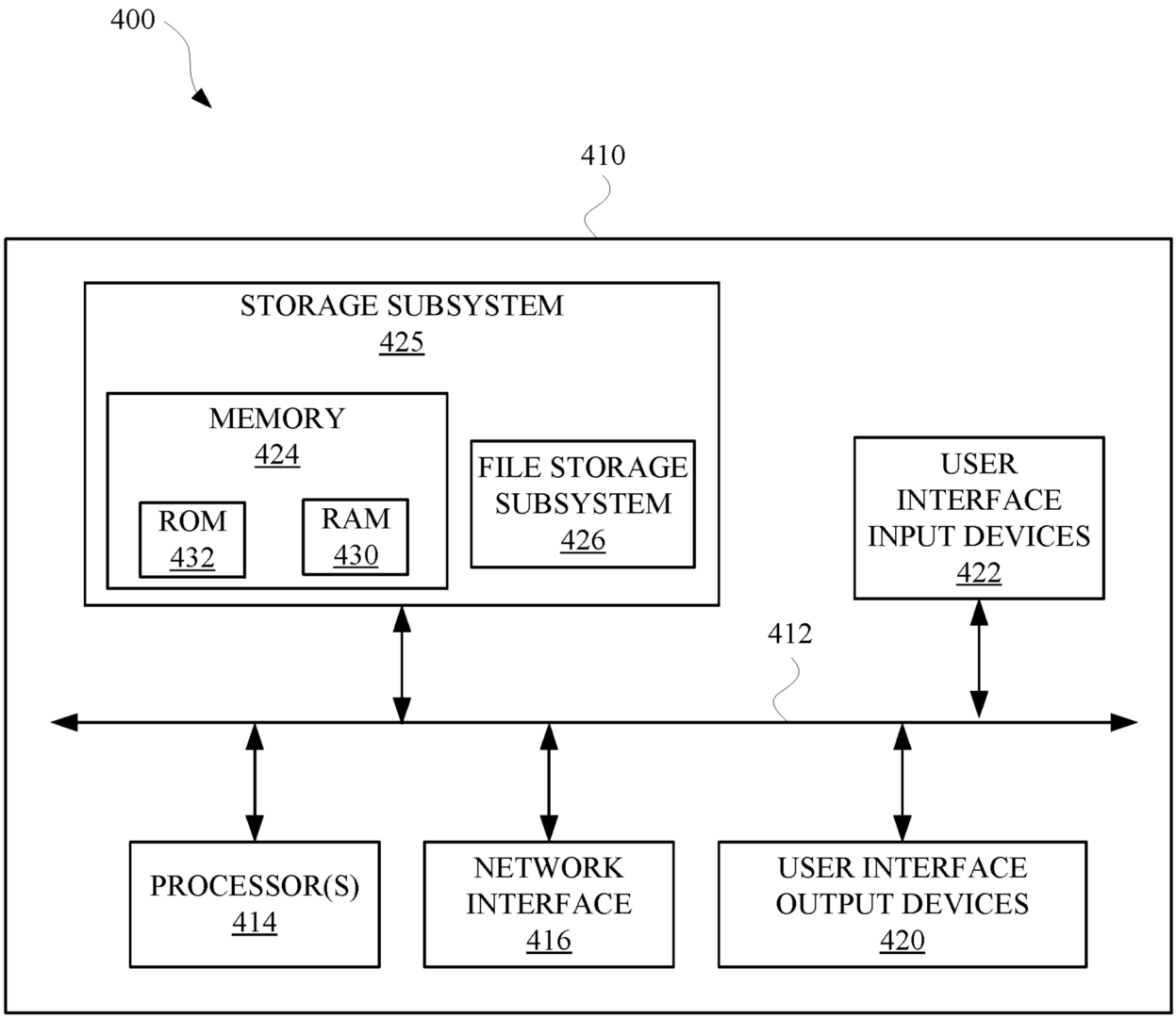

400
410
STORAGE SUBSYSTEM
425
MEMORY
424
ROM
432
RAM
430
FILE STORAGE
SUBSYSTEM
426
USER
INTERFACE
INPUT DEVICES
422
412
PROCESSOR(S)
414
NETWORK
INTERFACE
416
USER INTERFACE
OUTPUT DEVICES
420

FIG. 4