

**IN THE UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF TEXAS
AUSTIN DIVISION**

KP INNOVATIONS 2, LLC

Plaintiffs,

v.

SAMSUNG ELECTRONICS CO. LTD., and
SAMSUNG ELECTRONICS AMERICA,
INC.,

Defendants.

Civil Action File No. 1-24-cv-00170-DII

**PLAINTIFF’S INFRINGEMENT CONTENTIONS
AND DISCLOSURE OF ASSERTED CLAIMS**

In accordance with the Court’s Order, KP Innovations 2, LLC (“KP2”) provides the following Disclosure of Asserted Claims and Infringement Contentions (“Infringement Contentions”) as to U.S. Patent 10,499,168 (“the ’168 Patent”) (“Asserted Patent”) against Samsung Electronics Co. Ltd. and Samsung Electronics America, Inc. (collectively “Samsung”). These Infringement Contentions are made solely for the purpose of this action.

Discovery in this matter has not yet begun. KP2’s investigation regarding infringement and additional potential grounds for infringement is ongoing. Thus, KP2’s Infringement Contentions are based on publicly available information as well as KP2’s current good-faith beliefs that the identifies Samsung’s Galaxy Flip1, Galaxy Fold 1, Galaxy Fold 2, Galaxy Flip 3, Galaxy Fold 3, Galaxy Flip 4, Galaxy Fold 4, Galaxy Flip 5, and Galaxy Fold 5 products (“Accused Instrumentality”) and are given without prejudice to KP2’s right to amend or supplement or seek

leave to amend or supplement these Infringement Contentions as additional facts are ascertained, analysis is made, research is completed and the '168 Patent's claims are construed.

Plaintiff's Infringement Contentions also are based on KP2's understanding of the meaning and scope of the claims of the '168 Patent. KP2 reserves the right to amend or supplement or seek leave to amend or supplement its Infringement Contentions if its understanding of the claims change, including once the Court construes the claim language.

I. Identification of Infringed Claims

As set forth in the claim charts in Exhibits A and B, KP2 alleges that Samsung has infringed and/or is infringing claims 18, 19, 20, and 21 of the '168 Patent in violation of 35 U.S.C. § 271(a), § 271(b), and/or § 271(c). KP2's identification of these Asserted Claims is based on the information currently available to it and in view of KP2's current understanding of the proper construction of the Asserted Claims.

II. For Each Asserted Claim Identify the Accused Instrumentalities

KP2 identifies Samsung's Galaxy Flip1, Galaxy Fold 1, Galaxy Fold 2, Galaxy Flip 3, Galaxy Fold 3, Galaxy Flip 4, Galaxy Fold 4, Galaxy Flip 5, and Galaxy Fold 5 products as the accused apparatus, product, device, process, method, act or other instrumentality ("Accused Instrumentality") to which it is aware. KP2 bases its identification on the information currently available to it and based on KP2's current understanding of the proper construction of the Asserted Claims in the '168 Patent.

III. Identification of Elements of Asserted Claims in Each Accused Instrumentality

KP2 provides the attached claim charts in Exhibits A-I illustrating Samsung's infringement with the Accused Instrumentality. KP2 states that each claim element is understood to be literally present in the Accused Instrumentality. KP2 reserves the right to amend and/or supplement the asserted infringement contentions literally or under the doctrine of equivalence, as appropriate based on developments in the case or based on KP2's understanding of the Court's construction of the claim language.

IV. Identification of Whether Each Asserted Claim Element is Literally Present or Present Under the Doctrine of Equivalence in the Accused Instrumentalities

KP2 alleges that Samsung has in the past, and continues to, literally, directly and/or indirectly infringe claims 18, 19, 20, and 21 of the '168 Patent pursuant to 35 U.S.C. § 271. As of at least February 2024, Samsung had knowledge of the '168 Patent. Yet, on information and belief, Samsung, in violation of the '168 Patent, has sold and/or offered for sale the Accused Instrumentalities.

V. Identification of Priority Date

The '168 Patent is a divisional patent that claims priority to U.S. Patent No. 7,792,676 filed on October 25, 2001, which claims priority to a U.S. Provisional Application 60/243,162 filed on October 25, 2000. The '168 Patent was filed on February 8, 2010, and is entitled to a priority date of at least October 25, 2000. The term of the claims in the '168 Patent was extended under 35 U.S.C. § 154(b) by 852 days.

VI. Identification of KP Innovations 2 Documents

A copy of the file history for the Asserted Patent are produced as:

U.S. Patent No. 10,499,168 File History, Pt. 1 at KPI2-000001 - KPI2-000501
U.S. Patent No. 10,499,168 File History, Pt. 2 at KPI2-000502 - KPI2-001011
U.S. Patent No. 7,792,676 File History at KPI2-001012 - KPI2-001602
U.S. Provisional Patent Application 60/243,162 at KPI2-001603 - KPI2-001649
ATT SM-F900U Galaxy Fold EN IBG P 9.0 090419 Final at KPI2-001650 - KPI2-001651
SAM F946 F731 EN UM OS13 072723_FINAL at KPI2-001652 - KPI2-001823
SAM F900 EN UM OS12 041422 FINAL_AC at KPI2-001824 - KPI2-001993
Verizon Galaxy X Z Flip5 at KPI2-001994 - KPI2-001999
SAM F700 F707 EN UM OS13 021323 FINAL at KPI2-002000 - KPI2-002061
Z Flip4 Verizon Camera - Directors mode at KPI2-002162 - KPI2-002167
VZW SM-F916U1 EN IBG Q 10.0 080620 FINAL at KPI2-002168 - KPI2-002169
SAM F916 EN UM OS13 022323 FINAL AC 03062023 at KPI2-002170 - KPI2-002339
SAM F926 F711 EN UM OS13 021023 FINAL at KPI2-002340 - KPI2-002517
SAM F936 F721 EN UG OS14 122723 FINAL at KPI2-002518 - KPI2-002691
One UI See what's new in One UI 4 at KPI2-002692 - KPI2-002720
U.S. Patent No. 7,792,676 at KPI2-002721 - KPI2-002735
U.S. Patent No. 10,499,168 at KPI2-002736 -KPI2-002751

September 24, 2024

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on September 24, 2024, I electronically served Plaintiff's Infringement Contentions via electronic mail to all counsel of record as follows.

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Exhibit A

U.S. Patent 10,499,168

Product: Z Flip

Claims 18-21

	Document: Samsung Galaxy Z Flip Z Flip 5G Manual (SAM_F700_F707_EN_UM_TN_VK7_021323_FINAL) Bates No. KPI2-002000 – KPI2-002061
18. A communication service device operable with a communication network, comprising:	“Network indicators for 5G service are based on your service provider specifications and network availability.” (Manual, p. 10, KPI2-002009). “Wi-Fi You can connect your device to a Wi-Fi network to access the internet without using your mobile data.” (Manual, p. 107, KPI2-002106).
at least one user communication device configured to receive and transmit information over the communication network;	“Wi-Fi You can connect your device to a Wi-Fi network to access the internet without using your mobile data.” (Manual, p. 107, KPI2-002106). “Real Time Text (RTT) Type back and forth in real time with the other person while on a call. You can use RTT whenever you are calling someone whose phone also supports RTT or is connected to a teletypewriter (TTY) device. The RTT icon appears on all incoming RTT calls.” (Manual, p. 96, KPI2-002095).

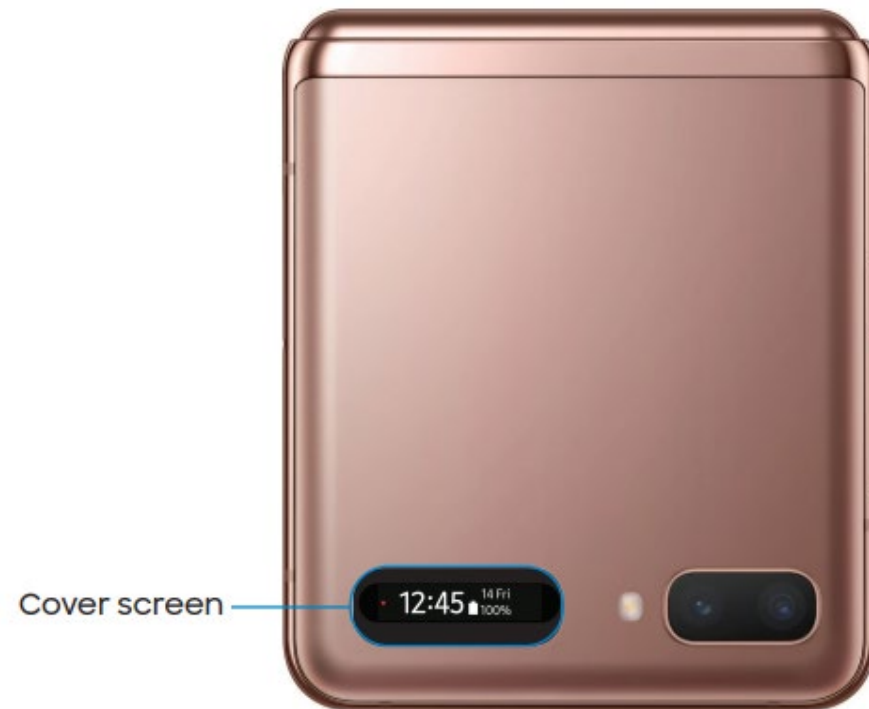
the at least one user communication device comprising a housing having a first side and a second side, at least one first input device and first display device configured to allow the at least one user to input and output visual information wherein the at least one first input device and first display device resides on the first side of the housing, at least one second input device configured to input visual information wherein the at least one second input device resides on the second side of the housing;

Galaxy Z Flip



(Manual, p. 5, KPI2-002004).

Z Flip 5G Folded

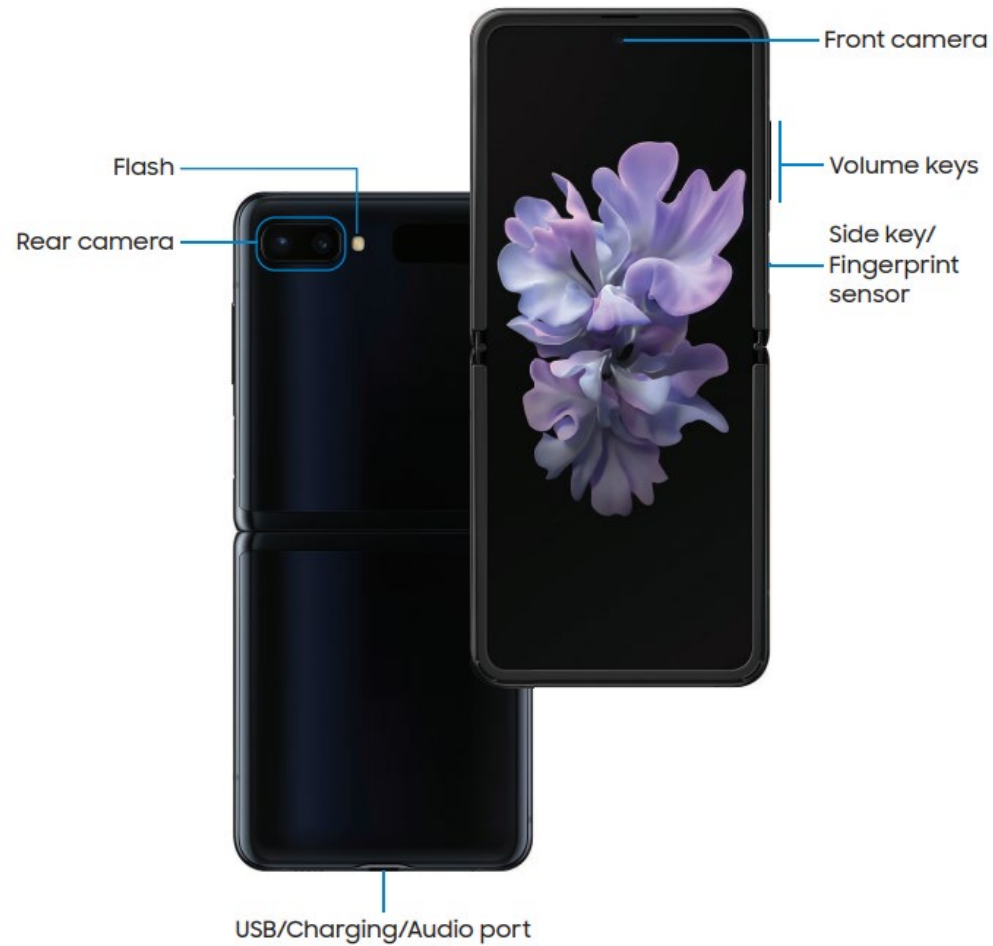


(Manual, p. 8, KPI2-002007).

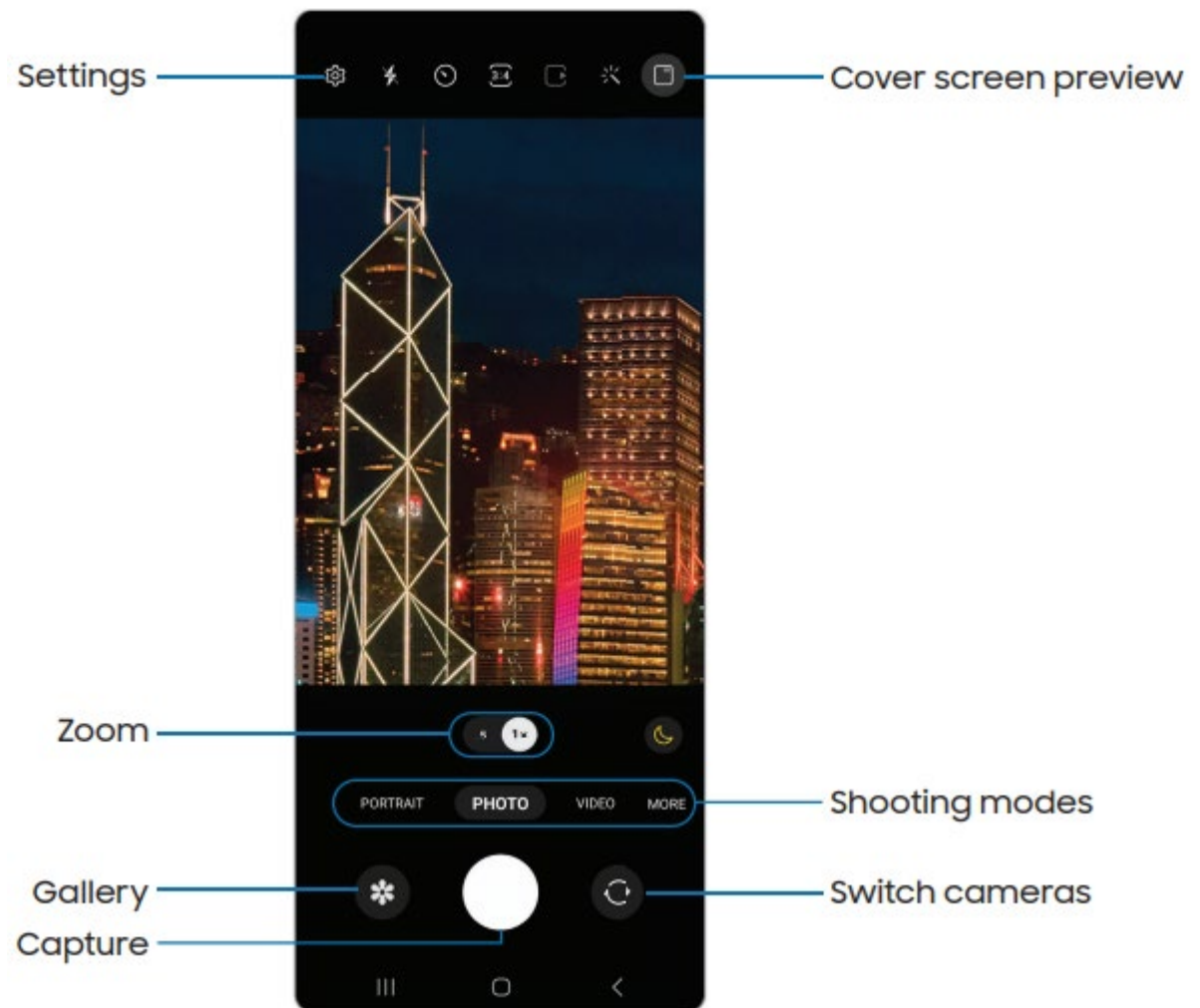
In the pictures of Z Flip, one side has a rear camera with a cover screen display and the other side a “Front Camera” and screen display of the open housing.

wherein the first and second input devices and first display are carried by the housing in an orientation to allow the at least one user to access the at least one first input device and first display device from the first side of the housing at the same time as the at least one second input device from the second side of the housing.

Galaxy Z Flip



(Manual, p. 5, KPI2-002004).



(Manual, p. 47, KPI2-002046).

The Z flip has a button for switching cameras, that button enables access to one of the cameras when the other is operating at the same time to switch between the cameras.

19. The communication service device as claimed in claim 18, wherein the first side of the housing and the second side of the housing face mutually opposite directions.

Galaxy Z Flip



(Manual, p. 5, KPI2-002004).

20. The communication services device as claimed in claim 18, wherein the first input device comprises a first camera, and where the second input device comprises a second camera.

Galaxy Z Flip



(Manual, p. 5, KPI2-002004).

21. The communication services device as claimed in claim 19 includes, a second display device residing on the second side of the housing.	“Cover screen When your device is folded, use the touch screen to access shortcuts without opening the device. The following shortcuts are available: • Press the Side key or double tap to wake the cover screen. • Swipe right to view notifications. • Swipe right to answer or left to reject an incoming call.” (Manual, p. 16, KPI2-002015).

Exhibit B

U.S. Patent 10,499,168

Product: Z Fold

Claims 18-21

	Documents: 1. Samsung Galaxy Z Fold - Quick Start Guide ver. P 9.0 (ATT_SM-F900U_Galaxy_Fold_EN_IBG_P_9.0_090419_Final) Bates No. KPI2-001650 – KPI2-001651 2. User Manual ver. S 12.0 (SAM_F900_EN_UM_OS12_041422_FINAL_AC) Bates No. KPI2-001824 - KPI2-001993
18. A communication service device operable with a communication network, comprising:	“See more with AT&T video call One-touch video calling built into your smartphone, no app to download, no separate account to configure, and no password to enter. • Simply tap Video Call on the dialer or in your contacts. • Switch between HD voice and video at any time during a call.” (Quick Start Guide, p. 2, KPI2-001651). “Wi-Fi calling Make calls over Wi-Fi when you are connected to a Wi-Fi network. 1. From Phone, tap More options > Settings > Wi-Fi calling. 2. Tap to enable this feature. 3. Follow the prompts to set up and configure Wi-Fi calling. Real Time Text (RTT) Type back and forth in real time with the other person while on a call. You can use RTT whenever you are calling someone whose phone also supports RTT or is connected to a teletypewriter (TTY) device. The RTT icon appears on all incoming

	RTT calls.” (User Manual p. 102, KPI2-001925).
at least one user communication device configured to receive and transmit information over the communication network;	“See more with AT&T video call One-touch video calling built into your smartphone, no app to download, no separate account to configure, and no password to enter. • Simply tap Video Call on the dialer or in your contacts. • Switch between HD voice and video at any time during a call.” (Quick Start Guide, p. 2, KPI2-001651). “Wi-Fi calling Make calls over Wi-Fi when you are connected to a Wi-Fi network. 1. From Phone, tap More options > Settings > Wi-Fi calling. 2. Tap to enable this feature. 3. Follow the prompts to set up and configure Wi-Fi calling. Real Time Text (RTT) Type back and forth in real time with the other person while on a call. You can use RTT whenever you are calling someone whose phone also supports RTT or is connected to a teletypewriter (TTY) device. The RTT icon appears on all incoming RTT calls.” (Manual p. 102, KPI2-001925).

the at least one user communication device comprising a housing having a first side and a second side, at least one first input device and first display device configured to allow the at least one user to input and output visual information wherein the at least one first input device and first display device resides on the first side of the housing, at least one second input device configured to input visual information wherein the at least one second input device resides on the second side of the housing;



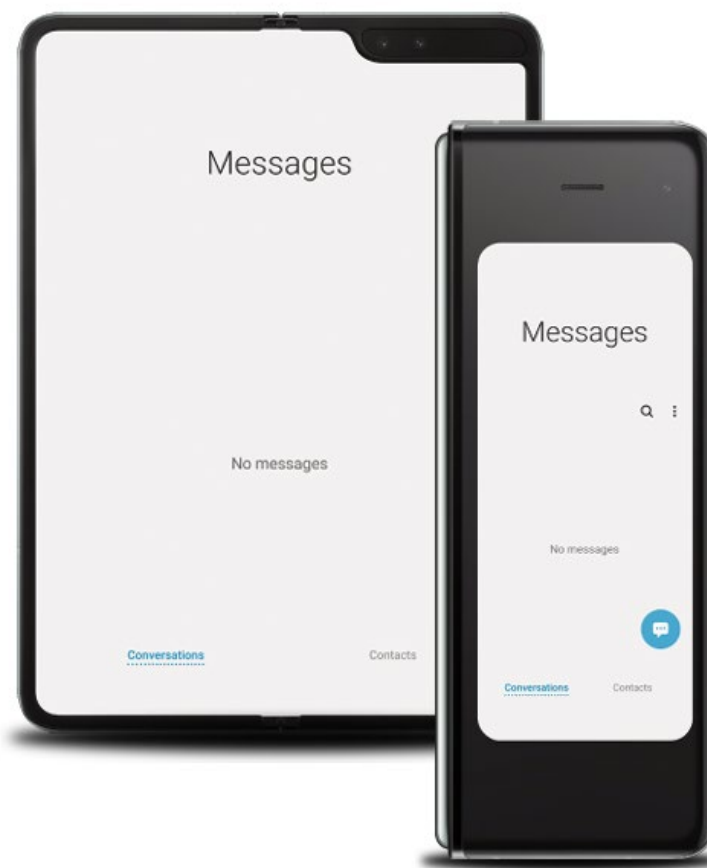
(Quick Start Guide, p. 2, KPI2-001651).



(Manual p. 7, KPI2-001651).

App continuity

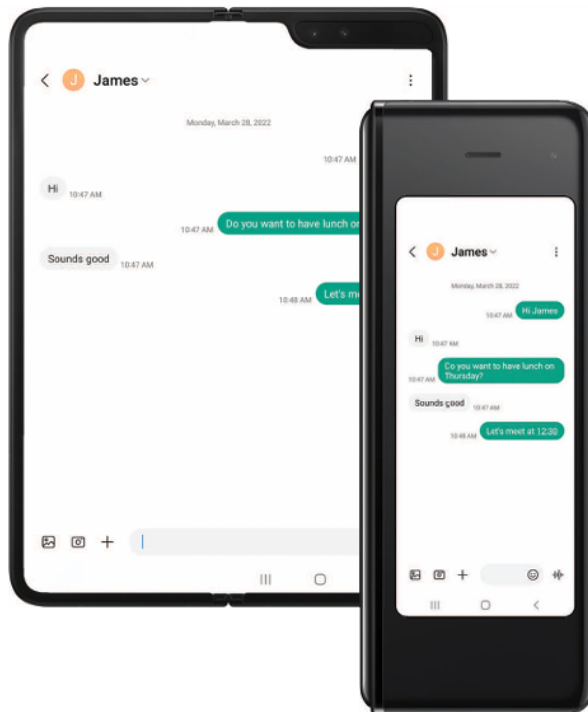
Do more with App continuity. The app experience continues from the front screen to the large immersive display.



(Quick Start Guide, p. 2, KPI2-001651).

App continuity

App continuity allows your apps to transition between the cover screen and the large display seamlessly.



Continue apps on cover screen

Choose which apps you want to continue using on the cover screen when you close your device.

- From Settings, tap  **Display** > **Continue apps on cover screen**, and tap apps to enable this feature.

(Manual p. 37, KPI2-001860).

wherein the first and second input devices and first display are carried by the housing in an orientation to allow the at least one user to access the at least one first input device and first display device from the first side of the housing at the same time as the at least one second input device from the second side of the housing.

Screen recorder

Record activities on your device, write notes, and use the camera to record a video overlay of yourself to share with friends or family.

1. From Quick Settings, tap  **Screen recorder**.
2. Choose a sound setting, and tap **Start recording**.
3. A three-second countdown runs before it starts recording. You can tap **Skip countdown** to begin recording immediately.
 - Tap  **Draw** to draw on the screen.
 - Tap  **Selfie video** to include a recording from your front camera.
4. Tap  **Stop** to finish recording. These are automatically saved to the Screen recordings album in the Gallery.

63

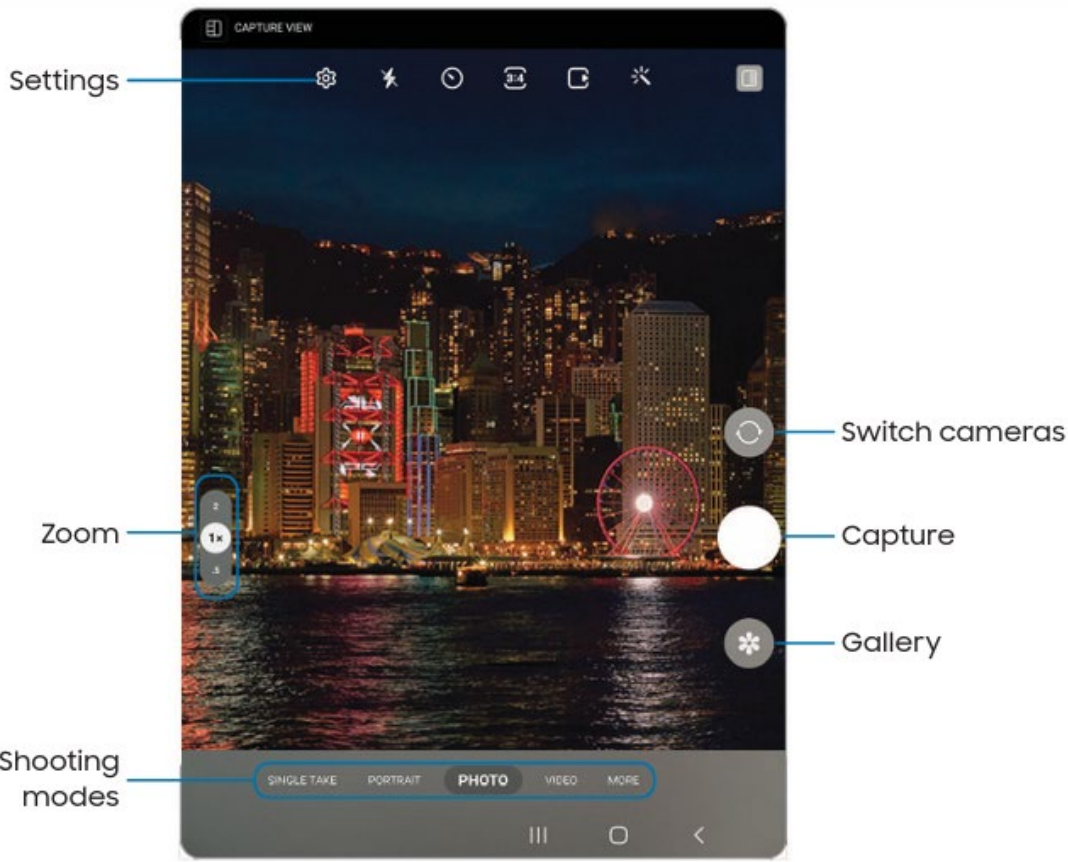
Camera and Gallery

Screen recorder settings

Control the sound and quality settings for the screen recorder.

- From Settings, tap  **Advanced features** > **Screenshots and screen recorder**.
 - **Sound:** Choose what sounds to record while using the screen recorder.
 - **Video quality:** Select a resolution. Selecting a higher resolution for higher quality requires more memory.
 - **Selfie video size:** Drag the slider to set the size of the video overlay.
 - **Show taps and touches:** Enable to indicate screen taps and touches in a recording.

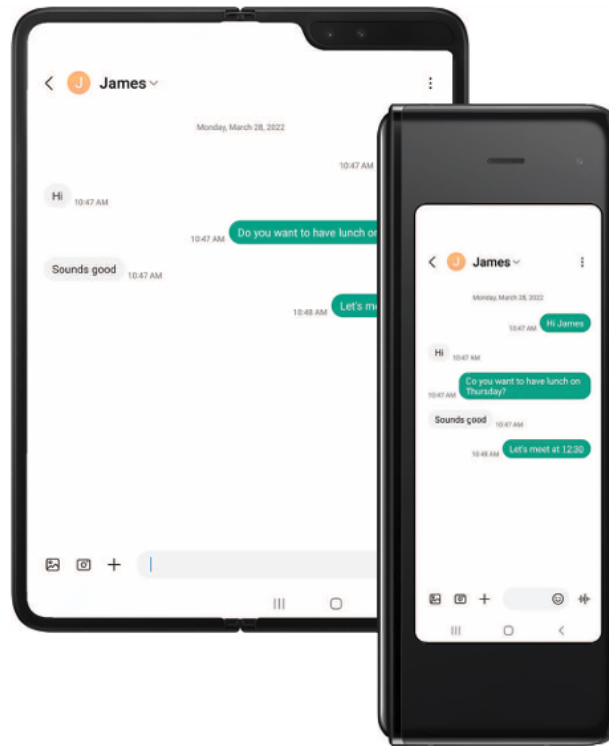
(Manual, p. 63-64, KPI2-001886-KPI2-001887).

	 The image shows the camera application interface on a Samsung Z Fold device. The screen displays a night view of a city skyline with a Ferris wheel. Several UI elements are labeled with blue lines pointing to them: 'Settings' points to the gear icon in the top left; 'Zoom' points to the vertical zoom slider on the left; 'Shooting modes' points to the bottom bar containing 'SINGLE TAKE', 'PORTRAIT', 'PHOTO', 'VIDEO', and 'MORE'; 'Switch cameras' points to the circular camera switch icon on the right; 'Capture' points to the large white circular shutter button; and 'Gallery' points to the star icon below the shutter button. The top status bar shows 'CAPTURE VIEW' and various icons for flash, timer, grid, and other settings. (Manual, p. 53, KPI2-001876). The Z Fold has a button for switching cameras, that button enables access to one of the cameras when the other is operating at the same time to switch between the cameras.

19. The communication service device as claimed in claim 18, wherein the first side of the housing and the second side of the housing face mutually opposite directions.

App continuity

App continuity allows your apps to transition between the cover screen and the large display seamlessly.



Continue apps on cover screen

Choose which apps you want to continue using on the cover screen when you close your device.

- From Settings, tap  **Display** > **Continue apps on cover screen**, and tap apps to enable this feature.

(Manual, p. 37, KPI2-001860).

20. The communication services device as claimed in claim 18, wherein the first input device comprises a first camera, and where the second input device comprises a second camera.

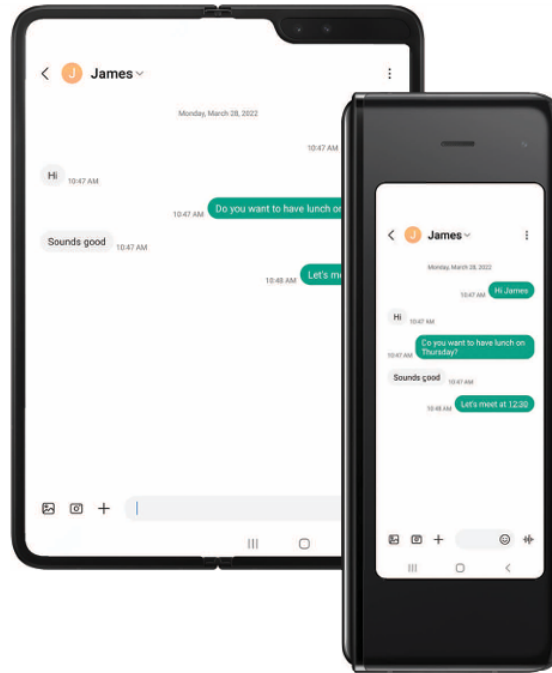


21. The communication services device as claimed in claim 19 includes,

a second display device residing on the second side of the housing.

App continuity

App continuity allows your apps to transition between the cover screen and the large display seamlessly.



Continue apps on cover screen

Choose which apps you want to continue using on the cover screen when you close your device.

- From Settings, tap  **Display** > **Continue apps on cover screen**, and tap apps to enable this feature.

(Manual, p. 37, KPI2-001860).

Exhibit C

U.S. Patent 10,499,168
Product: Z Fold2
Claims 18-21

	Documents: 1. Samsung Galaxy Z Fold2 5G Manual (SAM_F916_EN_UM_TN_VK5_022323_FINAL) Bates No. KPI2-002170-KPI2-002339 2. Samsung Galaxy Z Fold2 5G Quick Reference Guide (VZW_SM-F916U1EN_IBG_Q_10.0_080620_FINAL) Bates No. KPI2-002168-KPI2-002169
18. A communication service device operable with a communication network, comprising:	“Network indicators for 5G service are based on your service provider specifications and network availability.” (Manual, p. 10, KPI2-002179). “Wi-Fi calling Make calls over Wi-Fi when you are connected to a Wi-Fi network.” (Manual, p. 99, KPI2-002268).
at least one user communication device configured to receive and transmit information over the communication network;	“Wi-Fi calling Make calls over Wi-Fi when you are connected to a Wi-Fi network.” (Manual, p. 99, KPI2-002268). “Real Time Text (RTT) Type back and forth in real time with the other person while on a call ... ”

	You can use RTT whenever you are calling someone whose phone also supports RTT or is connected to a teletypewriter (TTY) device. The RTT icon appears on all incoming RTT calls.” (Manual, p. 99, KPI2-002268).
the at least one user communication device comprising a housing having a first side and a second side, at least one first input device and first display device configured to allow the at least one user to input and output visual information wherein the at least one first input device and first display device resides on the first side of the housing, at least one second input device configured to input visual information wherein the at least one second input device resides on the second side of the housing;	 Diagram illustrating the components of a user communication device (smartphone) and their locations: Camera: Located at the top center of the front face. Volume: Located on the right side of the device. Side key / Fingerprint scanner: Located on the right side of the device, below the volume keys. Press to power on Short press: Lock screen Long press: Bixby Voice Double press: Camera Long press (Side key and Volume down): Turn off SIM card slot: Located on the left side of the device. (Quick Reference Guide, p. 1, KPI2-002168).



(Quick Reference Guide, p. 1, KPI2-002168).

In the pictures of Z Fold2, when open, one side has a rear camera and “Front Camera” along with a screen display. On the other side, there is a “camera” along with another display.

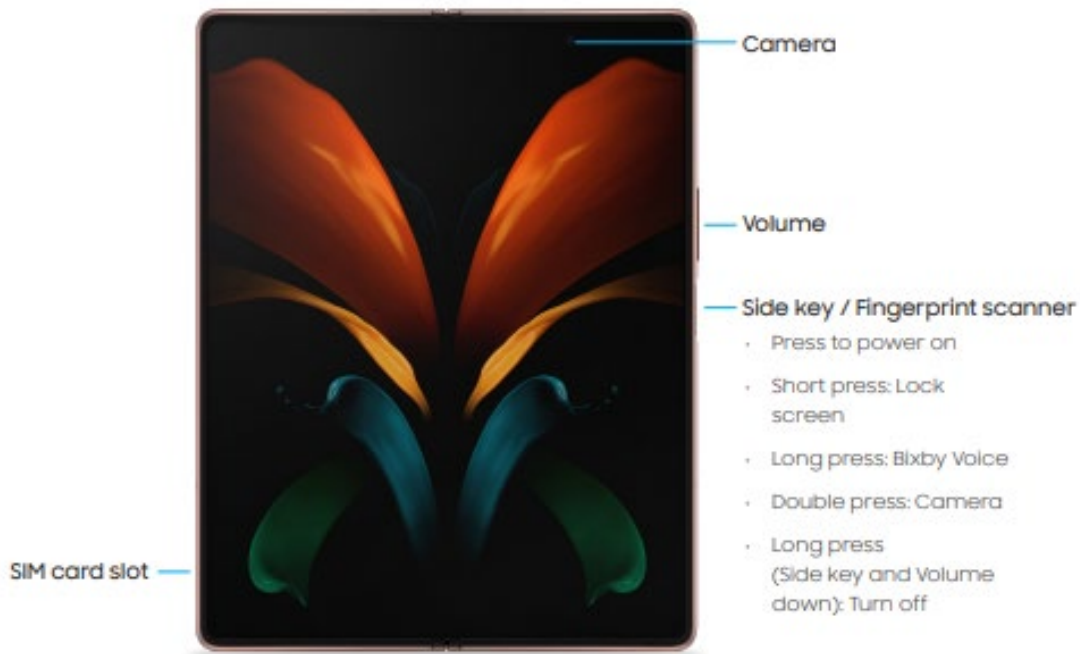
wherein the first and second input devices and first display are carried by the housing in an orientation to allow the at least one user to access the at least one first input device and first display device from the first side of the housing at the same time as the at least one second input device from the second side of the housing.



(Manual, p. 50, KPI2-002219).

The Z Fold2 has a button for switching cameras, that button enables access to one of the cameras when the other is operating at the same time to switch between the cameras.

19. The communication service device as claimed in claim 18, wherein the first side of the housing and the second side of the housing face mutually opposite directions.



(Quick Reference Guide, p. 1, KPI2-002168).



(Quick Reference Guide, p. 1, KPI2-002168).

20. The communication services device as claimed in claim 18, wherein the first input device comprises a first camera, and where the second input device comprises a second camera.



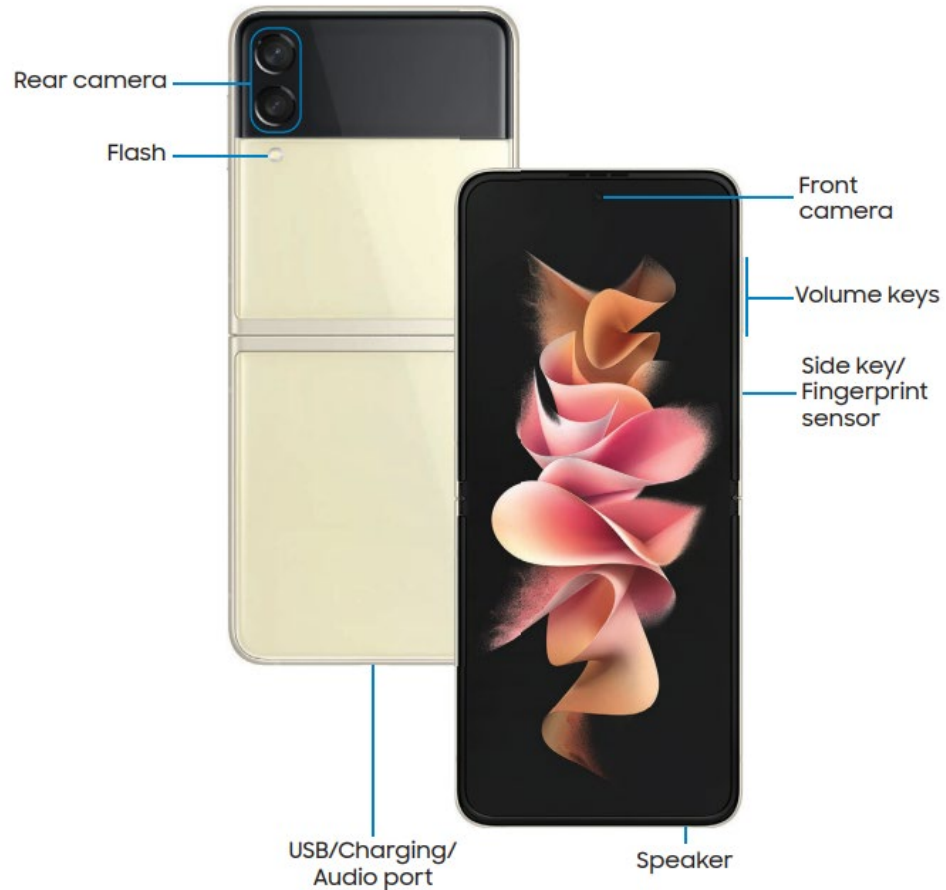
(Quick Reference Guide, p. 1, KPI2-002168).

21. The communication services device as claimed in claim 19 includes, a second display device residing on the second side of the housing.	“Cover screen preview Make photo shoots more interactive by turning on dual preview. The camera view will display on both the cover screen and main screen so that both the photographer and subject will be able to see the camera screen while taking photos.” (Manual, p. 50, KPI2-002219).

Exhibit D

U.S. Patent 10,499,168
Product: Z Flip3
Claims 18-21

	Document: 1. Samsung Galaxy Z Fold3 Z Flip3 Manual (SAM_F926_F711_EN_UM_TN_VKE_021023_FINAL) Bates No. KPI2-002340-KPI2-002517 2. One UI See what's new in One UI 4 (https://www.samsung.com/global/galaxy/apps/one-ui/features/) Bates No. KPI2-002692-KPI2-002720
18. A communication service device operable with a communication network, comprising:	“Network indicators for 5G service are based on your service provider specifications and network availability.” (Manual, p. 14, KPI2-002353). “Wi-Fi calling Make calls over Wi-Fi when you are connected to a Wi-Fi network.” (Manual, p. 107, KPI2-002446).
at least one user communication device configured to receive and transmit information over the communication network;	“Wi-Fi calling Make calls over Wi-Fi when you are connected to a Wi-Fi network.” (Manual, p. 107, KPI2-002446). “Real Time Text (RTT) Type back and forth in real time with the other person while on a call ... You can use RTT whenever you are calling someone whose phone also supports RTT or is connected to a teletypewriter (TTY) device. The RTT icon appears on all

	incoming RTT calls.” (Manual, p. 107, KPI2-002446).
the at least one user communication device comprising a housing having a first side and a second side, at least one first input device and first display device configured to allow the at least one user to input and output visual information wherein the at least one first input device and first display device resides on the first side of the housing, at least one second input device configured to input visual information wherein the at least one second input device resides on the second side of the housing;	Galaxy Z Flip3 5G  The diagram illustrates the Samsung Galaxy Z Flip3 5G in two states: folded and unfolded. The folded state (left) shows the back of the device with a 'Rear camera' and 'Flash' labeled. The unfolded state (right) shows the front of the device with a 'Front camera', 'Volume keys', 'Side key/Fingerprint sensor', and 'Speaker' labeled. A 'USB/Charging/Audio port' is also labeled at the bottom of the folded state. (Manual, p. 10, KPI2-002349).

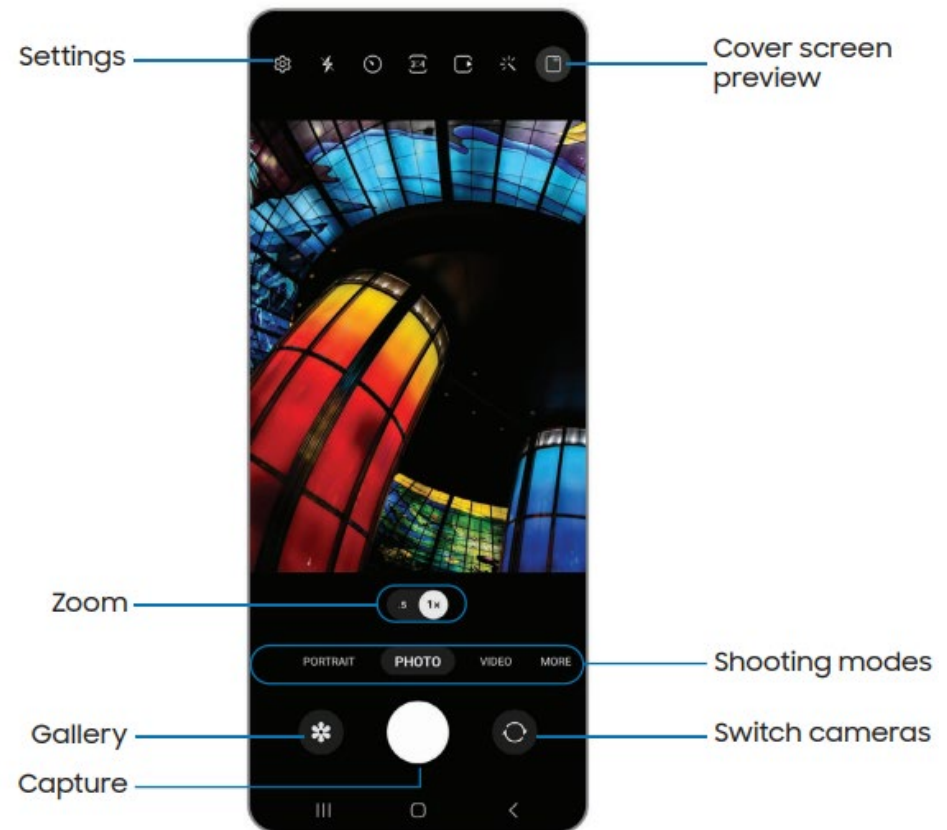


(Manual, p. 12, KPI2-002351).

In the pictures of Z Flip 3, a rear camera and “cover screen” display is shown along with a front camera and front display.

wherein the first and second input devices and first display are carried by the housing in an orientation to allow the at least one user to access the at least one first input device and first display device from the first side of the housing at the same time as the at least one second input device from the second side of the housing.

Galaxy Z Flip3 Camera features



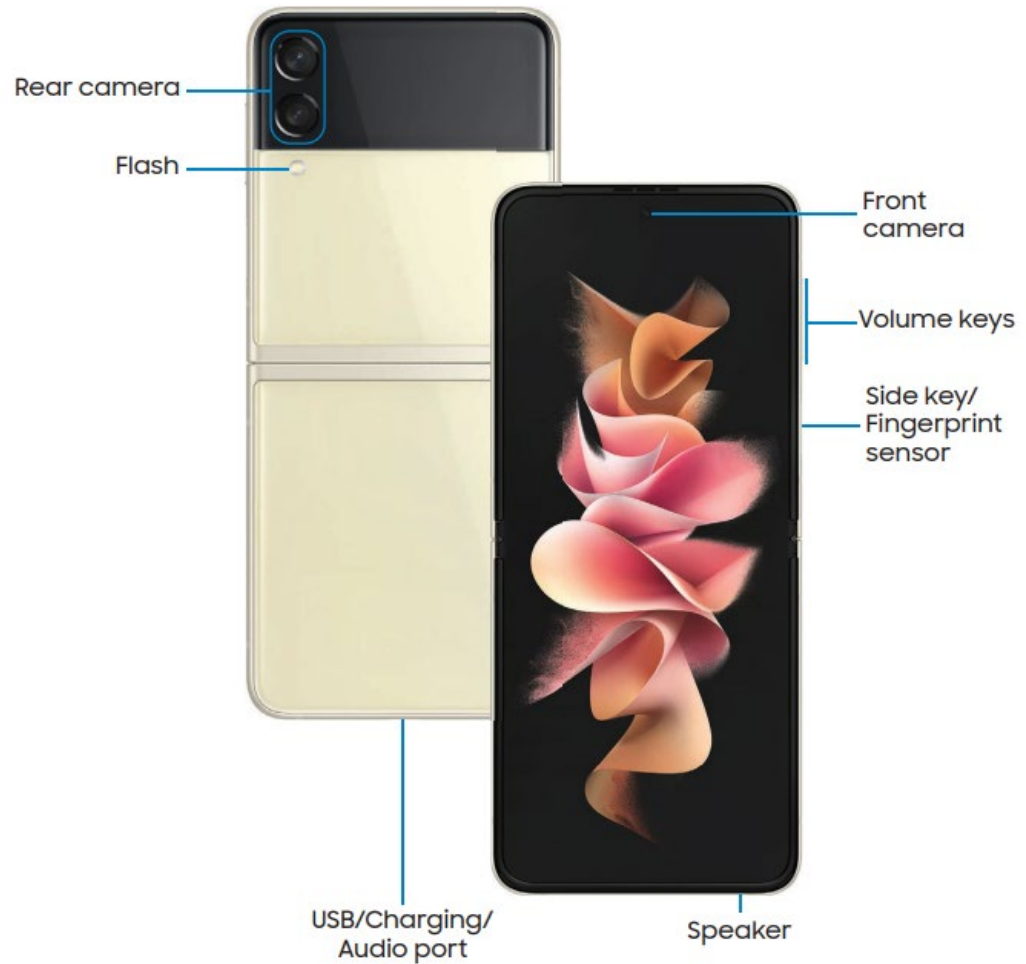
(Manual, p. 59, KPI2-002398).

Both the Z Flip3 and Z Fold3 have a button for switching cameras, that button enables access to one of the cameras when the other is operating at the same time to switch between the cameras.

	“Director’s view: Access advanced features such as lock onto a subject change between different rear camera lenses, and more.” (Manual, p. 60, KPI2-002399). “Get the full Director’s view You can save your Director’s view videos with separate front and rear videos so you can edit them later, even after you’re done recording. When you play them back in the Video player, you can switch between different views such as split-screen or picture-in-picture.¹⁴ Enhanced scanning Scan documents, then tap the magnifying glass to zoom in and edit them immediately. You can also do more after scanning QR codes, like calling or emailing someone instead of just adding their contact info to your phone. ... 14. Available on Galaxy S22 series, S21 series, Z Fold3, and Z Flip3.” (One UI See what’s new in One UI p. 4, KPI2-002696 & KPI2-002719).
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19. The communication service device as claimed in claim 18, wherein the first side of the housing and the second side of the housing face mutually opposite directions.

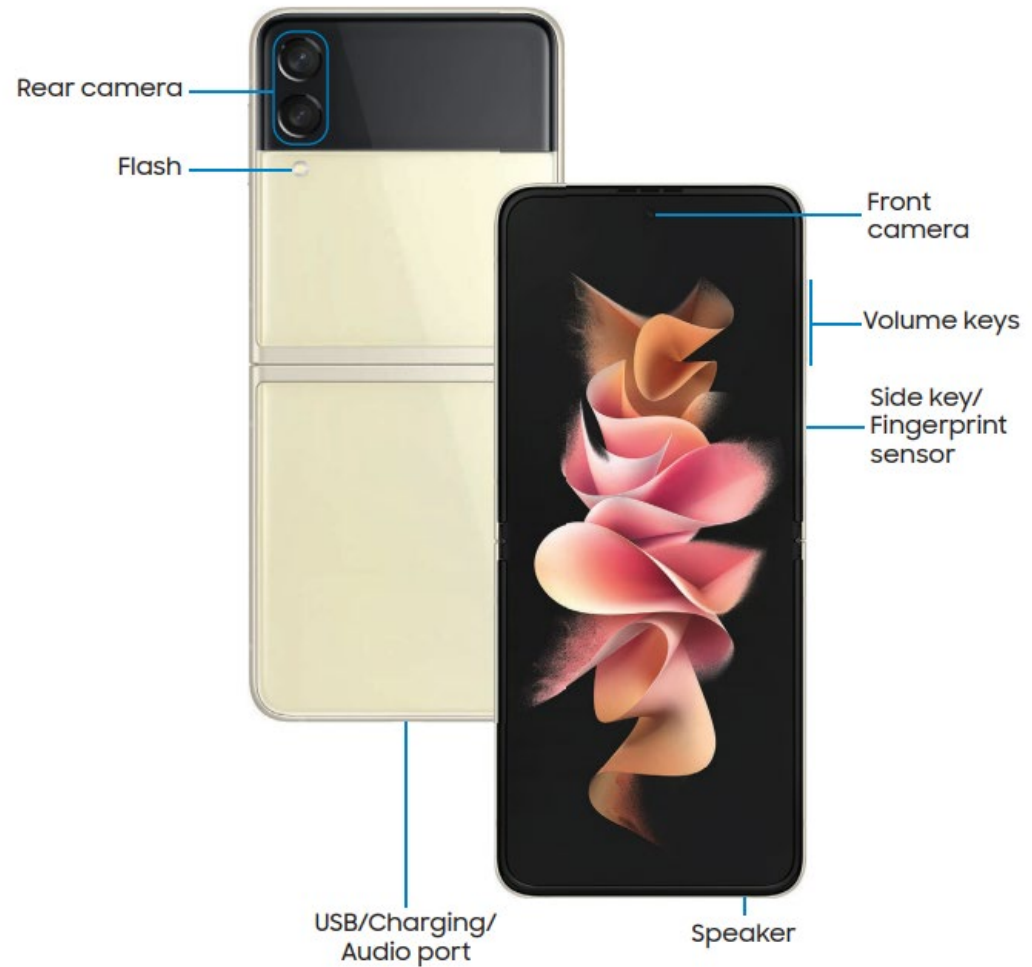
Galaxy Z Flip3 5G



(Manual, p. 10, KPI2-002349).

20. The communication services device as claimed in claim 18, wherein the first input device comprises a first camera, and where the second input device comprises a second camera.

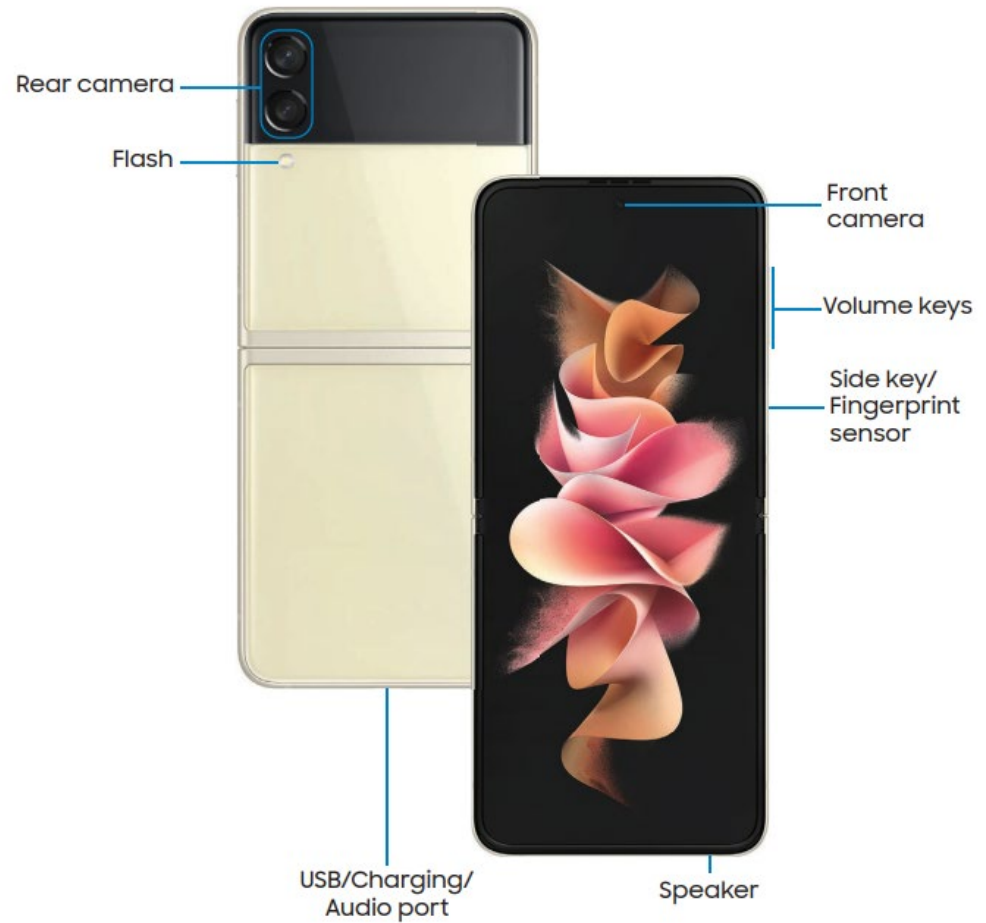
Galaxy Z Flip3 5G



(Manual, p. 10, KPI2-002349).

21. The communication services device as claimed in claim 19 includes, a second display device residing on the second side of the housing.

Galaxy Z Flip3 5G



(Manual, p. 10, KPI2-002349).



(Manual, p. 12, KPI2-002351).

“Adaptive flex mode

Take advantage of both screens for your preferred viewing and camera experiences.”

(Manual, p. 9, KPI2-002348).

“Make photo shoots more interactive by turning on dual preview. The camera preview displays on both the cover screen and main screen so that both the photographer and subject are able to preview the camera screen while taking photos.”

(Manual, p. 58, KPI2-002397).

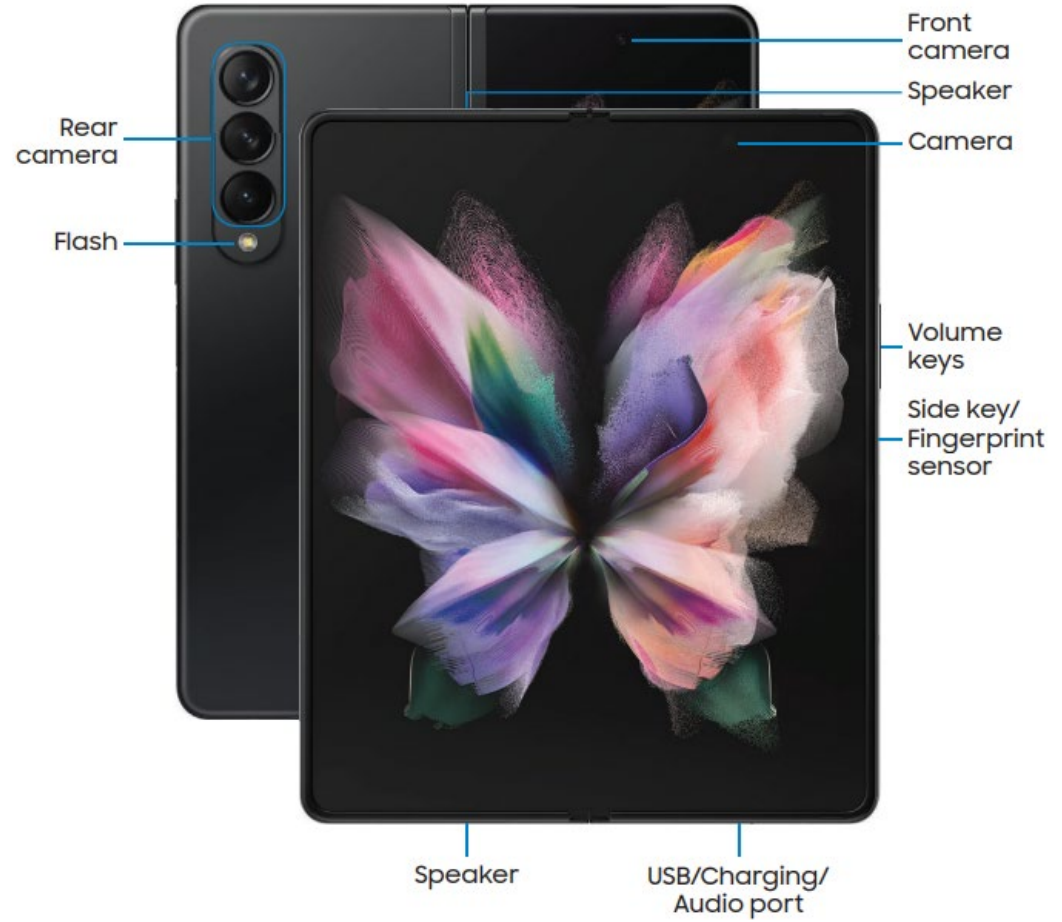
Exhibit E

U.S. Patent 10,499,168
Product: Z Fold3
Claims 18-21

	Documents: 1. Samsung Galaxy Z Fold3 Z Flip3 Manual (SAM_F926_F711_EN_UM_TN_VKE_021023_FINAL) Bates No. KPI2-002324-KPI-002517 2. One UI See what's new in One UI 4 (https://www.samsung.com/global/galaxy/apps/one-ui/features/) Bates No. KPI2-002692-KPI2-002720
18. A communication service device operable with a communication network, comprising:	“Network indicators for 5G service are based on your service provider specifications and network availability.” (Manual, p. 14, KPI2-002353). “Wi-Fi calling Make calls over Wi-Fi when you are connected to a Wi-Fi network.” (Manual, p. 107, KPI2-002446).
at least one user communication device configured to receive and transmit information over the communication network;	“Wi-Fi calling Make calls over Wi-Fi when you are connected to a Wi-Fi network.” (Manual, p. 107, KPI2-002446). “Real Time Text (RTT) Type back and forth in real time with the other person while on a call ... You can use RTT whenever you are calling someone whose phone also supports RTT or is connected to a teletypewriter (TTY) device. The RTT icon appears on all incoming RTT calls.” (Manual, p. 107, KPI2-002446).

the at least one user communication device comprising a housing having a first side and a second side, at least one first input device and first display device configured to allow the at least one user to input and output visual information wherein the at least one first input device and first display device resides on the first side of the housing, at least one second input device configured to input visual information wherein the at least one second input device resides on the second side of the housing;

Galaxy Z Fold3 5G



(Manual, p. 6, KPI2-002345).

Cover screen

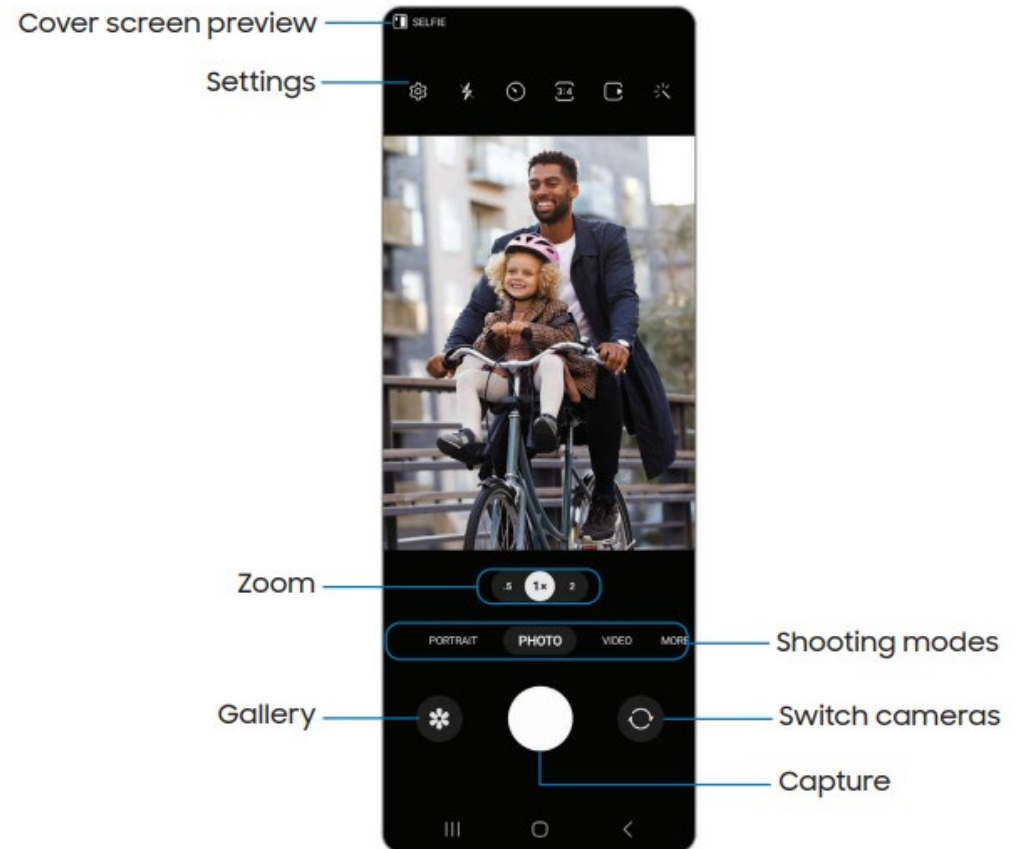


(Manual, p. 8, KPI2-002347).

In the pictures of Z Fold 3, one side has a “Rear Camera” and “Front Camera” on a first side of the open housing along with a cover screen display. On the other side, there is a “camera” along with another display.

wherein the first and second input devices and first display are carried by the housing in an orientation to allow the at least one user to access the at least one first input device and first display device from the first side of the housing at the same time as the at least one second input device from the second side of the housing.

Galaxy Z Fold3 5G Camera features



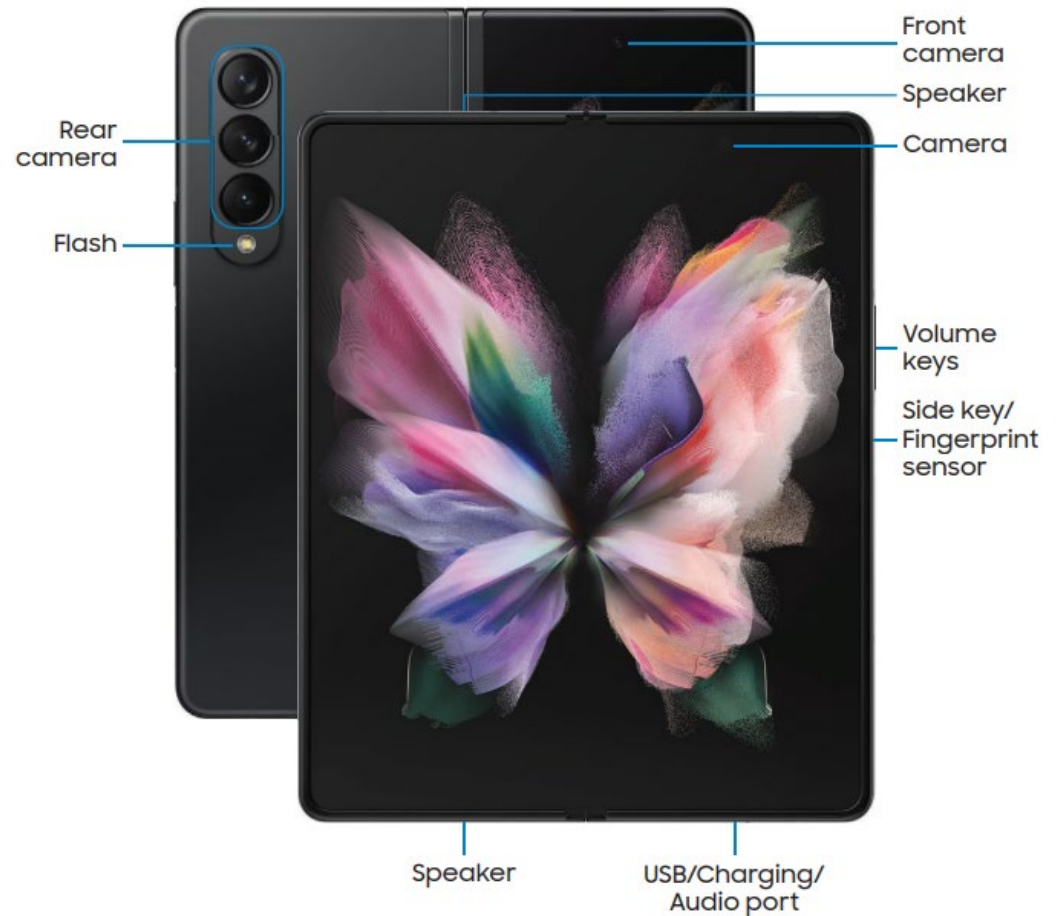
(Manual, p. 57, KPI2-002396).

Both the Z Flip3 and Z Fold3 have a button for switching cameras, that button enables access to one of the cameras when the other is operating at the same time to switch between the cameras.

	“Director’s view: Access advanced features such as lock onto a subject change between different rear camera lenses, and more.” (Manual, p. 60, KPI2-002399). “Get the full Director’s view You can save your Director’s view videos with separate front and rear videos so you can edit them later, even after you’re done recording. When you play them back in the Video player, you can switch between different views such as split-screen or picture-in-picture.¹⁴ Enhanced scanning Scan documents, then tap the magnifying glass to zoom in and edit them immediately. You can also do more after scanning QR codes, like calling or emailing someone instead of just adding their contact info to your phone. ... 14. Available on Galaxy S22 series, S21 series, Z Fold3, and Z Flip3.” (One UI See what’s new in One UI 4, KPI2-002696 & KPI2-002719).

19. The communication service device as claimed in claim 18, wherein the first side of the housing and the second side of the housing face mutually opposite directions.

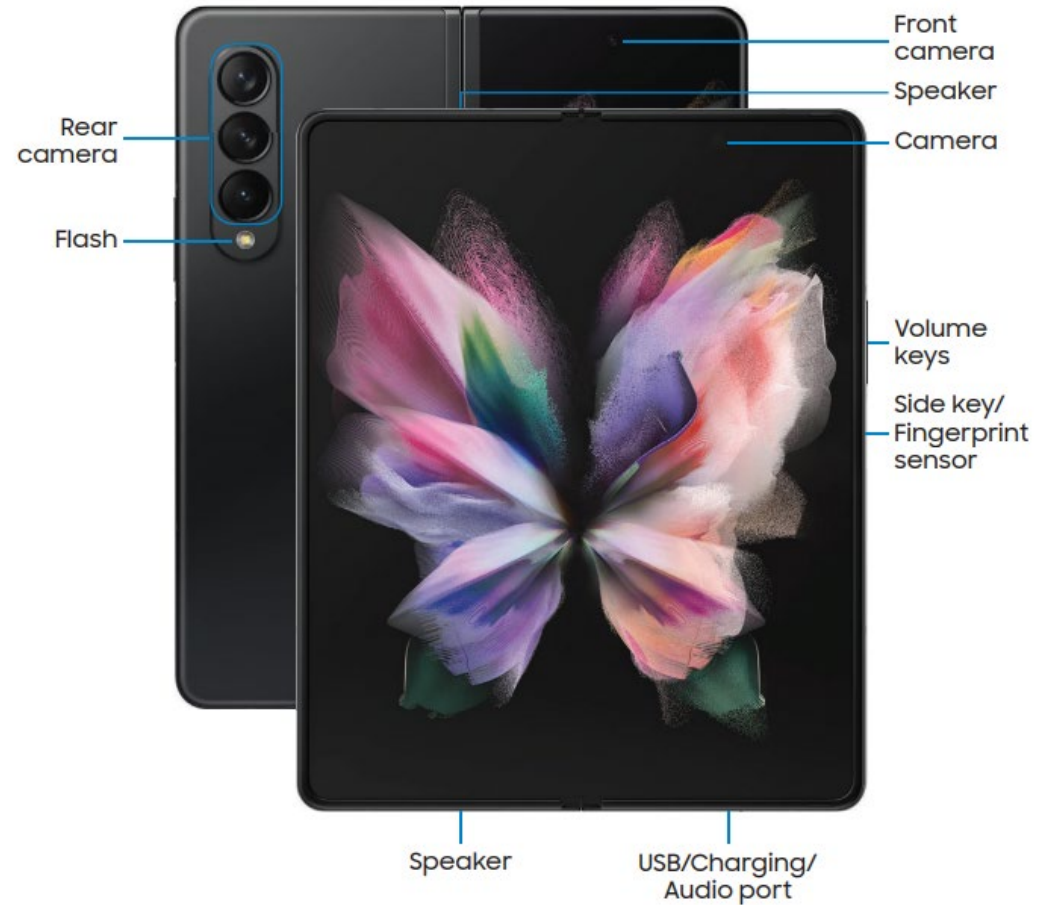
Galaxy Z Fold3 5G



(Manual, p. 6, KPI2-002345).

20. The communication services device as claimed in claim 18, wherein the first input device comprises a first camera, and where the second input device comprises a second camera.

Galaxy Z Fold3 5G



(Manual, p. 6, KPI2-002345).

21. The communication services device as claimed in claim 19 includes, a second display device residing on the second side of the housing.

Galaxy Z Fold3 5G



(Manual, p. 6, KPI2-002345).

“Adaptive flex mode

Take advantage of both screens for your preferred viewing and camera experiences.”

(Manual, p. 9, KPI-002348).

	“Make photo shoots more interactive by turning on dual preview. The camera preview displays on both the cover screen and main screen so that both the photographer and subject are able to preview the camera screen while taking photos.” (Manual, p. 58, KPI2-002397).
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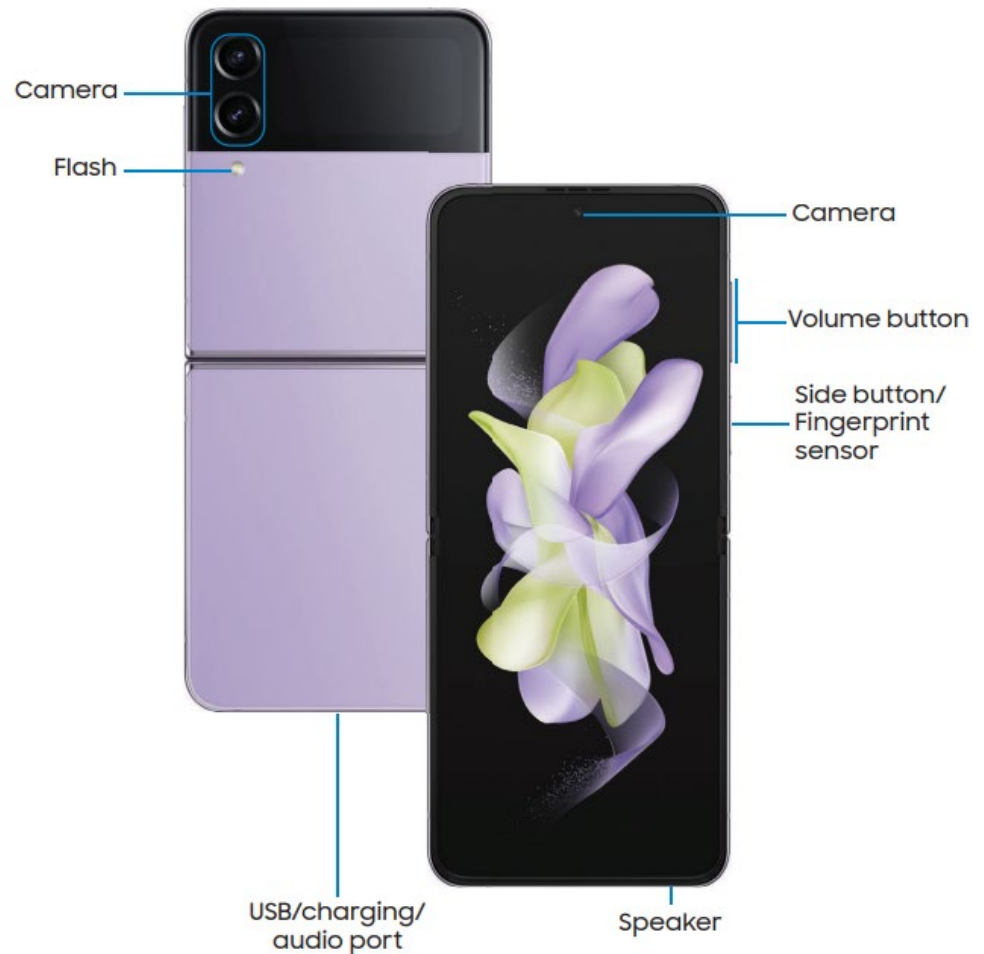
Exhibit F

U.S. Patent 10,499,168
Product: Z Flip4
Claims 18-21

	Documents: 1. Samsung Galaxy Z Fold4 Z Flip4 Manual (SAM_F936_F721_EN_UG_TN_WKB_122723_FINAL) Bates No. KPI2-02518-KPI2-002691 2. Samsung Galaxy Z Flip4 – Common Camera Settings (https://www.verizon.com/support/knowledge-base-302272/) Bates No. KPI2-002162-KPI2-002167
18. A communication service device operable with a communication network, comprising:	“Network indicators for 5G service are based on your service provider pecifications and network availability.” (Manual, p. 13, KPI2-002530). “Wi-Fi calling Make calls over Wi-Fi when you are connected to a Wi-Fi network.” (Manual, p. 106, KPI2-002623).
at least one user communication device configured to receive and transmit information over the communication network;	“Wi-Fi calling Make calls over Wi-Fi when you are connected to a Wi-Fi network.” (Manual, p. 106, KPI2-002623). “Real Time Text (RTT) Type back and forth in real time with the other person while on a call ... You can use RTT whenever you are calling someone whose phone also supports RTT or is connected to a teletypewriter (TTY) device. The RTT icon appears on all incoming RTT calls.” (Manual, p. 106, KPI2-002623).

the at least one user communication device comprising a housing having a first side and a second side, at least one first input device and first display device configured to allow the at least one user to input and output visual information wherein the at least one first input device and first display device resides on the first side of the housing, at least one second input device configured to input visual information wherein the at least one second input device resides on the second side of the housing;

Galaxy Z Flip4



(Manual, p. 9, KPI2-002526).

Cover screen

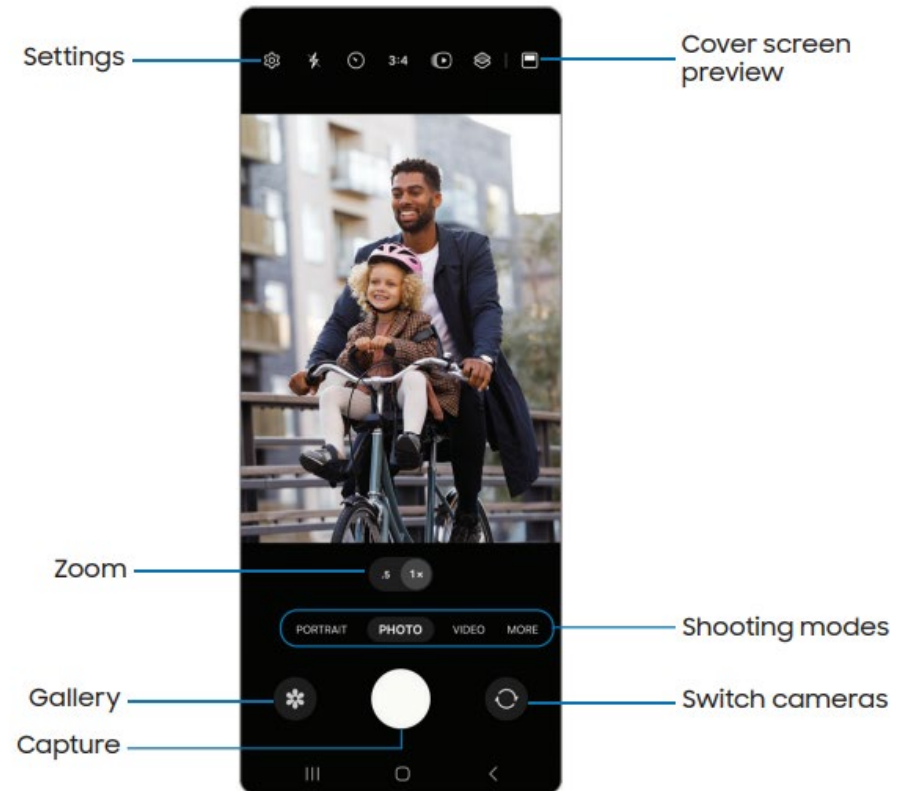


(Manual, p. 11, KPI2-002528).

In the pictures of Z Flip 4, a rear camera and “cover screen” display is shown along with a front camera and front display.

wherein the first and second input devices and first display are carried by the housing in an orientation to allow the at least one user to access the at least one first input device and first display device from the first side of the housing at the same time as the at least one second input device from the second side of the housing.

Galaxy Z Flip4 Camera features



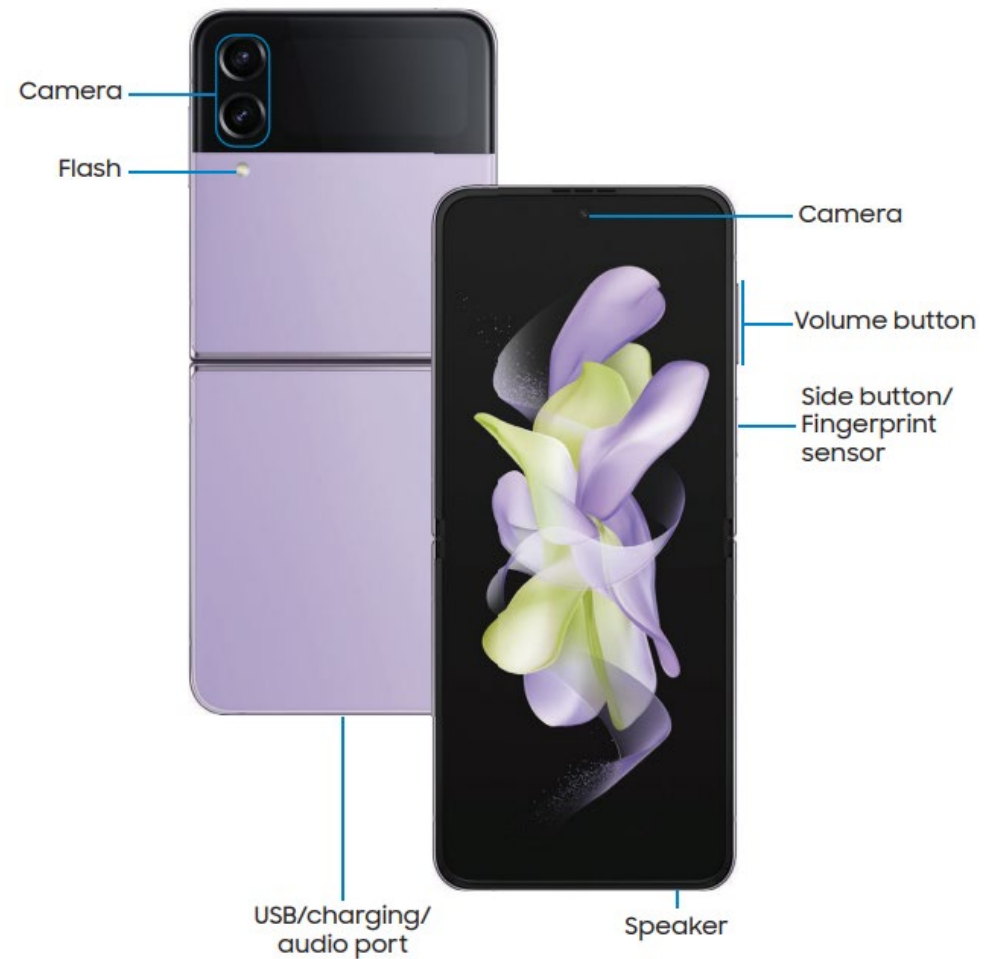
(Manual, p. 57, KPI2-002574).

“Swipe up/down to switch cameras: Enable to quickly change cameras for selfies.”
(Manual, p. 61, KPI2-002578).

	Both the Z Flip4 and Z Fold4 have a button for switching cameras, that button enables access to one of the cameras when the other is operating at the same time to switch between the cameras. Further, swiping up or down can “quickly change cameras.” “Director’s view: Access advanced features such as lock onto a subject change between different rear camera lenses, and more.” (Manual, p. 58, KPI2-002575). “DIRECTOR’S VIEW: Preview all lenses, record with the front and rear cameras at the ... time.” (Samsung Galaxy Z Flip4 – Common Camera Settings, Shot Modes, Director’s view, KPI2-002165)
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19. The communication service device as claimed in claim 18, wherein the first side of the housing and the second side of the housing face mutually opposite directions.

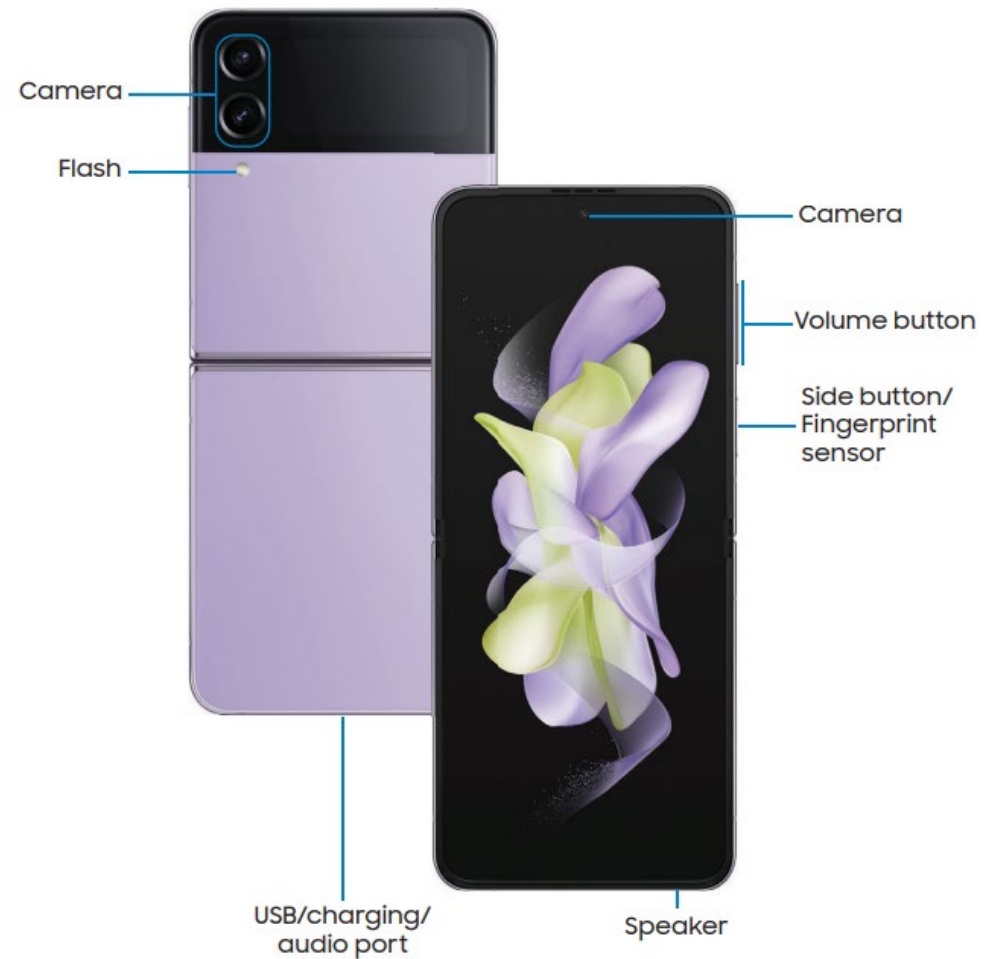
Galaxy Z Flip4



(Manual, p. 9, KPI2-002526).

20. The communication services device as claimed in claim 18, wherein the first input device comprises a first camera, and where the second input device comprises a second camera.

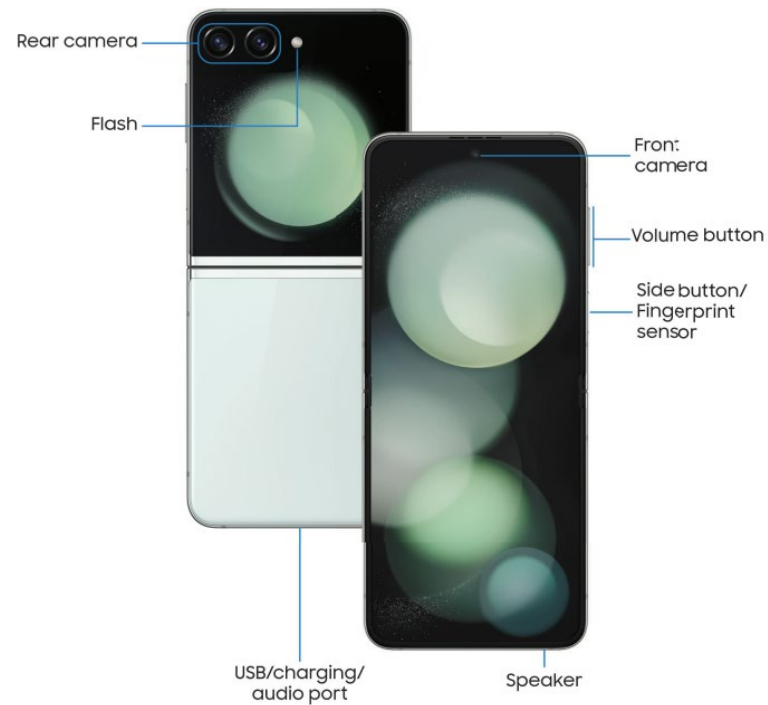
Galaxy Z Flip4



(Manual, p. 9, KPI2-002526).

21. The communication services device as claimed in claim 19 includes, a second display device residing on the second side of the housing.

Galaxy Z Flip5



(Manual, p. 9).

	 Cover screen (Manual, p. 11). “Make photo shoots more interactive by turning on dual preview. The camera preview displays on both the cover screen and main screen so that both the photographer and subject are able to preview the camera screen while taking photos.” (Manual, p. 60).
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Exhibit G

U.S. Patent 10,499,168
Product: Z Fold4
Claims 18-21

	Documents: 1. Samsung Galaxy Z Fold4 Z Flip4 Manual (SAM_F936_F721_EN_UG_TN_WKB_122723_FINAL) Bates No. KPI2-002518-KPI2-002691
18. A communication service device operable with a communication network, comprising:	“Network indicators for 5G service are based on your service provider specifications and network availability.” (Manual, p. 13, KPI2-002530). “Wi-Fi calling Make calls over Wi-Fi when you are connected to a Wi-Fi network.” (Manual, p. 106, KPI2-002623).
at least one user communication device configured to receive and transmit information over the communication network;	“Wi-Fi calling Make calls over Wi-Fi when you are connected to a Wi-Fi network.” (Manual, p. 106, KPI2-002623). “Real Time Text (RTT) Type back and forth in real time with the other person while on a call ... You can use RTT whenever you are calling someone whose phone also supports RTT or is connected to a teletypewriter (TTY) device. The RTT icon appears on all incoming RTT calls.” (Manual, p. 106, KPI2-002623).

the at least one user communication device comprising a housing having a first side and a second side, at least one first input device and first display device configured to allow the at least one user to input and output visual information wherein the at least one first input device and first display device resides on the first side of the housing, at least one second input device configured to input visual information wherein the at least one second input device resides on the second side of the housing;

Galaxy Z Fold4



(Manual, p. 5, KPI2-002522).

Cover screen



(Manual, p. 7, KPI2-002524).

In the pictures of Z Fold 4, one side has a “cover camera” on a first side of the open housing along with a cover screen display. On the other side, there is an “under display camera” along with another display.

wherein the first and second input devices and first display are carried by the housing in an orientation to allow the at least one user to access the at least one first input device and first display device from the first side of the housing at the same time as the at least one second input device from the second side of the housing.

Galaxy Z Fold4 Camera features



(Manual, p. 56, KPI2-002573).

“Swipe up/down to switch cameras: Enable to quickly change cameras for selfies.”
(Manual, p. 61, KPI2-002578).

Both the Z Flip4 and Z Fold4 have a button for switching cameras, that button enables access to one of the cameras when the other is operating at the same time to switch between the cameras. Further, swiping up or down can “quickly change cameras.”

“Director’s view: Access advanced features such as lock onto a subject change between different rear camera lenses, and more.”
(Manual, p. 58, KPI2-002575).

19. The communication service device as claimed in claim 18, wherein the first side of the housing and the second side of the housing face mutually opposite directions.

Galaxy Z Fold4



(Manual, p. 5, KPI2-002522).

20. The communication services device as claimed in claim 18, wherein the first input device comprises a first camera, and where the second input device comprises a second camera.

Galaxy Z Fold4



(Manual, p. 5, KPI2-002522).

21. The communication services device as claimed in claim 19 includes, a second display device residing on the second side of the housing.

Galaxy Z Fold4



(Manual, p. 5, KPI2-002522).

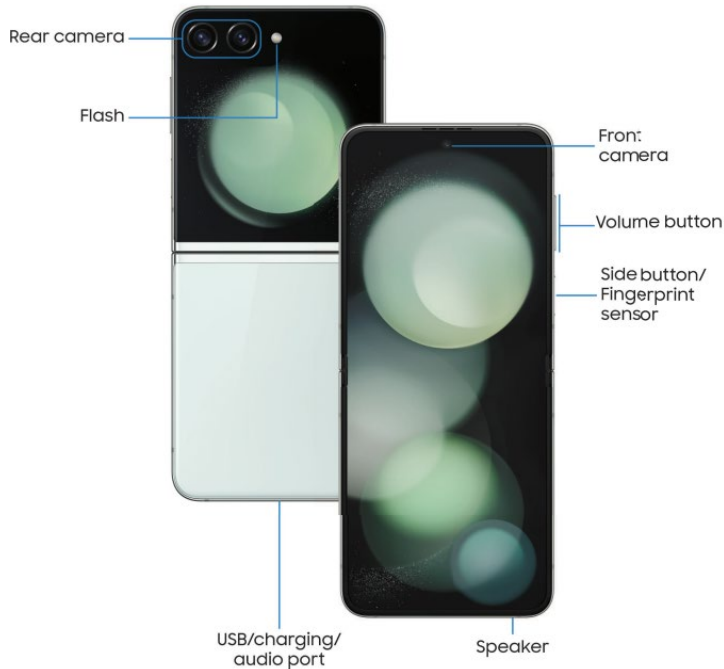
“Make photo shoots more interactive by turning on dual preview. The camera preview displays on both the cover screen and main screen so that both the photographer and subject are able to preview the camera screen while taking photos.”

(Manual, p. 60, KPI2-002577).

Exhibit H

U.S. Patent 10,499,168
Product: Galaxy Z Flip5
Claims 18-21

	Documents: 1. Samsung Galaxy Z Fold5, Z Flip5 Manual (SAM_F946_F731_EN_UM_TN_WG3_072723_FINAL) Bates No. KPI2-001652-KPI2-001823 2. Samsung Galaxy Flip5 – Common Camera Settings (https://www.verizon.com/support/knowledge-base-305002/) Bates No. KPI2-001994-KPI2-001999
18. A communication service device operable with a communication network, comprising:	“Connections Manage connections between your device and a variety of networks and other devices.” (Manual, p. 117, KPI2-001768). “Mobile networks Use Mobile networks to configure your device’s ability to connect to mobile networks and use mobile data. Options may vary by service provider.” (Manual, p. 122, KPI2-001773).
at least one user communication device configured to receive and transmit information over the communication network;	“Connections Manage connections between your device and a variety of networks and other devices.” (Manual, p. 117, KPI2-001768).

	“Mobile networks Use Mobile networks to configure your device’s ability to connect to mobile networks and use mobile data. Options may vary by service provider.” (Manual, p. 122, KPI2-001773).
the at least one user communication device comprising a housing having a first side and a second side, at least one first input device and first display device configured to allow the at least one user to input and output visual information wherein the at least one first input device and first display device resides on the first side of the housing, at least one second input device configured to input visual information wherein the at least one second input device resides on the second side of the housing;	Galaxy Z Flip5  The diagram illustrates the Samsung Galaxy Z Flip5 in two states: folded and unfolded. The folded state (top) shows the rear camera and flash. The unfolded state (bottom) shows the front camera, volume button, side button/fingerprint sensor, and speaker. The USB/charging/audio port is also indicated at the bottom of the folded state. (Manual, p. 10, KPI2-001661). In the picture of Z Flip 5, a rear camera and cover screen display is shown along with a front camera and front display.

Folded

Cover screen



(Manual, p. 12, KPI2-001663).

wherein the first and second input devices and first display are carried by the housing in an orientation to allow the at least one user to access the at least one first input device and first display device from the first side of the housing at the same time as the at least one second input device from the second side of the housing.

Galaxy Z Fold5 Camera features

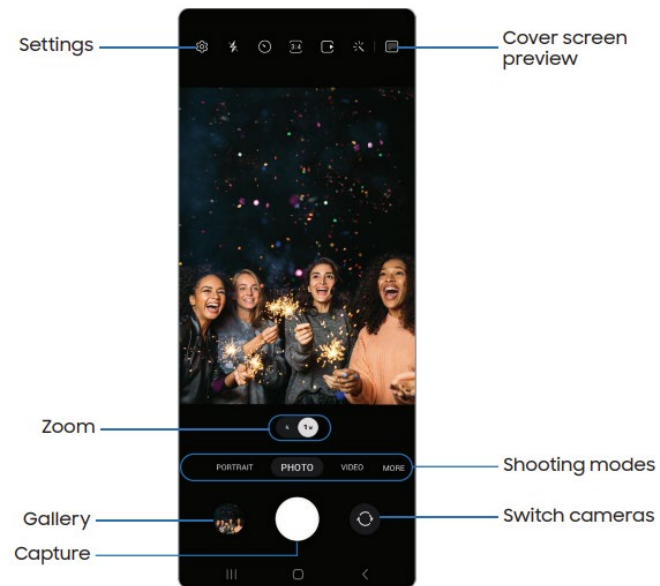
The following features are unique to the Galaxy Z Fold5.



(Manual, p. 56, KPI2-001707).

Galaxy Z Flip5 Camera features

The following features are unique to the Galaxy Z Flip5.



(Manual, p. 57, KPI2-001708).

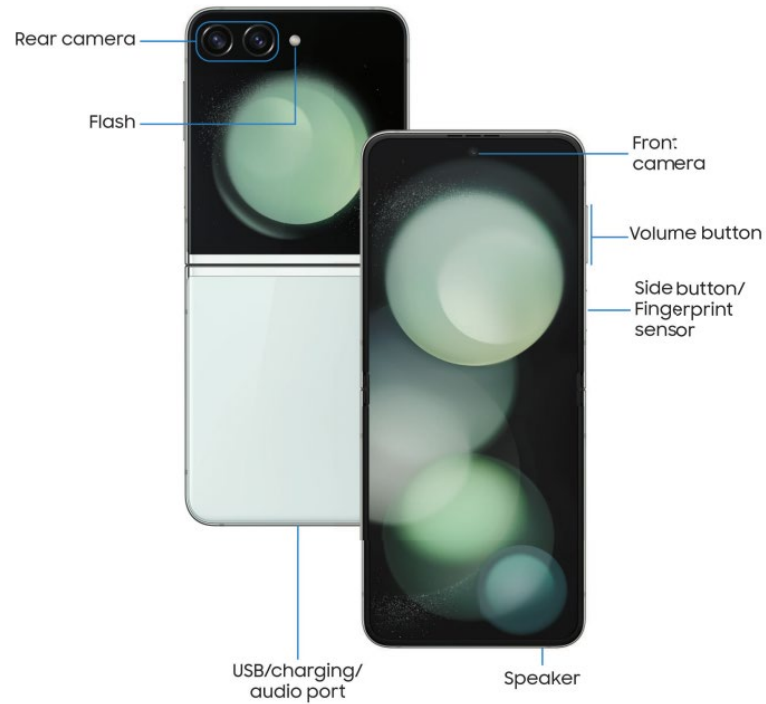
“To quickly switch between the front and rear cameras, swipe the screen up or down.”
(Manual, p. 55, KPI2-001706).

Both the Z Flip and Z fold have a button for switching cameras, that button enables access to one of the cameras when the other is operating at the same time to switch between the cameras.

	“Director’s view”: Access advanced features such as lock onto a subject change between different rear camera lenses, and more.” (Manual, p. 58, KPI2-001709). “DIRECTOR’S VIEW: Preview all lenses, record with the front and rear cameras at the same time.” (Common Camera Settings, Shot Modes, Director’s Modes, p. 4, KPI2-001997).
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19. The communication service device as claimed in claim 18, wherein the first side of the housing and the second side of the housing face mutually opposite directions.

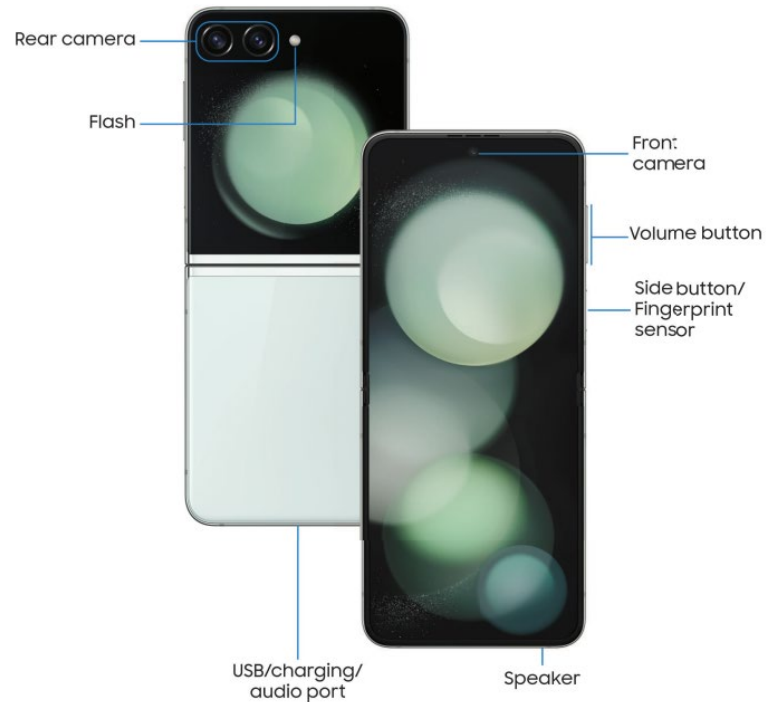
Galaxy Z Flip5



(Manual, p. 10, KPI2-001661)

20. The communication services device as claimed in claim 18, wherein the first input device comprises a first camera, and where the second input device comprises a second camera.

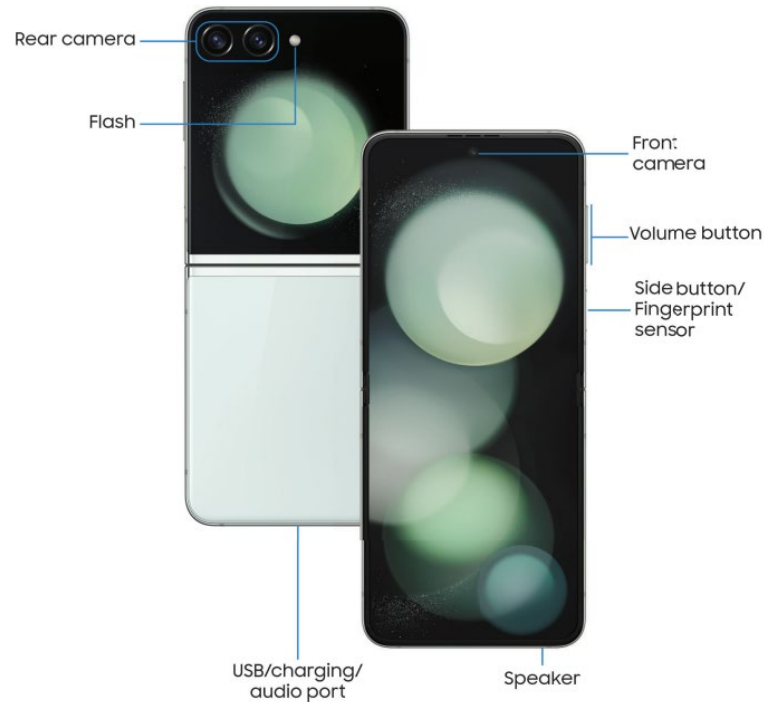
Galaxy Z Flip5



(Manual, p. 10, KPI2-001661).

21. The communication services device as claimed in claim 19 includes, a second display device residing on the second side of the housing.

Galaxy Z Flip5



(Manual, p. 10, KPI2-001661).

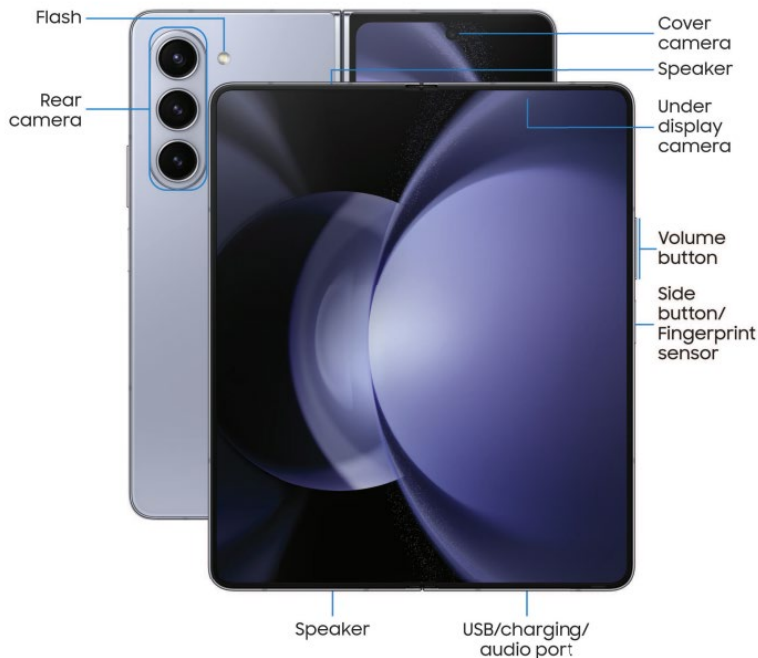
“Make photo shots more interactive by turning on dual preview. The camera preview displays on both the cover screen and main screen so that both the photographer and subject are able to preview the camera screen while taking photos.”

(Manual, p. 59, KPI2-001710).

Exhibit I

U.S. Patent 10,499,168
Product: Z Fold5
Claims 18-21

	Documents: 1. Samsung Galaxy Z Fold5, Z Flip5 Manual (SAM_F946_F731_EN_UM_TN_WG3_072723_FINAL) Bates No. KPI2-001652-KPI2-001823
18. A communication service device operable with a communication network, comprising:	“Connections Manage connections between your device and a variety of networks and other devices.” (Manual, p. 117, KPI2-001768). “Mobile networks Use Mobile networks to configure your device’s ability to connect to mobile networks and use mobile data. Options may vary by service provider.” (Manual, p. 122, KPI2-001773).
at least one user communication device configured to receive and transmit information over the communication network;	“Connections Manage connections between your device and a variety of networks and other devices.” (Manual, p. 117, KPI2-001768). “Mobile networks Use Mobile networks to configure your device’s ability to connect to mobile networks

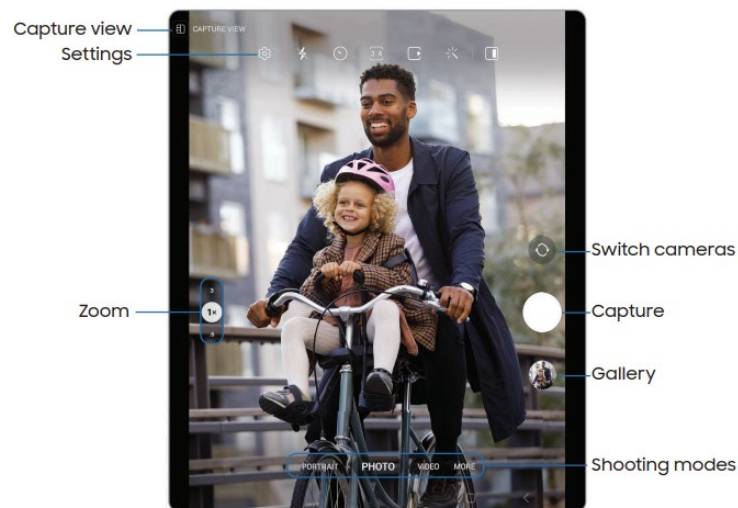
	and use mobile data. Options may vary by service provider.” (Manual, p. 122, KPI2-001773).
the at least one user communication device comprising a housing having a first side and a second side, at least one first input device and first display device configured to allow the at least one user to input and output visual information wherein the at least one first input device and first display device resides on the first side of the housing, at least one second input device configured to input visual information wherein the at least one second input device resides on the second side of the housing;	Galaxy Z Fold5  The diagram illustrates the Samsung Galaxy Z Fold5 in its unfolded state. It shows two large rectangular displays. The left display has a vertical camera module on its left edge with three lenses and a flash. The right display has a horizontal camera module on its top edge. Various other features are labeled with lines pointing to them: a speaker on the top edge of the right display, an under-display camera on the right display, a volume button and a side button/fingerprint sensor on the right edge of the right display, a speaker on the bottom edge of the right display, and a USB/charging/audio port on the bottom edge of the right display. (Manual, p. 6, KPI2-001657). In the picture of Z Fold 5, one side has a “cover camera” on a first side of the open housing along with a cover screen display. On the other side, there is an “under display camera” along with another display.

	Folded  Cover screen (Manual, p. 8, KPI2-001659).
wherein the first and second input devices and first display are carried by the housing in an orientation to allow the at least one user to access the at least one first input device and first display device from	

the first side of the housing at the same time as the at least one second input device from the second side of the housing.

Galaxy Z Fold5 Camera features

The following features are unique to the Galaxy Z Fold5.



(Manual, p. 56, KPI2-001707).

“To quickly switch between the front and rear cameras, swipe the screen up or down.”

(Manual, p. 55, IKPI2-001706).

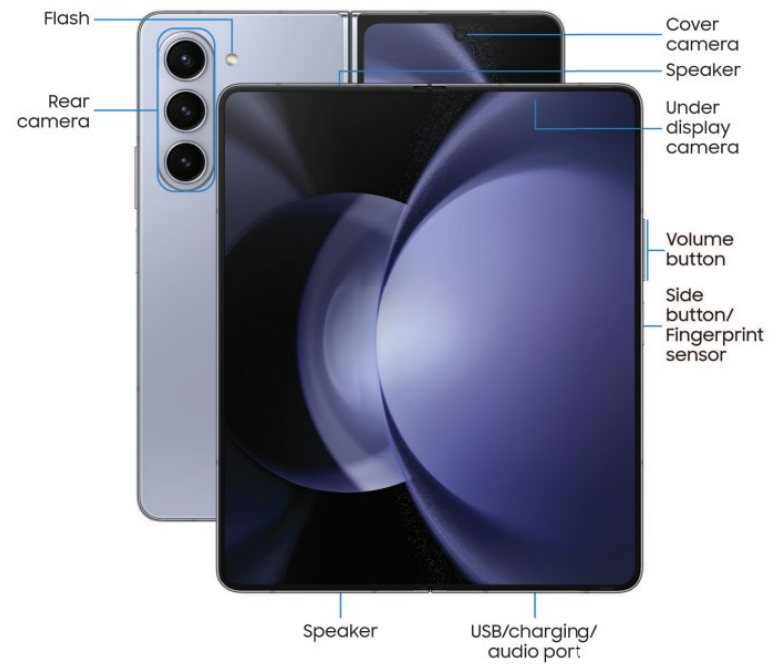
Both the Z Flip and Z fold have a button for switching cameras, that button enables access to one of the cameras when the other is operating at the same time to switch between the cameras.

“Director’s view”: Access advanced features such as lock onto a subject change between different rear camera lenses, and more.”

(Manual, p. 58, KPI2-001709).

19. The communication service device as claimed in claim 18, wherein the first side of the housing and the second side of the housing face mutually opposite directions.

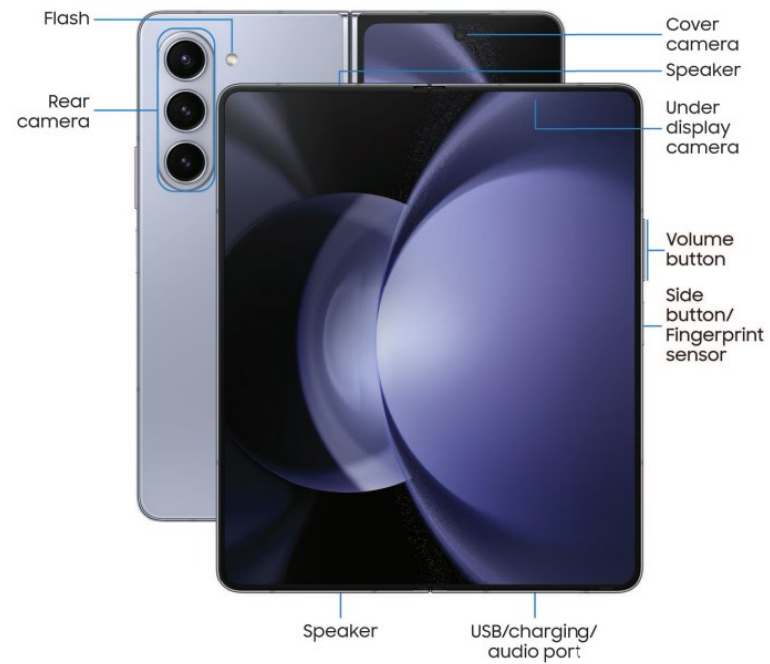
Galaxy Z Fold5



(Manual, p. 6, KPI2-001657).

20. The communication services device as claimed in claim 18 , wherein the first input device comprises a first camera , and where the second input device comprises a second camera .

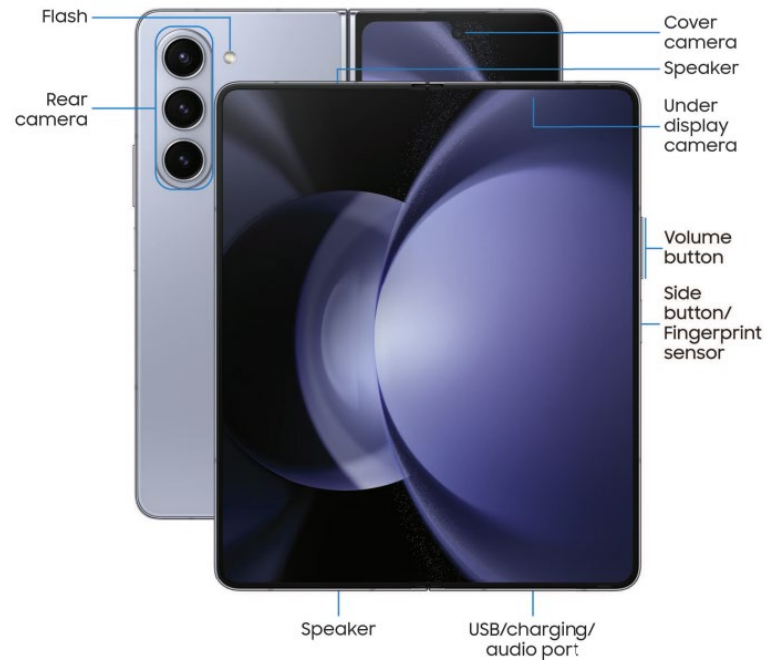
Galaxy Z Fold5



(Manual, p. 6, KPI2-001657).

21. The communication services device as claimed in claim 19 includes, a second display device residing on the second side of the housing.

Galaxy Z Fold5



(Manual, p. 6, KPI2-001657).

“Make photo shots more interactive by turning on dual preview. The camera preview displays on both the cover screen and main screen so that both the photographer and subject are able to preview the camera screen while taking photos.”

(Manual, p. 59, KPI2-001710).