Figure 1 (Prior Art)

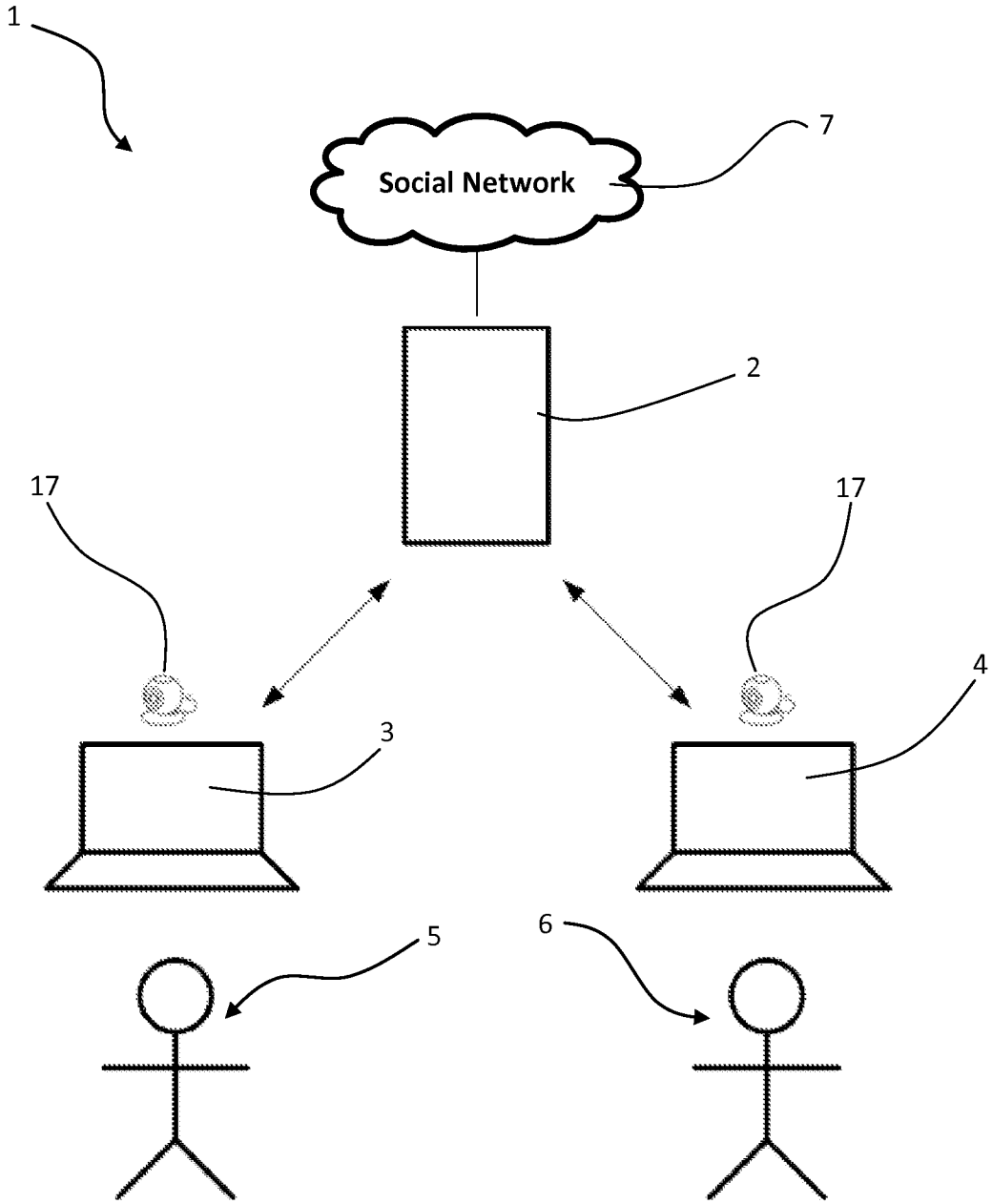


Figure 2

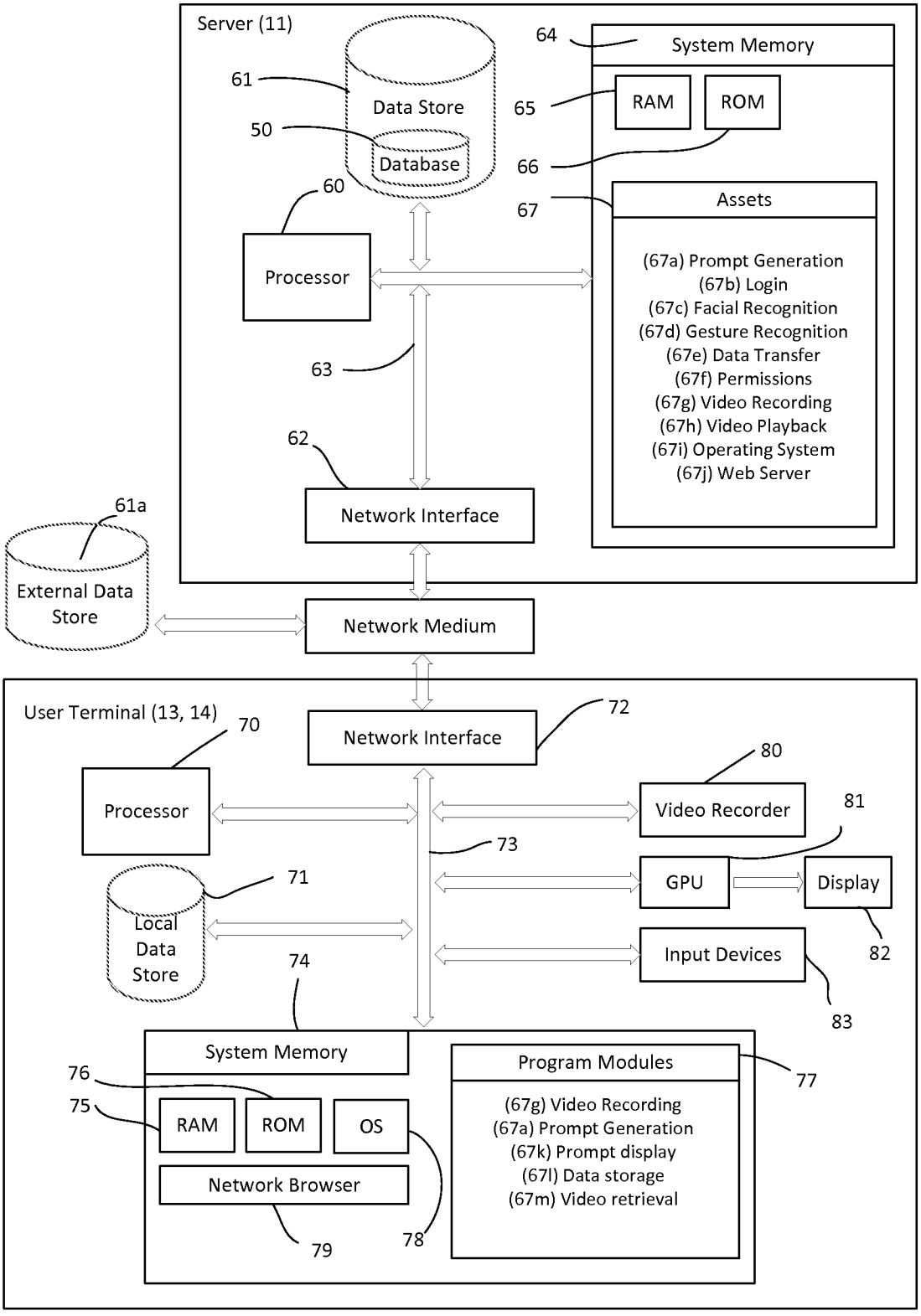

Server (11)
61
Data Store
50
Database
64
System Memory
65
RAM
ROM
66
60
Processor
67
Assets
(67a) Prompt Generation
(67b) Login
(67c) Facial Recognition
(67d) Gesture Recognition
(67e) Data Transfer
(67f) Permissions
(67g) Video Recording
(67h) Video Playback
(67i) Operating System
(67j) Web Server
63
62
Network Interface
61a
External Data Store
Network Medium
User Terminal (13, 14)
70
Processor
Network Interface
72
80
Video Recorder
81
73
GPU
Display
71
Local Data Store
Input Devices
82
74
83
System Memory
Program Modules
77
76
75
RAM
ROM
OS
(67g) Video Recording
(67a) Prompt Generation
(67k) Prompt display
(67l) Data storage
(67m) Video retrieval
Network Browser
78
79

Figure 3

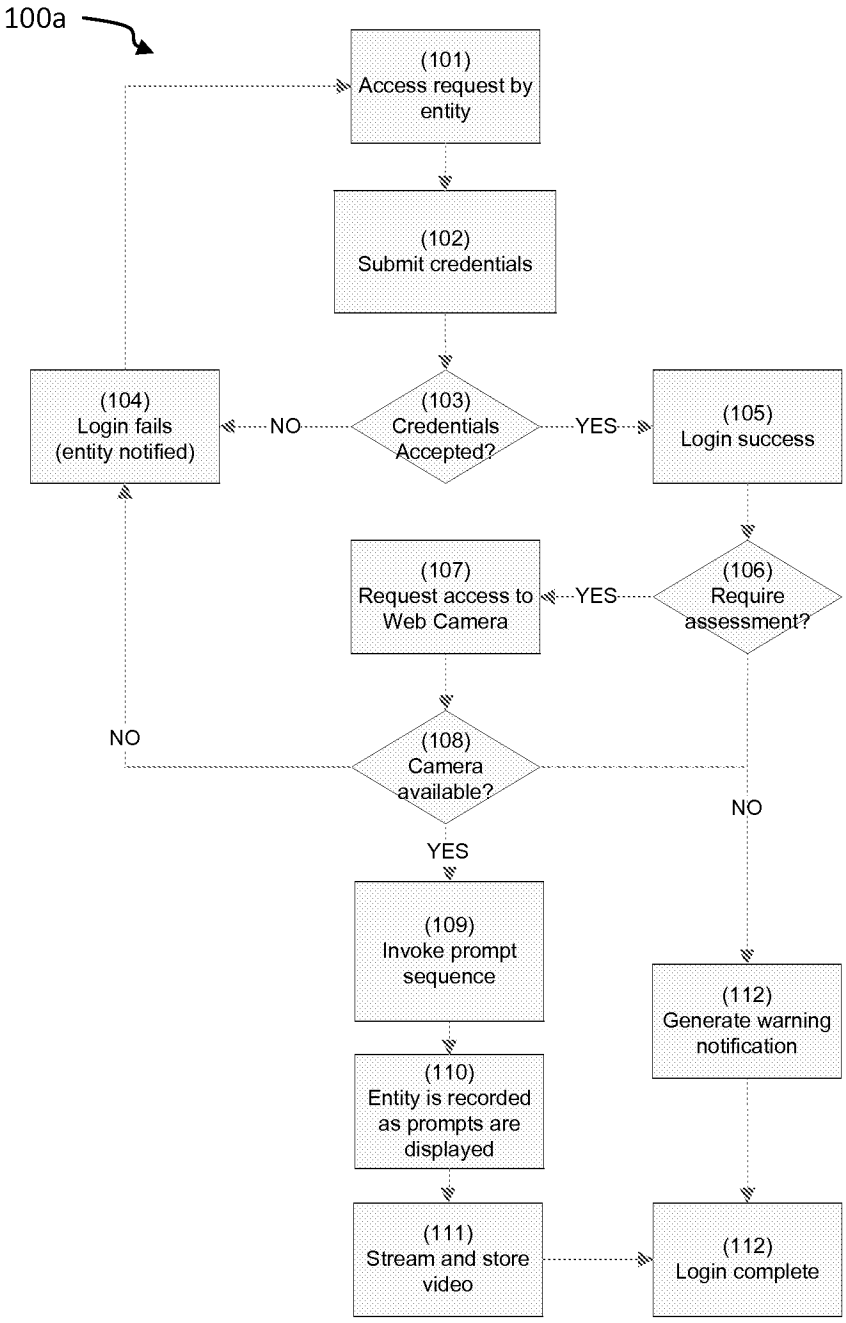

100a
(101) Access request by entity
(102) Submit credentials
(103) Credentials Accepted?
NO
YES
(104) Login fails (entity notified)
(105) Login success
(106) Require assessment?
YES
(107) Request access to Web Camera
NO
(108) Camera available?
NO
YES
(109) Invoke prompt sequence
(110) Entity is recorded as prompts are displayed
(111) Stream and store video
(112) Generate warning notification
(112) Login complete

Figure 4

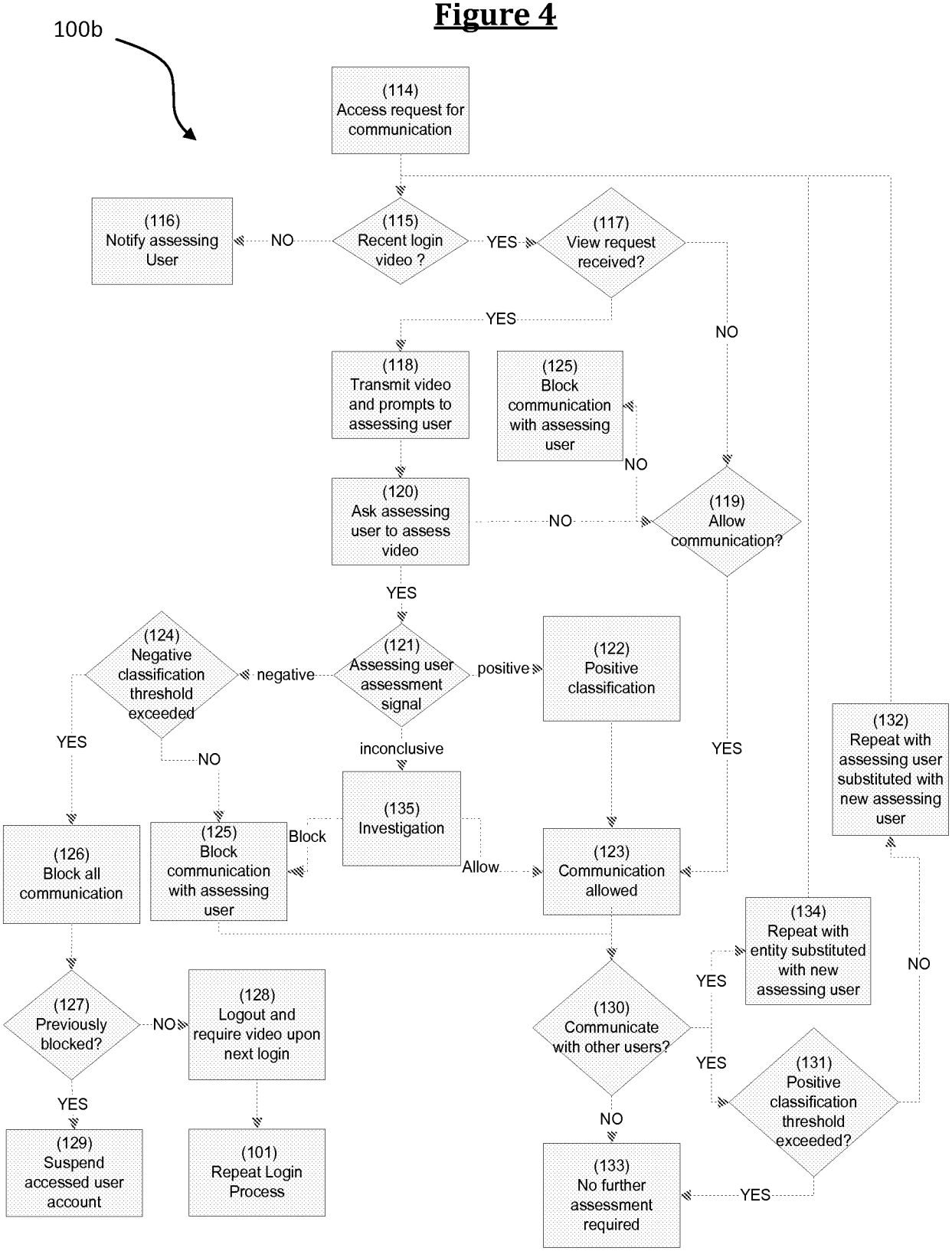

100b
(114) Access request for communication
(115) Recent login video ?
NO
(116) Notify assessing User
YES
(117) View request received?
YES
NO
(118) Transmit video and prompts to assessing user
(125) Block communication with assessing user
NO
(120) Ask assessing user to assess video
NO
(119) Allow communication?
YES
(121) Assessing user assessment signal
negative
positive
(122) Positive classification
(124) Negative classification threshold exceeded
YES
NO
inconclusive
(135) Investigation
Block
Allow
(125) Block communication with assessing user
(126) Block all communication
(123) Communication allowed
YES
(132) Repeat with assessing user substituted with new assessing user
(134) Repeat with entity substituted with new assessing user
NO
YES
(127) Previously blocked?
NO
(128) Logout and require video upon next login
(130) Communicate with other users?
YES
(131) Positive classification threshold exceeded?
YES
NO
(129) Suspend accessed user account
(101) Repeat Login Process
(133) No further assessment required
YES

Figure 5

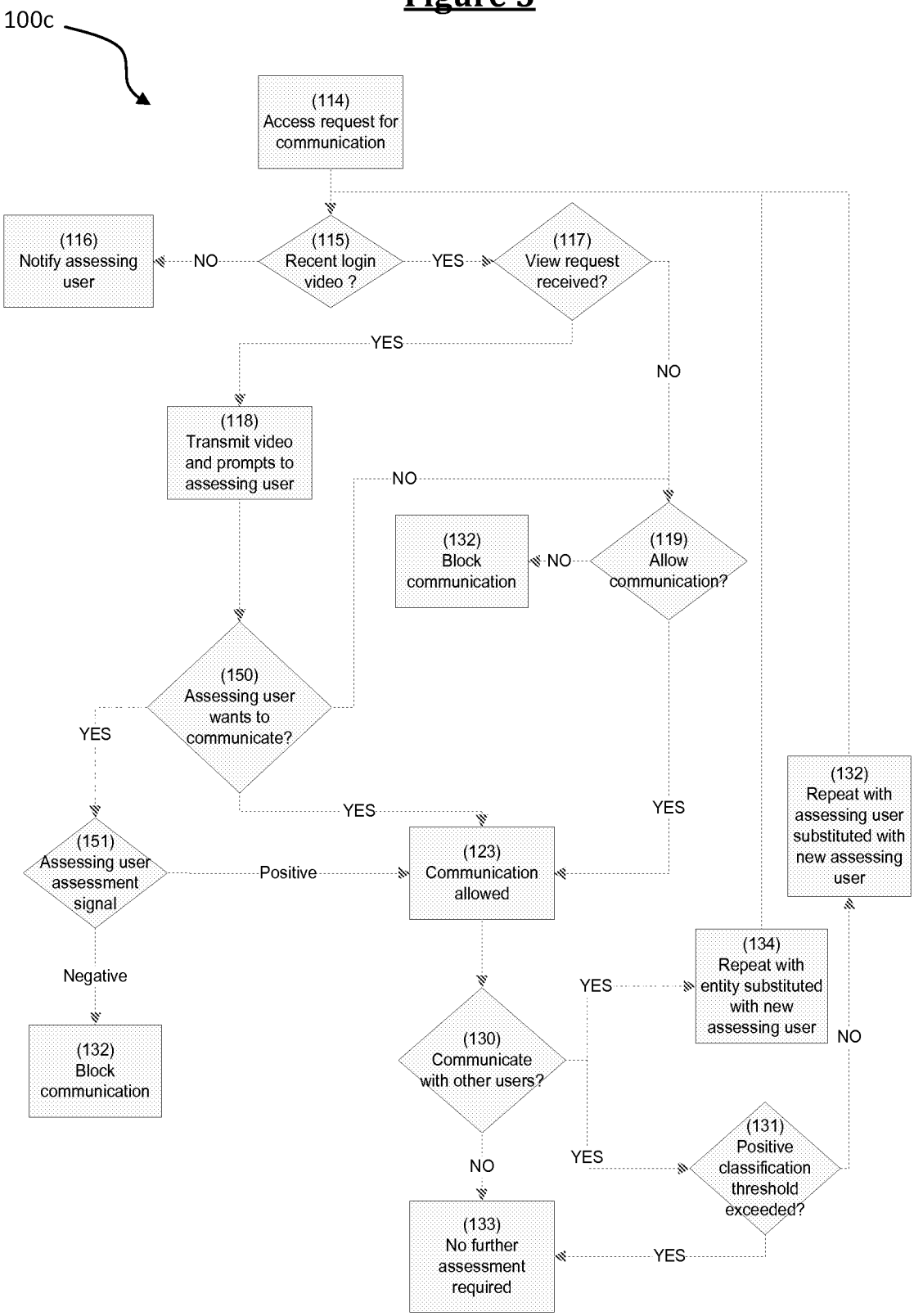

100c
(114) Access request for communication
(115) Recent login video ?
NO
(116) Notify assessing user
YES
(117) View request received?
YES
NO
(118) Transmit video and prompts to assessing user
NO
(119) Allow communication?
NO
(132) Block communication
(150) Assessing user wants to communicate?
YES
YES
YES
(151) Assessing user assessment signal
Positive
(123) Communication allowed
Negative
(132) Block communication
(130) Communicate with other users?
YES
(134) Repeat with entity substituted with new assessing user
NO
YES
(131) Positive classification threshold exceeded?
NO
(133) No further assessment required
YES
(132) Repeat with assessing user substituted with new assessing user

Figure 6

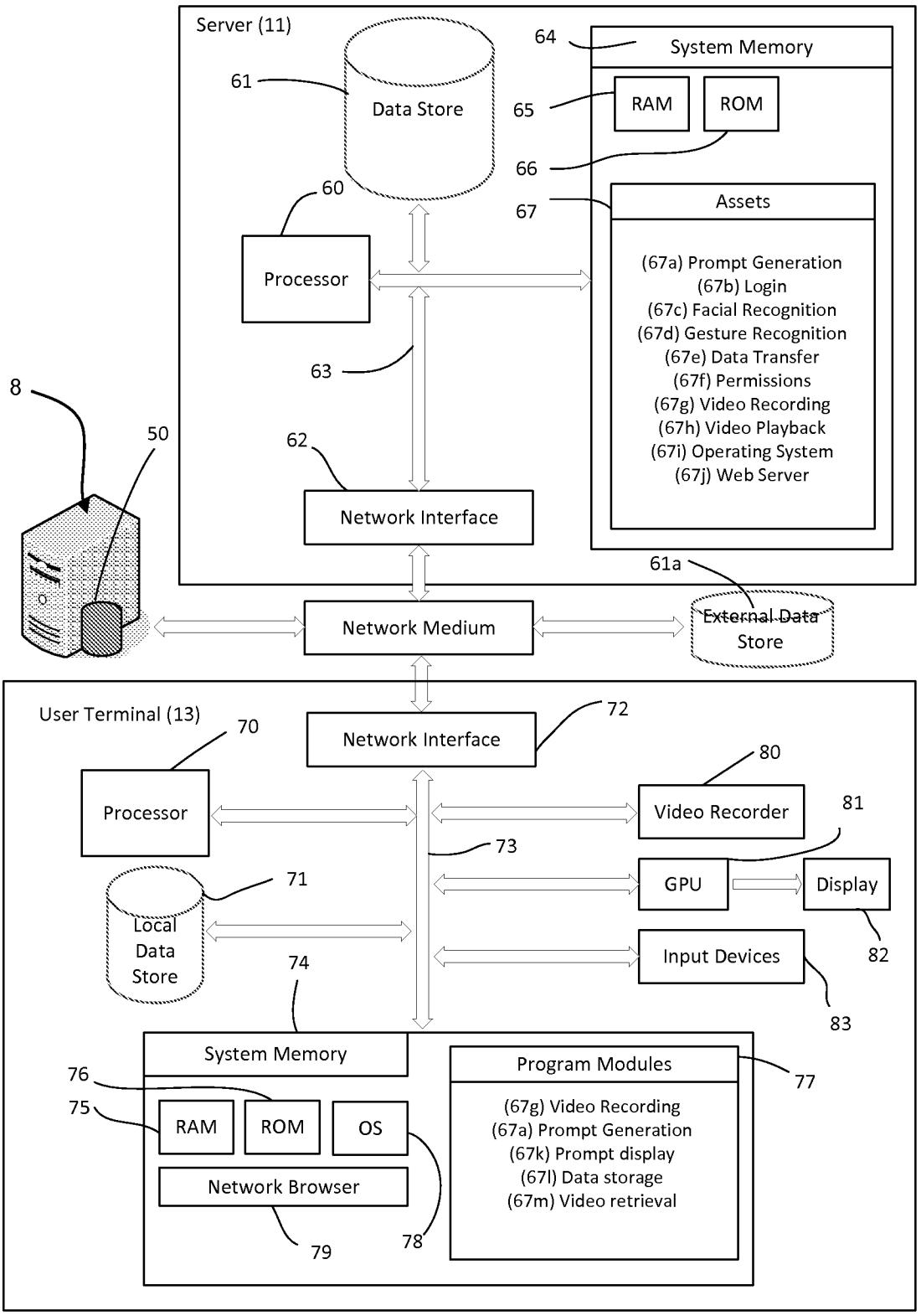

Server (11)
64
System Memory
61
Data Store
65
RAM
ROM
66
60
67
Assets
Processor
(67a) Prompt Generation
(67b) Login
(67c) Facial Recognition
(67d) Gesture Recognition
(67e) Data Transfer
(67f) Permissions
(67g) Video Recording
(67h) Video Playback
(67i) Operating System
(67j) Web Server
63
8
50
62
Network Interface
61a
Network Medium
External Data Store
User Terminal (13)
70
Network Interface
72
Processor
80
Video Recorder
81
73
71
GPU
Display
Local Data Store
Input Devices
82
74
83
System Memory
Program Modules
76
77
75
RAM
ROM
OS
(67g) Video Recording
(67a) Prompt Generation
(67k) Prompt display
(67l) Data storage
(67m) Video retrieval
Network Browser
78
79

Figure 7

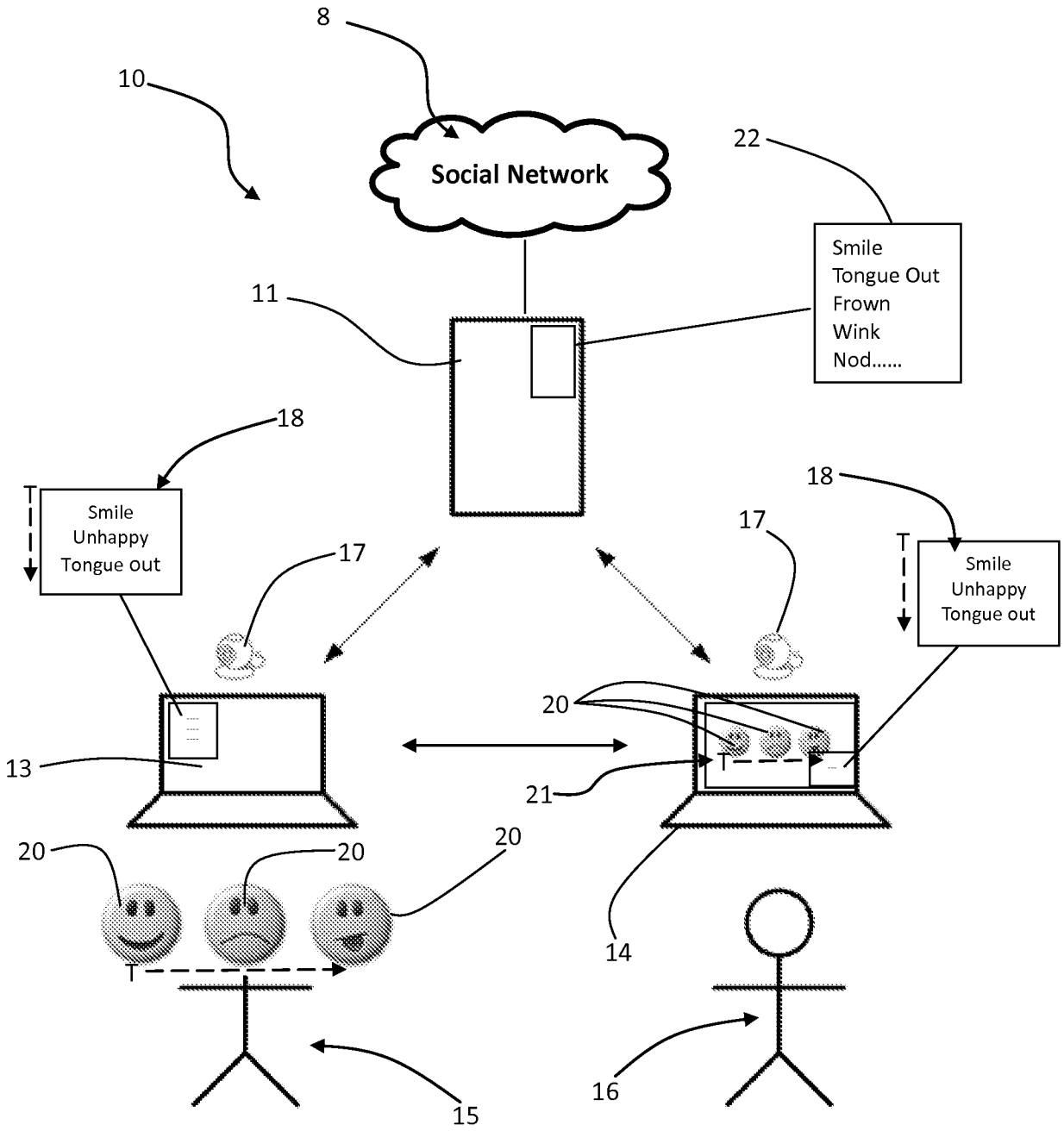

8
10
Social Network
22
Smile
Tongue Out
Frown
Wink
Nod.....
11
18
Smile
Unhappy
Tongue out
17
18
17
Smile
Unhappy
Tongue out
20
13
21
20
20
20
14
15
16

Figure 8

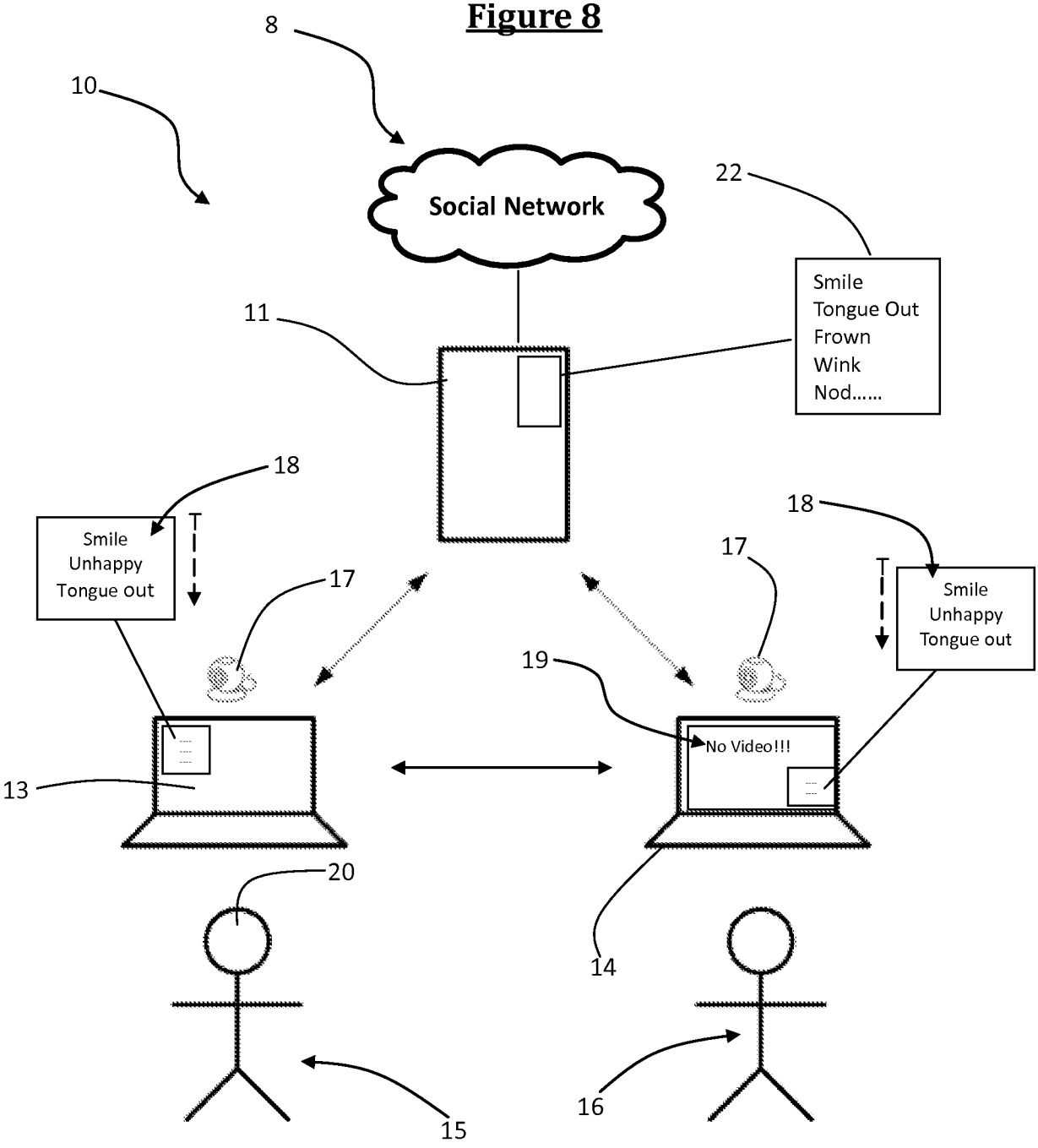

8
10
Social Network
22
Smile
Tongue Out
Frown
Wink
Nod……
11
18
Smile
Unhappy
Tongue out
17
18
17
Smile
Unhappy
Tongue out
19
No Video!!!
13
20
14
16
15

Figure 9

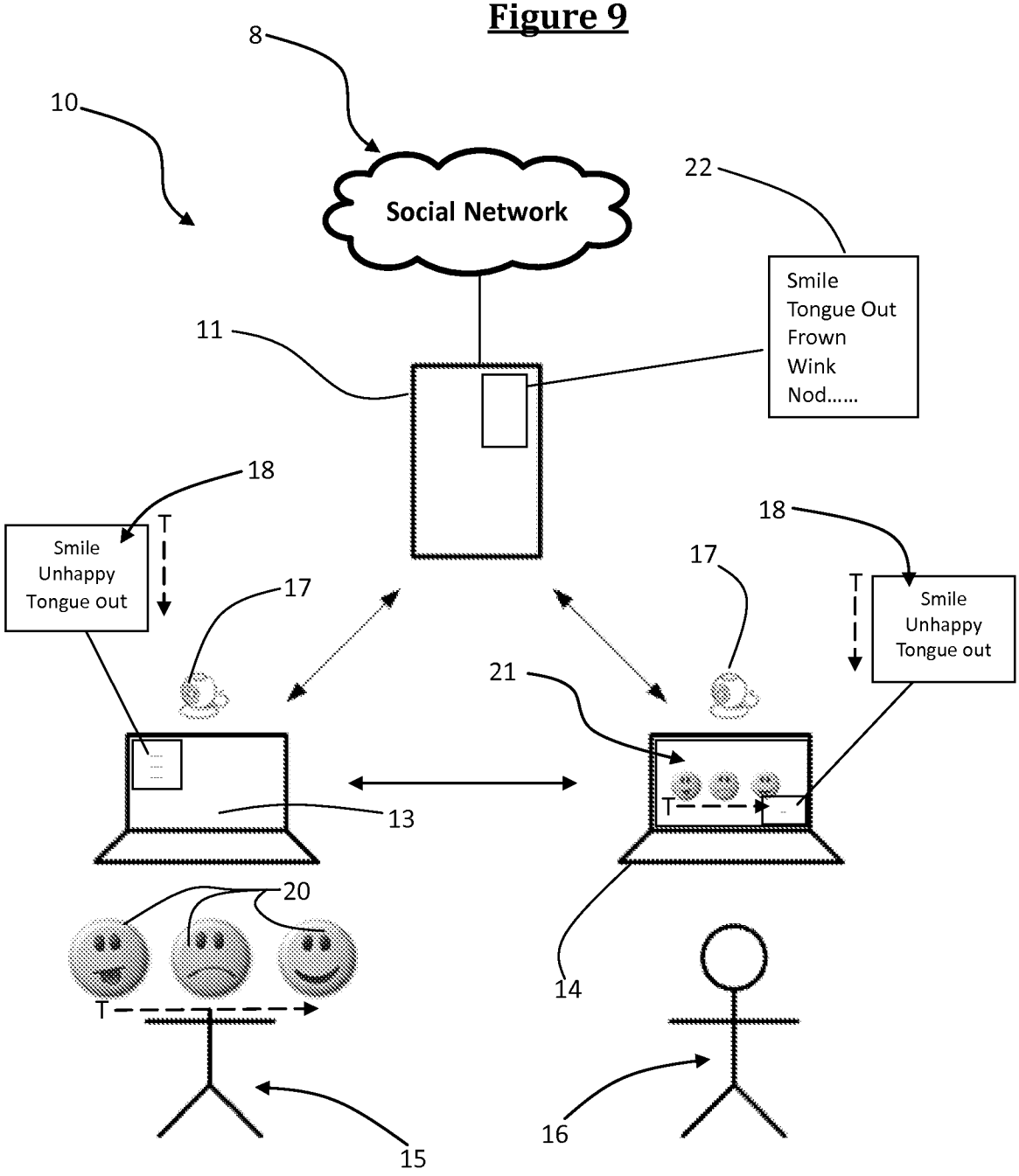

8
10
Social Network
22
Smile
Tongue Out
Frown
Wink
Nod……
11
18
Smile
Unhappy
Tongue out
T
17
18
17
T
Smile
Unhappy
Tongue out
21
13
T
20
T
14
15
16

Figure 10a

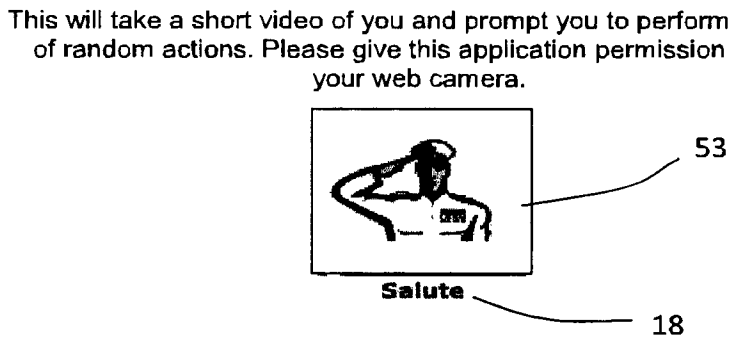


Figure 10b

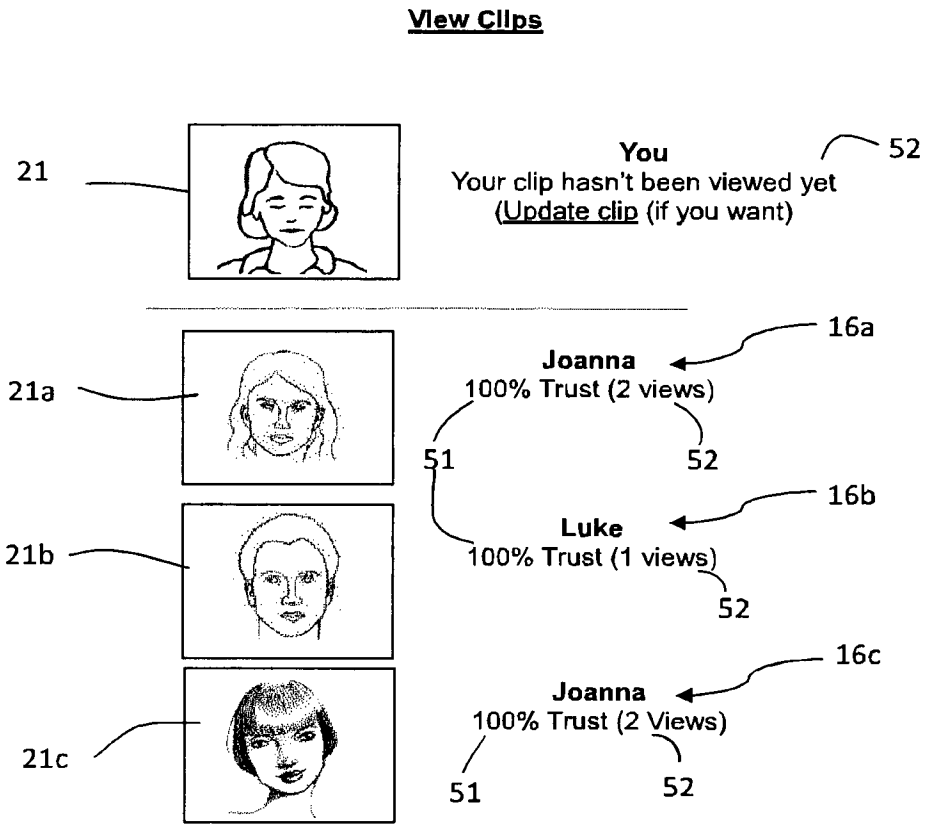
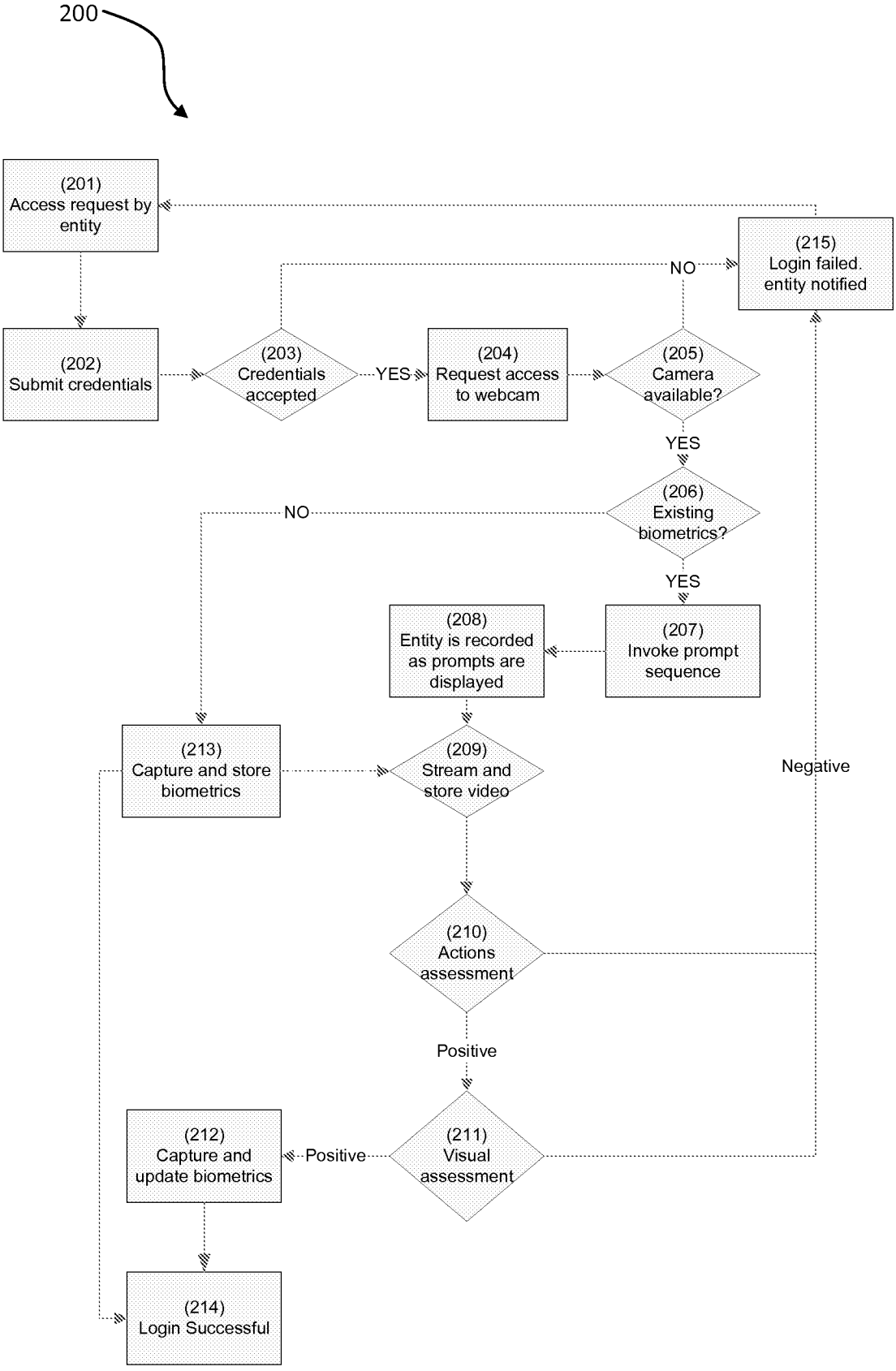


Figure 11


200
(201) Access request by entity
(202) Submit credentials
(203) Credentials accepted
YES
(204) Request access to webcam
(205) Camera available?
NO
(215) Login failed. entity notified
YES
(206) Existing biometrics?
NO
YES
(207) Invoke prompt sequence
(208) Entity is recorded as prompts are displayed
(213) Capture and store biometrics
(209) Stream and store video
Negative
(210) Actions assessment
Positive
(211) Visual assessment
Positive
(212) Capture and update biometrics
(214) Login Successful