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(54) **SYSTEMS AND METHODS FOR MANAGING CAPTIONS**

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| ***G06F 3/0488*** | (2022.01) |
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(52) **U.S. Cl.**

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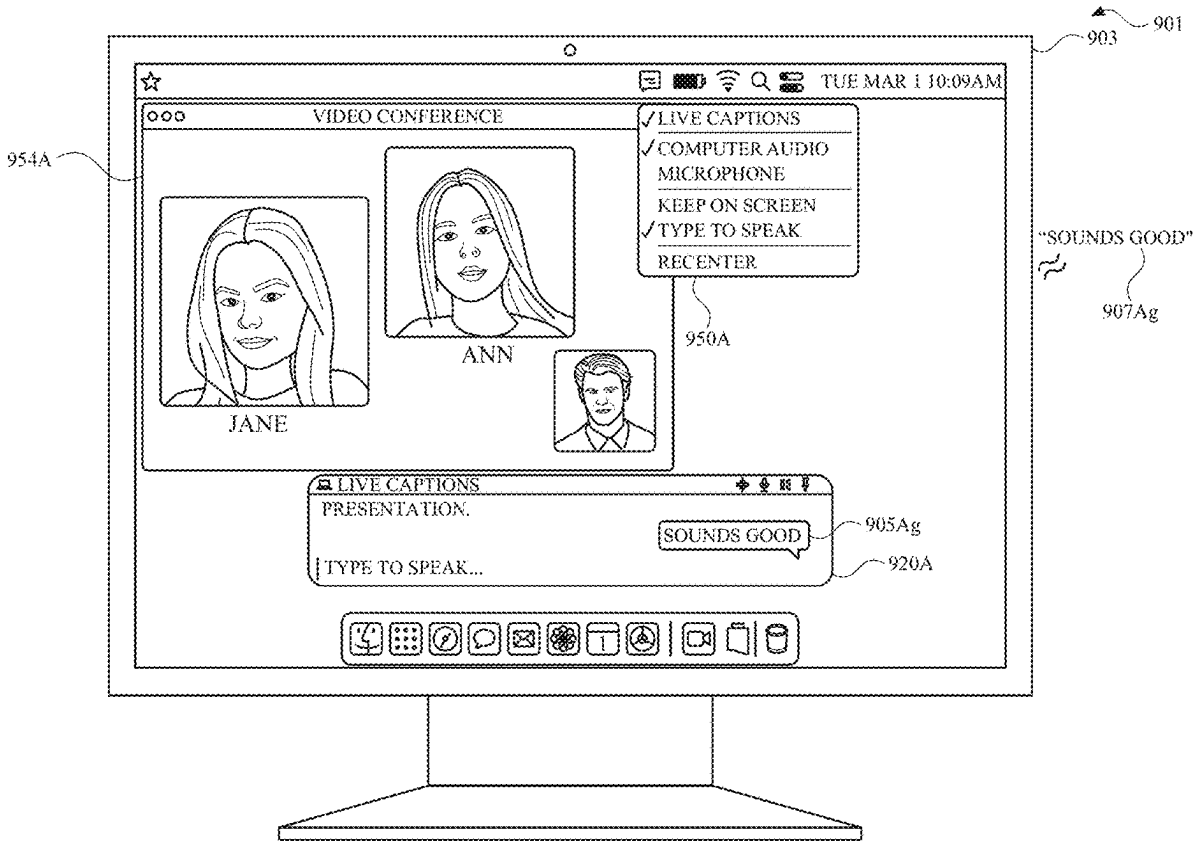
(57) **ABSTRACT**

The present disclosure generally relates to embodiments for a live communication interface for managing captions.



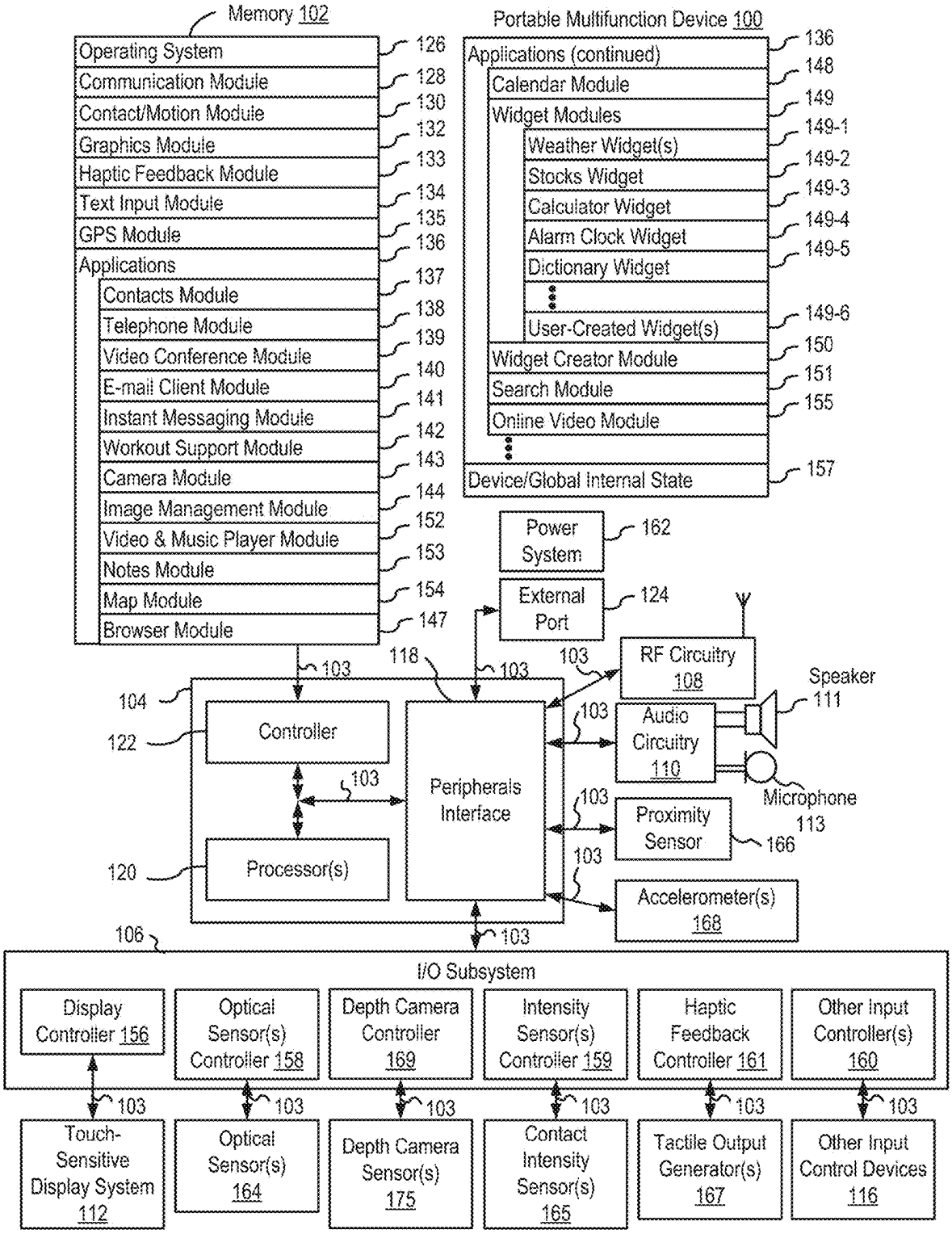

Memory 102
Operating System 126
Communication Module 128
Contact/Motion Module 130
Graphics Module 132
Haptic Feedback Module 133
Text Input Module 134
GPS Module 135
Applications 136
Contacts Module 137
Telephone Module 138
Video Conference Module 139
E-mail Client Module 140
Instant Messaging Module 141
Workout Support Module 142
Camera Module 143
Image Management Module 144
Video & Music Player Module 152
Notes Module 153
Map Module 154
Browser Module 147
Portable Multifunction Device 100
Applications (continued) 136
Calendar Module 148
Widget Modules 149
Weather Widget(s) 149-1
Stocks Widget 149-2
Calculator Widget 149-3
Alarm Clock Widget 149-4
Dictionary Widget 149-5
User-Created Widget(s) 149-6
Widget Creator Module 150
Search Module 151
Online Video Module 155
Device/Global Internal State 157
Power System 162
External Port 124
RF Circuitry 108
Speaker 111
Audio Circuitry 110
Microphone 113
Proximity Sensor 166
Accelerometer(s) 168
Controller 122
Processor(s) 120
Peripherals Interface 118
104
103
106
I/O Subsystem
Display Controller 156
Optical Sensor(s) Controller 158
Depth Camera Controller 169
Intensity Sensor(s) Controller 159
Haptic Feedback Controller 161
Other Input Controller(s) 160
Touch-Sensitive Display System 112
Optical Sensor(s) 164
Depth Camera Sensor(s) 175
Contact Intensity Sensor(s) 165
Tactile Output Generator(s) 167
Other Input Control Devices 116

*FIG. 1A*

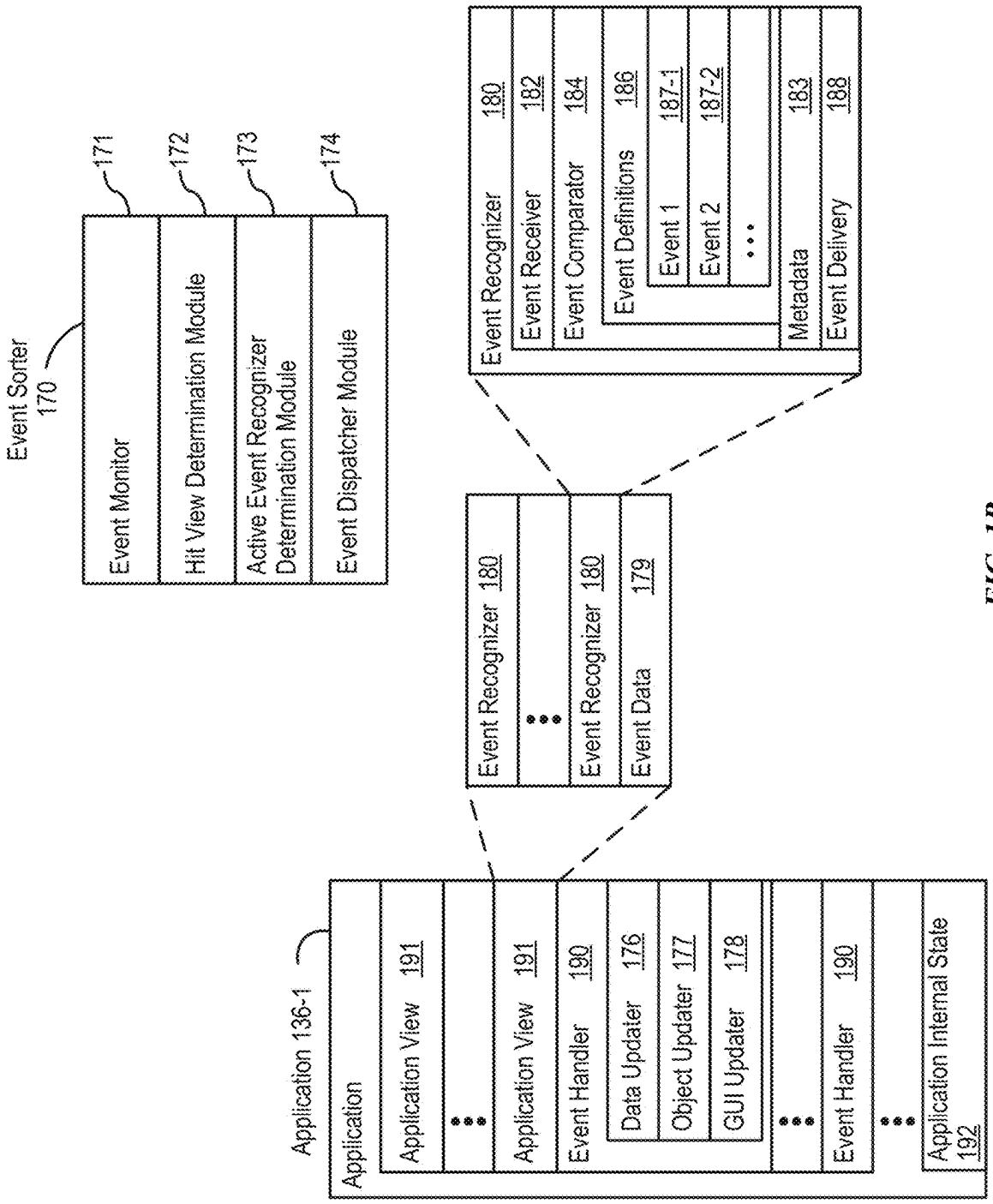

Event Sorter
170
171
Event Monitor
172
Hit View Determination Module
173
Active Event Recognizer Determination Module
174
Event Dispatcher Module
Event Recognizer 180
Event Receiver 182
Event Comparator 184
Event Definitions 186
Event 1 187-1
Event 2 187-2
...
Metadata 183
Event Delivery 188
Event Recognizer 180
...
Event Recognizer 180
Event Data 179
Application 136-1
Application
Application View 191
...
Application View 191
Event Handler 190
Data Updater 176
Object Updater 177
GUI Updater 178
...
Event Handler 190
...
Application Internal State 192

*FIG. 1B*

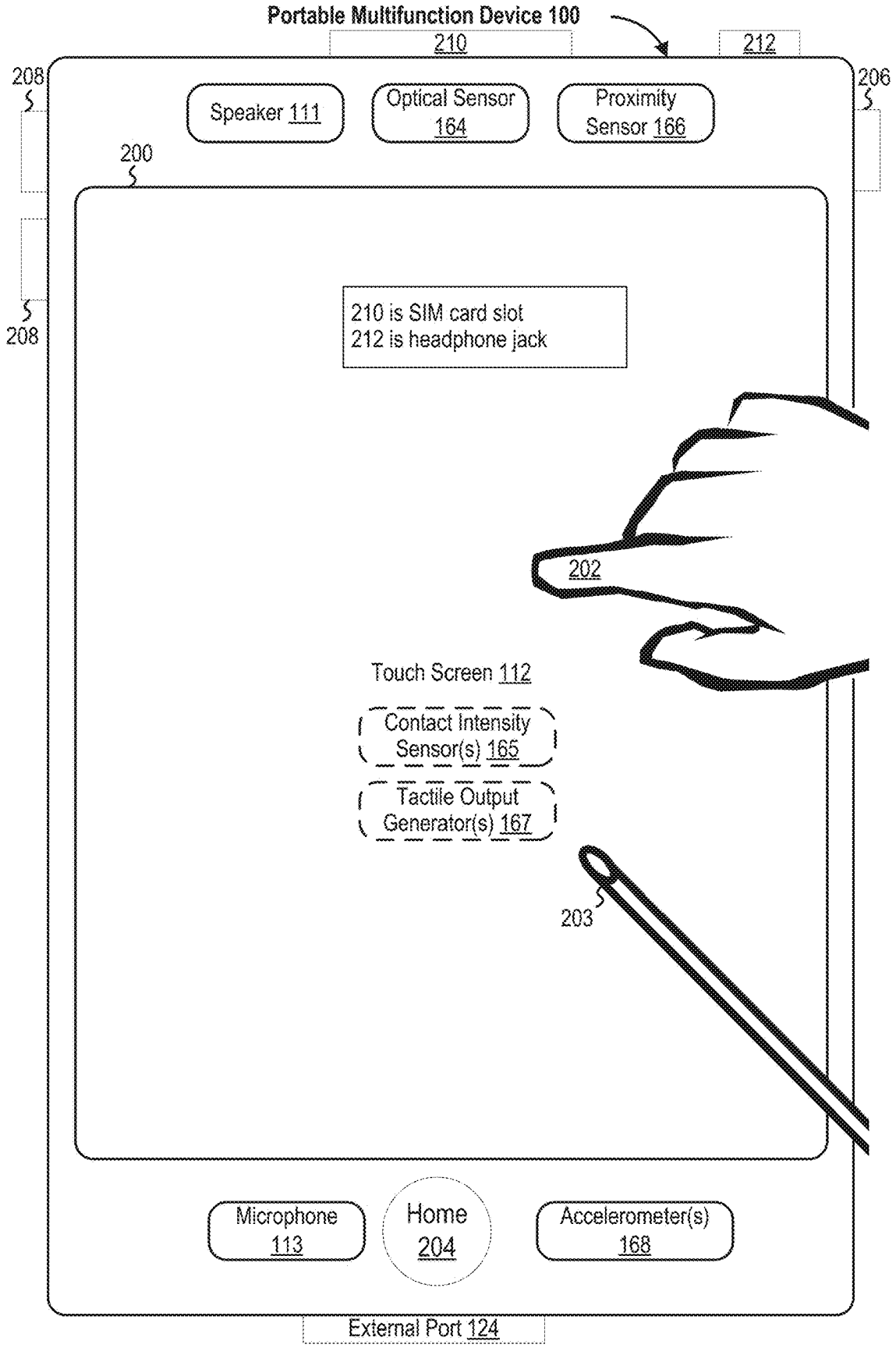

Portable Multifunction Device 100
210
212
208
206
Speaker 111
Optical Sensor 164
Proximity Sensor 166
200
208
210 is SIM card slot
212 is headphone jack
202
Touch Screen 112
Contact Intensity Sensor(s) 165
Tactile Output Generator(s) 167
203
Microphone 113
Home 204
Accelerometer(s) 168
External Port 124

*FIG. 2*

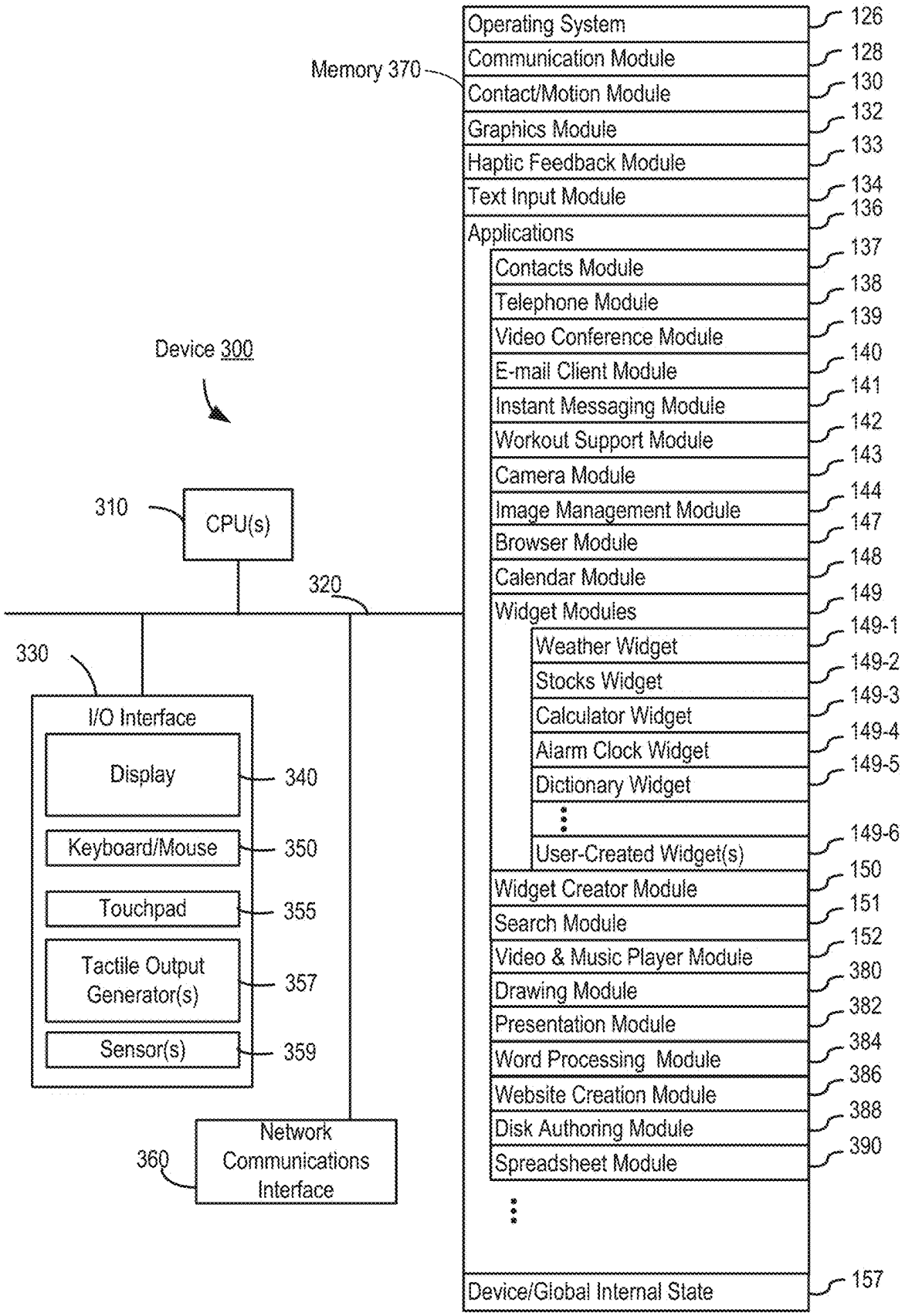

Device 300
310
CPU(s)
320
330
I/O Interface
Display
340
Keyboard/Mouse
350
Touchpad
355
Tactile Output Generator(s)
357
Sensor(s)
359
360
Network Communications Interface
Memory 370
Operating System
126
Communication Module
128
Contact/Motion Module
130
Graphics Module
132
Haptic Feedback Module
133
Text Input Module
134
Applications
136
Contacts Module
137
Telephone Module
138
Video Conference Module
139
E-mail Client Module
140
Instant Messaging Module
141
Workout Support Module
142
Camera Module
143
Image Management Module
144
Browser Module
147
Calendar Module
148
Widget Modules
149
Weather Widget
149-1
Stocks Widget
149-2
Calculator Widget
149-3
Alarm Clock Widget
149-4
Dictionary Widget
149-5
User-Created Widget(s)
149-6
Widget Creator Module
150
Search Module
151
Video & Music Player Module
152
Drawing Module
380
Presentation Module
382
Word Processing Module
384
Website Creation Module
386
Disk Authoring Module
388
Spreadsheet Module
390
Device/Global Internal State
157

*FIG. 3*

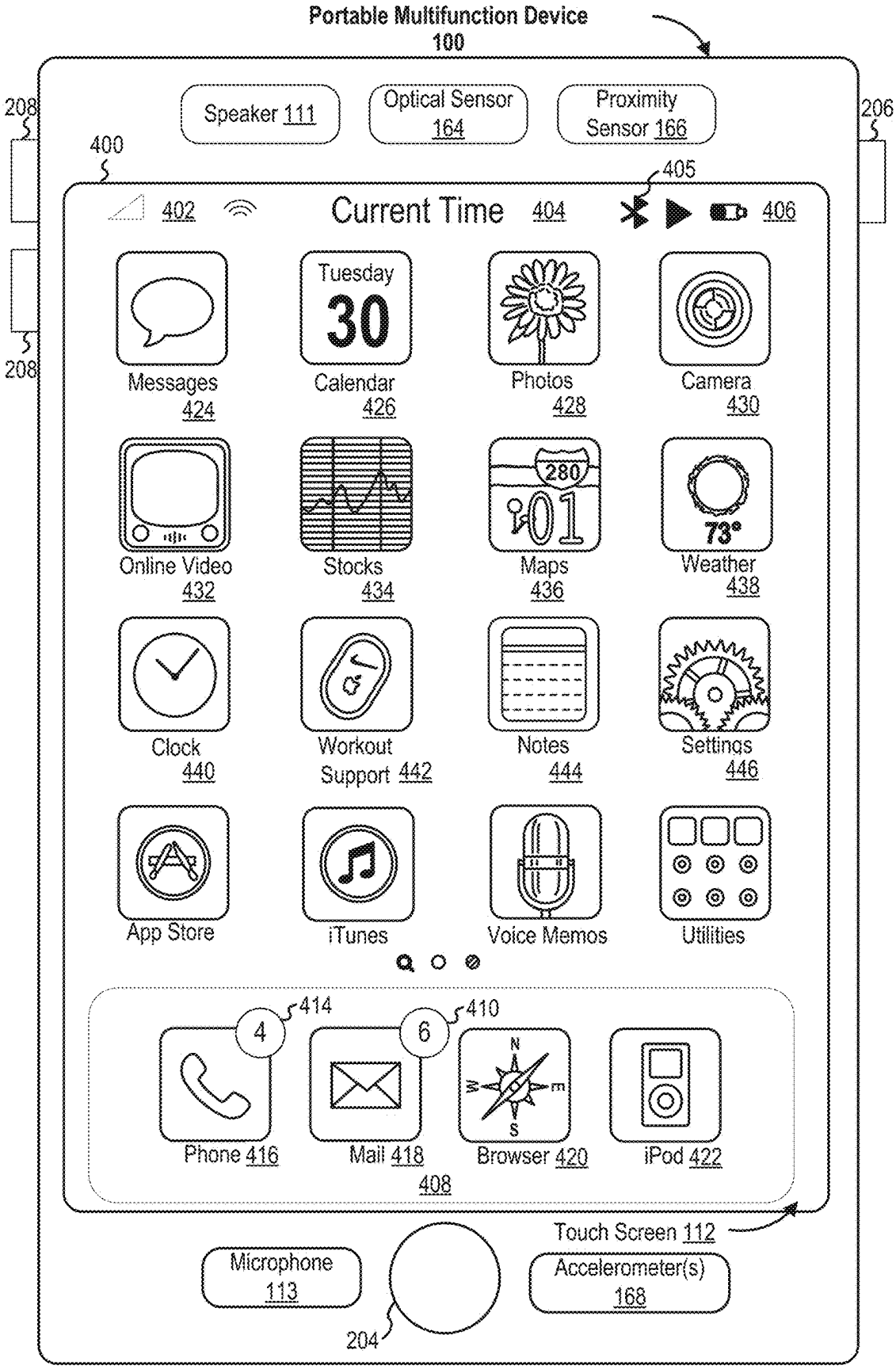
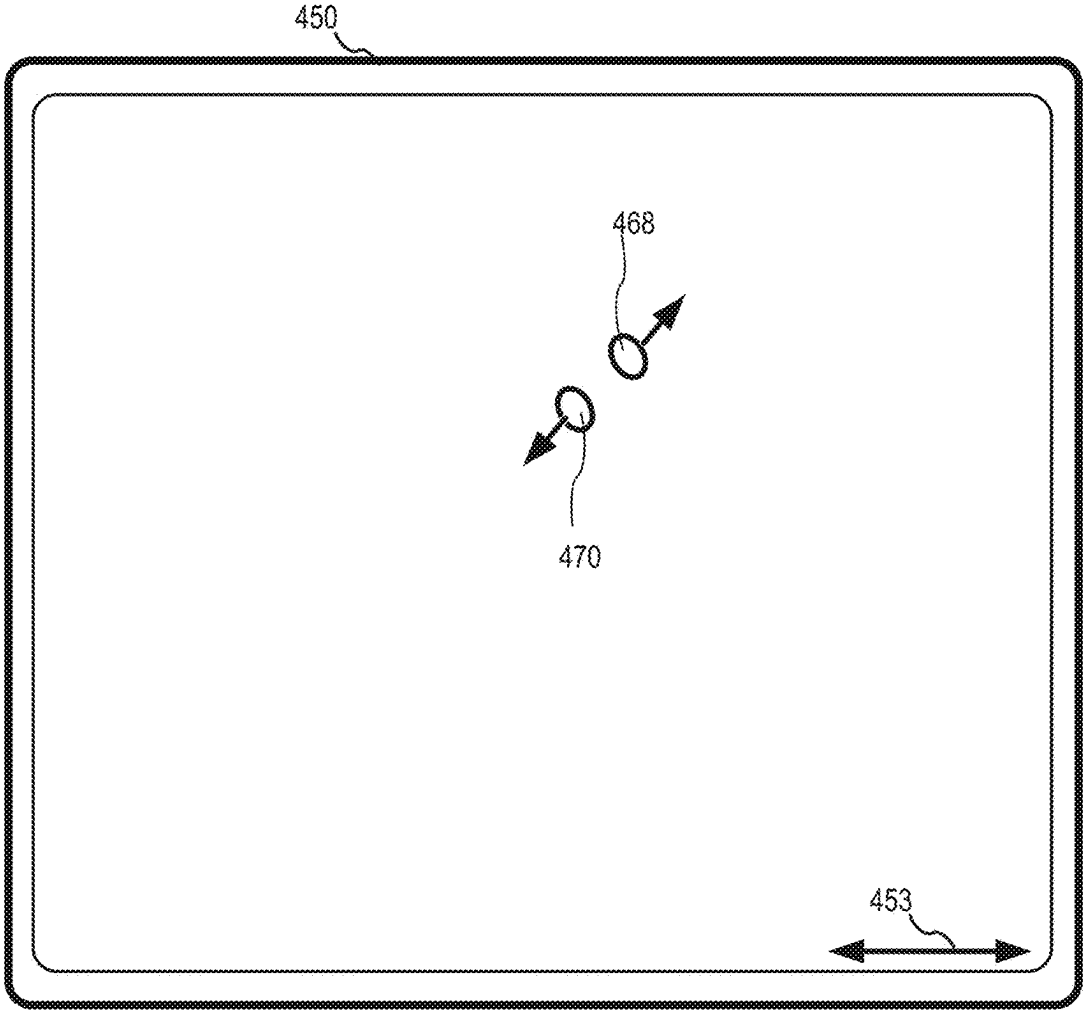

Portable Multifunction Device
100
Speaker 111
Optical Sensor
164
Proximity
Sensor 166
208
206
400
405
402
Current Time 404
406
208
Tuesday
30
Messages
424
Calendar
426
Photos
428
Camera
430
Online Video
432
Stocks
434
280
Maps
436
73°
Weather
438
Clock
440
Workout
Support 442
Notes
444
Settings
446
App Store
iTunes
Voice Memos
Utilities
414
410
4
6
N
W
E
S
Phone 416
Mail 418
Browser 420
iPod 422
408
Touch Screen 112
Microphone
113
Accelerometer(s)
168
204

*FIG. 4A*


450
468
470
453

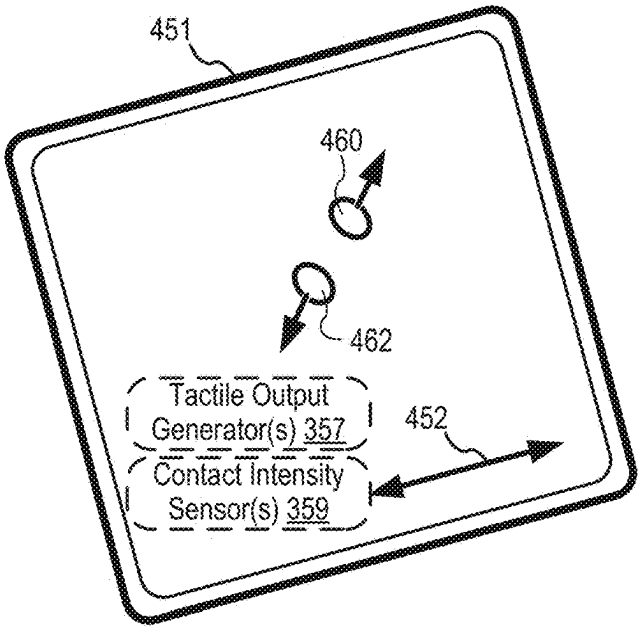

451
460
462
Tactile Output Generator(s) 357
Contact Intensity Sensor(s) 359
452

*FIG. 4B*

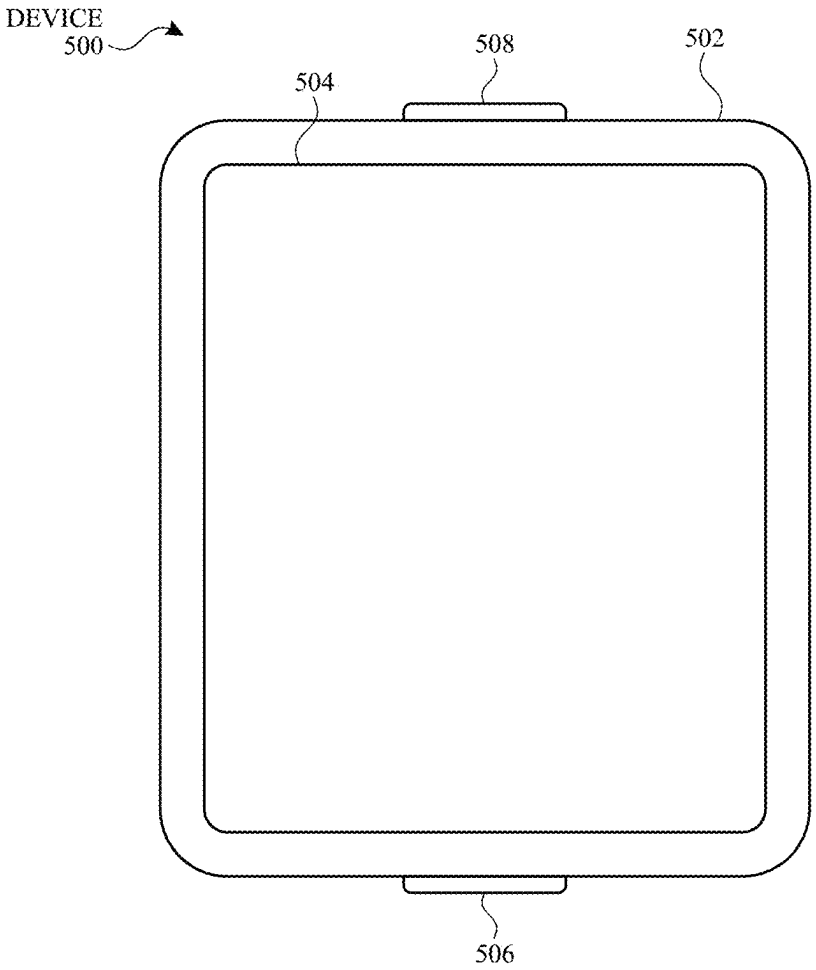



*FIG. 5A*

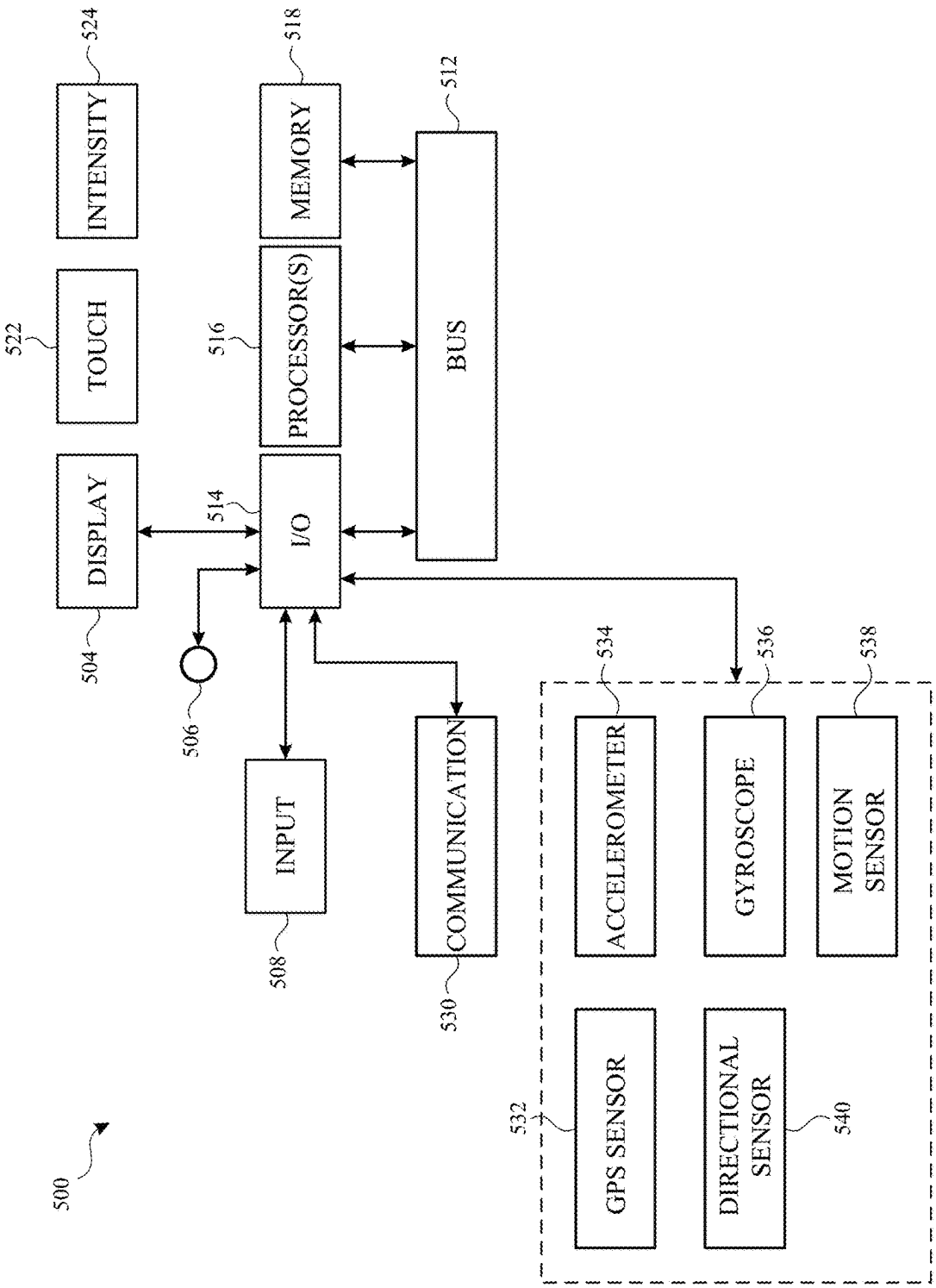

500
DISPLAY
504
TOUCH
522
INTENSITY
524
506
I/O
514
PROCESSOR(S)
516
MEMORY
518
BUS
512
INPUT
508
COMMUNICATION
530
GPS SENSOR
532
ACCELEROMETER
534
GYROSCOPE
536
MOTION SENSOR
538
DIRECTIONAL SENSOR
540

*FIG. 5B*

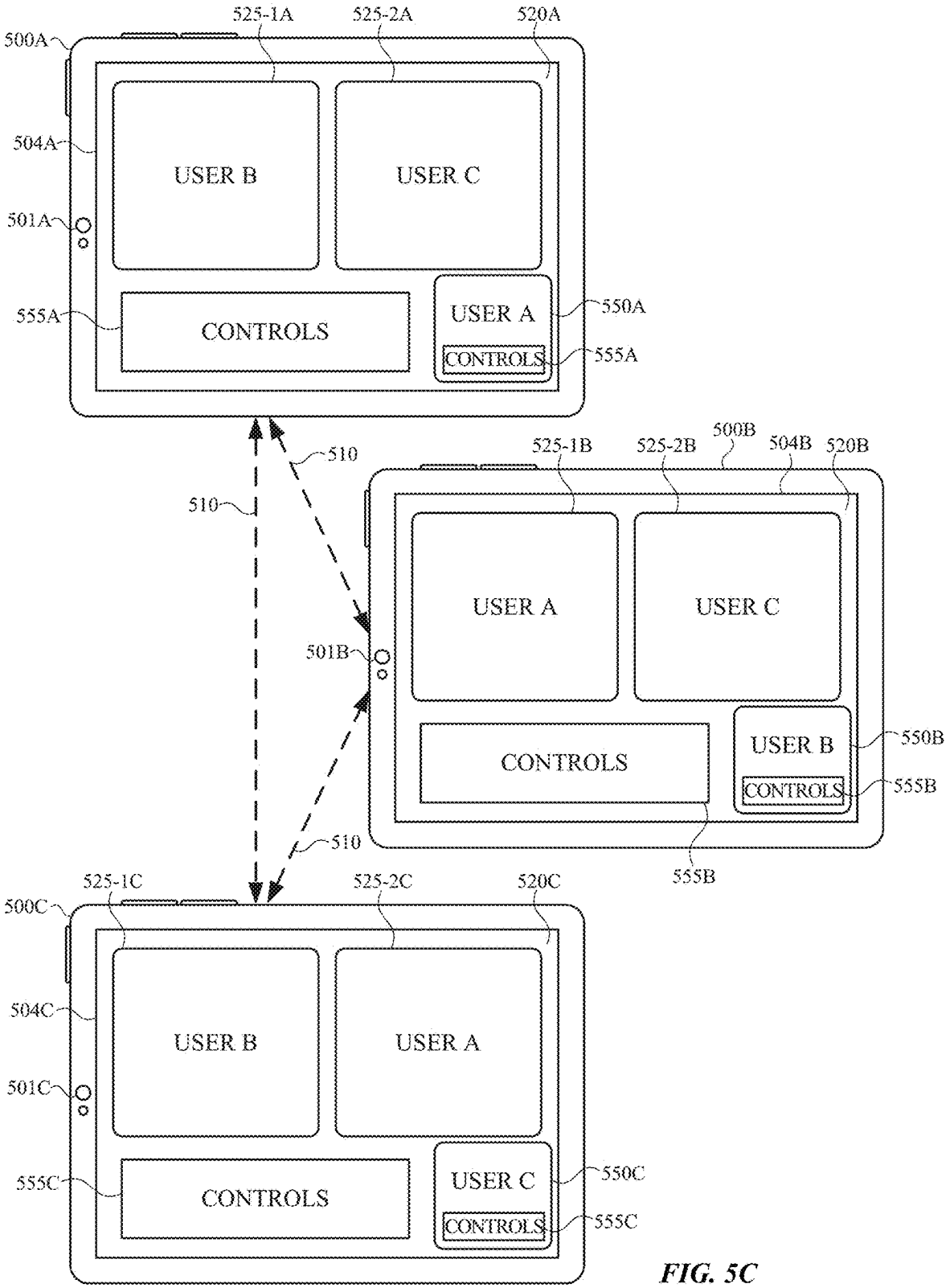

500A
525-1A
525-2A
520A
504A
USER B
USER C
501A
555A
CONTROLS
USER A
550A
CONTROLS
555A
510
510
525-1B
525-2B
500B
504B
520B
USER A
USER C
501B
CONTROLS
USER B
550B
CONTROLS
555B
510
555B
525-1C
525-2C
520C
500C
504C
USER B
USER A
501C
555C
CONTROLS
USER C
550C
CONTROLS
555C

*FIG. 5C*

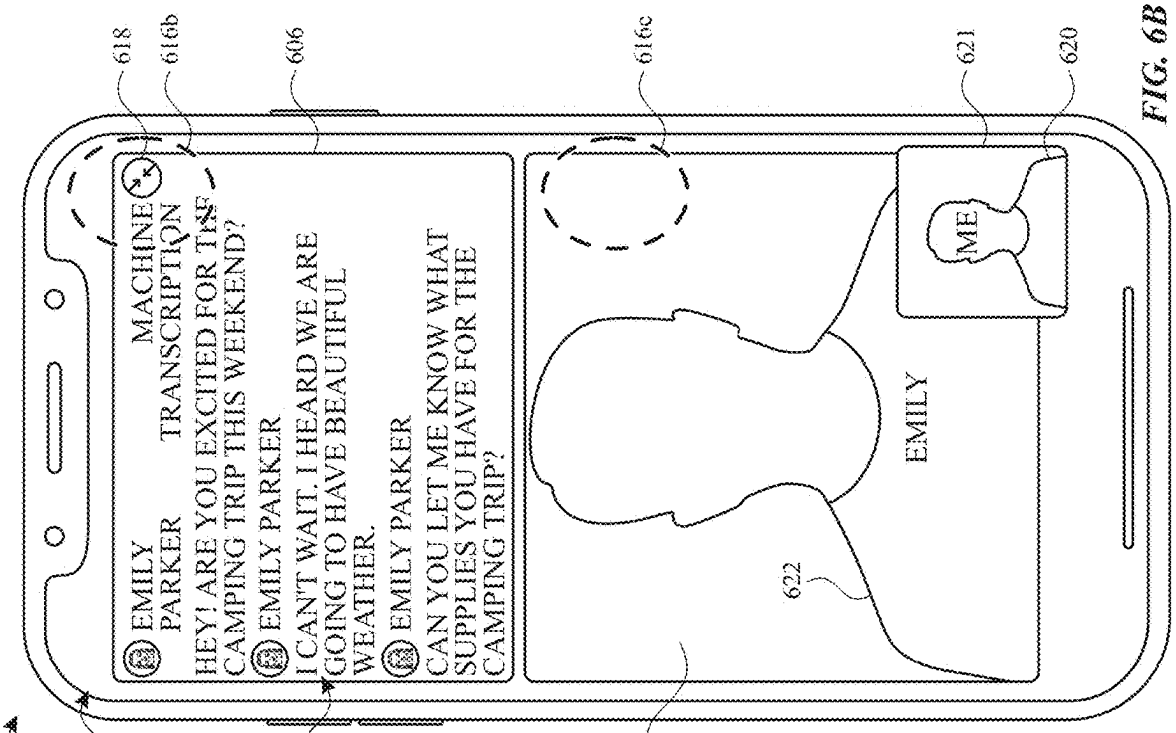

600
601
614
612
606
605
623
621
620
EMILY PARKER
MACHINE TRANSCRIPTION
CAN YOU LET ME KNOW WHAT SUPPLIES YOU HAVE FOR THE CAMPING TRIP?
616a
EMILY
ME
622

FIG. 6A


600
614
618
616b
606
616c
621
620
EMILY PARKER
MACHINE TRANSCRIPTION
HEY! ARE YOU EXCITED FOR THE CAMPING TRIP THIS WEEKEND?
EMILY PARKER
I CAN'T WAIT. I HEARD WE ARE GOING TO HAVE BEAUTIFUL WEATHER.
EMILY PARKER
CAN YOU LET ME KNOW WHAT SUPPLIES YOU HAVE FOR THE CAMPING TRIP?
EMILY
ME
622
623

FIG. 6B

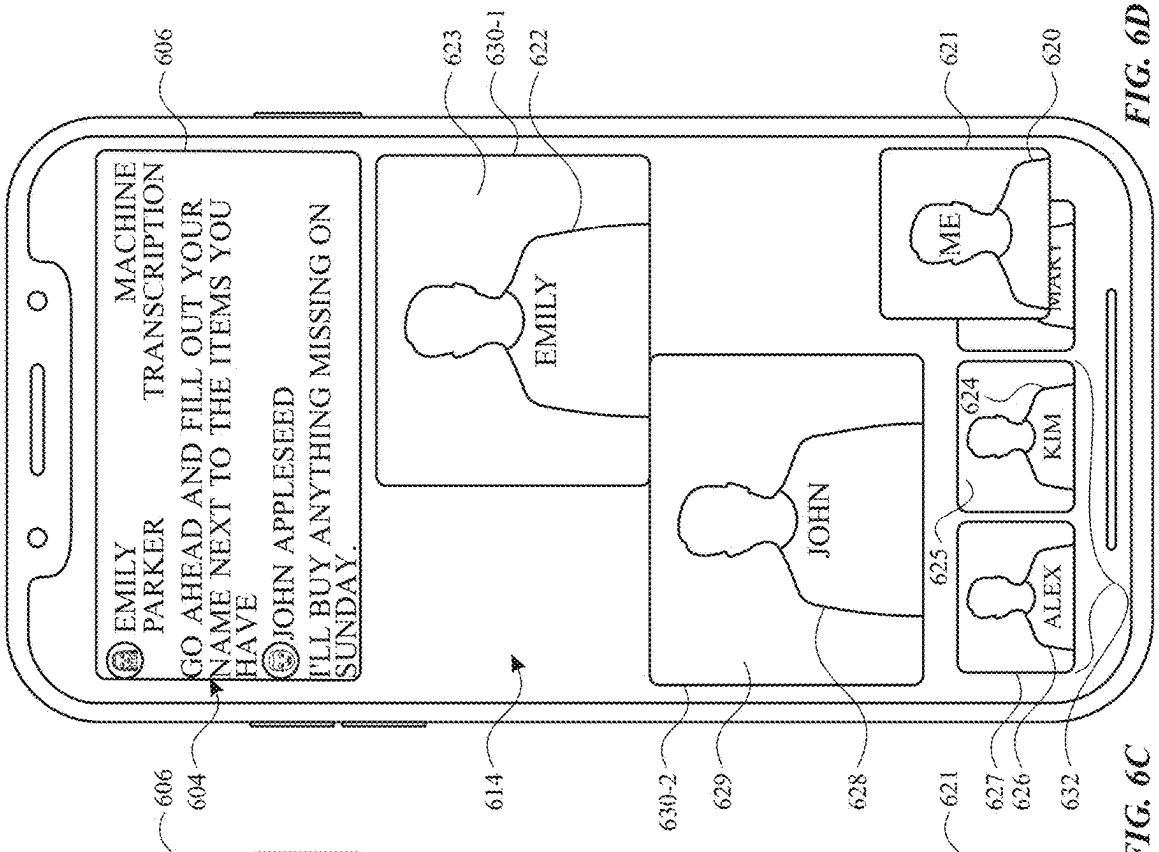

606
MACHINE TRANSCRIPTION
EMILY PARKER
GO AHEAD AND FILL OUT YOUR NAME NEXT TO THE ITEMS YOU HAVE
JOHN APPLESEED
I'LL BUY ANYTHING MISSING ON SUNDAY.
604
614
623
630-1
622
EMILY
630-2
629
JOHN
628
625
624
KIM
ALEX
627
626
632
621
ME
620

FIG. 6D

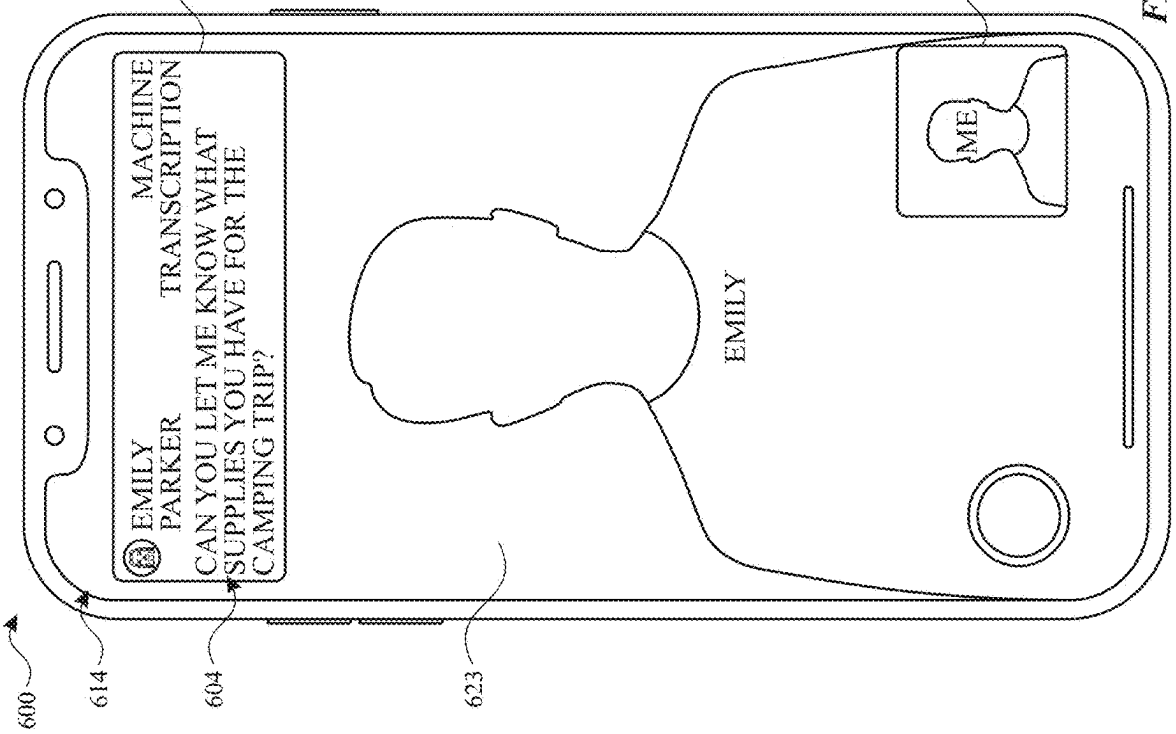

600
614
604
606
MACHINE TRANSCRIPTION
EMILY PARKER
CAN YOU LET ME KNOW WHAT SUPPLIES YOU HAVE FOR THE CAMPING TRIP?
623
EMILY
621
ME

FIG. 6C

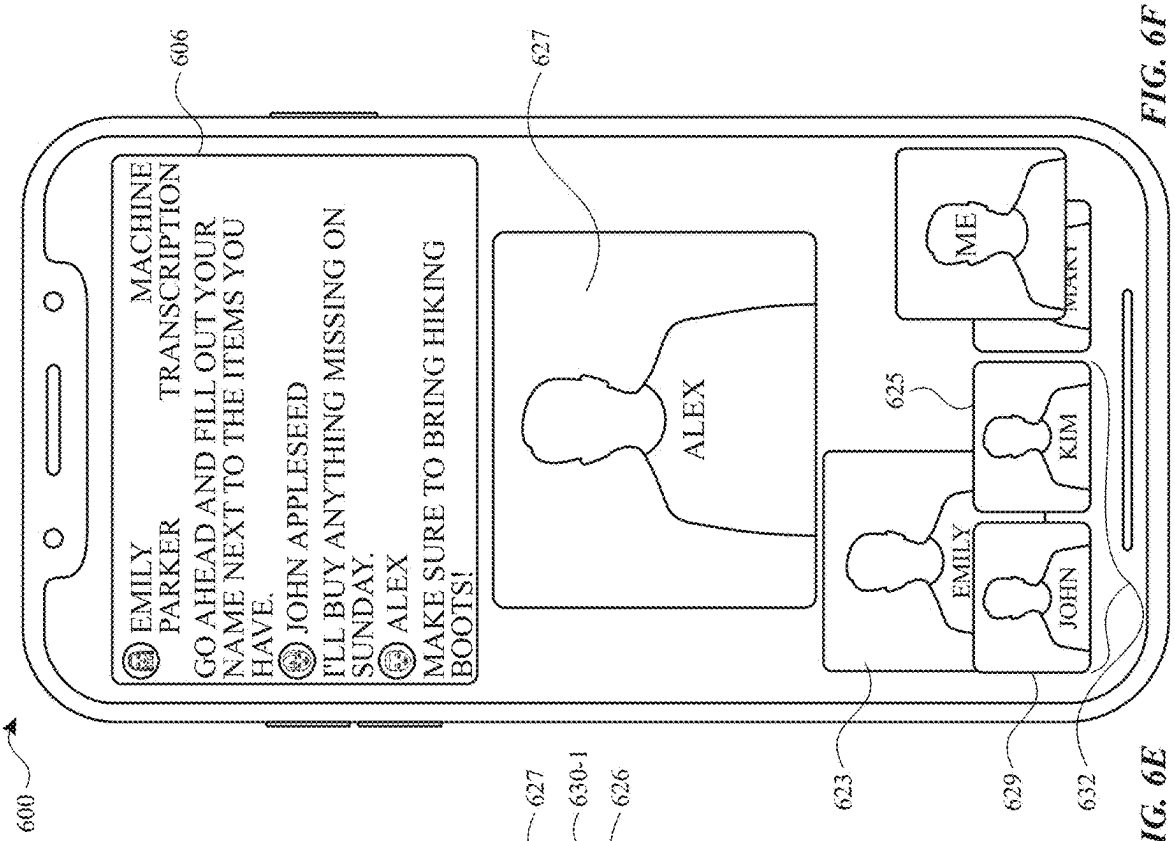

600
606
EMILY PARKER
MACHINE TRANSCRIPTION
GO AHEAD AND FILL OUT YOUR NAME NEXT TO THE ITEMS YOU HAVE.
JOHN APPLESEED
I'LL BUY ANYTHING MISSING ON SUNDAY.
ALEX
MAKE SURE TO BRING HIKING BOOTS!
627
ALEX
625
EMILY
KIM
JOHN
ME
MARY
623
629
632

FIG. 6F

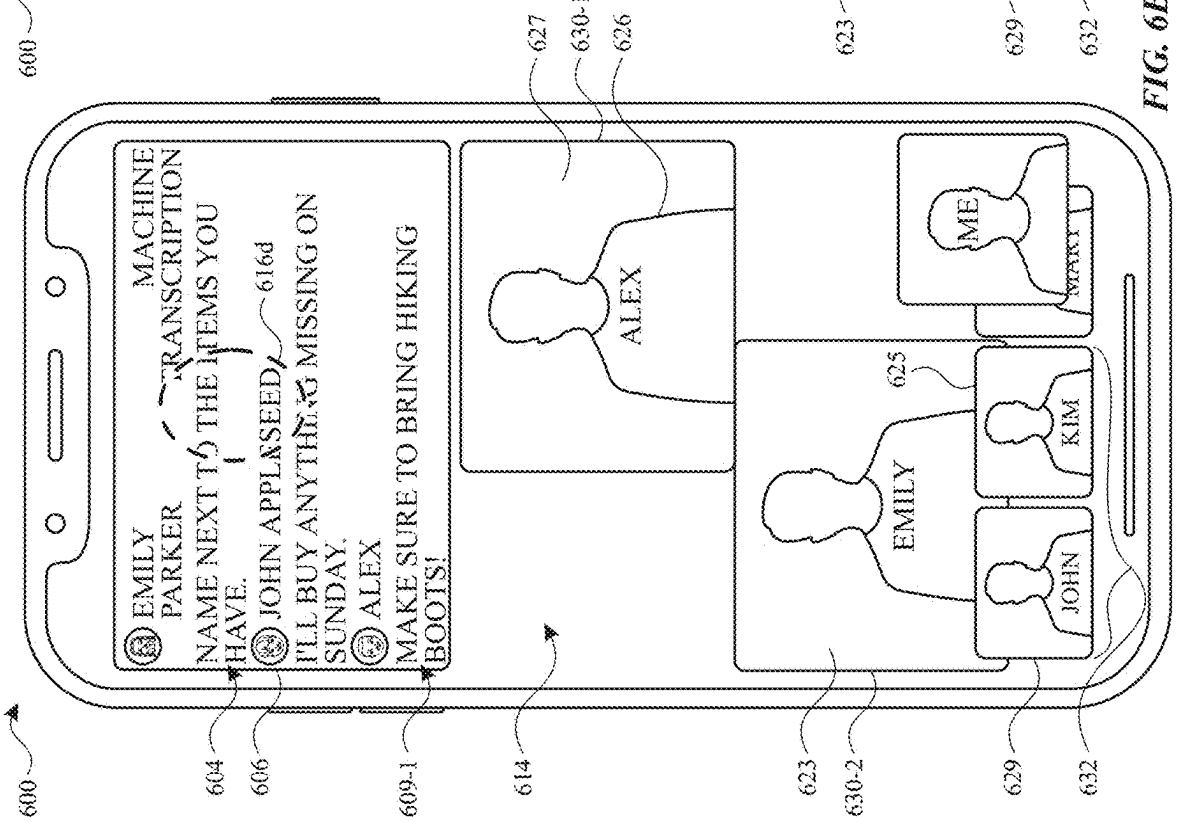

600
604
606
609-1
614
623
630-2
629
632
EMILY PARKER
MACHINE TRANSCRIPTION
NAME NEXT TO THE ITEMS YOU HAVE.
616d
JOHN APPLESEED
I'LL BUY ANYTHING MISSING ON SUNDAY.
ALEX
MAKE SURE TO BRING HIKING BOOTS!
627
630-1
626
ALEX
625
EMILY
KIM
JOHN
ME
MARY

FIG. 6E

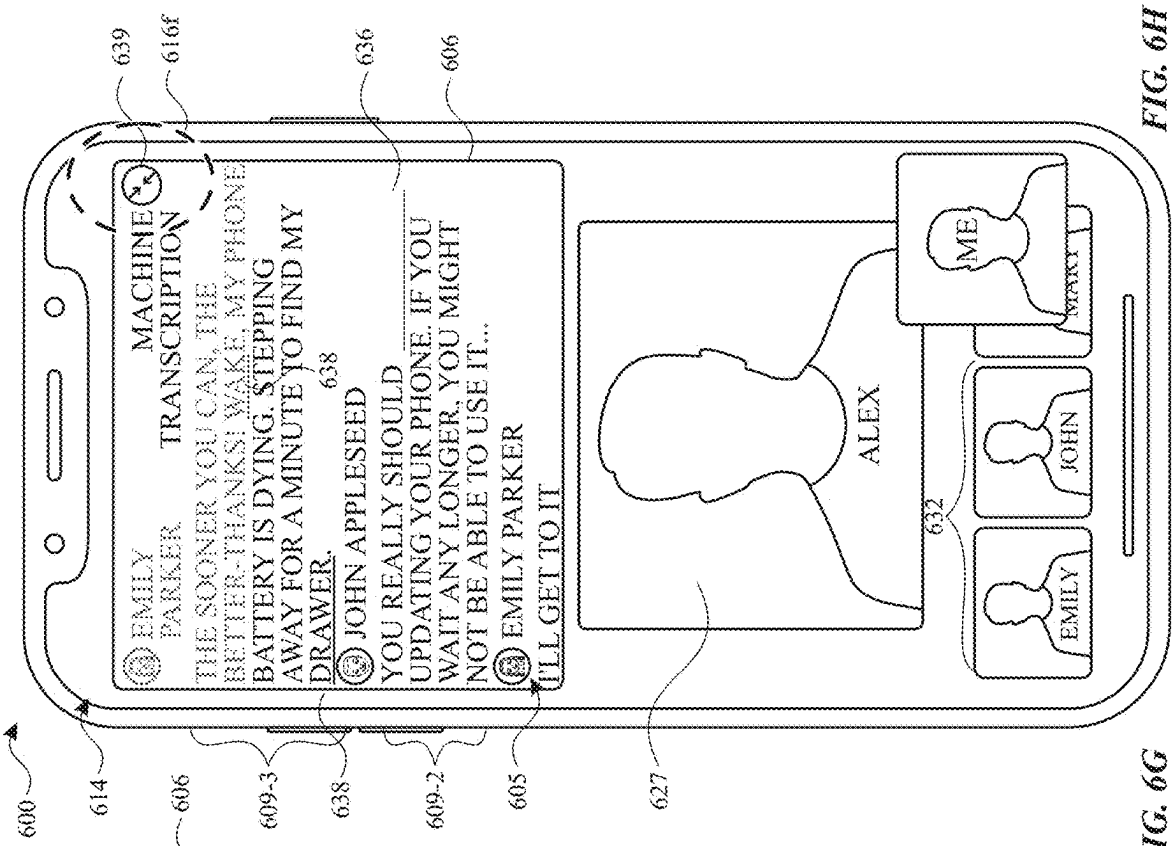

600
614
639
616f
606
636
EMILY PARKER
MACHINE TRANSCRIPTION
THE SOONER YOU CAN, THE BETTER. THANKS! WAKE MY PHONE BATTERY IS DYING. STEPPING AWAY FOR A MINUTE TO FIND MY DRAWER.
638
JOHN APPLESEED
YOU REALLY SHOULD UPDATING YOUR PHONE. IF YOU WAIT ANY LONGER, YOU MIGHT NOT BE ABLE TO USE IT...
EMILY PARKER
I'LL GET TO IT
609-3
638
609-2
605
627
ALEX
ME
MARY
JOHN
EMILY
632

FIG. 6H

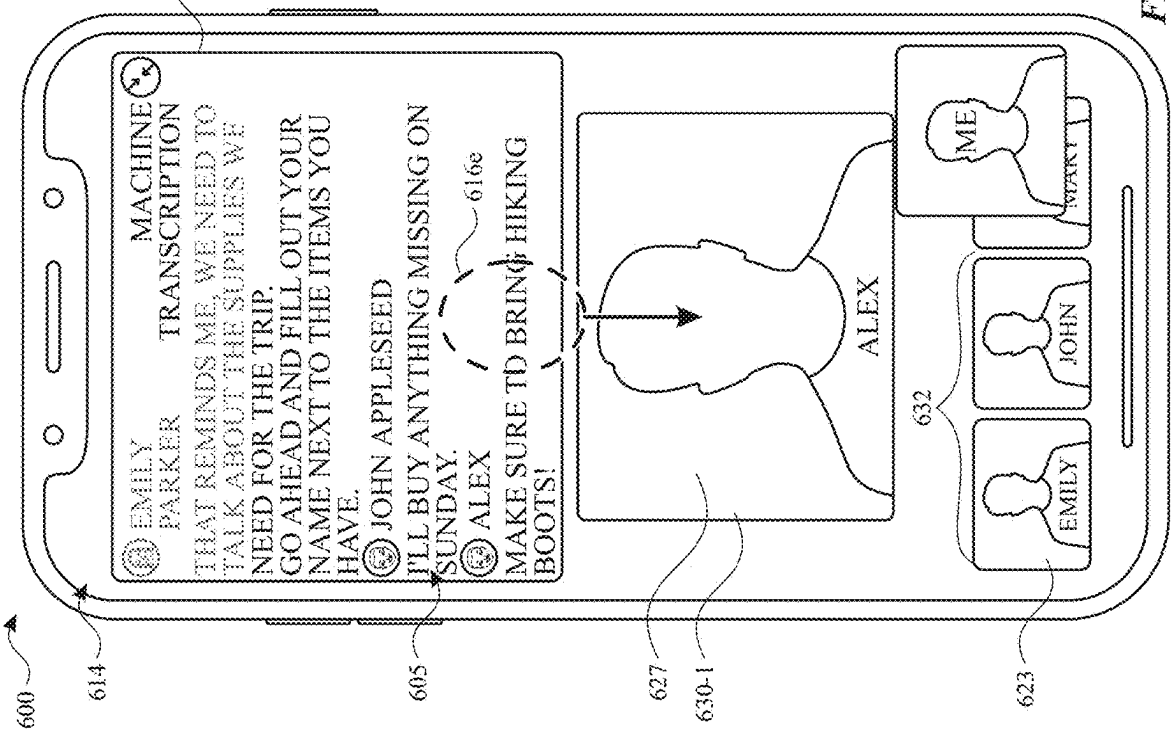

600
614
606
EMILY PARKER
MACHINE TRANSCRIPTION
THAT REMINDS ME, WE NEED TO TALK ABOUT THE SUPPLIES WE NEED FOR THE TRIP.
GO AHEAD AND FILL OUT YOUR NAME NEXT TO THE ITEMS YOU HAVE.
JOHN APPLESEED
I'LL BUY ANYTHING MISSING ON SUNDAY.
616e
ALEX
MAKE SURE TO BRING HIKING BOOTS!
605
627
630-1
ALEX
ME
MARY
JOHN
EMILY
632
623

FIG. 6G

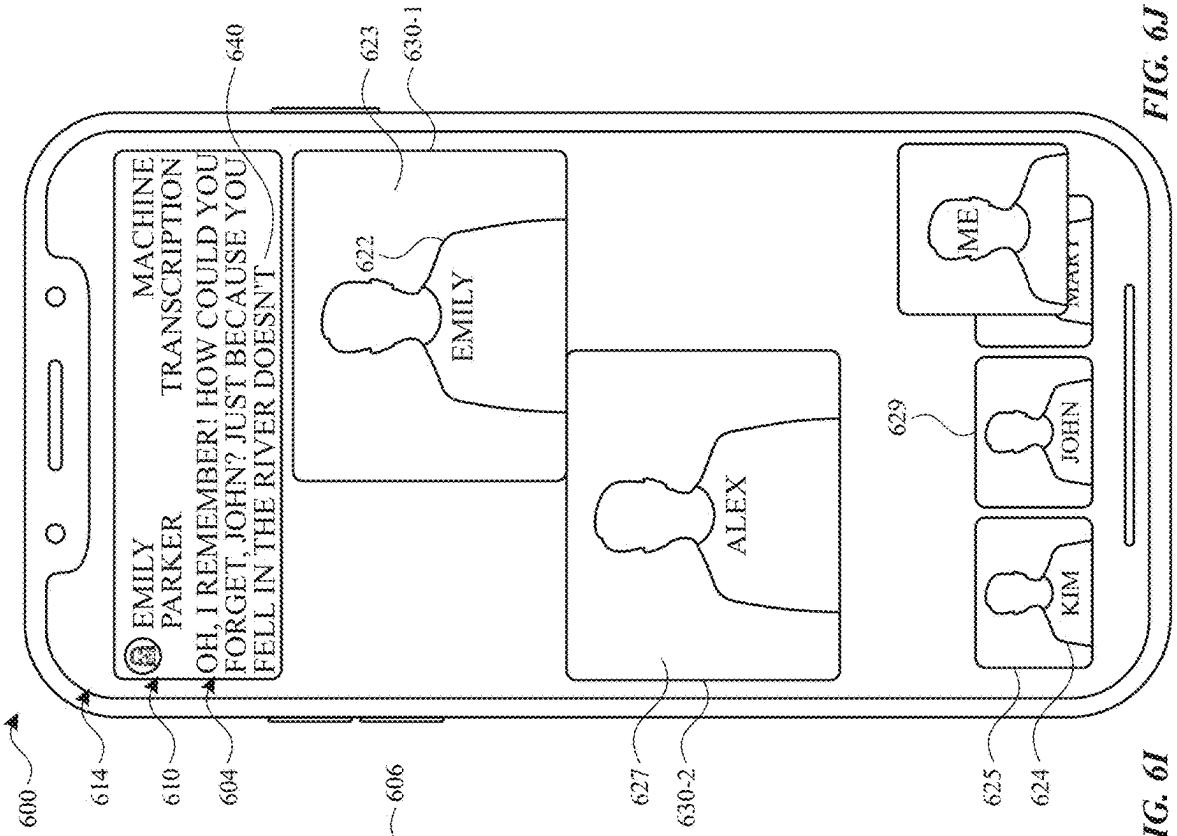

600
614
610
604
640
EMILY PARKER
MACHINE TRANSCRIPTION
OH, I REMEMBER! HOW COULD YOU FORGET, JOHN? JUST BECAUSE YOU FELL IN THE RIVER DOESN'T
623
630-1
622
EMILY
627
630-2
ALEX
629
625
624
KIM
JOHN
ME

FIG. 6J

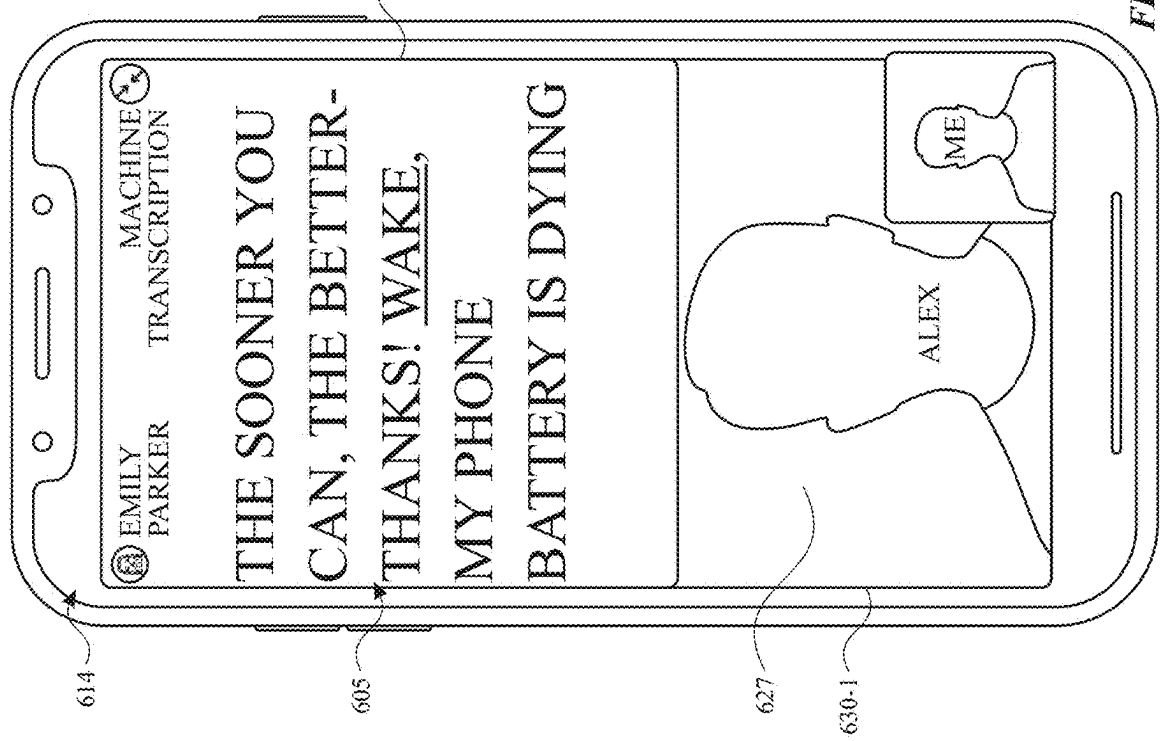

614
605
606
EMILY PARKER
MACHINE TRANSCRIPTION
THE SOONER YOU CAN, THE BETTER-THANKS! WAKE, MY PHONE BATTERY IS DYING
627
630-1
ALEX
ME

FIG. 6I

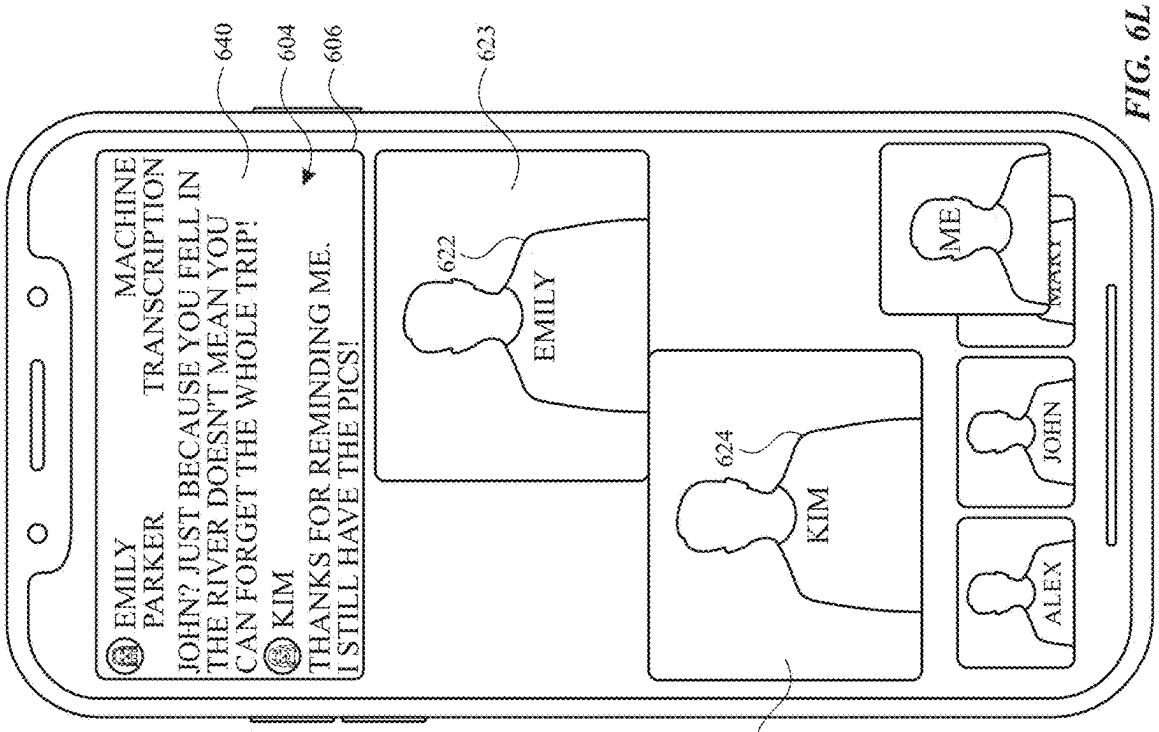

640
604
606
623
MACHINE TRANSCRIPTION
EMILY PARKER
JOHN? JUST BECAUSE YOU FELL IN THE RIVER DOESN'T MEAN YOU CAN FORGET THE WHOLE TRIP!
KIM
THANKS FOR REMINDING ME. I STILL HAVE THE PICS!
622
EMILY
624
KIM
ME
MARY
JOHN
ALEX
625

FIG. 6L

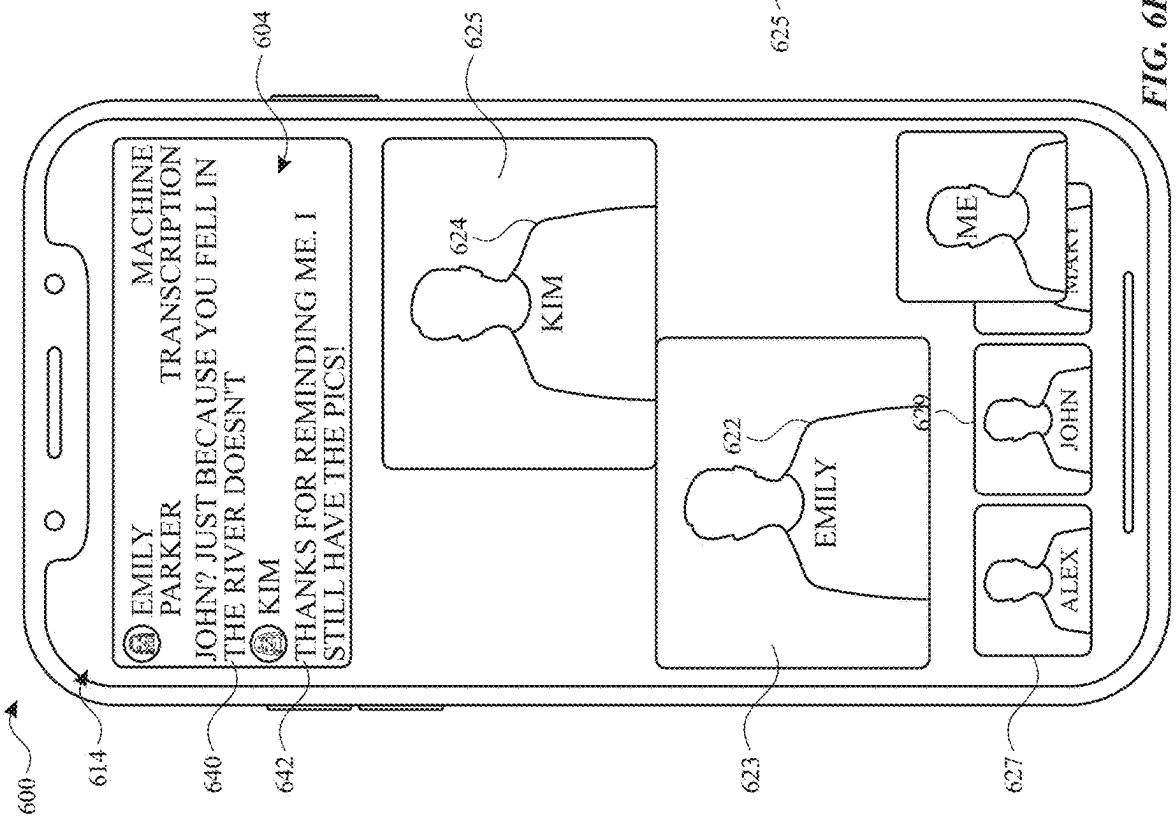

600
614
640
642
604
625
MACHINE TRANSCRIPTION
EMILY PARKER
JOHN? JUST BECAUSE YOU FELL IN THE RIVER DOESN'T
KIM
THANKS FOR REMINDING ME. I STILL HAVE THE PICS!
624
KIM
622
EMILY
620
ME
MARY
JOHN
ALEX
623
627

FIG. 6K

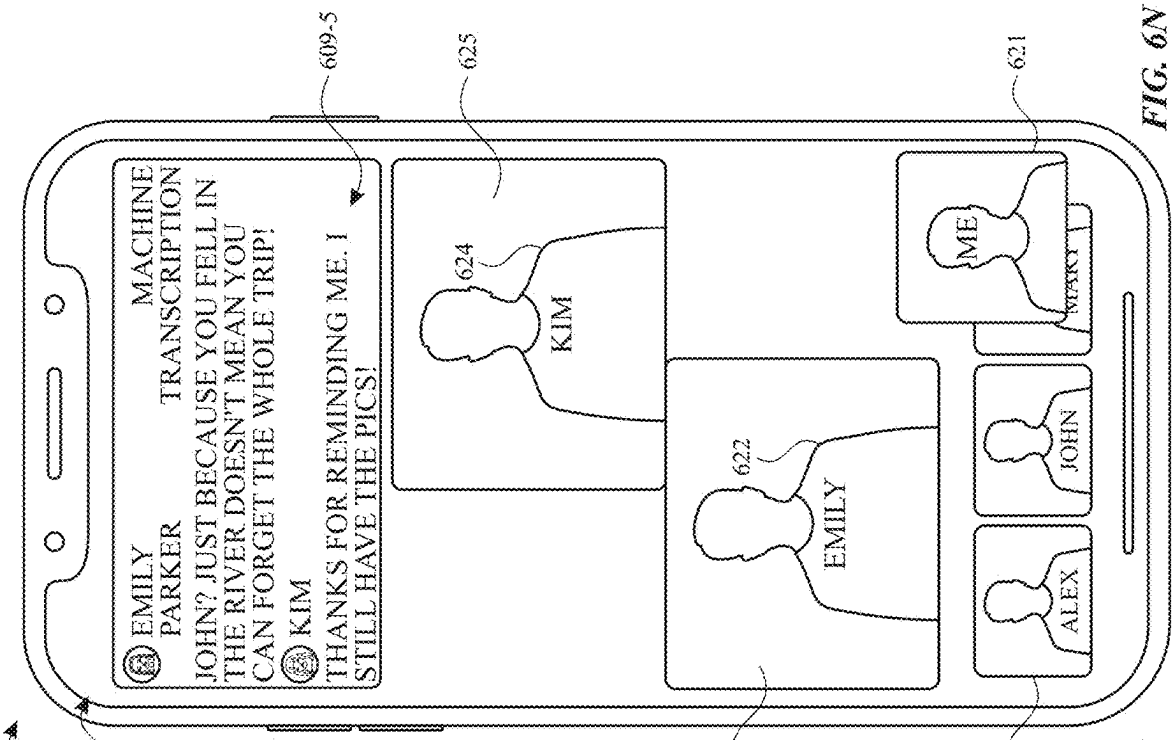

600
614
609-5
625
624
KIM
622
EMILY
623
ME
MARY
JOHN
ALEX
621
627
EMILY
PARKER
MACHINE
TRANSCRIPTION
JOHN? JUST BECAUSE YOU FELL IN
THE RIVER DOESN'T MEAN YOU
CAN FORGET THE WHOLE TRIP!
KIM
THANKS FOR REMINDING ME. I
STILL HAVE THE PICS!

FIG. 6N

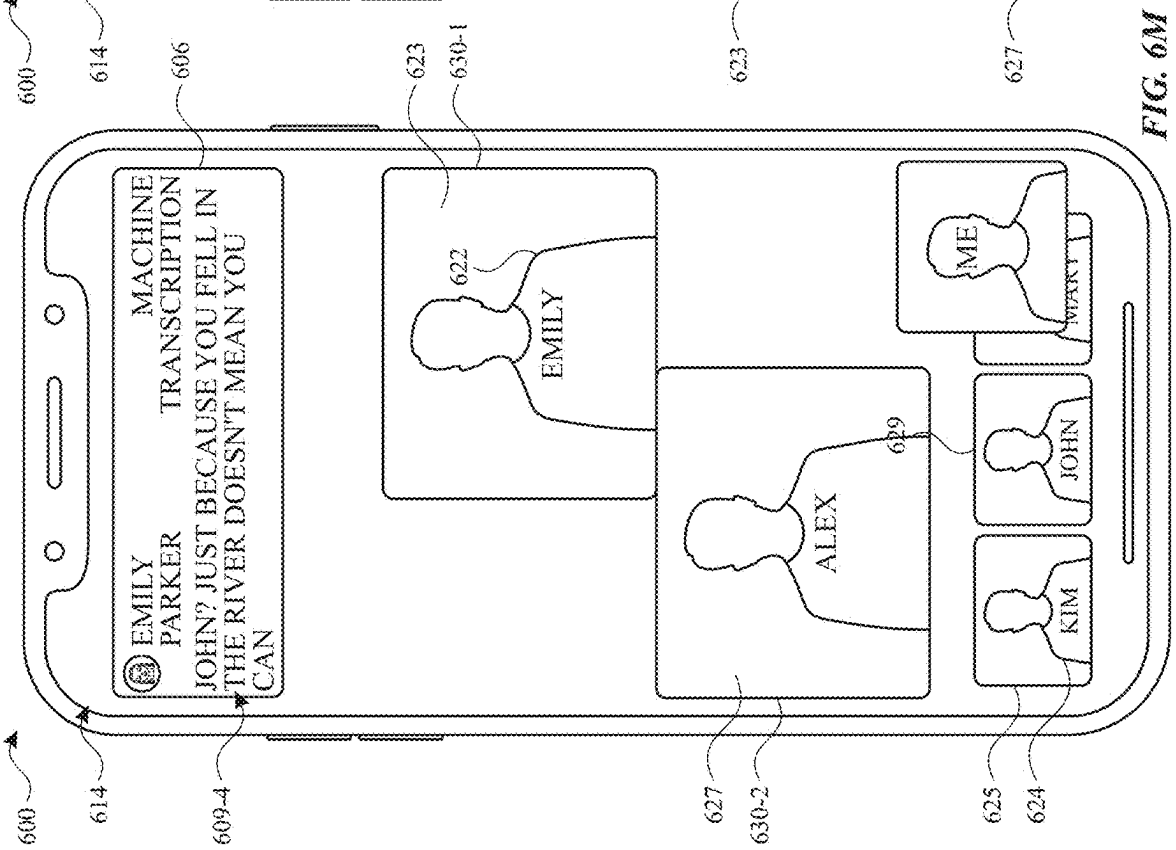

600
614
609-4
606
EMILY
PARKER
MACHINE
TRANSCRIPTION
JOHN? JUST BECAUSE YOU FELL IN
THE RIVER DOESN'T MEAN YOU
CAN
623
630-1
622
EMILY
ALEX
629
627
630-2
ME
MARY
JOHN
KIM
625
624

FIG. 6M

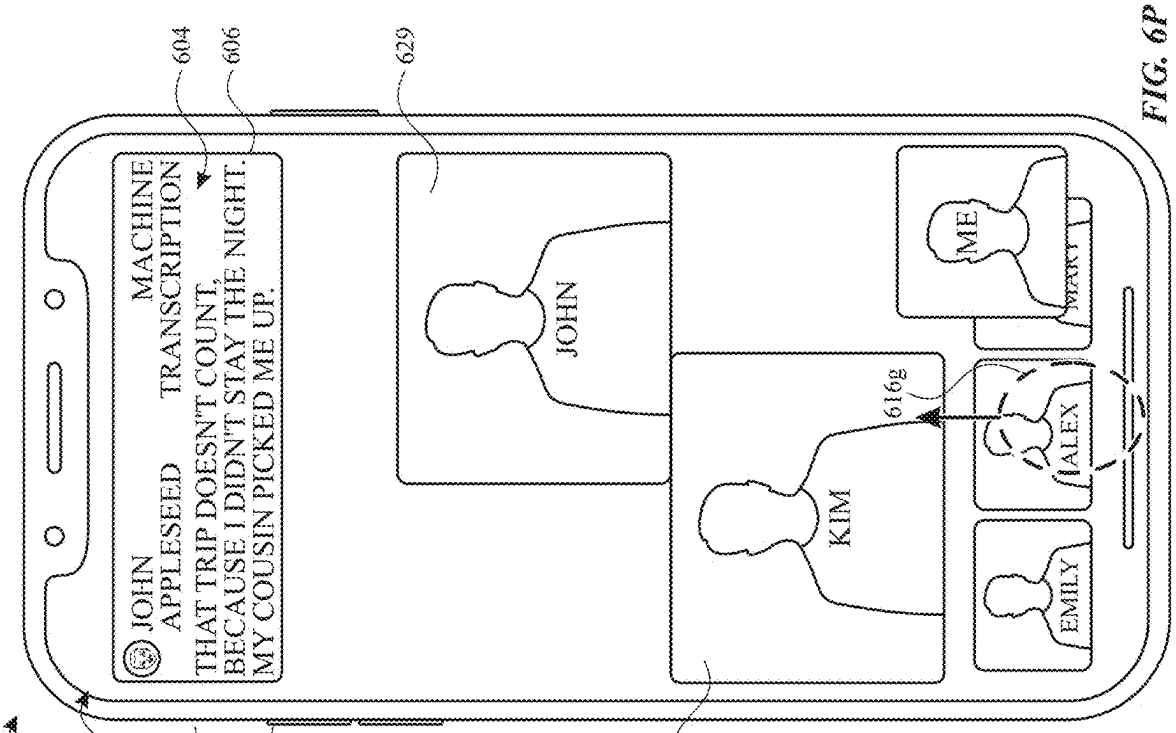

600
614
609-6
604
606
629
625
JOHN
APPLESEED
MACHINE
TRANSCRIPTION
THAT TRIP DOESN'T COUNT,
BECAUSE I DIDN'T STAY THE NIGHT.
MY COUSIN PICKED ME UP.
JOHN
KIM
616g
ME
MARY
ALEX
EMILY

FIG. 6P

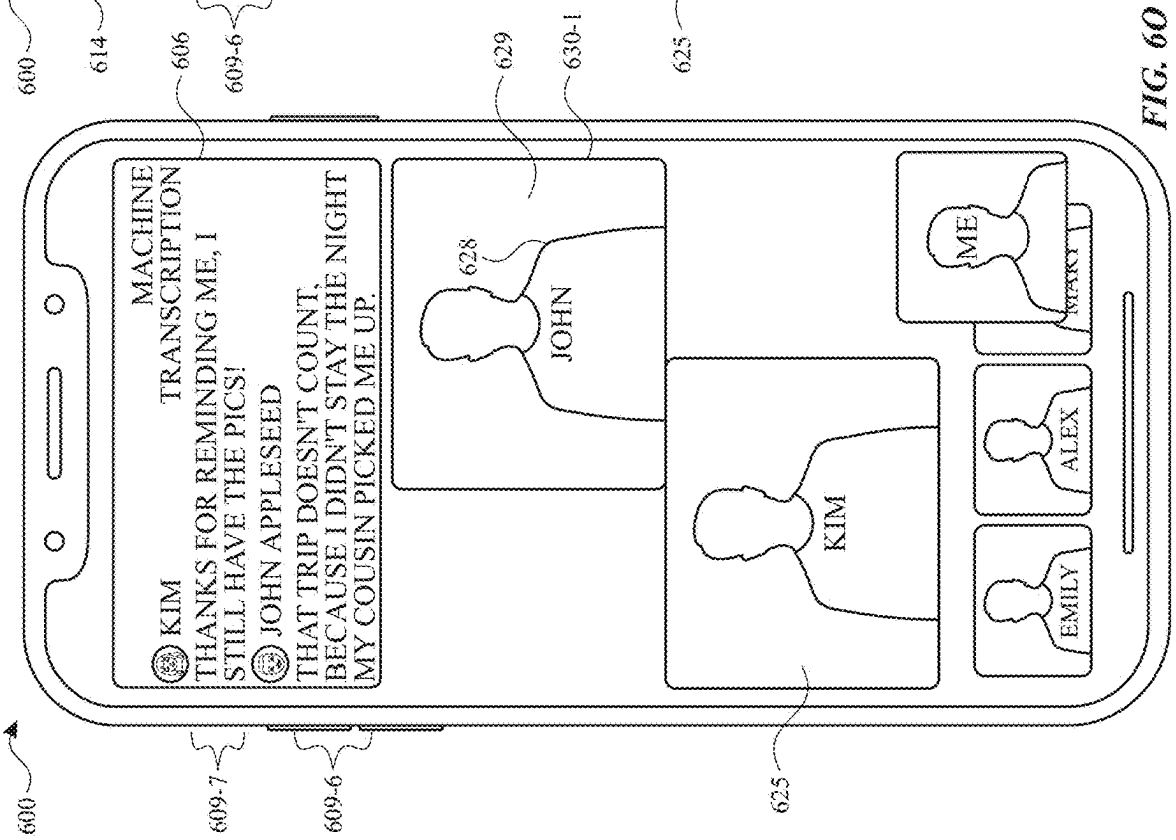

600
609-7
609-6
606
629
630-1
625
628
KIM
MACHINE
TRANSCRIPTION
THANKS FOR REMINDING ME, I
STILL HAVE THE PICS!
JOHN APPLESEED
THAT TRIP DOESN'T COUNT,
BECAUSE I DIDN'T STAY THE NIGHT
MY COUSIN PICKED ME UP.
JOHN
KIM
ME
MARY
ALEX
EMILY

FIG. 6O

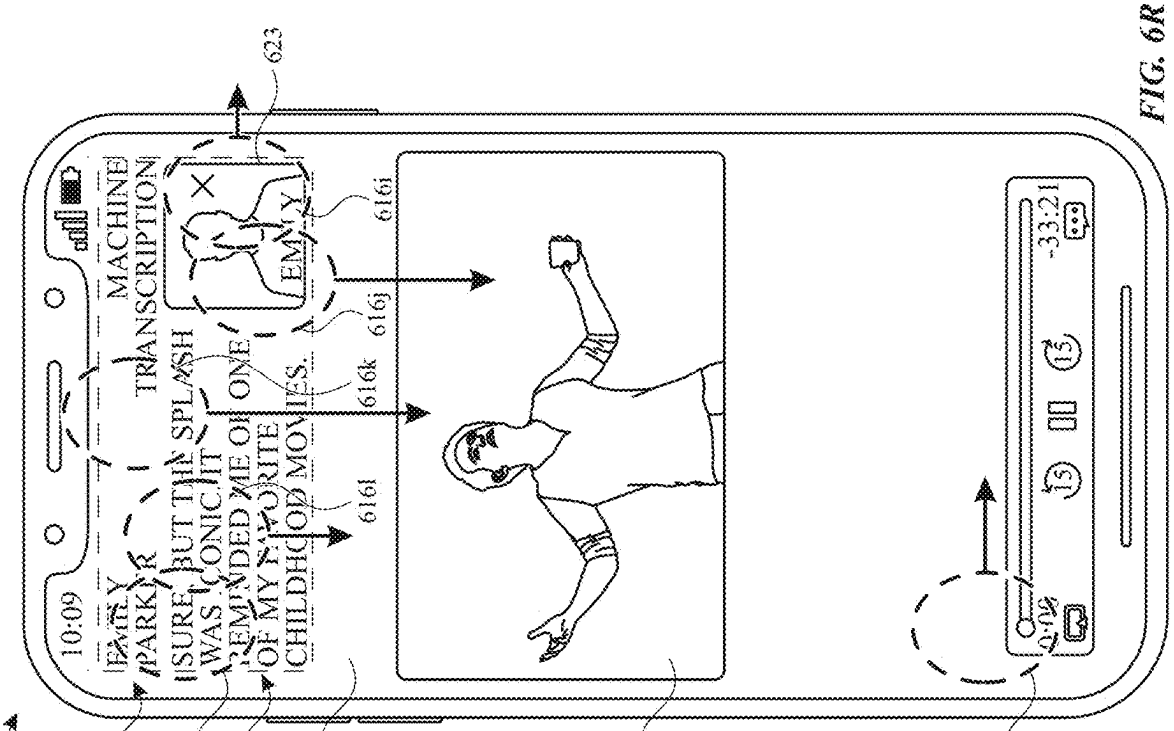

600
10:09
JOHN
APPLESEED
SURE, BUT THE SPLASH
WAS ICONIC. IT
REMINDED ME OF ONE
OF MY FAVORITE
CHILDHOOD MOVIES.
MACHINE
TRANSCRIPTION
JOHN
MUSIC
HOME
MOVIES
PHOTOS
ACTIVITY
615
604
606
650
651
616h
616m
629
630-1
601
652
616i
616j
616k
616l
623
-33:21

FIG. 6Q

FIG. 6R

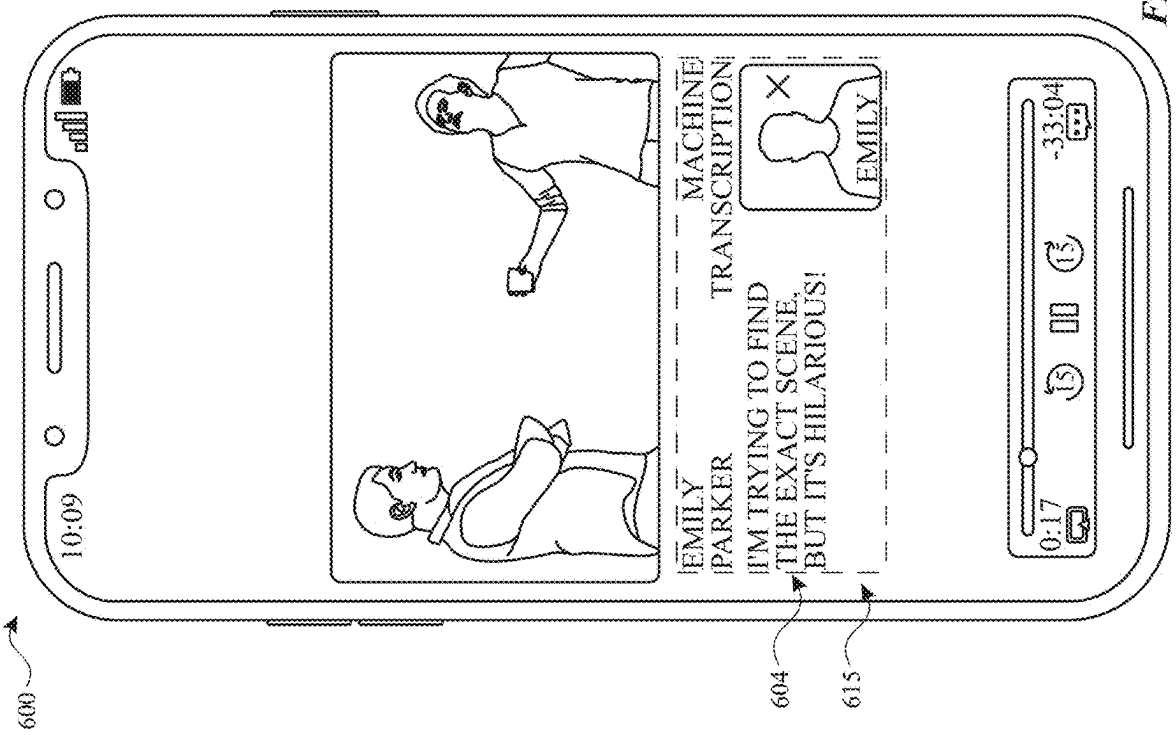

600
10:09
EMILY
PARKER
MACHINE
TRANSCRIPTION
I'M TRYING TO FIND
THE EXACT SCENE,
BUT IT'S HILARIOUS!
EMILY
604
615
0:17
-33:04

FIG. 6S

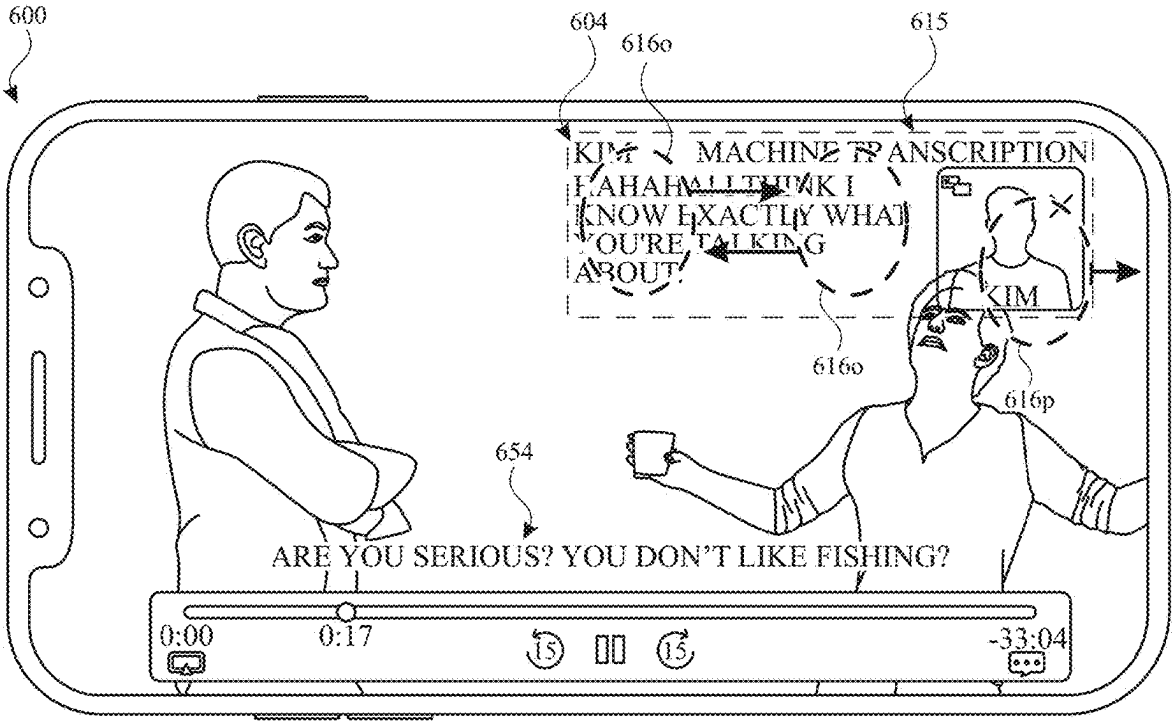

600
604
616o
615
KIM MACHINE TRANSCRIPTION
HAHAHA, I THINK I
KNOW EXACTLY WHAT
YOU'RE TALKING
ABOUT.
KIM
616o
616p
654
ARE YOU SERIOUS? YOU DON'T LIKE FISHING?
0:00
0:17
15
15
-33:04

*FIG. 6T*

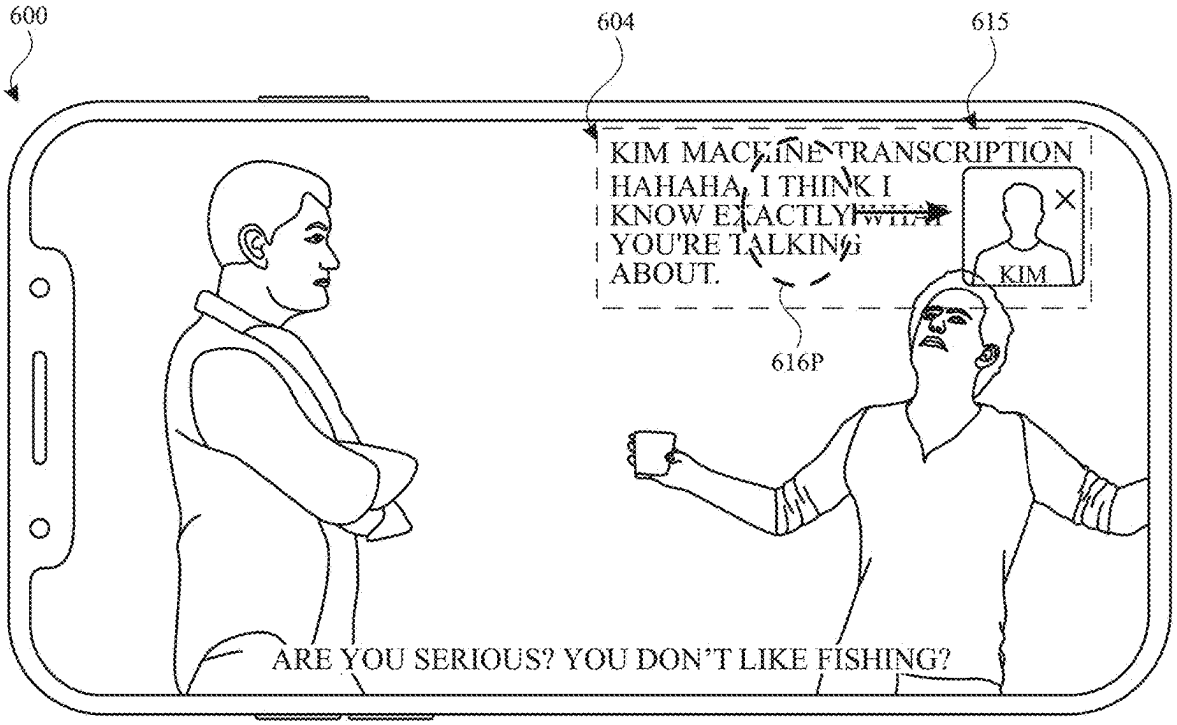

600
604
615
KIM MACHINE TRANSCRIPTION
HAHAHA, I THINK I
KNOW EXACTLY WHAT
YOU'RE TALKING
ABOUT.
KIM
616P
ARE YOU SERIOUS? YOU DON'T LIKE FISHING?

*FIG. 6U*

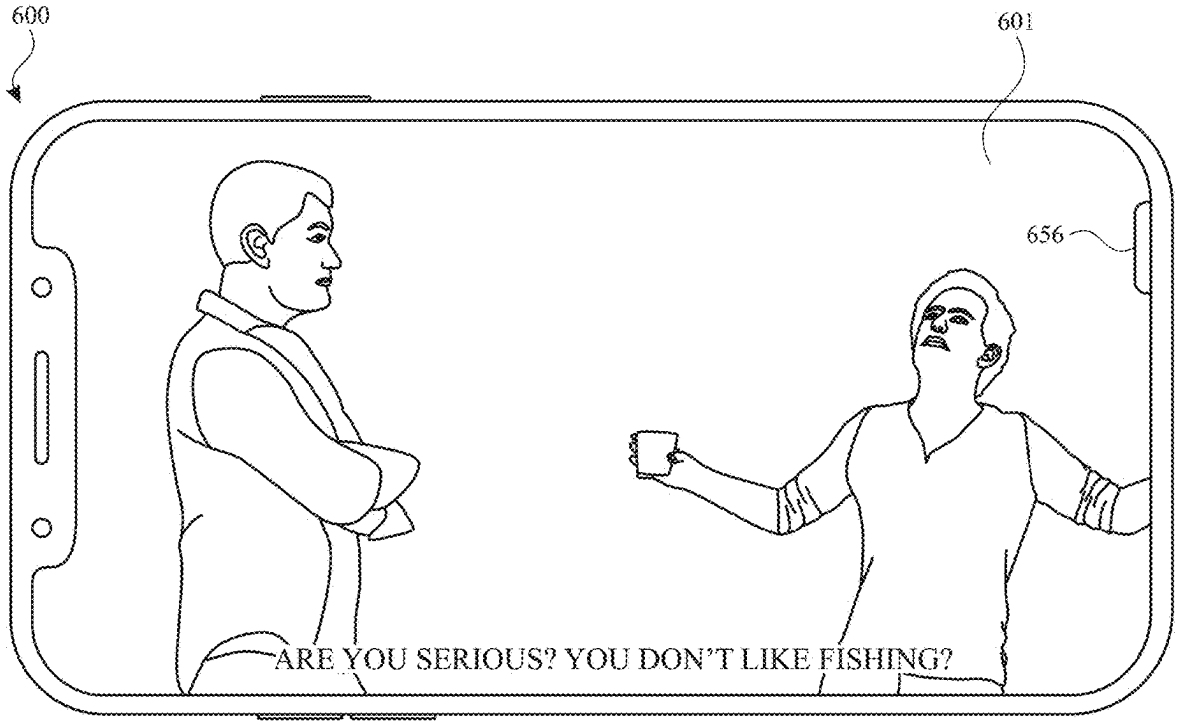

600
601
656
ARE YOU SERIOUS? YOU DON'T LIKE FISHING?

*FIG. 6V*

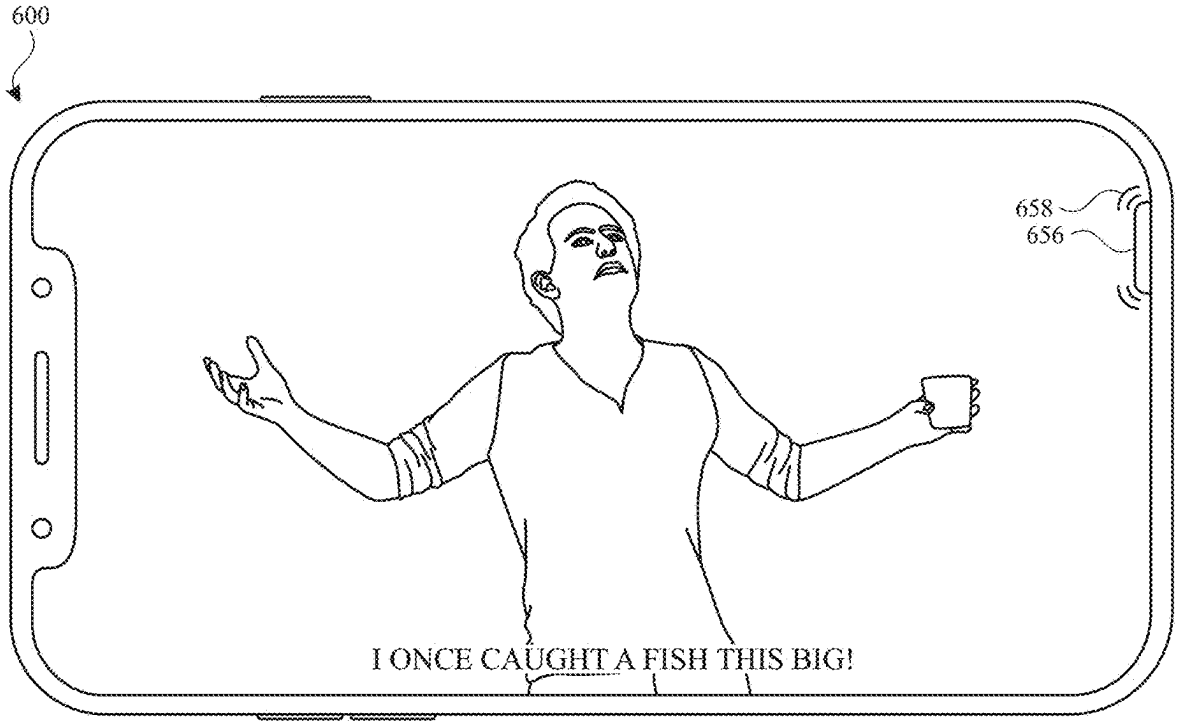

600
658
656
I ONCE CAUGHT A FISH THIS BIG!

*FIG. 6W*

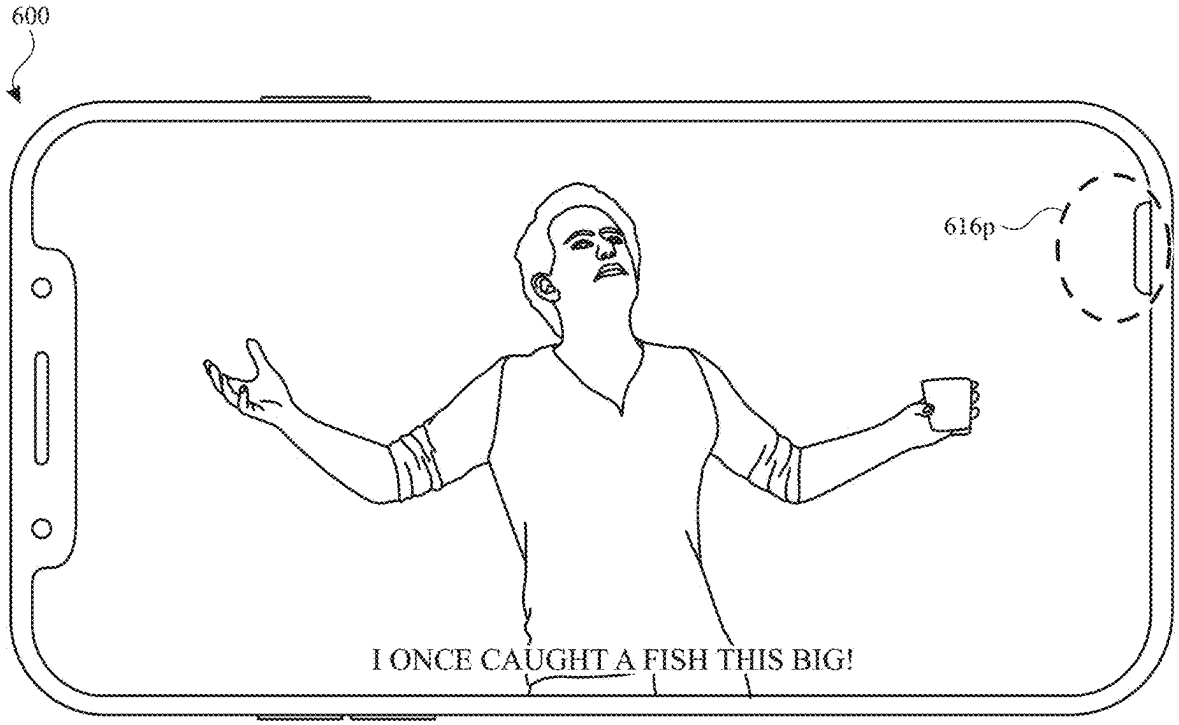

600
616p
I ONCE CAUGHT A FISH THIS BIG!

*FIG. 6X*

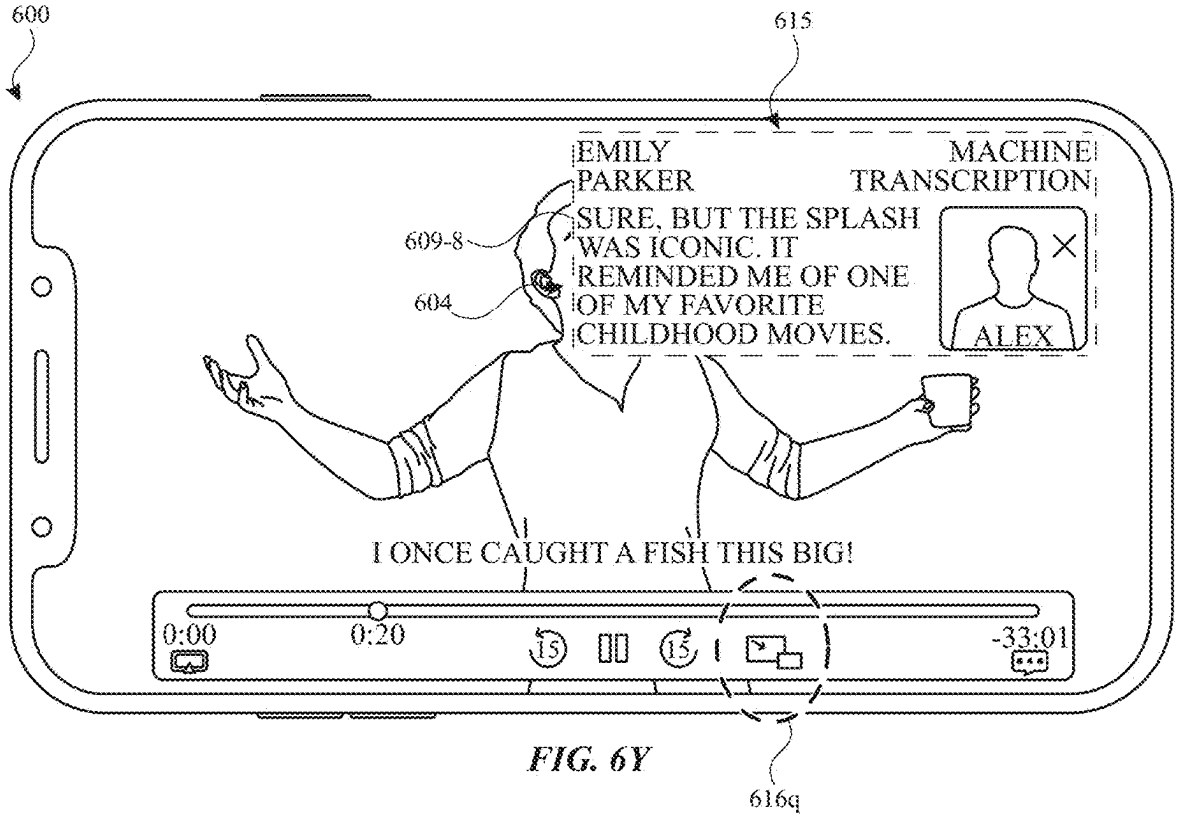

600
615
EMILY PARKER
MACHINE TRANSCRIPTION
SURE, BUT THE SPLASH WAS ICONIC. IT REMINDED ME OF ONE OF MY FAVORITE CHILDHOOD MOVIES.
609-8
604
ALEX
I ONCE CAUGHT A FISH THIS BIG!
0:00
0:20
15
15
-33:01
616q

*FIG. 6Y*

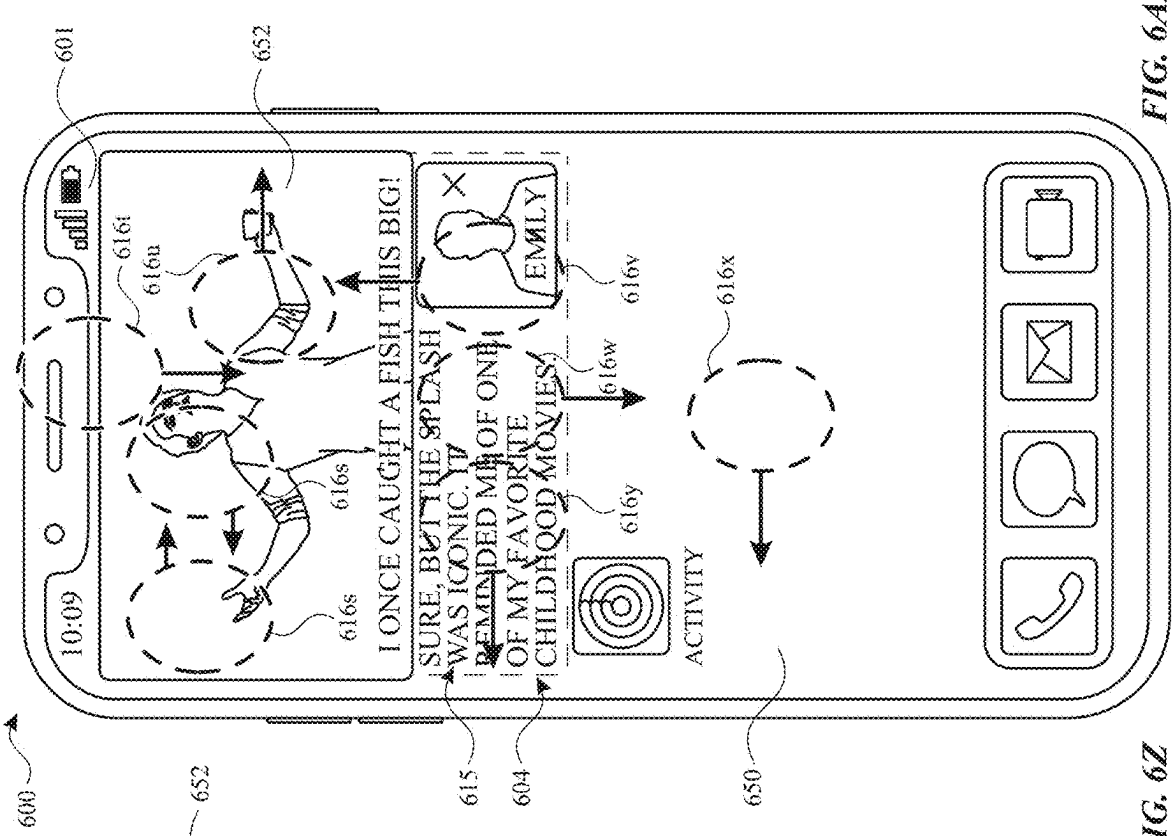



FIG. 6AA

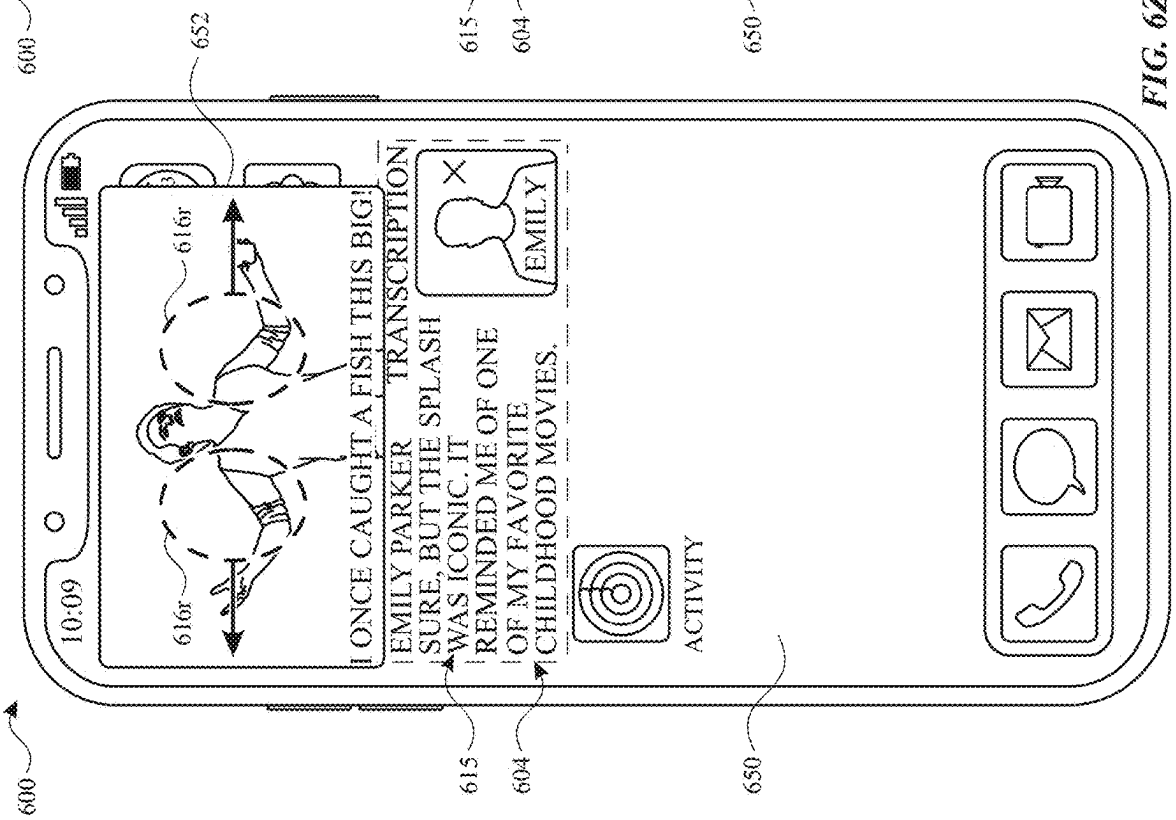



FIG. 6Z

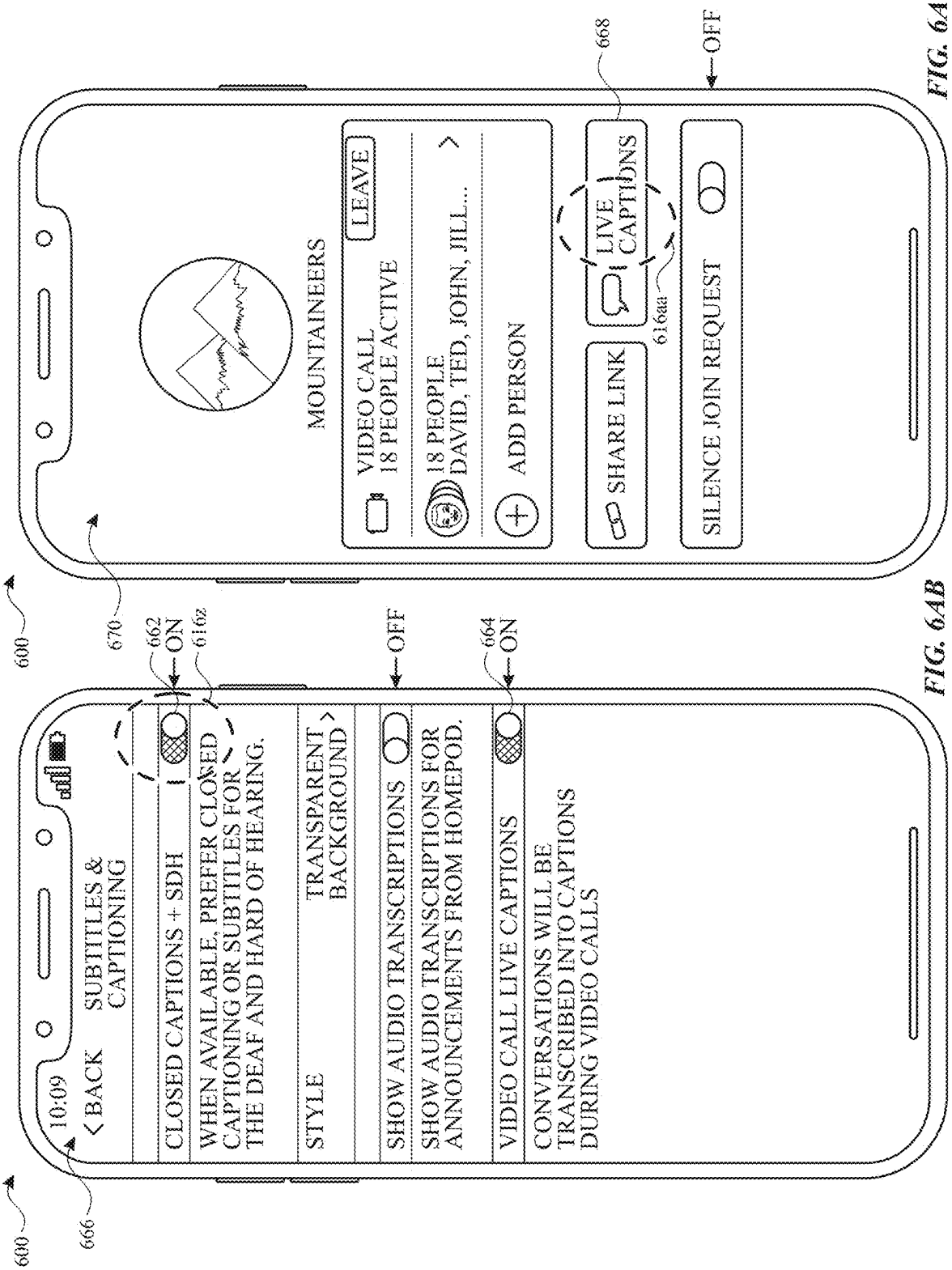



FIG. 6AB

FIG. 6AC

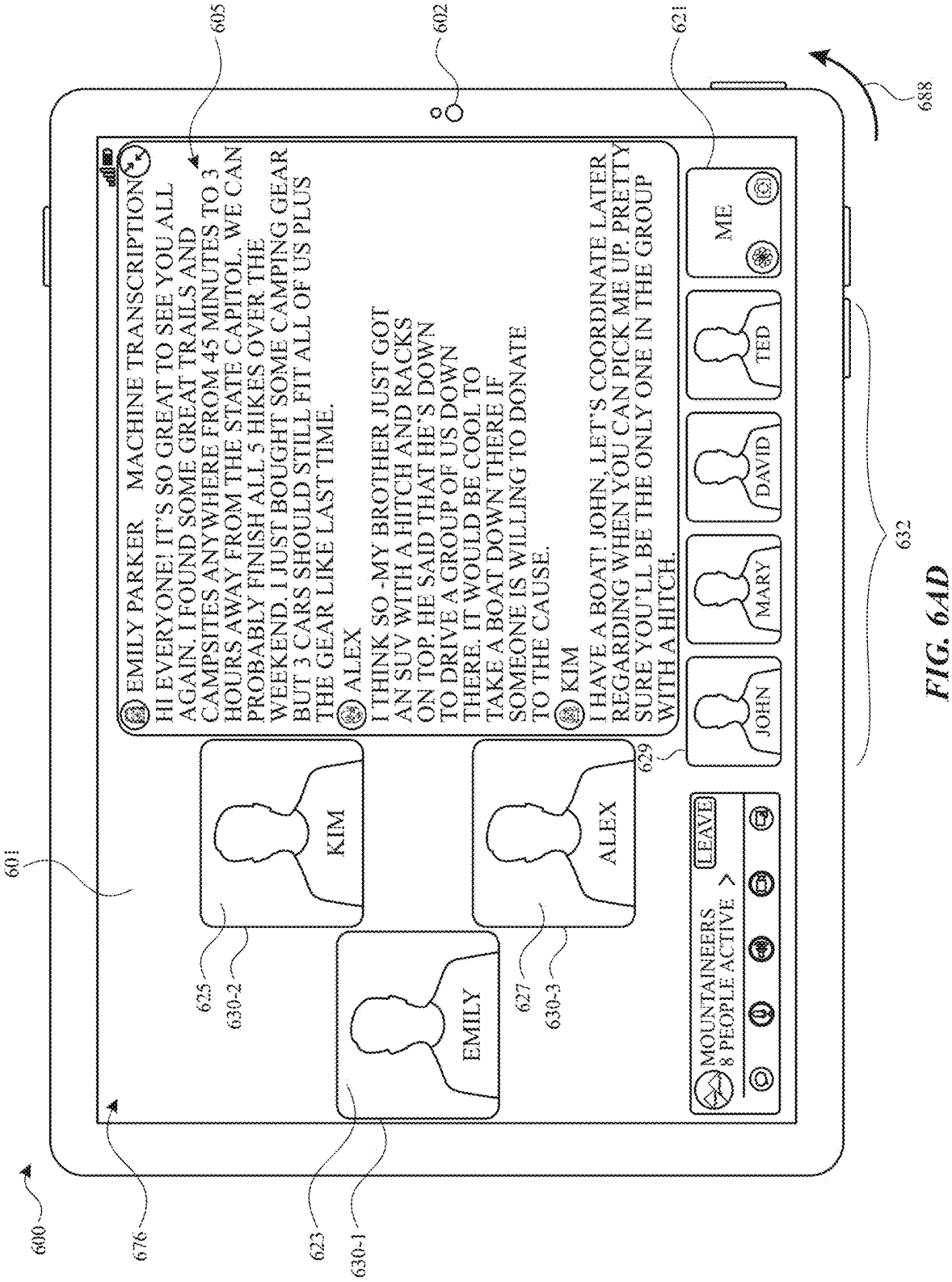

605
602
621
688
EMILY PARKER MACHINE TRANSCRIPTION
HI EVERYONE! IT'S SO GREAT TO SEE YOU ALL AGAIN. I FOUND SOME GREAT TRAILS AND CAMPSITES ANYWHERE FROM 45 MINUTES TO 3 HOURS AWAY FROM THE STATE CAPITOL. WE CAN PROBABLY FINISH ALL 5 HIKES OVER THE WEEKEND. I JUST BOUGHT SOME CAMPING GEAR BUT 3 CARS SHOULD STILL FIT ALL OF US PLUS THE GEAR LIKE LAST TIME.
ALEX
I THINK SO -MY BROTHER JUST GOT AN SUV WITH A HITCH AND RACKS ON TOP. HE SAID THAT HE'S DOWN TO DRIVE A GROUP OF US DOWN THERE. IT WOULD BE COOL TO TAKE A BOAT DOWN THERE IF SOMEONE IS WILLING TO DONATE TO THE CAUSE.
KIM
I HAVE A BOAT! JOHN, LET'S COORDINATE LATER REGARDING WHEN YOU CAN PICK ME UP. PRETTY SURE YOU'LL BE THE ONLY ONE IN THE GROUP WITH A HITCH.
ME
TED
DAVID
MARY
JOHN
632
629
KIM
ALEX
EMILY
625
630-2
627
630-3
601
MOUNTAINEERS
8 PEOPLE ACTIVE
LEAVE
600
676
623
630-1

FIG. 6AD

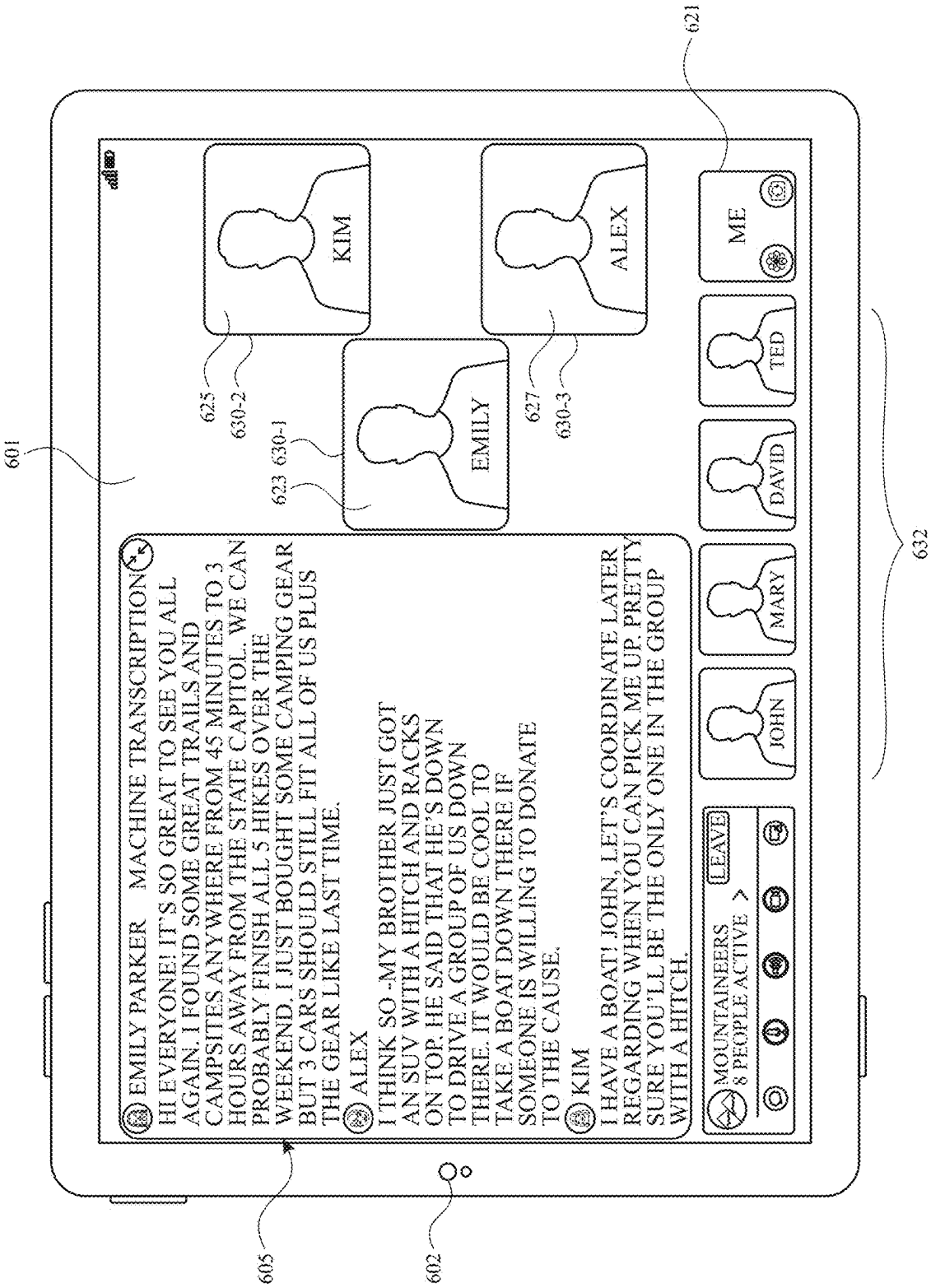

601
605
602
EMILY PARKER MACHINE TRANSCRIPTION
HI EVERYONE! IT'S SO GREAT TO SEE YOU ALL AGAIN. I FOUND SOME GREAT TRAILS AND CAMPSITES ANYWHERE FROM 45 MINUTES TO 3 HOURS AWAY FROM THE STATE CAPITOL. WE CAN PROBABLY FINISH ALL 5 HIKES OVER THE WEEKEND. I JUST BOUGHT SOME CAMPING GEAR BUT 3 CARS SHOULD STILL FIT ALL OF US PLUS THE GEAR LIKE LAST TIME.
ALEX
I THINK SO -MY BROTHER JUST GOT AN SUV WITH A HITCH AND RACKS ON TOP. HE SAID THAT HE'S DOWN TO DRIVE A GROUP OF US DOWN THERE. IT WOULD BE COOL TO TAKE A BOAT DOWN THERE IF SOMEONE IS WILLING TO DONATE TO THE CAUSE.
KIM
I HAVE A BOAT! JOHN, LET'S COORDINATE LATER REGARDING WHEN YOU CAN PICK ME UP. PRETTY SURE YOU'LL BE THE ONLY ONE IN THE GROUP WITH A HITCH.
MOUNTAINEERS
8 PEOPLE ACTIVE >
LEAVE
JOHN
MARY
DAVID
TED
ME
KIM
EMILY
ALEX
625
630-2
623
630-1
627
630-3
621
632

*FIG. 6AE*

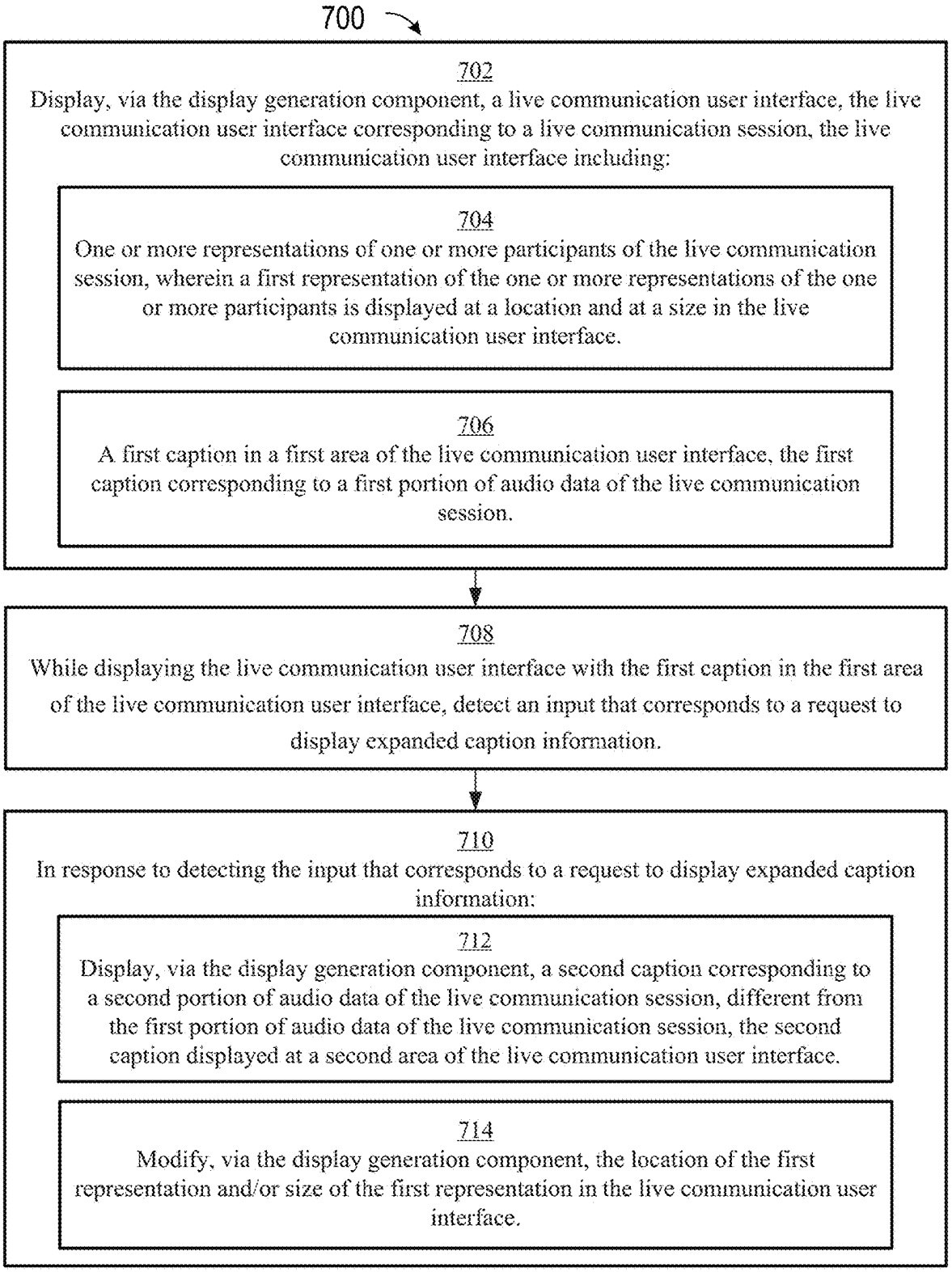

700
702
Display, via the display generation component, a live communication user interface, the live communication user interface corresponding to a live communication session, the live communication user interface including:
704
One or more representations of one or more participants of the live communication session, wherein a first representation of the one or more representations of the one or more participants is displayed at a location and at a size in the live communication user interface.
706
A first caption in a first area of the live communication user interface, the first caption corresponding to a first portion of audio data of the live communication session.
708
While displaying the live communication user interface with the first caption in the first area of the live communication user interface, detect an input that corresponds to a request to display expanded caption information.
710
In response to detecting the input that corresponds to a request to display expanded caption information:
712
Display, via the display generation component, a second caption corresponding to a second portion of audio data of the live communication session, different from the first portion of audio data of the live communication session, the second caption displayed at a second area of the live communication user interface.
714
Modify, via the display generation component, the location of the first representation and/or size of the first representation in the live communication user interface.

*FIG. 7*

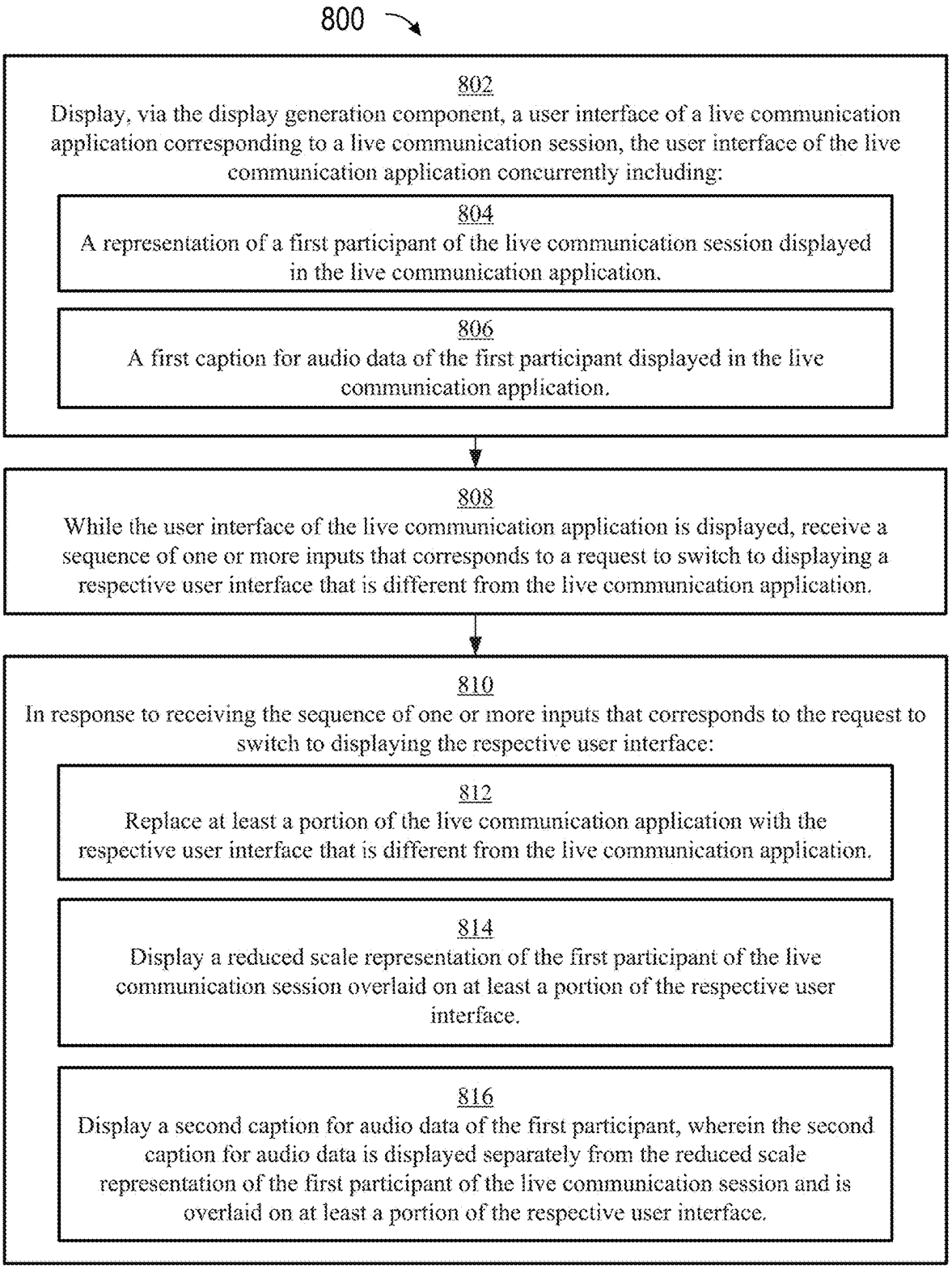

800
802
Display, via the display generation component, a user interface of a live communication application corresponding to a live communication session, the user interface of the live communication application concurrently including:
804
A representation of a first participant of the live communication session displayed in the live communication application.
806
A first caption for audio data of the first participant displayed in the live communication application.
808
While the user interface of the live communication application is displayed, receive a sequence of one or more inputs that corresponds to a request to switch to displaying a respective user interface that is different from the live communication application.
810
In response to receiving the sequence of one or more inputs that corresponds to the request to switch to displaying the respective user interface:
812
Replace at least a portion of the live communication application with the respective user interface that is different from the live communication application.
814
Display a reduced scale representation of the first participant of the live communication session overlaid on at least a portion of the respective user interface.
816
Display a second caption for audio data of the first participant, wherein the second caption for audio data is displayed separately from the reduced scale representation of the first participant of the live communication session and is overlaid on at least a portion of the respective user interface.

*FIG. 8*

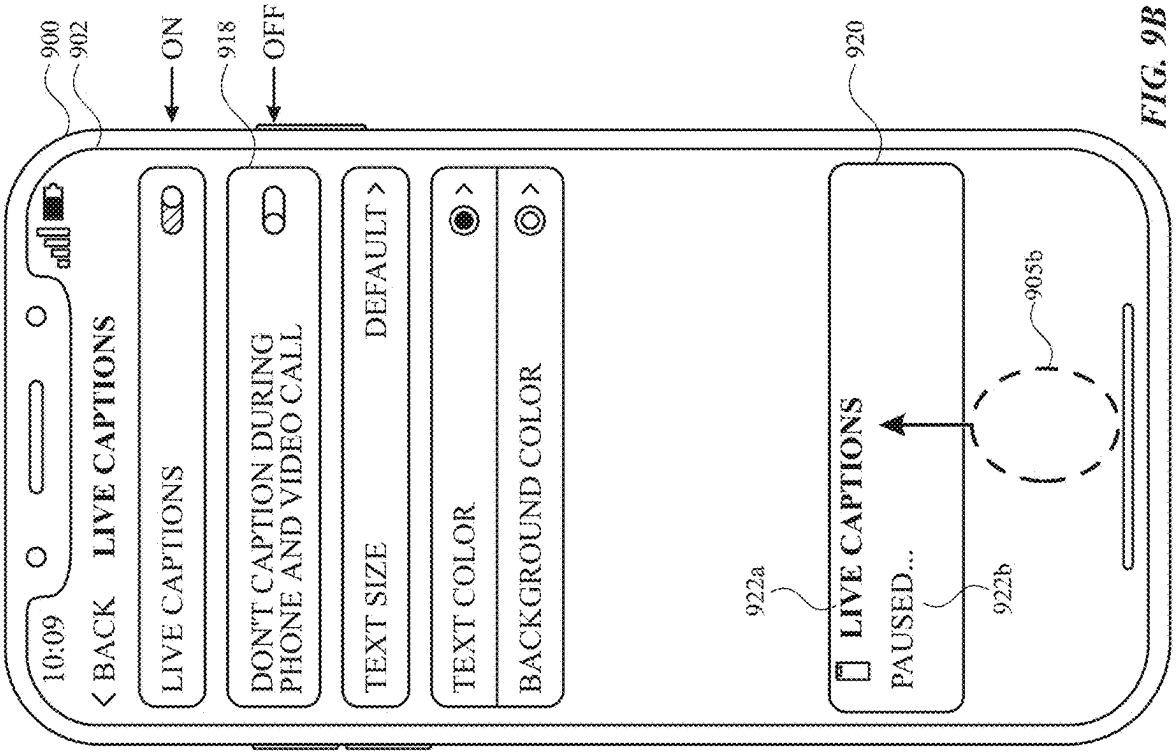

900
902
ON
918
OFF
920
10:09
< BACK
LIVE CAPTIONS
LIVE CAPTIONS
DON'T CAPTION DURING PHONE AND VIDEO CALL
TEXT SIZE
DEFAULT >
TEXT COLOR
BACKGROUND COLOR
922a
LIVE CAPTIONS
PAUSED...
922b
905b

FIG. 9B

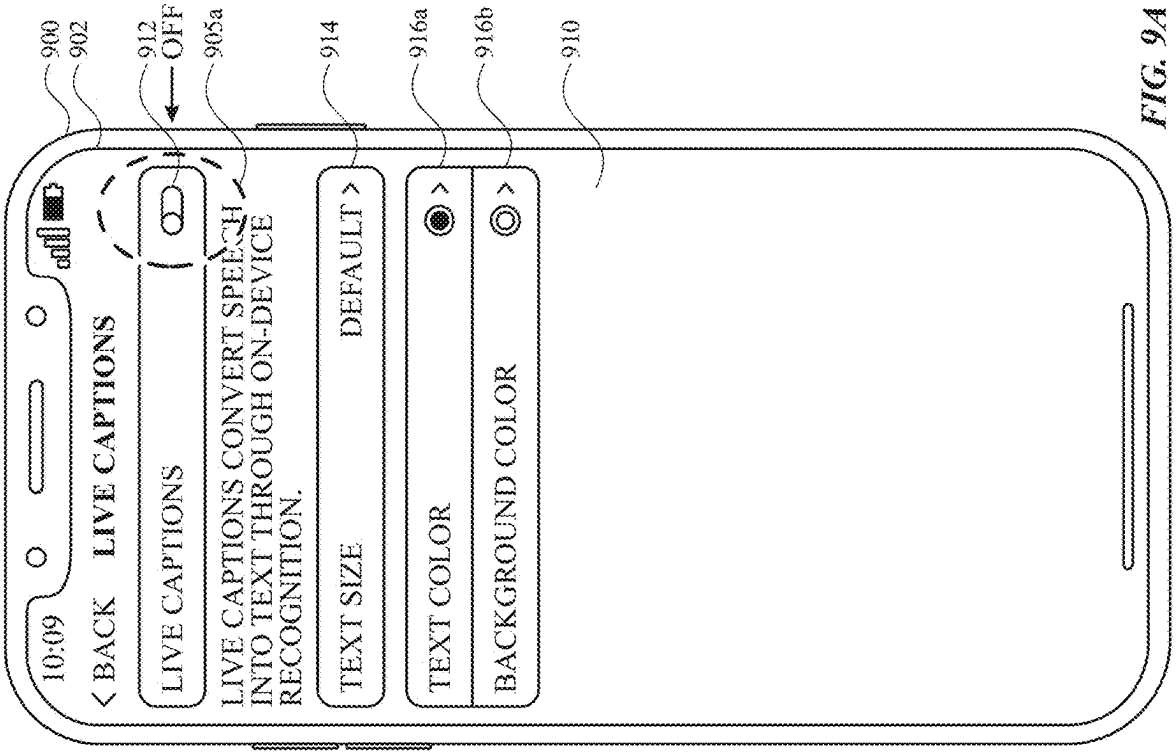

900
902
912
OFF
905a
914
916a
916b
910
10:09
< BACK
LIVE CAPTIONS
LIVE CAPTIONS
LIVE CAPTIONS CONVERT SPEECH INTO TEXT THROUGH ON-DEVICE RECOGNITION.
TEXT SIZE
DEFAULT >
TEXT COLOR
BACKGROUND COLOR

FIG. 9A

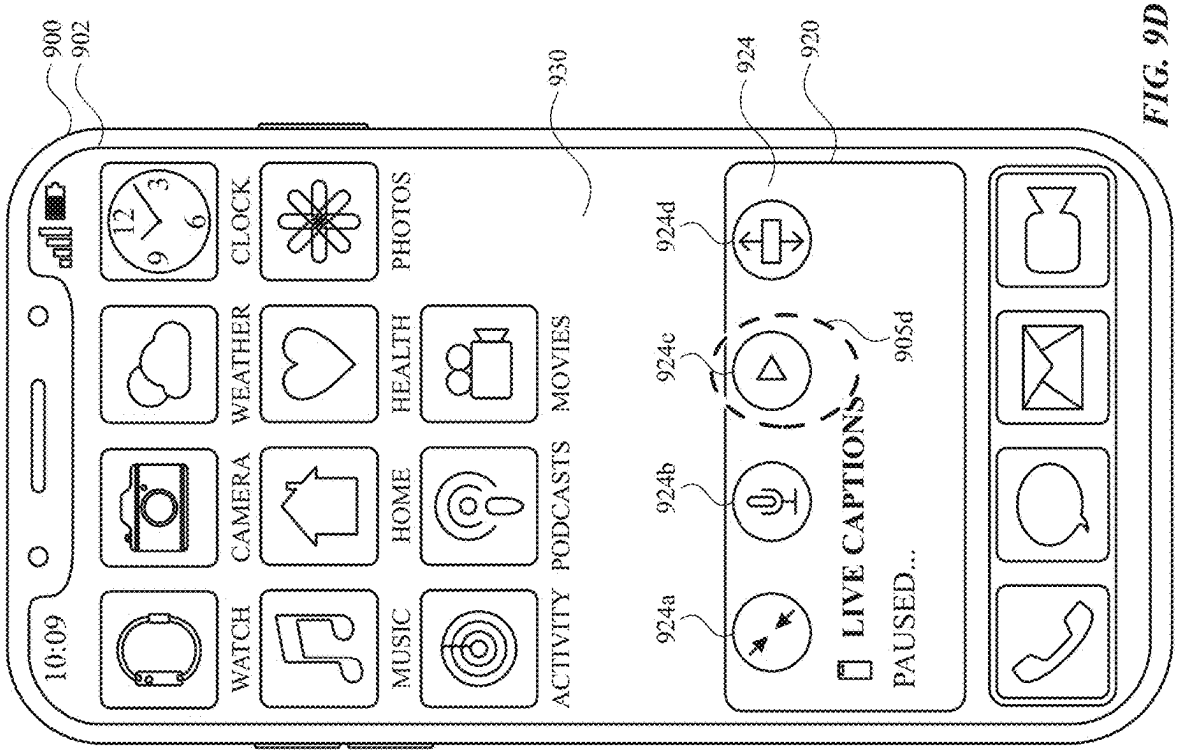

900
902
930
924
920
10:09
WATCH
CAMERA
WEATHER
CLOCK
MUSIC
HOME
HEALTH
PHOTOS
ACTIVITY
PODCASTS
MOVIES
924a
924b
924c
924d
LIVE CAPTIONS
PAUSED...
905d

FIG. 9D

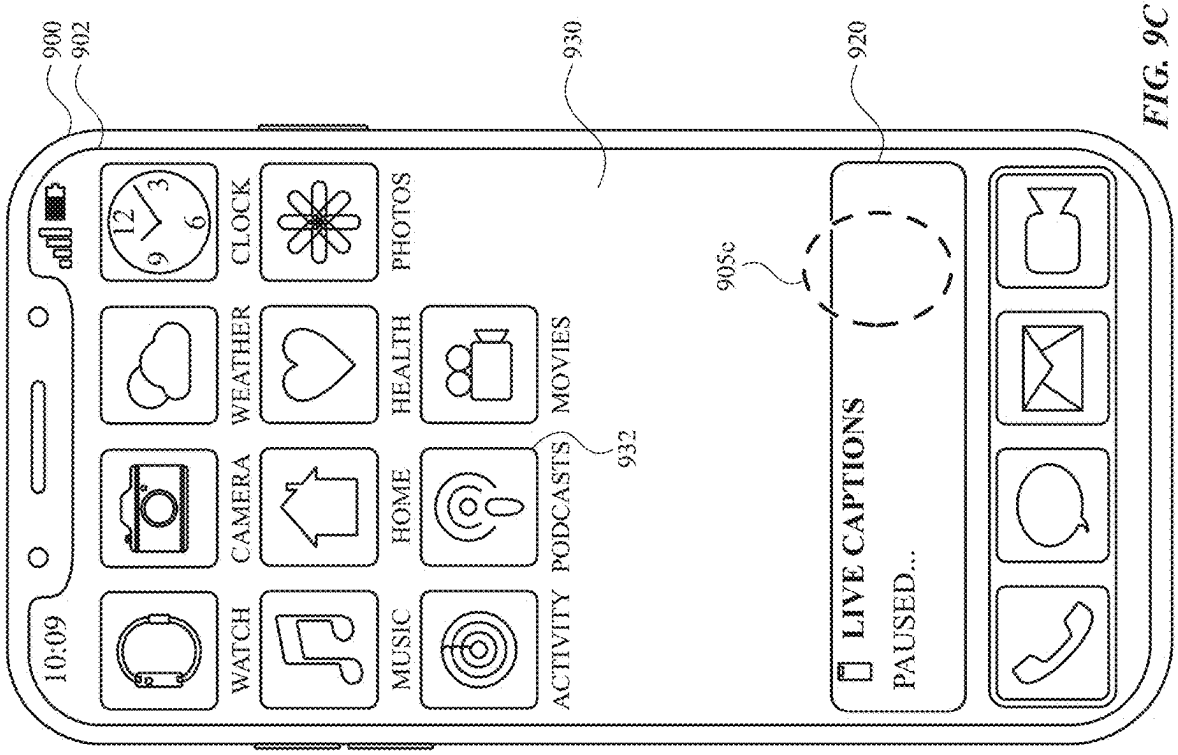

900
902
930
920
10:09
WATCH
CAMERA
WEATHER
CLOCK
MUSIC
HOME
HEALTH
PHOTOS
ACTIVITY
PODCASTS
MOVIES
932
905c
LIVE CAPTIONS
PAUSED...

FIG. 9C

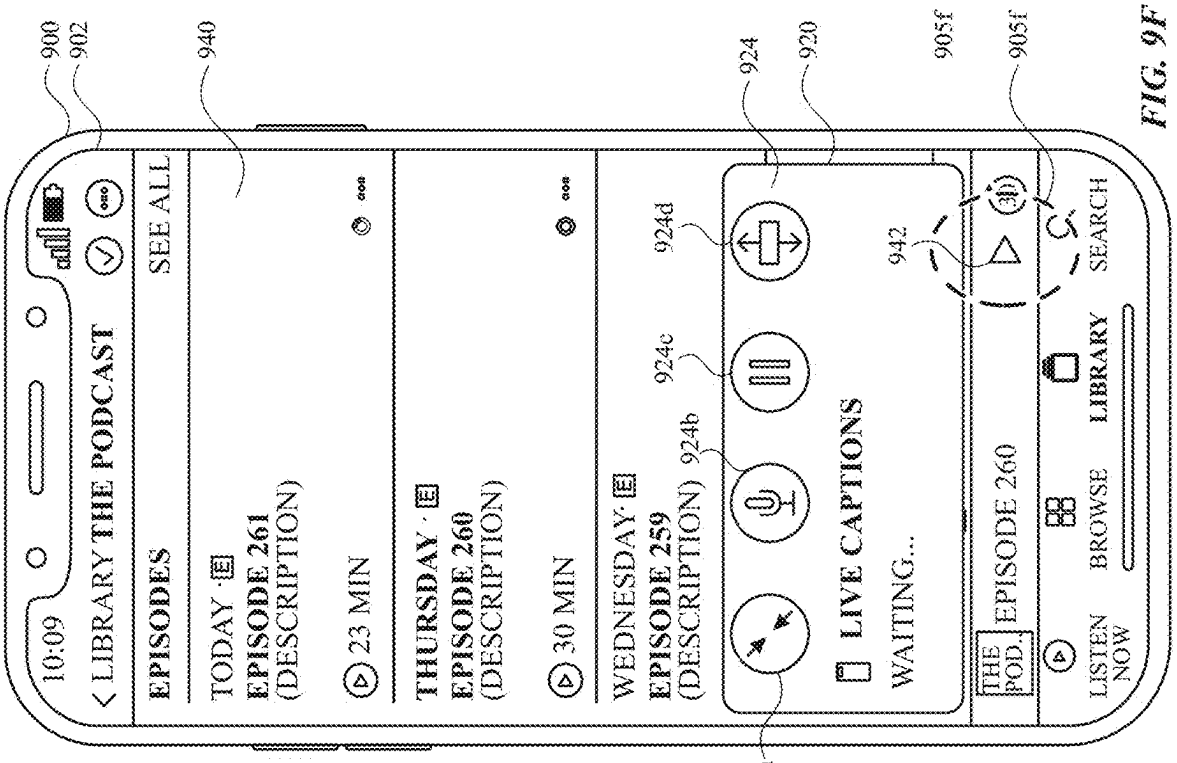

900
902
940
10:09
< LIBRARY THE PODCAST
EPISODES
SEE ALL
TODAY · E
EPISODE 261
(DESCRIPTION)
23 MIN
THURSDAY · E
EPISODE 260
(DESCRIPTION)
30 MIN
WEDNESDAY · E
EPISODE 259
(DESCRIPTION)
924
920
905f
905f
924d
942
924c
924b
LIVE CAPTIONS
WAITING...
THE POD.
EPISODE 260
LISTEN NOW
BROWSE
LIBRARY
SEARCH
924a

FIG. 9F

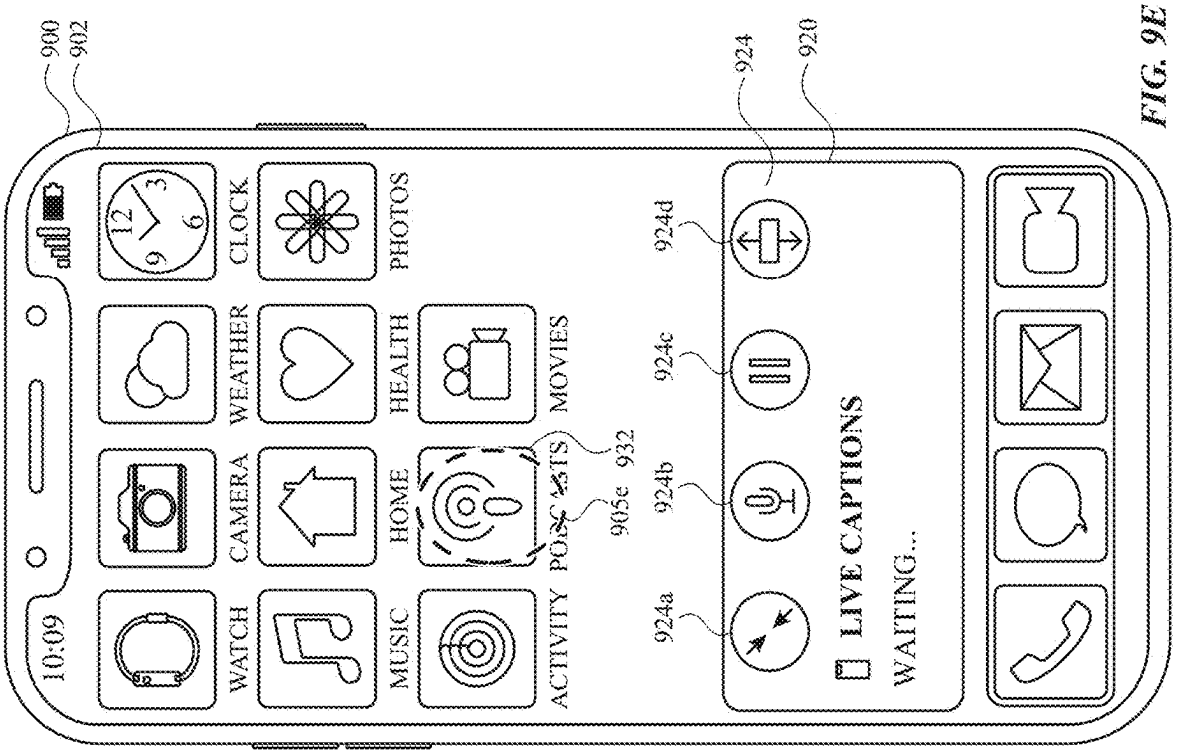

900
902
10:09
WATCH
CAMERA
WEATHER
CLOCK
MUSIC
HOME
HEALTH
PHOTOS
ACTIVITY
PODCASTS
MOVIES
905e
932
924
920
924d
924c
924b
924a
LIVE CAPTIONS
WAITING...

FIG. 9E

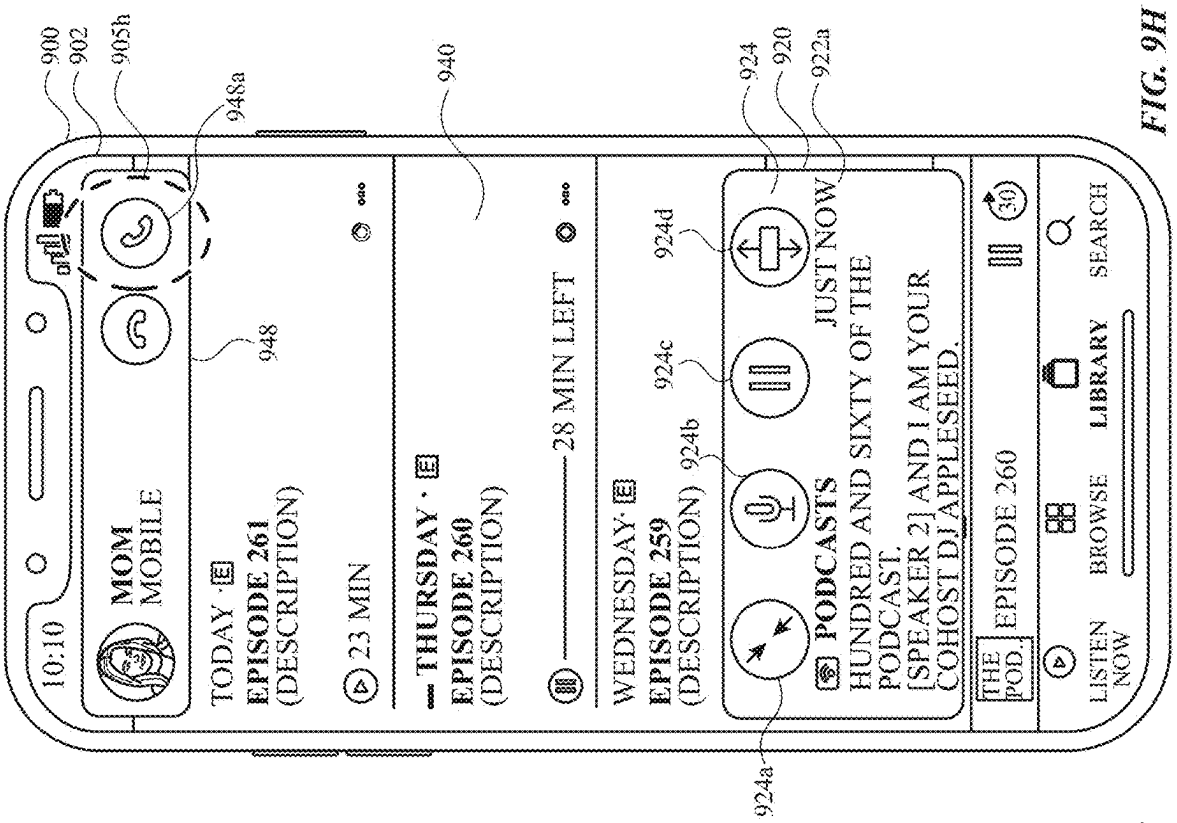

900
902
905b
948a
940
924
920
922a
10:10
MOM
MOBILE
948
TODAY ·
EPISODE 261
(DESCRIPTION)
23 MIN
THURSDAY ·
EPISODE 260
(DESCRIPTION)
28 MIN LEFT
WEDNESDAY ·
EPISODE 259
(DESCRIPTION)
924d
924c
924b
924a
PODCASTS
JUST NOW
HUNDRED AND SIXTY OF THE
PODCAST.
[SPEAKER 2] AND I AM YOUR
COHOST DJ APPLESEED.
THE POD.
EPISODE 260
30
LISTEN NOW
BROWSE
LIBRARY
SEARCH

FIG. 9H

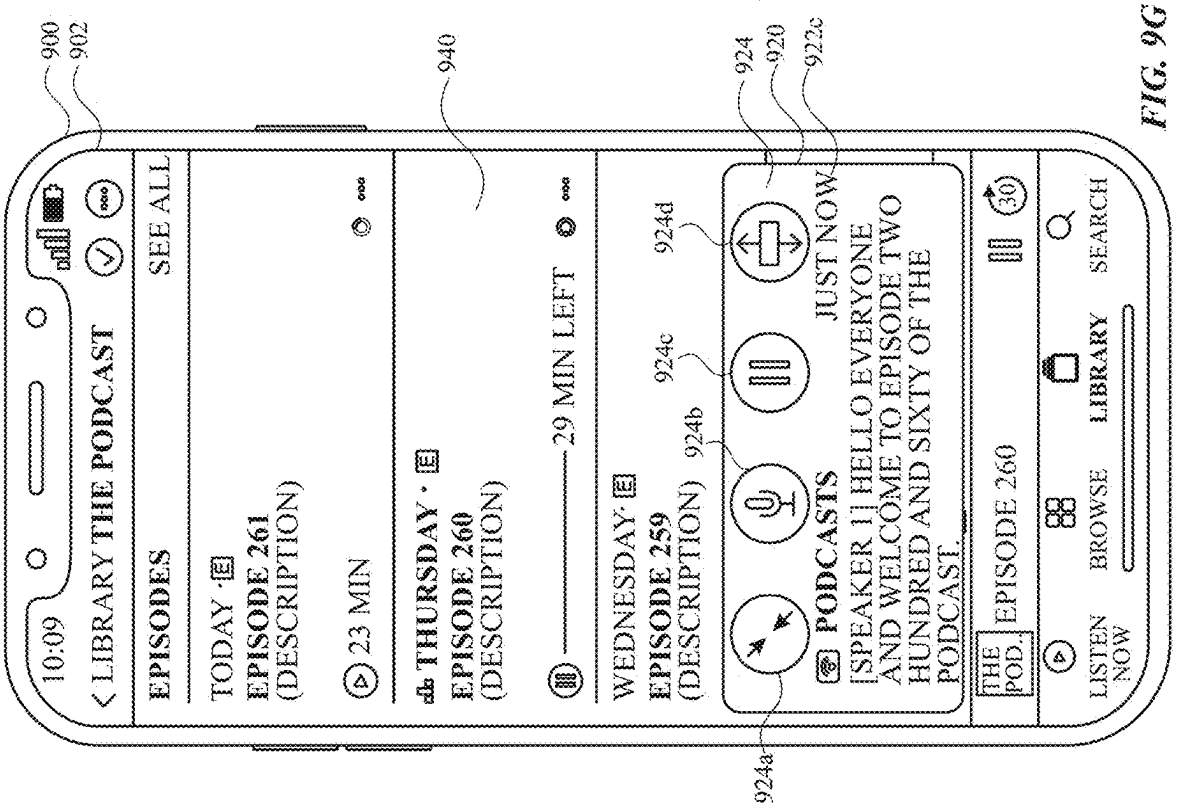

900
902
940
924
920
922c
10:09
< LIBRARY THE PODCAST
EPISODES
SEE ALL
TODAY ·
EPISODE 261
(DESCRIPTION)
23 MIN
THURSDAY ·
EPISODE 260
(DESCRIPTION)
29 MIN LEFT
WEDNESDAY ·
EPISODE 259
(DESCRIPTION)
924d
924c
924b
924a
PODCASTS
JUST NOW
[SPEAKER 1] HELLO EVERYONE
AND WELCOME TO EPISODE TWO
HUNDRED AND SIXTY OF THE
PODCAST.
THE POD.
EPISODE 260
30
LISTEN NOW
BROWSE
LIBRARY
SEARCH

FIG. 9G

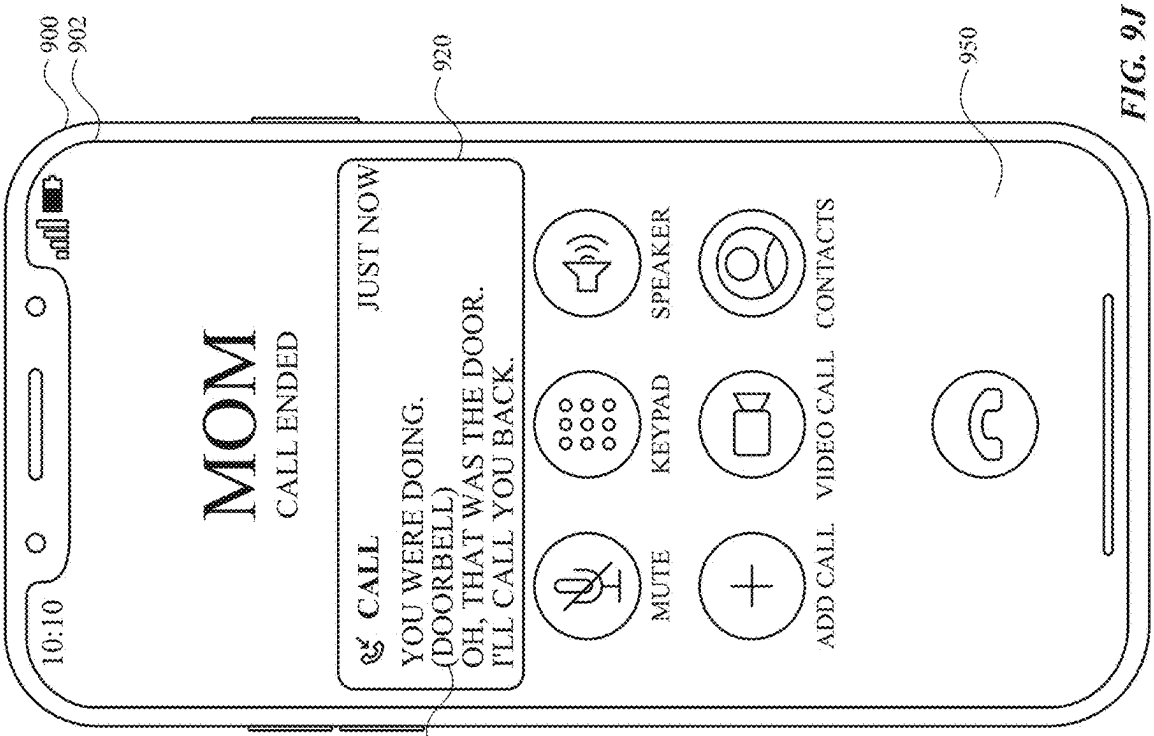

900
902
10:10
MOM
CALL ENDED
920
CALL
JUST NOW
YOU WERE DOING.
(DOORBELL)
OH, THAT WAS THE DOOR.
I'LL CALL YOU BACK.
954
MUTE
KEYPAD
SPEAKER
ADD CALL
VIDEO CALL
CONTACTS
950

FIG. 9J

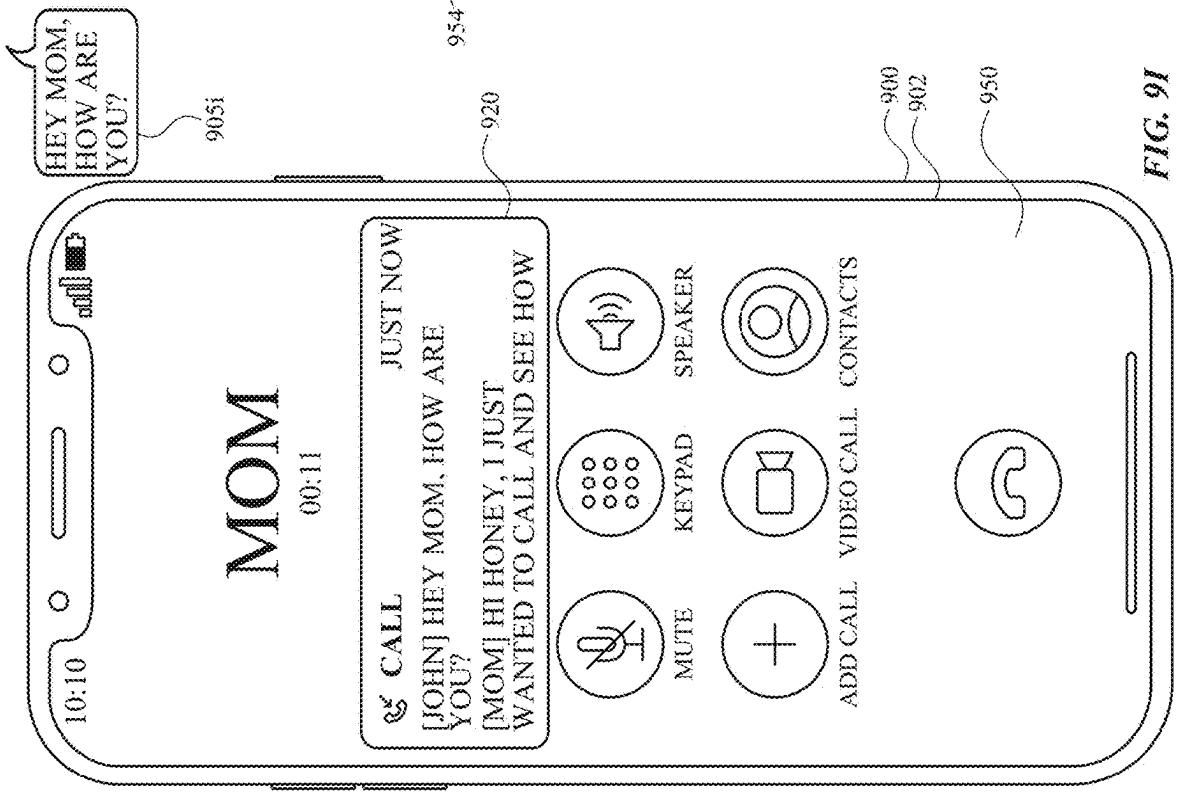

HEY MOM, HOW ARE YOU?
905i
10:10
MOM
00:11
920
CALL
JUST NOW
[JOHN] HEY MOM, HOW ARE YOU?
[MOM] HI HONEY, I JUST WANTED TO CALL AND SEE HOW
900
902
950
MUTE
KEYPAD
SPEAKER
ADD CALL
VIDEO CALL
CONTACTS

FIG. 9I

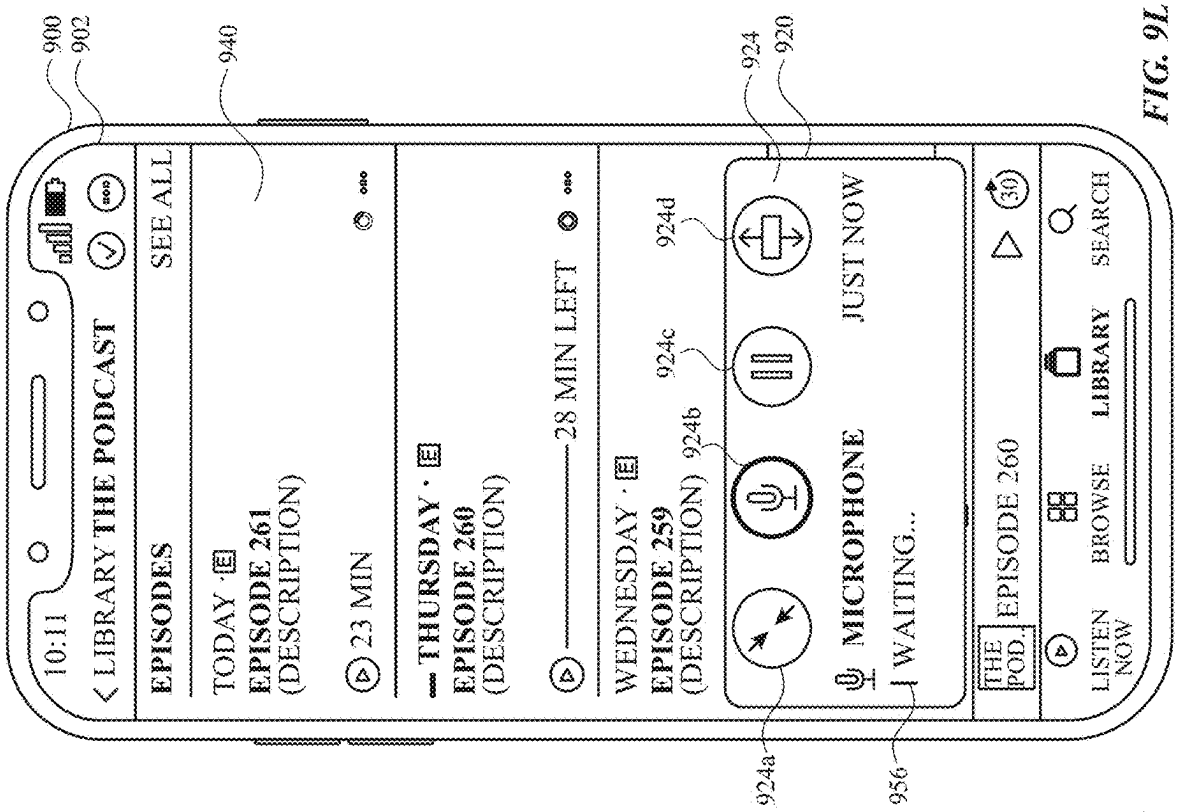

900
902
940
924
920
10:11
< LIBRARY THE PODCAST
EPISODES
SEE ALL
TODAY · E
EPISODE 261
(DESCRIPTION)
23 MIN
THURSDAY · E
EPISODE 260
(DESCRIPTION)
28 MIN LEFT
WEDNESDAY · E
EPISODE 259
(DESCRIPTION)
924d
924c
924b
MICROPHONE
JUST NOW
WAITING...
924a
956
THE POD.
EPISODE 260
LISTEN NOW
BROWSE
LIBRARY
SEARCH

FIG. 9L

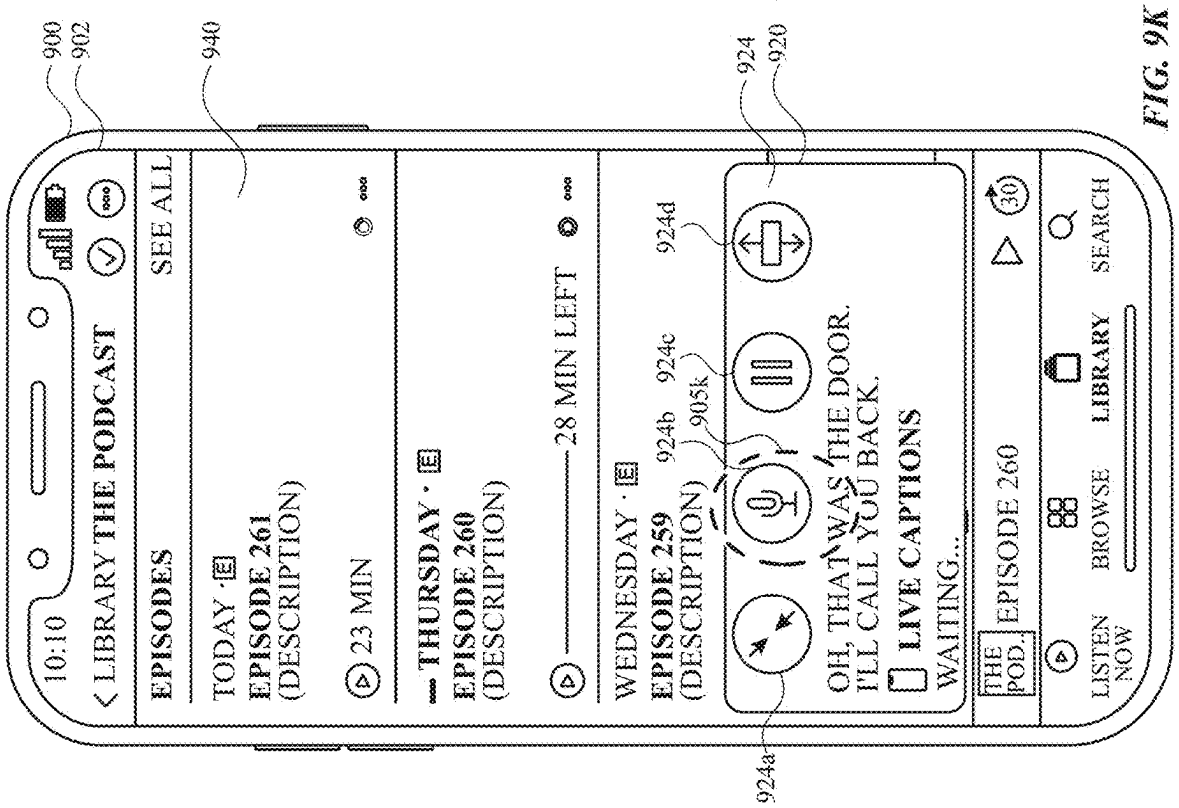

900
902
940
924
920
10:10
< LIBRARY THE PODCAST
EPISODES
SEE ALL
TODAY · E
EPISODE 261
(DESCRIPTION)
23 MIN
THURSDAY · E
EPISODE 260
(DESCRIPTION)
28 MIN LEFT
WEDNESDAY · E
EPISODE 259
(DESCRIPTION)
924d
924c
924b
905k
OH, THAT WAS THE DOOR.
I'LL CALL YOU BACK.
LIVE CAPTIONS
WAITING...
924a
THE POD.
EPISODE 260
LISTEN NOW
BROWSE
LIBRARY
SEARCH

FIG. 9K

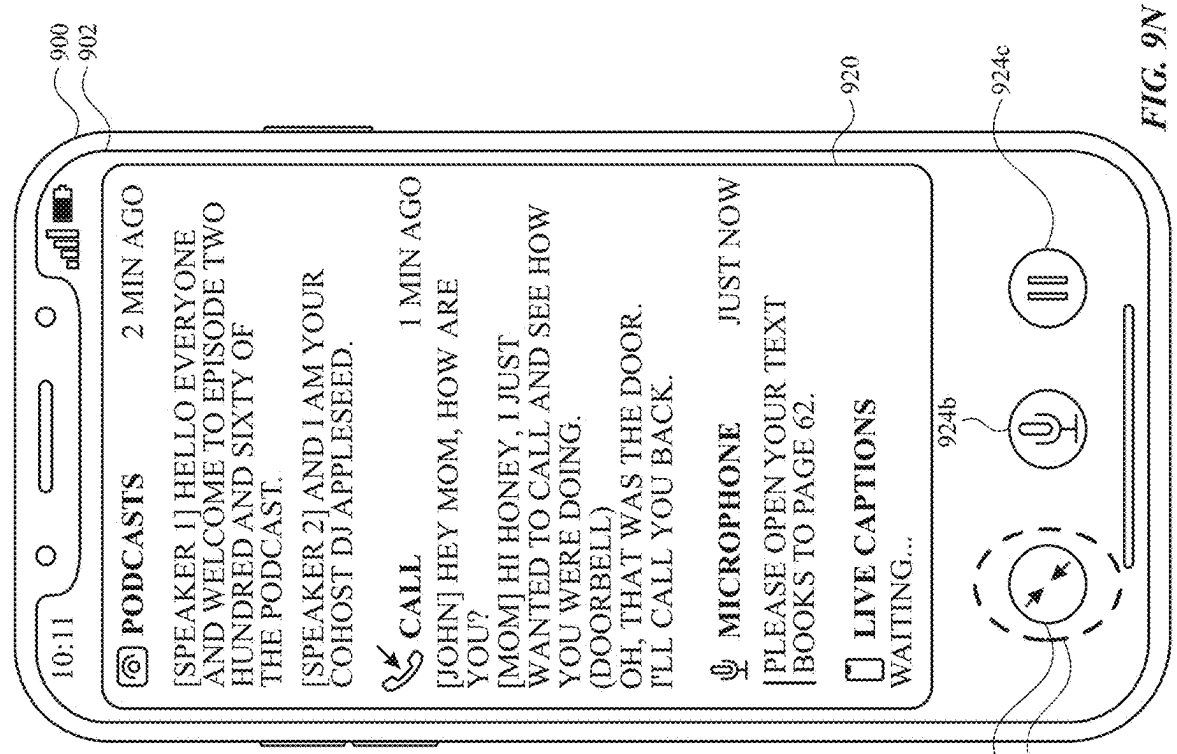

10:11
PODCASTS 2 MIN AGO
[SPEAKER 1] HELLO EVERYONE AND WELCOME TO EPISODE TWO HUNDRED AND SIXTY OF THE PODCAST.
[SPEAKER 2] AND I AM YOUR COHOST DJ APPLESEED.
CALL 1 MIN AGO
[JOHN] HEY MOM, HOW ARE YOU?
[MOM] HI HONEY, I JUST WANTED TO CALL AND SEE HOW YOU WERE DOING.
(DOORBELL)
OH, THAT WAS THE DOOR. I'LL CALL YOU BACK.
MICROPHONE JUST NOW
PLEASE OPEN YOUR TEXT BOOKS TO PAGE 62.
LIVE CAPTIONS
WAITING...
900
902
920
924a
924b
924c
905n

FIG. 9N

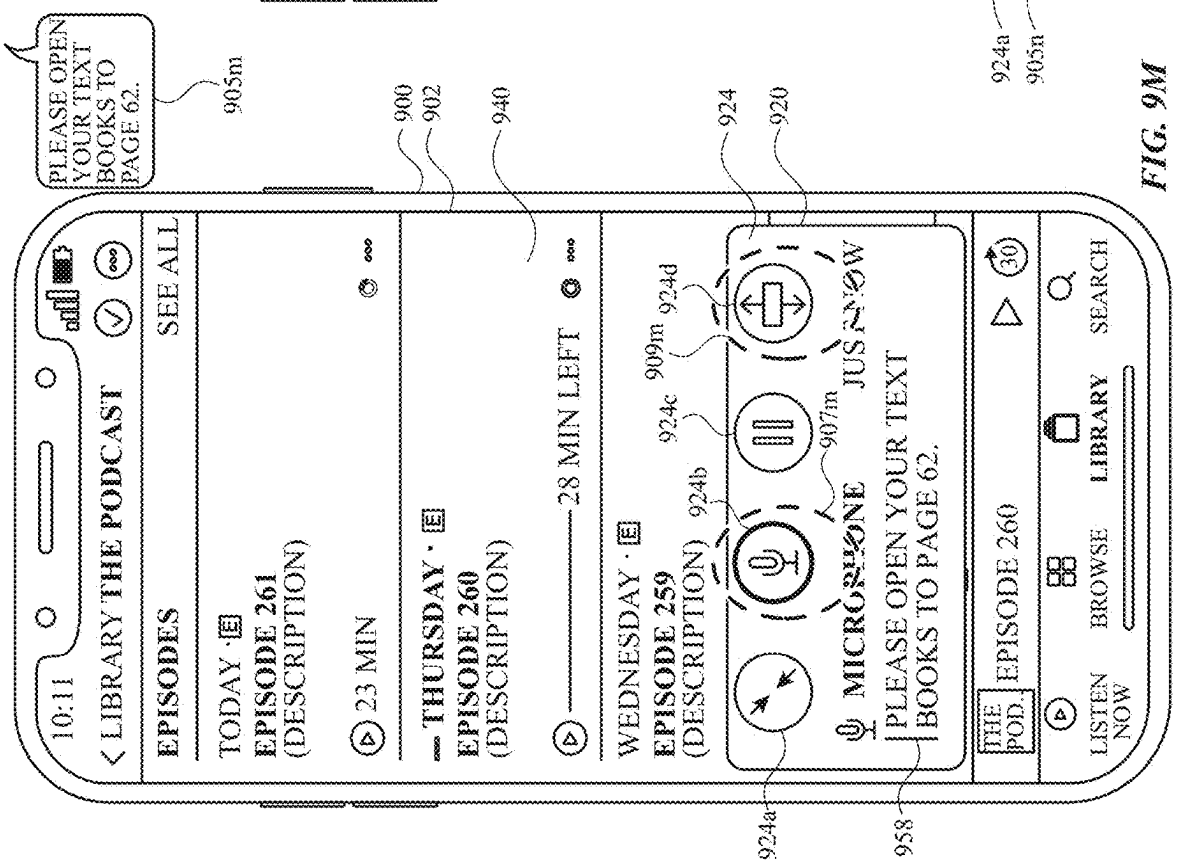

PLEASE OPEN YOUR TEXT BOOKS TO PAGE 62.
905m
10:11
< LIBRARY THE PODCAST
EPISODES SEE ALL
TODAY · E
EPISODE 261
(DESCRIPTION)
23 MIN
THURSDAY · E
EPISODE 260
(DESCRIPTION)
28 MIN LEFT
WEDNESDAY · E
EPISODE 259
(DESCRIPTION)
MICROPHONE JUST NOW
PLEASE OPEN YOUR TEXT BOOKS TO PAGE 62.
THE POD.
EPISODE 260
LISTEN NOW
BROWSE
LIBRARY
SEARCH
900
902
940
924
920
924a
924b
924c
924d
909m
907m
958

FIG. 9M

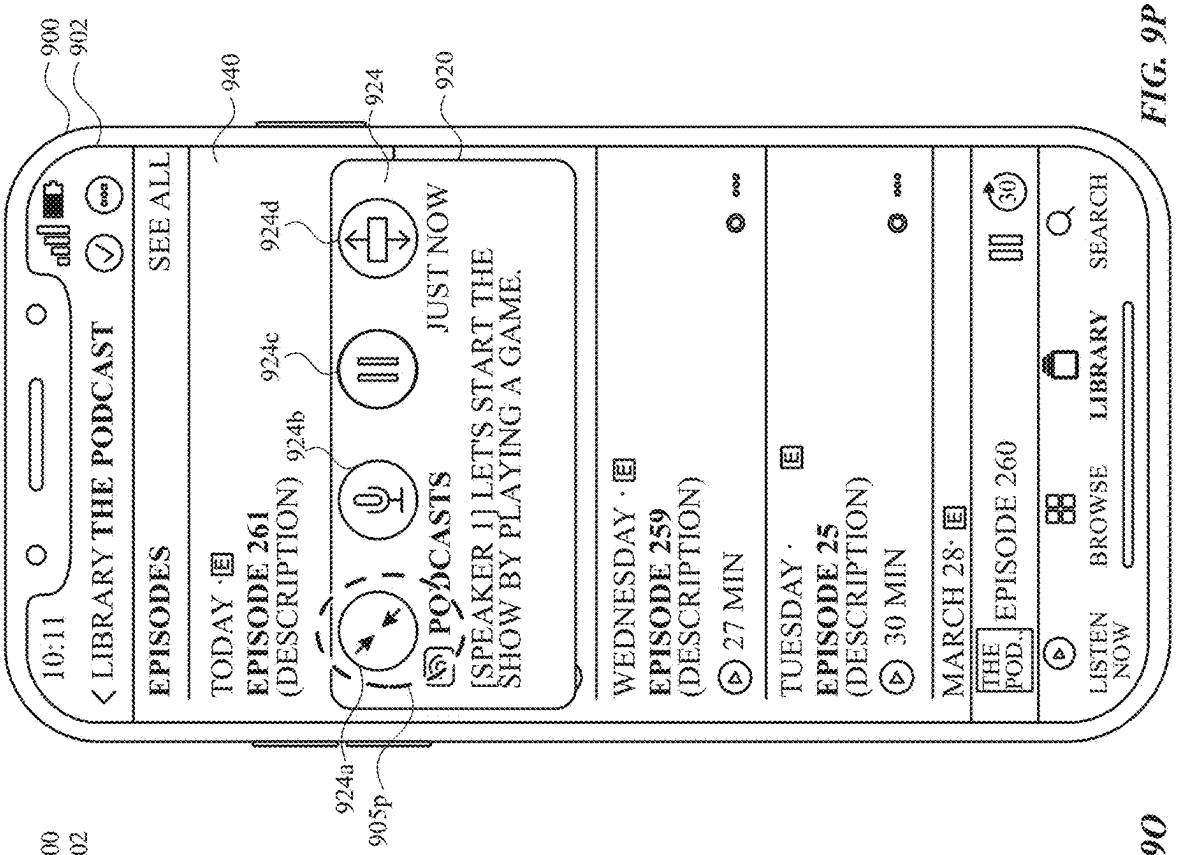

900
902
10:11
< LIBRARY THE PODCAST
EPISODES
SEE ALL
940
TODAY ·
EPISODE 261
(DESCRIPTION)
924
920
924d
924c
924b
JUST NOW
PODCASTS
[SPEAKER 1] LET'S START THE SHOW BY PLAYING A GAME.
WEDNESDAY ·
EPISODE 259
(DESCRIPTION)
27 MIN
TUESDAY ·
EPISODE 25
(DESCRIPTION)
30 MIN
MARCH 28 ·
THE POD.
EPISODE 260
30
LISTEN NOW
BROWSE
LIBRARY
SEARCH
924a
905p

FIG. 9P

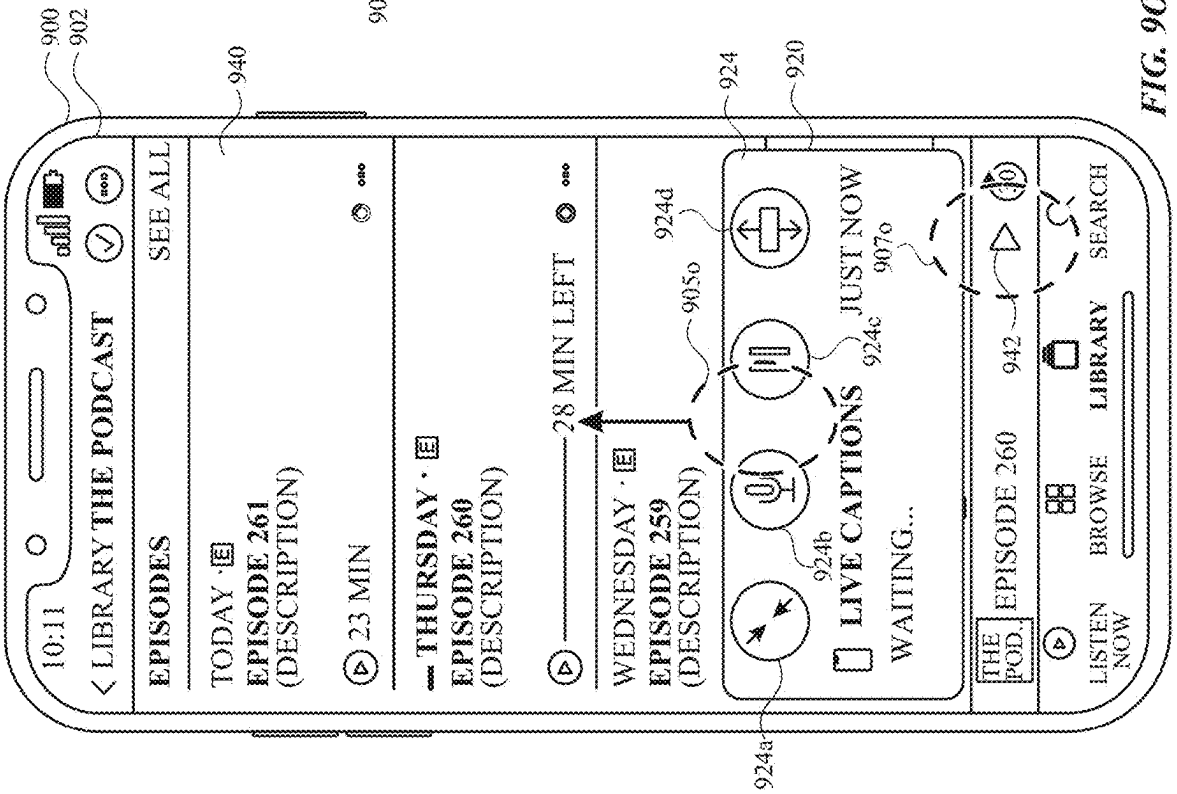

900
902
10:11
< LIBRARY THE PODCAST
EPISODES
SEE ALL
940
TODAY ·
EPISODE 261
(DESCRIPTION)
23 MIN
THURSDAY ·
EPISODE 260
(DESCRIPTION)
28 MIN LEFT
WEDNESDAY ·
EPISODE 259
(DESCRIPTION)
924
920
924d
905o
924c
JUST NOW
907o
924b
LIVE CAPTIONS
WAITING...
942
THE POD.
EPISODE 260
10
LISTEN NOW
BROWSE
LIBRARY
SEARCH
924a

FIG. 9O

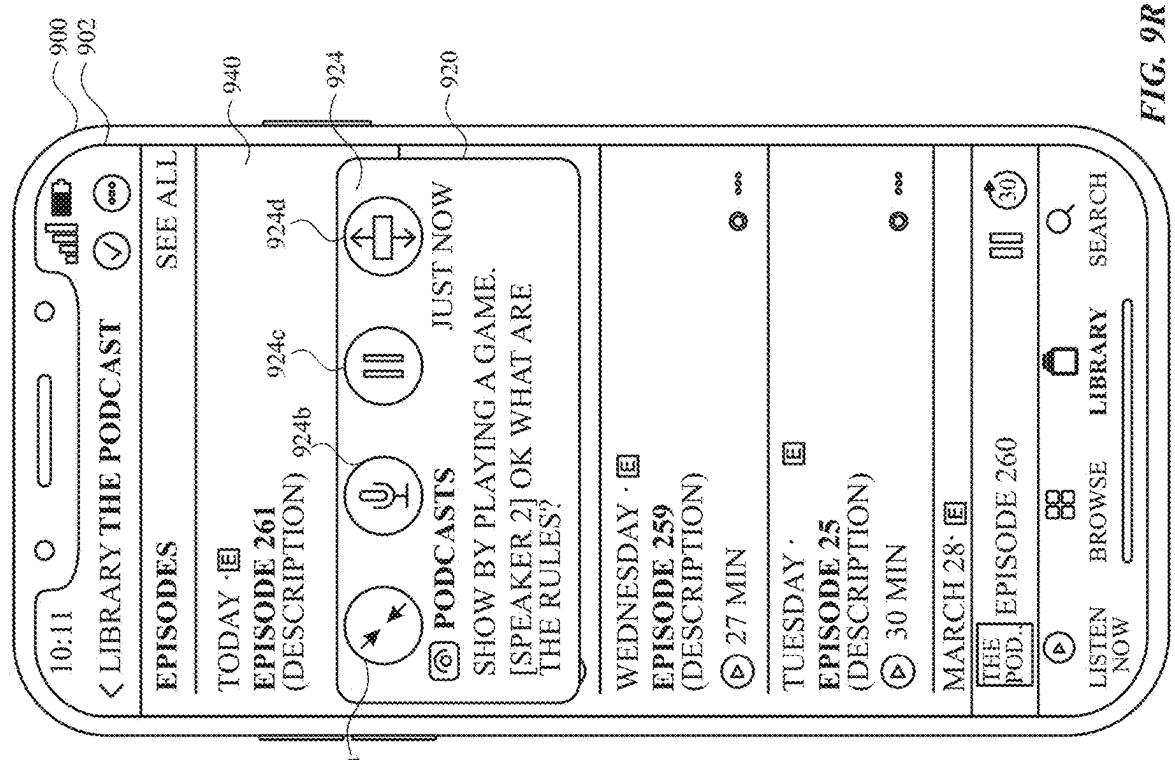

10:11
< LIBRARY THE PODCAST
EPISODES
SEE ALL
TODAY · E
EPISODE 261
(DESCRIPTION)
PODCASTS
JUST NOW
SHOW BY PLAYING A GAME.
[SPEAKER 2] OK WHAT ARE THE RULES?
WEDNESDAY · E
EPISODE 259
(DESCRIPTION)
27 MIN
TUESDAY · E
EPISODE 25
(DESCRIPTION)
30 MIN
MARCH 28 · E
THE POD.
EPISODE 260
LISTEN NOW
BROWSE
LIBRARY
SEARCH
900
902
940
924
920
924a
924b
924c
924d

FIG. 9R

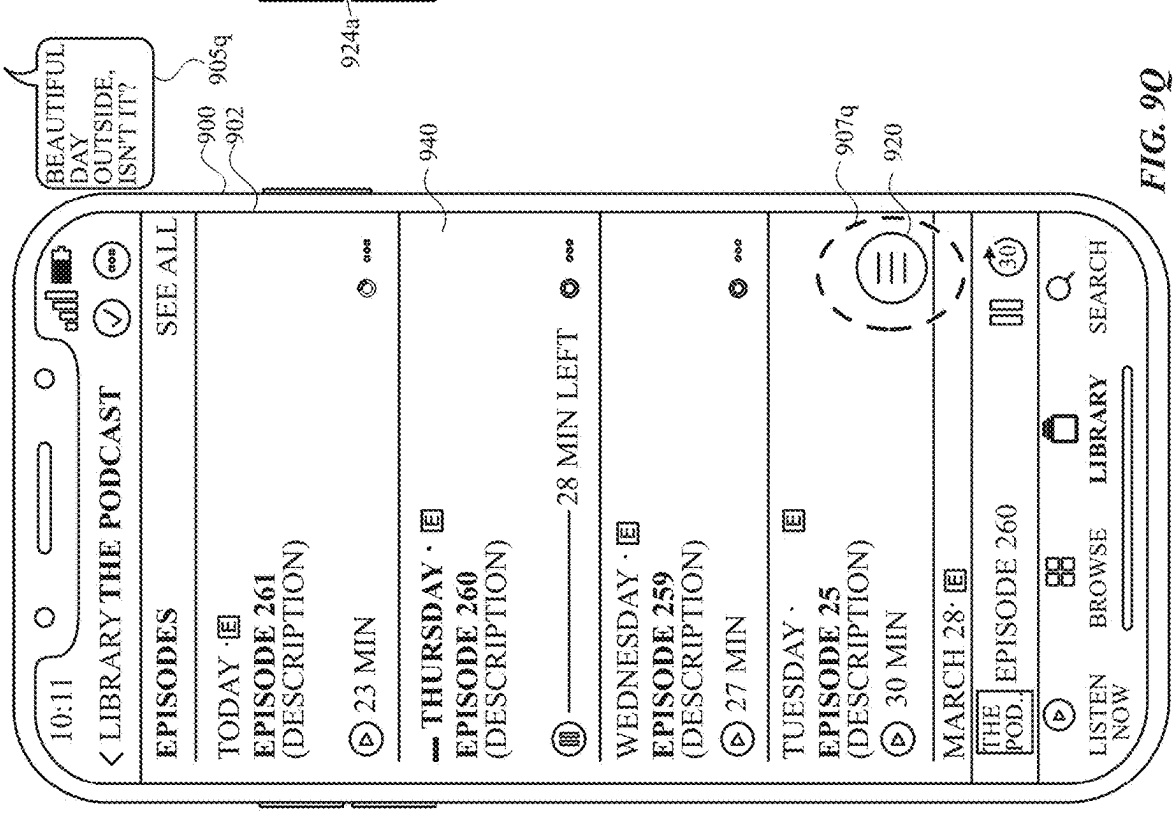

BEAUTIFUL DAY OUTSIDE, ISN'T IT?
905q
10:11
< LIBRARY THE PODCAST
EPISODES
SEE ALL
TODAY · E
EPISODE 261
(DESCRIPTION)
23 MIN
THURSDAY · E
EPISODE 260
(DESCRIPTION)
28 MIN LEFT
WEDNESDAY · E
EPISODE 259
(DESCRIPTION)
27 MIN
TUESDAY · E
EPISODE 25
(DESCRIPTION)
30 MIN
MARCH 28 · E
THE POD.
EPISODE 260
LISTEN NOW
BROWSE
LIBRARY
SEARCH
900
902
940
907q
920

FIG. 9Q

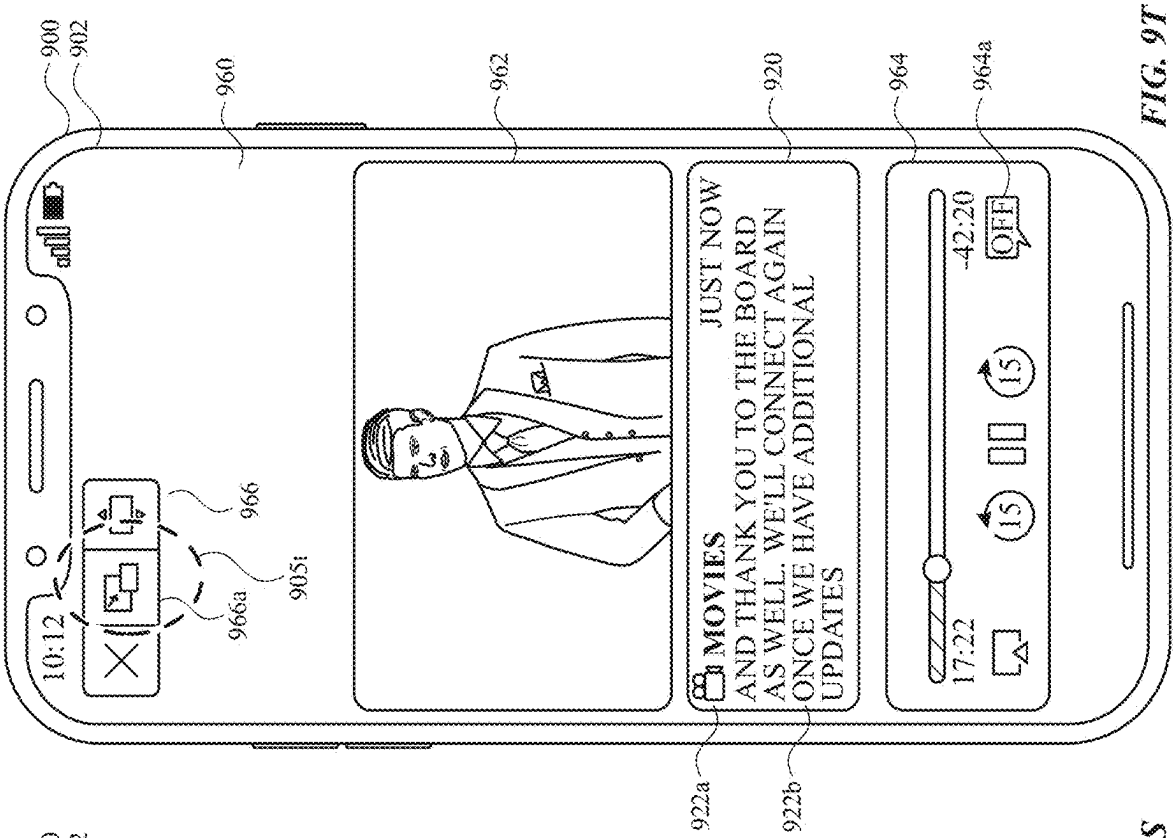

900
902
960
962
920
964
964a
10:12
966
966a
905t
922a
922b
MOVIES
JUST NOW
AND THANK YOU TO THE BOARD
AS WELL. WE'LL CONNECT AGAIN
ONCE WE HAVE ADDITIONAL
UPDATES
17:22
15
15
-42:20
OFF

FIG. 9T

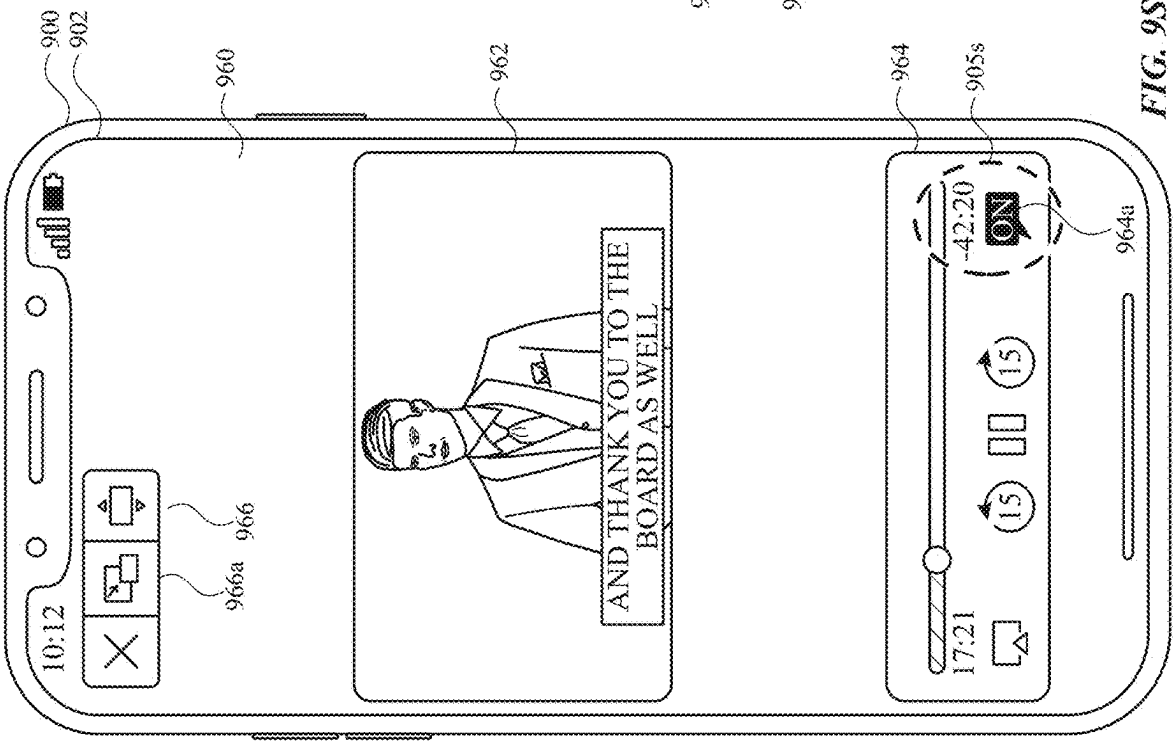

900
902
960
962
964
905s
964a
10:12
966
966a
AND THANK YOU TO THE
BOARD AS WELL
17:21
15
15
-42:20

FIG. 9S

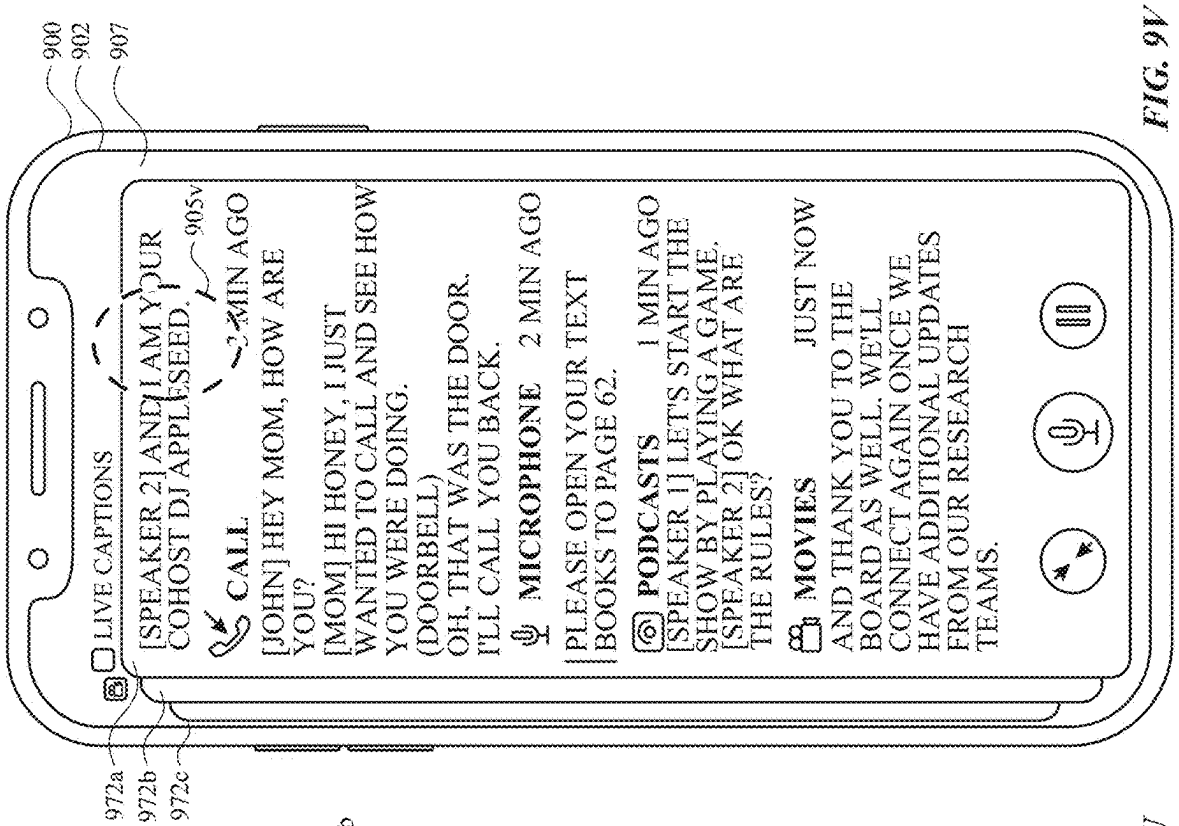

900
902
907
LIVE CAPTIONS
[SPEAKER 2] AND I AM YOUR COHOST DJ APPLESEED.
905v
CALL
2 MIN AGO
[JOHN] HEY MOM, HOW ARE YOU?
[MOM] HI HONEY, I JUST WANTED TO CALL AND SEE HOW YOU WERE DOING.
(DOORBELL)
OH, THAT WAS THE DOOR. I'LL CALL YOU BACK.
MICROPHONE
2 MIN AGO
PLEASE OPEN YOUR TEXT BOOKS TO PAGE 62.
PODCASTS
1 MIN AGO
[SPEAKER 1] LET'S START THE SHOW BY PLAYING A GAME.
[SPEAKER 2] OK WHAT ARE THE RULES?
MOVIES
JUST NOW
AND THANK YOU TO THE BOARD AS WELL. WE'LL CONNECT AGAIN ONCE WE HAVE ADDITIONAL UPDATES FROM OUR RESEARCH TEAMS.
972a
972b
972c

FIG. 9V

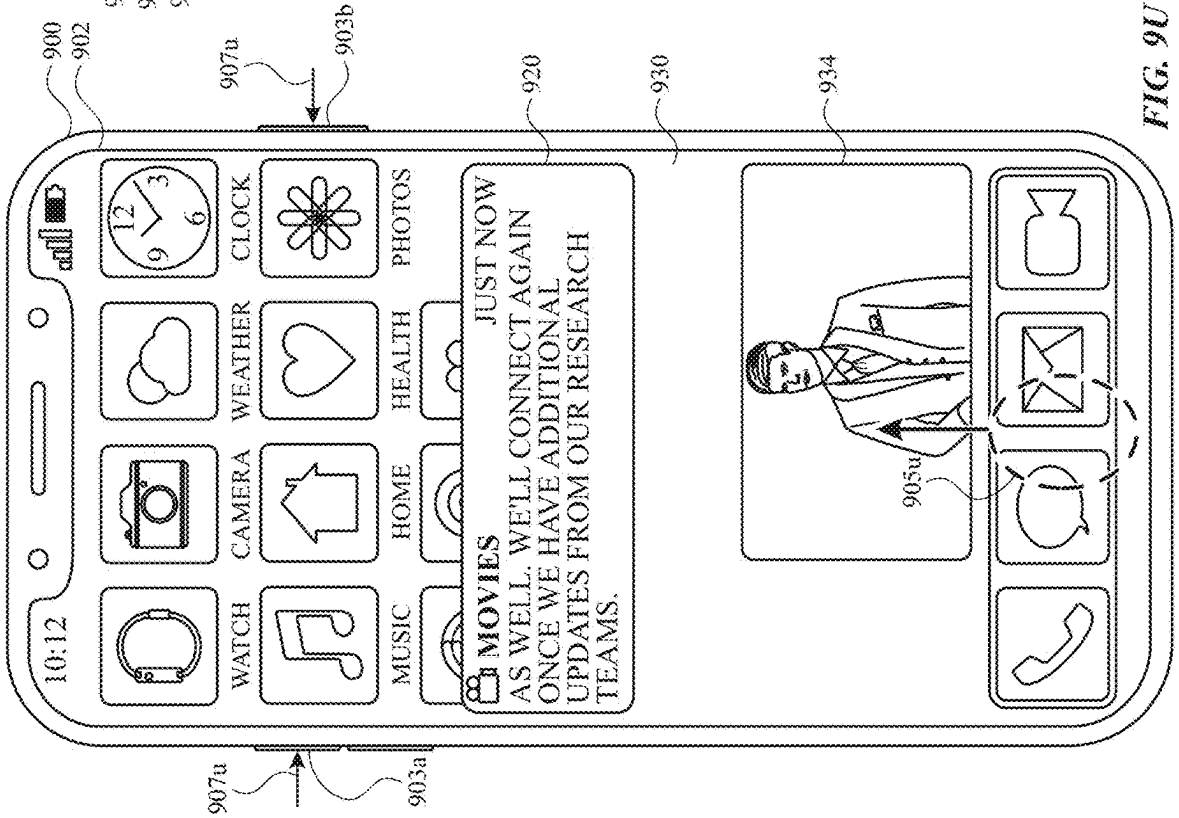

900
902
907a
903b
920
930
934
10:12
WATCH
CAMERA
WEATHER
CLOCK
MUSIC
HOME
HEALTH
PHOTOS
MOVIES
JUST NOW
AS WELL. WE'LL CONNECT AGAIN ONCE WE HAVE ADDITIONAL UPDATES FROM OUR RESEARCH TEAMS.
905u
907a
903a

FIG. 9U

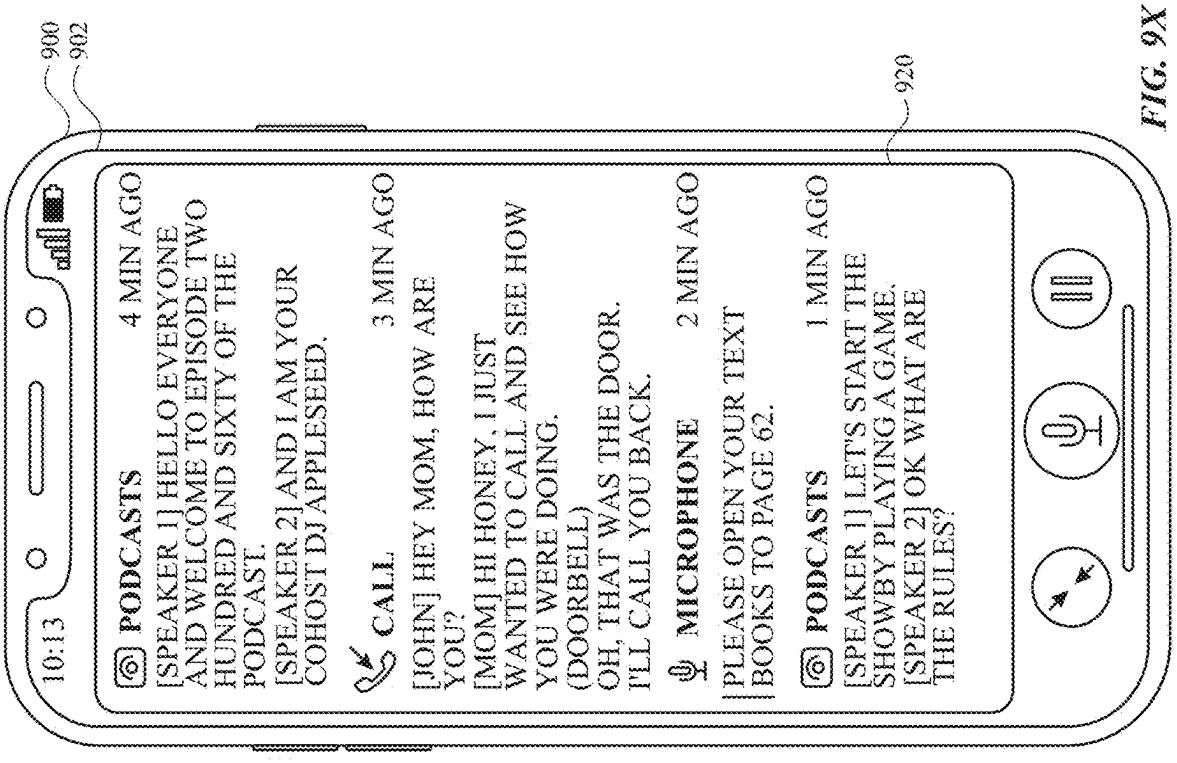

900
902
10:13
PODCASTS 4 MIN AGO
[SPEAKER 1] HELLO EVERYONE AND WELCOME TO EPISODE TWO HUNDRED AND SIXTY OF THE PODCAST.
[SPEAKER 2] AND I AM YOUR COHOST DJ APPLESEED.
CALL 3 MIN AGO
[JOHN] HEY MOM, HOW ARE YOU?
[MOM] HI HONEY, I JUST WANTED TO CALL AND SEE HOW YOU WERE DOING.
(DOORBELL)
OH, THAT WAS THE DOOR. I'LL CALL YOU BACK.
MICROPHONE 2 MIN AGO
PLEASE OPEN YOUR TEXT BOOKS TO PAGE 62.
PODCASTS 1 MIN AGO
[SPEAKER 1] LET'S START THE SHOWBY PLAYING A GAME.
[SPEAKER 2] OK WHAT ARE THE RULES?
920

FIG. 9X

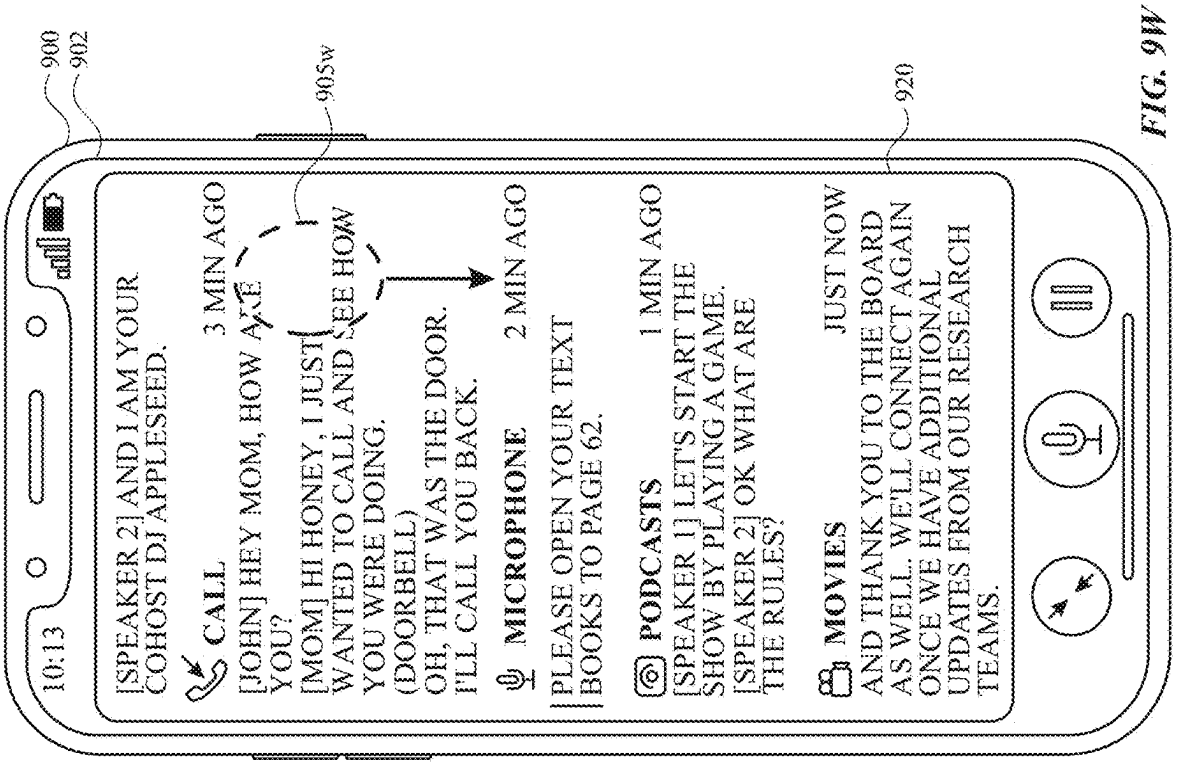

900
902
905w
10:13
[SPEAKER 2] AND I AM YOUR COHOST DJ APPLESEED.
CALL 3 MIN AGO
[JOHN] HEY MOM, HOW ARE YOU?
[MOM] HI HONEY, I JUST WANTED TO CALL AND SEE HOW YOU WERE DOING.
(DOORBELL)
OH, THAT WAS THE DOOR. I'LL CALL YOU BACK.
MICROPHONE 2 MIN AGO
PLEASE OPEN YOUR TEXT BOOKS TO PAGE 62.
PODCASTS 1 MIN AGO
[SPEAKER 1] LET'S START THE SHOW BY PLAYING A GAME.
[SPEAKER 2] OK WHAT ARE THE RULES?
MOVIES JUST NOW
AND THANK YOU TO THE BOARD AS WELL. WE'LL CONNECT AGAIN ONCE WE HAVE ADDITIONAL UPDATES FROM OUR RESEARCH TEAMS.
920

FIG. 9W

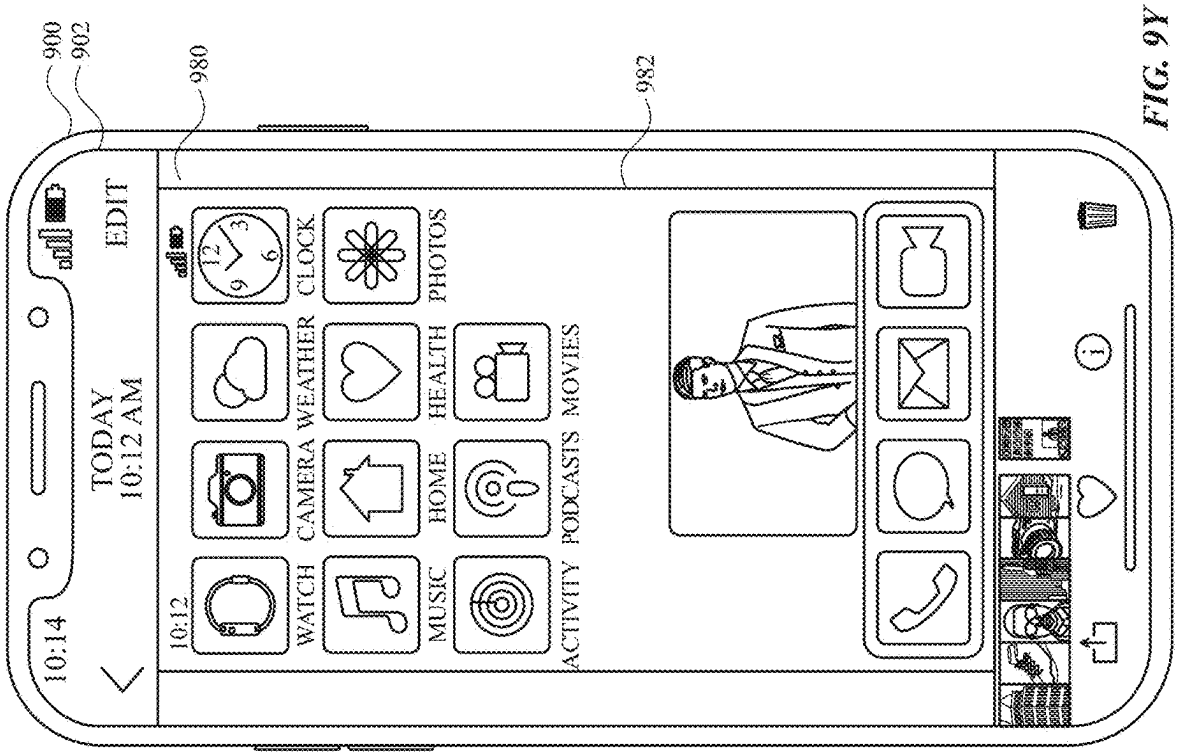

900
902
980
982
10:14
EDIT
TODAY
10:12 AM
10:12
WATCH
CAMERA
WEATHER
CLOCK
MUSIC
HOME
HEALTH
PHOTOS
ACTIVITY
PODCASTS
MOVIES

FIG. 9Y

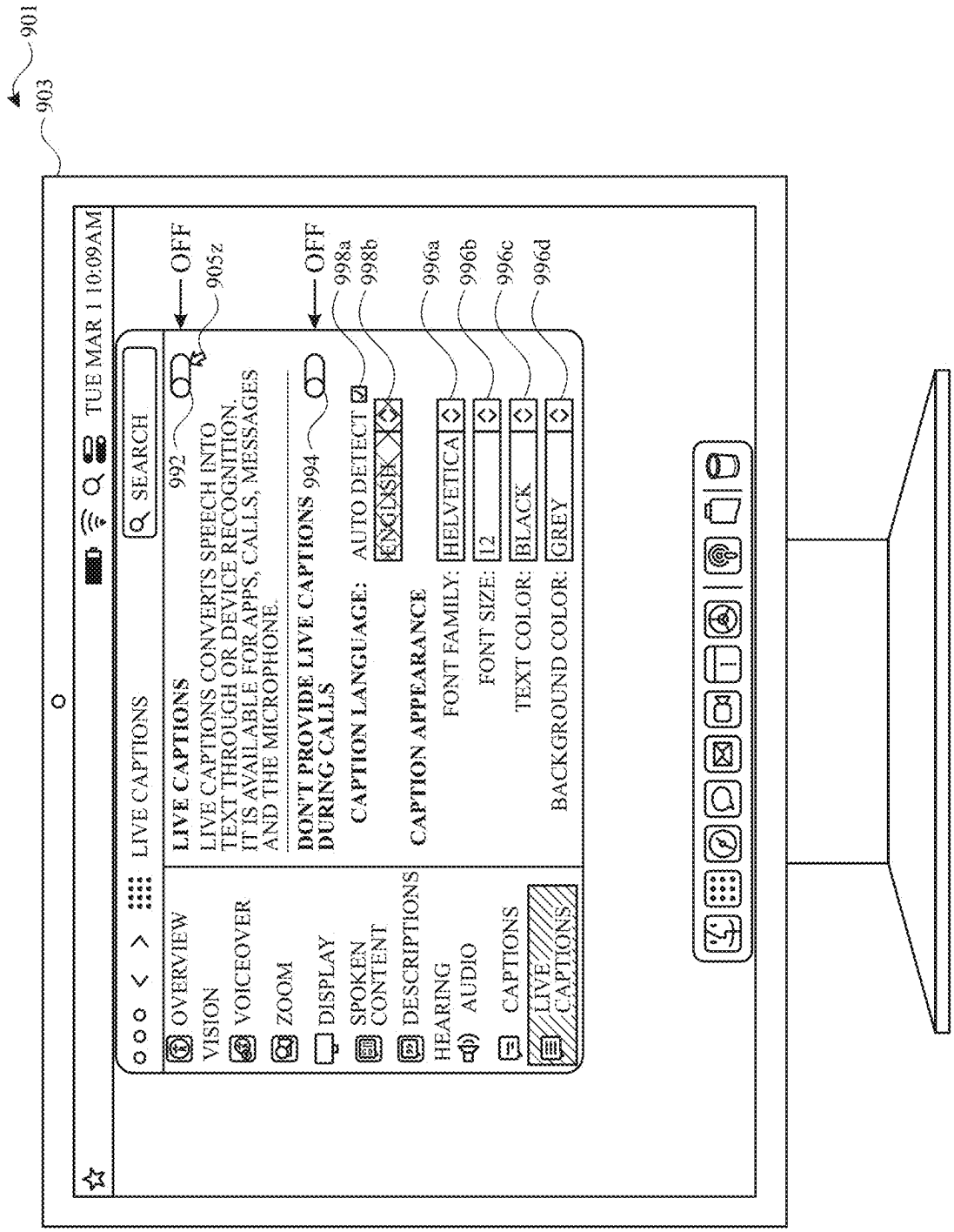

901
903
TUE MAR 1 10:09AM
LIVE CAPTIONS
SEARCH
OVERVIEW
VISION
VOICEOVER
ZOOM
DISPLAY
SPOKEN CONTENT
DESCRIPTIONS
HEARING
AUDIO
CAPTIONS
LIVE CAPTIONS
LIVE CAPTIONS
LIVE CAPTIONS CONVERTS SPEECH INTO TEXT THROUGH OR DEVICE RECOGNITION. IT IS AVAILABLE FOR APPS, CALLS, MESSAGES AND THE MICROPHONE.
992
OFF
905z
DON'T PROVIDE LIVE CAPTIONS DURING CALLS
994
OFF
CAPTION LANGUAGE:
AUTO DETECT
ENGLISH
998a
998b
CAPTION APPEARANCE
FONT FAMILY:
HELVETICA
FONT SIZE:
12
TEXT COLOR:
BLACK
BACKGROUND COLOR:
GREY
996a
996b
996c
996d

*FIG. 9Z*

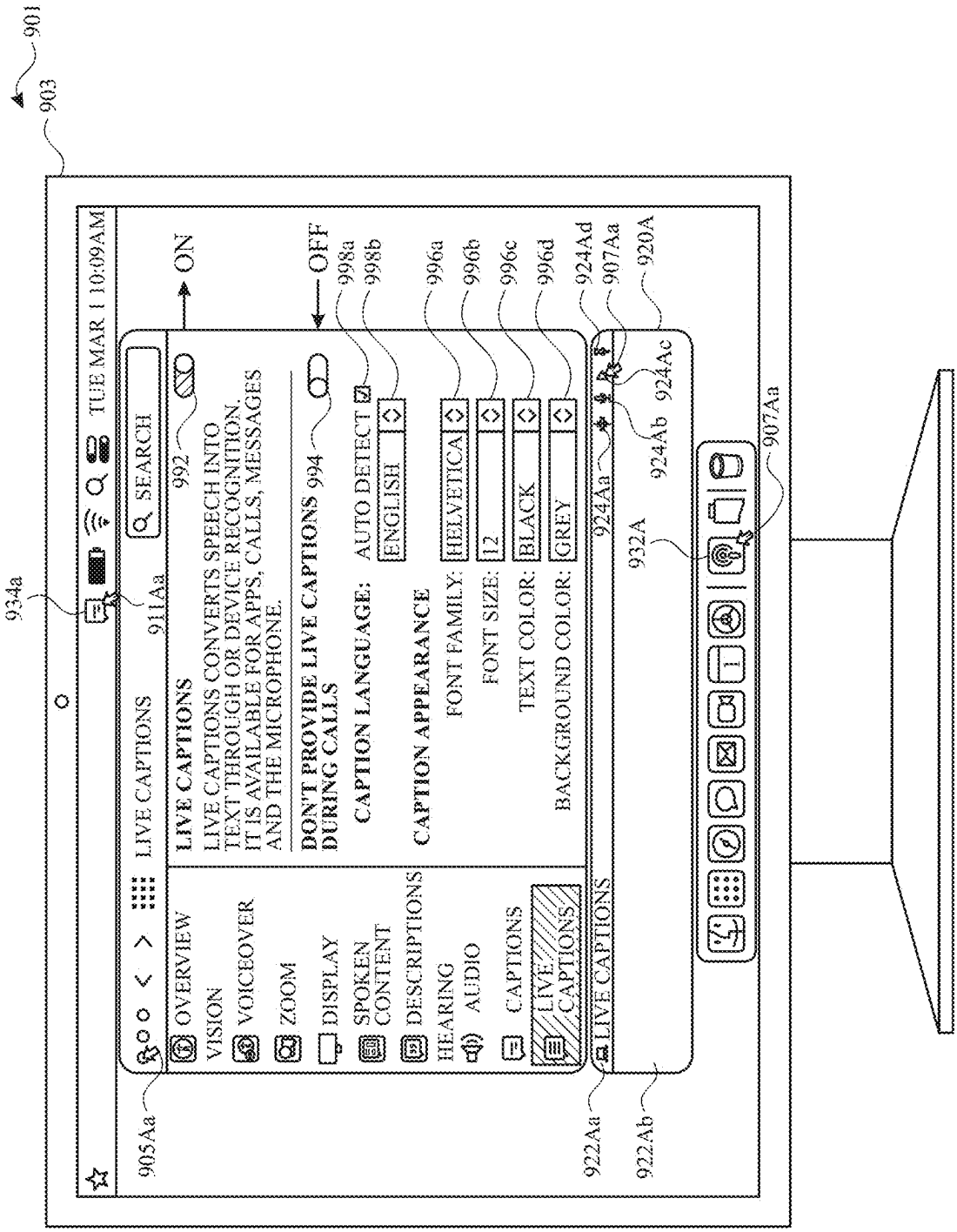

901
903
934a
905Aa
911Aa
LIVE CAPTIONS
SEARCH
TUE MAR 1 10:09AM
OVERVIEW
VISION
VOICEOVER
ZOOM
DISPLAY
SPOKEN CONTENT
DESCRIPTIONS
HEARING
AUDIO
CAPTIONS
LIVE CAPTIONS
LIVE CAPTIONS
LIVE CAPTIONS CONVERTS SPEECH INTO TEXT THROUGH OR DEVICE RECOGNITION. IT IS AVAILABLE FOR APPS, CALLS, MESSAGES AND THE MICROPHONE.
992
ON
DONT PROVIDE LIVE CAPTIONS DURING CALLS
994
OFF
CAPTION LANGUAGE:
AUTO DETECT
ENGLISH
998a
998b
CAPTION APPEARANCE
FONT FAMILY:
HELVETICA
FONT SIZE:
12
TEXT COLOR:
BLACK
BACKGROUND COLOR:
GREY
996a
996b
996c
996d
924Ad
907Aa
920A
924Ac
924Ab
924Aa
932A
907Aa
922Aa
922Ab

FIG. 9AA

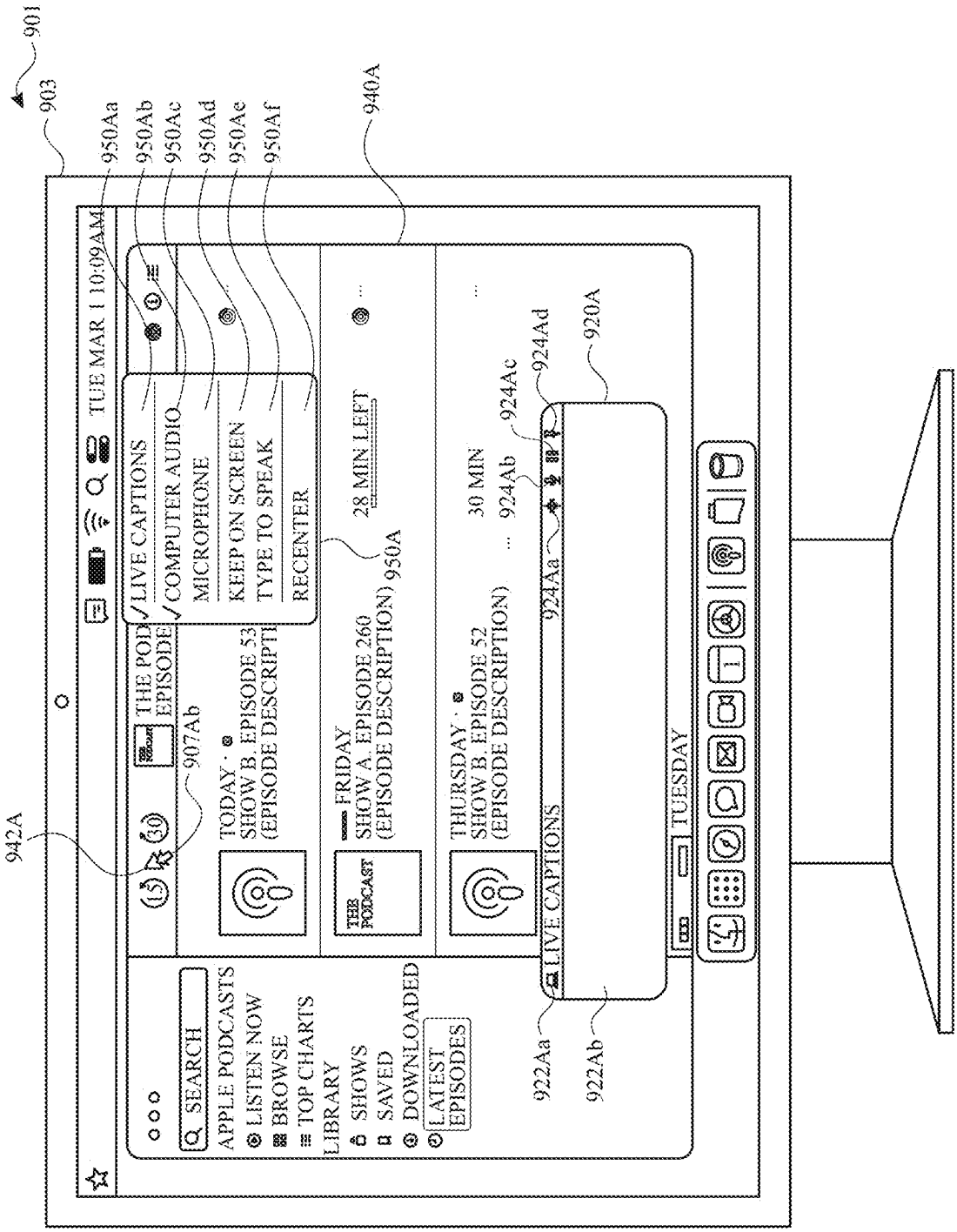

901
903
950Aa
950Ab
950Ac
950Ad
950Ae
950Af
940A
TUE MAR 1 10:09AM
LIVE CAPTIONS
COMPUTER AUDIO
MICROPHONE
KEEP ON SCREEN
TYPE TO SPEAK
RECENTER
950A
THE POD
EPISODE
907Ab
942A
TODAY
SHOW B, EPISODE 53
(EPISODE DESCRIPTI
FRIDAY
SHOW A, EPISODE 260
(EPISODE DESCRIPTION)
28 MIN LEFT
THURSDAY
SHOW B, EPISODE 52
(EPISODE DESCRIPTION)
30 MIN
924Ab
924Ac
924Ad
924Aa
920A
SEARCH
APPLE PODCASTS
LISTEN NOW
BROWSE
TOP CHARTS
LIBRARY
SHOWS
SAVED
DOWNLOADED
LATEST EPISODES
LIVE CAPTIONS
TUESDAY
922Aa
922Ab

FIG. 9AB

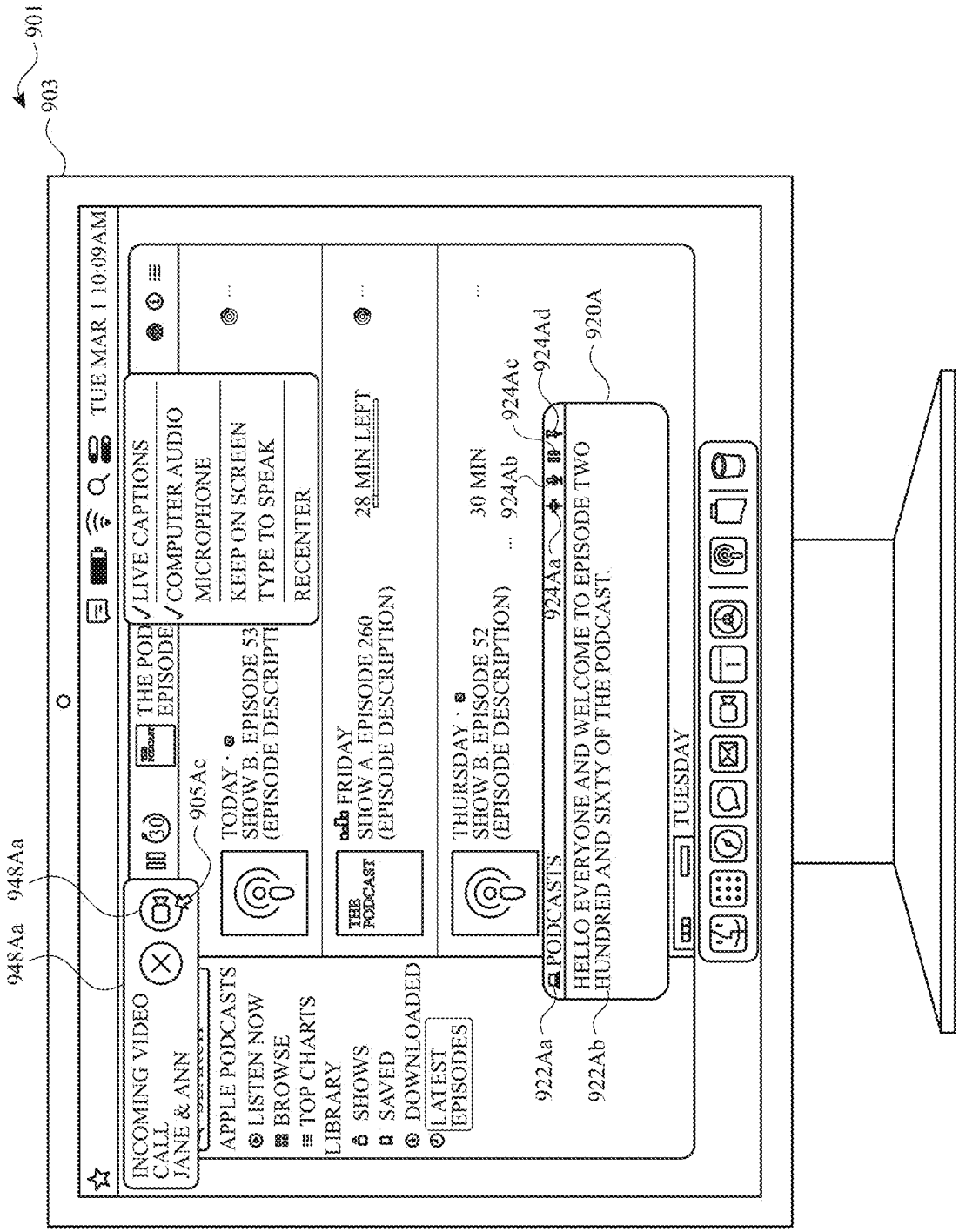

901
903
948Aa
948Aa
905Ac
TUE MAR 1 10:09AM
INCOMING VIDEO CALL
JANE & ANN
THE POD EPISODE
LIVE CAPTIONS
COMPUTER AUDIO
MICROPHONE
KEEP ON SCREEN
TYPE TO SPEAK
RECENTER
APPLE PODCASTS
LISTEN NOW
BROWSE
TOP CHARTS
LIBRARY
SHOWS
SAVED
DOWNLOADED
LATEST EPISODES
TODAY
SHOW B, EPISODE 53
(EPISODE DESCRIPTI
FRIDAY
SHOW A, EPISODE 260
(EPISODE DESCRIPTION)
28 MIN LEFT
THURSDAY
SHOW B, EPISODE 52
(EPISODE DESCRIPTION)
30 MIN
924Ab
924Ac
924Ad
924Aa
920A
PODCASTS
HELLO EVERYONE AND WELCOME TO EPISODE TWO HUNDRED AND SIXTY OF THE PODCAST.
922Aa
922Ab
TUESDAY

FIG. 9AC

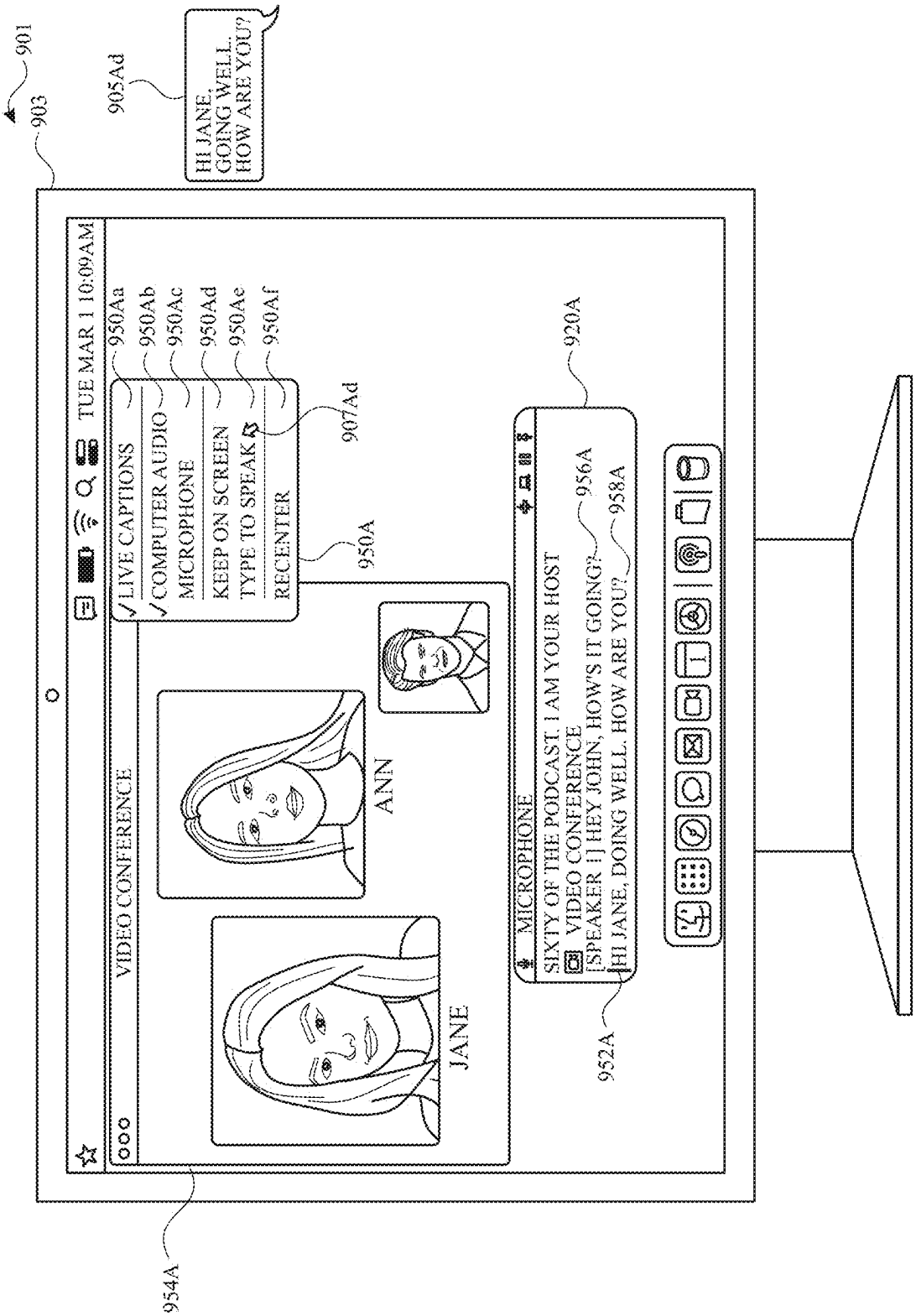

901
903
905Ad
HI JANE, GOING WELL. HOW ARE YOU?
TUE MAR 1 10:09AM
VIDEO CONFERENCE
LIVE CAPTIONS
COMPUTER AUDIO
MICROPHONE
KEEP ON SCREEN
TYPE TO SPEAK
RECENTER
950Aa
950Ab
950Ac
950Ad
950Ae
950Af
907Ad
950A
ANN
JANE
920A
MICROPHONE
SIXTY OF THE PODCAST. I AM YOUR HOST
VIDEO CONFERENCE
[SPEAKER 1] HEY JOHN, HOW'S IT GOING?
[HI JANE, DOING WELL. HOW ARE YOU?
956A
958A
952A
954A

FIG. 9AD

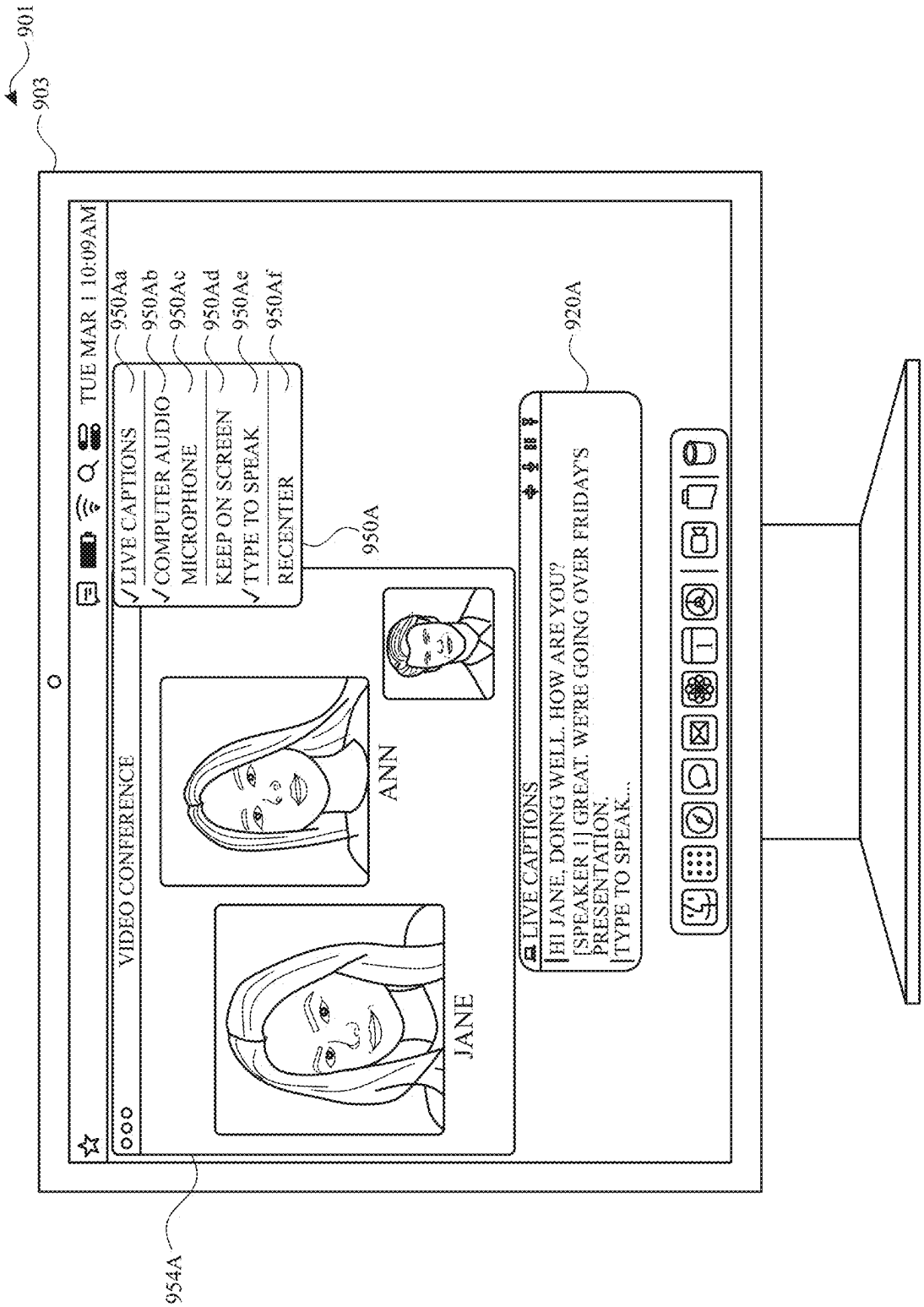

901
903
954A
TUE MAR 1 10:09AM
VIDEO CONFERENCE
LIVE CAPTIONS
COMPUTER AUDIO
MICROPHONE
KEEP ON SCREEN
TYPE TO SPEAK
RECENTER
950Aa
950Ab
950Ac
950Ad
950Ae
950Af
950A
ANN
JANE
920A
LIVE CAPTIONS
HI JANE, DOING WELL. HOW ARE YOU?
[SPEAKER 1] GREAT. WERE GOING OVER FRIDAY'S
PRESENTATION.
TYPE TO SPEAK...

FIG. 9AE

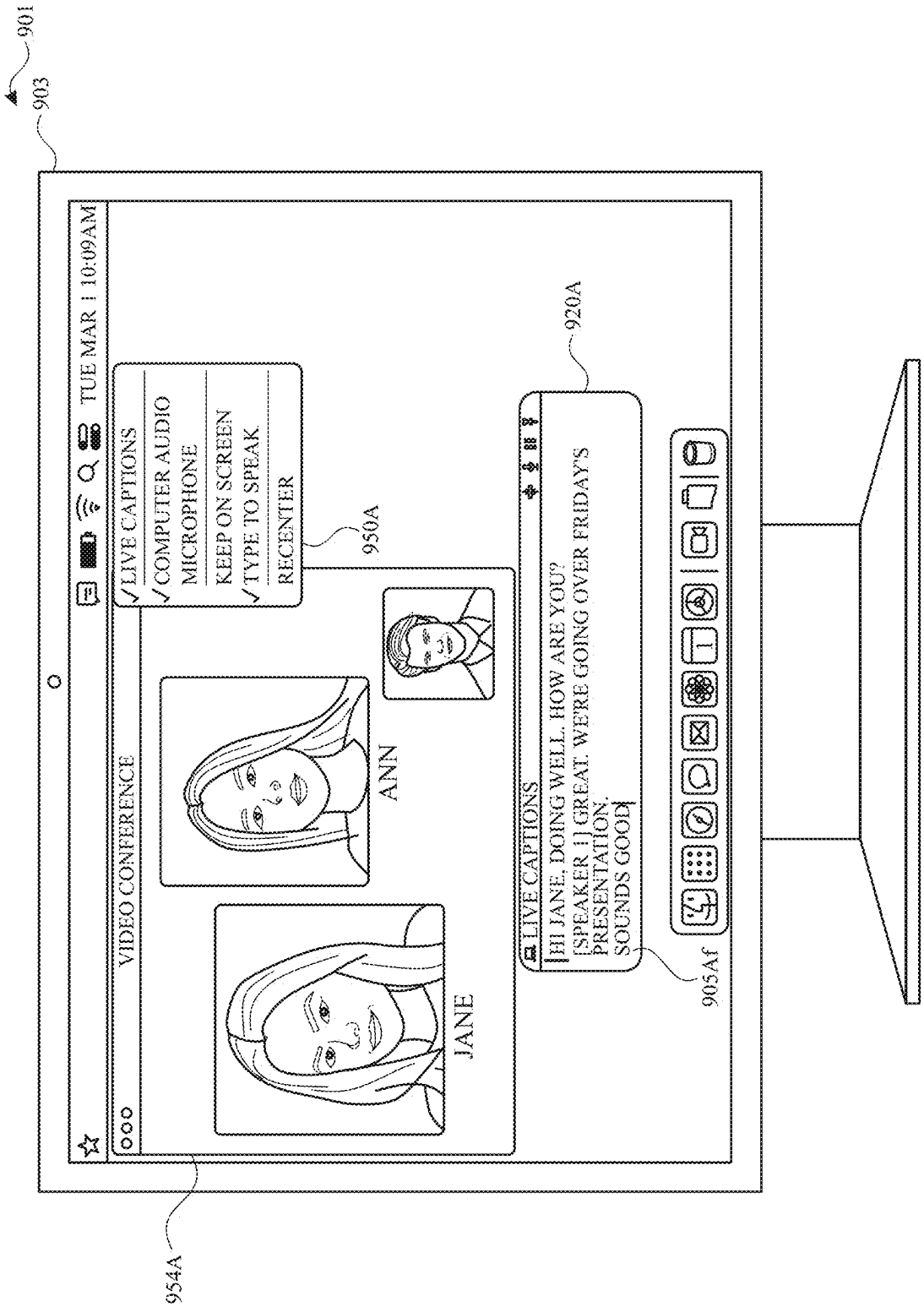

901
903
TUE MAR 1 10:09AM
VIDEO CONFERENCE
LIVE CAPTIONS
COMPUTER AUDIO
MICROPHONE
KEEP ON SCREEN
TYPE TO SPEAK
RECENTER
950A
ANN
JANE
920A
LIVE CAPTIONS
HI JANE, DOING WELL. HOW ARE YOU?
[SPEAKER 1] GREAT. WERE GOING OVER FRIDAY'S
PRESENTATION.
SOUNDS GOOD
905Af
954A

FIG. 9AF

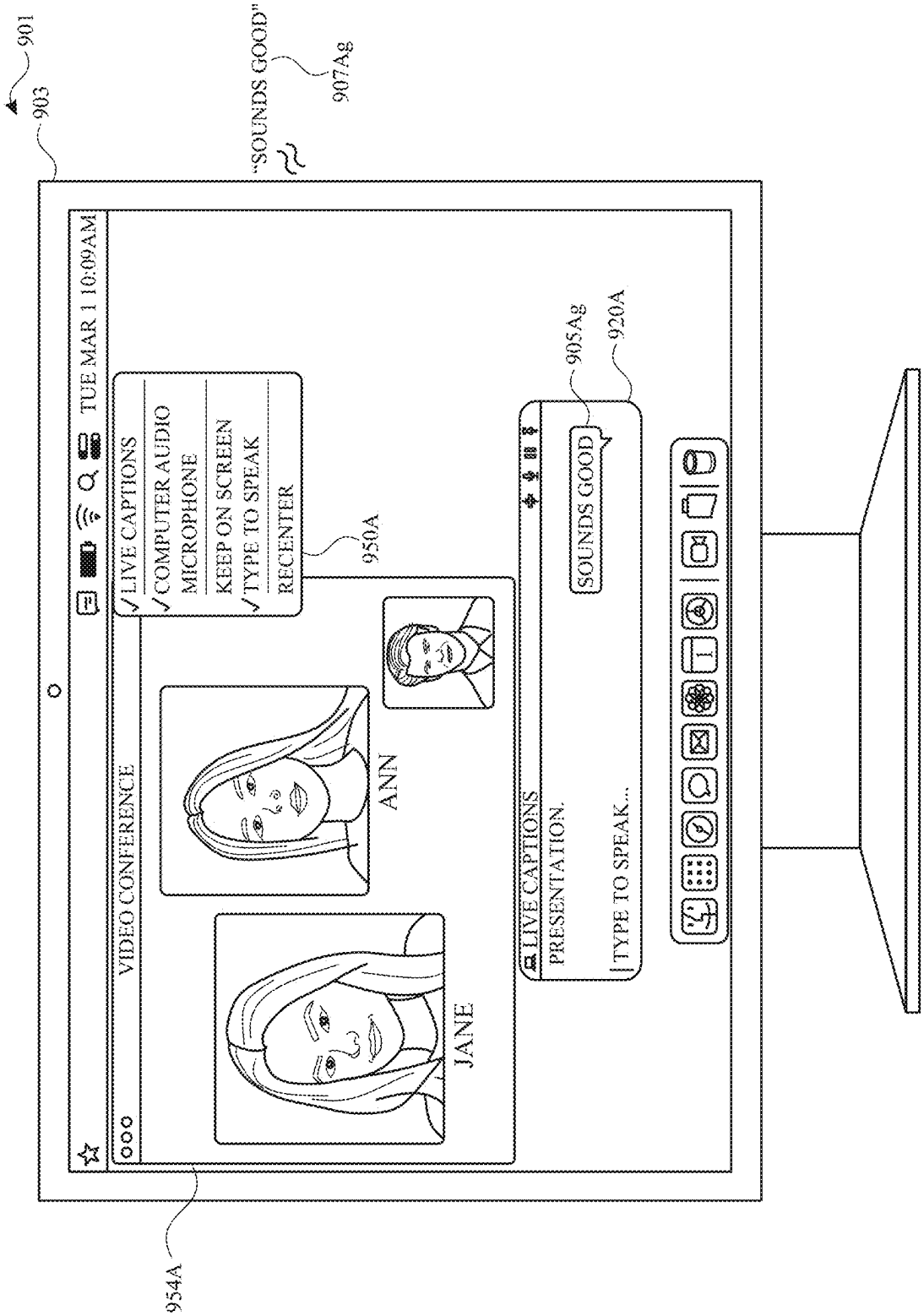

901
903
"SOUNDS GOOD"
907Ag
TUE MAR 1 10:09AM
VIDEO CONFERENCE
LIVE CAPTIONS
COMPUTER AUDIO
MICROPHONE
KEEP ON SCREEN
TYPE TO SPEAK
RECENTER
950A
ANN
JANE
905Ag
920A
SOUNDS GOOD
LIVE CAPTIONS
PRESENTATION.
TYPE TO SPEAK...
954A

FIG. 9AG

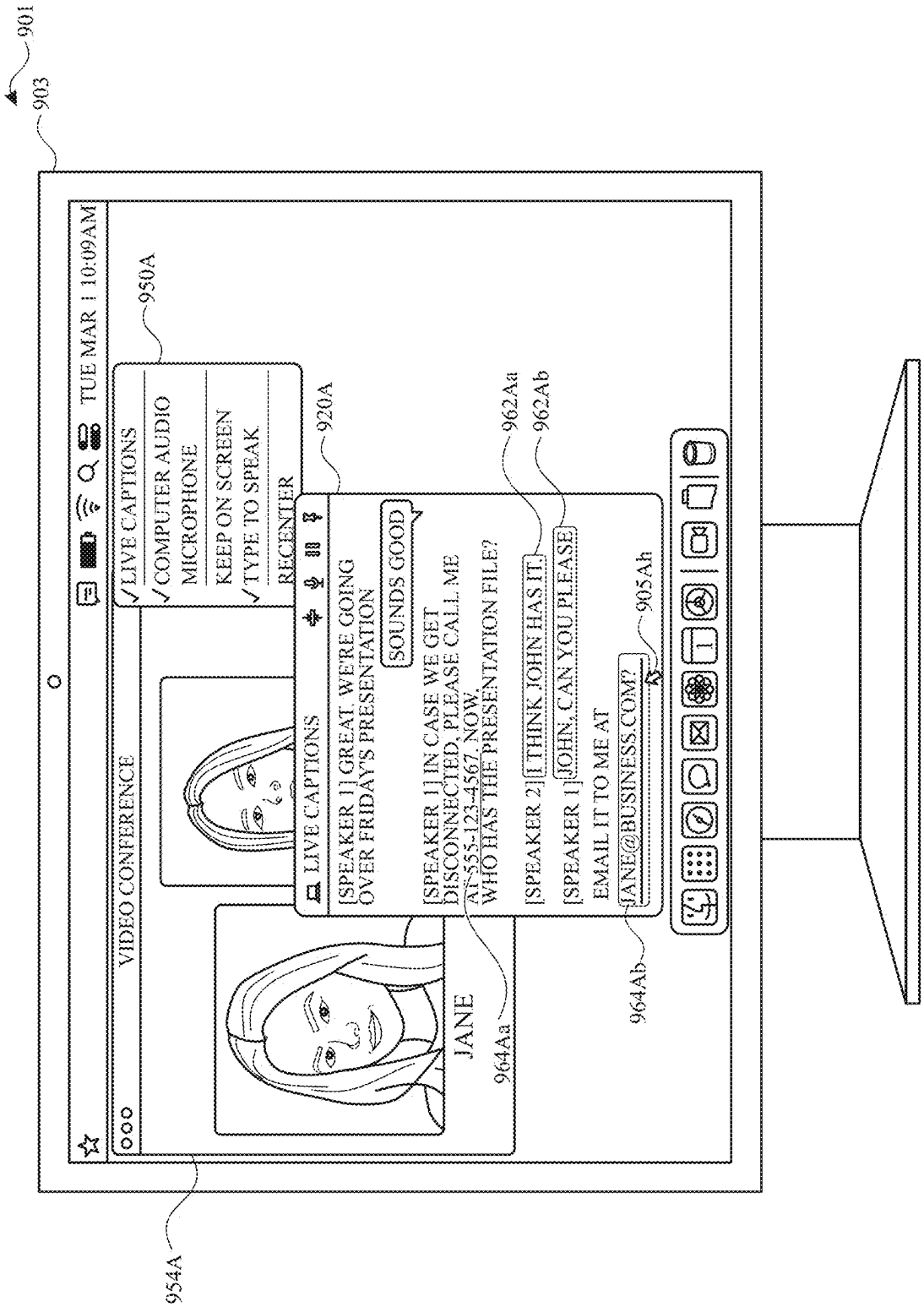

901
903
TUE MAR 1 10:09AM
VIDEO CONFERENCE
950A
✓LIVE CAPTIONS
✓COMPUTER AUDIO
MICROPHONE
KEEP ON SCREEN
✓TYPE TO SPEAK
RECENTER
920A
LIVE CAPTIONS
[SPEAKER 1] GREAT. WE'RE GOING OVER FRIDAY'S PRESENTATION
SOUNDS GOOD
[SPEAKER 1] IN CASE WE GET DISCONNECTED, PLEASE CALL ME AT 555-123-4567. NOW, WHO HAS THE PRESENTATION FILE?
[SPEAKER 2] I THINK JOHN HAS IT.
[SPEAKER 1] JOHN, CAN YOU PLEASE EMAIL IT TO ME AT JANE@BUSINESS.COM?
962Aa
962Ab
905Ah
964Aa
964Ab
JANE
954A

FIG. 9AH

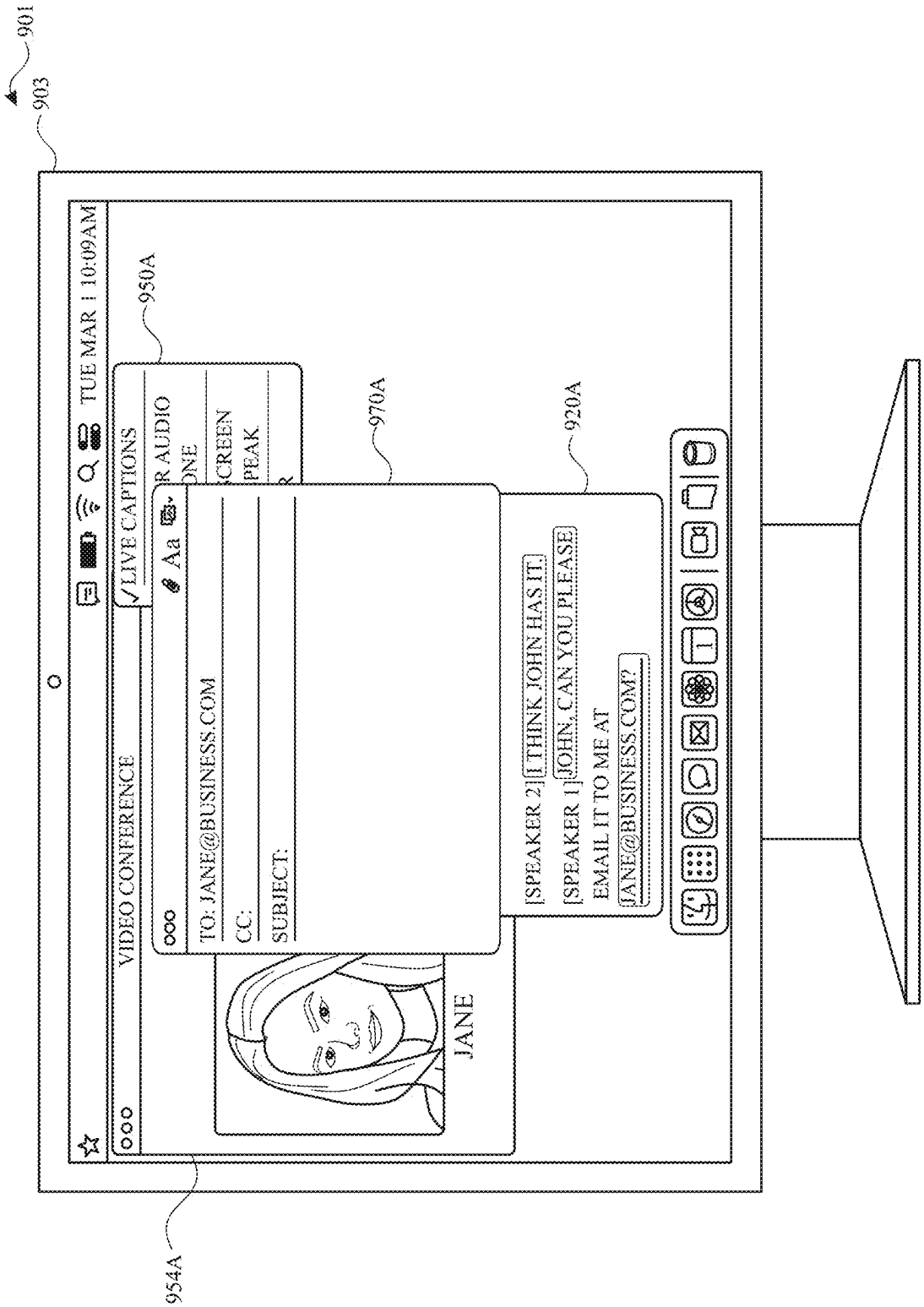

901
903
TUE MAR 1 10:09AM
VIDEO CONFERENCE
LIVE CAPTIONS
950A
R AUDIO
ONE
CREEN
PEAK
Aa
970A
TO: JANE@BUSINESS.COM
CC:
SUBJECT:
920A
[SPEAKER 2] I THINK JOHN HAS IT.
[SPEAKER 1] JOHN, CAN YOU PLEASE
EMAIL IT TO ME AT
JANE@BUSINESS.COM?
JANE
954A

FIG. 9AI

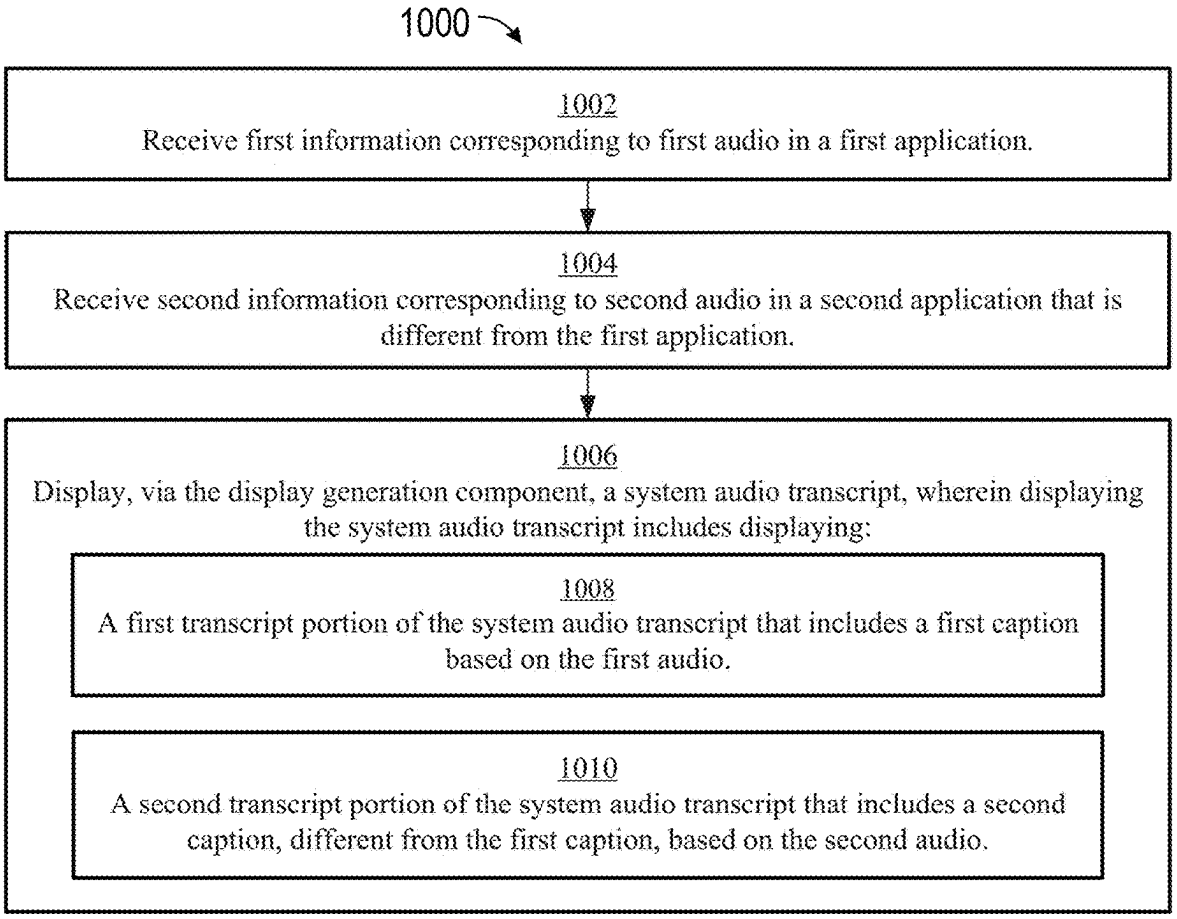

1000
1002
Receive first information corresponding to first audio in a first application.
1004
Receive second information corresponding to second audio in a second application that is different from the first application.
1006
Display, via the display generation component, a system audio transcript, wherein displaying the system audio transcript includes displaying:
1008
A first transcript portion of the system audio transcript that includes a first caption based on the first audio.
1010
A second transcript portion of the system audio transcript that includes a second caption, different from the first caption, based on the second audio.

*FIG. 10*

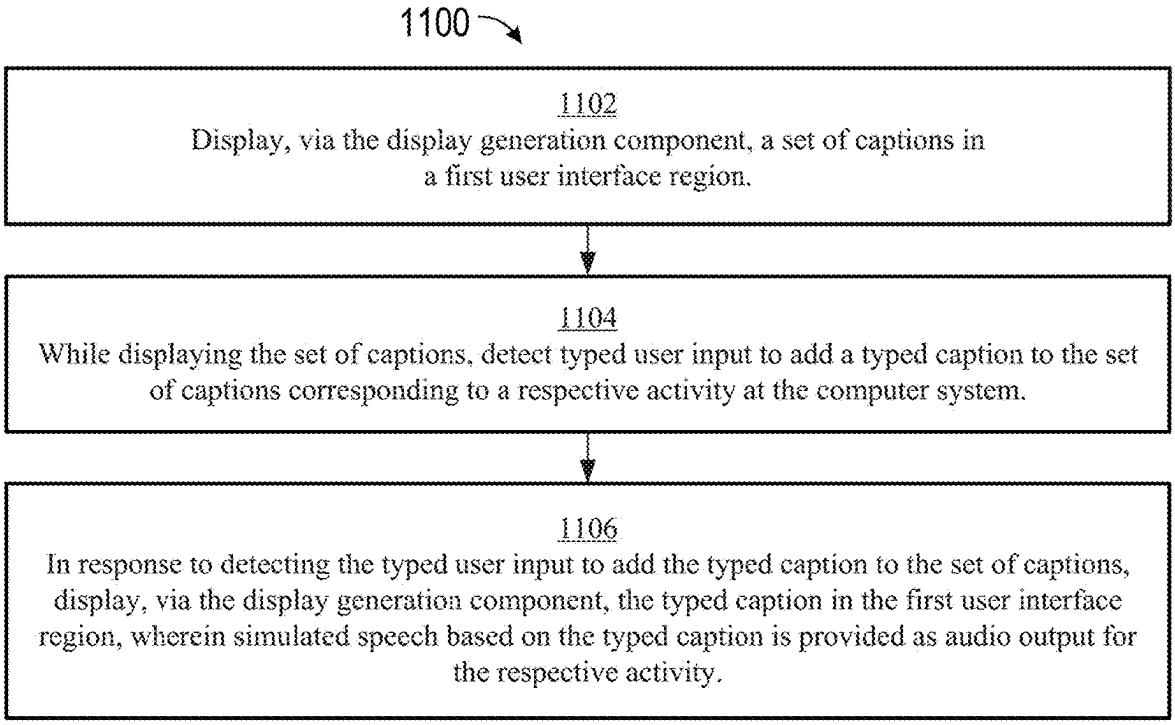

1100
1102
Display, via the display generation component, a set of captions in a first user interface region.
1104
While displaying the set of captions, detect typed user input to add a typed caption to the set of captions corresponding to a respective activity at the computer system.
1106
In response to detecting the typed user input to add the typed caption to the set of captions, display, via the display generation component, the typed caption in the first user interface region, wherein simulated speech based on the typed caption is provided as audio output for the respective activity.

*FIG. 11*

# SYSTEMS AND METHODS FOR MANAGING CAPTIONS

## CROSS-REFERENCE TO RELATED APPLICATIONS

**[0001]** This application is a continuation of U.S. patent application Ser. No. 17/988,571, filed Nov. 16, 2022, entitled "SYSTEMS AND METHODS FOR MANAGING CAPTIONS," which claims the benefit of U.S. Provisional Application No. 63/343,075, filed May 17, 2022, entitled "SYSTEMS AND METHODS FOR MANAGING CAPTIONS," and U.S. Provisional Application No. 63/281,373, filed Nov. 19, 2021, entitled "CAPTIONS FOR A COMMUNICATION SESSION." All of these applications are incorporated by reference herein in their entirety.

## FIELD

**[0002]** The present disclosure relates generally to computer user interfaces, and more specifically to techniques for managing captions on an electronic device.

## BACKGROUND

**[0003]** Computer systems can include hardware and/or software for displaying captions in various user interfaces. Captions (sometimes called subtitles) provide visual content that corresponds to audio content or metadata related to audio content.

## BRIEF SUMMARY

**[0004]** Captions can include a text version of the speech and non-speech audio information and help a user understand the audio information. The display of captions is optionally synchronized (in time) with the audio of the communication session.

**[0005]** Some techniques for managing captions using electronic devices, however, are generally cumbersome and inefficient. For example, some existing techniques use a complex and time-consuming user interface, which may include multiple key presses or keystrokes. Existing techniques require more time than necessary, wasting user time and device energy. This latter consideration is particularly important in battery-operated devices.

**[0006]** Accordingly, the present technique provides electronic devices with faster, more efficient methods and interfaces for managing captions. Such methods and interfaces optionally complement or replace other methods for managing captions. Such methods and interfaces reduce the cognitive burden on a user and produce a more efficient human-machine interface. For battery-operated computing devices, such methods and interfaces conserve power and increase the time between battery charges. Such methods and interfaces reduce the cognitive burden on a user that relies on machine-generated transcriptions and produce a more efficient human-machine interface.

**[0007]** In accordance with some embodiments, a method performed at a computer system that is in communication with a display generation component and one or more input devices is described. The method comprises: displaying, via the display generation component, a live communication user interface, the live communication user interface corresponding to a live communication session, the live communication user interface including: one or more representations of one or more participants of the live communication session, wherein a first representation of the one or more representations of the one or more participants is displayed at a location and at a size in the live communication user interface; and a first caption in a first area of the live communication user interface, the first caption corresponding to a first portion of audio data of the live communication session; while displaying the live communication user interface with the first caption in the first area of the live communication user interface, detecting, via the one or more input devices, an input that corresponds to a request to display expanded caption information; and in response to detecting the input that corresponds to a request to display expanded caption information: displaying, via the display generation component, a second caption corresponding to a second portion of audio data of the live communication session, different from the first portion of audio data of the live communication session, the second caption displayed at a second area of the live communication user interface; and modifying, via the display generation component, the location of the first representation and/or size of the first representation in the live communication user interface.

**[0008]** In accordance with some embodiments, a non-transitory computer-readable storage medium is described. The non-transitory computer-readable storage medium stores one or more programs configured to be executed by one or more processors of a computer system that is in communication with a display generation component and one or more input devices, the one or more programs including instructions for: displaying, via the display generation component, a live communication user interface, the live communication user interface corresponding to a live communication session, the live communication user interface including: one or more representations of one or more participants of the live communication session, wherein a first representation of the one or more representations of the one or more participants is displayed at a location and at a size in the live communication user interface; and a first caption in a first area of the live communication user interface, the first caption corresponding to a first portion of audio data of the live communication session; while displaying the live communication user interface with the first caption in the first area of the live communication user interface, detecting, via the one or more input devices, an input that corresponds to a request to display expanded caption information; and in response to detecting the input that corresponds to a request to display expanded caption information: displaying, via the display generation component, a second caption corresponding to a second portion of audio data of the live communication session, different from the first portion of audio data of the live communication session, the second caption displayed at a second area of the live communication user interface; and modifying, via the display generation component, the location of the first representation and/or size of the first representation in the live communication user interface.

**[0009]** In accordance with some embodiments, a transitory computer-readable storage medium is described. The transitory computer-readable storage medium stores one or more programs configured to be executed by one or more processors of a computer system that is in communication with a display generation component and one or more input devices, the one or more programs including instructions for: displaying, via the display generation component, a live communication user interface, the live communication user

interface corresponding to a live communication session, the live communication user interface including: one or more representations of one or more participants of the live communication session, wherein a first representation of the one or more representations of the one or more participants is displayed at a location and at a size in the live communication user interface; and a first caption in a first area of the live communication user interface, the first caption corresponding to a first portion of audio data of the live communication session; while displaying the live communication user interface with the first caption in the first area of the live communication user interface, detecting, via the one or more input devices, an input that corresponds to a request to display expanded caption information; and in response to detecting the input that corresponds to a request to display expanded caption information: displaying, via the display generation component, a second caption corresponding to a second portion of audio data of the live communication session, different from the first portion of audio data of the live communication session, the second caption displayed at a second area of the live communication user interface; and modifying, via the display generation component, the location of the first representation and/or size of the first representation in the live communication user interface.

**[0010]** In accordance with some embodiments, a computer system that is configured to communicate with a display generation component and one or more input devices is described. The computer system comprises: one or more processors; and memory storing one or more programs configured to be executed by the one or more processors, the one or more programs including instructions for: displaying, via the display generation component, a live communication user interface, the live communication user interface corresponding to a live communication session, the live communication user interface including: one or more representations of one or more participants of the live communication session, wherein a first representation of the one or more representations of the one or more participants is displayed at a location and at a size in the live communication user interface; and a first caption in a first area of the live communication user interface, the first caption corresponding to a first portion of audio data of the live communication session; while displaying the live communication user interface with the first caption in the first area of the live communication user interface, detecting, via the one or more input devices, an input that corresponds to a request to display expanded caption information; and in response to detecting the input that corresponds to a request to display expanded caption information: displaying, via the display generation component, a second caption corresponding to a second portion of audio data of the live communication session, different from the first portion of audio data of the live communication session, the second caption displayed at a second area of the live communication user interface; and modifying, via the display generation component, the location of the first representation and/or size of the first representation in the live communication user interface.

**[0011]** In accordance with some embodiments, a computer system that is configured to communicate with a display generation component and one or more input devices is described. The computer system comprises: means for displaying, via the display generation component, a live communication user interface, the live communication user interface corresponding to a live communication session, the live communication user interface including: one or more representations of one or more participants of the live communication session, wherein a first representation of the one or more representations of the one or more participants is displayed at a location and at a size in the live communication user interface; and a first caption in a first area of the live communication user interface, the first caption corresponding to a first portion of audio data of the live communication session; means, while displaying the live communication user interface with the first caption in the first area of the live communication user interface, for detecting, via the one or more input devices, an input that corresponds to a request to display expanded caption information; and means, responsive to detecting the input that corresponds to a request to display expanded caption information, for: displaying, via the display generation component, a second caption corresponding to a second portion of audio data of the live communication session, different from the first portion of audio data of the live communication session, the second caption displayed at a second area of the live communication user interface; and modifying, via the display generation component, the location of the first representation and/or size of the first representation in the live communication user interface.

**[0012]** In accordance with some embodiments, a computer program product is described. The computer program product comprises one or more programs configured to be executed by one or more processors of a computer system that is in communication with a display generation component and one or more input devices. The one or more programs include instructions for: displaying, via the display generation component, a live communication user interface, the live communication user interface corresponding to a live communication session, the live communication user interface including: one or more representations of one or more participants of the live communication session, wherein a first representation of the one or more representations of the one or more participants is displayed at a location and at a size in the live communication user interface; and a first caption in a first area of the live communication user interface, the first caption corresponding to a first portion of audio data of the live communication session; while displaying the live communication user interface with the first caption in the first area of the live communication user interface, detecting, via the one or more input devices, an input that corresponds to a request to display expanded caption information; and in response to detecting the input that corresponds to a request to display expanded caption information: displaying, via the display generation component, a second caption corresponding to a second portion of audio data of the live communication session, different from the first portion of audio data of the live communication session, the second caption displayed at a second area of the live communication user interface; and modifying, via the display generation component, the location of the first representation and/or size of the first representation in the live communication user interface.

**[0013]** In accordance with some embodiments, a method performed at a computer system that is in communication with a display generation component and one or more input devices is described. The method comprises: displaying, via the display generation component, a user interface of a live communication application corresponding to a live communication session, the user interface of the live communica-

tion application concurrently including: a representation of a first participant of the live communication session displayed in the live communication application; and a first caption for audio data of the first participant displayed in the live communication application; while the user interface of the live communication application is displayed, receiving a sequence of one or more inputs that corresponds to a request to switch to displaying a respective user interface that is different from the live communication application; and in response to receiving the sequence of one or more inputs that corresponds to the request to switch to displaying the respective user interface: replacing at least a portion of the live communication application with the respective user interface that is different from the live communication application; displaying a reduced scale representation of the first participant of the live communication session overlaid on at least a portion of the respective user interface; and displaying a second caption for audio data of the first participant, wherein the second caption for audio data is displayed separately from the reduced scale representation of the first participant of the live communication session and is overlaid on at least a portion of the respective user interface.

**[0014]** In accordance with some embodiments, a non-transitory computer-readable storage medium is described. The non-transitory computer-readable storage medium stores one or more programs configured to be executed by one or more processors of a computer system that is in communication with a display generation component and one or more input devices, the one or more programs including instructions for: displaying, via the display generation component, a user interface of a live communication application corresponding to a live communication session, the user interface of the live communication application concurrently including: a representation of a first participant of the live communication session displayed in the live communication application; and a first caption for audio data of the first participant displayed in the live communication application; while the user interface of the live communication application is displayed, receiving a sequence of one or more inputs that corresponds to a request to switch to displaying a respective user interface that is different from the live communication application; and in response to receiving the sequence of one or more inputs that corresponds to the request to switch to displaying the respective user interface: replacing at least a portion of the live communication application with the respective user interface that is different from the live communication application; displaying a reduced scale representation of the first participant of the live communication session overlaid on at least a portion of the respective user interface; and displaying a second caption for audio data of the first participant, wherein the second caption for audio data is displayed separately from the reduced scale representation of the first participant of the live communication session and is overlaid on at least a portion of the respective user interface.

**[0015]** In accordance with some embodiments, a transitory computer-readable storage medium is described. The transitory computer-readable storage medium stores one or more programs configured to be executed by one or more processors of a computer system that is configured to communicate with a display generation component and one or more input devices, the one or more programs including instructions for: displaying, via the display generation component, a user interface of a live communication application corresponding to a live communication session, the user interface of the live communication application concurrently including: a representation of a first participant of the live communication session displayed in the live communication application; and a first caption for audio data of the first participant displayed in the live communication application; while the user interface of the live communication application is displayed, receiving a sequence of one or more inputs that corresponds to a request to switch to displaying a respective user interface that is different from the live communication application; and in response to receiving the sequence of one or more inputs that corresponds to the request to switch to displaying the respective user interface: replacing at least a portion of the live communication application with the respective user interface that is different from the live communication application; displaying a reduced scale representation of the first participant of the live communication session overlaid on at least a portion of the respective user interface; and displaying a second caption for audio data of the first participant, wherein the second caption for audio data is displayed separately from the reduced scale representation of the first participant of the live communication session and is overlaid on at least a portion of the respective user interface.

**[0016]** In accordance with some embodiments, a computer system that is configured to communicate with a display generation component and one or more input devices is described. The computer system comprises: one or more processors; and memory storing one or more programs configured to be executed by the one or more processors, the one or more programs including instructions for: displaying, via the display generation component, a user interface of a live communication application corresponding to a live communication session, the user interface of the live communication application concurrently including: a representation of a first participant of the live communication session displayed in the live communication application; and a first caption for audio data of the first participant displayed in the live communication application; while the user interface of the live communication application is displayed, receiving a sequence of one or more inputs that corresponds to a request to switch to displaying a respective user interface that is different from the live communication application; and in response to receiving the sequence of one or more inputs that corresponds to the request to switch to displaying the respective user interface: replacing at least a portion of the live communication application with the respective user interface that is different from the live communication application; displaying a reduced scale representation of the first participant of the live communication session overlaid on at least a portion of the respective user interface; and displaying a second caption for audio data of the first participant, wherein the second caption for audio data is displayed separately from the reduced scale representation of the first participant of the live communication session and is overlaid on at least a portion of the respective user interface.

**[0017]** In accordance with some embodiments, a computer system that is configured to communicate with a display generation component and one or more input devices is described. The computer system comprises: means for displaying, via the display generation component, a user interface of a live communication application corresponding to a

live communication session, the user interface of the live communication application concurrently including: a representation of a first participant of the live communication session displayed in the live communication application; and a first caption for audio data of the first participant displayed in the live communication application; means, while the user interface of the live communication application is displayed, for receiving a sequence of one or more inputs that corresponds to a request to switch to displaying a respective user interface that is different from the live communication application; and means, responsive to receiving the sequence of one or more inputs that corresponds to the request to switch to displaying the respective user interface, for: replacing at least a portion of the live communication application with the respective user interface that is different from the live communication application; displaying a reduced scale representation of the first participant of the live communication session overlaid on at least a portion of the respective user interface; and displaying a second caption for audio data of the first participant, wherein the second caption for audio data is displayed separately from the reduced scale representation of the first participant of the live communication session and is overlaid on at least a portion of the respective user interface.

**[0018]** In accordance with some embodiments, a computer program product is described. The computer program product comprises one or more programs configured to be executed by one or more processors of a computer system that is in communication with a display generation component and one or more input devices. The one or more programs include instructions for: displaying, via the display generation component, a user interface of a live communication application corresponding to a live communication session, the user interface of the live communication application concurrently including: a representation of a first participant of the live communication session displayed in the live communication application; and a first caption for audio data of the first participant displayed in the live communication application; while the user interface of the live communication application is displayed, receiving a sequence of one or more inputs that corresponds to a request to switch to displaying a respective user interface that is different from the live communication application; and in response to receiving the sequence of one or more inputs that corresponds to the request to switch to displaying the respective user interface: replacing at least a portion of the live communication application with the respective user interface that is different from the live communication application; displaying a reduced scale representation of the first participant of the live communication session overlaid on at least a portion of the respective user interface; and displaying a second caption for audio data of the first participant, wherein the second caption for audio data is displayed separately from the reduced scale representation of the first participant of the live communication session and is overlaid on at least a portion of the respective user interface.

**[0019]** In accordance with some embodiments, a method performed at a computer system that is in communication with a display generation component is described. The method comprises: receiving second information corresponding to second audio in a second application that is different from the first application; and displaying, via the display generation component, a system audio transcript, wherein displaying the system audio transcript includes displaying: a first transcript portion of the system audio transcript that includes a first caption based on the first audio; and caption, different from the first caption, based on the second audio.

**[0020]** In accordance with some embodiments, a non-transitory computer-readable storage medium is described. The non-transitory computer-readable storage medium stores one or more programs configured to be executed by one or more processors of a computer system that is in communication with a display generation component, the one or more programs including instructions for: receiving first information corresponding to first audio in a first application; receiving second information corresponding to second audio in a second application that is different from the first application; and displaying, via the display generation component, a system audio transcript, wherein displaying the system audio transcript includes displaying: a first transcript portion of the system audio transcript that includes a first caption based on the first audio; and a second transcript portion of the system audio transcript that includes a second caption, different from the first caption, based on the second audio.

**[0021]** In accordance with some embodiments, a transitory computer-readable storage medium is described. The transitory computer-readable storage medium stores one or more programs configured to be executed by one or more processors of a computer system that is in communication with a display generation component, the one or more programs including instructions for: receiving first information corresponding to first audio in a first application; receiving second information corresponding to second audio in a second application that is different from the first application; and displaying, via the display generation component, a system audio transcript, wherein displaying the system audio transcript includes displaying: a first transcript portion of the system audio transcript that includes a first caption based on the first audio; and a second transcript portion of the system audio transcript that includes a second caption, different from the first caption, based on the second audio.

**[0022]** In accordance with some embodiments, a computer system that is configured to communicate with a display generation component is described. The computer system comprises: one or more processors; and memory storing one or more programs configured to be executed by the one or more processors, the one or more programs including instructions for: receiving first information corresponding to first audio in a first application; receiving second information corresponding to second audio in a second application that is different from the first application; and displaying, via the display generation component, a system audio transcript, wherein displaying the system audio transcript includes displaying: a first transcript portion of the system audio transcript that includes a first caption based on the first audio; and a second transcript portion of the system audio transcript that includes a second caption, different from the first caption, based on the second audio.

**[0023]** In accordance with some embodiments, a computer system that is configured to communicate with a display generation component is described. The computer system comprises: means for receiving first information corresponding to first audio in a first application; means for receiving second information corresponding to second audio in a second application that is different from the first

application; and means for displaying, via the display generation component, a system audio transcript, wherein displaying the system audio transcript includes displaying: means for a first transcript portion of the system audio transcript that includes a first caption based on the first audio; and means for a second transcript portion of the system audio transcript that includes a second caption, different from the first caption, based on the second audio.

**[0024]** In accordance with some embodiments, a computer program product is described. The computer program product comprises one or more programs configured to be executed by one or more processors of a computer system that is in communication with a display generation component. The one or more programs include instructions for: receiving first information corresponding to first audio in a first application; receiving second information corresponding to second audio in a second application that is different from the first application; and displaying, via the display generation component, a system audio transcript, wherein displaying the system audio transcript includes displaying: a first transcript portion of the system audio transcript that includes a first caption based on the first audio; and a second transcript portion of the system audio transcript that includes a second caption, different from the first caption, based on the second audio.

**[0025]** In accordance with some embodiments, a method performed at a computer system that is in communication with a display generation component is described. The method comprises: displaying, via the display generation component, a set of captions in a first user interface region; while displaying the set of captions, detecting typed user input to add a typed caption to the set of captions corresponding to a respective activity at the computer system; and in response to detecting the typed user input to add the typed caption to the set of captions, displaying, via the display generation component, the typed caption in the first user interface region, wherein simulated speech based on the typed caption is provided as audio output for the respective activity.

**[0026]** In accordance with some embodiments, a non-transitory computer-readable storage medium is described. The non-transitory computer-readable storage medium stores one or more programs configured to be executed by one or more processors of a computer system that is in communication with a display generation component, the one or more programs including instructions for: displaying, via the display generation component, a set of captions in a first user interface region; while displaying the set of captions, detecting typed user input to add a typed caption to the set of captions corresponding to a respective activity at the computer system; and in response to detecting the typed user input to add the typed caption to the set of captions, displaying, via the display generation component, the typed caption in the first user interface region, wherein simulated speech based on the typed caption is provided as audio output for the respective activity.

**[0027]** In accordance with some embodiments, a transitory computer-readable storage medium is described. The transitory computer-readable storage medium stores one or more programs configured to be executed by one or more processors of a computer system that is in communication with a display generation component, the one or more programs including instructions for: displaying, via the display generation component, a set of captions in a first user interface region; while displaying the set of captions, detecting typed user input to add a typed caption to the set of captions corresponding to a respective activity at the computer system; and in response to detecting the typed user input to add the typed caption to the set of captions, displaying, via the display generation component, the typed caption in the first user interface region, wherein simulated speech based on the typed caption is provided as audio output for the respective activity.

**[0028]** In accordance with some embodiments, a computer system that is configured to communicate with a display generation component is described. The computer system comprises: one or more processors; and memory storing one or more programs configured to be executed by the one or more processors, the one or more programs including instructions for: displaying, via the display generation component, a set of captions in a first user interface region; while displaying the set of captions, detecting typed user input to add a typed caption to the set of captions corresponding to a respective activity at the computer system; and in response to detecting the typed user input to add the typed caption to the set of captions, displaying, via the display generation component, the typed caption in the first user interface region, wherein simulated speech based on the typed caption is provided as audio output for the respective activity.

**[0029]** In accordance with some embodiments, a computer system that is configured to communicate with a display generation component is described. The computer system comprises: means for displaying, via the display generation component, a set of captions in a first user interface region; means for, while displaying the set of captions, detecting typed user input to add a typed caption to the set of captions corresponding to a respective activity at the computer system; and means for, in response to detecting the typed user input to add the typed caption to the set of captions, displaying, via the display generation component, the typed caption in the first user interface region, wherein simulated speech based on the typed caption is provided as audio output for the respective activity.

**[0030]** In accordance with some embodiments, a computer program product is described. The computer program product comprises one or more programs configured to be executed by one or more processors of a computer system that is in communication with a display generation component. The one or more programs include instructions for: displaying, via the display generation component, a set of captions in a first user interface region; while displaying the set of captions, detecting typed user input to add a typed caption to the set of captions corresponding to a respective activity at the computer system; and in response to detecting the typed user input to add the typed caption to the set of captions, displaying, via the display generation component, the typed caption in the first user interface region, wherein simulated speech based on the typed caption is provided as audio output for the respective activity.

**[0031]** Executable instructions for performing these functions are, optionally, included in a non-transitory computer-readable storage medium or other computer program product configured for execution by one or more processors. Executable instructions for performing these functions are, optionally, included in a transitory computer-readable storage medium or other computer program product configured for execution by one or more processors.

**[0032]** Thus, devices are provided with faster, more efficient methods and interfaces for managing captions of a live communication session, thereby increasing the effectiveness, efficiency, and user satisfaction with such devices. Such methods and interfaces may complement or replace other methods for managing captions of a live communication session.

## DESCRIPTION OF THE FIGURES

**[0033]** For a better understanding of the various described embodiments, reference should be made to the Description of Embodiments below, in conjunction with the following drawings in which like reference numerals refer to corresponding parts throughout the figures.

**[0034]** FIG. **1**A is a block diagram illustrating a portable multifunction device with a touch-sensitive display in accordance with some embodiments.

**[0035]** FIG. **1**B is a block diagram illustrating exemplary components for event handling in accordance with some embodiments.

**[0036]** FIG. **2** illustrates a portable multifunction device having a touch screen in accordance with some embodiments.

**[0037]** FIG. **3** is a block diagram of an exemplary multifunction device with a display and a touch-sensitive surface in accordance with some embodiments.

**[0038]** FIG. **4**A illustrates an exemplary user interface for a menu of applications on a portable multifunction device in accordance with some embodiments.

**[0039]** FIG. **4**B illustrates an exemplary user interface for a multifunction device with a touch-sensitive surface that is separate from the display in accordance with some embodiments.

**[0040]** FIG. **5**A illustrates a personal electronic device in accordance with some embodiments.

**[0041]** FIG. **5**B is a block diagram illustrating a personal electronic device in accordance with some embodiments.

**[0042]** FIG. **5**C illustrates an exemplary diagram of a communication session between electronic devices in accordance with some embodiments.

**[0043]** FIGS. **6**A-**6**AE illustrate exemplary user interfaces for managing captions of a live communication session in accordance with some embodiments.

**[0044]** FIG. **7** depicts a flow diagram illustrating a method for displaying expanded caption information in a live communication session, in accordance with some embodiments.

**[0045]** FIG. **8** depicts a flow diagram illustrating a method for switching user interfaces during a live communication session, in accordance with some embodiments.

**[0046]** FIGS. **9**A-**9**AI illustrate exemplary user interfaces for providing captions in accordance with some embodiments.

**[0047]** FIG. **10** depicts a flow diagram illustrating a method for providing captions in accordance with some embodiments.

**[0048]** FIG. **11** depicts a flow diagram illustrating a method for providing captions in accordance with some embodiments.

## DESCRIPTION OF EMBODIMENTS

**[0049]** The following description sets forth exemplary methods, parameters, and the like. It should be recognized, however, that such description is not intended as a limitation on the scope of the present disclosure but is instead provided as a description of exemplary embodiments.

**[0050]** There is a need for electronic devices that provide efficient methods and interfaces for managing captions for a live communication session. For example, a technique may enable a user to expand captions for a live communication session. For another example, a technique may enable a user to switch user interfaces during the live communication session. Such techniques can reduce the cognitive burden on a user who managing captions for a live communication session, thereby enhancing productivity. Further, such techniques can reduce processor and battery power otherwise wasted on redundant user inputs.

**[0051]** Below, FIGS. **1**A-**1**B, **2**, **3**, **4**A-**4**B, and **5**A-**5**C provide a description of exemplary devices for performing the techniques for managing captions, for instance for a live communication session, in accordance with some embodiments. FIGS. **6**A-**6**AE illustrate exemplary user interfaces for managing captions for a live communication session, including displaying expanded caption information in a live communication session and switching user interfaces during a live communication session, in accordance with some embodiments. FIG. **7** is a flow diagram illustrating methods of displaying expanded caption information in a live communication session, in accordance with some embodiments. FIG. **8** is a flow diagram illustrating methods of switching user interfaces during a live communication session, in accordance with some embodiments. FIGS. **9**A-**9**AI illustrate exemplary user interfaces for providing captions, in accordance with some embodiments. FIG. **10** is a flow diagram illustrating methods of providing captions, in accordance with some embodiments. FIG. **11** is a flow diagram illustrating methods of providing captions, in accordance with some embodiments.

**[0052]** The processes described below enhance the operability of the devices and make the user-device interfaces more efficient (e.g., by helping the user to provide proper inputs and reducing user mistakes when operating/interacting with the device) through various techniques, including by providing improved visual feedback to the user, reducing the number of inputs needed to perform an operation, providing additional control options without cluttering the user interface with additional displayed controls, performing an operation when a set of conditions has been met without requiring further user input, increasing security, managing machine-generated transcriptions, and/or additional techniques. These techniques also reduce power usage and improve battery life of the device by enabling the user to use the device more quickly and efficiently.

**[0053]** In addition, in methods described herein where one or more steps are contingent upon one or more conditions having been met, it should be understood that the described method can be repeated in multiple repetitions so that over the course of the repetitions all of the conditions upon which steps in the method are contingent have been met in different repetitions of the method. For example, if a method requires performing a first step if a condition is satisfied, and a second step if the condition is not satisfied, then a person of ordinary skill would appreciate that the claimed steps are repeated until the condition has been both satisfied and not satisfied, in no particular order. Thus, a method described with one or more steps that are contingent upon one or more conditions having been met could be rewritten as a method that is repeated until each of the conditions described in the method

has been met. This, however, is not required of system or computer readable medium claims where the system or computer readable medium contains instructions for performing the contingent operations based on the satisfaction of the corresponding one or more conditions and thus is capable of determining whether the contingency has or has not been satisfied without explicitly repeating steps of a method until all of the conditions upon which steps in the method are contingent have been met. A person having ordinary skill in the art would also understand that, similar to a method with contingent steps, a system or computer readable storage medium can repeat the steps of a method as many times as are needed to ensure that all of the contingent steps have been performed.

**[0054]** Although the following description uses terms "first," "second," etc. to describe various elements, these elements should not be limited by the terms. In some embodiments, these terms are used to distinguish one element from another. For example, a first touch could be termed a second touch, and, similarly, a second touch could be termed a first touch, without departing from the scope of the various described embodiments. In some embodiments, the first touch and the second touch are two separate references to the same touch. In some embodiments, the first touch and the second touch are both touches, but they are not the same touch.

**[0055]** The terminology used in the description of the various described embodiments herein is for the purpose of describing particular embodiments only and is not intended to be limiting. As used in the description of the various described embodiments and the appended claims, the singular forms "a," "an," and "the" are intended to include the plural forms as well, unless the context clearly indicates otherwise. It will also be understood that the term "and/or" as used herein refers to and encompasses any and all possible combinations of one or more of the associated listed items. It will be further understood that the terms "includes," "including," "comprises," and/or "comprising," when used in this specification, specify the presence of stated features, integers, steps, operations, elements, and/or components, but do not preclude the presence or addition of one or more other features, integers, steps, operations, elements, components, and/or groups thereof.

**[0056]** The term "if" is, optionally, construed to mean "when" or "upon" or "in response to determining" or "in response to detecting," depending on the context. Similarly, the phrase "if it is determined" or "if [a stated condition or event] is detected" is, optionally, construed to mean "upon determining" or "in response to determining" or "upon detecting [the stated condition or event]" or "in response to detecting [the stated condition or event]," depending on the context.

**[0057]** Embodiments of electronic devices, user interfaces for such devices, and associated processes for using such devices are described. In some embodiments, the device is a portable communications device, such as a mobile telephone, that also contains other functions, such as PDA and/or music player functions. Exemplary embodiments of portable multifunction devices include, without limitation, the iPhone®, iPod Touch®, and iPad® devices from Apple Inc. of Cupertino, California. Other portable electronic devices, such as laptops or tablet computers with touch-sensitive surfaces (e.g., touch screen displays and/or touchpads), are, optionally, used. It should also be understood that, in some embodiments, the device is not a portable communications device, but is a desktop computer with a touch-sensitive surface (e.g., a touch screen display and/or a touchpad). In some embodiments, the electronic device is a computer system that is in communication (e.g., via wireless communication, via wired communication) with a display generation component. The display generation component is configured to provide visual output, such as display via a CRT display, display via an LED display, or display via image projection. In some embodiments, the display generation component is integrated with the computer system. In some embodiments, the display generation component is separate from the computer system. As used herein, "displaying" content includes causing to display the content (e.g., video data rendered or decoded by display controller **156**) by transmitting, via a wired or wireless connection, data (e.g., image data or video data) to an integrated or external display generation component to visually produce the content.

**[0058]** In the discussion that follows, an electronic device that includes a display and a touch-sensitive surface is described. It should be understood, however, that the electronic device optionally includes one or more other physical user-interface devices, such as a physical keyboard, a mouse, and/or a joystick.

**[0059]** The device typically supports a variety of applications, such as one or more of the following: a drawing application, a presentation application, a word processing application, a website creation application, a disk authoring application, a spreadsheet application, a gaming application, a telephone application, a video conferencing application, an e-mail application, an instant messaging application, a workout support application, a photo management application, a digital camera application, a digital video camera application, a web browsing application, a digital music player application, and/or a digital video player application.

**[0060]** The various applications that are executed on the device optionally use at least one common physical user-interface device, such as the touch-sensitive surface. One or more functions of the touch-sensitive surface as well as corresponding information displayed on the device are, optionally, adjusted and/or varied from one application to the next and/or within a respective application. In this way, a common physical architecture (such as the touch-sensitive surface) of the device optionally supports the variety of applications with user interfaces that are intuitive and transparent to the user.

**[0061]** Attention is now directed toward embodiments of portable devices with touch-sensitive displays. FIG. **1**A is a block diagram illustrating portable multifunction device **100** with touch-sensitive display system **112** in accordance with some embodiments. Touch-sensitive display **112** is sometimes called a "touch screen" for convenience and is sometimes known as or called a "touch-sensitive display system." Device **100** includes memory **102** (which optionally includes one or more computer-readable storage mediums), memory controller **122**, one or more processing units (CPUs) **120**, peripherals interface **118**, RF circuitry **108**, audio circuitry **110**, speaker **111**, microphone **113**, input/output (I/O) subsystem **106**, other input control devices **116**, and external port **124**. Device **100** optionally includes one or more optical sensors **164**. Device **100** optionally includes one or more contact intensity sensors **165** for detecting intensity of contacts on device **100** (e.g., a touch-sensitive

surface such as touch-sensitive display system **112** of device **100**). Device **100** optionally includes one or more tactile output generators **167** for generating tactile outputs on device **100** (e.g., generating tactile outputs on a touch-sensitive surface such as touch-sensitive display system **112** of device **100** or touchpad **355** of device **300**). These components optionally communicate over one or more communication buses or signal lines **103**.

**[0062]** As used in the specification and claims, the term "intensity" of a contact on a touch-sensitive surface refers to the force or pressure (force per unit area) of a contact (e.g., a finger contact) on the touch-sensitive surface, or to a substitute (proxy) for the force or pressure of a contact on the touch-sensitive surface. The intensity of a contact has a range of values that includes at least four distinct values and more typically includes hundreds of distinct values (e.g., at least 256). Intensity of a contact is, optionally, determined (or measured) using various approaches and various sensors or combinations of sensors. For example, one or more force sensors underneath or adjacent to the touch-sensitive surface are, optionally, used to measure force at various points on the touch-sensitive surface. In some implementations, force measurements from multiple force sensors are combined (e.g., a weighted average) to determine an estimated force of a contact. Similarly, a pressure-sensitive tip of a stylus is, optionally, used to determine a pressure of the stylus on the touch-sensitive surface. Alternatively, the size of the contact area detected on the touch-sensitive surface and/or changes thereto, the capacitance of the touch-sensitive surface proximate to the contact and/or changes thereto, and/or the resistance of the touch-sensitive surface proximate to the contact and/or changes thereto are, optionally, used as a substitute for the force or pressure of the contact on the touch-sensitive surface. In some implementations, the substitute measurements for contact force or pressure are used directly to determine whether an intensity threshold has been exceeded (e.g., the intensity threshold is described in units corresponding to the substitute measurements). In some implementations, the substitute measurements for contact force or pressure are converted to an estimated force or pressure, and the estimated force or pressure is used to determine whether an intensity threshold has been exceeded (e.g., the intensity threshold is a pressure threshold measured in units of pressure). Using the intensity of a contact as an attribute of a user input allows for user access to additional device functionality that may otherwise not be accessible by the user on a reduced-size device with limited real estate for displaying affordances (e.g., on a touch-sensitive display) and/or receiving user input (e.g., via a touch-sensitive display, a touch-sensitive surface, or a physical/mechanical control such as a knob or a button).

**[0063]** As used in the specification and claims, the term "tactile output" refers to physical displacement of a device relative to a previous position of the device, physical displacement of a component (e.g., a touch-sensitive surface) of a device relative to another component (e.g., housing) of the device, or displacement of the component relative to a center of mass of the device that will be detected by a user with the user's sense of touch. For example, in situations where the device or the component of the device is in contact with a surface of a user that is sensitive to touch (e.g., a finger, palm, or other part of a user's hand), the tactile output generated by the physical displacement will be interpreted by the user as a tactile sensation corresponding to a perceived change in physical characteristics of the device or the component of the device. For example, movement of a touch-sensitive surface (e.g., a touch-sensitive display or trackpad) is, optionally, interpreted by the user as a "down click" or "up click" of a physical actuator button. In some cases, a user will feel a tactile sensation such as an "down click" or "up click" even when there is no movement of a physical actuator button associated with the touch-sensitive surface that is physically pressed (e.g., displaced) by the user's movements. As another example, movement of the touch-sensitive surface is, optionally, interpreted or sensed by the user as "roughness" of the touch-sensitive surface, even when there is no change in smoothness of the touch-sensitive surface. While such interpretations of touch by a user will be subject to the individualized sensory perceptions of the user, there are many sensory perceptions of touch that are common to a large majority of users. Thus, when a tactile output is described as corresponding to a particular sensory perception of a user (e.g., an "up click," a "down click," "roughness"), unless otherwise stated, the generated tactile output corresponds to physical displacement of the device or a component thereof that will generate the described sensory perception for a typical (or average) user.

**[0064]** It should be appreciated that device **100** is only one example of a portable multifunction device, and that device **100** optionally has more or fewer components than shown, optionally combines two or more components, or optionally has a different configuration or arrangement of the components. The various components shown in FIG. **1**A are implemented in hardware, software, or a combination of both hardware and software, including one or more signal processing and/or application-specific integrated circuits.

**[0065]** Memory **102** optionally includes high-speed random access memory and optionally also includes non-volatile memory, such as one or more magnetic disk storage devices, flash memory devices, or other non-volatile solid-state memory devices. Memory controller **122** optionally controls access to memory **102** by other components of device **100**.

**[0066]** Peripherals interface **118** can be used to couple input and output peripherals of the device to CPU **120** and memory **102**. The one or more processors **120** run or execute various software programs (such as computer programs (e.g., including instructions)) and/or sets of instructions stored in memory **102** to perform various functions for device **100** and to process data. In some embodiments, peripherals interface **118**, CPU **120**, and memory controller **122** are, optionally, implemented on a single chip, such as chip **104**. In some other embodiments, they are, optionally, implemented on separate chips.

**[0067]** RF (radio frequency) circuitry **108** receives and sends RF signals, also called electromagnetic signals. RF circuitry **108** converts electrical signals to/from electromagnetic signals and communicates with communications networks and other communications devices via the electromagnetic signals. RF circuitry **108** optionally includes well-known circuitry for performing these functions, including but not limited to an antenna system, an RF transceiver, one or more amplifiers, a tuner, one or more oscillators, a digital signal processor, a CODEC chipset, a subscriber identity module (SIM) card, memory, and so forth. RF circuitry **108** optionally communicates with networks, such as the Internet, also referred to as the World Wide Web (WWW), an intranet and/or a wireless network, such as a cellular tele-

phone network, a wireless local area network (LAN) and/or a metropolitan area network (MAN), and other devices by wireless communication. The RF circuitry **108** optionally includes well-known circuitry for detecting near field communication (NFC) fields, such as by a short-range communication radio. The wireless communication optionally uses any of a plurality of communications standards, protocols, and technologies, including but not limited to Global System for Mobile Communications (GSM), Enhanced Data GSM Environment (EDGE), high-speed downlink packet access (HSDPA), high-speed uplink packet access (HSUPA), Evolution, Data-Only (EV-DO), HSPA, HSPA+, Dual-Cell HSPA (DC-HSPDA), long term evolution (LTE), near field communication (NFC), wideband code division multiple access (W-CDMA), code division multiple access (CDMA), time division multiple access (TDMA), Bluetooth, Bluetooth Low Energy (BTLE), Wireless Fidelity (Wi-Fi) (e.g., IEEE 802.11a, IEEE 802.11b, IEEE 802.11g, IEEE 802.11n, and/or IEEE 802.11ac), voice over Internet Protocol (VOIP), Wi-MAX, a protocol for e-mail (e.g., Internet message access protocol (IMAP) and/or post office protocol (POP)), instant messaging (e.g., extensible messaging and presence protocol (XMPP), Session Initiation Protocol for Instant Messaging and Presence Leveraging Extensions (SIMPLE), Instant Messaging and Presence Service (IMPS)), and/or Short Message Service (SMS), or any other suitable communication protocol, including communication protocols not yet developed as of the filing date of this document.

**[0068]** Audio circuitry **110**, speaker **111**, and microphone **113** provide an audio interface between a user and device **100**. Audio circuitry **110** receives audio data from peripherals interface **118**, converts the audio data to an electrical signal, and transmits the electrical signal to speaker **111**. Speaker **111** converts the electrical signal to human-audible sound waves. Audio circuitry **110** also receives electrical signals converted by microphone **113** from sound waves. Audio circuitry **110** converts the electrical signal to audio data and transmits the audio data to peripherals interface **118** for processing. Audio data is, optionally, retrieved from and/or transmitted to memory **102** and/or RF circuitry **108** by peripherals interface **118**. In some embodiments, audio circuitry **110** also includes a headset jack (e.g., **212**, FIG. **2**). The headset jack provides an interface between audio circuitry **110** and removable audio input/output peripherals, such as output-only headphones or a headset with both output (e.g., a headphone for one or both ears) and input (e.g., a microphone).

**[0069]** I/O subsystem **106** couples input/output peripherals on device **100**, such as touch screen **112** and other input control devices **116**, to peripherals interface **118**. I/O subsystem **106** optionally includes display controller **156**, optical sensor controller **158**, depth camera controller **169**, intensity sensor controller **159**, haptic feedback controller **161**, and one or more input controllers **160** for other input or control devices. The one or more input controllers **160** receive/send electrical signals from/to other input control devices **116**. The other input control devices **116** optionally include physical buttons (e.g., push buttons, rocker buttons, etc.), dials, slider switches, joysticks, click wheels, and so forth. In some embodiments, input controller(s) **160** are, optionally, coupled to any (or none) of the following: a keyboard, an infrared port, a USB port, and a pointer device such as a mouse. The one or more buttons (e.g., **208**, FIG. **2**) optionally include an up/down button for volume control of speaker **111** and/or microphone **113**. The one or more buttons optionally include a push button (e.g., **206**, FIG. **2**). In some embodiments, the electronic device is a computer system that is in communication (e.g., via wireless communication, via wired communication) with one or more input devices. In some embodiments, the one or more input devices include a touch-sensitive surface (e.g., a trackpad, as part of a touch-sensitive display). In some embodiments, the one or more input devices include one or more camera sensors (e.g., one or more optical sensors **164** and/or one or more depth camera sensors **175**), such as for tracking a user's gestures (e.g., hand gestures and/or air gestures) as input. In some embodiments, the one or more input devices are integrated with the computer system. In some embodiments, the one or more input devices are separate from the computer system. In some embodiments, an air gesture is a gesture that is detected without the user touching an input element that is part of the device (or independently of an input element that is a part of the device) and is based on detected motion of a portion of the user's body through the air including motion of the user's body relative to an absolute reference (e.g., an angle of the user's arm relative to the ground or a distance of the user's hand relative to the ground), relative to another portion of the user's body (e.g., movement of a hand of the user relative to a shoulder of the user, movement of one hand of the user relative to another hand of the user, and/or movement of a finger of the user relative to another finger or portion of a hand of the user), and/or absolute motion of a portion of the user's body (e.g., a tap gesture that includes movement of a hand in a predetermined pose by a predetermined amount and/or speed, or a shake gesture that includes a predetermined speed or amount of rotation of a portion of the user's body).

**[0070]** A quick press of the push button optionally disengages a lock of touch screen **112** or optionally begins a process that uses gestures on the touch screen to unlock the device, as described in U.S. patent application Ser. No. 11/322,549, "Unlocking a Device by Performing Gestures on an Unlock Image," filed Dec. 23, 2005, U.S. Pat. No. 7,657,849, which is hereby incorporated by reference in its entirety. A longer press of the push button (e.g., **206**) optionally turns power to device **100** on or off. The functionality of one or more of the buttons are, optionally, user-customizable. Touch screen **112** is used to implement virtual or soft buttons and one or more soft keyboards.

**[0071]** Touch-sensitive display **112** provides an input interface and an output interface between the device and a user. Display controller **156** receives and/or sends electrical signals from/to touch screen **112**. Touch screen **112** displays visual output to the user. The visual output optionally includes graphics, text, icons, video, and any combination thereof (collectively termed "graphics"). In some embodiments, some or all of the visual output optionally corresponds to user-interface objects.

**[0072]** Touch screen **112** has a touch-sensitive surface, sensor, or set of sensors that accepts input from the user based on haptic and/or tactile contact. Touch screen **112** and display controller **156** (along with any associated modules and/or sets of instructions in memory **102**) detect contact (and any movement or breaking of the contact) on touch screen **112** and convert the detected contact into interaction with user-interface objects (e.g., one or more soft keys, icons, web pages, or images) that are displayed on touch

screen **112**. In an exemplary embodiment, a point of contact between touch screen **112** and the user corresponds to a finger of the user.

**[0073]** Touch screen **112** optionally uses LCD (liquid crystal display) technology, LPD (light emitting polymer display) technology, or LED (light emitting diode) technology, although other display technologies are used in other embodiments. Touch screen **112** and display controller **156** optionally detect contact and any movement or breaking thereof using any of a plurality of touch sensing technologies now known or later developed, including but not limited to capacitive, resistive, infrared, and surface acoustic wave technologies, as well as other proximity sensor arrays or other elements for determining one or more points of contact with touch screen **112**. In an exemplary embodiment, projected mutual capacitance sensing technology is used, such as that found in the iPhone® and iPod Touch® from Apple Inc. of Cupertino, California.

**[0074]** A touch-sensitive display in some embodiments of touch screen **112** is, optionally, analogous to the multi-touch sensitive touchpads described in the following U.S. Pat. No. 6,323,846 (Westerman et al.), **6,570,557** (Westerman et al.), and/or **6,677,932** (Westerman), and/or U.S. Patent Publication 2002/0015024A1, each of which is hereby incorporated by reference in its entirety. However, touch screen **112** displays visual output from device **100**, whereas touch-sensitive touchpads do not provide visual output.

**[0075]** A touch-sensitive display in some embodiments of touch screen **112** is described in the following applications: (1) U.S. patent application Ser. No. 11/381,313, "Multipoint Touch Surface Controller," filed May 2, 2006; (2) U.S. patent application Ser. No. 10/840,862, "Multipoint Touchscreen," filed May 6, 2004; (3) U.S. patent application Ser. No. 10/903,964, "Gestures For Touch Sensitive Input Devices," filed Jul. 30, 2004; (4) U.S. patent application Ser. No. 11/048,264, "Gestures For Touch Sensitive Input Devices," filed Jan. 31, 2005; (5) U.S. patent application Ser. No. 11/038,590, "Mode-Based Graphical User Interfaces For Touch Sensitive Input Devices," filed Jan. 18, 2005; (6) U.S. patent application Ser. No. 11/228,758, "Virtual Input Device Placement On A Touch Screen User Interface," filed Sep. 16, 2005; (7) U.S. patent application Ser. No. 11/228,700, "Operation Of A Computer With A Touch Screen Interface," filed Sep. 16, 2005; (8) U.S. patent application Ser. No. 11/228,737, "Activating Virtual Keys Of A Touch-Screen Virtual Keyboard," filed Sep. 16, 2005; and (9) U.S. patent application Ser. No. 11/367,749, "Multi-Functional Hand-Held Device," filed Mar. 3, 2006. All of these applications are incorporated by reference herein in their entirety.

**[0076]** Touch screen **112** optionally has a video resolution in excess of 100 dpi. In some embodiments, the touch screen has a video resolution of approximately 160 dpi. The user optionally makes contact with touch screen **112** using any suitable object or appendage, such as a stylus, a finger, and so forth. In some embodiments, the user interface is designed to work primarily with finger-based contacts and gestures, which can be less precise than stylus-based input due to the larger area of contact of a finger on the touch screen. In some embodiments, the device translates the rough finger-based input into a precise pointer/cursor position or command for performing the actions desired by the user.

**[0077]** In some embodiments, in addition to the touch screen, device **100** optionally includes a touchpad for activating or deactivating particular functions. In some embodiments, the touchpad is a touch-sensitive area of the device that, unlike the touch screen, does not display visual output. The touchpad is, optionally, a touch-sensitive surface that is separate from touch screen **112** or an extension of the touch-sensitive surface formed by the touch screen.

**[0078]** Device **100** also includes power system **162** for powering the various components. Power system **162** optionally includes a power management system, one or more power sources (e.g., battery, alternating current (AC)), a recharging system, a power failure detection circuit, a power converter or inverter, a power status indicator (e.g., a light-emitting diode (LED)) and any other components associated with the generation, management and distribution of power in portable devices.

**[0079]** Device **100** optionally also includes one or more optical sensors **164**. FIG. **1**A shows an optical sensor coupled to optical sensor controller **158** in I/O subsystem **106**. Optical sensor **164** optionally includes charge-coupled device (CCD) or complementary metal-oxide semiconductor (CMOS) phototransistors. Optical sensor **164** receives light from the environment, projected through one or more lenses, and converts the light to data representing an image. In conjunction with imaging module **143** (also called a camera module), optical sensor **164** optionally captures still images or video. In some embodiments, an optical sensor is located on the back of device **100**, opposite touch screen display **112** on the front of the device so that the touch screen display is enabled for use as a viewfinder for still and/or video image acquisition. In some embodiments, an optical sensor is located on the front of the device so that the user's image is, optionally, obtained for video conferencing while the user views the other video conference participants on the touch screen display. In some embodiments, the position of optical sensor **164** can be changed by the user (e.g., by rotating the lens and the sensor in the device housing) so that a single optical sensor **164** is used along with the touch screen display for both video conferencing and still and/or video image acquisition.

**[0080]** Device **100** optionally also includes one or more depth camera sensors **175**. FIG. **1**A shows a depth camera sensor coupled to depth camera controller **169** in I/O subsystem **106**. Depth camera sensor **175** receives data from the environment to create a three dimensional model of an object (e.g., a face) within a scene from a viewpoint (e.g., a depth camera sensor). In some embodiments, in conjunction with imaging module **143** (also called a camera module), depth camera sensor **175** is optionally used to determine a depth map of different portions of an image captured by the imaging module **143**. In some embodiments, a depth camera sensor is located on the front of device **100** so that the user's image with depth information is, optionally, obtained for video conferencing while the user views the other video conference participants on the touch screen display and to capture selfies with depth map data. In some embodiments, the depth camera sensor **175** is located on the back of device, or on the back and the front of the device **100**. In some embodiments, the position of depth camera sensor **175** can be changed by the user (e.g., by rotating the lens and the sensor in the device housing) so that a depth camera sensor **175** is used along with the touch screen display for both video conferencing and still and/or video image acquisition.

**[0081]** Device **100** optionally also includes one or more contact intensity sensors **165**. FIG. **1**A shows a contact

intensity sensor coupled to intensity sensor controller **159** in I/O subsystem **106**. Contact intensity sensor **165** optionally includes one or more piezoresistive strain gauges, capacitive force sensors, electric force sensors, piezoelectric force sensors, optical force sensors, capacitive touch-sensitive surfaces, or other intensity sensors (e.g., sensors used to measure the force (or pressure) of a contact on a touch-sensitive surface). Contact intensity sensor **165** receives contact intensity information (e.g., pressure information or a proxy for pressure information) from the environment. In some embodiments, at least one contact intensity sensor is collocated with, or proximate to, a touch-sensitive surface (e.g., touch-sensitive display system **112**). In some embodiments, at least one contact intensity sensor is located on the back of device **100**, opposite touch screen display **112**, which is located on the front of device **100**.

**[0082]** Device **100** optionally also includes one or more proximity sensors **166**. FIG. **1**A shows proximity sensor **166** coupled to peripherals interface **118**. Alternately, proximity sensor **166** is, optionally, coupled to input controller **160** in I/O subsystem **106**. Proximity sensor **166** optionally performs as described in U.S. patent application Ser. No. 11/241,839, "Proximity Detector In Handheld Device"; Ser. No. 11/240,788, "Proximity Detector In Handheld Device"; Ser. No. 11/620,702, "Using Ambient Light Sensor To Augment Proximity Sensor Output"; Ser. No. 11/586,862, "Automated Response To And Sensing Of User Activity In Portable Devices"; and Ser. No. 11/638,251, "Methods And Systems For Automatic Configuration Of Peripherals," which are hereby incorporated by reference in their entirety. In some embodiments, the proximity sensor turns off and disables touch screen **112** when the multifunction device is placed near the user's ear (e.g., when the user is making a phone call).

**[0083]** Device **100** optionally also includes one or more tactile output generators **167**. FIG. **1**A shows a tactile output generator coupled to haptic feedback controller **161** in I/O subsystem **106**. Tactile output generator **167** optionally includes one or more electroacoustic devices such as speakers or other audio components and/or electromechanical devices that convert energy into linear motion such as a motor, solenoid, electroactive polymer, piezoelectric actuator, electrostatic actuator, or other tactile output generating component (e.g., a component that converts electrical signals into tactile outputs on the device). Contact intensity sensor **165** receives tactile feedback generation instructions from haptic feedback module **133** and generates tactile outputs on device **100** that are capable of being sensed by a user of device **100**. In some embodiments, at least one tactile output generator is collocated with, or proximate to, a touch-sensitive surface (e.g., touch-sensitive display system **112**) and, optionally, generates a tactile output by moving the touch-sensitive surface vertically (e.g., in/out of a surface of device **100**) or laterally (e.g., back and forth in the same plane as a surface of device **100**). In some embodiments, at least one tactile output generator sensor is located on the back of device **100**, opposite touch screen display **112**, which is located on the front of device **100**.

**[0084]** Device **100** optionally also includes one or more accelerometers **168**. FIG. **1**A shows accelerometer **168** coupled to peripherals interface **118**. Alternately, accelerometer **168** is, optionally, coupled to an input controller **160** in I/O subsystem **106**. Accelerometer **168** optionally performs as described in U.S. Patent Publication No. 20050190059, "Acceleration-based Theft Detection System for Portable Electronic Devices," and U.S. Patent Publication No. 20060017692, "Methods And Apparatuses For Operating A Portable Device Based On An Accelerometer," both of which are incorporated by reference herein in their entirety. In some embodiments, information is displayed on the touch screen display in a portrait view or a landscape view based on an analysis of data received from the one or more accelerometers. Device **100** optionally includes, in addition to accelerometer(s) **168**, a magnetometer and a GPS (or GLONASS or other global navigation system) receiver for obtaining information concerning the location and orientation (e.g., portrait or landscape) of device **100**.

**[0085]** In some embodiments, the software components stored in memory **102** include operating system **126**, communication module (or set of instructions) **128**, contact/motion module (or set of instructions) **130**, graphics module (or set of instructions) **132**, text input module (or set of instructions) **134**, Global Positioning System (GPS) module (or set of instructions) **135**, and applications (or sets of instructions) **136**. Furthermore, in some embodiments, memory **102** (FIG. **1**A) or **370** (FIG. **3**) stores device/global internal state **157**, as shown in FIGS. **1**A and **3**. Device/global internal state **157** includes one or more of: active application state, indicating which applications, if any, are currently active; display state, indicating what applications, views or other information occupy various regions of touch screen display **112**; sensor state, including information obtained from the device's various sensors and input control devices **116**; and location information concerning the device's location and/or attitude.

**[0086]** Operating system **126** (e.g., Darwin, RTXC, LINUX, UNIX, OS X, IOS, WINDOWS, or an embedded operating system such as VxWorks) includes various software components and/or drivers for controlling and managing general system tasks (e.g., memory management, storage device control, power management, etc.) and facilitates communication between various hardware and software components.

**[0087]** Communication module **128** facilitates communication with other devices over one or more external ports **124** and also includes various software components for handling data received by RF circuitry **108** and/or external port **124**. External port **124** (e.g., Universal Serial Bus (USB), FIREWIRE, etc.) is adapted for coupling directly to other devices or indirectly over a network (e.g., the Internet, wireless LAN, etc.). In some embodiments, the external port is a multi-pin (e.g., 30-pin) connector that is the same as, or similar to and/or compatible with, the 30-pin connector used on iPod® (trademark of Apple Inc.) devices.

**[0088]** Contact/motion module **130** optionally detects contact with touch screen **112** (in conjunction with display controller **156**) and other touch-sensitive devices (e.g., a touchpad or physical click wheel). Contact/motion module **130** includes various software components for performing various operations related to detection of contact, such as determining if contact has occurred (e.g., detecting a finger-down event), determining an intensity of the contact (e.g., the force or pressure of the contact or a substitute for the force or pressure of the contact), determining if there is movement of the contact and tracking the movement across the touch-sensitive surface (e.g., detecting one or more finger-dragging events), and determining if the contact has ceased (e.g., detecting a finger-up event or a break in

contact). Contact/motion module **130** receives contact data from the touch-sensitive surface. Determining movement of the point of contact, which is represented by a series of contact data, optionally includes determining speed (magnitude), velocity (magnitude and direction), and/or an acceleration (a change in magnitude and/or direction) of the point of contact. These operations are, optionally, applied to single contacts (e.g., one finger contacts) or to multiple simultaneous contacts (e.g., "multitouch"/multiple finger contacts). In some embodiments, contact/motion module **130** and display controller **156** detect contact on a touchpad.

**[0089]** In some embodiments, contact/motion module **130** uses a set of one or more intensity thresholds to determine whether an operation has been performed by a user (e.g., to determine whether a user has "clicked" on an icon). In some embodiments, at least a subset of the intensity thresholds are determined in accordance with software parameters (e.g., the intensity thresholds are not determined by the activation thresholds of particular physical actuators and can be adjusted without changing the physical hardware of device **100**). For example, a mouse "click" threshold of a trackpad or touch screen display can be set to any of a large range of predefined threshold values without changing the trackpad or touch screen display hardware. Additionally, in some implementations, a user of the device is provided with software settings for adjusting one or more of the set of intensity thresholds (e.g., by adjusting individual intensity thresholds and/or by adjusting a plurality of intensity thresholds at once with a system-level click "intensity" parameter).

**[0090]** Contact/motion module **130** optionally detects a gesture input by a user. Different gestures on the touch-sensitive surface have different contact patterns (e.g., different motions, timings, and/or intensities of detected contacts). Thus, a gesture is, optionally, detected by detecting a particular contact pattern. For example, detecting a finger tap gesture includes detecting a finger-down event followed by detecting a finger-up (liftoff) event at the same position (or substantially the same position) as the finger-down event (e.g., at the position of an icon). As another example, detecting a finger swipe gesture on the touch-sensitive surface includes detecting a finger-down event followed by detecting one or more finger-dragging events, and subsequently followed by detecting a finger-up (liftoff) event.

**[0091]** Graphics module **132** includes various known software components for rendering and displaying graphics on touch screen **112** or other display, including components for changing the visual impact (e.g., brightness, transparency, saturation, contrast, or other visual property) of graphics that are displayed. As used herein, the term "graphics" includes any object that can be displayed to a user, including, without limitation, text, web pages, icons (such as user-interface objects including soft keys), digital images, videos, animations, and the like.

**[0092]** In some embodiments, graphics module **132** stores data representing graphics to be used. Each graphic is, optionally, assigned a corresponding code. Graphics module **132** receives, from applications etc., one or more codes specifying graphics to be displayed along with, if necessary, coordinate data and other graphic property data, and then generates screen image data to output to display controller **156**.

**[0093]** Haptic feedback module **133** includes various software components for generating instructions used by tactile output generator(s) **167** to produce tactile outputs at one or more locations on device **100** in response to user interactions with device **100**.

**[0094]** Text input module **134**, which is, optionally, a component of graphics module **132**, provides soft keyboards for entering text in various applications (e.g., contacts module **137**, e-mail client module **140**, IM module **141**, browser module **147**, and any other application that needs text input).

**[0095]** GPS module **135** determines the location of the device and provides this information for use in various applications (e.g., to telephone module **138** for use in location-based dialing; to camera module **143** as picture/video metadata; and to applications that provide location-based services such as weather widgets, local yellow page widgets, and map/navigation widgets).

**[0096]** Applications **136** optionally include the following modules (or sets of instructions), or a subset or superset thereof:

- **[0097]** Contacts module **137** (sometimes called an address book or contact list);
- **[0098]** Telephone module **138**;
- **[0099]** Video conference module **139**;
- **[0100]** E-mail client module **140**;
- **[0101]** Instant messaging (IM) module **141**;
- **[0102]** Workout support module **142**;
- **[0103]** Camera module **143** for still and/or video images;
- **[0104]** Image management module **144**;
- **[0105]** Video player module;
- **[0106]** Music player module;
- **[0107]** Browser module **147**;
- **[0108]** Calendar module **148**;
- **[0109]** Widget modules **149**, which optionally include one or more of: weather widget **149-1**, stocks widget **149-2**, calculator widget **149-3**, alarm clock widget **149-4**, dictionary widget **149-5**, and other widgets obtained by the user, as well as user-created widgets **149-6**;
- **[0110]** Widget creator module **150** for making user-created widgets **149-6**;
- **[0111]** Search module **151**;
- **[0112]** Video and music player module **152**, which merges video player module and music player module;
- **[0113]** Notes module **153**;
- **[0114]** Map module **154**; and/or
- **[0115]** Online video module **155**.

**[0116]** Examples of other applications **136** that are, optionally, stored in memory **102** include other word processing applications, other image editing applications, drawing applications, presentation applications, JAVA-enabled applications, encryption, digital rights management, voice recognition, and voice replication.

**[0117]** In conjunction with touch screen **112**, display controller **156**, contact/motion module **130**, graphics module **132**, and text input module **134**, contacts module **137** are, optionally, used to manage an address book or contact list (e.g., stored in application internal state **192** of contacts module **137** in memory **102** or memory **370**), including: adding name(s) to the address book; deleting name(s) from the address book; associating telephone number(s), e-mail address(es), physical address(es) or other information with a name; associating an image with a name; categorizing and sorting names; providing telephone numbers or e-mail addresses to initiate and/or facilitate communications by

telephone module **138**, video conference module **139**, e-mail client module **140**, or IM module **141**; and so forth.

**[0118]** In conjunction with RF circuitry **108**, audio circuitry **110**, speaker **111**, microphone **113**, touch screen **112**, display controller **156**, contact/motion module **130**, graphics module **132**, and text input module **134**, telephone module **138** are optionally, used to enter a sequence of characters corresponding to a telephone number, access one or more telephone numbers in contacts module **137**, modify a telephone number that has been entered, dial a respective telephone number, conduct a conversation, and disconnect or hang up when the conversation is completed. As noted above, the wireless communication optionally uses any of a plurality of communications standards, protocols, and technologies.

**[0119]** In conjunction with RF circuitry **108**, audio circuitry **110**, speaker **111**, microphone **113**, touch screen **112**, display controller **156**, optical sensor **164**, optical sensor controller **158**, contact/motion module **130**, graphics module **132**, text input module **134**, contacts module **137**, and telephone module **138**, video conference module **139** includes executable instructions to initiate, conduct, and terminate a video conference between a user and one or more other participants in accordance with user instructions.

**[0120]** In conjunction with RF circuitry **108**, touch screen **112**, display controller **156**, contact/motion module **130**, graphics module **132**, and text input module **134**, e-mail client module **140** includes executable instructions to create, send, receive, and manage e-mail in response to user instructions. In conjunction with image management module **144**, e-mail client module **140** makes it very easy to create and send e-mails with still or video images taken with camera module **143**.

**[0121]** In conjunction with RF circuitry **108**, touch screen **112**, display controller **156**, contact/motion module **130**, graphics module **132**, and text input module **134**, the instant messaging module **141** includes executable instructions to enter a sequence of characters corresponding to an instant message, to modify previously entered characters, to transmit a respective instant message (for example, using a Short Message Service (SMS) or Multimedia Message Service (MMS) protocol for telephony-based instant messages or using XMPP, SIMPLE, or IMPS for Internet-based instant messages), to receive instant messages, and to view received instant messages. In some embodiments, transmitted and/or received instant messages optionally include graphics, photos, audio files, video files and/or other attachments as are supported in an MMS and/or an Enhanced Messaging Service (EMS). As used herein, "instant messaging" refers to both telephony-based messages (e.g., messages sent using SMS or MMS) and Internet-based messages (e.g., messages sent using XMPP, SIMPLE, or IMPS).

**[0122]** In conjunction with RF circuitry **108**, touch screen **112**, display controller **156**, contact/motion module **130**, graphics module **132**, text input module **134**, GPS module **135**, map module **154**, and music player module, workout support module **142** includes executable instructions to create workouts (e.g., with time, distance, and/or calorie burning goals); communicate with workout sensors (sports devices); receive workout sensor data; calibrate sensors used to monitor a workout; select and play music for a workout; and display, store, and transmit workout data.

**[0123]** In conjunction with touch screen **112**, display controller **156**, optical sensor(s) **164**, optical sensor controller **158**, contact/motion module **130**, graphics module **132**, and image management module **144**, camera module **143** includes executable instructions to capture still images or video (including a video stream) and store them into memory **102**, modify characteristics of a still image or video, or delete a still image or video from memory **102**.

**[0124]** In conjunction with touch screen **112**, display controller **156**, contact/motion module **130**, graphics module **132**, text input module **134**, and camera module **143**, image management module **144** includes executable instructions to arrange, modify (e.g., edit), or otherwise manipulate, label, delete, present (e.g., in a digital slide show or album), and store still and/or video images.

**[0125]** In conjunction with RF circuitry **108**, touch screen **112**, display controller **156**, contact/motion module **130**, graphics module **132**, and text input module **134**, browser module **147** includes executable instructions to browse the Internet in accordance with user instructions, including searching, linking to, receiving, and displaying web pages or portions thereof, as well as attachments and other files linked to web pages.

**[0126]** In conjunction with RF circuitry **108**, touch screen **112**, display controller **156**, contact/motion module **130**, graphics module **132**, text input module **134**, e-mail client module **140**, and browser module **147**, calendar module **148** includes executable instructions to create, display, modify, and store calendars and data associated with calendars (e.g., calendar entries, to-do lists, etc.) in accordance with user instructions.

**[0127]** In conjunction with RF circuitry **108**, touch screen **112**, display controller **156**, contact/motion module **130**, graphics module **132**, text input module **134**, and browser module **147**, widget modules **149** are mini-applications that are, optionally, downloaded and used by a user (e.g., weather widget **149-1**, stocks widget **149-2**, calculator widget **149-3**, alarm clock widget **149-4**, and dictionary widget **149-5**) or created by the user (e.g., user-created widget **149-6**). In some embodiments, a widget includes an HTML (Hypertext Markup Language) file, a CSS (Cascading Style Sheets) file, and a JavaScript file. In some embodiments, a widget includes an XML (Extensible Markup Language) file and a JavaScript file (e.g., Yahoo! Widgets).

**[0128]** In conjunction with RF circuitry **108**, touch screen **112**, display controller **156**, contact/motion module **130**, graphics module **132**, text input module **134**, and browser module **147**, the widget creator module **150** are, optionally, used by a user to create widgets (e.g., turning a user-specified portion of a web page into a widget).

**[0129]** In conjunction with touch screen **112**, display controller **156**, contact/motion module **130**, graphics module **132**, and text input module **134**, search module **151** includes executable instructions to search for text, music, sound, image, video, and/or other files in memory **102** that match one or more search criteria (e.g., one or more user-specified search terms) in accordance with user instructions.

**[0130]** In conjunction with touch screen **112**, display controller **156**, contact/motion module **130**, graphics module **132**, audio circuitry **110**, speaker **111**, RF circuitry **108**, and browser module **147**, video and music player module **152** includes executable instructions that allow the user to download and play back recorded music and other sound files stored in one or more file formats, such as MP3 or AAC files, and executable instructions to display, present, or otherwise play back videos (e.g., on touch screen **112** or on an external,

connected display via external port **124**). In some embodiments, device **100** optionally includes the functionality of an MP3 player, such as an iPod (trademark of Apple Inc.).

**[0131]** In conjunction with touch screen **112**, display controller **156**, contact/motion module **130**, graphics module **132**, and text input module **134**, notes module **153** includes executable instructions to create and manage notes, to-do lists, and the like in accordance with user instructions.

**[0132]** In conjunction with RF circuitry **108**, touch screen **112**, display controller **156**, contact/motion module **130**, graphics module **132**, text input module **134**, GPS module **135**, and browser module **147**, map module **154** are, optionally, used to receive, display, modify, and store maps and data associated with maps (e.g., driving directions, data on stores and other points of interest at or near a particular location, and other location-based data) in accordance with user instructions.

**[0133]** In conjunction with touch screen **112**, display controller **156**, contact/motion module **130**, graphics module **132**, audio circuitry **110**, speaker **111**, RF circuitry **108**, text input module **134**, e-mail client module **140**, and browser module **147**, online video module **155** includes instructions that allow the user to access, browse, receive (e.g., by streaming and/or download), play back (e.g., on the touch screen or on an external, connected display via external port **124**), send an e-mail with a link to a particular online video, and otherwise manage online videos in one or more file formats, such as H.264. In some embodiments, instant messaging module **141**, rather than e-mail client module **140**, is used to send a link to a particular online video. Additional description of the online video application can be found in U.S. Provisional Patent Application No. 60/936,562, "Portable Multifunction Device, Method, and Graphical User Interface for Playing Online Videos," filed Jun. 20, 2007, and U.S. patent application Ser. No. 11/968,067, "Portable Multifunction Device, Method, and Graphical User Interface for Playing Online Videos," filed Dec. 31, 2007, the contents of which are hereby incorporated by reference in their entirety.

**[0134]** Each of the above-identified modules and applications corresponds to a set of executable instructions for performing one or more functions described above and the methods described in this application (e.g., the computer-implemented methods and other information processing methods described herein). These modules (e.g., sets of instructions) need not be implemented as separate software programs (such as computer programs (e.g., including instructions)), procedures, or modules, and thus various subsets of these modules are, optionally, combined or otherwise rearranged in various embodiments. For example, video player module is, optionally, combined with music player module into a single module (e.g., video and music player module **152**, FIG. **1**A). In some embodiments, memory **102** optionally stores a subset of the modules and data structures identified above. Furthermore, memory **102** optionally stores additional modules and data structures not described above.

**[0135]** In some embodiments, device **100** is a device where operation of a predefined set of functions on the device is performed exclusively through a touch screen and/or a touchpad. By using a touch screen and/or a touchpad as the primary input control device for operation of device **100**, the number of physical input control devices (such as push buttons, dials, and the like) on device **100** is, optionally, reduced.

**[0136]** The predefined set of functions that are performed exclusively through a touch screen and/or a touchpad optionally include navigation between user interfaces. In some embodiments, the touchpad, when touched by the user, navigates device **100** to a main, home, or root menu from any user interface that is displayed on device **100**. In such embodiments, a "menu button" is implemented using a touchpad. In some other embodiments, the menu button is a physical push button or other physical input control device instead of a touchpad.

**[0137]** FIG. **1**B is a block diagram illustrating exemplary components for event handling in accordance with some embodiments. In some embodiments, memory **102** (FIG. **1**A) or **370** (FIG. **3**) includes event sorter **170** (e.g., in operating system **126**) and a respective application **136-1** (e.g., any of the aforementioned applications **137-151**, **155**, **380-390**).

**[0138]** Event sorter **170** receives event information and determines the application **136-1** and application view **191** of application **136-1** to which to deliver the event information. Event sorter **170** includes event monitor **171** and event dispatcher module **174**. In some embodiments, application **136-1** includes application internal state **192**, which indicates the current application view(s) displayed on touch-sensitive display **112** when the application is active or executing. In some embodiments, device/global internal state **157** is used by event sorter **170** to determine which application(s) is (are) currently active, and application internal state **192** is used by event sorter **170** to determine application views **191** to which to deliver event information.

**[0139]** In some embodiments, application internal state **192** includes additional information, such as one or more of: resume information to be used when application **136-1** resumes execution, user interface state information that indicates information being displayed or that is ready for display by application **136-1**, a state queue for enabling the user to go back to a prior state or view of application **136-1**, and a redo/undo queue of previous actions taken by the user.

**[0140]** Event monitor **171** receives event information from peripherals interface **118**. Event information includes information about a sub-event (e.g., a user touch on touch-sensitive display **112**, as part of a multi-touch gesture). Peripherals interface **118** transmits information it receives from I/O subsystem **106** or a sensor, such as proximity sensor **166**, accelerometer(s) **168**, and/or microphone **113** (through audio circuitry **110**). Information that peripherals interface **118** receives from I/O subsystem **106** includes information from touch-sensitive display **112** or a touch-sensitive surface.

**[0141]** In some embodiments, event monitor **171** sends requests to the peripherals interface **118** at predetermined intervals. In response, peripherals interface **118** transmits event information. In other embodiments, peripherals interface **118** transmits event information only when there is a significant event (e.g., receiving an input above a predetermined noise threshold and/or for more than a predetermined duration).

**[0142]** In some embodiments, event sorter **170** also includes a hit view determination module **172** and/or an active event recognizer determination module **173**.

**[0143]** Hit view determination module **172** provides software procedures for determining where a sub-event has taken place within one or more views when touch-sensitive display **112** displays more than one view. Views are made up of controls and other elements that a user can see on the display.

**[0144]** Another aspect of the user interface associated with an application is a set of views, sometimes herein called application views or user interface windows, in which information is displayed and touch-based gestures occur. The application views (of a respective application) in which a touch is detected optionally correspond to programmatic levels within a programmatic or view hierarchy of the application. For example, the lowest level view in which a touch is detected is, optionally, called the hit view, and the set of events that are recognized as proper inputs are, optionally, determined based, at least in part, on the hit view of the initial touch that begins a touch-based gesture.

**[0145]** Hit view determination module **172** receives information related to sub-events of a touch-based gesture. When an application has multiple views organized in a hierarchy, hit view determination module **172** identifies a hit view as the lowest view in the hierarchy which should handle the sub-event. In most circumstances, the hit view is the lowest level view in which an initiating sub-event occurs (e.g., the first sub-event in the sequence of sub-events that form an event or potential event). Once the hit view is identified by the hit view determination module **172**, the hit view typically receives all sub-events related to the same touch or input source for which it was identified as the hit view.

**[0146]** Active event recognizer determination module **173** determines which view or views within a view hierarchy should receive a particular sequence of sub-events. In some embodiments, active event recognizer determination module **173** determines that only the hit view should receive a particular sequence of sub-events. In other embodiments, active event recognizer determination module **173** determines that all views that include the physical location of a sub-event are actively involved views, and therefore determines that all actively involved views should receive a particular sequence of sub-events. In other embodiments, even if touch sub-events were entirely confined to the area associated with one particular view, views higher in the hierarchy would still remain as actively involved views.

**[0147]** Event dispatcher module **174** dispatches the event information to an event recognizer (e.g., event recognizer **180**). In embodiments including active event recognizer determination module **173**, event dispatcher module **174** delivers the event information to an event recognizer determined by active event recognizer determination module **173**. In some embodiments, event dispatcher module **174** stores in an event queue the event information, which is retrieved by a respective event receiver **182**.

**[0148]** In some embodiments, operating system **126** includes event sorter **170**. Alternatively, application **136-1** includes event sorter **170**. In yet other embodiments, event sorter **170** is a stand-alone module, or a part of another module stored in memory **102**, such as contact/motion module **130**.

**[0149]** In some embodiments, application **136-1** includes a plurality of event handlers **190** and one or more application views **191**, each of which includes instructions for handling touch events that occur within a respective view of the application's user interface. Each application view **191** of the application **136-1** includes one or more event recognizers **180**. Typically, a respective application view **191** includes a plurality of event recognizers **180**. In other embodiments, one or more of event recognizers **180** are part of a separate module, such as a user interface kit or a higher level object from which application **136-1** inherits methods and other properties. In some embodiments, a respective event handler **190** includes one or more of: data updater **176**, object updater **177**, GUI updater **178**, and/or event data **179** received from event sorter **170**. Event handler **190** optionally utilizes or calls data updater **176**, object updater **177**, or GUI updater **178** to update the application internal state **192**. Alternatively, one or more of the application views **191** include one or more respective event handlers **190**. Also, in some embodiments, one or more of data updater **176**, object updater **177**, and GUI updater **178** are included in a respective application view **191**.

**[0150]** A respective event recognizer **180** receives event information (e.g., event data **179**) from event sorter **170** and identifies an event from the event information. Event recognizer **180** includes event receiver **182** and event comparator **184**. In some embodiments, event recognizer **180** also includes at least a subset of: metadata **183**, and event delivery instructions **188** (which optionally include sub-event delivery instructions).

**[0151]** Event receiver **182** receives event information from event sorter **170**. The event information includes information about a sub-event, for example, a touch or a touch movement. Depending on the sub-event, the event information also includes additional information, such as location of the sub-event. When the sub-event concerns motion of a touch, the event information optionally also includes speed and direction of the sub-event. In some embodiments, events include rotation of the device from one orientation to another (e.g., from a portrait orientation to a landscape orientation, or vice versa), and the event information includes corresponding information about the current orientation (also called device attitude) of the device.

**[0152]** Event comparator **184** compares the event information to predefined event or sub-event definitions and, based on the comparison, determines an event or sub-event, or determines or updates the state of an event or sub-event. In some embodiments, event comparator **184** includes event definitions **186**. Event definitions **186** contain definitions of events (e.g., predefined sequences of sub-events), for example, event **1** (**187-1**), event **2** (**187-2**), and others. In some embodiments, sub-events in an event (**187**) include, for example, touch begin, touch end, touch movement, touch cancellation, and multiple touching. In one example, the definition for event **1** (**187-1**) is a double tap on a displayed object. The double tap, for example, comprises a first touch (touch begin) on the displayed object for a predetermined phase, a first liftoff (touch end) for a predetermined phase, a second touch (touch begin) on the displayed object for a predetermined phase, and a second liftoff (touch end) for a predetermined phase. In another example, the definition for event **2** (**187-2**) is a dragging on a displayed object. The dragging, for example, comprises a touch (or contact) on the displayed object for a predetermined phase, a movement of the touch across touch-sensitive display **112**, and liftoff of the touch (touch end). In some embodiments, the event also includes information for one or more associated event handlers **190**.

**[0153]** In some embodiments, event definition **187** includes a definition of an event for a respective user-interface object. In some embodiments, event comparator **184** performs a hit test to determine which user-interface object is associated with a sub-event. For example, in an application view in which three user-interface objects are displayed on touch-sensitive display **112**, when a touch is detected on touch-sensitive display **112**, event comparator **184** performs a hit test to determine which of the three user-interface objects is associated with the touch (sub-event). If each displayed object is associated with a respective event handler **190**, the event comparator uses the result of the hit test to determine which event handler **190** should be activated. For example, event comparator **184** selects an event handler associated with the sub-event and the object triggering the hit test.

**[0154]** In some embodiments, the definition for a respective event (**187**) also includes delayed actions that delay delivery of the event information until after it has been determined whether the sequence of sub-events does or does not correspond to the event recognizer's event type.

**[0155]** When a respective event recognizer **180** determines that the series of sub-events do not match any of the events in event definitions **186**, the respective event recognizer **180** enters an event impossible, event failed, or event ended state, after which it disregards subsequent sub-events of the touch-based gesture. In this situation, other event recognizers, if any, that remain active for the hit view continue to track and process sub-events of an ongoing touch-based gesture.

**[0156]** In some embodiments, a respective event recognizer **180** includes metadata **183** with configurable properties, flags, and/or lists that indicate how the event delivery system should perform sub-event delivery to actively involved event recognizers. In some embodiments, metadata **183** includes configurable properties, flags, and/or lists that indicate how event recognizers interact, or are enabled to interact, with one another. In some embodiments, metadata **183** includes configurable properties, flags, and/or lists that indicate whether sub-events are delivered to varying levels in the view or programmatic hierarchy.

**[0157]** In some embodiments, a respective event recognizer **180** activates event handler **190** associated with an event when one or more particular sub-events of an event are recognized. In some embodiments, a respective event recognizer **180** delivers event information associated with the event to event handler **190**. Activating an event handler **190** is distinct from sending (and deferred sending) sub-events to a respective hit view. In some embodiments, event recognizer **180** throws a flag associated with the recognized event, and event handler **190** associated with the flag catches the flag and performs a predefined process.

**[0158]** In some embodiments, event delivery instructions **188** include sub-event delivery instructions that deliver event information about a sub-event without activating an event handler. Instead, the sub-event delivery instructions deliver event information to event handlers associated with the series of sub-events or to actively involved views. Event handlers associated with the series of sub-events or with actively involved views receive the event information and perform a predetermined process.

**[0159]** In some embodiments, data updater **176** creates and updates data used in application **136-1**. For example, data updater **176** updates the telephone number used in contacts module **137**, or stores a video file used in video player module. In some embodiments, object updater **177** creates and updates objects used in application **136-1**. For example, object updater **177** creates a new user-interface object or updates the position of a user-interface object. GUI updater **178** updates the GUI. For example, GUI updater **178** prepares display information and sends it to graphics module **132** for display on a touch-sensitive display.

**[0160]** In some embodiments, event handler(s) **190** includes or has access to data updater **176**, object updater **177**, and GUI updater **178**. In some embodiments, data updater **176**, object updater **177**, and GUI updater **178** are included in a single module of a respective application **136-1** or application view **191**. In other embodiments, they are included in two or more software modules.

**[0161]** It shall be understood that the foregoing discussion regarding event handling of user touches on touch-sensitive displays also applies to other forms of user inputs to operate multifunction devices **100** with input devices, not all of which are initiated on touch screens. For example, mouse movement and mouse button presses, optionally coordinated with single or multiple keyboard presses or holds; contact movements such as taps, drags, scrolls, etc. on touchpads; pen stylus inputs; movement of the device; oral instructions; detected eye movements; biometric inputs; and/or any combination thereof are optionally utilized as inputs corresponding to sub-events which define an event to be recognized.

**[0162]** FIG. **2** illustrates a portable multifunction device **100** having a touch screen **112** in accordance with some embodiments. The touch screen optionally displays one or more graphics within user interface (UI) **200**. In this embodiment, as well as others described below, a user is enabled to select one or more of the graphics by making a gesture on the graphics, for example, with one or more fingers **202** (not drawn to scale in the figure) or one or more styluses **203** (not drawn to scale in the figure). In some embodiments, selection of one or more graphics occurs when the user breaks contact with the one or more graphics. In some embodiments, the gesture optionally includes one or more taps, one or more swipes (from left to right, right to left, upward and/or downward), and/or a rolling of a finger (from right to left, left to right, upward and/or downward) that has made contact with device **100**. In some implementations or circumstances, inadvertent contact with a graphic does not select the graphic. For example, a swipe gesture that sweeps over an application icon optionally does not select the corresponding application when the gesture corresponding to selection is a tap.

**[0163]** Device **100** optionally also include one or more physical buttons, such as "home" or menu button **204**. As described previously, menu button **204** is, optionally, used to navigate to any application **136** in a set of applications that are, optionally, executed on device **100**. Alternatively, in some embodiments, the menu button is implemented as a soft key in a GUI displayed on touch screen **112**.

**[0164]** In some embodiments, device **100** includes touch screen **112**, menu button **204**, push button **206** for powering the device on/off and locking the device, volume adjustment button(s) **208**, subscriber identity module (SIM) card slot **210**, headset jack **212**, and docking/charging external port **124**. Push button **206** is, optionally, used to turn the power on/off on the device by depressing the button and holding the button in the depressed state for a predefined time interval; to lock the device by depressing the button and releasing the

button before the predefined time interval has elapsed; and/or to unlock the device or initiate an unlock process. In an alternative embodiment, device **100** also accepts verbal input for activation or deactivation of some functions through microphone **113**. Device **100** also, optionally, includes one or more contact intensity sensors **165** for detecting intensity of contacts on touch screen **112** and/or one or more tactile output generators **167** for generating tactile outputs for a user of device **100**.

**[0165]** FIG. **3** is a block diagram of an exemplary multifunction device with a display and a touch-sensitive surface in accordance with some embodiments. Device **300** need not be portable. In some embodiments, device **300** is a laptop computer, a desktop computer, a tablet computer, a multimedia player device, a navigation device, an educational device (such as a child's learning toy), a gaming system, or a control device (e.g., a home or industrial controller). Device **300** typically includes one or more processing units (CPUs) **310**, one or more network or other communications interfaces **360**, memory **370**, and one or more communication buses **320** for interconnecting these components. Communication buses **320** optionally include circuitry (sometimes called a chipset) that interconnects and controls communications between system components. Device **300** includes input/output (I/O) interface **330** comprising display **340**, which is typically a touch screen display. I/O interface **330** also optionally includes a keyboard and/or mouse (or other pointing device) **350** and touchpad **355**, tactile output generator **357** for generating tactile outputs on device **300** (e.g., similar to tactile output generator(s) **167** described above with reference to FIG. **1**A), sensors **359** (e.g., optical, acceleration, proximity, touch-sensitive, and/or contact intensity sensors similar to contact intensity sensor(s) **165** described above with reference to FIG. **1**A). Memory **370** includes high-speed random access memory, such as DRAM, SRAM, DDR RAM, or other random access solid state memory devices; and optionally includes non-volatile memory, such as one or more magnetic disk storage devices, optical disk storage devices, flash memory devices, or other non-volatile solid state storage devices. Memory **370** optionally includes one or more storage devices remotely located from CPU(s) **310**. In some embodiments, memory **370** stores programs, modules, and data structures analogous to the programs, modules, and data structures stored in memory **102** of portable multifunction device **100** (FIG. **1**A), or a subset thereof. Furthermore, memory **370** optionally stores additional programs, modules, and data structures not present in memory **102** of portable multifunction device **100**. For example, memory **370** of device **300** optionally stores drawing module **380**, presentation module **382**, word processing module **384**, website creation module **386**, disk authoring module **388**, and/or spreadsheet module **390**, while memory **102** of portable multifunction device **100** (FIG. **1**A) optionally does not store these modules.

**[0166]** Each of the above-identified elements in FIG. **3** is, optionally, stored in one or more of the previously mentioned memory devices. Each of the above-identified modules corresponds to a set of instructions for performing a function described above. The above-identified modules or computer programs (e.g., sets of instructions or including instructions) need not be implemented as separate software programs (such as computer programs (e.g., including instructions)), procedures, or modules, and thus various subsets of these modules are, optionally, combined or otherwise rearranged in various embodiments. In some embodiments, memory **370** optionally stores a subset of the modules and data structures identified above. Furthermore, memory **370** optionally stores additional modules and data structures not described above.

**[0167]** Attention is now directed towards embodiments of user interfaces that are, optionally, implemented on, for example, portable multifunction device **100**.

**[0168]** FIG. **4**A illustrates an exemplary user interface for a menu of applications on portable multifunction device **100** in accordance with some embodiments. Similar user interfaces are, optionally, implemented on device **300**. In some embodiments, user interface **400** includes the following elements, or a subset or superset thereof:

- **[0169]** Signal strength indicator(s) **402** for wireless communication(s), such as cellular and Wi-Fi signals;
- **[0170]** Time **404**;
- **[0171]** Bluetooth indicator **405**;
- **[0172]** Battery status indicator **406**;
- **[0173]** Tray **408** with icons for frequently used applications, such as:
  - **[0174]** Icon **416** for telephone module **138**, labeled "Phone," which optionally includes an indicator **414** of the number of missed calls or voicemail messages;
  - **[0175]** Icon **418** for e-mail client module **140**, labeled "Mail," which optionally includes an indicator **410** of the number of unread e-mails;
  - **[0176]** Icon **420** for browser module **147**, labeled "Browser;" and
  - **[0177]** Icon **422** for video and music player module **152**, also referred to as iPod (trademark of Apple Inc.) module **152**, labeled "iPod;" and
- **[0178]** Icons for other applications, such as:
  - **[0179]** Icon **424** for IM module **141**, labeled "Messages;"
  - **[0180]** Icon **426** for calendar module **148**, labeled "Calendar;"
  - **[0181]** Icon **428** for image management module **144**, labeled "Photos;"
  - **[0182]** Icon **430** for camera module **143**, labeled "Camera;"
  - **[0183]** Icon **432** for online video module **155**, labeled "Online Video;"
  - **[0184]** Icon **434** for stocks widget **149-2**, labeled "Stocks;"
  - **[0185]** Icon **436** for map module **154**, labeled "Maps;"
  - **[0186]** Icon **438** for weather widget **149-1**, labeled "Weather;"
  - **[0187]** Icon **440** for alarm clock widget **149-4**, labeled "Clock;"
  - **[0188]** Icon **442** for workout support module **142**, labeled "Workout Support;"
  - **[0189]** Icon **444** for notes module **153**, labeled "Notes;" and
  - **[0190]** Icon **446** for a settings application or module, labeled "Settings," which provides access to settings for device **100** and its various applications **136**.

**[0191]** It should be noted that the icon labels illustrated in FIG. **4**A are merely exemplary. For example, icon **422** for video and music player module **152** is labeled "Music" or "Music Player." Other labels are, optionally, used for various application icons. In some embodiments, a label for a respective application icon includes a name of an application

corresponding to the respective application icon. In some embodiments, a label for a particular application icon is distinct from a name of an application corresponding to the particular application icon.

**[0192]** FIG. **4**B illustrates an exemplary user interface on a device (e.g., device **300**, FIG. **3**) with a touch-sensitive surface **451** (e.g., a tablet or touchpad **355**, FIG. **3**) that is separate from the display **450** (e.g., touch screen display **112**). Device **300** also, optionally, includes one or more contact intensity sensors (e.g., one or more of sensors **359**) for detecting intensity of contacts on touch-sensitive surface **451** and/or one or more tactile output generators **357** for generating tactile outputs for a user of device **300**.

**[0193]** Although some of the examples that follow will be given with reference to inputs on touch screen display **112** (where the touch-sensitive surface and the display are combined), in some embodiments, the device detects inputs on a touch-sensitive surface that is separate from the display, as shown in FIG. **4**B. In some embodiments, the touch-sensitive surface (e.g., **451** in FIG. **4**B) has a primary axis (e.g., **452** in FIG. **4**B) that corresponds to a primary axis (e.g., **453** in FIG. **4**B) on the display (e.g., display **450**). In accordance with these embodiments, the device detects contacts (e.g., contact **460** and contact **462** in FIG. **4**B) with the touch-sensitive surface **451** at locations that correspond to respective locations on the display (e.g., in FIG. **4**B, contact **460** corresponds to **468** and contact **462** corresponds to **470**). In this way, user inputs (e.g., contacts **460** and **462**, and movements thereof) detected by the device on the touch-sensitive surface (e.g., **451** in FIG. **4**B) are used by the device to manipulate the user interface on the display (e.g., **450** in FIG. **4**B) of the multifunction device when the touch-sensitive surface is separate from the display. It should be understood that similar methods are, optionally, used for other user interfaces described herein.

**[0194]** Additionally, while the following examples are given primarily with reference to finger inputs (e.g., finger contacts, finger tap gestures, finger swipe gestures), it should be understood that, in some embodiments, one or more of the finger inputs are replaced with input from another input device (e.g., a mouse-based input or stylus input). For example, a swipe gesture is, optionally, replaced with a mouse click (e.g., instead of a contact) followed by movement of the cursor along the path of the swipe (e.g., instead of movement of the contact). As another example, a tap gesture is, optionally, replaced with a mouse click while the cursor is located over the location of the tap gesture (e.g., instead of detection of the contact followed by ceasing to detect the contact). Similarly, when multiple user inputs are simultaneously detected, it should be understood that multiple computer mice are, optionally, used simultaneously, or a mouse and finger contacts are, optionally, used simultaneously.

**[0195]** FIG. **5**A illustrates exemplary personal electronic device **500**. Device **500** includes body **502**. In some embodiments, device **500** can include some or all of the features described with respect to devices **100** and **300** (e.g., FIGS. **1**A-**4**B). In some embodiments, device **500** has touch-sensitive display screen **504**, hereafter touch screen **504**. Alternatively, or in addition to touch screen **504**, device **500** has a display and a touch-sensitive surface. As with devices **100** and **300**, in some embodiments, touch screen **504** (or the touch-sensitive surface) optionally includes one or more intensity sensors for detecting intensity of contacts (e.g., touches) being applied. The one or more intensity sensors of touch screen **504** (or the touch-sensitive surface) can provide output data that represents the intensity of touches. The user interface of device **500** can respond to touches based on their intensity, meaning that touches of different intensities can invoke different user interface operations on device **500**.

**[0196]** Exemplary techniques for detecting and processing touch intensity are found, for example, in related applications: International Patent Application Serial No.

**[0197]** PCT/US2013/040061, titled "Device, Method, and Graphical User Interface for Displaying User Interface Objects Corresponding to an Application," filed May 8, 2013, published as WIPO Publication No. WO/2013/169849, and International Patent Application Serial No. PCT/US2013/069483, titled "Device, Method, and Graphical User Interface for Transitioning Between Touch Input to Display Output Relationships," filed Nov. 11, 2013, published as WIPO Publication No. WO/2014/105276, each of which is hereby incorporated by reference in their entirety.

**[0198]** In some embodiments, device **500** has one or more input mechanisms **506** and **508**. Input mechanisms **506** and **508**, if included, can be physical. Examples of physical input mechanisms include push buttons and rotatable mechanisms. In some embodiments, device **500** has one or more attachment mechanisms. Such attachment mechanisms, if included, can permit attachment of device **500** with, for example, hats, eyewear, earrings, necklaces, shirts, jackets, bracelets, watch straps, chains, trousers, belts, shoes, purses, backpacks, and so forth. These attachment mechanisms permit device **500** to be worn by a user.

**[0199]** FIG. **5**B depicts exemplary personal electronic device **500**. In some embodiments, device **500** can include some or all of the components described with respect to FIGS. **1**A, **1**B, and **3**. Device **500** has bus **512** that operatively couples I/O section **514** with one or more computer processors **516** and memory **518**. I/O section **514** can be connected to display **504**, which can have touch-sensitive component **522** and, optionally, intensity sensor **524** (e.g., contact intensity sensor). In addition, I/O section **514** can be connected with communication unit **530** for receiving application and operating system data, using Wi-Fi, Bluetooth, near field communication (NFC), cellular, and/or other wireless communication techniques. Device **500** can include input mechanisms **506** and/or **508**. Input mechanism **506** is, optionally, a rotatable input device or a depressible and rotatable input device, for example. Input mechanism **508** is, optionally, a button, in some examples.

**[0200]** Input mechanism **508** is, optionally, a microphone, in some examples. Personal electronic device **500** optionally includes various sensors, such as GPS sensor **532**, accelerometer **534**, directional sensor **540** (e.g., compass), gyroscope **536**, motion sensor **538**, and/or a combination thereof, all of which can be operatively connected to I/O section **514**.

**[0201]** Memory **518** of personal electronic device **500** can include one or more non-transitory computer-readable storage mediums, for storing computer-executable instructions, which, when executed by one or more computer processors **516**, for example, can cause the computer processors to perform the techniques described below, including processes **700**, **800**, **1000**, and **1100** (FIGS. **7**, **8**, **10**, and **11**). A computer-readable storage medium can be any medium that can tangibly contain or store computer-executable instructions for use by or in connection with the instruction execution system, apparatus, or device. In some examples,

the storage medium is a transitory computer-readable storage medium. In some examples, the storage medium is a non-transitory computer-readable storage medium. The non-transitory computer-readable storage medium can include, but is not limited to, magnetic, optical, and/or semiconductor storages. Examples of such storage include magnetic disks, optical discs based on CD, DVD, or Blu-ray technologies, as well as persistent solid-state memory such as flash, solid-state drives, and the like. Personal electronic device **500** is not limited to the components and configuration of FIG. **5**B, but can include other or additional components in multiple configurations.

**[0202]** As used here, the term "affordance" refers to a user-interactive graphical user interface object that is, optionally, displayed on the display screen of devices **100**, **300**, and/or **500** (FIGS. **1**A, **3**, and **5**A-**5**C). For example, an image (e.g., icon), a button, and text (e.g., hyperlink) each optionally constitute an affordance.

**[0203]** As used herein, the term "focus selector" refers to an input element that indicates a current part of a user interface with which a user is interacting. In some implementations that include a cursor or other location marker, the cursor acts as a "focus selector" so that when an input (e.g., a press input) is detected on a touch-sensitive surface (e.g., touchpad **355** in FIG. **3** or touch-sensitive surface **451** in FIG. **4**B) while the cursor is over a particular user interface element (e.g., a button, window, slider, or other user interface element), the particular user interface element is adjusted in accordance with the detected input. In some implementations that include a touch screen display (e.g., touch-sensitive display system **112** in FIG. **1**A or touch screen **112** in FIG. **4**A) that enables direct interaction with user interface elements on the touch screen display, a detected contact on the touch screen acts as a "focus selector" so that when an input (e.g., a press input by the contact) is detected on the touch screen display at a location of a particular user interface element (e.g., a button, window, slider, or other user interface element), the particular user interface element is adjusted in accordance with the detected input. In some implementations, focus is moved from one region of a user interface to another region of the user interface without corresponding movement of a cursor or movement of a contact on a touch screen display (e.g., by using a tab key or arrow keys to move focus from one button to another button); in these implementations, the focus selector moves in accordance with movement of focus between different regions of the user interface. Without regard to the specific form taken by the focus selector, the focus selector is generally the user interface element (or contact on a touch screen display) that is controlled by the user so as to communicate the user's intended interaction with the user interface (e.g., by indicating, to the device, the element of the user interface with which the user is intending to interact). For example, the location of a focus selector (e.g., a cursor, a contact, or a selection box) over a respective button while a press input is detected on the touch-sensitive surface (e.g., a touchpad or touch screen) will indicate that the user is intending to activate the respective button (as opposed to other user interface elements shown on a display of the device).

**[0204]** As used in the specification and claims, the term "characteristic intensity" of a contact refers to a characteristic of the contact based on one or more intensities of the contact. In some embodiments, the characteristic intensity is based on multiple intensity samples. The characteristic intensity is, optionally, based on a predefined number of intensity samples, or a set of intensity samples collected during a predetermined time period (e.g., 0.5, 0.1, 0.2, 0.5, 1, 2, 5, 10 seconds) relative to a predefined event (e.g., after detecting the contact, prior to detecting liftoff of the contact, before or after detecting a start of movement of the contact, prior to detecting an end of the contact, before or after detecting an increase in intensity of the contact, and/or before or after detecting a decrease in intensity of the contact). A characteristic intensity of a contact is, optionally, based on one or more of: a maximum value of the intensities of the contact, a mean value of the intensities of the contact, an average value of the intensities of the contact, a top 10 percentile value of the intensities of the contact, a value at the half maximum of the intensities of the contact, a value at the 90 percent maximum of the intensities of the contact, or the like. In some embodiments, the duration of the contact is used in determining the characteristic intensity (e.g., when the characteristic intensity is an average of the intensity of the contact over time). In some embodiments, the characteristic intensity is compared to a set of one or more intensity thresholds to determine whether an operation has been performed by a user. For example, the set of one or more intensity thresholds optionally includes a first intensity threshold and a second intensity threshold. In this example, a contact with a characteristic intensity that does not exceed the first threshold results in a first operation, a contact with a characteristic intensity that exceeds the first intensity threshold and does not exceed the second intensity threshold results in a second operation, and a contact with a characteristic intensity that exceeds the second threshold results in a third operation. In some embodiments, a comparison between the characteristic intensity and one or more thresholds is used to determine whether or not to perform one or more operations (e.g., whether to perform a respective operation or forgo performing the respective operation), rather than being used to determine whether to perform a first operation or a second operation.

**[0205]** FIG. **5**C depicts an exemplary diagram of a communication session between electronic devices **500**A, **500**B, and **500**C. Devices **500**A, **500**B, and **500**C are similar to electronic device **500**, and each share with each other one or more data connections **510** such as an Internet connection, Wi-Fi connection, cellular connection, short-range communication connection, and/or any other such data connection or network so as to facilitate real time communication of audio and/or video data between the respective devices for a duration of time. In some embodiments, an exemplary communication session can include a shared-data session whereby data is communicated from one or more of the electronic devices to the other electronic devices to enable concurrent output of respective content at the electronic devices. In some embodiments, an exemplary communication session can include a video conference session whereby audio and/or video data is communicated between devices **500**A, **500**B, and **500**C such that users of the respective devices can engage in real time communication using the electronic devices.

**[0206]** In FIG. **5**C, device **500**A represents an electronic device associated with User A.

**[0207]** Device **500**A is in communication (via data connections **510**) with devices **500**B and **500**C, which are associated with User B and User C, respectively. Device

**500**A includes camera **501**A, which is used to capture video data for the communication session, and display **504**A (e.g., a touchscreen), which is used to display content associated with the communication session. Device **500**A also includes other components, such as a microphone (e.g., **113**) for recording audio for the communication session and a speaker (e.g., **111**) for outputting audio for the communication session.

**[0208]** Device **500**A displays, via display **504**A, communication UI **520**A, which is a user interface for facilitating a communication session (e.g., a video conference session) between device **500**B and device **500**C. Communication UI **520**A includes video feed **525-1**A and video feed **525-2**A. Video feed **525-1**A is a representation of video data captured at device **500**B (e.g., using camera **501**B) and communicated from device **500**B to devices **500**A and **500**C during the communication session. Video feed **525-2**A is a representation of video data captured at device **500**C (e.g., using camera **501**C) and communicated from device **500**C to devices **500**A and **500**B during the communication session.

**[0209]** Communication UI **520**A includes camera preview **550**A, which is a representation of video data captured at device **500**A via camera **501**A. Camera preview **550**A represents to User A the prospective video feed of User A that is displayed at respective devices **500**B and **500**C.

**[0210]** Communication UI **520**A includes one or more controls **555**A for controlling one or more aspects of the communication session. For example, controls **555**A can include controls for muting audio for the communication session, changing a camera view for the communication session (e.g., changing which camera is used for capturing video for the communication session, adjusting a zoom value), terminating the communication session, applying visual effects to the camera view for the communication session, activating one or more modes associated with the communication session. In some embodiments, one or more controls **555**A are optionally displayed in communication UI **520**A. In some embodiments, one or more controls **555**A are displayed separate from camera preview **550**A. In some embodiments, one or more controls **555**A are displayed overlaying at least a portion of camera preview **550**A.

**[0211]** In FIG. **5**C, device **500**B represents an electronic device associated with User B, which is in communication (via data connections **510**) with devices **500**A and **500**C. Device **500**B includes camera **501**B, which is used to capture video data for the communication session, and display **504**B (e.g., a touchscreen), which is used to display content associated with the communication session. Device **500**B also includes other components, such as a microphone (e.g., **113**) for recording audio for the communication session and a speaker (e.g., **111**) for outputting audio for the communication session.

**[0212]** Device **500**B displays, via touchscreen **504**B, communication UI **520**B, which is similar to communication UI **520**A of device **500**A. Communication UI **520**B includes video feed **525-1**B and video feed **525-2**B. Video feed **525-1**B is a representation of video data captured at device **500**A (e.g., using camera **501**A) and communicated from device **500**A to devices **500**B and **500**C during the communication session. Video feed **525-2**B is a representation of video data captured at device **500**C (e.g., using camera **501**C) and communicated from device **500**C to devices **500**A and **500**B during the communication session. Communication UI **520**B also includes camera preview **550**B, which is a representation of video data captured at device **500**B via camera **501**B, and one or more controls **555**B for controlling one or more aspects of the communication session, similar to controls **555**A. Camera preview **550**B represents to User B the prospective video feed of User B that is displayed at respective devices **500**A and **500**C.

**[0213]** In FIG. **5**C, device **500**C represents an electronic device associated with User C, which is in communication (via data connections **510**) with devices **500**A and **500**B. Device **500**C includes camera **501**C, which is used to capture video data for the communication session, and display **504**C (e.g., a touchscreen), which is used to display content associated with the communication session. Device **500**C also includes other components, such as a microphone (e.g., **113**) for recording audio for the communication session and a speaker (e.g., **111**) for outputting audio for the communication session.

**[0214]** Device **500**C displays, via touchscreen **504**C, communication UI **520**C, which is similar to communication UI **520**A of device **500**A and communication UI **520**B of device **500**B. Communication UI **520**C includes video feed **525-1**C and video feed **525-2**C. Video feed **525-1**C is a representation of video data captured at device **500**B (e.g., using camera **501**B) and communicated from device **500**B to devices **500**A and **500**C during the communication session. Video feed **525-2**C is a representation of video data captured at device **500**A (e.g., using camera **501**A) and communicated from device **500**A to devices **500**B and **500**C during the communication session. Communication UI **520**C also includes camera preview **550**C, which is a representation of video data captured at device **500**C via camera **501**C, and one or more controls **555**C for controlling one or more aspects of the communication session, similar to controls **555**A and **555**B. Camera preview **550**C represents to User C the prospective video feed of User C that is displayed at respective devices **500**A and **500**B.

**[0215]** While the diagram depicted in FIG. **5**C represents a communication session between three electronic devices, the communication session can be established between two or more electronic devices, and the number of devices participating in the communication session can change as electronic devices join or leave the communication session. For example, if one of the electronic devices leaves the communication session, audio and video data from the device that stopped participating in the communication session is no longer represented on the participating devices. For example, if device **500**B stops participating in the communication session, there is no data connection **510** between devices **500**A and **500**C, and no data connection **510** between devices **500**C and **500**B. Additionally, device **500**A does not include video feed **525-1**A and device **500**C does not include video feed **525-1**C. Similarly, if a device joins the communication session, a connection is established between the joining device and the existing devices, and the video and audio data is shared among all devices such that each device is capable of outputting data communicated from the other devices.

**[0216]** FIG. **5**C represents a diagram of a communication session between multiple electronic devices, including the example communication sessions depicted in FIGS. **6**A-**6**AE. In some embodiments, the communication session depicted in FIGS. **6**A-**6**AE includes two or more electronic devices, even if the other electronic devices participating in the communication session are not depicted in the figures.

**[0217]** Attention is now directed towards embodiments of user interfaces ("UI") and associated processes that are implemented on an electronic device, such as portable multifunction device **100**, device **300**, or device **500**.

**[0218]** FIGS. **6**A-**6**AE illustrate exemplary user interfaces for managing captions of a live communication session, in accordance with some embodiments. The user interfaces in these figures are used to illustrate the processes described below, including the processes in FIGS. **7**-**8**.

**[0219]** At a high level, FIGS. **6**A-**6**AE illustrate device **600** that corresponds to (e.g., is being used by and/or is logged into a user account of) local user **620**, who is a participant of a live communication session (e.g., audio communication session and/or a video communication session) with one or more participants using a communication application. Device **600** includes a display (e.g., touch-sensitive display) **601** and a camera **602** (e.g., front-facing camera) having a field of view, for example, of local user **620**. Device **600** displays graphical user interfaces that optionally include local user representation **621** of local user **620** and/or one or more remote user representations of the one or more participants. A representation can include a shape, text, avatar, image, and/or a video (e.g., a live video feed) of a participant.

**[0220]** As will be described in further detail below, device **600** optionally displays one or more captions in addition to the one or more representations. The one or more captions includes a machine-generated transcription for audio data of the communication session. In some examples, the size and/or location of the one or more captions and/or the one or more representations can be modified during the live communication session to provide an improved communication session experience (e.g., when a participant is relying on a machine-generated transcript of audio data).

**[0221]** FIGS. **6**A-**6**B illustrate exemplary graphical user interfaces for a communication session between two participants. Referring to FIG. **6**A, device **600** displays interface **614** for a live communication session between local user **620** ("Me") and remote user **622** ("Emily"). Device **600** displays remote user representation **623** of remote user **622** and local user representation **621** of local user **620**. Remote user representation **623** has a first size (e.g., full screen) and a first location. Local user representation **621** has a smaller size and a different location as compared to remote user representation **623**.

**[0222]** At FIG. **6**A, interface **614** further includes captions **604**. Captions **604** are displayed in caption area **606**. Captions **604** include a transcription of utterances made by remote user **622**. In some embodiments, captions **604** can include a transcription of other sounds, such as background noise (e.g., "dog barking," "music playing," and/or "applause"). As depicted, device **600** displays captions **604** on a background (e.g., an image, a solid color, and/or a graphical object). Additionally or alternatively, captions **604** are overlaid on a portion of representation **623**. In some embodiments, captions **604** are displayed with a graphical indication that provides a context of an utterance (e.g., a length of pause between utterances and/or ambient sounds).

**[0223]** At FIG. **6**A, captions **604** occupy a predetermined number of lines. As illustrated, interface **614** includes no more than three lines of captions. During a communication session, if a caption cannot fit on an existing line, the caption is displayed on a new line. To accommodate the new line of captions, device **600** will cease to display a line of existing captions, shift existing lines of captions (e.g., up or down), and add a new line of captions.

**[0224]** At FIG. **6**A, device **600** displays one or more indications (e.g., **610**) to indicate that a caption corresponds to a respective participant. As illustrated, indication **610** (e.g., a name and/or image of remote user **622**) indicates that captions **604** correspond to remote user **622**. Indication **610** can be any representation of the respective participant (e.g., name, initials, avatar, and/or image). Additionally, as depicted, device **600** displays indication **612** (e.g., in captions area **606**) that captions **604** are machine generated. Indication **612** can distinguish captions **604** from other text, such as text composed by a participant (e.g., text message and/or chat messages as part of the live communication session).

**[0225]** In some embodiments, captions are not displayed at device **600** for utterances by local user **620** of device **600**. Additionally or alternatively, a caption is not displayed for local user **620** when there are more than two participants. Not generating and/or displaying a caption for user **620** conserves processing power and declutters the interface by decreasing the amount of captions that are displayed and/or processed.

**[0226]** At FIG. **6**A, while displaying interface **614**, device **600** detects input **616***a* (e.g., a tap gesture, a drag gesture, and/or pinch gesture). In some embodiments, the location of input **616***a* corresponds to captions **604**. In response to detecting input **616***a*, device **600** displays interface **614**, as depicted in FIG. **6**B.

**[0227]** At FIG. **6**B, interface **614** includes expanded captions. For example, device **600** displays expanded captions **605**. Expanded captions **605** includes, optionally, a transcription of a different portion (e.g., an earlier portion) of a conversation and/or the same portion of the conversation as captions **604**. Expanded captions **605** are displayed in caption area **606** that is different from (e.g., larger than) caption area **606** of FIG. **6**A.

**[0228]** At FIG. **6**B, interface **614** includes remote user representation **623** and local user representation **621**. Remote user representation **623** is a different size (e.g., smaller) than remote user representation **623** of FIG. **6**A. This is achieved, for example, by scaling and/or cropping at least a portion of remote user representation **623** as compared to FIG. **6**A. In some embodiments, expanded captions **605** are displayed in a portion of the display that was previously occupied by remote user representation **623**. Additionally or alternatively, expanded captions **605** are not overlaid on remote user representation **623**. Additionally or alternatively, remote user representation **623** at FIG. **6**B has changed locations as compared to FIG. **6**A. For example, a center of remote user representation **623** of FIG. **6**B is offset (e.g., below) from a center of remote user representation **623** of FIG. **6**A. Local user representation **621** at FIG. **6**B is depicted as having a similar size and/or location as local user representation **621** of FIG. **6**A. In some embodiments, local user representation **621** of FIG. **6**B has a different size and/or location as compared to local user representation **621** of FIG. **6**A. In some embodiments, interface **614** of FIG. **6**B does not include local user representation **621**.

**[0229]** At FIG. **6**B, while displaying interface **614**, device **600** detects input **616***b* (e.g., a tap gesture, drag gesture, and/or pinch gesture). For example, input **616***b* is a tap gesture on a unexpanded caption affordance **618**. In response to receiving input **616***b*, device **600** displays interface **614** of

FIG. **6**C. Additionally or alternatively, while displaying interface **614** at FIG. **6**B, device **600** detects input **616***c* that corresponds to a location outside of (e.g., not corresponding to) expanded captions **605** (e.g., a location outside of caption area **606**). For example, as depicted in FIG. **6**B, input **616***c* corresponds to a location of remote user representation **623**. In response to receiving input **616***c*, device **600** displays interface **614** of FIG. **6**C.

**[0230]** As depicted in FIG. **6**C, device **600** ceases to display expanded captions **605** and displays captions **604**. Additionally, as depicted, device **600** displays representation **623** at a full-screen size.

**[0231]** At FIG. **6**D, an exemplary graphical user interface is illustrated after additional participants join the live communication session. As depicted, remote user **624** ("Kim"), remote user **626** ("Alex"), remote user **628** ("John") have joined the live communication session between local user **620** and remote user **622**. Remote user **628** is represented by representation **629**. Remote user **626** is represented by remote user representation **627**. Remote user **624** is represented by remote user representation **625**. As depicted, interface **614** of FIG. **6**D includes captions **604** that are displayed in caption area **606**. As depicted, captions **604** are not overlaid on a representation.

**[0232]** At FIG. **6**D, interface **614** includes one or more dynamic representation areas for a more active participant and a roster for a less active participant. Dynamic representation area **630-1** and dynamic representation area **630-2** are updated with a representation of a remote user that is more active (e.g., moving more, talking more, talking louder, and/or talking faster) than another remote user (e.g., a remote user whose representation is displayed in roster **632**). As shown, dynamic representation area **630-1** is occupied by remote user representation **623** and dynamic representation area **630-2** is occupied by remote user representation **629** as remote user **628** and remote user **622** have recently spoken. Roster **632** includes remote user representation **627** and remote user representation **625** as remote user **626** and remote user **624** have not recently spoken.

**[0233]** At FIG. **6**E, device **600** updates dynamic representation area **630-1** from including remote user representation **623** to including remote user representation **627** in response to a recent utterance ("Make sure to bring hiking boots!") by remote user **626**. As depicted, device **600** updates dynamic representation area **630-2** from including remote user representation **629** to including remote user representation **623**. Additionally or alternatively, in response to the recent utterance by remote user **626**, device **600** displays captions **609-1**. In some examples, device **600** can display captions **609-1** synchronously (e.g., at substantially the same time) or asynchronously (e.g., after or before) with the update of the representation in dynamic representation area **630-1** and/or dynamic representation area **630-2**. As further depicted, device **600** updates roster **632** in response to the recent utterance by remote user **626**. For example, remote user representation **629** is moved from dynamic representation area **630-2** to roster **632**.

**[0234]** At FIG. **6**E, while displaying interface **614**, device **600** detects input **616***d* (e.g., a tap gesture, a drag gesture, and/or pinch gesture). In some embodiments, the location of input **616***d* corresponds to captions **604** (e.g., caption area **606**). In response to detecting input **616***d*, device **600** displays an animation of the captions expanding, as shown in FIGS. **6**F-**6**G.

**[0235]** FIG. **6**F illustrates an exemplary animation during an animation state of displaying expanded captions. For example, in response to input **616***d*, device **600** displays an animation that includes increasing the size of caption area **606**. As shown, device **600** also displays an animation of modifying the size and/or location of remote user representation **623** and remote user representation **627**. In some embodiments, the animation is a smooth transition between the user interfaces of FIGS. **6**E and **6**G.

**[0236]** At FIG. **6**G, device **600** displays interface **614** that includes expanded captions **605** in caption area **606**. Expanded captions **605** include a transcription of an earlier conversation that occurred during the communication session. As depicted, interface **614** includes dynamic representation area **630-1** that includes remote user representation **627**.

**[0237]** At FIG. **6**G, device **600** displays an indication that a caption area is scrollable. As depicted, a portion of expanded captions **605** (e.g., a portion, such as a top portion, of captions **605**) are visually differentiated from the other portion of the captions (e.g., greyed out, dimmed, and/or have increased transparency) to indicate that expanded captions **605** are scrollable. While displaying interface **614** at FIG. **6**G, device **600** detects input **616***e* (e.g., a swipe gesture and/or a swipe gesture starting on expanded captions **605** (e.g., caption area **606**) and moving in the direction of remote user representation **627** and/or roster **632**). In some embodiments, the location of input **616***e* is directed to expanded captions **605** (e.g., caption area **606**). In response to detecting input **616***e*, device **600** displays captions **609-2** and captions **609-3**, as depicted in FIG. **6**H. Captions **609-2** and captions **609-3** are captions for an earlier conversation during the same live communication session. In some examples, expanded captions **605** (e.g., caption area **606**) is scrollable for a particular user up until a point in which the particular user joined the communication session (e.g., the user cannot access transcripts for portions of the communication session for which the user was not part of the live communication session).

**[0238]** FIG. **6**H illustrates an example in which device **600** displays an indication of a confidence level of a caption. As shown, device **600** displays a blank space and underscore **636** (e.g., without text) to indicate that a caption for an utterance has a low confidence level and, as such, was not displayed. In some examples, the length of blank space and underscore **636** corresponds to the length of the utterance that has the low confidence level (and/or how long (e.g., in time) the utterance lasted). Additionally or alternatively, device **600** displays caption **638** with an underline (e.g., under the text) to indicate that the caption has a medium confidence level.

**[0239]** Turning briefly to FIG. **6**I, device **600** can display captions at an increased size. For example, in response to receiving an input corresponding to a request to increase the size of captions (e.g., via a settings interface), device **600** displays at least a portion of expanded captions **605** at a larger size, as shown in FIG. **6**I, than expanded captions **605** of FIG. **6**H. Additionally or alternatively, caption area **606** of FIG. **6**I is larger than caption area **606** of FIG. **6**H. Additionally or alternatively, one or more representations in FIG. **6**I are smaller in size as compared to FIG. **6**H. For example, remote user representation **627** of FIG. **6**I is smaller than remote user representation **627** of FIG. **6**H. Additionally or alternatively, in some embodiments, interface **614** does not

include a roster. In some embodiments, these techniques optionally apply to unexpanded captions (e.g., captions **604**).

**[0240]** Turning back to FIG. **6**H, while displaying interface **614**, device **600** detects input **616***f*. As shown, input **616***f* is a tap gesture directed at unexpand caption affordance **639**. In response to detecting input **616***f*, device **600** displays interface **614** of FIG. **6**J.

**[0241]** FIGS. **6**J-**6**L illustrate an example in which a device displays captions when two participants are speaking at the same time. As depicted in FIG. **6**J, captions **604** are no longer expanded and device **600** displays interface **614** that includes remote user representation **623** in dynamic representation area **630-1** and remote user representation **627** in dynamic representation area **630-2**. During the communication session, remote user **622** is speaking, which is transcribed as a caption on line **640**. Additionally or alternatively, the words uttered by user **622** are grouped together and associated with user **622** (e.g., grouped together and associated with indication **610** of user **622**). As depicted in FIG. **6**K, remote user **624** begins speaking (e.g., by interrupting or speaking over remote user **622**). Accordingly, line **640** is moved up and the utterance of remote user **624** is transcribed on a new line **642**. Additionally or alternatively, the words uttered by user **624** are grouped together and associated with user **624** (e.g., grouped together and associated with indication **610** of user **624**). At FIG. **6**L, remote user **622** continues speaking, which is transcribed as a caption on line **640** (e.g., as opposed to adding a new line under line **642**). Additionally or alternatively, words for the utterances (in some embodiments, the interrupted utterances) by remote user **622** are grouped together and associated with the existing captions of remote user **622** (e.g., grouped together and associated with indication **610** of user **624**). In some embodiments, words are added to transcripts corresponding to multiple participants by alternating between the multiple transcripts of the participants (e.g., without waiting for a pause in speech from a respective participant to add text corresponding to that participant's utterances). In some embodiments, captions corresponding to one user are added to an existing line (e.g., line **640**) while captions for another user are concurrently added to another line (e.g., line **642**).

**[0242]** FIGS. **6**M-**6**N illustrate an example in which a device displays captions when two participants are speaking at the same time. As depicted in FIG. **6**M, while remote user **622** and remote user **624** are speaking at the same time, device **600** adds captions **609-4** for remote user **622** to caption area **606**. After adding captions **609-4** and upon determining that a predetermined threshold is met (e.g., remote user **622** is silent for at least a threshold amount of time and/or remote user **622** has completed a sentence), device **600** displays captions **609-5** for the utterance of remote user **624**, as shown in FIG. **6**N (e.g., even though remote user's **624** utterance has interrupted or overlapped with the utterance of remote user **622**). If the predetermined threshold is not met (e.g., remote user **622** speaks within the threshold amount of time and/or remote user **622** has not completed a sentence), device **600** forgoes displaying captions **609-5** for the utterance of remote user **624** until the predetermined threshold is met.

**[0243]** At FIG. **6**O, device **600** displays remote user representation **629** in dynamic representation area **630-1** based on a recent utterance by remote user **628**. Device **600** also displays captions **609-6** corresponding to the recent utterance. In some embodiments, captions **604-6** are synchronously or asynchronously displayed with the update of dynamic representation area **630-1**. In some examples, captions **609-6** are displayed at the same or substantially the same time as dynamic representation area **630-1** updates. In some examples, captions **609-6** are displayed after dynamic representation area **630-1** updates.

**[0244]** At FIG. **6**P, device **600** displays caption area **606** as smaller than caption area **606** of FIG. **6**O. In some embodiments, in response to determination that a first period of time has elapsed in which the participants do not speak (e.g., none of the participants speak and/or no text or content is added to the transcript), device **600** ceases to display one or more captions (e.g., caption **609-7** of FIG. **6**O) and automatically reduces the size of captions area **606** (e.g., as compared to FIG. **6**O). In some embodiments, in accordance with (and/or in response to) a determination that the first predetermined time has elapsed since initially displaying one or more captions, device **600** ceases to display the one or more captions (e.g., caption **609-7** of FIG. **6**O). In some embodiments, in response to a determination that the second period of time (e.g., longer than the first period of time) has elapsed in which the participants do not speak (e.g., none of the participants speak and/or no text or content is added to the transcript) device **600** ceases to display all captions (e.g., ceases to display captions area **606**). In some embodiments, in accordance with (and/or in response to) a determination that the first and/or second periods of time have elapsed in which the participants do not speak (e.g., none of the participants speak and/or no text or content is added to the transcript) device **600** optionally increases the size of representations **625** and/or **629** (e.g., in conjunction with reducing and/or ceasing to display captions area **606**).

**[0245]** At FIG. **6**P, while displaying interface **614**, device **600** detects input **616***g*. As shown, input **616***g* is a swipe gesture. In response to detecting input **616***g*, device **600** displays interface **615** in a picture-in-picture mode, as shown in FIG. **6**Q.

**[0246]** At FIG. **6**Q, interface **615** includes remote user representation **629** that is smaller than remote user representation **629** of FIG. **6**P. Remote user representation **629** occupies dynamic representation area **630-1**. As shown, dynamic representation area **630-1** is smaller than dynamic representation area **630-1** of FIG. **6**P. Additionally or alternatively, as depicted, device **600** ceases to display one or more representations (e.g., roster **632**, local user representation **621**, and/or remote user representation **625**) in response to input **616***g*. Interface **615** also includes captions **604** in caption area **606**. As shown, caption area **606** is different (e.g., smaller) than caption area of FIG. **6**P. Interface **615** further includes a view of home screen **650**. As shown, captions **604** and remote user representation **629** are overlaid on at least a portion of home screen **650**. While displaying interface **615**, device **600** detects input **616***h*. As shown, input **616***h* is a tap gesture on movie application **651**. In response to detecting input **616***h*, device **600** displays interface **615** of FIG. **6**R.

**[0247]** At FIG. **6**Q, caption area **606** is optional, as indicated by the dashed line depicted in FIG. **6**Q. In some embodiments, interface **615** does not include captions **604** and/or caption area **606**. In some embodiments, interface **615** includes remote user representation **629** as depicted in FIG. **6**Q but, optionally, does not include captions **604**

and/or caption area **606**. As such, in some embodiments, device **600** of FIG. **6**Q ceases to display captions **604** and/or caption area **606** in response to input **616***g*. Additionally or alternatively, in some embodiments, device **600** displays (e.g., re-displays) captions **604** and/or caption area **606** in response to an input to return to interface **614** of FIG. **6**P. For instance, device **600** optionally detects an input while displaying interface **615** (e.g., a tap gesture directed to remote user representation **629**, an input corresponding to a request to replace the display the user interface of an application that is different from the live communication application with the user interface of the live communication applications, and/or a request to a display the user interface of the communications applications at full-screen). In response to detecting the input, device **600** displays (e.g., re-displays) captions **604** and/or caption area **606** of FIG. **6**P. Additionally or alternatively, in response to detecting the input, device **600** re-displays one or more representations (e.g., roster **632**, local user representation **621**, and/or remote user representation **625**). Additionally or alternatively, in response to detecting the input, device **600** modifies the size and/or location of one or more representations. For example, remote user representation **629** of FIG. **6**P is larger and/or has a different location than remote user representation **629** of FIG. **6**Q.

**[0248]** At FIG. **6**R, interface **615** is displayed with a view of movie **652** that is being shared in the communication session (e.g., that is being concurrently played for and/or viewed by multiple participants of the communication session). One skilled in the art would appreciate that user **620** can initiate the sharing of content in the communication session in response to, for example, a share content control option in a settings menu. In some embodiments, captions **604** are overlaid on a user interface of an application that is different from the communication application. In some embodiments, captions **604** and remote user representation **629** are overlaid on at least a portion of movie **652**.

**[0249]** At FIG. **6**R, device **600** detects one or more inputs while displaying interface **615**. In some embodiments, while displaying interface **615** in the picture-in-picture mode, device **600** detects input **616***i* corresponding to a request to stash captions **604**. As depicted, input **616***i* is a swipe gesture on representation **623**. In response to detecting input **616***i*, device **600** stashes captions **604** (e.g., as shown in FIG. **6**V). In some embodiments, while displaying interface **615** in the picture-in-picture mode, device **600** detects input **616***j* corresponding to a request to move captions **604**. As depicted, input **616***j* is a tap and drag gesture. In response to detecting input **616***j*, device **600** moves captions **604-8** to a different location in user interface **615**, as shown in FIG. **6**S. In some embodiments, while displaying interface **615**, device **600** detects input **616***k* corresponding to a request display a device settings menu. As depicted, input **616***k* is a tap and drag gesture at an edge of display **601**. In response to detecting input **616***k*, device **600** displays a device settings menu. In some embodiments, the device settings menu includes one or more activatable options which, when activated, toggle (e.g., enable or disable) a wireless communication modality (e.g., cellular, WiFi, and/or Bluetooth), change a brightness of display **601**, change a system volume of device **600**, and provide other (e.g., system-level) functions. In some embodiments, while displaying interface **615**, device **600** detects input **616***l* corresponding to a request scroll captions. As depicted, input **616***l* is a swipe gesture. In response to detecting input **616***l*, device **600** scrolls through captions **604**. In some embodiments, while displaying interface **615**, device **600** detects input **616***m* corresponding to a request to display an interface of the communications application at a full screen size, such as interface **614** of FIG. **6**P. As depicted, input **616***m* is a tap gesture on captions **604**. In response to detecting input **616***m*, device **600** displays interface **614** of FIG. **6**P. In some embodiments, while displaying interface **615**, device **600** detects input **616***n* corresponding to a request to fast forward through movie **652**. As depicted, input **616***n* is a tap and drag gesture in the media application (e.g., on a scrubber bar of the media application). In response to detecting input **616***n*, device **600** fast forwards through movie **652**. Inputs **616***i*, **616***j*, **616***k*, **616***l*, and/or **616***m* are optionally provided on interface **615** of FIG. **6**Q and would cause the same (or similar) response by device **600**.

**[0250]** At FIG. **6**S, in response to detecting input **616***j*, device **600** displays captions **604** at a different location of interface **615** than captions **604** of FIG. **6**R. While displaying interface **615** at FIG. **6**S, device **600** detects an input (e.g., rotational movement of device **600**) causing a change in an orientation of device **600**. As depicted in FIG. **6**T, in response to detecting the input, interface **615** transitions from a portrait mode to a landscape mode.

**[0251]** At FIG. **6**T, device **600** displays interface **615**, including captions **604**. As shown, captions **604** are positioned on the display so as to prevent obscuring/overlaying/hiding particular content, such as movie captions **654**. In some embodiments, while displaying interface **615**, device **600** detects input **6160** (e.g., a pinch gesture). In response to detecting input **6160**, device **600** decreases the size of captions **604**, as shown in FIG. **6**U. In some embodiments, a de-pinching (e.g., spread) gesture increases the size of captions **604**. At FIG. **6**U, while displaying interface **615**, device **600** detects input **616***p*. As depicted, input **616***p* is a swipe gesture. In response to detecting input **616***p*, device **600** stashes captions **604**, as shown in FIG. **6**V.

**[0252]** At FIG. **6**V, device **600** displays stashed graphical object **656**, indicating that captions **604** are stashed. As shown, stashed graphical object **656** is displayed along an edge of display **601**. While caption area **606** is stashed, device **600** detects that a new caption (e.g., a caption that has not been displayed or a caption for an utterance that was made while caption area **606** was stashed) is available (e.g., because one of the participants said something that resulted in a new caption). In response to detecting a new caption is available, device **600** displays an indication of the new caption. In some examples, the indication of a new caption includes modifying an appearance of stashed graphical object **656** (e.g., modifies a color, shape, location, and/or size).

**[0253]** At FIG. **6**W, device **600** displays animation **658** to indicate a new caption is available. As shown, animation **658** includes a movement of stashed graphical object **656**. In some examples, animation **658** includes changing an appearance of stashed graphical object **656**, displaying an additional graphical object, and/or displaying a glow around stashed graphical object **656**.

**[0254]** At FIG. **6**X, while displaying stashed graphical object **656**, device **600** detects input **616***p*. As depicted, input **616***p* is a tap gesture directed at stashed graphical object **656**. In response to detecting input **616***p*, device **600** re-displays captions **604**, which includes new captions **609-8**, as shown in FIG. **6**Y.

**[0255]** At FIG. **6**Y, while displaying interface **615**, device **600** detects a movement (e.g., a rotation) of device **600**. In response, device **600** displays movie application **651** in a portrait mode. Additionally, while displaying interface **615**, device **600** detects input **616***q*. As depicted, input **616***q* is a tap gesture directed at exit full-screen view affordance **660** of movie application **651**. In response, device **600** displays interface **615** of FIG. **6**Z.

**[0256]** At FIG. **6**Z, interface **615** includes captions **604** that are not overlaid on movie **652** and/or a user interface for movie application **651**. As depicted, captions **604** are displayed adjacent to movie **652** and/or the user interface for movie application **651**. As depicted, interface **615** is displayed with a view of home screen **650** and the user interface for movie application **651** (which currently includes a view of movie **652**). While displaying interface **615**, device **600** detects input **616***r*. As shown, input **616***r* is a de-pinch gesture. As shown in FIG. **6**AA, in response to detecting input **616***r*, device **600** displays movie **652** and/or a user interface for movie application **651** at an enlarged size as compared the size of movie **652** of FIG. **6**Z. Additionally, as shown in FIG. **6**AA, in response to input **616***r*, device **600** moves captions **604** so as to not obscure a portion (e.g., any portion) of the enlarged size of movie **652** and/or a user interface for movie application **651**.

**[0257]** At FIG. **6**AA, device **600** detects one or more inputs while displaying interface **615**. In some embodiments, while displaying interface **615**, device **600** detects input **616***s* corresponding to a request to decrease the size of movie **652** and/or a user interface for movie application **651**. As depicted, input **616***s* is a pinch gesture on movie **652** and/or a user interface for movie application **651**. In response to detecting input **616***s*, device **600** decreases the size of movie **652** and/or a user interface for movie application **651**. In some embodiments, while displaying interface **615**, device **600** detects input **616***t* corresponding to a request display a device settings menu. As depicted, input **616***t* is a tap and drag gesture at the edge of display **601**. In response to detecting input **616***t*, device **600** displays a settings menu. In some embodiments, the device settings menu includes one or more activatable options which, when activated, toggle (e.g., enable or disable) a wireless communication modality (e.g., cellular, WiFi, and/or Bluetooth), change a brightness of display **601**, change a system volume of device **600**, and provide other (e.g., system-level) functions. In some embodiments, while displaying interface **615**, device **600** detects input **616***u* corresponding to a request to stash movie **652**. As depicted, input **616***u* is a swipe gesture on movie **652**. In response to detecting input **616***u*, device **600** stashes movie **652**. In some embodiments, while displaying interface **615**, device **600** detects input **616***v* corresponding to a request to move captions **604**. As depicted, input **616***v* is a tap and drag gesture. In response to detecting input **616***v*, device **600** moves captions **604** to a different location (e.g., with respect to a location of movie **652** and/or a user interface for movie application **651**). In some embodiments, while displaying interface **615**, device **600** detects input **616***w* corresponding to a request scroll captions. As depicted, input **616***w* is a swipe gesture. In response to detecting input **616***w*, device **600** scrolls through captions **604**. In some embodiments, while displaying interface **615**, device **600** detects input **616***x* corresponding to a request display a new page of the home screen. As depicted, input **616***x* is a swipe gesture on the home screen. In response to detecting input **616***x*, device **600** displays a new page of home screen **650** (e.g., replace display of application icons with different application icons). In some embodiments, while displaying interface **615**, device **600** detects input **616***y* corresponding to a request to stash captions **604**. As depicted, input **616***y* is a swipe gesture on captions **604**. In response to detecting input **616***y*, device **600** stashes captions **604** (e.g., on the left side of the display based on the direction of input **616***y*).

**[0258]** At FIG. **6**AB, an exemplary settings menu is illustrated. As depicted, device **600** displays settings menu **666** for controlling the display of captions. Settings menu **666** includes universal caption option **662** and communication application caption option **664**. Universal caption option **662** is a system-wide setting that turns captions on or off for a plurality of applications, for example, including movie application **651** and the communication application. Communication application caption option **664** controls captions for the communication application. As shown, universal caption option **662** and communication application caption option **664** are currently on. In some embodiments, in accordance with a determination that a universal caption option **662** and communication application caption option **664** are on, device **600** displays captions for the communication application (e.g., captions **604** and/or expanded captions **605**) and/or movie application **651** (e.g., movie captions **654**), as shown in FIGS. **6**A-**6**U and **6**Y-**6**AA. While displaying settings menu **666**, device **600** detects input **616***z*. As depicted, input **616***z* is a tap gesture directed at universal captions option **662**. In response, device **600** turns universal captions option **662** off. In some embodiments, in response to detecting input **616***z*, device **600** automatically turns communication application caption option **664** off. In some embodiments, in response to detecting universal caption option **662** and communication application caption option **664** are off, device **600** forgoes displaying captions for the communication application (e.g., captions **604** and/or expanded captions **605**) and/or forgoes displaying captions for movie application **651** (e.g., movie captions **654**). For example, device **600** would forgo displaying captions (e.g., movie captions **654**, captions **604**, and/or expanded captions **605**) in FIGS. **6**A-**6**U and **6**Y-**6**AA. In some embodiments, device **600** subsequently detects an input directed at communication application caption option **664** and, in response, device **600** turns captions back on for the communication application (e.g., without turning captions back on for other applications). In some embodiments, in accordance with a determination that universal caption option **662** is off and communication application caption option **664** is on, device **600** forgoes displaying captions for movie application **651** (e.g., movie captions **654**) while displaying captions for the communication application (e.g., captions **604** and/or expanded captions **605**). For example, device **600** would forgo displaying movie captions **654** in FIGS. **6**T-**6**AA while continuing to display captions **604** and/or expanded captions **605** in FIGS. **6**A-**6**U and **6**Y-**6**AA.

**[0259]** At FIG. **6**AC, an exemplary settings menu is illustrated. As depicted, device **600** displays settings menu **670** including communication session caption option **668**. Communication session caption option **668** turns captions on or off for a particular communication session. While displaying settings menu **670**, device **600** detects input **616***aa*. As depicted, input **616***aa* is a tap gesture directed at communication session caption option **668**. In response, device **600**

turns communication session caption options **668** off. As such, captions are no longer displayed for a particular communication session.

**[0260]** At FIGS. **6**AD-**6**AE, an exemplary interface is modified based on a location of a camera. At FIG. **6**AD, device **600** displays interface **676**. Interface **676** includes remote user representations **623**, **625**, and **627**. Representations **623**, **625**, and **627** occupy dynamic representation areas **630-1**, **630-2**, and **630-3**, respectively. Interface **676** further includes roster **632** and local user representation **621**. As depicted, device **600** is in a landscape orientation, with camera **602** located to a right of display **601** (e.g., from the user's perspective). As illustrated, device **600** displays expanded captions **605** adjacent to camera **602**. While FIGS. **6**AD-**6**AE illustrated captions as being expanded, the techniques optionally equally apply to unexpanded captions.

**[0261]** While displaying interface **676**, device **600** detects movement **688** (e.g., rotational movement) that changes device **600** and/or interface **676** from one landscape orientation, as shown in FIG. **6**AD, to another landscape orientation, as shown in FIG. **6**AE. As depicted in FIG. **6**AE, device **600** and/or interface **676** is in a landscape orientation in which camera **602** is located to the left of display **601** (e.g., from the user's perspective). In response to detecting movement **688**, device **600** displays expanded captions **605** adjacent to the location of camera **602**. In some embodiments, the location of remote user representations **623**, **625**, and **647** changes in response to detecting movement **688**. In some embodiments, the location and/or size of roster **686** does not change in response to detecting movement **688**.

**[0262]** FIG. **7** is a flow diagram illustrating a method for displaying expanded caption information in a live communication session using a computer system in accordance with some embodiments. Method **700** is performed at a computer system (e.g., **100**, **300**, **500**, **600**) (e.g., a smartphone, a tablet, a laptop computer, and/or a desktop computer) that is in communication with a display generation component (e.g., **601**) (e.g., a display controller, a touch-sensitive display system, and/or a monitor) and one or more input devices (e.g., **601**) (e.g., a touch-sensitive surface, a keyboard, a controller, and/or a mouse). Some operations in method **700** are, optionally, combined, the orders of some operations are, optionally, changed, and some operations are, optionally, omitted.

**[0263]** As described below, method **700** provides an intuitive way for displaying expanded caption information. The method reduces the cognitive burden on a user for managing captions of a live communication session, thereby creating a more efficient human-machine interface. For battery-operated computing devices, enabling a user to manage expanded caption information faster and more efficiently conserves power and increases the time between battery charges.

**[0264]** The computer system displays (**702**), via the display generation component, a live communication user interface (e.g., **614**) (e.g., an interface for an incoming and/or outgoing live audio/video communication session), the live communication user interface (e.g., of a live communication application) corresponding to a live communication session (e.g., the live communication session depicted in FIGS. **6**A-**6**AA) (In some embodiments, the live communication session is between a first user of the computer system (e.g., a first computer system) and a second user of a second computer system). The live communication user interface includes (**704**) one or more representations (e.g., **621**, **623**, **625**, **627**, and/or **629**) (e.g., avatar, still image and/or video (e.g., live video feed)) of one or more participants (e.g., **620**, **622**, **624**, **626**, and/or **628**) (e.g., the first user and/or the second user) of the live communication session, wherein a first representation (e.g., **621**, **623**, **625**, **627**, and/or **629**) of the one or more representations of the one or more participants is displayed at a location and at a size in the live communication user interface. In some embodiments, the first representation has a centroid (e.g., a center of the displayed representation). The live communication user interface includes (**706**) a first caption (e.g., **604**) (e.g., caption information for one or more utterances and/or transcription of one or more utterances) in a first area (e.g., **606** in FIG. **6**A and/or **606** in FIG. **6**D) of the live communication user interface, the first caption corresponding to (e.g., transcribing and/or describing) a first portion of audio data of (e.g., received, processed, and/or transmitted as part of) the live communication session (e.g., one or more utterances and/or background sounds as described in reference to FIG. **6**A). In some embodiments, the first caption is a transcript of words (or sounds) spoken or uttered by the one or more participants that are displayed in the live communication session. In some embodiments, the live communication user interface does not display a caption for at least one of the one or more participants (e.g., the first user of first computer system) that is displayed in the live communication user interface. In some embodiments, the first caption overlaps (e.g., obscures and/or hides) a portion (e.g., some but not all) of the one or more representations of the one or more participants.

**[0265]** While displaying the live communication user interface with the first caption in the first area of the live communication user interface, the computer system detects (**708**), via the one or more input devices, an input (e.g., **616***a* and/or **616***d*) that corresponds to a request to display expanded caption information.

**[0266]** In response to (**710**) detecting the input that corresponds to a request to display expanded caption information, the computer system displays (**712**), via the display generation component, a second caption (e.g., **605**) corresponding to a second portion of audio data of (e.g., received, processed, and/or transmitted as part of) the live communication session (e.g., as depicted in FIG. **6**B and/or as depicted in FIG. **6**G), different from the first portion of audio data (e.g., at a different and/or non-overlapping time) of the live communication session, the second caption displayed at a second area (e.g., **606** in FIG. **6**B and/or **606** in FIG. **6**D) of the live communication user interface. In some embodiments, the second caption displayed in the second area does not overlap (e.g., obscure and/or hide) the one or more representations (including the first representation) of the one or more participants. In some embodiments, the second area of the second caption is larger than the first area of the first caption. In some embodiments, the first area is different from the second area. In response to (**710**) detecting the input that corresponds to a request to display expanded caption information, the computer system modifies (**714**), via the display generation component, the location of the first representation and/or size of the first representation in the live communication user interface (e.g., as described in reference to FIGS. **6**A-**6**B and/or FIGS. **6**E-**6**G). In some embodiments, modifying the location of the first representation includes moving a centroid (e.g., the center of the representation) of

the first representation. In some embodiments, modifying the size of the first representation includes changing the size of the first representation from a first size to a modified size that is different (e.g., larger or smaller) from the first size. In some embodiments, modifying the location and/or size of the first representation includes cropping a first portion (e.g., and not a second portion) of the first representation. In some embodiments, the second area of the live communication user interface (e.g., the area in which the second caption is displayed) is an area of the display that was occupied by the first representation before it is modified (e.g., the second caption occupies an area of the display that was previously occupied by a portion of the first representation). Automatically modifying a location and/or size of a representation in response to a request to display additional caption information enhances the communication session experience by allowing a user to maintain a view of at least one participant while also viewing an additional transcript of the conversation (e.g., transcript of an earlier point in the conversation) without requiring further input from the user, thereby reducing the number of inputs needed to perform the operations.

**[0267]** In some embodiments, modifying the location of the first representation and/or the size of the first representation includes modifying (e.g., reducing or increasing) the size of the first representation (e.g., as described in reference to FIGS. **6**A-**6**B and/or FIGS. **6**E-**6**G) in the live communication user interface. In some embodiments, while displaying the live communication user interface with the first caption in the first area of the live communication user interface, the computer system displays a second representation (e.g., **623** in FIGS. **6**A-**6**B, **623** in FIGS. **6**E-**6**G, **627** in FIGS. **6**E-**6**G, and/or **621** optionally changes sizes in FIGS. **6**A-**6**B, **6**E-**6**G) of the one or more participants, wherein the first representation corresponds to a first participant (e.g., **620**, **622**, **624**, **626**, and/or **628**) and the second representation corresponds to a second participant (e.g., **620**, **622**, **624**, **626**, and/or **628**). In response to detecting the input that corresponds to a request to display expanded caption information, the computer system modifies, via the display generation component, a size of the second representation in the live communication user interface (e.g., **621**, **623**, **625**, **627**, and/or **629**). In some embodiments, modifying the size of the second representation includes increasing or decreasing the size of the second representation. Automatically modifying a size of the first representation and the second representation in response to a request to display additional caption information enhances the communication session experience by allowing a user to maintain a view of at least two participants while also viewing an additional transcript of the conversation without requiring further input from the user, thereby reducing the number of inputs needed to perform the operations.

**[0268]** In some embodiments, the first representation is a representation of a user (e.g., 620) (e.g., first participant) of the computer system (e.g., the first representation includes an image/avatar of the user of the computer system and/or the first representation is based on a live video captured by a camera of the computer system). Modifying the size of the representation of the user of the computer system provides the user with visual feedback that additional caption information is being displayed, thereby providing improved feedback. Automatically modifying a size of a representation of the user of the computer system in response to a request to display additional caption information enhances the communication session experience by changing the size of the representation of the user while also displaying additional transcript of the conversation without requiring further input from the user, which reduces the number of inputs needed to perform an operation.

**[0269]** In some embodiments, modifying the size of the first representation includes decreasing the size of the first representation (e.g., **623** depicted in FIGS. **6**A-**6**B and/or **623** depicted in FIGS. **6**E-**6**G) (e.g., decreasing the size of a representation of a user of the computer system). Additionally or alternatively, modifying the size of the second representation includes increasing the size of the second representation (e.g., **627** depicted in FIGS. **6**E-**6**G). Automatically increasing a size of a representation of one participant while decreasing the size of a representation of another participant in response to a request to display additional caption information enhances the communication session experience by providing a larger view one participant while decreasing a view of another participant without requiring further input from the user and by providing visual feedback that additional caption information is being displayed, which provides improved visual feedback and reduces the number of inputs needed to perform an operation.

**[0270]** In some embodiments, modifying the location of the first representation and/or size of the first representation includes moving the first representation from a first location to a second location in the live communication user interface (e.g., as depicted by **623** in FIGS. **6**A-**6**B, as depicted by **623** in FIGS. **6**E-**6**G, and/or as depicted by **627** in FIGS. **6**E-**6**G). In some embodiments, while displaying the live communication user interface with the first caption in the first area of the live communication user interface, the computer system displays a second representation (e.g., **621**, **623**, **625**, **627**, and/or **629**) of the one or more participants, wherein the first representation corresponds to a first participant (e.g., **620**, **622**, **624**, **626**, and/or **628**) and the second representation corresponds to a second participant (e.g., **620**, **622**, **624**, **626**, and/or **628**). In response to detecting the input that corresponds to a request to display expanded caption information, the computer system moves, via the display generation component, the second representation from a third location to a fourth location in the live communication user interface (e.g., as depicted by **623** in FIGS. **6**A-**6**B, as depicted by **623** in FIGS. **6**E-**6**G, and/or as depicted by **627** in FIGS. **6**E-**6**G). Automatically modifying a location of the first representation and the second representation in response to a request to display additional caption information provides the user with visual feedback that additional caption information is being displayed and enhances the communication session experience by moving the first representation and second representation so as to accommodate the display of the additional transcript of the conversation without requiring further input from the user, which provides improved visual feedback and reduces the number of inputs needed to perform an operation.

**[0271]** In some embodiments, the computer system changes a number of the one or more representations that are displayed in the live communication user interface (e.g., as depicted by changing a number of representations in FIGS. **6**E-**6**G and/or device **600** ceases to display roster **632** and/or local user representation **621**) (e.g., adding a representation to increase the number of the one or more representations that are displayed or ceasing display of a representation so

as to decrease the number of the one or more representations that are displayed). In some embodiments, the computer system changes the number of the one or more representations that are displayed in the live communication user interface in response to detecting the input that corresponds to the request to display expanded caption information. Automatically modifying a quantity of the one or more representations provides the user with visual feedback that additional caption information is being displayed and enhances the communication session experience by accommodating the display of other content of the communication session (e.g., additional caption information or an active participant) without requiring further input from the user, which provides improved visual feedback and reduces the number of inputs needed to perform an operation.

**[0272]** In some embodiments, changing the number of the one or more representations includes ceasing to display at least one representation (e.g., as depicted by changing a number of representations in FIGS. **6**E-**6**G and/or device **600** ceases to display roster **632** and/or local user representation **621**) (e.g., a roster of the one or more participants, a grid of the one or more participants, or a representation of an active or recently active participant) of the one or more representations of the one or more participants. In some embodiments, the computer system ceases to display the at least one representation of the one or more participants in response to the input corresponding to the request display expanded caption information. In some embodiments, the computer system ceases to display the at least one representation of the one or more participants in response to a participant not talking (e.g., not speaking or being silent). In some embodiments, changing the number of the one or more representations includes increasing the number of the one or more representations. Automatically ceasing to display of at least one representation of the one or more participants provides the user with visual feedback that additional caption information is being displayed and enhances the communication session experience by accommodating the display of additional content (e.g., additional caption information or an active participant) without requiring further input from the user, which provides improved visual feedback and reduces the number of inputs needed to perform an operation.

**[0273]** In some embodiments, in response to detecting the input that corresponds to a request to display expanded caption information, the computer system displays a dynamic representation of participants (e.g., **623** and/or **629** in FIG. **6**D and/or **623**, **625**, and **627** depicted in FIG. **6**AD) in the live communication session that changes from being a representation of one participant (e.g., **623** depicted in FIG. **6**D) to being a representation of a different participant (e.g., **627** depicted in FIG. **6**E) based on changes in activity levels of one or more of the participants (e.g., as described in reference to FIG. **6**D) (e.g., the participant currently speaking and/or the participant currently speaking the loudest) in the live communication session. In some embodiments, the first representation changes from representing a single participant to representing various participants (e.g., a participant that satisfies a predetermined condition of activity (e.g., audio activity or visual activity)). Changing a representation based on the activity level of a participant provides the user with visual feedback that additional caption information is being displayed and enhances the communication session experience by decluttering the user interface to allow the user to focus on the most active participant without requiring further input from the user, which provides improved visual feedback and reduces the number of inputs needed to perform an operation.

**[0274]** In some embodiments, the computer system concurrently displays, with the second caption and the first representation, a second representation of the one or more representations of the one or more participants (e.g., **621** and **623** depicted in FIG. **6**B and/or **621**, **623**, **625**, **627**, and/or **629** depicted in FIG. **6**D), wherein the first representation corresponds to a first participant and the second representation corresponds to a second participant. Concurrently displaying a caption with the first representation and the second representation (e.g., when the system receives a request to display expanded caption information) enhances the communication session experience by allowing a user to view a transcript of the communication session along with images corresponding to at least two participants who are participating in the communication session without requiring further input from the user, which reduces the number of inputs needed to perform an operation.

**[0275]** In some embodiments, the one or more participants includes a first participant (e.g., **622** depicted in FIG. **6**D) and a second participant (e.g., **628** depicted in FIG. **6**D). In some embodiments, in accordance with a determination that a respective caption (e.g., **604** depicted in FIG. **6**D) for a respective portion of audio data (e.g., the first portion of audio data or the second portion of audio data) corresponds to the first participant, the computer system displays an indication (e.g., as described in reference to **610** in FIG. **6**A) (e.g., a graphical and/or textual object and/or displayed adjacent to the respective caption) indicating that the respective caption corresponds to the first participant. In accordance a determination that the respective caption for the respective portion of audio data corresponds to the second participant, the computer system displays an indication (e.g., a graphical and/or textual object and/or displayed adjacent to the respective caption) indicating that the respective caption corresponds to the second participant (e.g., as depicted in FIG. **6**D, "Emily" is displayed above captions associated with Emily and "John Appleseed" is displayed above captions associated with John Appleseed). Displaying an indication indicating that the caption corresponds to a particular participant enhances the communication session experience by providing a context for the caption when different participants speak and provided the user with feedback about which speaker the caption corresponds to, which provides improved visual feedback.

**[0276]** In some embodiments, detecting the input that corresponds to a request to display expanded caption information includes detecting a drag gesture directed at the first caption (e.g., as described with reference to FIG. **6**A) (e.g., a drag down gesture, a drag up gesture, a pinch gesture, and/or an de-pinch gesture). Displaying additional caption information in response to detecting a drag gesture directed at the caption provides the user with feedback that the drag gesture was detected and helps to prevent the user from unintentionally displaying additional caption information, thereby providing improved feedback and enhancing the user-machine interface.

**[0277]** In some embodiments, detecting the input that corresponds to a request to display expanded caption information includes detecting a tap gesture directed at the first caption (e.g., **616***a* depicted in FIG. **6**A) (e.g., the tap gesture

may be on an expand affordance associated with the first caption). Displaying additional caption information in response to detecting a tap gesture directed at the caption provides the user with feedback that the tap gesture was detected and enables the user to quickly cause display of additional caption information, thereby providing improved feedback and enhancing the user-machine interface.

**[0278]** In some embodiments, while displaying the live communication user interface with the first caption in the first area of the live communication user interface, the computer system displays a roster of participants (e.g., **632** depicted in FIG. **6**D). In response to detecting the input that corresponds to a request to display expanded caption information and in accordance with a determination that the computer system is not displaying shared (e.g., video and/or text) content (In some embodiments, in accordance with a determination that the live communication session does not include streaming (for viewing by multiple participants) of a non-live video source and/or does not include streaming of a video source (for viewing by multiple participants) not originating from a camera of one of the participants' devices (e.g., a movie application, TV streaming application, and/or or a video from social media website)), the computer system maintains display, via the display generation component, of the roster of participants (e.g., **632** depicted in FIG. **6**G) (e.g., some or all of the participants of the live communication session; without changing the participants shown in the roster or with changing the participants shown in the roster). In some embodiments, the roster of participants includes a plurality of representations of the one or more participants participating in the live communication session. Maintaining display of the roster of participants when the computer system is not displaying shared content provides the user with visual feedback about the state of the live communication session and, in particular, which individuals are still participants.

**[0279]** In some embodiments, while displaying the live communication user interface with the first caption in the first area of the live communication user interface, the computer system displays a roster of participants (e.g., **632** depicted in FIG. **6**D) that includes a plurality of representations of different participants (e.g., **627** and **625** depicted in FIG. **6**D) that are smaller than other representations (e.g., **621**, **623**, **629** depicted in FIG. **6**D) (e.g., the first representation and/or the second representation) of participants in the live communication user interface. In response to detecting the input that corresponds to a request to display expanded caption information and in accordance with a determination that the computer system is displaying shared (e.g., video and/or text) content (In some embodiments, in accordance with a determination that the live communication session includes streaming (for viewing by multiple participants) of a non-live video source and/or includes streaming of a video source (for viewing by multiple participants) not originating from a camera of one of the participants' devices (e.g., a movie application, TV streaming application, and/or or a video from social media website)), the computer system ceases to display, via the display generation component, the roster of participants (e.g., device **600** ceases to display roster **632** depicted in FIG. **6**G). In some embodiments, the currently-displayed portion of the roster updates less frequently than a dynamic representation area that includes a representation of a participant (e.g., an active (or most active) participant). In some embodiments, representations of participants are moved between the roster and the dynamic representation area based on the activity levels of the participants (e.g., most active participant is moved from the roster to the dynamic representation area). In some embodiments, the roster is scrollable (e.g., a user can scroll through the roster which includes ceasing to display a plurality of representations of a first subset of the one or more participants in the live communication session and displaying a plurality of representations of a second subset of the one or more participants in the live communication session that is different from the first subset of the one or more participants and is displayed at a location that was previously occupied by the plurality of representations of the first subset of the one or more participants in the live communication session, for example by shifting the plurality of representations of the first subset of the one or more participants in the live communication session out of the display region in a first direction and shifting the plurality of representations of the second subset of the one or more participants in the live communication session into the display region in the first direction). In some embodiments, the roster includes one or more less active participants (e.g., as compared to one or more participants whose representations are displayed in the dynamic representation area). Ceasing to display the roster of participants when shared content is being displayed enables the computer system to display more of the shared content and/or to display the shared content using a larger size, thereby improving the man-machine interface.

**[0280]** In some embodiments, while displaying, via the display generation component, the second caption, the computer system detects a scroll input (e.g., **616***e* depicted in FIG. **6**G) corresponding to a request to scroll the second caption. In response to detecting the scroll input, the computer system scrolls a portion of second caption, including displaying a first portion (e.g., **609-2** and/or **609-3** as depicted in FIG. **6**H) of one or more captions (e.g., that were not previously displayed); and ceasing to display a second portion of one or more captions (e.g., device **600** ceases to display captions **605** depicted in FIG. **6**G). In some embodiments, in response to detecting the scroll input corresponding to a request to scroll the second caption, the computing system scrolls through captions for the communication session. In some embodiments, in response to detecting the scroll input corresponding to a request to scroll the second caption, the computing system ceases to display one or more captions for a most recent utterance of the communication session and displays one or more captions for an utterance for an earlier portion of the communication session (e.g., the computer system can scroll through historic captions for the current communication session). In some embodiments, scrolling through the captions of the communication session allows a user to review content the user missed during the communication session. Scrolling the captions enables the computer system to display additional caption information of the live communication session if, for example, the user missed a portion of the conversation (e.g., by taking her eyes off her device), which provides the user with feedback about the content that was transmitted as part of the live communication session, thereby improving visual feedback.

**[0281]** In some embodiments, in accordance with a determination that the second caption (and/or first caption) is scrollable, text of the second caption (and/or first caption) is displayed with a first visual property (e.g., a top portion of

captions **605** are gray as depicted in FIG. **6**G) (e.g., to indicate the text is scrollable or to indicate that there is an additional transcript available) (e.g., a portion (e.g., top portion and/or bottom portion) of the text is dimmed, faded, and/or is partially transparent). In accordance with a determination that the second caption (and/or first caption) is not scrollable, text of the second caption (and/or first caption) is not displayed with the first visual property (e.g., a bottom portion of captions **605** are not gray as depicted in FIG. **6**G) (e.g., the text is not dimmed, not faded, and/or is not partially transparent). Modifying a visual property of text of the caption when the caption is scrollable (as compared to when it is not scrollable) provides the user with visual feedback that the caption is scrollable, thereby providing improved feedback.

**[0282]** In some embodiments, an availability to navigate through the captions is limited based on a point in time at which the computer system joined the live communication session (e.g., as described with reference to FIG. **6**G). In some embodiments, the computer system can receive inputs to navigate through the transcript to view transcriptions of utterances of the participants between the time that the computer system joined the live communication session until the current time, but transcripts of utterances of the participants from before the time that the computer system joined the live communication system are unavailable and cannot be navigated to. Providing caption of the communication session only from the point in time at which the user/computer system joined the communication session enhances the communication session experience because it maintains the privacy of a conversation between participants that occurred prior to the user joining the communication session, which provides privacy and improves security of content.

**[0283]** In some embodiments, the computer system displays, via the display generation component, a settings user interface (e.g., **666** depicted in FIG. **6**AB) (e.g., in response to a request to display the settings user interface). While displaying the settings user interface, the computer system detects an input corresponding to a request to modify a caption setting (e.g., **616***z* and/or an input directed at communication application caption option **664** depicted in FIG. **6**AB). In response to detecting the input corresponding to a request to modify the caption setting, the computer system modifies the caption setting (e.g., as depicted in FIG. **6**AB). Subsequent to modifying the caption setting, the computer system receives a request to join a second live communication session (e.g., a live communication session that is different from the live communication session depicted in FIGS. **6**A-**6**P). In response to receiving the request to join the second live communication session, the computer system joins the second live communication session. In response to receiving the request to join the second live communication session and in accordance with a determination that the caption setting indicates that captions are enabled, the computer system displays, via the display generation component, one or more captions based on audio data of one or more participants of the second live communication session (e.g., device **600** displays captions similar to captions **604** and/or expanded captions **605** depicted in FIGS. **6**A-**6**P). In response to receiving the request to join the second live communication session and in accordance with a determination that the caption setting indicates that captions are not enabled, the computer system forgoes display, via the display generation component, of the one or more captions based on audio data of the one or more participants of the second live communication session (e.g., device **600** forgoes displaying captions similar to captions **604** and/or expanded captions **605** depicted in FIGS. **6**A-**6**P). Providing a caption setting in a settings user interface for live communication sessions enhances the communication session experience because it allows a user to intuitively turn captions on or off for multiple communication sessions (e.g., a current and future communication sessions), thereby reducing the number of inputs needed to perform an operation.

**[0284]** In some embodiments, subsequent to modifying the caption setting, the computer system receives a request to stream (e.g., via the second live communication session) shared (e.g., video) content (e.g., content similar to movie **652**) (In some embodiments, in accordance with a determination that the live communication session does not include streaming (for viewing by multiple participants) of a non-live video source and/or does not include streaming of a video source (for viewing by multiple participants) not originating from a camera of one of the participants' devices). In response to receiving the request to stream shared content (e.g., the second live communication session), the computer system streams the shared content (e.g., via the second live communication session). In response to receiving the request to stream shared content (e.g., the second live communication session) and in accordance with a determination that the caption setting indicates that captions are enabled (e.g., universal captions option **662** of FIG. **6**AB is on), the computer system displays, via the display generation component, one or more captions of the shared content (e.g., captions similar to movie captions **654**). In response to receiving the request to stream shared content (e.g., the second live communication session) and in accordance with a determination that the caption setting indicates that captions are not enabled (e.g., universal captions option **662** of FIG. **6**AB is off), the computer system forgoes display, via the display generation component, of the one or more captions of the shared content. Controlling captions for both a streaming content (e.g., a movie, a show) and for audio of participants of the live communication session enables the computer system to enable or disable captions for both types of media with a single user input, thereby reducing the number of inputs needed to perform the operations.

**[0285]** In some embodiments, during the live communication session, the computer system displays, via the display generation component, a second settings user interface (e.g., **670** depicted in FIG. **6**AC) (e.g., in response to a request to display the settings user interface). While displaying the second settings user interface, the computer system detects an input (e.g., **616***aa* depicted in FIG. **6**AC) corresponding to a request to modify a second caption setting (e.g., communication session caption option **668** depicted in FIG. **6**AC). In response to detecting the input corresponding to a request to modify the second caption setting, the computer system modifies the second caption setting. In accordance with a determination that the second caption setting indicates that captions are enabled (e.g., communication session caption option **668** depicted in FIG. **6**AC is on), the computer system displays, via the display generation component, one or more captions (e.g., captions similar to captions **604** and/or expanded captions **605** depicted in FIGS. **6**A-**6**P)

based on audio data of participants of the live communication session (e.g., transitioning from not displaying captions to displaying captions). In accordance with a determination that the second caption setting indicates that captions are not enabled (e.g., communication session caption option **668** depicted in FIG. **6**AC is off), the computer system ceases display, via the display generation component, of the one or more captions based on audio data of participants of the live communication session (e.g., transitioning from displaying captions to not displaying captions). In some embodiments, the second caption is specific to the current/active live communication session, and the setting is not maintained for future live communication sessions. Controlling captions for a particular live communication session enhances the communication session experience because it enables the computer system to temporarily activate or deactivate captions for a current live communication session while not changing caption settings for all future communication sessions.

**[0286]** In some embodiments, concurrently, a first participant in the live communication session utters a plurality of words (e.g., words corresponding to captions **604** for remote user **622** depicted in FIG. **6**J) and a second participant in the live communication session utters a plurality of words (e.g., words corresponding to captions **604** for remote user **624** depicted in FIG. **6**K). In some embodiments, the computer system displays, via the display generation component (e.g., on a first line), captions for the plurality of words uttered by the first participant grouped together and associated with a representation of the first participant (e.g., captions **604** for remote user **622** are displayed in association with Emily's name and image as depicted in FIG. **6**J and/or FIG. **6**L). The computer system displays, via the display generation component (e.g., on a second line), captions for the plurality of words uttered by the second participant grouped together and associated with a representation of the second participant (e.g., captions **604** for remote user **624** are displayed in association with Kim's name and image as depicted in FIG. **6**K). In some embodiments, the plurality of words uttered by the first participant are displayed on a first line and the words uttered by the second participant are displayed on a second line. Subsequent words In some embodiments, when two participants are speaking at the same time, captions for the words the first participant speaks are grouped together and displayed together before captions for the words spoken by the second participant are displayed. In some embodiments, words for a respective participant are grouped together based on detecting a pause in speech (e.g., of 0.5 seconds or 1 second) (e.g., when the participant has finished his or her sentence or when the participant has remained silent for a predetermined period of time). In some embodiments, the computer system displays the captions for the plurality of words uttered by the second participant grouped together and associated with the representation of the second participant subsequent to displaying the captions for the plurality of words uttered by the first participant grouped together and associated with the representation of the first participant. Displaying captions for an utterance for a respective participant as a group of spoken words once the utterance by the respective participant is finished provides the user with visual feedback about the timing of when participants have spoken, thereby providing enhanced visual feedback.

**[0287]** In some embodiments, concurrently, a first participant (e.g., remote user **622** depicted in FIG. **6**J) of the live communication session utters a plurality of words (e.g., words corresponding to captions **604** for remote user **622** depicted in FIG. **6**J) and a second participant (e.g., remote user **624** depicted in FIG. **6**K) of the live communication session utters a plurality of words (e.g., words corresponding to captions **604** for remote user **624** depicted in FIG. **6**K). In some embodiments, the computer system displays, via the display generation component (e.g., on a first line), a caption for a first word of the plurality of words uttered by the first participant (e.g., device **600** displays "doesn't" depicted in FIG. **6**J). Subsequent to displaying the caption for the first word of the plurality of words of the first participant, the computer system displays, via the display generation component (e.g., on a second line), a caption for a first word of the plurality of words uttered by the second participant (e.g., device **600** displays "Thanks" depicted in FIG. **6**K). Subsequent to displaying the caption for the first word of the plurality of words of the second participant, the computer system displays, via the display generation component (e.g., on the first line), a caption for a second word of the plurality of words uttered by the first participant (e.g., device **600** displays "mean" depicted in FIG. **6**L). In some embodiments, the computer system displays the caption for the first word uttered by the first participant and the caption for the second word uttered by the first participant grouped together and associated with the representation of the first participant. In some embodiments, subsequent to displaying the caption for the first word of the plurality of words uttered by the second participant, the computer system displays a caption for a second word of the plurality of words of the second participant grouped together with the caption for the first word uttered by the second participant and associated with the representation of the second participant. In some embodiments, subsequent to displaying the caption for the second word of the plurality of words of the first participant, the computer system displays, via the display generation component (e.g., on the second line), a caption for a second word of the plurality of words uttered by the second participant. In some embodiments, in accordance with a determination that utterances by at least two participants overlap, the computer system displays one or more captions for a first participant on a first row. While displaying the one or more captions for the first participant on the first row, the computer system displays one or more captions for a second participant on a second row. While displaying the one or more captions for the second participant on the second row and displaying the one or more captions for a first participant on a first row, the computer system displays one or more new captions for the first participant on the first row. Displaying captions for words uttered by participants without grouping words together provides visual feedback about the timing at which the individual words are uttered and which user uttered the words, thereby providing improved visual feedback.

**[0288]** In some embodiments, the caption for the first word of the plurality of words uttered by the first participant is displayed on a first line (e.g., **640** as depicted in FIG. **6**J), the caption for the first word of the plurality of words uttered by the second participant is displayed on a second line (e.g., **642** as depicted in FIG. **6**K) (e.g., below the first line), and the caption for the second word of the plurality of words uttered by the first participant is displayed on a third line (e.g., device **600** displays "mean" on a new line under line **642**) (e.g., below the second line). In some embodiments, earlier displayed lines of captions scroll up as a new line of

caption is displayed. In some embodiments, the computer system displays a plurality of words (e.g., in the first caption or in the second caption) one word at a time on a first line and, after displaying the plurality of words on the first line, the computer system moves the plurality of words from the first row to a second row (e.g., to make room for displaying an additional line for additional captions). Displaying a plurality of words one word at a time and moving the plurality of words from the first row to the second row enhances the communication session experience because it allows a user better follow a conversation as it keeps the most recent transcript on the first line, which provides improved visual feedback and reduces the number of inputs needed to perform an operation (e.g., scrolling back through a transcript).

**[0289]** In some embodiments, the first caption and the second caption are displayed in a respective user interface region (e.g., **606** as depicted in FIG. **6**L). In some embodiments, the computer system detects that a predetermined threshold time of inactivity (e.g., the one or more participants have stopped talking, not displaying new captions, and/or not receiving new captions to display) has been satisfied. In response to detecting that the predetermined threshold time of inactivity has been satisfied, the computer system minimizes (e.g., decreasing a size of or removing) the respective user interface region in which the first caption and the second caption were displayed (e.g., as described with reference to FIGS. **60**-**6**P, caption area **606** of **6**P is smaller than caption area **606** of FIG. **6**O) (e.g., decrease a size of a window for the first caption or second caption). In some embodiments, the computer system ceases to display one or more captions after a second predetermined threshold time (e.g., longer than the predetermined threshold of time) of inactivity has been satisfied. Minimizing a caption window when a predetermined threshold time of inactivity has been satisfied enhances the communication session experience because it declutters the user interface when no one is talking, which provides improved visual feedback by providing additional display space for other content.

**[0290]** In some embodiments, in accordance with a determination that the live communication session is between no more than two participants (e.g., as depicted in FIGS. **6**A-**6**C), the computer system overlays one or more captions (e.g., **604** as depicted in FIGS. **6**D-**60**) (e.g., the first caption and/or the second caption) on the one or more representations (e.g., as depicted in FIG. **6**C). In some embodiments, in accordance with a determination that the live communication session is between more than two participants, forgoing overlaying one or more captions (e.g., the first caption and/or the second caption) on the one or more representations. In some embodiments, the computer system determines that the live communication has changed from no more than two participants to at least three participants (e.g., additional participants have joined the live communication session). In response to determining that the live communication session has changed to at least three participants, the computer system ceases to overlay the one or more captions on the one or more representations. In some embodiments, the computer system determines that the live communication has changed from at least three participants to no more than two participants (e.g., one or more participants have left the live communication session). In response to determining that the live communication session has changed to at least three participants, the computer system overlays the one or more captions on the one or more representations. Overlaying captions on the one or more representations when the communication session only involves two participants enhances the communication session experience by enabling a larger view of one of the participants while still displaying captions, which provides improved visual feedback to the user of the expressions of the participant.

**[0291]** In some embodiments, in accordance with a determination that the live communication session is between at least three participants (e.g., as depicted in FIGS. **6**D-**60**), the computer system displays one or more captions (e.g., **604** and/or **605** as depicted in FIGS. **6**D-**60**) (e.g., the first caption or the second caption) adjacent to (e.g., next to and/or not overlapping with) the one or more representations (e.g., as depicted in FIGS. **6**D-**60**). In some embodiments, the computer system determines that the live communication has changed from no more than two participants to at least three participants (e.g., additional participants have joined the live communication session). In response to determining that the live communication session has changed to at least three participants, the computer system displays the one or more captions adjacent to the one or more representations. In some embodiments, the computer system determines that the live communication has changed from at least three participants to no more than two participants (e.g., one or more participants have left the live communication session). In response to determining that the live communication session has changed to at least three participants, the computer system ceases to display the one or more captions adjacent to the one or more representations. Displaying captions adjacent to the one or more representations when the communication session involves at least three participants enhances the communication session experience by not obstructing the view of one of the participants while still displaying a transcript of the conversation, which provides improved visual feedback.

**[0292]** In some embodiments, the computer system detects an input that corresponds to a request to enlarge text for one or more captions (e.g., as described in reference to FIG. **6**I). In response to detecting the input that corresponds to a request to enlarge the text for the one or more captions, the computer system enlarges the text (e.g., increasing the size at which the text is displayed) for the one or more captions (e.g., as depicted in FIG. **6**I). Additionally or alternatively, in response to detecting the input that corresponds to a request to enlarge the text for the one or more captions, the computer system expands a region (e.g., increasing the area in which captions are displayed) for the one or more captions (e.g., **606** in FIG. **6**I is larger than 606 in FIG. **6**H) (e.g., the first caption and/or the second caption). Automatically expanding a caption region when the text for the one or more captions are enlarged enhances the communication session experience because it provides a user the ability to view a magnified view of the text while also expanding a region for that text so that lesser amount (if any) text is excluded from view, which provides improved visual feedback.

**[0293]** In some embodiments, in accordance with a determination that a caption for an utterance (e.g., for one or more spoken words) has a confidence level less than a first threshold amount (e.g., as described in reference to FIG. **6**H) (e.g., within a first range of confidence levels (e.g., a range for a low confidence level and/or a range of 0-50% or 0-25% confidence level)), the computer system displays a graphical

object (e.g., **636**) (which optionally does not include alphabetical characters) (e.g., blanking out the word, underscore without the word, empty space between words) indicating that the utterance has a confidence level that is less than the first threshold amount. In some embodiments, a size (e.g., length and/or width) of the graphical object is based on a duration of the utterance (e.g., as described in reference to FIG. **6**H) (e.g., in accordance with a determination that the utterance has a first duration, the graphical object has a first length, and in accordance with a determination that the utterance has a second duration that is longer than the first duration, the graphical object has a second length that is longer than the first length) (e.g., a quantity of words and/or a length of time for the utterance) (e.g., a shorter distance between words indicates a smaller number of words with low confidence and/or a larger length of distance between words indicates a larger number of words with low confidence). Displaying a graphical object indicating that a machine transcription/caption of the utterance (and the duration/length of the utterance) is at a particular confidence level (e.g., a low confidence) enhances the communication session experience because it provides a reader of the machine transcription with feedback about the confidence the system has that the caption is accurate, which provides improved visual feedback.

**[0294]** In some embodiments, in accordance with a determination that a caption for an utterance has a confidence level within a range of confidence levels (e.g., as described in reference to FIG. **6**H) (e.g., a range for a medium confidence level and/or a range of 51-75% or 51-90% confidence level), the computer system displays text (which optionally includes alphabetical characters) for the caption corresponding to the utterance with a predetermined visual appearance (e.g., **638**) (e.g., the text greyed out, dotted line under the text, and/or underlined text). In some embodiments, the text for the one or more captions is displayed with one or more graphical objects to indicate the confidence level for the utterance is within second range of confidence levels. Displaying text for one or more captions with a predetermined visual appearance when an utterance is at a particular confidence level (e.g., a medium confidence) enhances the communication session experience because it provides the user with feedback about the confidence the system has in the transcribed words and facilitates better communication between users that are relying on machine transcription to communicate.

**[0295]** In some embodiments, the computer system displays a graphical object (e.g., **612**) indicating one or more captions are machine-generated. Displaying a graphical object indicating captions are machine-generated enhances the communication session experience because a user can quickly identify whether or not it is text being typed by another user, which provides improved visual feedback and facilitates better communication between users that are relying on a machine transcription to communicate.

**[0296]** In some embodiments, while displaying one or more captions, the computer system detects an input (e.g., **616***i* as depicted in FIG. **6**R and/or **616***y* as depicted in FIG. **6**AA) (e.g., a tap input or a non-tap input) corresponding to a request to cease to display the one or more captions (e.g., the first caption or the second caption). In response to detecting the input corresponding to the request to cease to display the one or more captions, the computer system ceases to display the one or more captions and ceases to display a representation of one or more participants (e.g., as depicted in FIG. **6**V). In some embodiments, the representation of the one or more participants overlaps onto shared content. In some embodiments, the computer system in a landscape mode. Automatically ceasing display of a representation of one or more participants and the one or more captions in response to a request to cease to display a caption enhances the communication session experience because a user can view content that is being shared in the communication session, which provides improved visual feedback and reduces the number of inputs needed to perform an operation.

**[0297]** In some embodiments, the computer system detects that the computer system is at a respective position (e.g., orientation, such as a landscape orientation). In response to detecting that the computer system is at a respective position and in accordance with a determination that the live communication user interface is in a first spatial orientation relative to a camera (e.g., **602**) of the computer system (e.g., as depicted in FIG. **6**AD) (e.g., a first landscape orientation, where a camera is located to the right of the display generation component), the computer system displays one or more captions (e.g., **605** of FIG. **6**AD) (e.g., of the first caption or the second caption) at a first location in the user interface that is adjacent to a camera of the computer system (e.g., as depicted in FIG. **6**AD). In response to detecting that the computer system is at a respective position and in accordance with a determination that the live communication user interface is in a second spatial orientation relative to the camera of the computer system (e.g., a second landscape orientation, where the camera is located to the left of the display generation component) different from the first spatial orientation (e.g., as depicted in FIG. **6**AE), the computer system displays one or more captions (e.g., **605** of FIG. **6**AE) (e.g., of the first caption or the second caption) at a second location in the live communication user interface, different from the first location in the live communication user interface, that is adjacent to the camera (e.g., as depicted in FIG. **6**AE). In some embodiments, the computer system displays the one or more captions proximate to the position of the camera so that it will appear (to other participants of the live communication session) like the user is looking at the camera while the user is reading the caption. Placing captions at locations in the user interface that is based on an orientation of the computer system and closer to a location of camera enhances the communication session experience because a user can read a transcription while it appears that the user is looking at the camera, which provides improved visual feedback and reduces the number of inputs needed to perform an operation (e.g., moving the one or more captions).

**[0298]** In some embodiments, while the live communication session includes more than two participants, the computer system displays a representation (e.g., **621**, **623**, and/or **629** of FIG. **6**D) of a first participant (e.g., **620**, **622**, and/or **628** of FIG. **6**D) (and/or second participant) of the live communication session at a first size (e.g., a first width and/or a first length) in the live communication user interface. The computer system detects that the live communication session includes no more than two participants (e.g., device **600** detects the communication session is between local user **620** and remote user **622** of FIGS. **6**A-**6**C). In response to detecting that the live communication session includes no more than two participants, the computer system

increases an amount (e.g., a number of lines or words) of caption information displayed in the live communication user interface (e.g., device **600** can increase the caption area **606** and/or display more text for captions **604**). Increasing the size of the captions in the live communication interface enhances the communication session experience by enabling a larger display of the captions and providing the user with feedback that there are only two participants remaining in the live communication session, which provides improved visual feedback.

**[0299]** In some embodiments, the first caption and the second caption are displayed in a respective user interface region. In some embodiments, the computer system displays one or more captions (e.g., of the first caption or the second caption). In accordance with a determination that a predetermined threshold of time has passed since an utterance has occurred (e.g., as described with reference to FIG. **6**P) (e.g., the one or more participants have not spoken or no utterances have been detected), the computer system ceases to display the respective user interface region (e.g., captions **604** and/or caption area **606** of FIG. **6**P). In some embodiments the one or more captions are overlaid on a graphical object (e.g., a platter, a tray, a shape, and/or a background). In some embodiments, ceasing to display the respective user interface region includes ceasing to display the first caption and the second caption. Ceasing to display the one or more captions enhances the communication session experience by decluttering the user interface when no one is speaking without requiring further input from the user, which provides improved visual feedback and reduces the number of inputs needed to perform an operation.

**[0300]** In some embodiments, the computer system displays (e.g., in response to detecting a pause and/or ambient sounds) a graphical indication of a context of an utterance (e.g., as described in reference to FIG. **6**A) (e.g., a length of pause between utterances or ambient sounds) within ((e.g., inline or embedded within) text of) one or more captions (e.g., **604** and/or **605**). In some embodiments, the computer system displays content based on audio (and/or lack of audio) in the captions that do not correspond to utterances. For example, the captions may include a graphical indication of a dog barking in the background of a participant, an alarm sounding in the background of a participant, and/or music (e.g., a plano) playing in the background of a participant. Displaying an indication of a context of an utterance enhances the communication session experience by providing an indication of background noise and/or pauses in the middle of a transcript, which provides improved visual feedback and facilitates better communication between users that are relying on a machine transcription to communicate.

**[0301]** Note that details of the processes described above with respect to method **700** (e.g., FIG. **7**) are also applicable in an analogous manner to the methods described below For example, method **800** optionally includes one or more of the characteristics of the various methods described above with reference to method **700**. For example, method **800** can include characteristics of method **700** to manage a live video communication session. For brevity, these details are not repeated below.

**[0302]** FIG. **8** is a flow diagram illustrating a method for switching user interfaces during a live communication session using a computer system in accordance with some embodiments. Method **800** is performed at a computer system (e.g., **100**, **300**, **500**, and/or **600**) (e.g., a smartphone, a tablet, a laptop computer, and/or a desktop computer) that is in communication with a display generation component (e.g., **601**) (e.g., a display controller, a touch-sensitive display system, and/or a monitor) and one or more input devices (e.g., **601**) (e.g., a touch-sensitive surface, a keyboard, a controller, and/or a mouse). Some operations in method **800** are, optionally, combined, the orders of some operations are, optionally, changed, and some operations are, optionally, omitted.

**[0303]** As described below, method **800** provides an intuitive way for switching user interfaces during a live communication session. The method reduces the cognitive burden on a user for managing captions of a live communication session, thereby creating a more efficient human-machine interface. For battery-operated computing devices, enabling a user to manage captions of a live communication session faster and more efficiently conserves power and increases the time between battery charges.

**[0304]** In some embodiments, the computer system displays (**802**), via the display generation component, a user interface (e.g., **614** and/or **615**) of a live communication application corresponding to a live communication session (e.g., the live communication session depicted in FIGS. **6**A-**6**AA). The user interface of the live communication application concurrently includes (**804**) a representation (e.g., **621**, **623**, **625**, **627**, and/or **629**) (e.g., avatar, still image, and/or video (e.g., live video feed)) of a first participant (e.g., **620**, **622**, **624**, **626**, and/or **628**) of the live communication session displayed in the live communication application. The user interface of the live communication application concurrently includes (**806**) a first caption (e.g., **604** and/or **605**) (e.g., including text) for audio data of the first participant (e.g., audio data received, processed, and/or transmitted by the live communication application for the participant) displayed in the live communication application.

**[0305]** In some embodiments, while the user interface of the live communication application is displayed, the computer system receives (**808**) a sequence of one or more inputs (e.g., **616***g* and/or **616***h*) that corresponds to a request to switch to displaying a respective user interface (e.g., user interface of a home screen as depicted in FIG. **6**Q and/or user interface of movie application **651**) that is different from the live communication application.

**[0306]** In response to (**810**) receiving the sequence of one or more inputs that corresponds to the request to switch to displaying the respective user interface, the computer system replaces (**812**) at least a portion of the live communication application with the respective user interface that is different from the live communication application (e.g., a different application or a system user interface such as a home screen). In response to (**810**) receiving the sequence of one or more inputs that corresponds to the request to switch to displaying the respective user interface, the computer system displays (**812**) a reduced scale representation (e.g., **629** of FIG. **6**Q) of the first participant of the live communication session overlaid on at least a portion of the respective user interface (e.g., as depicted in FIGS. **6**Q-**6**U, **6**Y-**6**AA). In response to (**810**) receiving the sequence of one or more inputs that corresponds to the request to switch to displaying the respective user interface, the computer system displays a second caption (e.g., **604** in FIG. **6**Q) (e.g., same as the first caption or different from the first caption)

for audio data of the first participant, wherein the second caption for audio data is displayed separately from the reduced scale representation of the first participant of the live communication session and is overlaid on at least a portion of the respective user interface (e.g., as depicted in FIG. **6**Q). In some embodiments, the second caption is a reduced scale caption (e.g., occupies a smaller portion of the display) than the first caption. In some embodiments, the user interface of the live communication application overlaps (e.g., obscures and/or hides) a first portion of the respective user interface and does not overlap a second portion of the respective user interface. In some embodiments, the user interface of the live communication application does not overlap (e.g., obscure and/or hide) the first user interface (e.g., the user interface of the live communication application is displayed adjacent to the respective user interface). Displaying a reduced scale representation and a caption over a user interface for an application different from the live communication application enhances the communication session experience by allowing a user to view a transcript of the communication session while navigating through an application or home screen, which provides improved visual feedback and facilitates better communication while users navigate away from the live communication application.

**[0307]** In some embodiments, the reduced scale representation of the first participant and the second caption for audio data of the participant are automatically positioned in a location that does not hide (e.g., obscure from view and/or overlap) predetermined content (e.g., **654** in FIG. **6**T) (e.g., particular user interface objects (e.g., virtual keyboard, buttons, and/or an application dock), shared media. captions of shared media) of the respective user interface. In some embodiments, the computer system detects that the predetermined content has moved. In response to detecting that the predetermined content has moved, the computer system moves the reduced scale representation of the first participant and the second caption for audio data of the participant (e.g., to avoid hiding the predetermined content). In some embodiments, the computer system detects an input (e.g., a drag gesture) corresponding to a request to move the reduced scale representation of the first participant and the second caption for audio data of the participant to a location occupied by the predetermined content. While continuing to detect the input (e.g., the initial contact is maintained), moving the reduced scale representation of the first participant and the second caption for audio data of the participant to a location occupied by the predetermined content (in some embodiments, the reduced scale representation of the first participant and the second caption for audio data of the participant hide the predetermined content). While the reduced scale representation of the first participant and the second caption for audio data of the participant are in the location occupied by the predetermined content, the computer system detects an end of the input (e.g., a finger lift off event and/or an end of the contact). In response to detecting then end of the input and in accordance with a determination that the reduced scale representation of the first participant and the second caption for audio data of the participant is in the location occupied by the predetermined content, the computer system are automatically positioned at a location other than the location occupied by the predetermined content (e.g., the computer system automatically moves the reduced scale representation of the first participant and the second caption for audio data of the participant so that they do not hide the predetermined content). Automatically placing the reduced scale representation of the first participant and the second caption for audio data of the participant to avoid certain content enhances the communication session experience by allowing a user to view a transcript of the communication session without obscuring important content, which provides improved visual feedback.

**[0308]** In some embodiments, while displaying the respective user interface, the computer system detects an input (e.g., **616***n* and/or **616***x*) corresponding to a request to update (e.g., scrolling through and/or navigating through) content of the respective user interface. In response to detecting the input corresponding to the request to update content of the respective user interface, the computer system updates the content of the respective user interface independently of (e.g., without updating) content of the second caption (e.g., as described in reference to FIGS. **6**R-**6**S) (e.g., without scrolling through the second caption or navigating through the second caption). In some embodiments, the computer system receives user input to update content of the second caption (e.g., scrolling through the content) and, in response, updates the content of the second caption independently of (e.g., without) updating content of the respective application. In some embodiments, the computer system automatically updates the second caption (e.g., replacing the second caption with one or more captions that are different from the second caption) independently of detecting the request to update content of the respective user interface (e.g., in response to an utterance by one or more participants of the live communication session). Updating content of the respective user interface (when the computer system detects input directed at the respective user interface) without updating (based on the input) the content of the second caption enables the computer system to allow for independent control of the two applications and provides the user with feedback about which application is being updated, thereby providing enhanced user feedback.

**[0309]** In some embodiments, while displaying the respective user interface, the computer system detects an input (e.g., **616***j* and/or **616***w*) corresponding to a request to move (e.g., without scrolling and/or without changing a size of) the reduced scale representation of the participant and/or the second caption. In response to detecting the input corresponding to the request to move the reduced scale representation of the first participant and/or the second caption, the computer system moves the reduced scale representation of the first participant and/or the second caption independently of (e.g., without navigating through) content of the respective user interface (e.g., as depicted in FIG. **6**S and/or described in reference to FIG. **6**AA). In some embodiments, the computer system receives user input to navigate through the content of the respective user interface and, in response, navigates through the content of the respective user interface independently of (e.g., without) moving the reduced scale representation of the first participant and/or the second caption. Moving the reduced scale representation of the first participant and/or moving the second caption independently of navigating through content of the respective user interface enhances the communication session experience by allowing a user to move a transcript of the communication session so that it does not obscure content of the respective application that the user desires to view/access, which provides improved visual feedback.

**[0310]** In some embodiments, while displaying a reduced scale representation of a respective participant (e.g., **623** as depicted in FIG. **6**R) of the live communication session overlaid on at least a portion of the respective user interface, the computer system detects information indicating that one or more captions are available for a respective utterance for the respective participant (e.g., device **600** detects captions **604** of FIG. **6**S are available) (e.g., the first participant or a second participant). In response to detecting that the one or more captions are available for the respective utterance for the respective participant, the computer system displays the one or more captions for the respective utterance instead of displaying (e.g., replacing and/or updating) the second caption (e.g., captions **604** of FIG. **6**S are displayed instead of captions **604** of FIG. **6**R). Updating one or more captions when new captions are available enhances the communication session experience by allowing a user to view an up-to-date transcript of a recent the communication session, which provides improved visual feedback.

**[0311]** In some embodiments, the second caption is overlaid on shared content that is being shared with multiple participants in the live communication session (e.g., captions **604** of FIGS. **6**T-**6**U and/or captions **604** of FIG. **6**Y) (e.g., content that is viewed by at least two participants in the live communication session or content that is shared between at least two devices). In some embodiments, content of the respective application is shared among participants of the live communication session (e.g., multiple participants of the live communication session are concurrently viewing the content) and the one or more captions (e.g., the first caption and/or the second caption) are overlaid on the shared content of the respective application. Overlaying captions on shared content enhances the communication session experience by allowing a user to concurrently view a transcript of the communication session along with the shared content, which provides improved visual feedback and facilitates better communication while users view shared content. For example, the user can monitor a single location to view both the shared content and updates to the captions.

**[0312]** In some embodiments, the computer system displays one or more captions (e.g., **604** of FIGS. **6**Q-**6**U and **6**Y-**6**Z) (e.g., the second caption for audio data of the first participant or the first caption for audio data of the first participant) (e.g., overlaid on a graphical object (e.g., a platter, a tray, a shape, and/or a background)). After displaying the one or more captions and in accordance with a determination that a predetermined threshold amount of time has passed since captions have been added to the one or more captions (e.g., as described with reference to FIG. **6**P) (e.g., predetermined threshold of time has passed since an utterance has occurred (e.g., the plurality of participants have not spoken)), the computer system ceases to display the one or more captions (e.g., device **600** can cease to display captions **604** of FIGS. **6**Q-**6**U and **6**Y-**6**Z) (and, optionally, ceasing to display at least a portion of (e.g., all of) the graphical object). In some embodiments, in accordance with a determination that the predetermined threshold amount of time has not passed since captions have been added to the one or more captions and in accordance with a determination that a caption has been added to the one or more captions, forgoing the ceasing to display the one or more captions. In some embodiments, the computer system forgoes ceasing to display the one or more captions if a caption is added to the one or more captions before the predetermined threshold amount of time has passed (or is satisfied). Ceasing to display the one or more captions enhances the communication session experience by decluttering the user interface and allowing a user to better view shared content and/or content of the respective application without requiring further user input, which provides improved visual feedback and performs the operation when a set of conditions has been met without requiring further user input.

**[0313]** In some embodiments, the computer system detects an input (e.g., **616***j* and/or **616***v*) (e.g., a touch-and-drag input on the reduced scale representation) corresponding to a request to move a reduced scale representation of a respective participant (e.g., the first participant). In response to detecting the input corresponding to the request to move the reduced scale representation of the respective participant, the computer system moves, via the display generation component, a location of the reduced scale representation of the respective participant and moves (e.g., as depicted in FIG. **6**S) (e.g., automatically), via the display generation component, a location of one or more captions (e.g., as depicted in FIG. **6**S) (e.g., the second caption for audio data of the first participant). In some embodiments, the computer system moves the one or more captions such that the one or more captions have a same position relative to the reduced scale representation of the respective participant as the one or more captions had prior to the moving of the reduced scale representation of the respective participant. In some embodiments, the computer system moves the one or more captions such that the one or more captions have a different position relative to the reduced scale representation of the respective participant as the one or more captions had prior to the moving of the reduced scale representation of the respective participant. Automatically moving the reduced scale representation of the respective participant and the one or more captions in response to a request to move the reduced scale representation enhances the communication session experience by allowing a user better view shared content and/or content of an application, which provides improved visual feedback and reduces the number of inputs needed to perform an operation.

**[0314]** In some embodiments, while displaying a reduced scale representation (e.g., **629** of FIG. **6**Q) of the first participant (e.g., John) of the live communication session overlaid on at least a portion of the respective user interface, the computer system detects that a respective participant (e.g., Emily) is more active in the live communication session than the first participant (e.g., as described in reference to FIG. **6**D) (e.g., the respective participant begins speaking and the first participant stops speaking or the respective participant speaks louder, more recently, and/or faster than the first participant). In response to detecting that the respective participant is more active in the live communication session than the first participant, the computer system replaces the reduced scale representation of the first participant with a reduced scale representation (e.g., **623** of FIG. **6**R) of the respective participant. Replacing the reduced scale representation of the first participant with a reduced scale representation of the respective participant enhances the communication session experience by allowing a user to view a representation (e.g., an image) of an active speaker, thereby indicating to the user which participants is speaking, which provides improved visual feedback.

**[0315]** In some embodiments, the computer system displays a settings user interface (e.g., **666** and/or an input directed to **664**). While displaying the settings user interface, the computer system detects an input (e.g., **616***z* an input directed to **664**) corresponding to a request to modify (e.g., toggle, enable, or disable) a caption setting for the user interface of the live communication application. In response to detecting the input corresponding to a request to modify the caption setting for the live communication application and in accordance with a determination that the input activates the caption setting for the live communication application, the computer system enables display of one or more captions as part of the user interface of the live communication application for live communication sessions (e.g., as described in reference to FIG. **6**AB). In response to detecting the input corresponding to a request to modify the caption setting for the live communication application and in accordance with a determination that the input deactivates the caption setting for the live communication application, the computer system disables display of captions as part of user interface of the live communication application for live communication sessions (e.g., as described in reference to FIG. **6**AB). In some embodiments, in accordance with a determination that the display of one or more captions are enabled, the computer system displays one or more captions (e.g., the first caption and/or the second caption) in the live communication user interface. In some embodiments, in accordance with a determination that the display of one or more captions are disabled, the computer system forgoes displaying the one or more captions (e.g., the first caption and/or the second caption) in the live communication user interface. Providing a caption setting in a settings user interface for the live communication application enhances the communication session experience because it allows a user to turn captions on or off for multiple communication sessions (e.g., a current and future communication session), which provides an intuitive interface and reduces the number of inputs needed to perform an operation (e.g., no need to change the setting for each new live communication session).

**[0316]** In some embodiments, while displaying a reduced scale representation (e.g., **629** of FIG. **6**Q) of the first participant of the live communication session overlaid on at least a portion of the respective user interface, the computer system detects that a respective participant (e.g., Emily) is more active in the live communication session than the first participant (e.g., as described in reference to FIG. **6**D) (e.g., the respective participant begins speaking and the first participant stops speaking or the respective participant speaks louder, more recently, and/or faster than the first participant). In response to in response to detecting that the respective participant is more active in the live communication than the first participant, the computer system replaces (e.g., swaps or switches), via the display generation component, the reduced scale representation of the first participant with a reduced scale representation (e.g., **623** of FIG. **6**R) of the respective participant. In response to detecting that the respective participant is more active in the live communication than the first participant, the computer system replaces (e.g., swaps or switches), via the display generation component, the second caption for audio data of the first participant with a caption for audio data of the respective participant (e.g., captions **604** of FIG. **6**Q are replaced by captions **604** of FIG. **6**R). Replacing both the reduced scale representation and the second caption of a person when a different person is active enhances the communication session experience because it allows a user to view both a transcript and a representation (e.g., an image) of an active speaker, which provides feedback to the user about the active participant and their corresponding captions.

**[0317]** In some embodiments, while displaying a reduced scale representation (e.g., **623** of FIG. **6**R and/or representation of Kim depicted in FIG. **6**U) of a respective participant (e.g., Emily and or Kim) (e.g., the first participant) and a second caption for audio data of the respective participant (e.g., **604** of FIG. **6**R and/or **604** of FIG. **6**U) (e.g., the first participant), the computer system detects an input (e.g., **616***i* and/or **616***p*) directed to the reduced scale representation of the respective participant (e.g., a minimization input such as a single gesture and/or corresponding to a request to minimize (e.g., cease to display or move to an applications dock) the reduced scale representation of the respective participant). In response to detecting the input directed to the reduced scale representation of the respective participant (e.g., a minimization input such as the single gesture, corresponding to the request to minimize the reduced scale representation of the respective participant, and/or without receiving additional user input), the computer system reduces a prominence (e.g., a visual prominence) of (e.g., minimizing, reducing in size, blurring, dimming, and/or ceasing to display) the reduced scale representation of the respective participant (e.g., as depicted in FIG. **6**V). In some embodiments, in response to detecting the input directed to the reduced scale representation of the respective participant, the computer system reduces a prominence of (e.g., minimizing or reducing in size and/or ceasing to display) the second caption for audio data of the respective participant (e.g., as depicted in FIG. **6**V). Automatically reducing a prominence of both the reduced scale representation and the caption of a respective participant in response to detecting the input enhances the communication session experience because it declutters the user interface and reduces the number of inputs required to minimize both the reduced scale representation of the respective participant and the caption for audio data of the respective participant, which reduces the number of inputs needed to perform an operation.

**[0318]** In some embodiments, reducing the prominence of the reduced scale representation of the respective participant and the second caption for audio data of the respective participant includes ceasing to display the reduced scale representation of the respective participant and the second caption for audio data of the respective participant (e.g., as depicted in FIG. **6**V). In some embodiments, the computer system displays an indication (e.g., **656** of FIG. **6**V) (e.g., a graphical object (e.g., shape, highlight, or symbol) and/or a visual change in a graphical object) indicating that one or more participants (e.g., a first participant or a second participant) are speaking (optionally, and/or have spoken since captions were last displayed) without displaying the reduced scale (and, optionally, any scale) representation of the respective participant and the caption for audio data of the respective participant. Displaying a visual cue that a participant is speaking enhances the communication session experience because it provides the user with visual feedback that a participant is speaking, which provides improved visual feedback.

**[0319]** In some embodiments, displaying the indication indicating that one or more participants are speaking includes animating (e.g., **658**) a graphical user interface object (e.g., **656** of FIG. **6**W) at a location in the respective user interface that is associated with the reduced scale representation of the respective participant (e.g., via a bouncing arrow and/or via a changes in color). In some embodiments, the computer system detects an input (e.g., a tap gesture, a swipe gesture, and/or a drag gesture) corresponding to the location in the respective user interface that is associated with the representation of the respective participant. In some embodiments, in response to detecting the input, the computer system increases the prominence of the reduced scale representation of the respective participant and the caption for audio data of the respective participant. Animating the graphical user interface object provides a visual cue that a participant is speaking enhances the communication session experience because provides the user with visual feedback that a participant is speaking, which provides improved visual feedback.

**[0320]** In some embodiments, the computer system displays shared content concurrently with the reduced scale representation of the first participant (e.g., as depicted in FIG. **6**U) (and, optionally, the second caption for audio data of the first participant). In some embodiments, while displaying the shared content concurrently with the reduced scale representation of the first participant (and, optionally, the second caption for audio data of the first participant), the computer system detects an input (e.g., **616***p*) corresponding to a request to reduce a prominence of (e.g., cease to display or minimize) the reduced scale representation of the first participant. In some embodiments, in response to detecting the input corresponding to the request to reduce the prominence of (e.g., cease to display or minimize) the reduced scale representation of the first participant, the computer system reduces a prominence of (e.g., ceasing to display or minimizing) the reduced scale representation of the first participant (and, optionally, ceasing to display or maintaining display of the second caption for audio data of the first participant) and/or maintains display of shared content (e.g., as depicted in FIG. **6**U). In some embodiments, the computer system further ceases to display the second caption for audio data of the first participant in response to detecting the input corresponding to the request to reduce the prominence of the reduced scale representation of the first participant. Ceasing to display the reduced scale representation while maintaining display of shared content enhances the communication session experience because it maximizes display of (and, therefore, a user's view of) shared content, which provides improved visual feedback.

**[0321]** In some embodiments, the computer system displays one or more captions for shared content (e.g., movie captions of FIG. **6**AA) (e.g., closed captioning for a movie that is being shared via the live communication session) overlaid on shared content (e.g., movie **652** of FIG. **6**AA) (e.g., the movie that is being shared). In some embodiments, one or more captions (e.g., **604** of FIG. **6**AA) (e.g., the second caption) for audio data of a respective participant, that is displayed concurrently with the one or more captions for the shared content, is displayed adjacent to (e.g., not overlapping with or not obscuring view of) the shared content (e.g., as depicted in FIG. **6**AA). In some embodiments, the computer system updates the one or more captions for shared content over time. In some embodiments, the computer system updates the one or more captions for shared content independently of (e.g., without updating and/or without adding captions to) the one or more captions for audio data of the respective participant. In some embodiments, the computer system updates the one or more captions for audio data of the respective participant over time. In some embodiments, the computer system updates the one or more captions for shared content independently of the caption for audio data of the respective participant. In some embodiments, the computer system updates the one or more captions for audio data of the respective participant independently of (e.g., without updating and/or without adding captions to) the one or more captions for shared content. Displaying a caption for audio data of a respective participant adjacent to the shared content and captions for the shared content overlaid on the shared content provides the user with visual feedback about which caption corresponds to which item (other participant or the shared content), which provides improved visual feedback.

**[0322]** Note that details of the processes described above with respect to method **800** (e.g., FIG. **8**) are also applicable in an analogous manner to the methods described above. For example, method **700** optionally includes one or more of the characteristics of the various methods described above with reference to method **800**. For example, method **700** can include characteristics of method **800** to manage a live video communication session. For brevity, these details are not repeated below.

**[0323]** FIGS. **9**A-**9**AI illustrate exemplary user interfaces for providing captions in accordance with some embodiments. The user interfaces in these figures are used to illustrate the processes described below, including the processes in FIG. **10**.

**[0324]** FIG. **9**A illustrates electronic device **900**. In FIG. **9**A, electronic device **900** is a portable multifunction device and has one or more components described above in relation to one or more of devices **100**, **300**, **500**, and **600**.

**[0325]** In FIG. **9**A, device **900** displays, on display **902**, a captions settings interface **910** for managing various aspects of captions (e.g., provided on device **900**). Captions settings interface **910** includes enable option **912**, text option **914**, and color options **916***a*, **916***b*. Enable option **912**, when selected, activates (or deactivates) a captions feature on device **900**. In some embodiments, enabling the captions feature allows device **900** to provide captions (e.g., transcriptions) in a captions interface based on audio (or audio metadata) provided and/or received by device **900**. In some embodiments, various visual characteristics of captions provided in this manner may be modified. As an example, text size may be modified using text option **914**, text color may be modified using color option **916***a*, and a background color of the captions interface may be modified using color option **916***b*.

**[0326]** In an example operation, device **900** detects selection of enable option **912** while displaying captions interface **910**. The selection is a tap gesture **905***a* on enable option **912**. As shown in FIG. **9**B, in response to detecting tap gesture **905***a*, device **900** displays captions interface **920** and toggles a state of enable option **912** from "off" to "on", indicating that the captions feature has been enabled on device **900**. In some embodiments, captions interface **920** is overlaid on captions settings interface **910**.

**[0327]** In some embodiments, captions interface **920** includes indicator **922***a* and text portion **922***b*. Indicator

**922***a* indicates that captions interface **920** is an interface for providing captions of audio received by device **900** (e.g., "Live Captions"). Optionally, and as described in further detail below, in some embodiments, indicator **922***a* indicates a current source of audio when captions are provided by device **900**. Text portion **922***b* indicates a state of the captions provided by device **900** (e.g., paused and/or waiting). In some embodiments, captions provided by device **900** are displayed in text portion **922***b*.

**[0328]** In some embodiments, further in response to selection of enable option **912**, device **900** displays, in captions settings interface **910**, caption option **918**. When enabled, caption option **918** prevents captioning during live communication sessions, such as phone calls, video calls, conference calls, and the like.

**[0329]** While displaying captions interface **920** (e.g., which is, optionally, overlaid on captions settings interface **910** or not overlaid on captions settings interface **910**), device **900** detects a request to display a home screen interface. In some embodiments, the request is an upward swipe gesture **905***b* located at or near the bottom of display **902**. As shown in FIG. **9**C, in response to detecting swipe gesture **905***b*, device **900** displays home interface **930** including application affordance **932** corresponding to a podcast application. In some embodiments, display of captions interface **920** is maintained until the captions feature is disabled on device **900**. Accordingly, device **900** maintains display of captions interface **920** such that captions interface **920** is overlaid on home interface **930**.

**[0330]** While displaying home interface **930**, device **900** detects an input corresponding to a location of captions interface **920**. The input is a tap gesture **905***c*. As shown in FIG. **9**D, in response to detecting tap gesture **905***c*, device **900** modifies display of (e.g., expands or contracts) captions interface **920** to display controls **924**.

**[0331]** Controls **924** include minimize affordance **924***a*, microphone affordance **924***b*, enable affordance **924***c*, and maximize affordance **924***d*. Minimize affordance **924***a*, when selected, causes a size of captions interface **920** to be reduced. In some embodiments, reducing a size of captions interface **920** in this manner includes ceasing display of one or more of indicator **922***a*, text portion **922***b*, and controls **924***a-d*. Maximize affordance **924***d*, when selected, causes a size of captions interface **920** to be increased. Microphone affordance **924***b*, when selected, activates microphone captioning such that device **900** provides captions based on user inputs (e.g., speech inputs and/or audio inputs) and/or other auditory inputs (e.g., non-verbal sounds, speech inputs from speakers other than a user of device **900**) received (e.g., detected) by device **900**.

**[0332]** Enable affordance **924***c*, when selected, enables captioning on device **900** such that device **900** provides captions in captions interface **920**, for instance, based on audio (or audio metadata) received by device **900**. For example, while displaying controls **924**, device **900** detects selection of enable affordance **924***c*. The selection is a tap gesture **905***d* on enable affordance **924***c*. As shown in FIG. **9**E, in response to detecting tap gesture **905***d*, device **900** modifies display of enable affordance **924***c* (e.g., from a "play" indicator to a "pause" indicator) to indicate captioning has been activated on device **900**. In some embodiments, display of text portion **922***b* is modified, indicating that device **900** is waiting for an audio source from which to provide captions (e.g., "waiting").

**[0333]** Thereafter, device **900** detects selection of an application affordance **932** (e.g., tap gesture **905***e*). As shown in FIG. **9**F, in response to detecting selection of the application affordance **932**, device **900** opens (e.g., executes) a podcast application and displays podcast interface **940** including a play affordance **942**, which when selected, initiates playback of a podcast episode (e.g., podcast episode **260**). While displaying the podcast interface **940**, device **900** detects selection of play affordance **942** (e.g., tap gesture **905***f*), and in response initiates playback of the podcast episode.

**[0334]** FIGS. **9**G-**9**H illustrate an example operation in which captioning is enabled during playback of the podcast episode. As shown in FIG. **9**G, during playback, indicator **922***a* of captions interface **920** indicates a source of audio (e.g., "Podcasts") and text portion **922***b* of captions interface **920** includes captions derived from audio of the podcast episode (e.g., "Hello everyone . . . "). In some embodiments, device **900** indicates a time at which captions are provided. Captions interface **920** may include, for instance, time indicator **922***c* indicating a time at which captions for the podcast have been provided.

**[0335]** In some embodiments, device **900** may be configured to identify one or more individuals speaking (also referred to as speakers) in an audio source. For example, as shown in FIG. **9**G, captions are attributed to "Speaker **1**" and, as shown in FIG. **9**H, subsequent captions are attributed to "Speaker **2**". In some embodiments, individuals speaking may be identified using one or more machine learning techniques and/or voice recognition models.

**[0336]** In some embodiments, only a portion of captions provided by device **900** may be displayed in captions interface **920** at a given time. Accordingly, in some embodiments, device **900** may scroll captions in captions interface **920** such that older captions are no longer displayed as new captions are provided. By way of example, FIG. **9**G illustrates playback at time **10**:**9** at which playback of the podcast episode has commenced, and FIG. **9**H illustrates time **10**:**10** at which playback of the podcast episode has progressed. As shown, a portion of the captions attributed to "Speaker **1**" displayed at time **10**:**9** (FIG. **9**G) are no longer displayed at time **10**:**10** (FIG. **9**H) after additional captions attributed to "Speaker **2**" have been provided.

**[0337]** In some embodiments, captions may be provided during live communication sessions. For example, while displaying podcast interface **940**, device **900** displays call notification **948** indicating that device **900** is currently receiving an incoming phone call (e.g., from contact "Mom"). While displaying call notification **948**, device **900** detects selection of acceptance affordance **948***a* of call notification **948** to accept the incoming call. The selection is a tap gesture **905***h* on acceptance affordance **948***a*. As shown in FIG. **9**I, in response to detecting tap gesture **905***h*, device **600** displays phone interface **950** of a phone application and initiates a phone call session. As described, in some embodiments, display of captions interface **920** is maintained until the captions feature is disabled. Accordingly, device **900** maintains display of captions interface **920** such that captions interface **920** is overlaid on phone interface **950**.

**[0338]** In some embodiments, captions interface **920** is displayed at a predetermined location and/or in a predetermined state. For example, in some embodiments, captions interface **920** may be displayed at a particular location (e.g., a user-specified location or system-specified location) when displayed concurrently with a particular application. As

another example, captions interface **920** may be displayed as having a particular size when displayed concurrently with a particular application. As another example, captions interface **920** may be displayed such that captions interface **920** does not obscure one or more elements of an underlying interface (e.g., an interface on which captions interface **920** is overlaid). For instance, with reference to FIG. **9**I, captions interface **920** is overlaid on phone interface **950** at a location such that various controls of phone interface **950** (e.g., mute, keypad, speaker, add call, video call, and/or contacts) are visible and accessible to a user of device **900**.

**[0339]** During the phone call, device **900** provides captions corresponding to various speakers. For example, captions may be provided based on input received from a user of device **900**. During the phone call, device **900** receives a speech input **905***i* (e.g., "Hey Mom, how are you?") from a user ("John") of device **900** (e.g., via a microphone of device **900**) and provides a caption for speech input **905***i* in captions interface **920**. As shown, captions from the user of device **900** may be attributed to the user. As another example, captions may be provided from other participants of the phone call (e.g., contact "Mom"). During the phone call session, device **900** receives audio from the phone application corresponding to the contact "Mom" and provides a corresponding caption ("Hi honey, I just wanted . . . "). As shown, captions from other participants may be attributed to the participants.

**[0340]** In some embodiments, captions may identify non-verbal sounds. With reference to FIG. **9**J, for example, device **900** provides a caption **954** during the phone call session indicating that a sound determined to be a doorbell was detected by device **900** (e.g., "doorbell"). Non-verbal sounds may be identified from any audio source including but not limited to audio detected by a microphone of device **900** and audio provided by one or more applications of device **900**. In some embodiments, device **900** may provide captions for any number and/or type of non-verbal sounds, such as ringtones, knocking sounds, alarms (e.g., appliance alarm), sirens, and non-verbal speech sounds (e.g., crying baby and/or person yelling).

**[0341]** In some embodiments, captions provided in captions interface **920** are displayed sequentially. For example, when switching from a first application to a second application, device **900** may cease to display captions corresponding to the first application. In some embodiments, captions provided in captions interface **920** are displayed concurrently (e.g., captions persist after device **900** switches between applications). For example, as shown in FIG. **9**K, after the phone call session between a user of device **900** and contact "Mom" has ended, device **900** resumes (e.g., automatically resumes) display of the podcast application. As shown in captions interface **920**, captions provided during the phone call are displayed in text portion **922***b* and attributed to the phone application (as indicated by indicator **922***a*). Further, device **900** displays captions interface **920** in a previous visual state (e.g., device **900** returns display of captions interface **920** to the location of captions interface **920** prior to switching to the phone application).

**[0342]** As described, in some embodiments, captions are provided based on audio received by a microphone of device **900**. In some embodiments, captions are provided based on audio when microphone captioning is enabled. For example, while displaying captions interface **920**, device **900** detects selection of microphone affordance **924***b*. The selection is a tap gesture **905***k* on microphone affordance **924***b*. As shown in FIG. **9**L, in response to detecting tap gesture **905***k*, device **900** enables microphone captioning and visually emphasizes (e.g., highlights and/or underlines) microphone affordance **924***b* indicating that microphone captioning has been enabled. Further in response to selection of microphone affordance **924***b*, indicator **922***a* is updated to attribute captions to audio captured by the microphone. In some embodiments, device **900** displays indicator **956** (in captions interface **920**) to identify captions provided using microphone captioning.

**[0343]** As shown in FIG. **9**M, while microphone captioning is enabled, device **900** receives a speech input **905***m* ("Please open your text books to page **62**.") and provides caption **958** corresponding to speech input **905***m*. Thereafter, while displaying captions interface **920**, device **900** detects selection of microphone affordance **924***b*. The selection is a tap gesture **907***m* on microphone affordance **924***b*. In response to detecting tap gesture **907***m*, device **900** deactivates microphone captioning and removes the visual emphasis on microphone affordance **924***b*, indicating that the microphone captions are no longer enabled.

**[0344]** While displaying captions interface **920**, device **900** further detects selection of maximize affordance **924***d*. The selection is a tap gesture **909***m* on maximize affordance **924***d*. As shown in FIG. **9**N, in response to detecting tap gesture **909***m*, device **900** increases a size of captions interface **920**. In some embodiments, increasing a size of captions interface **920** includes increasing a size of captions interface **920** such that all or nearly all of display **902** is used to display captions interface **920**.

**[0345]** In some embodiments, increasing a size of captions interface **920** allows for display of a greater number of captions. As shown, previously displayed captions for various applications (e.g., podcast application, phone application, and/or microphone) are displayed concurrently. In some embodiments captions are displayed in a chronological order. In some embodiments, despite an increased size of captions interface **920**, only a portion of captions provided by device **900** may be displayed in captions interface **920** at a given time. Accordingly, in some embodiments, captions interface **920** is scrollable (e.g., using swipe gestures and/or non-swipe gestures) such that other captions may be displayed in captions interface **920**.

**[0346]** While displaying captions interface **920** (e.g., at an increased size or at an intermediate size), device **900** detects selection of minimize affordance **924***a*. The selection is a tap gesture **905***n* on minimize affordance **924***a*. As shown in FIG. **9**O, in response to selection of minimize affordance **924***a*, device **900** reduces the size of captions interface **920** (e.g., to a previous size and/or to a predetermined size). As shown, reducing the size of captions interface **920** can, optionally, cause device **900** to resume display of podcast interface **940**.

**[0347]** In some embodiments, captions interface **920** may be repositioned and/or resized on display **902**, for instance, independent of an underlying displayed application. For example, while displaying captions interface **920** (FIG. **9**O), device **900** detects input **9050** (e.g., a swipe gesture starting at a location corresponding to captions interface **920**). In response, device moves captions interface **920** according to input **9050**. As shown in FIG. **9**P, in response to detecting

input **9050**, device **900** moves captions interface **920**, for instance, according to a direction and magnitude of input **9050**.

**[0348]** With reference to FIGS. **90-9**R, in some embodiments, captions are provided when captions interface **920** is in a fully minimized state. For example, in FIG. **9**O, device **900** detects selection of play affordance **942**. The selection is a tap gesture **9070** on play affordance **942**. As shown in FIG. **9**P, in response to detecting tap gesture **9070**, device **900** resumes playback of the podcast episode and captions for the podcast episode are provided as playback progresses.

**[0349]** After initiating playback, device **900** detects selection of minimize affordance **924***a*. The selection is a tap gesture **905***p* on minimize affordance **924***a*. As shown in FIG. **9**Q, in response to detecting tap gesture **905***p*, device **900** reduces the size of captions interface **920**. In some embodiments, reducing the size of captions interface **920** includes ceasing display of indicator **922***a*, text portion **922***b*, and/or controls **924***a-d*.

**[0350]** In some embodiments, captions are provided when captions interface **920** is in a minimized state. For example, with reference to FIG. **9**Q, after minimizing captions interface **920**, playback of the podcast episode continues and device **900** receives speech input **905***q* (FIG. **9**Q). Thereafter, device **900** detects an input at a location corresponding to captions interface **920** (e.g., while captions interface is in a minimized state). The input is a tap gesture **907***q*. As shown in FIG. **9**R, in response to detecting tap gesture **907***q*, device **900** increases a size of captions interface **920**, and optionally, resumes display one or more of indicator **922***a*, text portion **922***b*, and controls **924***a-d* in captions interface **920**.

**[0351]** As illustrated, when increasing the size of captions interface **920**, captions are provided for audio of the podcast played back while the captions interface **920** was in a minimized state. However, because microphone captioning was not enabled while captions interface **920** was in a minimized state (e.g., in response to selection of microphone affordance **924***b*), captions corresponding to the speech input **905***q* are not provided. In some embodiments, device **900** visually emphasizes (e.g., bolds and/or highlights) captions interface **920** when captions interface **920** is in a minimized state and captioning is activated on device **900**.

**[0352]** In FIG. **9**S, while captioning is activated on device **900**, device **900** displays a video interface **960** for performing video playback. Video interface **960** corresponds to a "movies" application in some embodiments. Video interface **960** includes video region **962** for displaying video playback, video controls **964**, and application controls **966**. Video controls **964** includes subtitles option **964***a*, which when enabled, causes device **900** to display subtitles in video region **962** during video playback. As shown, subtitles option **964***a* is visually emphasized (e.g., bolded and/or highlighted) indicating that subtitle option **964***a* is enabled and, as a result, subtitles are displayed in video region **962**.

**[0353]** In some embodiments, during playback of a video, device **900** determines whether a subtitles option is enabled. If the subtitles option is enabled, device **900** does not display captions interface **920** even if captioning is activated on device **900**. If the subtitles option is not enabled, device **900** displays captions interface **920** and provides captions for the video playback. For example, while displaying video interface **960**, device **900** detects selection of subtitles option **964***a*. The selection is a tap gesture **905***s* on subtitles option **964***a*. As shown in FIG. **9**T, in response to detecting tap gesture **905***s*, device **900** removes visual emphasis on option **964***a* (and, optionally, modifies subtitles option **964***a* to indicate "off"), displays captions interface **920**, and begins to provide captions during playback.

**[0354]** While description has been made herein with respect to device **900** providing captions based on audio provided by an application executing on device **900**, it will be appreciated that captions may be provided based on other types of information in some embodiments. As an example, device **900** provides captions based on metadata provided by an application executing on device **900**. Captions provided during playback of a video, for instance, may be based on a subtitles file such that device **900** need not analyze audio to provide captions for the video. As another example, device **900** provides captions based on information received from one or more external devices. An external device, such as a device sharing a local network with device **900**, provides caption data to device **900**. In turn, device **900** provides captions based on the caption data.

**[0355]** In some embodiments, captions are provided when an application, such as the video application, is displayed in a full screen mode. In some embodiments, when an application is displayed in this manner, one or more elements of captions interface **920**, such as indicator **922***a* or indicator **922***c*, is not displayed.

**[0356]** In some embodiments, captions are provided while a video is played in a particular mode, such as a picture-in-picture (PiP) mode. For example, application controls **966** include picture-in-picture (PiP) affordance **966***a*, which when selected causes a video to be played back in a picture-in-picture mode on device **900**. While displaying video interface **960**, device **900** detects selection of PiP affordance **966***a*. The selection is a tap gesture **905***t* on PiP affordance **966***a*. As shown in FIG. **9**U, in response to detecting tap gesture **905***t*, device **900** displays (e.g., replaces display of video interface **960** with) home interface **930** and continues playback of the video, in a PiP mode. Additionally, device **900** maintains display of captions interface **920** to provide captions during playback of the video. As shown, captions interface **920** may be overlaid on home interface **930** at a location that does not obscure PiP window **934**.

**[0357]** While displaying home interface **930**, device **900** detects an input corresponding to a request to switch applications. In some embodiments, the input is a swipe gesture **905***u* on home interface **930** starting at a location near the bottom of home interface **930** and moving in an upward direction. As shown in FIG. **9**V, in response to detecting swipe gesture **905***u*, device **900** displays application switch interface **970**.

**[0358]** Application switch interface **970** includes application previews **972** including application preview **972***a* corresponding to the captions feature of device **900**. While displaying application switch interface **970**, device **900** detects selection of application preview **972***a*. The selection is a tap gesture **905***v* on application preview **972***a*. As shown in FIG. **9**W, in response to detecting tap gesture **905***v*, device **900** displays captions interface **920**.

**[0359]** In some embodiments, displaying captions interface **920** in response to selection to application preview **972***a* causes captions interface **920** to be displayed in an expanded state. Accordingly, as shown in FIG. **9**W, captions

interface **920** includes captions for multiple applications provided during operation of device **900**.

**[0360]** As described, in some instances, only a portion of captions provided by device **900** are displayed in captions interface **920** at a given time, and other portions may be displayed by scrolling captions in captions interface **920**. For example, while displaying captions interface **920**, device **900** detects an input corresponding to a request to scroll captions in captions interface **920**. In some embodiments, the input **905***w* is a swipe gesture in a downward direction on captions interface **920**. As shown in FIG. **9**X, in response to detecting input **905***w*, captions of captions interface **920** are scrolled in a direction corresponding to input **905***w* (e.g., a downward direction) to display additional captions. In some embodiments, captions of captions interface **920** are scrolled in a direction that is opposite to the direction of input **905***w*.

**[0361]** In some embodiments, captions provided by device **900** are displayed in a screenshot (e.g., an image of one or more interfaces displayed on display **902** at a given time) captured by device **900**. In some embodiments captions provided by device **900** are not displayed in screenshots captured by device **900**. For example, with reference to FIG. **9**U, while displaying home screen interface **930**, device **900** receives input **907***u* corresponding to a request for device **900** to capture a screenshot. In some embodiments, input **907***u* is a simultaneous press of buttons **903***a*, **903***b*. In FIG. **9**Y, device **900** displays photos interface **980** including photo preview **982** corresponding to an image of a screenshot generated in response to input **907***u*. As shown, photo preview **982** does not include captions interface **920** (which was displayed at the time input **907***u* was detected).

**[0362]** In the examples described in FIGS. **9**Z-**9**AI, a device **901** (e.g., a device having one or more features of device **100**, **300**, **500**, **600**, and/or **900**) causes display, on display **903**, of the user interfaces described below. In some embodiments, display **903** is an integrated part of device **901**. In some embodiments, device **901** is a separate device (e.g., a desktop computer or a laptop computer) that is in communication (e.g., wireless, wired) with display **903**. In some embodiments, device **901** is in communication with one or more input devices, such as a keyboard or a mouse.

**[0363]** In FIG. **9**Z, device **901** displays, on display **903**, a captions settings interface **990** for managing various aspects of captions (e.g., provided on device **901**). Captions settings interface **990** includes enable option **992**, caption option **994**, text options **996***a*, **996***b*, color options **996***c*, **996***d*, and language options **998***a*, **998***b*.

**[0364]** Enable option **992**, when enabled, enables a captions feature on device **901**. In some embodiments, enabling the captions feature causes device **901** to display a captions interface that provides captions (e.g., transcriptions) based on audio provided and/or received by device **901**. Caption option **994**, when enabled, prevents captioning during live communication sessions, such as phone calls, video calls, conference calls, and the like. In some embodiments, caption option **994** is displayed only when a captions feature is enabled on device **901**.

**[0365]** In some embodiments, various visual characteristics of captions provided in this manner may be modified. As an example, text font may be modified using text option **996***a*. As another example, text size may be modified using text option **996***b*. As yet another example, text color may be modified using color option **996***c*. As yet another example, a background color of the captions interface may be modified using color option **996***d*.

**[0366]** In some embodiments, captions provided by device **901** may be provided in various languages. By way of example, language option **998***a* may be enabled to cause device **901** to detect a language of an audio source and provide captions in the detected language. In another example, if language option **998***a* is not enabled, language option **998***b* (e.g., a drop down menu or other selection mechanism) may be used to manually select a language for captions.

**[0367]** In an example operation, device **901** detects selection of enable option **992** while displaying captions interface **990**. The selection is a user input **905***z* (e.g., mouse click and/or touch gesture) on enable option **992**. As shown in FIG. **9**AA, in response to detecting input **905***z*, device **900** displays captions interface **920**A and toggles a state of enable option **992** from "off" to "on", indicating that the captions feature has been enabled on device **901**. In some embodiments, captions interface **920**A is overlaid on captions settings interface **990**. In some embodiments captions interface **920**A is displayed adjacent to captions settings interface **990**.

**[0368]** In some embodiments, captions interface **920**A includes indicator **922**Aa and text portion **922**Ab. Indicator **922**Aa indicates that captions interface **920**A is an interface for providing captions of audio received by device **901** (e.g., "Live Captions"). Optionally, in some embodiments, indicator **922**Aa indicates a current source of audio for captions provided by device **901**. Text portion **922**Ab, optionally, indicates a state of the captions feature (e.g., paused and/or waiting) and/or includes captions provided by device **901**.

**[0369]** In some embodiments, captions interface **920**A further includes controls **924**A. Controls **924**A include minimize affordance **924**Aa, microphone affordance **924**Bb, enable affordance **924**Ac, and overlay affordance **924**Ad. Minimize affordance **924**Aa, when selected, causes a size of captions interface **920**A to be reduced. In some embodiments, reducing a size of captions interface **920**A in this manner includes ceasing display of one or more of indicators **922**Aa, text portion **922**Ab, and controls **924**Aa-d. Microphone affordance **924**Ab, when selected, activates microphone captions such that device **901** provides captions based on user inputs (e.g., speech and/or audio inputs) and/or other auditory inputs detected by device **901** (e.g., non-verbal sounds, speech inputs from speakers other than a user of device **901**). Enable affordance **924**Ac, when selected, activates captions on device **901** such that device **901** provides captions in captions interface **920**A, for instance, based on audio received by device **901**. Overlay affordance **924**Ad, when selected, causes device **901** to overlay captions interface **920**A over any other displayed interfaces.

**[0370]** While displaying captions interface **920**A (and captions settings interface **990**), device **901** detects a request to cease display of captions settings interface **990**. The request is a user input **905**Aa (e.g., mouse click and/or touch gesture) on a close affordance of captions settings interface **990**. Further while displaying captions interface **920**A, device **901** detects selection of enable affordance **924**Ac. The selection is a user input **907**Aa (e.g., mouse click and/or touch gesture) on enable affordance **924**Ac. As shown in FIG. **9**AB, in response to detecting user input **907**Aa, device **901** modifies display of enable affordance **924**Ac (e.g., from

a "play" indicator to a "pause" indicator) to indicate captioning has been activated on device **901**.

**[0371]** With reference once again to FIG. **9**AA, device **901** further detects selection of application affordance **932**A corresponding to a podcast application (e.g., located in an application dock displayed on display **903**) and selection of captions option affordance **934**A (e.g., located in a menu bar). Selection of application affordance **932**A is a user input **909**Aa (e.g., mouse click and/or touch gesture), and selection of captions option affordance **934**A is a user input **911**Aa (e.g., mouse click and/or touch gesture).

**[0372]** As shown in FIG. **9**AB, in response to detecting user input **907**Aa, device **901** opens (e.g., executes and/or displays) the podcast application and displays podcast interface **940**A including a play affordance **942**A.

**[0373]** In response to detecting user input **909**Aa (FIG. **9**AA), device **901** displays captions menu **950**A. Captions menu **950**A includes enable option **950**Aa which when enabled, activates captioning on device **901**. As shown, enable option **950**Aa is displayed as being enabled (e.g., as indicated by a checkmark adjacent to enable option **950**Aa) (recall that a captioning was activated in response to selection of enable affordance **924**Ac). Captions menu **950**A further includes audio source options **950**Ab and **950**Ac. Audio source option **950**Ab, when enabled, causes device **901** to provide captions based on audio received from one or more applications executing on device **901**. Audio source option **950**Ac, when enabled, activates microphone captioning on device **901**. In some embodiments, only one of audio source options **950**Ab and **950**Ac may be enabled at a given time. In other embodiments, audio source options **950**Ab and **950**Ac may be enabled simultaneously. Captions menu **950**A further includes overlay option **950**Ad, which when enabled, causes device **901** overlay captions interface **920**A over other displayed interfaces. Captions menu **950**A further includes text-to-speech option **950**Ae, which when enabled, causes device **901** to provide audio outputs (e.g., synthetic speech) based on textual input provided by a user in captions interface **920**A. In some embodiments, a user of device **901** may select a synthetic voice for audio outputs provided in this manner. Captions menu **950**A further includes recenter option **950**Af, which when selected, causes device **901** to reposition (e.g., center) display captions interface **920**A horizontally and/or vertically on display **903**.

**[0374]** While displaying podcast interface **940**A, device **901** detects selection of play affordance **942**A. The selection is a user input **907**Ab (e.g., mouse click and/or touch gesture) on enable affordance **924**Ac. As shown in FIG. **9**AC, in response to detecting user input **907**Aa, initiates playback of a podcast episode. During playback of the podcast, indicator **922**Aa of captions interface **920** indicates a source of audio (e.g., "Podcasts") and text portion **922**Ab of captions interface **920** includes captions derived from audio of the podcast episode (e.g., "Hello everyone . . . "). Optionally, device **901** indicates a time at which captions are provided.

**[0375]** While displaying captions interface **920**A (e.g., overlaid on podcast interface **940**A), device **901** displays video notification **948**Aa indicating that device **901** is currently receiving an invitation to join a live communication session (e.g., video call and/or conference call). While displaying video notification **948**Aa, device **901** detects selection of acceptance affordance **948**Aa of call notification **948**A to accept the invitation to join the live communication session. The selection is a user input **905**Ac (e.g., mouse click and/or touch gesture) on acceptance affordance **948**Aa. As shown in FIG. **9**AD, in response to detecting user input **905**Ac, device **901** displays communication interface **954**A of a video communication application and initiates a live communication session with contacts "Jane" and "Anne".

**[0376]** During the live communication session, device **901** provides captions corresponding to various participants (e.g., individuals speaking). For example, captions may be provided based on input provided by contacts with which the user of device **901** is communicating. During the live communication session, for instance, device **901** receives audio from the video communication application corresponding to a contact identified as "Speaker **1**" (e.g., Jane) and provides corresponding caption **956**A ("Hey John, how's it going?"). As another example, captions may be provided based on input provided by a user of device **901**. During the live communication session, device **901** receives a speech input **905**Ad (e.g., "Hi Jane. Doing well. How are you?") from a user of device **901** (e.g., via a microphone integrated in and/or in communication with device **901**) and provides corresponding caption **958**A. In some embodiments, during live communication sessions, one or more inputs provided by a user are not captioned if microphone captioning is not activated.

**[0377]** In some embodiments, device **901** identifies captions in captions interface **920**A corresponding to inputs provided by a user. For example, device **901** may display an indicator, such as indicator **952**A, to identify captions corresponding to user inputs (and, optionally, other inputs detected by a microphone of device **901**). In some embodiments, device **901** highlights all user inputs in this manner (e.g., both speech and text inputs).

**[0378]** During the live communication session, device **901** detects selection of text-to-speech option **950**Ae. The selection is a user input **907**Ad (e.g., mouse click and/or touch gesture) on text-to-speech option **950**Ae. As shown in FIG. **9**AE, in response to detecting user input **907**Ad, device **901** indicates text-to-speech has been activated for user inputs in captions interface **920**A (e.g., by displaying a checkmark next to text-to-speech option **950**Ae) and indicates in text portion **922**Ab, that device **901** will provide synthetic speech based on text input provided by a user (e.g., "Type to speak").

**[0379]** For example, as shown in FIG. **9**AF, device **901** receives text input **905**Af (e.g., "sounds good"). As shown in FIG. **9**AG, in response to a request to submit the text input **905**Af (e.g., a press of an enter key and/or providing a particular touch gesture), device **901** displays input **905**Af in captions interface **920**A as a speech bubble **905**Ag and provides a synthetic speech output **907**Ag corresponding to input **905**Af. In some embodiments, text input **905**Af and/or speech output **907**Ag may also be provided to devices corresponding to other participants of the live communication session (e.g., Jane and Ann), which may in turn provide synthetic speech outputs corresponding to text input **905**Af and/or speech output **907**Ag. In this manner, a user of device **901** may verbally communicate to other participants of the live communication session using textual inputs.

**[0380]** In some embodiments, device **901** visually emphasizes (e.g., highlights, bolds, and/or underlines) captions of interest. As an example, in some embodiments, device **901** highlights captions referencing a user of device **901**. FIG. **9**AH, for instance, depicts the live communication session at

a time after captions **962**Aa, **962**Ab referencing a user ("John") of device **901** have been provided. As shown, each of the captions **962**Aa and **962**Ab are highlighted such a user of device **901** can easily identify instances in which the user was referenced during the live communications session.

**[0381]** In some embodiments, device **901** highlights at least a portion of captions including one or more predetermined data types (e.g., email address, phone number, address, time and/or place). As shown in FIG. **9**AH, for instance, a phone number of caption **964**Aa is highlighted, and an email address of caption **964**Ab is highlighted. In some embodiments, portions of captions highlighted in this manner are interactive objects. For example, while displaying caption **964**Ab, device **901** detects selection of the email address of caption **964**Ab. The selection is a user input **905**Ah (e.g., mouse click and/or touch gesture) on the email address of caption **964**Ab. As shown in FIG. **9**AI, in response to detecting user input **905**Ah, device **901** displays draft communications interface **970**A, corresponding to an email application, and populates a "To" field of the email with the email address of caption **964**Ab.

**[0382]** In some embodiments, transcripts may be stored on device **901**. For example, a transcript for a meeting (e.g., a meeting held using a live communication session) may be saved in and/or otherwise associated with a calendar event in a scheduling application. In this manner, a user of device **901** may review the transcript of the meeting to review captions of the meeting, for instance, to recall what was discussed during the meeting. In some embodiments, transcripts saved in this manner may be searchable using the scheduling application and/or an operating system search function of device **901**.

**[0383]** FIG. **10** is a flow diagram illustrating a method for providing captions in accordance with some embodiments. Method **1000** is performed at a computer system (e.g., **100**, **300**, **500**, **600**, **900**, and/or **901**) (e.g., a smartphone, a smartwatch, a head mounted device (e.g., a head mounted augmented reality and/or extended reality device), and/or a personal computer) that is in communication with a display generation component (e.g., **902**) (e.g., a display, a display controller, a head mounted display system, and/or a touch-sensitive display). Some operations in method **1000** are, optionally, combined, the orders of some operations are, optionally, changed, and some operations are, optionally, omitted.

**[0384]** As described below, method **1000** provides an intuitive way for providing captions. The method reduces the cognitive burden on a user for providing captions, thereby creating a more efficient human-machine interface. For battery-operated computing devices, enabling a user to provide faster and more efficiently conserves power and increases the time between battery charges.

**[0385]** The computer system receives (**1002**) first information (e.g., captions of display interface **920** in FIG. **9**G) (e.g., caption metadata and/or audio) corresponding to first audio (e.g., audio from podcast episode **260** of FIG. **9**G) in (e.g., directed to and/or from) a first application (e.g., podcast application in FIG. **9**G) (e.g., a voice communication application, a video communication application, a video player application, a music application, or a game application);

**[0386]** The computer system receives (**1004**) second information (captions of display interface **920** in FIG. **9**I) (e.g., caption metadata and/or audio) corresponding to second audio (e.g., audio from phone call in FIG. **9**I) in (e.g., directed to and/or from) a second application (e.g., phone application in FIG. **9**I) (e.g., a voice communication application, a video communication application, a video player application, a music application, or a game application) that is different from the first application; and

**[0387]** The computer system displays (**1006**), via the display generation component, a system audio transcript (e.g., captions in captions interface **920**) (e.g., in a captions window and/or in a bottom portion of a display). In some embodiments, displaying the system audio transcript includes displaying a first transcript portion (**1008**) of the system audio transcript that includes a first caption (e.g., caption "Hello everyone" as illustrated in FIG. **9**N) based on (e.g., determined using the caption metadata and/or transcribed or otherwise determined using the audio) the first audio (e.g., the first caption is based on the first audio when caption metadata (used to produce the first caption) corresponds to the first audio and/or the first caption is based on the first audio when the first caption is a transcription of the first audio). In some embodiments, the first caption is generated using the first information. In some embodiments, displaying the system audio transcript includes displaying a second transcript portion (**1010**) of the system audio transcript that includes a second caption (e.g., I'll call you back" as illustrated in FIG. **9**N, different from the first caption, based on (e.g., determined using the caption metadata and/or transcribed or otherwise determined using the audio) the second audio (e.g., the second caption is based on the second audio when caption metadata (used to produce the second caption) corresponds to the second audio and/or the second caption is based on the second audio when the second caption is a transcription of the second audio). In some embodiments, the second caption is generated using the second information. Displaying captions based on audio of two different applications in a system audio transcript enables the computer system to combine display of the captions into a single transcript area, thereby providing the user with improved visual feedback about the audio of the applications.

**[0388]** In some embodiments, the first caption and the second caption (and/or the first transcript portion and the second transcript portion) are displayed sequentially (e.g., captions interface **920** in FIG. **9**G and captions interface **920** in FIG. **9**K) (e.g., in a same window or display region). In some embodiments, the second transcript portion replaces display of the first transcript portion. Displaying the first caption and the second caption sequentially enables the computer system to provide the user with feedback about which caption is based on the most recent audio, thereby providing the user with improved visual feedback about the audio of the applications.

**[0389]** In some embodiments, the first caption and the second caption (and/or the first transcript portion and the second transcript portion) are displayed concurrently (e.g., captions interface **920** in FIG. **9**N) (e.g., in a same window or display region). In some embodiments, the second transcript portion is displayed adjacent to (e.g., next to and/or below) the first transcript portion. Displaying the first caption and the second caption concurrently enables the computer system to provide the user with feedback about both captions at the same, giving the user more time to review the captions and thus providing the user with improved visual feedback about the audio of the applications.

**[0390]** In some embodiments, displaying the first transcript portion and the second transcript portion comprises, in accordance with a determination that the system audio transcript (e.g., a caption window and/or a first user interface region (e.g., in a captions window and/or in a bottom portion of a display)) is at a reduced size, the first caption and the second caption (and/or the first transcript portion and the second transcript portion) are displayed sequentially (e.g., one after the other and/or the second transcript replaces display of the first transcript) in the system audio transcript (e.g., in a same window or display region). In some embodiments, displaying the first transcript portion and the second transcript portion comprises, in accordance with a determination that the system audio transcript (e.g., a caption window and/or a first user interface region (e.g., in a captions window and/or in a bottom portion of a display)) is not at the reduced size (e.g., is at a moderate size or is at an enlarged size), the first caption and the second caption (and/or the first transcript portion and the second transcript portion) are displayed concurrently in the system audio transcript (e.g., in a same window or display region). Displaying the first and second captions sequentially when the system audio transcript is at a reduced size and displaying the first and second captions concurrently when the system audio transcript is not at the reduced size (e.g., is larger) enables the computer system to optimize use of the area of the system audio transcript, thereby providing the user with improved visual feedback about the audio of the applications.

**[0391]** In some embodiments, the computer system is in communication with one or more input devices (e.g., a touch-sensitive surface (e.g., a touchscreen), a mouse, and/or a keyboard). In some embodiments, the computer system receives, via the one or more input devices, a scroll input (e.g., **905***w*) (e.g., a swipe gesture, an air gesture, and/or a gesture directed to the system audio transcript). In some embodiments, in response to receiving the scroll input, the computer system scrolls, via the display generation component, contents of the system audio transcript. In some embodiments, scrolling the system audio transcript includes ceasing to display the second caption and newly displaying a third caption that was not displayed prior to receiving the scroll input. In some embodiments, a direction of the scrolling (e.g., up, down, right, and/or left) of contents of the system audio transcript is based on a direction of the scroll input (e.g., up, down, right, and/or left). In some embodiments, an upward scroll input causes an upward scroll of contents of the system audio transcript and a downward scroll input cases a downward scroll of contents of the system audio transcript. In some embodiments, a magnitude of the scrolling (e.g., speed and/or amount of scrolling) of contents of the system audio transcript is based on a magnitude (e.g., speed, duration, and/or amount) of the scroll input. Scrolling the system audio transcript enables the computer system to display, based on user input, captions from earlier portions of audio, allowing the user to review speech and/or sounds that occurred earlier in the audio, thereby providing the user with improved visual feedback about the audio of the applications.

**[0392]** In some embodiments, in accordance with a determination that a set of indicator conditions is met for the first transcript portion, the computer system displays (e.g., adjacent to or in the first transcript portion, or not adjacent to and not in the first transcript portion), via the display generation component, an indication (e.g., **922***a*, "Podcasts", "Call", "Microphone") (e.g., an application name and/or application icon) of the first application (e.g., a voice communication application, a video communication application, a video player application, a music application, or a game application). In some embodiments, in accordance with a determination that the set of indicator conditions is met for the second transcript portion, the computer system displays (e.g., adjacent to or in the second transcript portion or not adjacent to and not in the second transcript portion), via the display generation component, an indication of the second application (e.g., **922***a*, "Podcasts", "Call", "Microphone" (e.g., a voice communication application, a video communication application, a video player application, a music application, or a game application). Displaying indications of the respective applications corresponding to the respective transcripts provides the user with feedback about which transcripts correspond to which applications and provides the user with feedback about the contents of the audio of the applications, thereby providing the user with improved visual feedback about the audio of the applications.

**[0393]** In some embodiments, the set of indicator conditions is met for a respective transcript portion when the respective application (e.g., "Movies" application, displayed in PiP mode in FIG. **9**U) corresponding to the respective transcript portion is not displayed prominently (e.g., does not take up more than a predefined amount (e.g., 50% or 80%) of the display space and/or is not displayed in a full screen mode). In some embodiments, while an indication of the first application is displayed in conjunction with the first transcript portion, the computer system begins to prominently display a window of the first application and, in response, ceases to display the indication of the first application in conjunction with the first transcript portion. In some embodiments, while an indication of the second application is displayed in conjunction with the second transcript portion, the computer system begins to prominently display a window of the second application and, in response, ceases to display the indication of the second application in conjunction with the second transcript portion. Not including the indication of the respective application for a respective transcript portion when the corresponding respective application is displayed prominently enables the computer system to conserve display space and avoid cluttering the user interface while still providing the user with information about which application the audio/transcript relates to, thereby providing the user with improved visual feedback about the audio of the applications.

**[0394]** In some embodiments, the computer system displays, via the display generation component, an indication of a time (e.g., **922***c*) (e.g., 3:04 μm and/or 5 minutes ago) (and, optionally, a date) when audio corresponding to a respective caption was received (e.g., the audio is a person speaking during a real-time communication session and the time indicates when the person spoke). In some embodiments, the indication of the time is displayed adjacent to the respective caption. In some embodiments, the indication of the time is displayed in response to user input requesting to display the time information. Displaying an indication of time of when audio corresponding to a respective caption was received provides the user with visual feedback about the recency of the display captions, thereby providing the user with improved visual feedback about the audio of the applications.

**[0395]** In some embodiments, the computer system is in communication with one or more input devices (e.g., a touch-sensitive surface (e.g., a touchscreen), a mouse, and/or a keyboard). In some embodiments, the computer system receives, via the one or more input devices, input (e.g., **909***m*, **905***p*, **9050**, **907***q*) adjusting the system audio transcript (e.g., a caption window and/or a first user interface region (e.g., in a captions window and/or in a bottom portion of a display)) in which the first caption and the second caption are displayed. In some embodiments, in response to receiving the input adjusting the system audio transcript, in accordance with a determination that the input (e.g., **909***m*, **905***p*, **907***q*) adjusting the system audio transcript is a resizing input, the computer system resizes the system audio transcript in accordance with the resizing input (e.g., independent from the first application and second application). In some embodiments, in response to receiving the input adjusting the system audio transcript, in accordance with a determination that the input adjusting the system audio transcript is a repositioning input (e.g., **9050**), the computer system moves the system audio transcript in accordance with the repositioning input (e.g., without resizing the system audio transcript and/or independent from the first application and second application). In some embodiments, the system audio transcript is overlaid on a user interface of the first application and/or second application. Moving and/or resizing the system audio transcript enables the computer system to display the system audio transcript with a user's preferred size (which optionally affects the amount of captions the system audio transcript displays) and at a preferred location (which helps avoid overlaying the content on other user interface elements that the user prefers to view). Moving/resizing the system audio transcript also enables the computer system to display the content while the user views other content on the same display, thereby providing the user with improved visual feedback about the audio of the applications.

**[0396]** In some embodiments, while displaying, at a first location via the display generation component, the system audio transcript (e.g., a caption window and/or a first user interface region (e.g., in a captions window and/or in a bottom portion of a display)) in which the first caption and the second caption are displayed, the computer system receives user input (e.g., **905***h* and an input terminating the phone call of FIGS. **9I-9J**) adjusting display of the first application and/or the second application (e.g., "Podcasts" and/or "Phone"). In some embodiments, in response to receiving the user input adjusting display of the first application and/or the second application, the computer system adjusts (e.g., moving, resizing, closing, minimizing, maximizing, and/or changing views of) display of the first application and/or the second application while continuing to display, at the first location, the system audio transcript in which the first caption and the second caption are displayed. Continuing to display the system audio transcript at the same location while the display of other applications are adjusted enables the computer system to provide the user with a consistent experience where the user can continuously view the captions while other displays of other applications are adjusted, thereby providing the user with improved visual feedback about the audio of the applications.

**[0397]** In some embodiments, the computer system is in communication with one or more input devices (e.g., a touch-sensitive surface (e.g., a touchscreen), a mouse, and/or a keyboard). In some embodiments, the computer system receives, via the one or more input devices, user input (e.g., selection of **912** to disable a captions feature, **907***q*). In some embodiments, in response to receiving the user input and in accordance with a determination that the user input corresponds to a request to stop displaying (and, optionally, currently displayed) captions (e.g., a button is toggled to the OFF position and/or user selects button for ceasing display of captions), the computer system stops display of further captions (e.g., until further user input is received enabling display of further captions and/or until a predefined amount of time has passed). In some embodiments, in response to receiving the user input and in accordance with a determination that the user input corresponds to a request to initiate displaying further (and, optionally, previously displayed) captions (e.g., a button is toggled to the ON position and/or user selects button for initiating display of captions), initiating display of further captions. The computer system providing the user with an option to cease displaying further captions improves the useability and security of the computer system, such as by enabling the user to cease displaying further captions when the captions are no longer needed and/or to cease displaying further captions of a confidential call when another person is able to see the display of the computer system.

**[0398]** In some embodiments, the computer system is in communication with one or more input devices (e.g., a touch-sensitive surface (e.g., a touchscreen), a mouse, and/or a keyboard). In some embodiments, the computer system receives, via the one or more input devices, user input (e.g., **907***q*) requesting to transition the system audio transcript, which includes the first caption and the second caption, to a minimized state. In some embodiments, in response to receiving the user input requesting to transition the system audio transcript to the minimized state, the computer system updates display of the system audio transcript to the minimized state (e.g., while not displaying further captions and/or while not displaying captions).

**[0399]** In some embodiments, while the system audio transcript is in the minimized state, the computer system generates captions corresponding to respective audio (e.g., first audio and/or second audio) received without displaying the captions corresponding to the respective audio received. Displaying the system audio transcript in a minimized state while continuing to generate captions enables the computer system to avoid using display space for the system audio transcript while still permitting the computer system to provide, at a later time, the captions generated while in the minimized state, thereby providing the user with improved visual feedback about the audio of the applications.

**[0400]** In some embodiments, subsequent to generating captions corresponding to received respective audio (e.g., audio that is part of the first audio or a continuation of the first audio stream and/or audio that is part of the second audio or a continuation of the second audio stream) without displaying the captions corresponding to the respective audio received, the computer system receives, via the one or more input devices, input (e.g., **909***m*) to enlarge the system audio transcript. In some embodiments, in response to receiving input to enlarge the system audio transcript, the computer system enlarges the system audio transcript (e.g., such that the system audio transcript is not in the minimized state; such that the system audio transcript is not at the reduced size, such that the system audio transcript is at a

moderate size or is at an enlarged size). In some embodiments, in response to receiving input to enlarge the system audio transcript, the computer system displays, via the display generation component and as part of the system audio transcript, at least some of the generated captions corresponding to previously received respective audio that were not previously displayed. Displaying the previously generated captions once the system audio transcript is enlarged enables the computer system to provide the user with feedback about the audio that was detected while captions were being generated and not being displayed, thereby providing the user with improved visual feedback about the audio of the applications.

**[0401]** In some embodiments, while the system audio transcript is in the minimized state, the computer system displays, via the display generation component, an indication (e.g., based on a color of a user interface object (e.g., color of the indication that the system audio transcript is in the minimized state) and/or based on textual information) that further captions are being generated corresponding to respective audio (e.g., first audio and/or second audio) being received without displaying content of the captions. In some embodiments, when the system audio transcript is not in the minimized state, the computer system displays the further captions without displaying the indication that further captions are being generated corresponding to respective audio (e.g., first audio and/or second audio) being received. In some embodiments, subsequent to a duration of time during which the system audio transcript is in the minimized state, the computer system receives, via the one or more input devices, user input requesting to transition the system audio transcript to a non-minimized (e.g., enlarged and/or intermediate) state. in response to receiving the user input requesting to transition the system audio transcript to the non-minimized state, the computer system updates display of the system audio transcript to the non-minimized state by increasing the size of the system audio transcript and displays at least some captions from the duration of time during which the system audio transcript was in the minimized state. Displaying an indication that captions are being generated for received audio provides the user with feedback about the state of the computer system and particularly that captions are being generated even though the captions are not being displayed, thereby providing the user with improved visual feedback about the audio of the applications. Displaying an indication that captions are being generated for received audio even though the captions are not being displayed provides the user with feedback that the captions are being generated (and, optionally, stored), thereby improving privacy for the user (as the user can disable generating the captions, if the user prefers). Displaying an indication that captions are being generated for received audio while the system audio transcript is in the minimized state reduces visual clutter in the user interface of the computer system by reducing the amount of room on the display occupied by the system audio transcript, thereby providing the user with improved visual feedback.

**[0402]** In some embodiments, the system audio transcript is displayed as part of a third application (e.g., an operating system of the computer system and/or an application that is different from the first application and the second application) that is different from the first application and the second application. In some embodiments, the first information is metadata information that includes the first caption (e.g., in text form and/or in binary form). In some embodiments, the first information is received (e.g., by the third application) from the first application. In some embodiments, the metadata information does not include audio. In some embodiments, the third application does not generate the first caption based on audio. In some embodiments, the third application receives metadata information that includes the second caption from the second application before displaying the second caption. Displaying captions received from other applications as part of the system audio transcript enables the computer system to compile captions from various sources and display them in a single interface, thereby allowing the user to more easily access the captions and providing the user with improved visual feedback about the audio of the various applications in one location.

**[0403]** In some embodiments, the first caption (and/or second captions) is a movie caption (e.g., caption in **992***b* in FIG. **9**T). In some embodiments, the first application is a video (e.g., show and/or movie) playback application. Providing movie captions in the system audio transcript enables the computer system to compile captions from a movie with other various sources and display them in a single interface, thereby allowing the user to more easily access the captions and providing the user with improved visual feedback about the audio of the applications in one location.

**[0404]** In some embodiments, the first caption (and/or second captions) is a video conference caption (e.g., wherein captions are displayed with or without speaker attribution). In some embodiments, the first application is a real-time video conferencing application. Providing video conference captions in the system audio transcript enables the computer system to compile captions from a video conference with other various sources and display them in a single interface, thereby allowing the user to more easily access the captions and providing the user with improved visual feedback about the audio of the applications in one location.

**[0405]** In some embodiments, the first information is received from an external device (e.g., the first application is running on the external device) different from the computer system. In some embodiments, the external device is on the same communication network (e.g., the same wireless network and/or the same local area network) as the computer system. In some embodiments, the external device and the computer system are both logged into the same service using the same account. Providing captions based on information received from an external device in the system audio transcript enables the computer system to compile captions from various sources and display them in a single interface, thereby allowing the user to more easily access the captions and providing the user with improved visual feedback about the audio in one location.

**[0406]** In some embodiments, in accordance with a determination that the first application has initiated displaying (e.g., is displaying or will display, via the display generation component of the computer system and/or via an external display) captions corresponding to audio in (e.g., directed to and/or from) the first application, the computer system ceases to display, as part of the system audio transcript, further captions corresponding to audio in the first application. In some embodiments, in accordance with a determination that the first application has not initiated displaying captions corresponding to audio in (e.g., directed to and/or from) the first application, the computer system continues to display, as part of the system audio transcript, further

captions corresponding to audio in the first application. In some embodiments, the computer system pauses display of captions (corresponding to an application) in the system audio transcript when the computer system determines that the application is displaying captions. In some embodiments, the computer system pause display of captions for the respective application that is displaying captions as part of the respective application, and the computer system continues to display captions for other applications that are not displaying captions as part of the other applications. Pausing display of captions of a respective application in the system audio transcript when the respective application displays captions enables the computer system to not duplicate the captions, which saves display space and declutters the user interface, thereby providing the user with improved visual feedback about the audio of the applications without requiring further user input.

**[0407]** In some embodiments, in accordance with a determination that the first application has ceased displaying (e.g., is no longer displaying or will not display, via the display generation component of the computer system and/or via an external display) captions corresponding to audio in (e.g., directed to and/or from) the first application, the computer system displays, as part of the system audio transcript, further captions corresponding to audio in the first application. In some embodiments, the first application ceases to display captions corresponding to audio in the first application based on receiving user input to hide and/or disable display of captions by the first application while the first application continues to be displayed. In some embodiments, the first application ceases to display captions corresponding to audio in the first application based on the first application ceasing (e.g., based on user input or automatically) to be displayed (e.g., hidden and/or minimized). In some embodiments, in accordance with a determination that the first application has not ceased displaying captions corresponding to audio in (e.g., directed to and/or from) the first application, continuing to not display, as part of the system audio transcript, further captions corresponding to audio in the first application. In some embodiments, the computer system starts (or restarts) displaying captions (corresponding to an application) in the system audio transcript when the computer system determines that the application is not (or no longer) displaying captions. Displaying captions of a respective application in the system audio transcript when the respective application ceases displaying captions enables the computer system to provide the user with the captions of the audio of the respective application, thereby providing the user with improved visual feedback about the audio of the respective application without requiring further user input.

**[0408]** In some embodiments, the first application is a real-time video conferencing application and the real-time video conferencing application ceases to displaying captions corresponding to conferencing audio of a conference call in the real-time video conferencing application when the conference call is in a reduced-size state (e.g., in a picture-in-picture state or such that a user interface of the real-time video conferencing application is no longer displayed). In some embodiments, the picture-in-picture state is a state in which the real-time video conferencing application is displayed by being overlaid on top of a second application and the real-time video conferencing application can be repositioned in response to user input (without repositioning the second application). In some embodiments, transitioning from a non-picture-in-picture state to the picture-in-picture state is a state results in the real-time video conferencing application concurrently displaying representations of (e.g., video of and/or a name of) fewer participants of the real-time communication session being conducted using the real-time video conferencing application. In some embodiments, during a non-picture-in-picture state, the real-time video conferencing application concurrently displays representations of a plurality of the participants (e.g., 4, 5, or 6 participants) of the real-time communication session and in the picture-in-picture state the real-time video conferencing application displays a representation of one of (e.g., not 4, 5, or 6) the plurality of the participants of the real-time communication session at any one time. Displaying captions of a real-time video conferencing application in the system audio transcript when the real-time video conferencing application ceases displaying captions enables the computer system to provide the user with the captions of the audio of the real-time video conferencing application, thereby providing the user with improved visual feedback about the audio of the real-time video conferencing application without requiring further user input.

**[0409]** In some embodiments, the computer system automatically scrolls the system audio transcript as further captions are added to the system audio transcript. In some embodiments, the computer system determines a third caption based on third audio to include in the system audio transcript. In response, the computer system ceases to display the first caption and displays the third caption. In some embodiments, the computer system also shifts up display of the second caption. Automatically scrolling the system audio transcript as further captions are added to the system audio transcript enables the computer system to display the captions in a limited display area without requiring further user inputs reduces the number of inputs needed to view the captions.

**[0410]** In some embodiments, the first caption is based on pre-recorded audio (e.g., a pre-recorded video and/or pre-recorded audio guidance provided by an application) and the second caption is based on live audio (e.g., audio from a video chat, audio detected at a microphone (e.g., of the computer system of a device in communication with the computer system), and/or audio of a phone call). In some embodiments, the system audio transcript concurrently includes (displayed concurrently) the first caption based on pre-recorded audio and the second caption based on live audio. Displaying captions based on both pre-recorded and live audio enables the computer system to provide the user with a single interface for captions from various applications, thereby providing the user with improved visual feedback about the audio of the applications.

**[0411]** In some embodiments, while not detecting audio with content to caption (e.g., no spoken content in the audio and/or no recognized sounds in the audio (e.g., dog barking or baby crying)), the computer system displays, via the display generation component, an indication (e.g., "waiting . . . " and/or a non-textual indication) that the computer system is waiting for audio with content to caption. Displaying an indication that the computer system is waiting for audio with content to caption provides the user with feedback that the captioning system is active, even when new

captions are not being displayed, thereby providing the user with improved visual feedback about the state of the computer system.

**[0412]** In some embodiments, displaying the system audio transcript includes, in accordance with a determination that a first type of content (e.g., controls of phone interface **950**) (e.g., a dock, call answer/end buttons, media player control, notifications,/or keyboard, system content, and/or important content) is not displayed, via the display generation component, at a first location (e.g., second type of content is displayed and/or no content is displayed), displaying, via the display generation component, the system audio transcript at the first location. In some embodiments, displaying the system audio transcript includes, in accordance with a determination that the first type of content is displayed, via the display generation component, at the first location, displaying, via the display generation component, the system audio transcript at a second location that is different from the first location (e.g., the second location does not overlap the location of the display of the first type of content). In some embodiments, the system audio transcript is displayed at the first or second location when the system audio transcript is initially displayed. In some embodiments, receiving user input to increase the size of the system audio transcript, receiving user input to move the system audio transcript, and/or the first type of content being newly displayed (e.g., virtual keyboard being displayed or a system alert being displayed) and/or moved causes the computer system to automatically adjust the display location of the system audio transcript such that the system audio transcript does not overlay and/or overlap with the first type of content. Moving the system audio transcript such that the system audio transcript does not overlay and/or block specific content (e.g., important content and/or system content) enables the computer system to automatically display the specific content and also display the system audio transcript without requiring further user input, thereby reducing the number of inputs required to access the captions.

**[0413]** In some embodiments, the computer system is in communication with one or more input devices (e.g., a touch-sensitive surface (e.g., a touchscreen), a mouse, and/or a keyboard). In some embodiments, while displaying the system audio transcript (e.g., in a full screen mode or not in a full screen mode), the computer system detects, via the one or more input devices, input (e.g., **905***u*) to access a user interface for switching among applications. In some embodiments, in response to detecting the input to access the user interface for switching among applications, the computer system displays a representation of a full-screen version of the system audio transcript (e.g., **972***a*) (e.g., regardless of whether the system audio transcript was full-screen when the input to access the user interface for switching among applications was detected). In some embodiments, in response to detecting the input to access the user interface for switching among applications, the computer system concurrently displays, with the representation of the full-screen version of the system audio transcript, one or more representations of other currently and/or recently executing applications. In some embodiments, the full-screen version of the representation of the system audio transcript is sized to a predefined size such that the representations of the other applications among which the user can switch are also displayed at the predefined size. In some embodiments, the representation of the full-screen version of the system audio transcript allows for a portion of (e.g., less than 20% of, less than 10% of, or less than 5% of) the user interface to be occupied with other content, such as system status information (e.g., current day, current time, battery level, wireless service strength). In some embodiments, the representation of the full-screen version of the system audio transcript does not include user interface elements of non-operating system applications. Displaying the system audio transcript as a full-screen application when the computer system is displaying an application-switching user interface provides the user with visual feedback that the system audio transcript feature is active and available to be accessed and/or closed, thereby providing the user with improved visual feedback about the state and availability of the captioning system.

**[0414]** In some embodiments, the computer system is in communication with one or more input devices. (e.g., a touch-sensitive surface (e.g., a touchscreen), a mouse, and/or a keyboard). In some embodiments, while displaying, via the display generation component, the system audio transcript that includes the first caption and the second caption, the computer system receives, via the one or more input devices, a request to capture a display screenshot (e.g., **907***u*) that includes an area (e.g., a display area of the display generation component) in which the system audio transcript is displayed. In some embodiments, in response to receiving the request to capture the display screenshot, the computer system captures a display screenshot (e.g., **982**) that includes the area in which the system audio transcript is displayed without including the system audio transcript in the display screenshot. In some embodiments, the system audio transcript is overlaid on other content at the area and the other content is included in the display screenshot at the area. Not including the system audio transcript in a screenshot of the computer system's display even while displaying the system audio transcript enables the computer system to provide additional non-system audio transcript information in the screenshot without requiring the user to provide inputs to minimize or cease displaying the system audio transcript, thereby reducing the number of inputs required to perform the operation. Not including the system audio transcript in a screenshot of the computer system's display even while displaying the system audio transcript improves the privacy of the user by not capturing contents of the system audio transcript (e.g., that may include captions of a private audio conversation).

**[0415]** In some embodiments, in response to determining that a second audio transcript is being displayed or will be displayed by a different application, the computer system ceases to display the system audio transcript. Ceasing to display one of two concurrently running caption contents enables the computer system to display additional non-caption information on the display and reduces duplication of displaying the same caption information without requiring the user to provide additional inputs, thereby reducing the number of inputs required to perform the operation.

**[0416]** In some embodiments, in response to determining that a second audio transcript is being displayed or will be displayed by a different application while the system audio transcript is being displayed, the computer system forgoes display of (or, optionally, suppressing display of) the second audio transcript. Ceasing to display one of two concurrently running caption contents enables the computer system to display additional non-caption information on the display and reduces duplication of displaying the same caption

information without requiring the user to provide additional inputs, thereby reducing the number of inputs required to perform the operation.

**[0417]** In some embodiments, the computer system is in communication with one or more input devices (e.g., a touch-sensitive surface (e.g., a touchscreen), a mouse, and/or a keyboard). In some embodiments, while displaying the system audio transcript in a first visual state (e.g., with a first size and/or with a first location), the computer system receives input (e.g., **905***e*) to display an application. In some embodiments, in response to receiving the input to display the application, in accordance with a determination that the application is a fourth application, the computer system displays the system audio transcript in a second visual state (e.g., with a second size (e.g., a minimized state or a non-minimized (e.g., enlarged, full-screen, reduced-size, and/or intermediate) state) and/or with a second location) that is different from the first visual state. In some embodiments, in response to receiving the input to display the application, in accordance with a determination that the application is a fifth application, the computer system displays the system audio transcript in a third visual state (e.g., with a third size (e.g., a minimized state or a non-minimized (e.g., enlarged, full-screen, reduced-size, and/or intermediate) state) and/or with a third location) that is different from the second visual state. In some embodiments, the third visual state is the same as the first visual state. In some embodiments, the computer system updates display of the system audio transcript based on the application that is most prominent (e.g., is displayed on top and/or is full screen). In some embodiments, the computer system displays the system audio transcript in the second or third visual state based on the state of the system audio transcript at a prior time (e.g., the last time the system audio transcript was displayed for the corresponding application). In some embodiments, when the system audio transcript was in the second visual state when the respective application was last active (e.g., displayed or being used), the computer system automatically transitions the system audio transcript to the second visual state when the respective application becomes active. Maintaining, on a per-application basis, the state (e.g., size and/or location) of the system audio transcript enables the computer system to display the system audio transcript in a preferred manner when a particular application is displayed and/or emphasized without requiring further user input, thereby reducing the number of inputs required to perform the operation.

**[0418]** In some embodiments, the first information (e.g., caption metadata and/or audio) corresponding to first audio is received from an external device that is also providing the first information to one or more devices that are different from the computer system. In some embodiments, a first user is logged into the first computer system and different users are logged into the one or more devices. In some embodiments, the first information includes first caption information received from a first external device and second caption information received from a second external device that is different from the first external device. In some embodiments, the captions are derived from audio received from multiple devices (e.g., multiple user devices that are in a meeting). The computer system getting captions from a source that is also providing captions to other computers enables the computer system to get the same captions as the other computers and/or to access captions prepared from a higher-quality audio source than the computer system has access to, thereby providing the user with improved visual feedback.

**[0419]** In some embodiments, the computer system displays, via the display generation component, a description (e.g., **954**) of a non-speech sound (e.g., a doorbell, a crying baby, a fire alarm, and/or a dog barking) as part of the system audio transcript. In some embodiments, the computer system receives audio and detects the non-speech sound, wherein display of the description of the non-speech sound is in response to detecting the non-speech sound in the received audio. Displaying descriptions of non-speech sounds in the system audio transcript provides the user with visual feedback about the content of the audio, thereby providing the user with improved visual feedback about the audio of the applications.

**[0420]** In some embodiments, the computer system receives third information (e.g., caption metadata and/or audio) corresponding to third audio in (e.g., directed to and/or from) a third application (e.g., a voice communication application, a video communication application, a video player application, a music application, or a game application). In some embodiments. In some embodiments, the computer system displays, via the display generation component, as part of the system audio transcript (e.g., in a captions window and/or in a bottom portion of a display) and based on the third audio: a caption of first speech of a first speaker (e.g., captions attributed to "Speaker **1**" in FIG. **9**G); a caption of second speech of a second speaker (e.g., captions attributed to "Speaker **2**" in FIG. **9**H) that is different from the first speaker; and an indication (e.g., indicator attributing captions to "Speaker **1**" and "Speaker **2**" in FIGS. **9**G-**9**H) that a speaker of the caption of the first speech is different from a speaker of the caption of the second speech. In some embodiments, the computer system displays an indication of the first speaker adjacent to the caption of the first speech and/or an indication of the second speaker adjacent to the caption of the second speech. In some embodiments, the computer system uses a dictation model (e.g., a machine-learning model technique or a non-machine-learning model technique) to differentiate between the speakers of the first speech and the second speed. Displaying information differentiating among various speakers provides the user with visual information about which person is saying what content that is displayed as part of the system audio transcript, thereby providing the user with improved visual feedback about the audio of the applications.

**[0421]** In some embodiments, the computer system provides an option (e.g., **918**) to disable captioning of real-time communication sessions. In some embodiments, the computer system detects selection of the option to disable captioning of real-time communication sessions. In some embodiments, after (e.g., in response to) detecting selection of the option to disable captioning of real-time communication sessions, the computer system forgoes captioning real-time communication sessions while continuing to caption one or more audio that is not part of a real-time communication session. In some embodiments, when a real-time communication session is captioned, the computer system provides an audio output indicating to the participants of the real-time communication session that the session is being captioned. In some embodiments, when the option to disable captioning of real-time communication

sessions is selected, the computer system does not caption the session and does not provide an audio output indicating to the participants of the session that the session is being captioned. In some embodiments, the option to disable captioning of real-time communication sessions is displayed as part of a system user interface (e.g., a system settings user interface and/or a system application). In some embodiments, the option to disable captioning of real-time communication sessions is displayed as part of a user interface of a real-time communication application (e.g., an audio calling application and/or a video calling application). Enabling users to disable captioning for real-time communication sessions enables users to participate in real-time communication sessions without having to disclose that the audio is being captioned and enables users to disable captioning of private communications, thereby improving the machine-user interaction.

**[0422]** Note that details of the processes described above with respect to method **1000** (e.g., FIG. **10**) are also applicable in an analogous manner to the methods described above. For example, methods **700**-**1000** may be executed on a same device, such as device **600**. For brevity, these details are not repeated below.

**[0423]** FIG. **11** is a flow diagram illustrating a method for providing captions in accordance with some embodiments. Method **1100** is performed at a computer system (e.g., **100**, **300**, **500**, **600**, **900**, and/or **901**) (e.g., a smartphone, a smartwatch, a head mounted device (e.g., a head mounted augmented reality and/or extended reality device), and/or a personal computer) that is in communication with a display generation component (e.g., **903**) (e.g., a display, a display controller, a head mounted display system, and/or a touch-sensitive display). Some operations in method **1200** are, optionally, combined, the orders of some operations are, optionally, changed, and some operations are, optionally, omitted.

**[0424]** As described below, method **1100** provides an intuitive way for providing captions. The method reduces the cognitive burden on a user for providing captions, thereby creating a more efficient human-machine interface. For battery-operated computing devices, enabling a user to provide faster and more efficiently conserves power and increases the time between battery charges.

**[0425]** In some embodiments, the computer system displays (**1102**), via the display generation component, a set of captions (e.g., captions in captions interface **920**A, **956**A, **958**A) (e.g., that includes a transcript of an utterance and/or that includes a transcript of other sounds, such as background noise (e.g., dog barking, music playing, and/or applause)) in a first user interface region (e.g., captions interface **920**A) (e.g., in a captions window and/or in a bottom portion of a display).

**[0426]** In some embodiments, while displaying the set of captions, the computer system detects (**1104**) typed user input (e.g., **905**Af) to add a typed caption to the set of captions corresponding to a respective activity at the computer system.

**[0427]** In some embodiments, in response to detecting the typed user input to add the typed caption to the set of captions, the computer system displays (**1106**), via the display generation component, the typed caption in the first user interface region, wherein simulated speech (e.g., **907**Ag) based on the typed caption is provided as audio output for the respective activity. Providing simulated speech based on the typed caption enables users that are not able or do not want to speak (e.g., are in a quiet area, such as a library, and/or are at a location where speaking is discouraged, such as on a plane) to participate in an audio conversation, such as a voice call or video call.

**[0428]** In some embodiments, the computer system outputs, via an audio output device (e.g., a speaker, headphone, and/or headset) of the computer system, the simulated speech. Outputting the simulated speech via an audio output device of the computer enables a user who is unable to speak to communicate with a nearby individual.

**[0429]** In some embodiments, the simulated speech is output via an audio output device (e.g., a speaker, headphone, and/or headset) of a remote computer system (e.g., a device of participant Jane or participant Ann) (e.g., a smartphone, a smartwatch, a head mounted device (e.g., a head mounted augmented reality and/or extended reality device), and/or a personal computer) that is in communication (e.g., wireless or wired) with the computer system (e.g., in a real-time communication session). In some embodiments, the computer system generates audio of the simulated speech (to be output via the audio output device) and transmits the audio of the simulated speech to the remote computer system to be output as audio. Outputting the simulated speech via a remote computer system enables the user to communicate with individuals that are not nearby.

**[0430]** In some embodiments, the computer system is in communication with one or more input devices (e.g., a touch-sensitive surface (e.g., a touchscreen), a mouse, and/or a keyboard). In some embodiments, prior to providing the simulated speech based on the typed caption as audio output for the respective activity (e.g., prior to displaying the set of captions and/or prior to detecting typed user input to add a typed caption to the set of captions), the computer system receives, via the one or more input devices, user input selecting (e.g., from among a plurality of simulated voices) a simulated voice. In some embodiments, the simulated speech based on the typed caption is provided as audio output for the respective activity using the selected simulated voice. In some embodiments, users optionally select a simulated voice that matches their preference (e.g., a deep voice, a high-pitched voice, a voice with a first accent, or a voice with a second accent). In some embodiments, providing simulated speech based on the typed caption as audio output for the respective activity includes: in accordance with a determination that a first simulated voice has been selected (e.g., by a user or automatically) for the simulated speech, the simulated speech uses the first simulated voice and in accordance with a determination that a second simulated voice (different from the first simulated voice) has been selected (e.g., by the user or automatically) for the simulated speech, the simulated speech uses the second simulated voice. Enabling a user to selected from among various simulated voices enables the user to, for example, select a simulated voice that more closely matches the user's actual voice (e.g., pitch, speed, and/or accent).

**[0431]** In some embodiments, the computer system is in communication with a microphone and one or more input devices (e.g., a touch-sensitive surface (e.g., a touchscreen), a mouse, and/or a keyboard). In some embodiments, the computer system displays, via the display generation component, an option (e.g., **950**Ac) to enable displaying captions based on (e.g., of or using) audio detected via the microphone. In some embodiments, the computer system receives,

via the one or more input devices, selection of the option to enable displaying captions based on audio detected via the microphone. In some embodiments, in response to receiving selection of the option to enable displaying captions based on audio detected via the microphone, the computer system displays, via the display generation component (e.g., in the first user interface region or outside the first user interface region), captions based on audio detected via the microphone. Displaying captions based on audio detected via the microphone enables the computer system to provide information about nearby audio to a user who is not able to understand and/or hear the nearby audio.

**[0432]** In some embodiments, the computer system displays, via the display generation component, a first caption (e.g., **958**A) that is based on audio (e.g., speech audio and/or non-speech audio) detected via the microphone and a visual indication (e.g., **952**A) corresponding to (e.g., displayed adjacent to and/or displayed as part of (such as via color or size)) the first caption. In some embodiments, the visual indication indicates that the first caption is based on audio detected via the microphone. In some embodiments, the computer system displays, via the display generation component, a second caption that is not based on audio detected via the microphone without displaying a visual indication corresponding to the second caption indicating that the second caption is based on audio detected via the microphone. In some embodiments, the first caption and the second caption are concurrently displayed. In some embodiments, the computer system displays a second visual indication, different from the visual indication, corresponding to the second caption indicating that the second caption corresponds to a specific application. In some embodiments, the computer system displays visual indications corresponding to respective captions indicating to what application the respective captions are attributed to. In some embodiments, the set of captions optionally includes a plurality of captions based on audio detected via the microphone and a plurality of captions that are not based on audio detected via the microphone. In some embodiments, the computer system displays one or more visual indications corresponding to (e.g., displayed adjacent to and/or displayed as part of (such as via color or size)) captions based on audio detected via the microphone to indicate that the audio was detected via the microphone. In some embodiments, the computer system does not display the same visual indications in correspondence with captions that are not based on audio detected via the microphone. In some embodiments, captions of audio of respective remote devices are displayed, via the display generation component, and include an indication of the source of the audio (e.g., an indication that a caption is based on audio from a first remote device and a different indication that another caption is based on audio from a second remote device that is different from the first remote device). In some embodiments (e.g., while the computer system is participating in a real-time communication session with a remote device), the computer system displays indications to differentiate between captions that are based on content that was typed at the remote device and captions that are based on audio generated at the remote device (e.g., visually differentiate for the user of the computer system whether a caption is produced using audio or whether a user of the remote device typed in text that is being displayed as part of the set of captions). Visually differentiating between portions of the captions that are based on audio from the microphone vs audio not from the microphone provides the user with visual feedback about the nearby audio and the non-nearby audio.

**[0433]** In some embodiments, the computer system is in communication with a microphone. In some embodiments, the computer system displays (e.g., in response to receiving, via the one or more input devices, user input selecting a menu option), via the display generation component, a menu (e.g., **950**A) including one or more of: an option to enable and/or disable display of captions (e.g., **950**Aa) (e.g., pausing display of captions (e.g., with or without pausing processing of audio for captions) upon being disabled and/or upon being disabled, maintaining already displayed captions without displaying additional captions (until the option is enabled)); an option to switch the source of audio for captions between audio for output at (e.g., audio generated by a program of the computer system and/or audio received at the computer system that is not through a microphone of the computer system) the computer and audio detected via the microphone of the computer system (e.g., **950**Ab, **950**Ac); an option to continuously display (e.g., prevent applications from occluding and/or prevent from going off screen), via the display generation component, the first user interface region with captions (e.g., **950**Ad); an option to enable and/or disable providing simulated speech as audio output based on receiving a typed caption (e.g., **950**Ae); and an option to center, via the display generation component, the first user interface region with captions (e.g., **950**Af). Displaying the various menu options enables the computer system to provide a user with a personalized captioning experience, thereby improving the man-machine interface.

**[0434]** In some embodiments, displaying, via the display generation component, the set of captions in the first user interface region includes: in accordance with a determination that the set of captions includes a portion of text that is determined to be a respective type (e.g., a phone number, an e-mail, a website URL, and/or an address of a physical location) of text (e.g., based on one or more regular expression patterns that correspond to different types of text and/or based on analysis of the text), displaying, via the display generation component, an indication (e.g., highlight of caption **962**Aa, highlight of caption **962**Ab, highlight of caption **964**Aa, highlight of caption **964**Ab) that the respective type of text has been detected. In some embodiments, as a part of displaying the indication that the respective type of text has been detected, the computer system emphasizes (e.g., highlights, underlines, colors, and/or brackets) the portion of text. In some embodiments, the indication that the respective type of text has been detected is displayed adjacent to the portion of text that is of the respective type of text. In some embodiments, in accordance with a determination that the respective text does not include a portion of text that is of a respective type of text, the computer system does not display the indication that the respective type of text has been detected. Displaying indications of the respective types of text provides the user with visual feedback about the type of text that is displayed (e.g., that the text is an actionable/activatable), thereby providing the user with improved visual feedback.

**[0435]** In some embodiments, the computer system is in communication with one or more input devices (e.g., a touch-sensitive surface (e.g., a touchscreen), a mouse, and/or a keyboard). In some embodiments, the computer system receives, via the one or more input devices, selection (e.g., **905**Ah) of the portion of text that is determined to be the

respective type. In some embodiments, in response to receiving selection of the portion of text that is determined to be the respective type, the computer system performs an action associated with the portion of text (e.g., initiate a call using the phone number, compose a draft email using the email address, display the website, and/or display navigation directions using the address). In some embodiments, the action performed is based on the respective type. In some embodiments, the computer system receives selection of a portion of text and, in accordance with a determination that the portion of text is of the first type, the computer system performs (in response to receiving selection of the portion of text) a first operation (e.g., initiate a voice call or initiate a video call) using the portion of text; and in accordance with a determination that the portion of text is of the second type (different from the first type), the computer system performs (in response to receiving selection of the portion of text) a second operation (different from the first operation) (e.g., display a draft email or display a draft text message) using the portion of text. Performing an action associated with text that is of the respective type when the user selects the text enables the computer system to perform operations with reduced user inputs (e.g., user can tap on a phone number rather than retyping the phone number).

**[0436]** In some embodiments, while displaying the set of captions (e.g., that includes a transcript of an utterance and/or that includes a transcript of other sounds, such as background noise (e.g., dog barking, music playing, and/or applause)) in the first user interface region and in response to detecting audio (e.g., received as part of a real-time audio communication session, received as part of a real-time video communication session, and/or received as part of recorded audio) that includes a name of a user of the computer system, the computer system emphasizes (e.g., highlighting, brightening, and/or enlarging) the first user interface region (e.g., highlight of caption **964**Aa, highlight of caption **964**Ab). In some embodiments, while displaying the set of captions (e.g., that includes a transcript of an utterance and/or that includes a transcript of other sounds, such as background noise (e.g., dog barking, music playing, and/or applause)) in the first user interface region and in response to detecting audio (e.g., received as part of a real-time audio communication session, received as part of a real-time video communication session, and/or received as part of recorded audio) that includes a name of a user of the computer system, the computer system emphasizes (e.g., highlighting, brightening, and/or enlarging) a portion of text (e.g., more than or not more than) of the set of captions corresponding to the audio that includes the name of the user of the computer system (e.g., highlight of caption **962**Aa, highlight of caption **962**Ab). Emphasizing a first user interface region when a user's name is captioned and emphasizing the portion of text that includes the user's name provides the user with visual feedback that their name has been spoken and identifies for the user the context of the usage, thereby providing the user with improved visual feedback.

**[0437]** In some embodiments, the computer system stores (e.g., in memory at the computer system and/or in memory at a remote computer system) the set of captions in association with calendar information (e.g., a calendar appointment and/or a calendar invitation) corresponding to the time at which the set of captions was displayed. In some embodiments, the set of captions is stored in a format that is user-searchable such that a user can subsequently search the contents of a voice or video conversation and/or a presentation. In some embodiments, the set of captions is associated with the calendar information such that a user can access the calendar entry corresponding to the calendar information and review the set of captions (e.g., a voice or video conversation and/or a presentation) that occurred during the scheduled calendar entry. Storing the captions along with calendar information enables the computer system to provide the user with the captions in the future based on selection of a calendar entry corresponding to the calendar information, thereby providing the user with information about the audio the computer system received during the time of the calendar entry and providing the user with improved visual feedback.

**[0438]** In some embodiments, the computer system receives first information (e.g., caption metadata and/or audio) corresponding to first audio. In some embodiments, the computer system automatically selects, based on the first audio, a transcription language (e.g., detecting the language being spoken, detecting content that indicates the first audio includes speech of the specific language). In some embodiments, the computer system displays (e.g., in the first user interface region or not in the first user interface region), via the display generation component, captions corresponding to the first audio, wherein the captions corresponding to the first audio are based on (e.g., generated using and/or displayed using) the automatically selected transcription language. In some embodiments, in response to receiving first information: in accordance with a determination that a first language is detected in the first audio, the captions for the first audio are automatically displayed in the first language, and in accordance with a determination that a second language (different from the first language) is detected in the first audio, the captions for the first audio are automatically displayed in the second language. Automatically detecting/selecting a language for the captioning system enables the computer system to provide correct captions based on the detected/selected language without requiring the user to provide additional inputs, thereby reducing the number of inputs required to perform the operation.

**[0439]** In some embodiments, the computer system is in communication with one or more input devices (e.g., a touch-sensitive surface (e.g., a touchscreen), a mouse, and/or a keyboard), In some embodiments, the computer system receives (e.g., after displaying captions corresponding to the first audio), via one or more input devices, input (e.g., selection of language from **998***b*) to manually select a transcription language. In some embodiments, the computer system receives second information (e.g., caption metadata and/or audio) corresponding to second audio. In some embodiments, the computer system displays (e.g., in the first user interface region or not in the first user interface region), via the display generation component, captions corresponding to the second audio. In some embodiments, the captions corresponding to the second audio are based on (e.g., generated using and/or displayed using) the manually selected language. In some embodiments, in response to receiving the input manually selecting the transcription language: in accordance with a determination that the transcription language is a first language, the captions for audio are automatically displayed in the first language, and in accordance with a determination that the transcription language is a second language (different from the first language), the captions for audio are automatically displayed in

the second language. In some embodiments, the language in which transcriptions are displayed is without regard to the language being spoken in the audio and/or without regard to the language automatically detected as being spoken in the audio. The computer system receiving a manual selection of a language for transcribing audio enables the computer system to provide captions that are appropriate for the language being spoken or expected to be spoken, thereby enabling the computer system to provide the user with improved captions and improved visual feedback about the audio the computer system is receiving.

**[0440]** Note that details of the processes described above with respect to method **1100** (e.g., FIG. **11**) are also applicable in an analogous manner to the methods described above. For example, methods **700-1100** may be executed on a same device, such as device **600**. For brevity, these details are not repeated below.

**[0441]** The foregoing description, for purpose of explanation, has been described with reference to specific embodiments. However, the illustrative discussions above are not intended to be exhaustive or to limit the invention to the precise forms disclosed. Many modifications and variations are possible in view of the above teachings. The embodiments were chosen and described in order to best explain the principles of the techniques and their practical applications. Others skilled in the art are thereby enabled to best utilize the techniques and various embodiments with various modifications as are suited to the particular use contemplated.

**[0442]** Although the disclosure and examples have been fully described with reference to the accompanying drawings, it is to be noted that various changes and modifications will become apparent to those skilled in the art. Such changes and modifications are to be understood as being included within the scope of the disclosure and examples as defined by the claims.

**[0443]** As described above, one aspect of the present technology is the gathering and use of data available from various sources to enhance a user's live communication experience. The present disclosure contemplates that in some instances, this gathered data may include personal information data that uniquely identifies or can be used to contact or locate a specific person. Such personal information data can include demographic data, location-based data, telephone numbers, email addresses, twitter IDs, home addresses, data or records relating to a user's health or level of fitness (e.g., vital signs measurements, medication information, exercise information), date of birth, or any other identifying or personal information.

**[0444]** The present disclosure recognizes that the use of such personal information data, in the present technology, can be used to the benefit of users. For example, the personal information data can be used to customize user profiles for a live communication application and/or improve how captions are provided to the user. Accordingly, use of such personal information data enables users to have calculated control of the delivered content. Further, other uses for personal information data that benefit the user are also contemplated by the present disclosure. For instance, health and fitness data may be used to provide insights into a user's general wellness, or may be used as positive feedback to individuals using technology to pursue wellness goals.

**[0445]** The present disclosure contemplates that the entities responsible for the collection, analysis, disclosure, transfer, storage, or other use of such personal information data will comply with well-established privacy policies and/or privacy practices. In particular, such entities should implement and consistently use privacy policies and practices that are generally recognized as meeting or exceeding industry or governmental requirements for maintaining personal information data private and secure. Such policies should be easily accessible by users, and should be updated as the collection and/or use of data changes. Personal information from users should be collected for legitimate and reasonable uses of the entity and not shared or sold outside of those legitimate uses. Further, such collection/sharing should occur after receiving the informed consent of the users. Additionally, such entities should consider taking any needed steps for safeguarding and securing access to such personal information data and ensuring that others with access to the personal information data adhere to their privacy policies and procedures. Further, such entities can subject themselves to evaluation by third parties to certify their adherence to widely accepted privacy policies and practices. In addition, policies and practices should be adapted for the particular types of personal information data being collected and/or accessed and adapted to applicable laws and standards, including jurisdiction-specific considerations. For instance, in the US, collection of or access to certain health data may be governed by federal and/or state laws, such as the Health Insurance Portability and Accountability Act (HIPAA); whereas health data in other countries may be subject to other regulations and policies and should be handled accordingly. Hence different privacy practices should be maintained for different personal data types in each country.

**[0446]** Despite the foregoing, the present disclosure also contemplates embodiments in which users selectively block the use of, or access to, personal information data. That is, the present disclosure contemplates that hardware and/or software elements can be provided to prevent or block access to such personal information data. For example, in the case of live communication user interfaces, the present technology can be configured to allow users to select to "opt in" or "opt out" of participation in the collection of personal information data during registration for services or anytime thereafter. In addition to providing "opt in" and "opt out" options, the present disclosure contemplates providing notifications relating to the access or use of personal information. For instance, a user may be notified upon downloading an app that their personal information data will be accessed and then reminded again just before personal information data is accessed by the app.

**[0447]** Moreover, it is the intent of the present disclosure that personal information data should be managed and handled in a way to minimize risks of unintentional or unauthorized access or use. Risk can be minimized by limiting the collection of data and deleting data once it is no longer needed. In addition, and when applicable, including in certain health related applications, data de-identification can be used to protect a user's privacy. De-identification may be facilitated, when appropriate, by removing specific identifiers (e.g., date of birth, etc.), controlling the amount or specificity of data stored (e.g., collecting location data a city level rather than at an address level), controlling how data is stored (e.g., aggregating data across users), and/or other methods.

**[0448]** Therefore, although the present disclosure broadly covers use of personal information data to implement one or

more various disclosed embodiments, the present disclosure also contemplates that the various embodiments can also be implemented without the need for accessing such personal information data. That is, the various embodiments of the present technology are not rendered inoperable due to the lack of all or a portion of such personal information data. For example, general user profiles can be created for live communication applications based on non-personal information data or a bare minimum amount of personal information, such as the content being requested by the device associated with a user, other non-personal information available to the content delivery services, or publicly available information.

What is claimed is:

**1**. A computer system configured to communicate with a display generation component, comprising:

one or more processors; and

memory storing one or more programs configured to be executed by the one or more processors, the one or more programs including instructions for:

displaying, via the display generation component, a set of captions in a first user interface region;

while displaying the set of captions, detecting typed user input to add a typed caption to the set of captions corresponding to a respective activity at the computer system; and

in response to detecting the typed user input to add the typed caption to the set of captions, displaying, via the display generation component, the typed caption in the first user interface region, wherein simulated speech based on the typed caption is provided as audio output for the respective activity.

**2**. The computer system of claim **1**, the one or more programs further including instructions for:

outputting, via an audio output device of the computer system, the simulated speech.

**3**. The computer system of claim **1**, wherein the simulated speech is output via an audio output device of a remote computer system that is in communication with the computer system.

**4**. The computer system of claim **1**, wherein the computer system is configured to communicate with one or more input devices, the one or more programs further including instructions for:

prior to providing the simulated speech based on the typed caption as audio output for the respective activity, receiving, via the one or more input devices, user input selecting a simulated voice, wherein the simulated speech based on the typed caption is provided as audio output for the respective activity using the selected simulated voice.

**5**. The computer system of claim **1**, wherein the computer system is configured to communicate with a microphone and one or more input devices, the one or more programs further including instructions for:

displaying, via the display generation component, an option to enable displaying captions based on audio detected via the microphone;

receiving, via the one or more input devices, selection of the option to enable displaying captions based on audio detected via the microphone; and

in response to receiving selection of the option to enable displaying captions based on audio detected via the microphone, displaying, via the display generation component, captions based on audio detected via the microphone.

**6**. The computer system of claim **5**, the one or more programs further including instructions for:

displaying, via the display generation component, a first caption that is based on audio detected via the microphone and a visual indication corresponding to the first caption, wherein the visual indication indicates that the first caption is based on audio detected via the microphone; and

displaying, via the display generation component, a second caption that is not based on audio detected via the microphone without displaying a visual indication corresponding to the second caption indicating that the second caption is based on audio detected via the microphone.

**7**. The computer system of claim **1**, wherein the computer system is configured to communicate with a microphone, the one or more programs further including instructions for:

displaying, via the display generation component, a menu including one or more of:

an option to enable and/or disable display of captions;

an option to switch a source of audio for captions between audio for output at the computer system and audio detected via the microphone of the computer system;

an option to continuously display, via the display generation component, the first user interface region with captions;

an option to enable and/or disable providing simulated speech as audio output based on receiving a typed caption; and

an option to center, via the display generation component, the first user interface region with captions.

**8**. The computer system of claim **1**, wherein displaying, via the display generation component, the set of captions in the first user interface region includes:

in accordance with a determination that the set of captions includes a portion of text that is determined to be a respective type of text, displaying, via the display generation component, an indication that the respective type of text has been detected.

**9**. The computer system of claim **8**, wherein the computer system is configured to communicate with one or more input devices, the one or more programs further including instructions for:

receiving, via the one or more input devices, selection of the portion of text that is determined to be the respective type; and

in response to receiving selection of the portion of text that is determined to be the respective type, performing an action associated with the portion of text.

**10**. The computer system of claim **1**, the one or more programs further including instructions for:

while displaying the set of captions in the first user interface region and in response to detecting audio that includes a name of a user of the computer system:

emphasizing the first user interface region; and

emphasizing a portion of text of the set of captions corresponding to the audio that includes the name of the user of the computer system.

**11**. The computer system of claim **1**, the one or more programs further including instructions for:

storing the set of captions in association with calendar information corresponding to a time at which the set of captions was displayed.

**12**. The computer system of claim **1**, the one or more programs further including instructions for:

receiving first information corresponding to first audio;

automatically selecting, based on the first audio, a transcription language; and

displaying, via the display generation component, captions corresponding to the first audio, wherein the captions corresponding to the first audio are based on the automatically selected transcription language.

**13**. The computer system of claim **1**, wherein the computer system is configured to communicate with one or more input devices, the one or more programs further including instructions for:

receiving, via one or more input devices, input to manually select a transcription language;

receiving second information corresponding to second audio; and

displaying, via the display generation component, captions corresponding to the second audio, wherein the captions corresponding to the second audio are based on the manually selected language.

**14**. A non-transitory computer-readable storage medium storing one or more programs configured to be executed by one or more processors of a computer system that is in communication with a display generation component, the one or more programs including instructions for:

displaying, via the display generation component, a set of captions in a first user interface region;

while displaying the set of captions, detecting typed user input to add a typed caption to the set of captions corresponding to a respective activity at the computer system; and

in response to detecting the typed user input to add the typed caption to the set of captions, displaying, via the display generation component, the typed caption in the first user interface region, wherein simulated speech based on the typed caption is provided as audio output for the respective activity.

**15**. A method, comprising:

at a computer system that is in communication with a display generation component:

displaying, via the display generation component, a set of captions in a first user interface region;

while displaying the set of captions, detecting typed user input to add a typed caption to the set of captions corresponding to a respective activity at the computer system; and

in response to detecting the typed user input to add the typed caption to the set of captions, displaying, via the display generation component, the typed caption in the first user interface region, wherein simulated speech based on the typed caption is provided as audio output for the respective activity.

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