

Exhibit C: Infringement Contentions for U.S. Patent No. 11,503,144 v. Samsung

Plaintiff Keyless Licensing LLC (“Keyless”) accuses Defendants Samsung Electronics America, Inc., and Samsung Electronics Co., Ltd. (collectively, “Samsung”) of making, using, offering for sale, selling in and/or importing into the United States the Accused Instrumentalities in violation of 35 U.S.C. § 271. “Accused Instrumentalities” means all Samsung Galaxy smartphones, including without limitation:

- Galaxy S20, Galaxy S20 FE, Galaxy S20 Ultra, Galaxy S20+, Galaxy S21, Galaxy S21 Ultra, Galaxy S21+, Galaxy S22, Galaxy S22 Ultra, Galaxy S22+, Galaxy S23, Galaxy S23 FE, Galaxy S23 Ultra, Galaxy S23+, Galaxy S24, Galaxy S24 FE, Galaxy S24 Ultra, Galaxy S24+;
- Galaxy Z Fold3, Galaxy Z Fold4, Galaxy Z Fold5, Galaxy Z Fold6;
- Galaxy Z Flip3, Galaxy Z Flip4, Galaxy Z Flip5, Galaxy Z Flip6;
- Galaxy A03s, Galaxy A12, Galaxy A13, Galaxy A14, Galaxy A15, Galaxy A20, Galaxy A23, Galaxy A25, Galaxy A32, Galaxy A35, Galaxy A42, Galaxy A52, Galaxy A53, Galaxy A54;
- Galaxy XCover6 Pro;
- Galaxy Note10, Galaxy Note20, Galaxy Note20 Ultra;

including any editions, collaborations, model numbers, levels of connectivity (e.g., 4G, 5G, UW), and screen sizes for the identified models.

Samsung directly infringes U.S. Patent No. 11,503,144 (“the ’144 patent”) by making, using, offering for sale, selling in and/or importing into the United States the Accused Instrumentalities, which meet each and every limitation of the claims as shown in the charts below. Samsung also directly infringes the asserted claims of the ’144 patent to the extent Samsung contracted with, or directed, a third party to perform any of the steps of the asserted claims. Samsung also directly infringes the asserted claims of the ’144 patent to the extent it conditions participation in an activity or receipt of a benefit upon performance of a step or steps of a patented method and establishes the manner or timing of that performance. Samsung may have infringed and continues to infringe the ’144 patent through other devices utilizing the same or reasonably similar functionality, including other versions of the Accused Instrumentalities. Samsung is therefore liable for infringement of the ’144 patent under 35 U.S.C. § 271(a).

Samsung directly or indirectly provides the Accused Instrumentalities to wholesalers, retailers, and end users of Samsung’s products in the United States. The wholesalers, retailers, and end users directly infringe the ’144 patent by making, using, selling, offering for sale, and/or importing the Accused Instrumentalities in the United States. Samsung actively induces these acts of direct infringement by the wholesalers, retailers, and end users as demonstrated by the following facts: (A) Samsung aids, instructs, or otherwise acts with the intent to cause the wholesalers, retailers, and end users to perform acts of direct infringement. *See, e.g.*, <https://www.samsung.com/us/support/answer/ANS10001611/> (providing user manuals for the Accused Instrumentalities); <https://www.youtube.com/@Samsung> (demonstrating the Accused Instrumentalities). For example, Samsung’s purpose and intent for providing the Accused Instrumentalities to wholesalers and retailers is for the wholesalers and retailers to offer, resell, and distribute the Accused Instrumentalities throughout the United States so that they can be purchased and used by end users. Such offers for sale, sales, and use of the Accused

Instrumentalities constitute acts of direct infringement. (B) At least since the filing of the complaint in this action, Samsung has known of the '144 patent. (C) Samsung knew that the actions of wholesalers, retailers, and end users would infringe the '144 patent because their downstream offers for sale, sales, and use of the Accused Instrumentalities constitute acts of infringement. (D) Because the '144 patent read on the Accused Instrumentalities, every offer for sale, sale, or use of the Accused Instrumentalities in the United States constitutes an act of direct infringement. Samsung is thereby liable for induced infringement of the asserted claims of the '144 patent under 35 U.S.C. § 271(b).

Samsung also contributes to infringement of the '144 patent by offering to sell, selling (including licensing) and importing into the United States the Accused Instrumentality, which is especially made or adapted for use in an infringement of the '144 patent. The Accused Instrumentalities are a material component for use in practicing the '144 patent and are not a staple article of commerce suitable for substantial non-infringing use. For example, Samsung's Accused Instrumentalities constitute a material portion of the invention and have no substantial non-infringing uses. Samsung's clients, customers, and end users, direct or otherwise, cause the performance of each and every limitation of the claims, as shown below. Samsung is thereby liable for contributory infringement of the asserted claims of the '144 patent under 35 U.S.C. § 271(c).

The asserted claims include elements that are implemented, at least in part, by proprietary and specialized electronics in the Accused Instrumentalities. The precise designs used in them are held secret, at least in part, and are not publicly available in their entirety. An analysis of Samsung's documentation may be necessary to fully and accurately describe all infringing features and functionality of the Accused Instrumentalities, and accordingly, Plaintiff reserves the right to supplement these contentions once such information is made available to Plaintiff. Furthermore, Plaintiff reserves the right to revise these contentions, including as discovery in the case progresses, in view of any non-infringement arguments Samsung may make (e.g., to allege infringement under the doctrine of equivalents), in view of the Court's final claim construction in this action, and in connection with the provision of expert reports.

U.S. Patent No.
11,503,144

Samsung

[1a] A mobile phone device, comprising:

The Accused Instrumentalities are mobile phone devices. Samsung sells and offers for sale new and used (“Certified Re-Newed”) mobile phone devices, and has done so continuously since the ’144 patent issued on November 15, 2022.

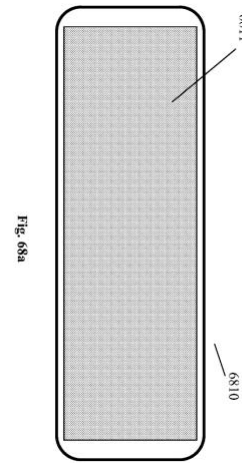


Available at: <https://web.archive.org/web/20231114225342/https://www.samsung.com/us/smartphones/> (“Discover Galaxy smartphones”); screenshot of Galaxy S23.

[1b.1] a practically rectangular-shaped housing within which the components of a mobile phone are integrated,

The Accused Instrumentalities have a practically rectangular-shaped housing within which the components of a mobile phone are integrated.

The ’144 patent provides examples of a rectangular-shaped housing, such as Figure 68a:



The '144 patent at Fig. 68a.

For example, the S23 has a rectangular-shaped housing in which all of the mobile phone's components are integrated, with a height of 146.3 millimeters (5.8 inches), a width of 70.9 mm (2.8 inches), and a depth of 7.6 mm (0.3 inches):

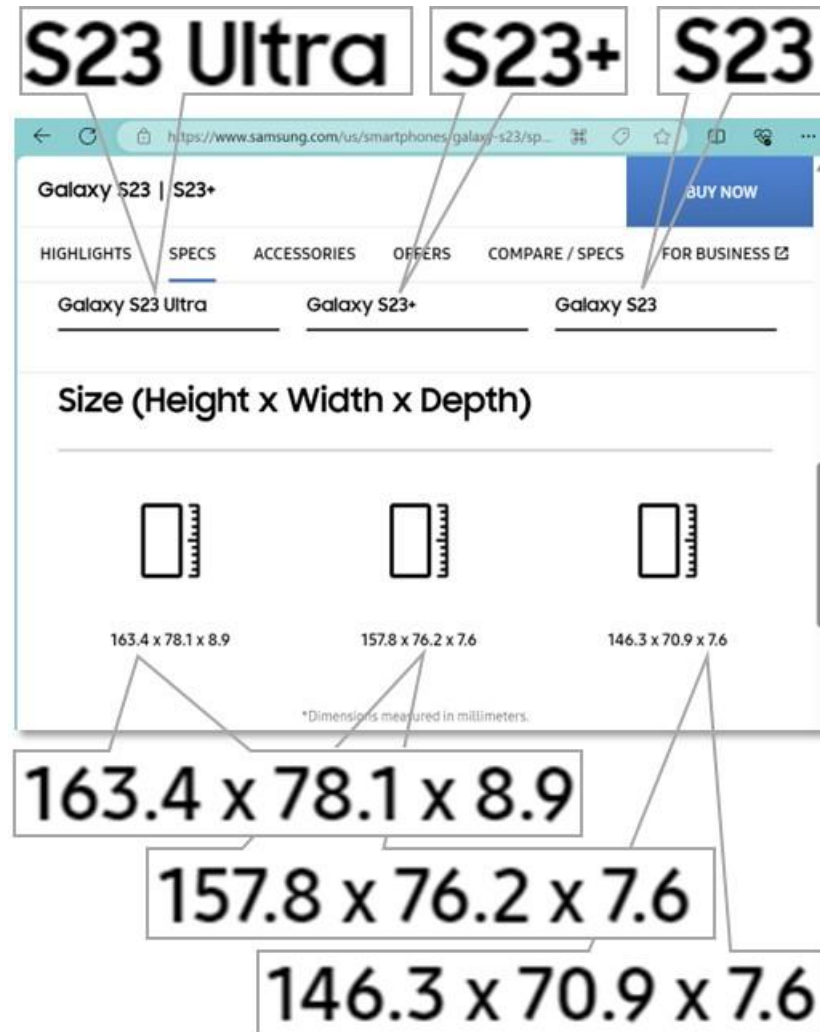
Size (Height x Width x Depth)

146.3 x 70.9 x 7.6 millimeters

KL0016906-KL0016918; also available at: <https://www.samsung.com/us/smartphones/galaxy-s23/specs/>.

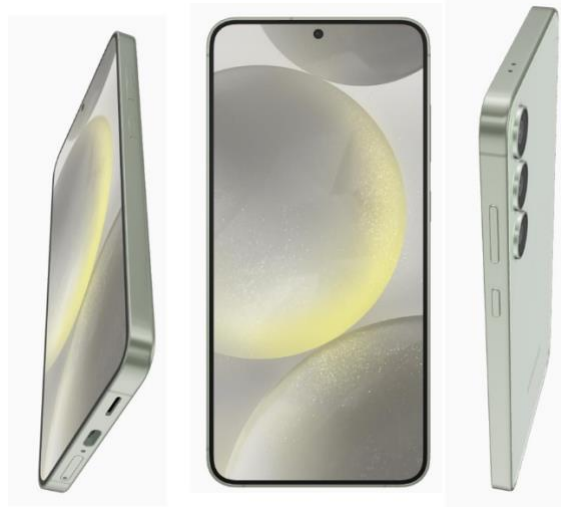
Similarly, the other phones in the S23 series (the S23 Ultra and S23+) have a rectangular-shaped housing in which all of the mobile phone's components are integrated. The S23 Ultra height, width, and depth is 163.4 mm x 78.1 mm x 8.9 mm. The S23+ height, width,

and depth is 157.8 mm x 76.2 mm x 7.6 mm.



KL0016906-KL0016918; also available at: <https://www.samsung.com/us/smartphones/galaxy-s23/specs/>.

For example, the S24 has a practically rectangular-shaped housing within which the components of a mobile phone are integrated.



KL0016657-KL0016672; also available at: <https://www.samsung.com/us/smartphones/galaxy-s24/>.

The same is true of the S24 series.



S24

S24+

S24 Ultra

S24 FE

The same is true of the S23 series.



KL0016906-KL0016918; also available at: <https://www.samsung.com/us/smartphones/galaxy-s23/specs/>.



The same is true of the S22 series.



S22

S22+

S22 Ultra

The same is true of the S21 series.



S21

S21+

S21 Ultra

S21 FE

The same is true of the S20 series.



The same is true of the Galaxy A series.



The same is true of the Z Flip series. Note the phones are depicted unfolded.

Samsung



Z Flip

Z Flip 5G

Z Flip3

Z Flip4

Z Flip5

The same is true of the Z Fold series. Note the phones are depicted folded.



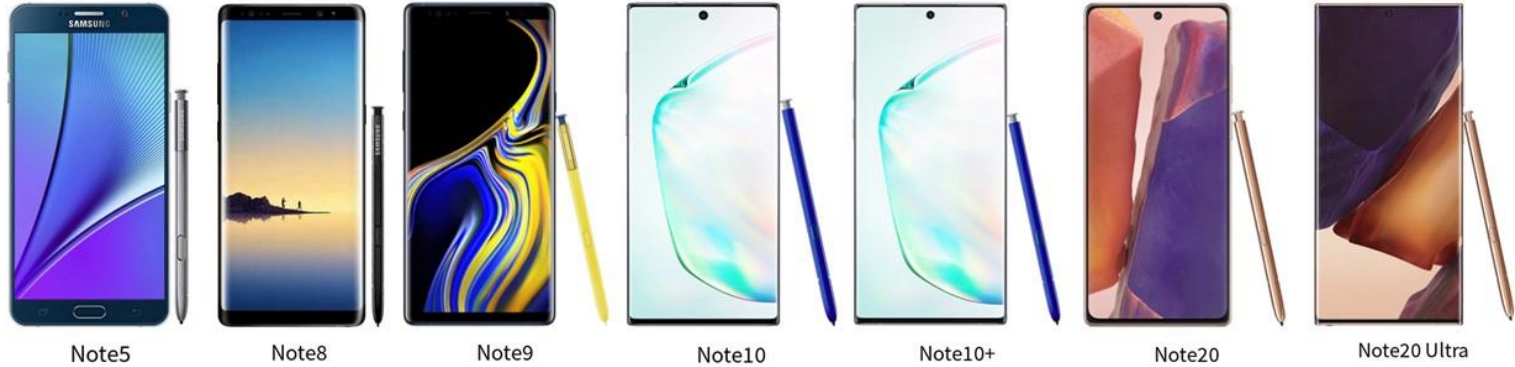
Z Fold2

Z Fold3

Z Fold4

Z Fold5

The same is true of the Note series.



Photos of phones available at: <https://www.samsung.com/us/smartphones/galaxy-s24-ultra/compare>.

The same is true of the XCover6 Pro.



KL0016442-KL0016447; also available at: <https://www.samsung.com/us/smartphones/galaxy-xcover/buy/?modelCode=SM-G736UZKEXAA>.

The arguments, evidence, and functionality cited for this limitation have been demonstrated by exemplary models of the Accused Instrumentalities but apply equally to all Accused Instrumentalities.

[1b.2] said housing having a front surface, a back surface and four side surfaces,

The Accused Instrumentalities have a housing that has a front surface, a back surface and four side surfaces, where the length of the front surface approximately corresponds to the distance between the ear and the mouth of a user, and where the width of the front surface is substantially shorter than the length, and where the housing has a thin thickness.

The Accused Instrumentalities, including for example the S23, include “said housing having a front surface, a back surface, and four side surfaces.” The S23 has a front surface, a back surface, and four side surfaces (top, bottom, left, and right):

wherein the length of the front surface approximately corresponds to the distance between the ear and the mouth of a user and wherein the width of the front surface is substantially shorter than the length and wherein the housing has a thin thickness; and



KL0016450-KL0016460; KL0016906-KL0016918; also available at: <https://www.samsung.com/us/smartphones/galaxy-s23/> (after selecting “SEE IN 360” button); <https://www.samsung.com/us/smartphones/galaxy-s23/specs/> (showing dimensions of Galaxy S23 in millimeters).

The Accused Instrumentalities, including for example the S23, include “wherein the length of the front surface approximately corresponds to the distance between the ear and the mouth of a user.” For example, the S23 has a height (length) of 146.3 millimeters (5.8 inches) (see previous paragraphs), a distance approximately corresponding to the distance between the ear and mouth of a user when held to the side of a user’s face:



KL0016408-KL0016413; KL0016414-KL0016441; KL0016925-KL0016933; also available at:
<https://www.samsung.com/my/support/mobile-devices/how-can-i-improve-the-sound-of-a-voice-call-with-a-galaxy-s23/> (after
expanding “The sound of a voice call with a Galaxy S23 device is noticeably quiet” dropdown);
<https://www.samsung.com/ie/support/mobile-devices/how-do-i-use-the-call-functions-on-my-device/>;
<https://www.samsung.com/us/support/troubleshooting/TSG01001240/>.

The Accused Instrumentalities include “wherein the width of the front surface is substantially shorter than the length and wherein the housing has a thin thickness.” Of the Accused Instrumentalities, the Z Fold series of phones have the greatest thickness (when folded), and even that thickness is thin.

The thinnest⁴

The thinnest⁴ 5.6 mm

Available at: <https://www.samsung.com/us/smartphones/galaxy-z-fold6/>.

For example, the S23's width of 70.9 mm (2.8 inches) is substantially less than its length (height) of 146.3 millimeters (5.8 inches), and its depth (thickness) of 7.6 mm (0.3 inches) is thin:



KL0016450-KL0016460; KL0016906-KL0016918; also available at: <https://www.samsung.com/us/smartphones/galaxy-s23/> (after selecting “SEE IN 360” button); <https://www.samsung.com/us/smartphones/galaxy-s23/specs/> (showing dimensions of Galaxy S23 in millimeters).

The same is true of the S24 series.



The same is true of the S23 series.

Samsung



S23

S23+

S23 Ultra

S23 FE

The same is true of the S22 series.



S22

S22+

S22 Ultra

The same is true of the S21 series.

Samsung



The same is true of the S20 series.



The same is true of the Galaxy A series.

Samsung



A10

A20

A50

A51

A54

A70

A71

The same is true of the Z Flip series. Note that the front of the phone is visible when the flip phone is unfolded.



Z Flip

Z Flip 5G

Z Flip3

Z Flip4

Z Flip5

The same is true of the Z Fold series. Note that the front of the phone is visible when the phone is folded.

Samsung



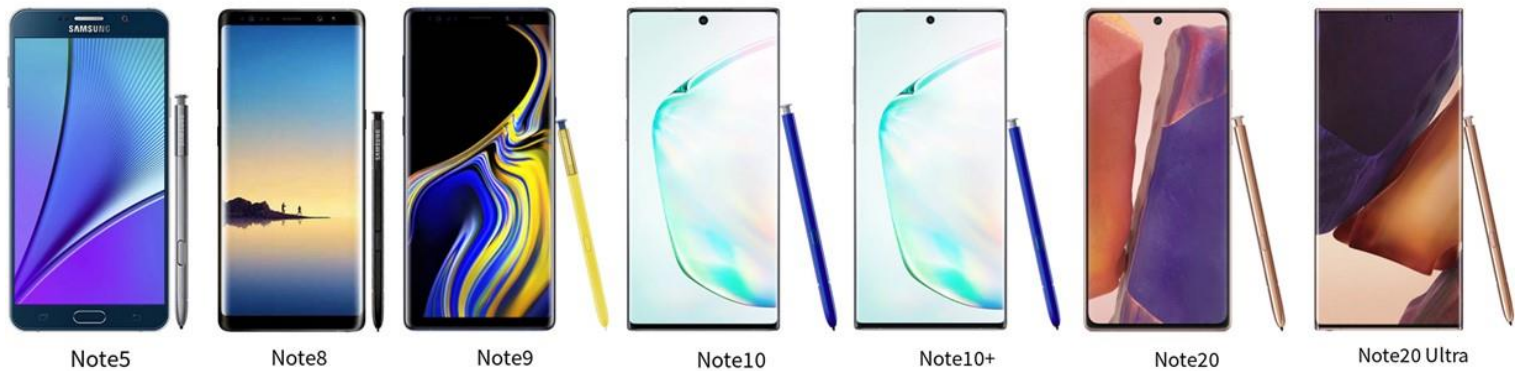
Z Fold2

Z Fold3

Z Fold4

Z Fold5

The same is true of the Note series.



Note5

Note8

Note9

Note10

Note10+

Note20

Note20 Ultra

Photos of phones available at: <https://www.samsung.com/us/smartphones/galaxy-s24-ultra/compare>.

The same is true of the XCover6 Pro.



Available at: <https://www.samsung.com/us/smartphones/galaxy-xcover/buy/?modelCode=SM-G736UZKEXAA>.

The Z Fold and Z Flip series have a hinge that allows the phones to be folded or unfolded, with a variable degree of folding. The front of the Z Fold series has a display that is visible when the phone is folded. The front of the Z Flip series has a display that is visible when the phone is unfolded. The Z Flip also has a different, smaller display that is visible when the phone is folded.

<p>Folded</p> <p>153.5 x 68.1 x 12.1</p> <p>Unfolded</p> <p>153.5 x 132.6 x 5.6</p> <p>Flex Hinge</p>	<p>Galaxy Z Fold6</p> <p>Folded 153.5 x 68.1 x 12.1</p> <p>Unfolded 153.5 x 132.6 x 5.6</p> <p>Flex Hinge</p>	<p>Galaxy Z Fold5</p> <p>Folded 154.9 x 67.1 x 13.4</p> <p>Unfolded 154.9 x 129.9 x 6.1</p> <p>Flex Hinge</p>	<p>Galaxy Z Flip6</p> <p>Folded 85.1 x 71.9 x 14.9</p> <p>Unfolded 165.1 x 71.9 x 6.9</p> <p>Flex Hinge</p>	<p>Galaxy Z Flip5</p> <p>Folded 85.1 x 71.9 x 15.1</p> <p>Unfolded 165.1 x 71.9 x 6.9</p> <p>Flex Hinge</p>	<p>Galaxy Z Flip4</p> <p>Folded 84.9 x 71.9 x 17.1 15.9</p> <p>Unfolded 165.2 x 71.9 x 6.9</p> <p>Flex Hinge</p>	<p>Galaxy Z Flip3</p> <p>Folded 86.4 x 72.2 x 17.1 15.9</p> <p>Unfolded 166.0 x 72.2 x 6.9</p> <p>Flex Hinge</p>
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Available at: <https://www.samsung.com/us/smartphones/galaxy-z-fold6/compare/>.

The Z Fold series has a front display that is viewable when the phone is folded. When the phone is unfolded, a second, wider display is also viewable.

U.S. Patent No.
11,503,144

Samsung



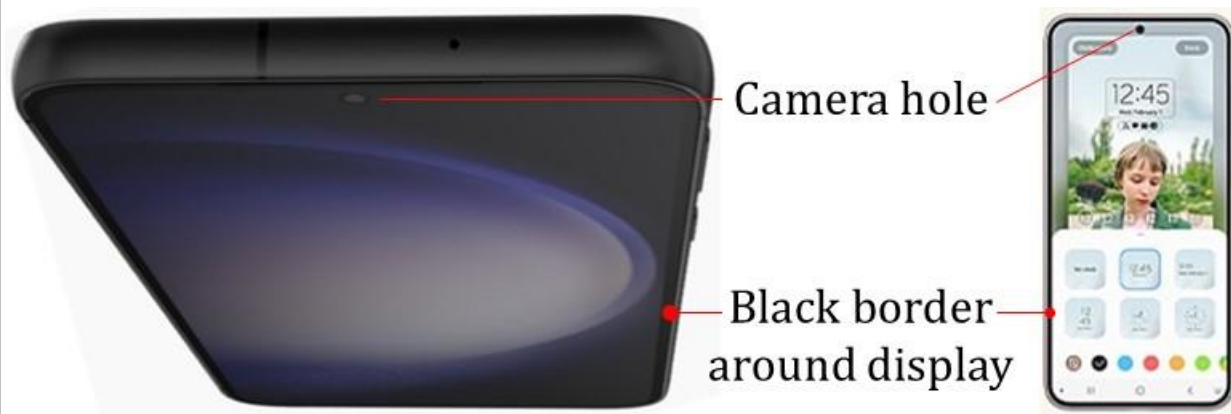
Available at: <https://www.samsung.com/us/smartphones/galaxy-z-fold5/buy/galaxy-z-fold5-512gb-unlocked-sm-f946ulbexaa/>.

The arguments, evidence, and functionality cited for this limitation have been demonstrated by exemplary models of the Accused Instrumentalities but apply equally to all Accused Instrumentalities.

[1c] a display unit integrated within the front surface of the housing where the display unit practically covers the entire front surface of the housing;

The Accused Instrumentalities have a display unit integrated within the front surface of the housing where the display unit practically covers the entire front surface of the housing.

The Accused Instrumentalities, including for example the S23, include “a display unit integrated within the front surface of said housing wherein said display unit practically covers the entire front surface of said housing.” For example, the S23’s display unit is integrated within the front surface of its housing and covers nearly the entire front surface of the device, except for the camera hole, and the black border around the display.



KL0016450-KL0016460; also available at: <https://www.samsung.com/us/smartphones/galaxy-s23/> (after selecting “SEE IN 360” button).

The same is true of the S24 series.

Samsung



S24

S24+

S24 Ultra

S24 FE

The same is true of the S23 series.



S23

S23+

S23 Ultra

S23 FE

The same is true of the S22 series.

Samsung



S22

S22+

S22 Ultra

The same is true of the S21 series.



S21

S21+

S21 Ultra

S21 FE

The same is true of the S20 series.

Samsung



The same is true of the Galaxy A series.



The same is true of the Z Flip series. Note that the front of the phone is visible when the flip phone is unfolded.

Samsung



Z Flip

Z Flip 5G

Z Flip3

Z Flip4

Z Flip5

The same is true of the Z Fold series. Note that the front of the phone is visible when the phone is folded.



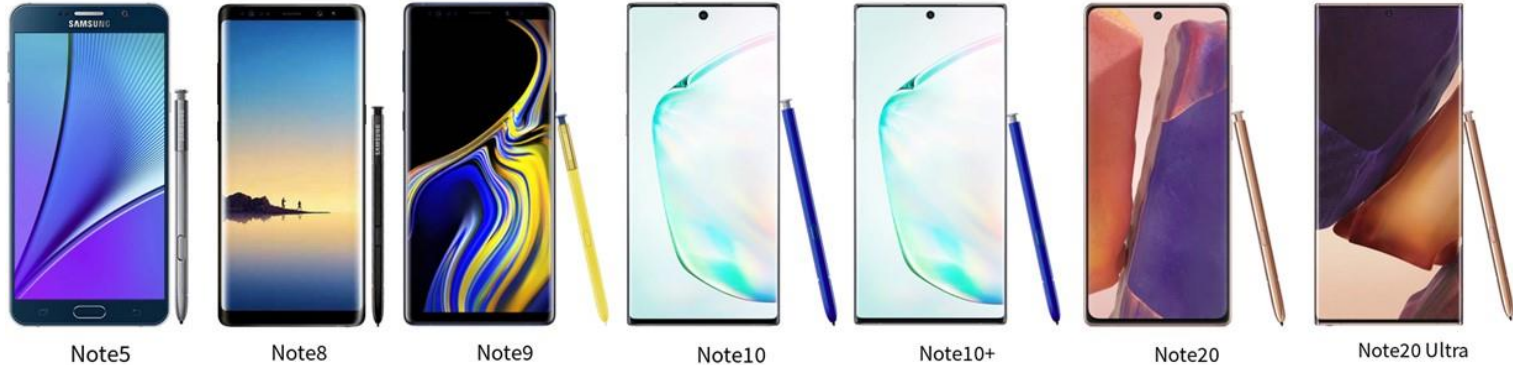
Z Fold2

Z Fold3

Z Fold4

Z Fold5

The same is true of the Note series.



Photos of phones available at: <https://www.samsung.com/us/smartphones/galaxy-s24-ultra/compare>.

The same is true of the XCover6 Pro.



Available at: <https://www.samsung.com/us/smartphones/galaxy-xcover/buy/?modelCode=SM-G736UZKEXAA>.

The arguments, evidence, and functionality cited for this limitation have been demonstrated by exemplary models of the Accused Instrumentalities but apply equally to all Accused Instrumentalities.

[1d] wherein said mobile phone device does not include a physical key on the front

The Accused Instrumentalities are mobile phone devices that do not include a physical key on the front surface.

For example, the S23 has no physical keys located on its front surface, as the front, side, top, and bottom views demonstrate.

U.S. Patent No.
11,503,144

Samsung

surface, and



KL0016450-KL0016460; also available at: <https://www.samsung.com/us/smartphones/galaxy-s23/> (after selecting “SEE IN 360” button).360” button).

The same is true of the S24 series.

Samsung



S24

S24+

S24 Ultra

S24 FE

The same is true of the S23 series.



S23

S23+

S23 Ultra

S23 FE

The same is true of the S22 series.

Samsung



The same is true of the S21 series.



The same is true of the S20 series.

Samsung



The same is true of the Galaxy A series.



The same is true of the Z Flip series. Note that the front of the phone is visible when the flip phone is unfolded.

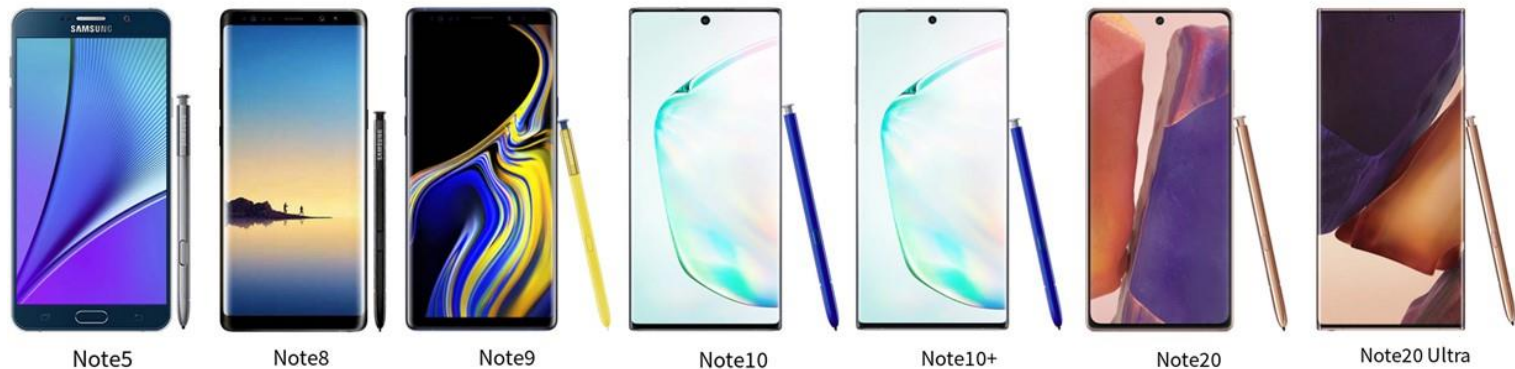
Samsung



The same is true of the Z Fold series. Note that the front of the phone is visible when the phone is folded.



The same is true of the Note series.



Photos of phones available at: <https://www.samsung.com/us/smartphones/galaxy-s24-ultra/compare>.

The same is true of the XCover6 Pro.



Available at: <https://www.samsung.com/us/smartphones/galaxy-xcover/buy/?modelCode=SM-G736UZKEXAA>.

The arguments, evidence, and functionality cited for this limitation have been demonstrated by exemplary models of the Accused Instrumentalities but apply equally to all Accused Instrumentalities.

[1e] wherein said components of the mobile phone are integrated

The Accused Instrumentalities have mobile phone components that are integrated within the housing such that none of the components noticeably extends out from the housing.

The Accused Instrumentalities, including for example the S23, include “wherein said components of the mobile phone are integrated within said housing such that none of said components is noticeably extended out from said housing.” For example, all of the S23’s

**U.S. Patent No.
11,503,144**

Samsung

within said housing such that none of said components is noticeably extended out from said housing.

components are integrated within the housing. None of the components noticeably extend out from the housing. The housing extends outward over and around the camera in the back of the phone so that the camera does not noticeably extend out from the housing. In fact, none of the camera extends out from the housing because the cover for the camera, which is part of the housing, is recessed slightly within the housing.



KL0016450-KL0016460; also available at: <https://www.samsung.com/us/smartphones/galaxy-s23-ultra/> (after selecting “SEE IN 360” button); <https://www.samsung.com/us/smartphones/galaxy-s23/> (after selecting “SEE IN 360” button).(after selecting “SEE IN 360” button).

The same is true of the S24 series.

Samsung



Available at: <https://www.samsung.com/us/smartphones/galaxy-s24/buy/galaxy-s24-plus-256gb-unlocked-sm-s926uzyaxaa/>.

The same is true of the S23 series.



Available at: <https://www.samsung.com/us/smartphones/galaxy-s23-fe/buy/galaxy-s23-fe-128gb-unlocked-sm-s711ulgaxaa/>.

The same is true of the S22 series.



S22

S22+

S22 Ultra

Available at: <https://www.samsung.com/us/smartphones/galaxy-s-series/certified-re-newed-store/buy/galaxy-s22-plus-128gb-certified-re-newed-sm5s906uzkaxaa/>.

The same is true of the S21 series.

Samsung



Available at: <https://www.samsung.com/us/smartphones/galaxy-s-series/certified-re-newed-store/buy/galaxy-s21-ultra-5g-128gb-certified-re-newed-unlocked-sm5g998uzkaxaa/>.

The same is true of the S20 series.



Available at: <https://www.samsung.com/levant/smartphones/galaxy-s20/specs/>.

The same is true of the Galaxy A series.



Available at: <https://www.samsung.com/us/smartphones/galaxy-a35/buy/galaxy-a35-5g-128gb-unlocked-sm-a356ulvaxaa/>.

The same is true of the Z Flip series. Note that the front of the phone is visible when the flip phone is unfolded.



Available at: <https://www.samsung.com/us/smartphones/galaxy-z-flip5/buy/galaxy-z-flip5-256gb-unlocked-sm-f731ulixaa/>.

The same is true of the Z Fold series. Note that the front of the phone is visible when the phone is folded.



Available at: <https://www.samsung.com/us/smartphones/galaxy-z-fold6/buy/galaxy-z-fold6-256gb-unlocked-sm-f956uliaxaa/>.

The same is true of the Note series.



Available at: <https://www.samsung.com/us/mobile/phones/galaxy-note/galaxy-note10-plus-256gb-certified-re-newed-att-sm5n975uzkaatt/>.

Photos of phones available at: <https://www.samsung.com/us/smartphones/galaxy-s24-ultra/compare>.

The same is true of the XCover6 Pro.



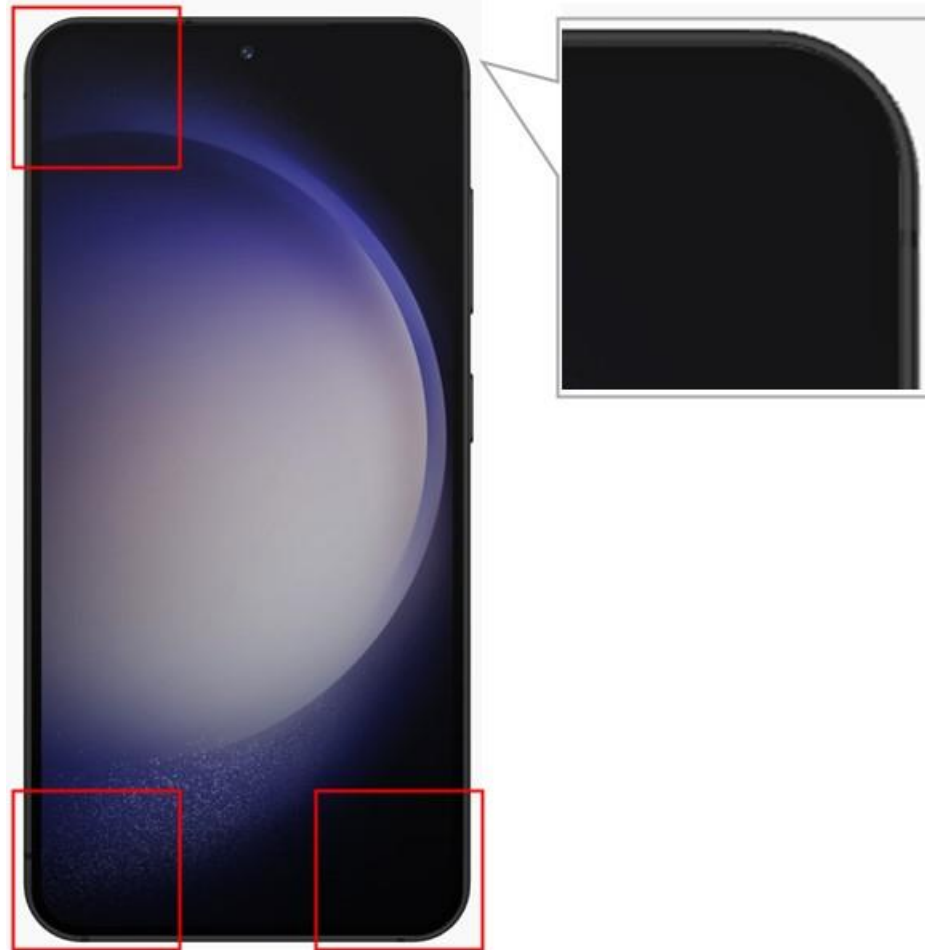
Available at: <https://www.samsung.com/us/smartphones/galaxy-xcover/buy/?modelCode=SM-G736UZKEXAA>.

The arguments, evidence, and functionality cited for this limitation have been demonstrated by exemplary models of the Accused Instrumentalities but apply equally to all Accused Instrumentalities.

[2] The device of claim 1, wherein said practically rectangular shape has rounded corners.

The Accused Instrumentalities have a practically rectangular shape with rounded corners.

For example, the S23 has a rectangular shape with rounded corners on the top left, top right, bottom left, and bottom right.



KL0016450-KL0016460; also available at: <https://www.samsung.com/us/smartphones/galaxy-s23/> (after selecting “SEE IN 360” button).

The same is true of the phones in the S24 series that have rounded corners.



S24

S24+

S24 FE

The same is true of phones in the S23 series that have rounded corners.



S23

S23+

S23 FE

The same is true of phones in the S22 series that have rounded corners.

Samsung



S22

S22+

The same is true of phones in the S21 series that have rounded corners.



S21

S21+

S21 Ultra

S21 FE

The same is true of phones in the S20 series that have rounded corners.

Samsung



The same is true of phones in the Galaxy A series that have rounded corners.



The same is true of phones in the Z Flip series that have rounded corners.

Samsung



Z Flip

Z Flip 5G

Z Flip3

Z Flip4

Z Flip5

The same is true of phones in the Z Fold series that have rounded corners.



Z Fold2

Z Fold3

Z Fold4

Z Fold5

The same is true of phones in the Note series that have rounded corners.



Photos of phones available at: <https://www.samsung.com/us/smartphones/galaxy-s24-ultra/compare>.

The same is true of the XCover6 Pro.



Available at: <https://www.samsung.com/us/smartphones/galaxy-xcover/buy/?modelCode=SM-G736UZKEXAA>.

The arguments, evidence, and functionality cited for this limitation have been demonstrated by exemplary models of the Accused Instrumentalities but apply equally to all Accused Instrumentalities.

[3] [The] device of claim 1, The Accused Instrumentalities have a plurality of icons corresponding to a plurality of applications that are displayed on said display unit, and when the user makes a sweeping action on the display unit, the plurality of icons corresponding to a plurality of other

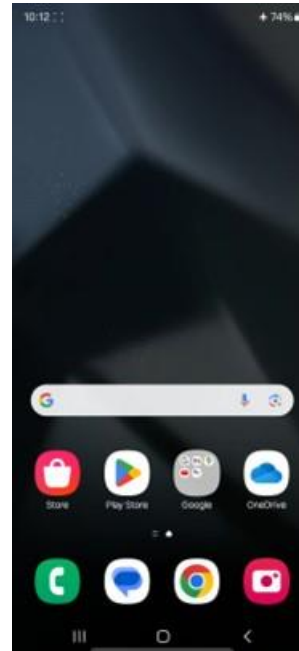
**U.S. Patent No.
11,503,144**

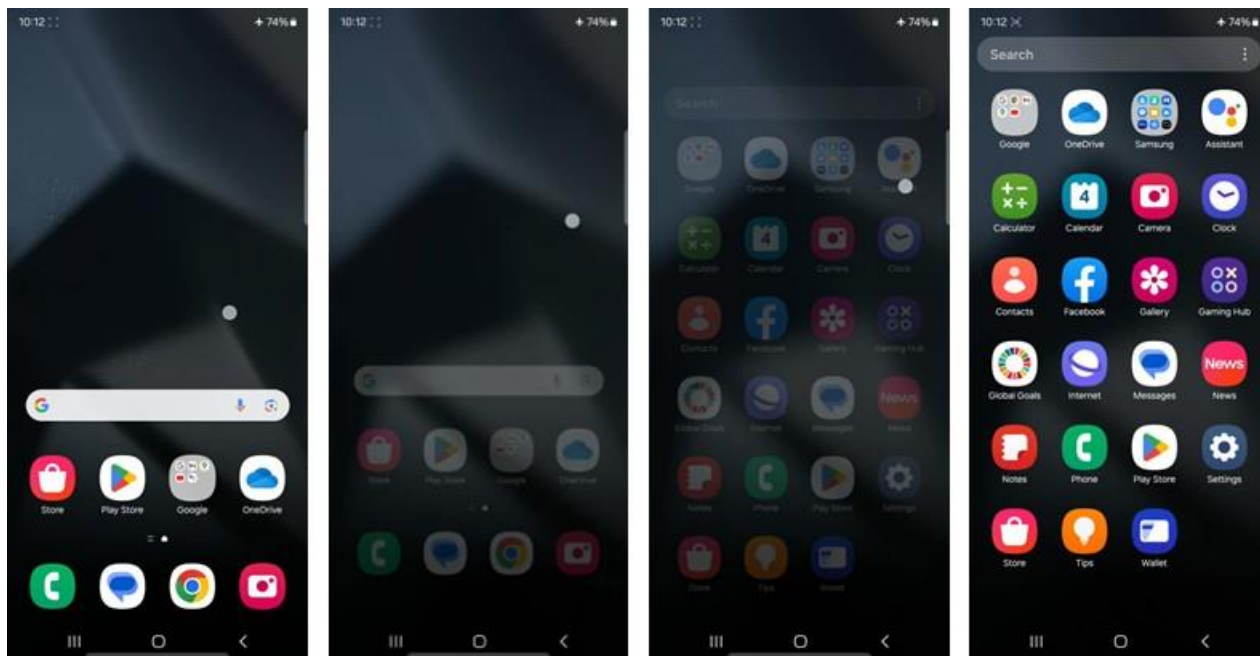
Samsung

wherein plurality of icons corresponding to plurality of applications are displayed on said display unit, and wherein upon providing a sweeping action on said display unit, plurality of other icons corresponding to plurality of other applications are displayed on said display unit.

applications are displayed on the display unit.

For example, the Mobile Phone Accused Instrumentalities run Samsung's One UI software, which displays a plurality of applications on the home screen. By default, the bottom of the display shows 4 application icons, and one row above that shows more icons. A sweeping action on the display toward the top of the display causes Samsung's One UI to display a plurality of other icons corresponding to other applications.





Screen recording of Galaxy S24 Ultra.

As another example, a sweeping action from the side of the display (by default the right side) toward the other side of the display causes Samsung's One UI to display a plurality of other icons corresponding to other applications, in the "Edge panels." The Edge panels can be displayed with a sweeping action regardless of whether the user is starting from the home screen, or from the icons shown after a sweeping motion up.



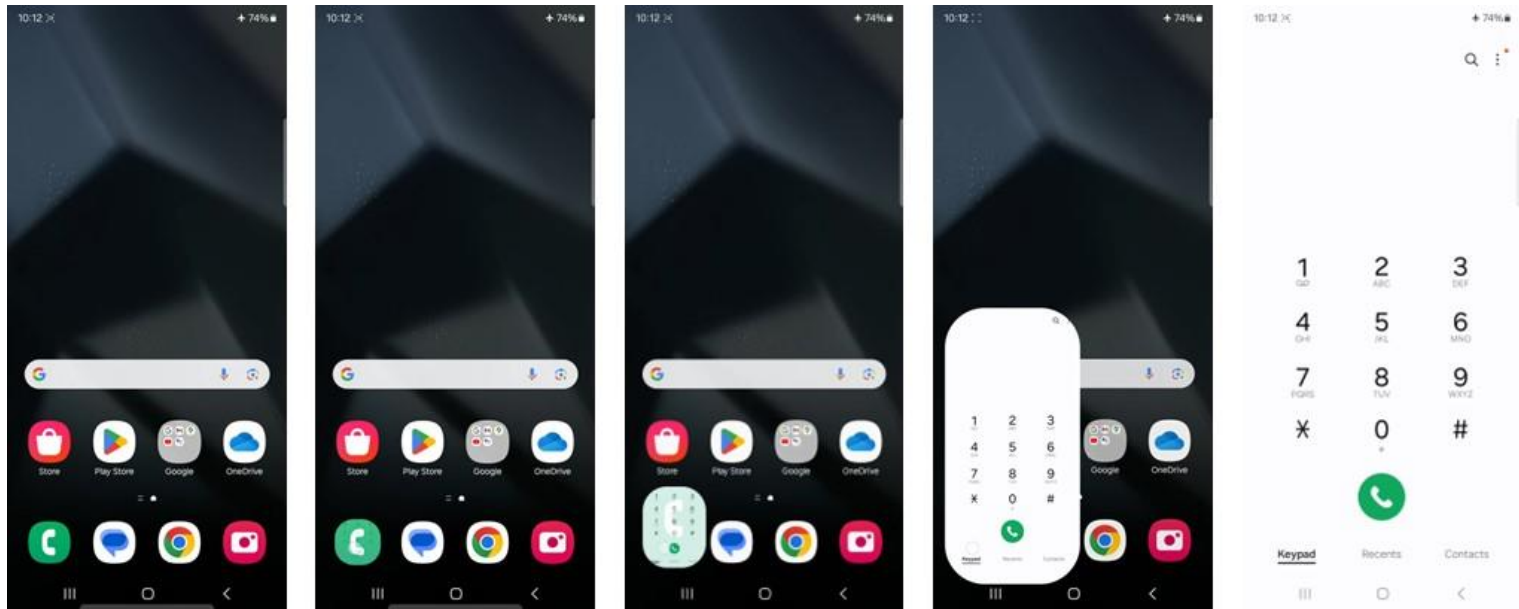
Screen recording of Galaxy S24 Ultra.

An analysis of source code may be necessary to fully and accurately describe functionality of the Accused Products with respect to this limitation and, accordingly, Plaintiff reserves the right to supplement these infringement contentions once such information is made available to Plaintiff. The arguments, evidence, and functionality cited for this limitation have been demonstrated by an exemplary model of the Accused Instrumentalities but apply equally to all Accused Instrumentalities.

[4] The device of claim 3, wherein upon providing a predefined interaction with an icon, said corresponding application is opened on the display unit.

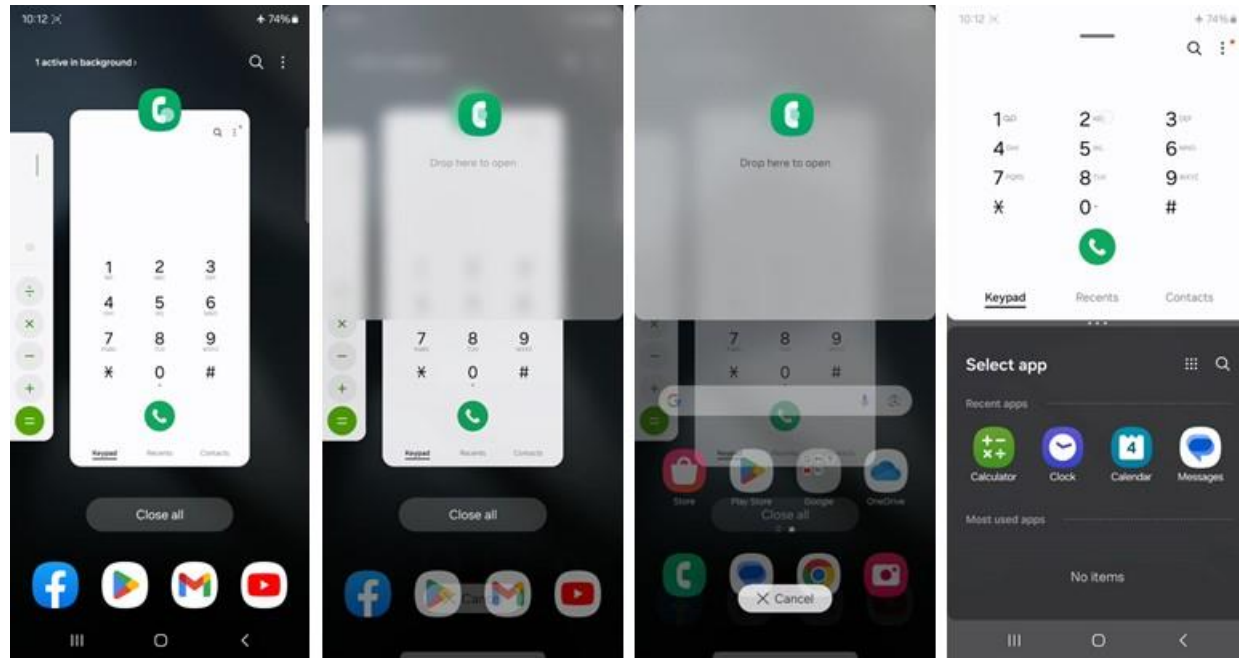
In the Accused Instrumentalities when a user performs a predefined interaction with an icon, a corresponding application is opened on the display unit.

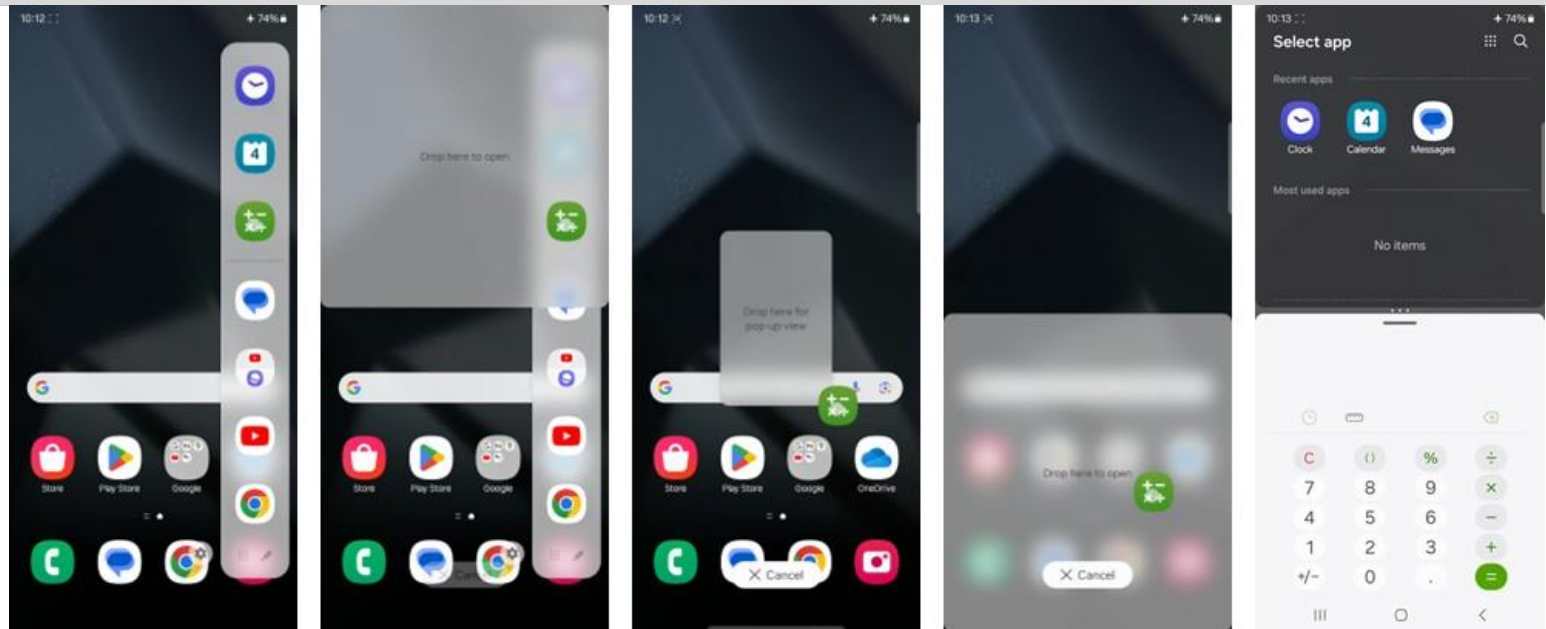
For example, the Mobile Phone Accused Instrumentalities include Samsung's One UI software, which functions such that interaction with an application icon allows opening the corresponding application. Tapping the icon opens the application in full screen mode.



Screen recording of Galaxy S24 Ultra.

As another example, a longer press on the icon allows the application to be opened in split screen mode, and interacting with the icon by moving it to different portions of the screen causes the application to open in, for example, the top, middle (“pop-up view”) or bottom portion of the screen.





Screen recording of Galaxy S24 Ultra.

An analysis of source code may be necessary to fully and accurately describe functionality of the Accused Products with respect to this limitation and, accordingly, Plaintiff reserves the right to supplement these infringement contentions once such information is made available to Plaintiff. The arguments, evidence, and functionality cited for this limitation have been demonstrated by exemplary models of the Accused Instrumentalities but apply equally to all Accused Instrumentalities.

[5] The device of claim 1, wherein said device is adapted to display text entered through a keyboard in landscape direction and in portrait direction on said display unit when the

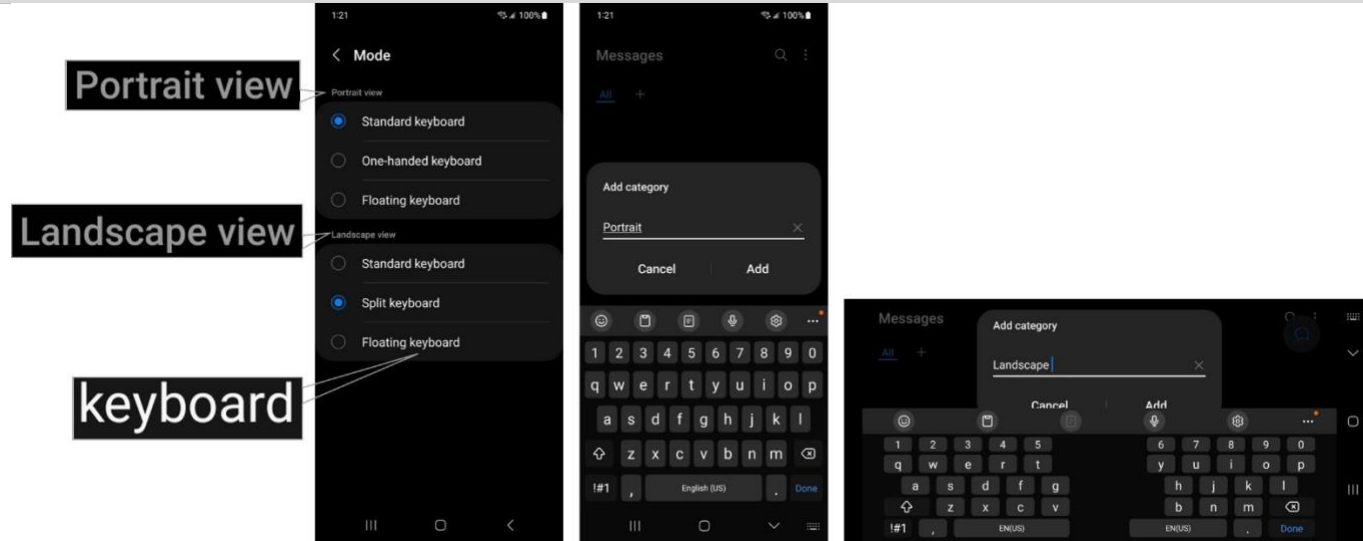
The Accused Instrumentalities are devices adapted to display text entered through a keyboard in landscape direction and in portrait direction on the display unit when the device is used, respectively, in landscape position and in portrait position.

For example, the S23 displays text entered through a virtual keyboard in landscape direction when the S23 is used in landscape position, and in portrait direction when the S23 is used in portrait position.

U.S. Patent No.
11,503,144

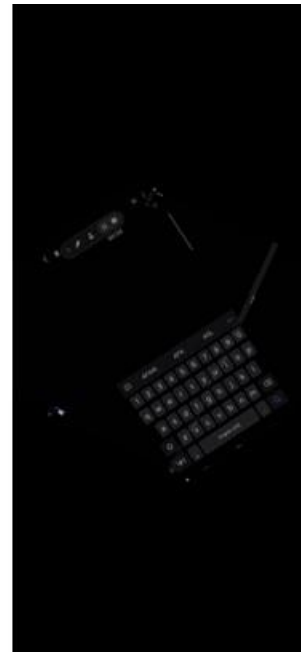
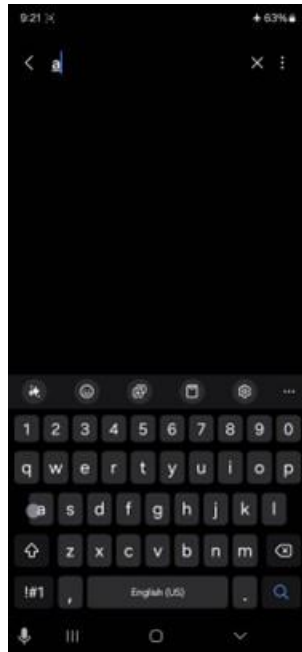
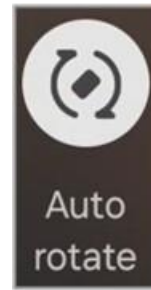
device is used,
respectively, in
landscape
position and in
portrait position.

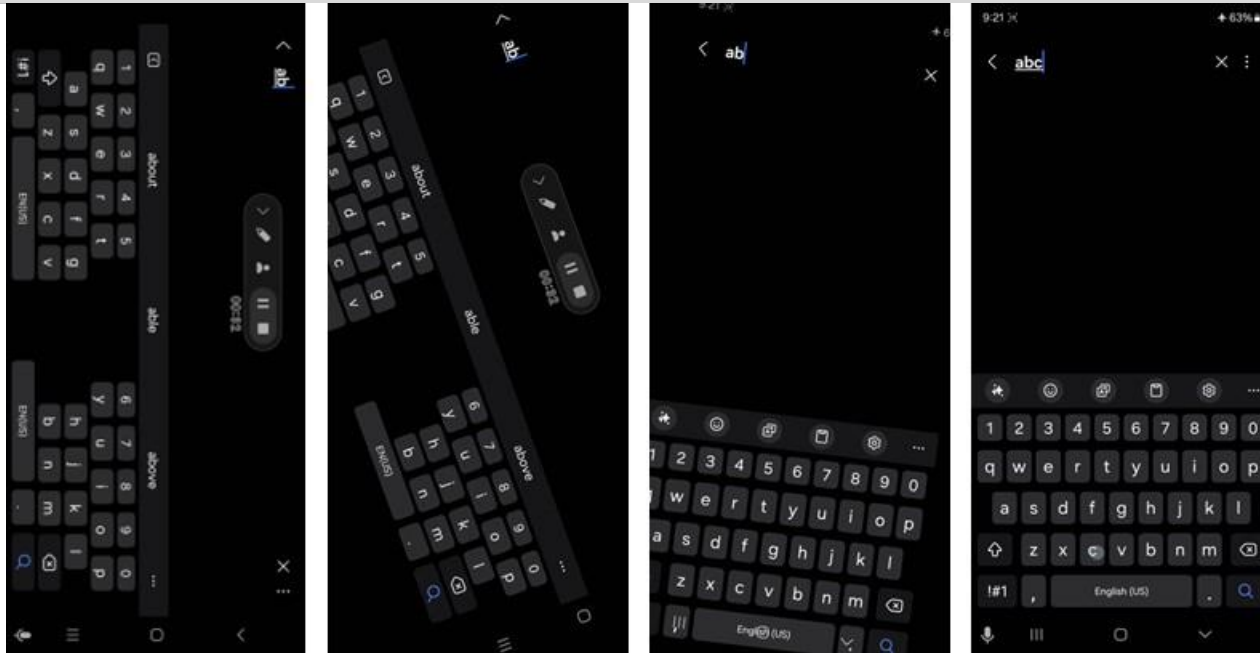
Samsung



Screenshots of Galaxy S23.

For example, the Mobile Phone Accused Instrumentalities include Samsung's One UI software, which changes the keyboard from landscape to portrait as appropriate, as part of the "Auto rotate" system setting that Samsung enables by default for each phone. For example, this screen recording of a Galaxy S24 Ultra shows that "Auto rotate" is enabled. The phone starts in portrait mode and the user types "a," then rotates the phone. The phone rotates the screen (including the keyboard) and changes the keyboard layout to landscape mode (note the space between the left and right side of the keyboard). Then the user types "b" and rotates the phone back to its original orientation. The phone rotates the screen and changes the keyboard layout back to portrait mode, and the user types "c."





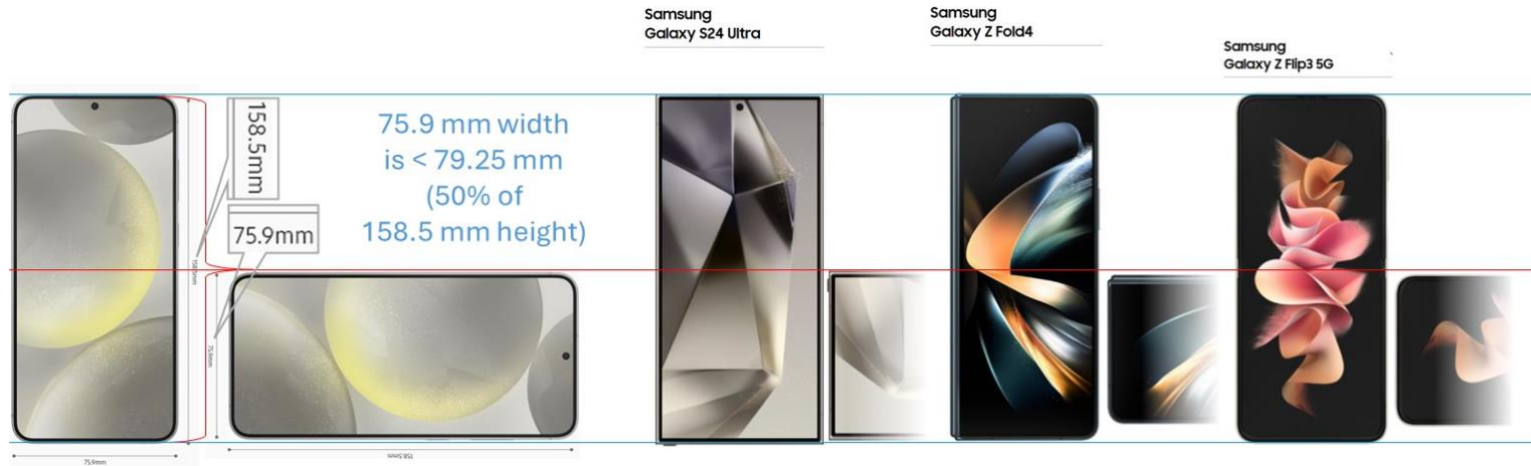
Screen recording of Galaxy S24 Ultra.

An analysis of source code may be necessary to fully and accurately describe functionality of the Accused Products with respect to this limitation and, accordingly, Plaintiff reserves the right to supplement these infringement contentions once such information is made available to Plaintiff. The arguments, evidence, and functionality cited for this limitation have been demonstrated by exemplary models of the Accused Instrumentalities but apply equally to all Accused Instrumentalities.

[7] The device of claim 1, wherein the width of the device is approximately half of said length.

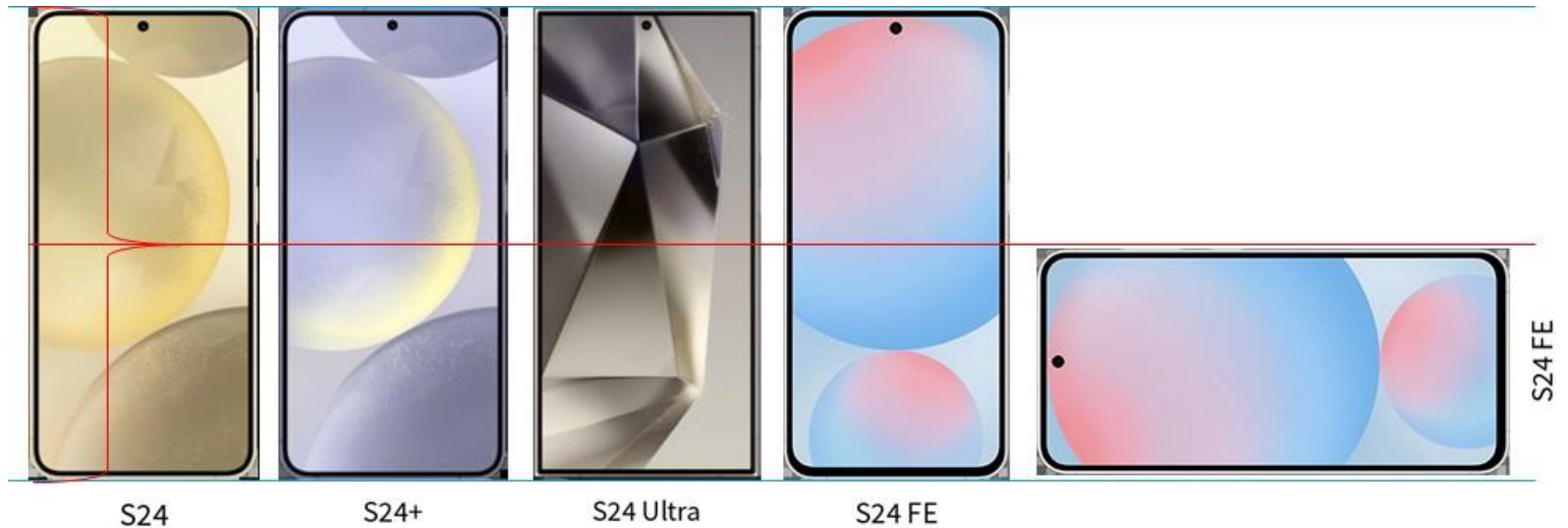
The Accused Instrumentalities are devices where the width of the device is approximately half of the length.
See e.g., [1b]. The discussion and evidence disclosed in the section on [1b] is incorporated here by reference.

For example, a photo of the front of each of the Mobile Phone Accused Instrumentalities shows each phone's height and width. Comparing the photo versus a rotated version of the same photo is one way to compare height and width. The photos demonstrate that the Mobile Phone Accused Instrumentalities have a width that is approximately half of the length of the device. In the case of the Z Fold phones, the width of the phone is the width when the phone is folded. In the case of the Z Flip phones, the height of the phone is the height when the phone is unfolded.

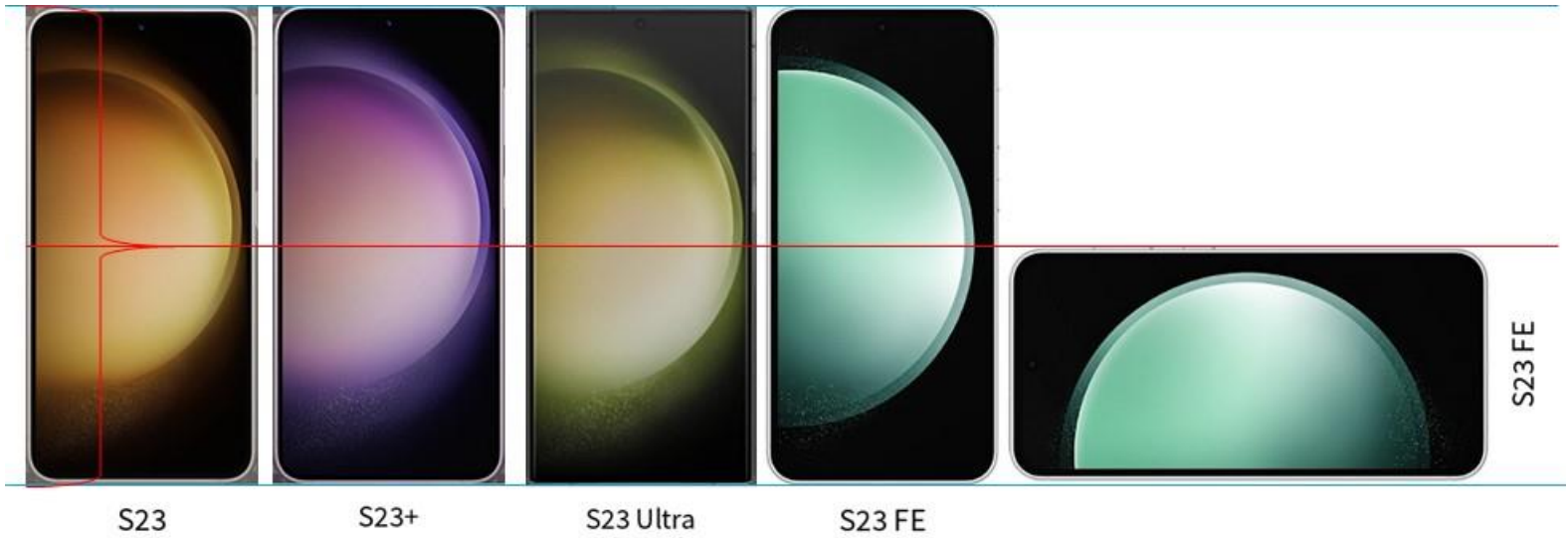


KL0016657-KL0016672; also available at: <https://www.samsung.com/us/smartphones/galaxy-s24/> (after selecting “SEE IN 360” button); <https://www.samsung.com/us/smartphones/galaxy-s24-ultra> (after selecting different models to compare from the drop-down menu).

The same is true of the S24 series.



The same is true of the S23 series.



The same is true of the S22 series.



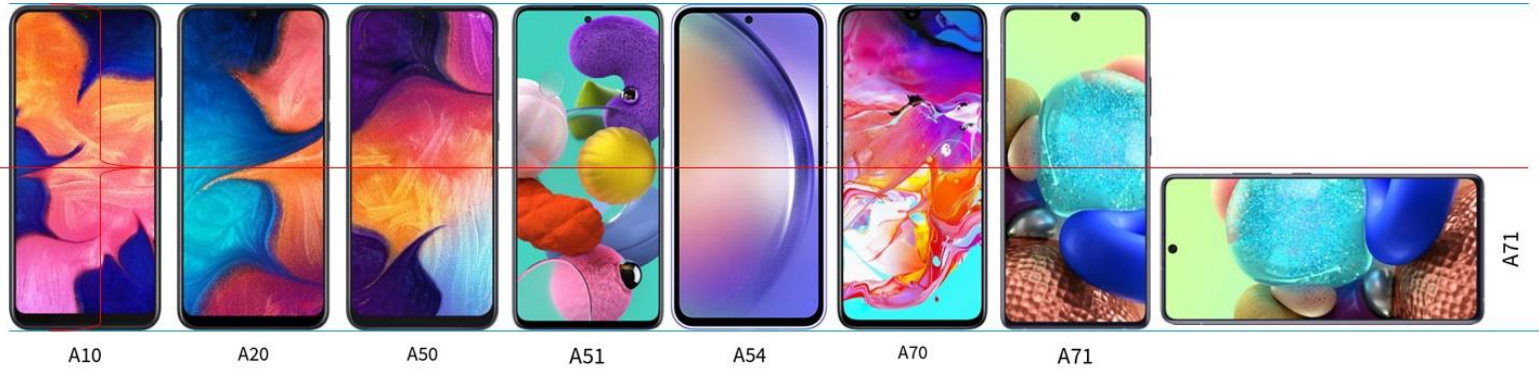
The same is true of the S21 series.



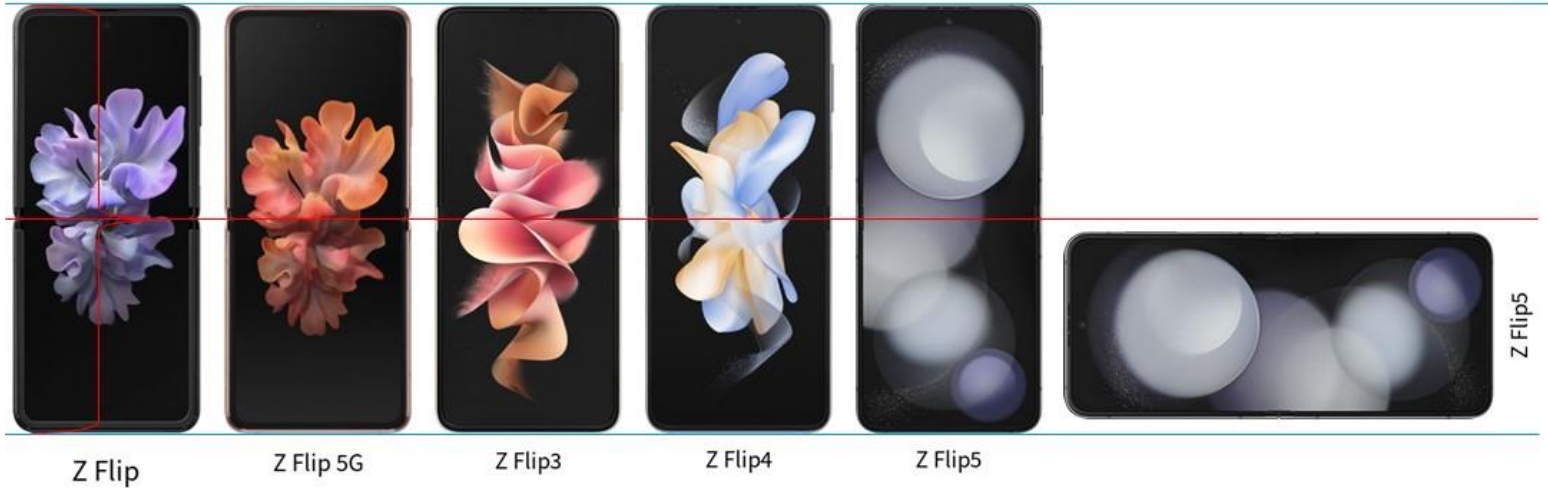
The same is true of the S20 series.



The same is true of the Galaxy A series.



The same is true of the Z Flip series. Note the phones are depicted unfolded.

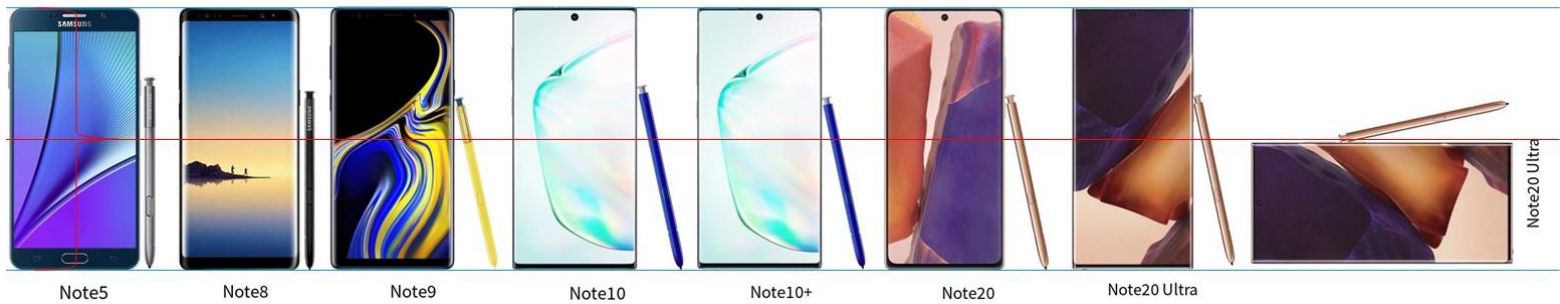


The same is true of the Z Fold series. Note the phones are depicted folded.

Samsung



The same is true of the Note series.



Photos of phones available at: <https://www.samsung.com/us/smartphones/galaxy-s24-ultra/compare>.

The same is true of the XCover6 Pro.



Available at: <https://www.samsung.com/us/smartphones/galaxy-xcover/buy/?modelCode=SM-G736UZKEXAA>.

The arguments, evidence, and functionality cited for this limitation have been demonstrated by exemplary models of the Accused Instrumentalities but apply equally to all Accused Instrumentalities.

[8] The device of claim 1, wherein the thickness of the device is less than 20 percent of said width.

The Accused Instrumentalities, other than the Galaxy Z Fold 4 and Galaxy Z Fold 3, are devices where the thickness of the device is less than 20 percent of the width.

See, e.g., [1b]. The discussion and evidence disclosed in the section on [1b] is incorporated here by reference.

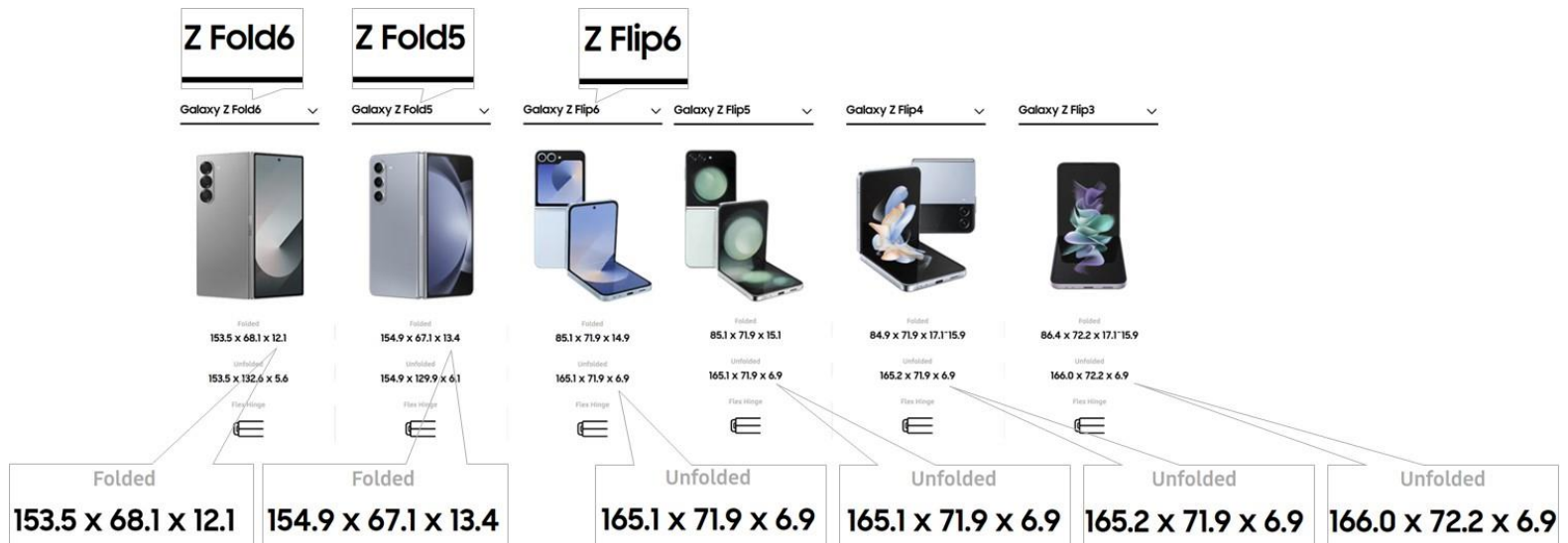
For example, a photo of the bottom (or top) of each of the Mobile Phone Accused Instrumentalities shows each phone's width and thickness. Comparing the photo versus a rotated version of the same photo is one way to compare width and thickness. The photos demonstrate that the Mobile Phone Accused Instrumentalities have a thickness that is less than 20 percent of the width of the device. In the case of the Z Fold phones, the width and thickness of the phone is the width when the phone is folded. In the case of the Z Flip phones, the thickness of the phone is the thickness when the phone is unfolded.



KL0016657-KL0016672; also available at: <https://www.samsung.com/us/smartphones/galaxy-s24/> (after selecting "SEE IN 360")

button); <https://www.samsung.com/us/smartphones/galaxy-s24-ultra> (after selecting “SEE IN 360” button); <https://www.samsung.com/us/smartphones/galaxy-s23-ultra> (after selecting “SEE IN 360” button); <https://www.samsung.com/us/smartphones/galaxy-s23> (after selecting “SEE IN 360” button); <https://www.samsung.com/us/smartphones/galaxy-z-fold6> (after selecting “SEE IN 360” button).

Of the Accused Instrumentalities, the Z Fold series of phones have the greatest thickness, and in the case of the Z Fold6 and Z Fold5, even that thickness, when the phone is folded, is less than 20 percent of the width. All of the Accused Instrumentalities other than the Z Fold series have a thickness of less than 20 percent of the width of the device. For example, in comparison, the Z Flip series of phones have a thickness (when the phone is unfolded) that is less than the Z Fold thickness, and is less than 10 percent of the width of the Z Flip phone.



U.S. Patent No. 11,503,144	Samsung			
	Z Flip3	72.2	6.9	9.56%
[9a] A mobile phone, comprising:	<p>The arguments, evidence, and functionality cited for this limitation have been demonstrated by exemplary models of the Accused Instrumentalities but apply equally to all Accused Instrumentalities.</p> <p>The Accused Instrumentalities include a mobile phone.</p> <p><i>See, e.g., [1a].</i> The discussion and evidence disclosed in the section on [1a] is incorporated here by reference.</p>			
[9b.1] a body having a practically rectangular shape,	<p>The Accused Instrumentalities include a body having a practically rectangular shape.</p> <p><i>See, e.g., [1b.1].</i> The discussion and evidence disclosed in the section on [1b.1] is incorporated here by reference.</p>			
[9b.2] said body having a front surface, a back surface and four side surfaces, wherein the length of the front surface of the mobile phone corresponds to the distance between the ear and the mouth of a user and wherein the width of the front surface of the mobile phone is significantly shorter than the length, and wherein said	<p>The Accused Instrumentalities include a body having a front surface, a back surface and four side surfaces, where the length of the front surface of the mobile phone corresponds to the distance between the ear and the mouth of a user, the width of the front surface of the mobile phone is significantly shorter than the length, and the body has a thin thickness.”</p> <p><i>See, e.g., [1b.2].</i> The discussion and evidence disclosed in the section on [1b.2] is incorporated here by reference.</p>			

U.S. Patent No.
11,503,144

Samsung

body has a thin thickness;

[9c] a touch sensitive display unit;

The Accused Instrumentalities include a touch sensitive display unit.

For example, Samsung Galaxy phones feature a touchscreen display.

The screenshot shows a Samsung support article titled "Touchscreen issues on a Galaxy phone or tablet". The page features the Samsung logo, navigation icons (search, shopping cart, user profile, menu), and a sub-header "Touchscreen issues on a Galaxy phone or tablet". Below the sub-header is a paragraph of text: "Your Galaxy device's touchscreen is its center of navigation, so we understand how worrisome it can be when the touch function isn't working properly. However, there are some simple ways to get the touchscreen working again when it's frozen or unresponsive." There are also share and print icons. A photograph shows a hand holding a Galaxy S24 series phone. At the bottom of the screenshot, a large text box contains the sentence: "Your Galaxy device's touchscreen is its center of navigation".

Available at: <https://www.samsung.com/us/support/troubleshoot/TSG10001974/>.

Exemplary touch sensitive display units of the Accused Instrumentalities are shown below:

Galaxy S24 series.



S24

S24+

S24 Ultra

S24 FE

Galaxy S23 series.



S23

S23+

S23 Ultra

S23 FE

Galaxy S22 series.

Samsung



S22

S22+

S22 Ultra

Galaxy S21 series.



S21

S21+

S21 Ultra

S21 FE

Galaxy S20 series.

Samsung



S20

S20+

S20 Ultra

S20 FE

Galaxy A series.



A10

A20

A50

A51

A54

A70

A71

Galaxy Z Flip series.

Samsung



Z Flip

Z Flip 5G

Z Flip3

Z Flip4

Z Flip5

Galaxy Z Fold series.



Z Fold2

Z Fold3

Z Fold4

Z Fold5

Galaxy Note series.



Photos of phones available at: <https://www.samsung.com/us/smartphones/galaxy-s24-ultra/compare>.

XCover6 Pro.



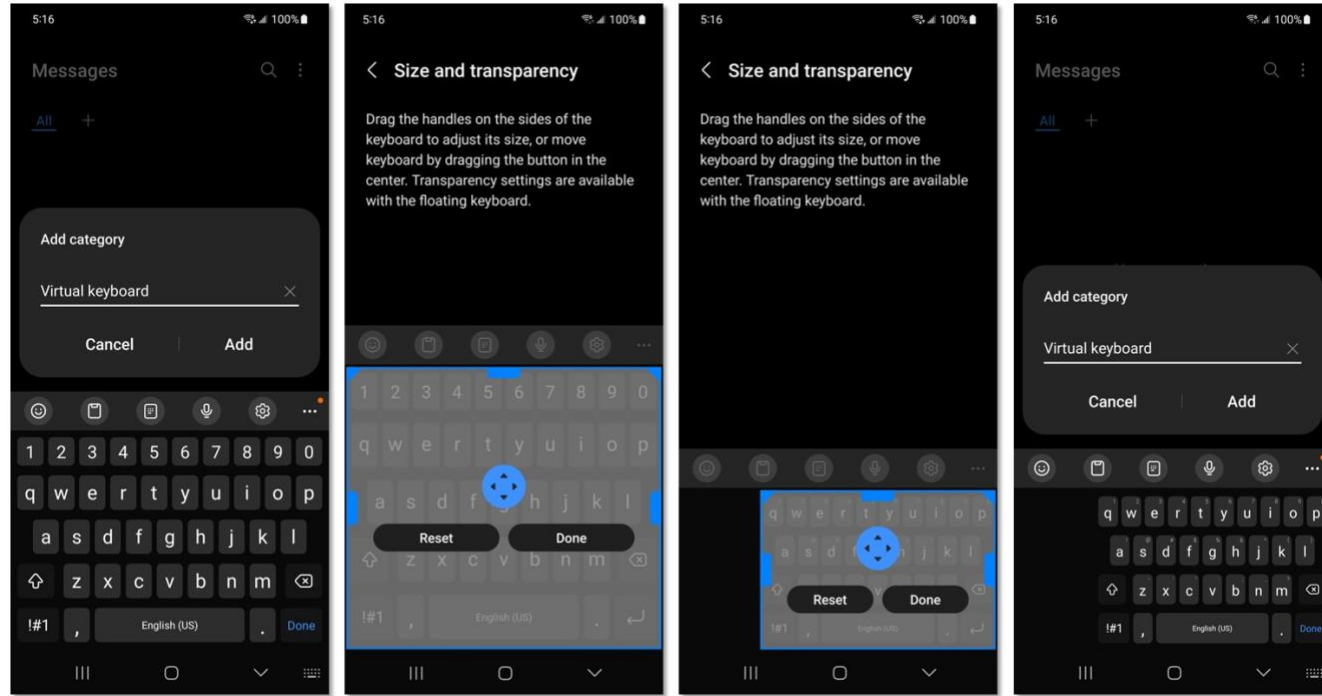
Available at: <https://www.samsung.com/us/smartphones/galaxy-xcover/buy/?modelCode=SM-G736UZKEXAA>.

The arguments, evidence, and functionality cited for this limitation have been demonstrated by exemplary models of the Accused Instrumentalities but apply equally to all Accused Instrumentalities.

[9d] a virtual keyboard to enter text; and

The Accused Instrumentalities include a virtual keyboard to enter text.

For example, the Accused Instrumentalities run OneUI, which has a virtual keyboard that can be moved, resized, and otherwise adjusted (e.g., to show numbers or not) using software settings.



Screenshots of Galaxy S23.

An analysis of source code may be necessary to fully and accurately describe functionality of the Accused Products with respect to this limitation and, accordingly, Plaintiff reserves the right to supplement these infringement contentions once such information is made available to Plaintiff.

The arguments, evidence, and functionality cited for this limitation have been demonstrated by exemplary models of the Accused Instrumentalities but apply equally to all Accused Instrumentalities.

[9e] a microphone and a speaker;


The Accused Instrumentalities include a microphone and a speaker.



SmartThings

Change the microphone mode on your Galaxy phone or tablet

Mic mode on your Galaxy device lets you tune the microphone during phone calls for improved clarity. This feature optimizes the frequencies that your phone or tablet transmits over calls while decreasing background sounds, making it ideal for crowded and noisy areas.

For Business



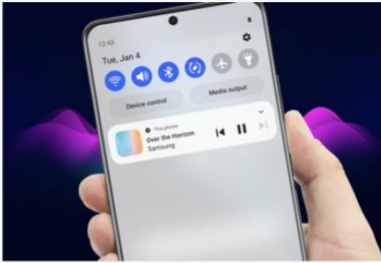
 

Available at: <https://www.samsung.com/us/support/answer/ANS10002555/>.

Home / Speaker not working on Samsung phone

SmartThings

For Business



Speaker not working on Samsung phone


There are a few things that can cause issues with the speaker while you are on call or listening to audio playback through your Galaxy phone. For example, there could be an external device where the audio is being redirected. It's also possible that a software problem or physical damage is causing the issue.

STEP 1

Do basic troubleshooting for the speakers

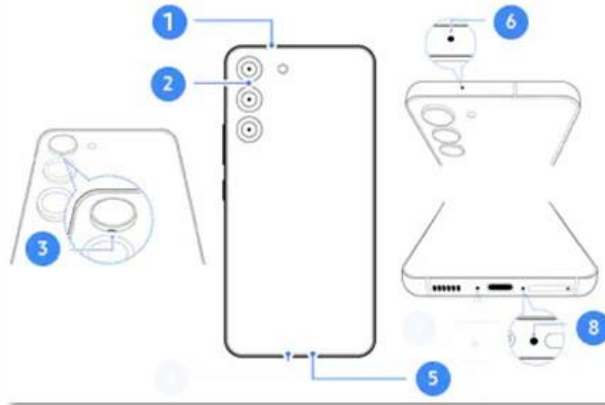
Note: If you use the Fingerprint security feature, the phone will require the backup password to unlock after rebooting.

Related Content

-  [Program the keys on your Galaxy XCover6 Pro](#)
Program the XCover key and Top key The XCover key is th...
- [The new features on your](#)

Available at: <https://www.samsung.com/us/support/troubleshooting/TSG01001255/>.

For example, the S23 series includes at least two microphones.

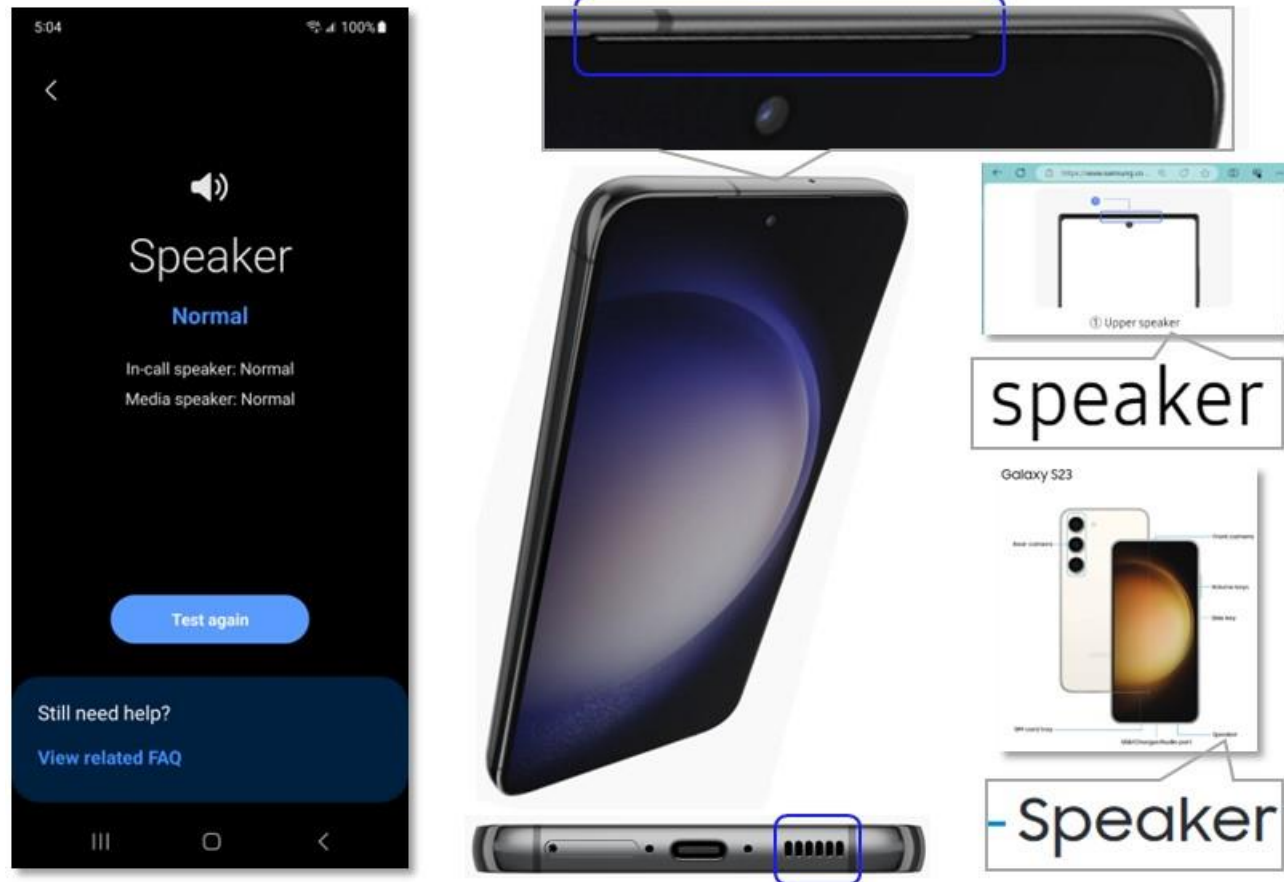


- ① Microphone
- ② Microphone
- ③ Microphone
- ⑤ Microphone
- ⑥ Microphone
- ⑧ Microphone

There are 2 microphones built into this phone.

KL0016408-KL0016413; also available at: <https://www.samsung.com/my/support/mobile-devices/how-can-i-improve-the-sound-of-a-voice-call-with-a-galaxy-s23/> (after expanding “The sound of a voice call with a Galaxy S23 device is noticeably quiet” dropdown)

For example, the S23 includes at least two speakers, one speaker at the bottom of the phone, and another speaker (difficult to see) above the camera hole on the front of the phone.



KL0016408-KL0016413; KL0016450-KL0016460; also available at: <https://www.samsung.com/my/support/mobile-devices/how-can-i-improve-the-sound-of-a-voice-call-with-a-galaxy-s23/> (after expanding “I am using a non-genuine screen protector and call volume is quiet” dropdown); https://downloadcenter.samsung.com/content/UM/202302/20230207045923682/SAM_S911_S916_S918_EN_UM_OS13_020223_FINAL.pdf (Galaxy S23|S23+|S23 Ultra user manual at p. 7); <https://www.samsung.com/us/smartphones/galaxy-s23/> (after selecting “SEE IN 360” button).(after selecting “SEE IN 360” button).

As an additional example, the S24 series has the same arrangement: a microphone at or near the top of the phone and the bottom of the phone, and a speaker at or near the top of the phone and the bottom of the phone.

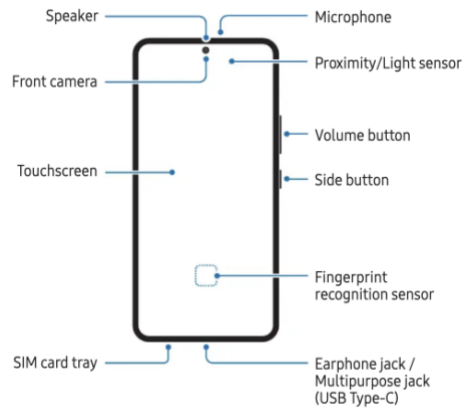


Available at:

https://downloadcenter.samsung.com/content/UM/202409/20240907052058472/SAM_S921_S926_S928_EN_UG_OS14_081624_FINAL_REV_1.1_AC_082824.pdf (Galaxy S24|S24+|S24 Ultra user manual at pp. 5-7).

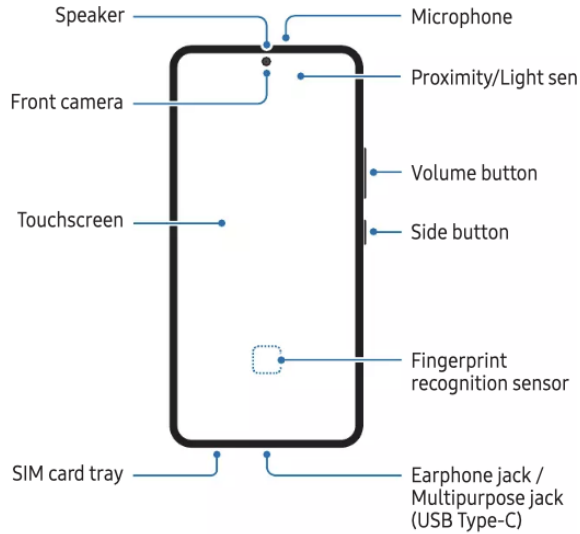
All Samsung Galaxy phones have a speaker and a microphone so that the device can be used for phone calls where the user of the Samsung phone can listen via the phone's speaker(s) to what others say and can speak into the phone's microphone(s) so that others can hear the user of the phone.

The Galaxy S22 series phones also include at least a speaker and a microphone.



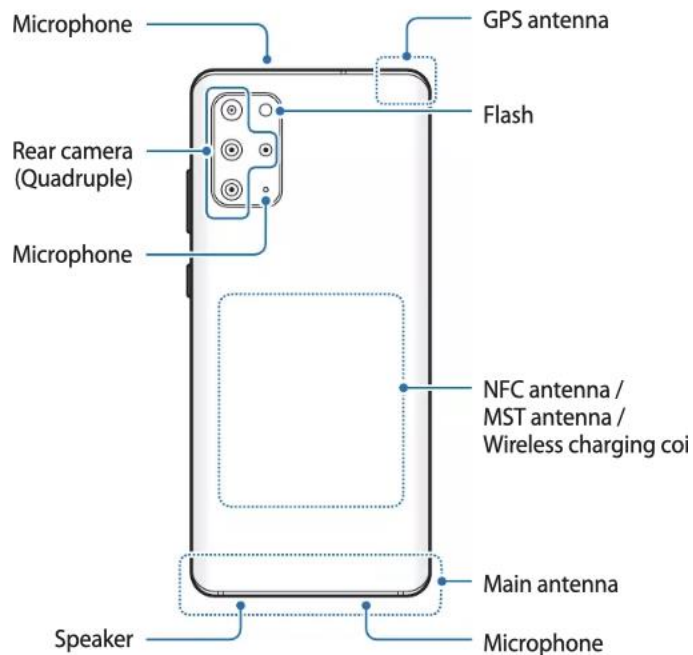
Available at: <https://www.manua.ls/samsung/galaxy-s22-5g/manual?p=8> (Galaxy S22 User Manual at p. 8).

The Galaxy S21 series phones also include at least a speaker and a microphone.



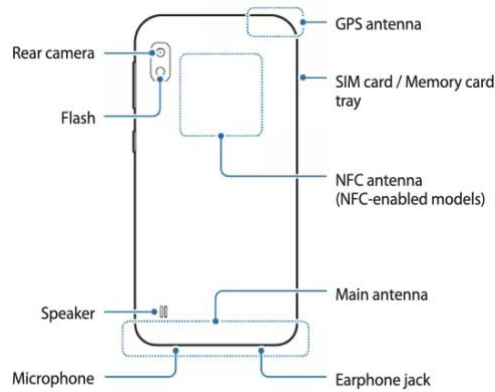
Available at: <https://www.manua.ls/samsung/galaxy-s21-5g/manual?p=8> (Galaxy S21 User Manual at p. 8).

The Galaxy S20 series phones also include at least a speaker and a microphone.



Available at: <https://www.manua.ls/samsung/galaxy-s20/manual?p=12> (Galaxy S20 User Manual at p. 12).

The Galaxy A series phones also include at least a speaker and a microphone.



Available at: <https://www.manua.ls/samsung/galaxy-a10/manual?p=11> (Galaxy A10 User Manual at p. 11).

The Galaxy Z Flip series phones also include at least a speaker and a microphone.

Device layout

Unfolded

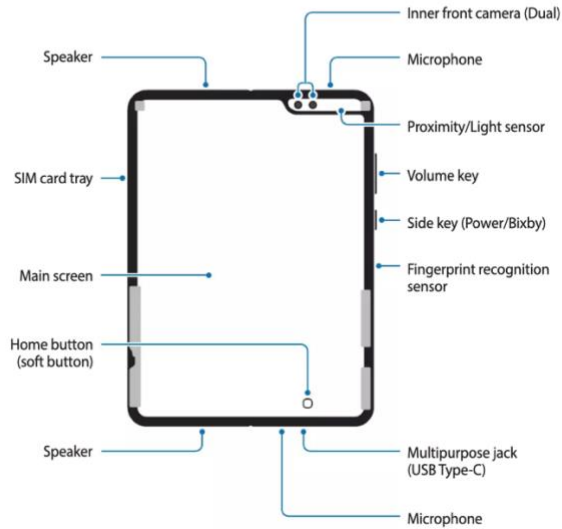


Available at: <https://www.manua.ls/samsung/galaxy-z-flip/manual?p=10> (Galaxy A Flip User Manual at p. 10).

The Galaxy Z Fold series phones also include at least a speaker and a microphone.

Device layout

Unfolded

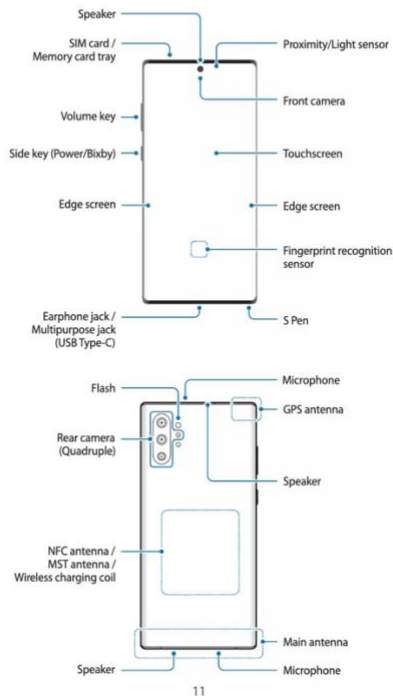


Available at: <https://www.manua.ls/samsung/galaxy-fold/manual?p=11>.

The Galaxy Note series phones also include at least a speaker and a microphone.

Device layout

► Galaxy Note10+:



Available at: <https://www.manua.ls/samsung/galaxy-note10+/manual?p=11> (Galaxy Note10+ User Manual at p. 11).

The arguments, evidence, and functionality cited for this limitation have been demonstrated by exemplary models of the Accused Instrumentalities but apply equally to all Accused Instrumentalities.

[9f.1] wherein said display unit, practically occupying the entire front surface of the mobile phone, is integrated within said mobile phone and

The Accused Instrumentalities have a display unit that practically occupies the entire front surface of the mobile phone and is integrated within the mobile phone.

See, e.g., [1c]. The discussion and evidence disclosed in the section on [1c] is incorporated here by reference.

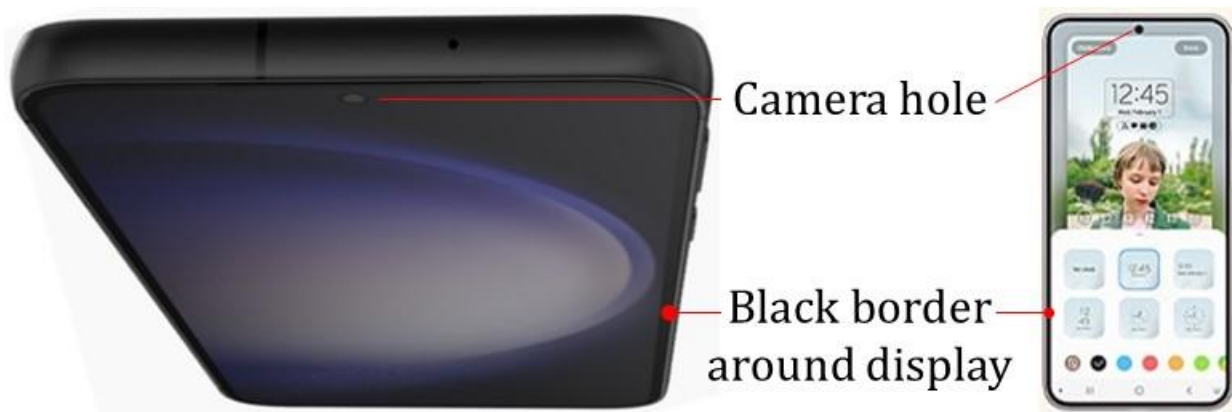
[9f.2] wherein said front surface of the mobile phone does not have a physical button and wherein said mobile phone does not have a physical keyboard to enter text, and

The Accused Instrumentalities have a front surface of the mobile phone that does not have a physical button.

See, e.g., [1d]. The discussion and evidence disclosed in the section on [1d] is incorporated here by reference.

The Mobile Phone Accused Instrumentalities include “wherein said mobile phone does not have a physical keyboard to enter text.”

For example, the S23’s display unit occupies nearly the entire front surface of the mobile phone, except for the camera hole, and the black border around the display, and is integrated within the mobile phone. The S23 has no physical button or keyboard located on its front surface.



KL0016450-KL0016460; also available at: <https://www.samsung.com/us/smartphones/galaxy-s23/> (after selecting “SEE IN 360” button) (after selecting “SEE IN 360” button).

The same is true of the S24 series.

Samsung



S24

S24+

S24 Ultra

S24 FE

The same is true of the S23 series.



S23

S23+

S23 Ultra

S23 FE

The same is true of the S22 series.

Samsung



S22

S22+

S22 Ultra

The same is true of the S21 series.



S21

S21+

S21 Ultra

S21 FE

The same is true of the S20 series.

Samsung



S20

S20+

S20 Ultra

S20 FE

The same is true of the Galaxy A series.



A10

A20

A50

A51

A54

A70

A71

The same is true of the Z Flip series. Note that the front of the phone is visible when the flip phone is unfolded.

Samsung



Z Flip

Z Flip 5G

Z Flip3

Z Flip4

Z Flip5

The same is true of the Z Fold series. Note that the front of the phone is visible when the phone is folded.



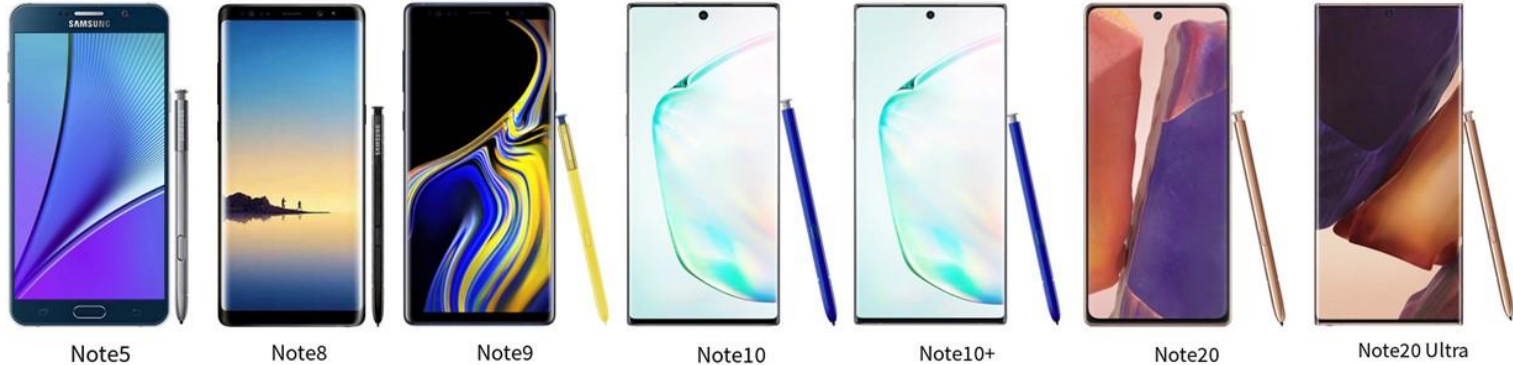
Z Fold2

Z Fold3

Z Fold4

Z Fold5

The same is true of the Note series.



Photos of phones available at: <https://www.samsung.com/us/smartphones/galaxy-s24-ultra/compare>.

The same is true of the XCover6 Pro.



Available at: <https://www.samsung.com/us/smartphones/galaxy-xcover/buy/?modelCode=SM-G736UZKEXAA>.

The arguments, evidence, and functionality cited for this limitation have been demonstrated by exemplary models of the Accused Instrumentalities but apply equally to all Accused Instrumentalities.

[9g] wherein said display unit is adapted to display text, entered through the virtual keyboard, in

The Accused Instrumentalities have a display unit adapted to display text, entered through the virtual keyboard, in landscape direction and in portrait direction when the mobile phone is used, respectively, in landscape position and in portrait position.

See, e.g., [9d] and [5]. The discussion and evidence disclosed in [9d] and [5] are incorporated here by reference.

An analysis of source code may be necessary to fully and accurately describe functionality of the Accused Products with respect to this limitation and, accordingly, Plaintiff reserves the right to supplement these infringement contentions once such information is made

U.S. Patent No. 11,503,144	Samsung
<p>landscape direction and in portrait direction when the mobile phone is used, respectively, in landscape position and in portrait position.</p>	<p>available to Plaintiff.</p>
<p>[10] The mobile phone of claim 9, wherein the distance between said microphone and said speaker corresponds to the distance between the ear and the mouth of a user.</p>	<p>In the Accused Instrumentalities the distance between said microphone and said speaker corresponds to the distance between the ear and the mouth of a user.</p> <p><i>See, e.g.</i>, [1b.2], [9b.2], and [9e]. The discussion and evidence disclosed in [1b.2], [9b.2], and [9e] is incorporated here by reference.</p> <p>The “length of the front surface” (see [1b.2], [9b.2], [9e]) is approximately the same as “the distance between said microphone and said speaker” when the Mobile Phone Accused Instrumentalities include a microphone at or near the top of the phone, and a speaker at or near the bottom of the phone, or vice versa. The Mobile Phone Accused Instrumentalities typically include both a microphone and speaker at or near the top, and a microphone and speaker at or near the bottom.</p> <p>For example, the S23 includes at least two microphones, at the top and bottom of the phone.</p>

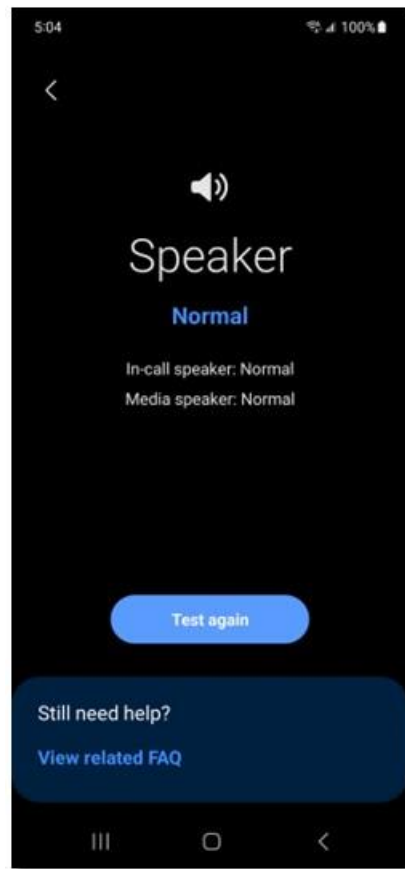


- ① Microphone
- ② Microphone
- ③ Microphone
- ⑤ Microphone
- ⑥ Microphone
- ⑧ Microphone

There are 2 microphones built into this phone.

KL0016408-KL0016413; also available at: <https://www.samsung.com/my/support/mobile-devices/how-can-i-improve-the-sound-of-a-voice-call-with-a-galaxy-s23/> (after expanding “The sound of a voice call with a Galaxy S23 device is noticeably quiet” dropdown).

For example, the S23 includes at least two speakers, one speaker at the bottom of the phone, and another speaker above the camera hole on the front of the phone.



KL0016408-KL0016413; KL0016450-KL0016460; also available at: <https://www.samsung.com/my/support/mobile-devices/how-can-i-improve-the-sound-of-a-voice-call-with-a-galaxy-s23/> (after expanding “I am using a non-genuine screen protector and call volume is quiet” dropdown); https://downloadcenter.samsung.com/content/UM/202302/20230207045923682/SAM_S911_S916_S918_EN_UM_OS13_020223_FINAL.pdf (Galaxy S23|S23+|S23 Ultra user manual at p. 7); <https://www.samsung.com/us/smartphones/galaxy-s23/> (after selecting “SEE IN 360” button.(after selecting “SEE IN 360” button).



KL0016408-KL0016413; KL0016414-KL0016441; KL0016925-KL0016933; also available at:
<https://www.samsung.com/my/support/mobile-devices/how-can-i-improve-the-sound-of-a-voice-call-with-a-galaxy-s23/> (after
expanding “The sound of a voice call with a Galaxy S23 device is noticeably quiet” dropdown);
<https://www.samsung.com/ie/support/mobile-devices/how-do-i-use-the-call-functions-on-my-device/>);
<https://www.samsung.com/us/support/troubleshooting/TSG01001240/>.

The arguments, evidence, and functionality cited for this limitation have been demonstrated by exemplary models of the Accused Instrumentalities but apply equally to all Accused Instrumentalities.

[11] The mobile phone of claim 9, wherein said practically rectangular shape has rounded corners.

The Accused Instrumentalities have a practically rectangular shape with rounded corners.




See, e.g., [2]. The discussion and evidence disclosed in the section on [2] is incorporated here by reference.




[12] The mobile phone of claim 9, wherein plurality of icons corresponding to plurality of applications are displayed on said display unit, and

The Accused Instrumentalities include a plurality of icons corresponding to plurality of applications displayed on the display unit, and a sweeping action on said display unit causes the plurality of other icons corresponding to plurality of other applications are displayed on the display unit.

See, e.g., [3]. The discussion and evidence disclosed in the section on [3] is incorporated here by reference.

U.S. Patent No. 11,503,144	Samsung
<p>wherein upon providing a sweeping action on said display unit, plurality of other icons corresponding to plurality of other applications are displayed on said display unit.</p>	
<p>[13] The mobile phone of claim 12, wherein upon providing a predefine interaction with an icon, the corresponding application is opened on the screen.</p>	<p>In the Accused Instrumentalities when a user performs a predefined interaction with an icon, the corresponding application is opened on the screen.</p> <p><i>See, e.g.</i>, [4]. The discussion and evidence disclosed in the section on [4] is incorporated here by reference.</p>
<p>[14] The mobile phone of claim 9, wherein said components of the mobile phone are integrated within the body such that none of said components is significantly extended out</p>	<p>The Accused Instrumentalities include mobile phone components that are integrated within the body such that none of the components significantly extends out from the body.</p> <p><i>See, e.g.</i>, [1e]. The discussion and evidence disclosed in the section on [1e] is incorporated here by reference.</p>

U.S. Patent No. 11,503,144	Samsung
from the body.	
[15a] A mobile phone device, comprising:	<p>The Accused Instrumentalities include a mobile phone device.</p> <p><i>See, e.g., [1a].</i> The discussion and evidence disclosed in the section on [1a] is incorporated here by reference.</p>
[15b] a body having a practically rectangular shape;	<p>The Accused Instrumentalities include a body having a practically rectangular shape.</p> <p><i>See, e.g., [1b.1].</i> The discussion and evidence disclosed in the section on [1b.1] is incorporated here by reference.</p>
[15c] a processor; and	<p>The Accused Instrumentalities include a processor.</p> <p>For example, the Galaxy S24 series has a Snapdragon 8 Gen 3 processor.</p> <div data-bbox="422 651 1906 1123" style="border: 1px solid #ccc; padding: 10px; margin: 10px 0;"> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Samsung Galaxy S24 Ultra</p> <p>Processor</p>  <p>Snapdragon 8 Gen 3 Mobile Platform for Galaxy</p> </div> <div style="text-align: center;"> <p>Samsung Galaxy S24+</p>  <p>Snapdragon 8 Gen 3 Mobile Platform for Galaxy</p> </div> <div style="text-align: center;"> <p>Samsung Galaxy S24</p>  <p>Snapdragon 8 Gen 3 Mobile Platform for Galaxy</p> </div> </div> </div> <p>Available at: https://www.samsung.com/us/smartphones/galaxy-s24-ultra/compare.</p> <p>Accused Instrumentalities include some form of application processor. For example:</p>

U.S. Patent No. 11,503,144	Samsung		
	<p data-bbox="438 175 814 245">Samsung Galaxy S21 Ultra 5G</p>  <p data-bbox="470 480 825 558">Octa-Core (2.8GHZ, 2.4GHZ, 1.8GHZ)</p>	<p data-bbox="978 175 1354 245">Samsung Galaxy Note20 5G</p>  <p data-bbox="957 480 1373 558">Octa-Core (3.1GHZ, 2.4GHZ, 1.8GHZ)</p>	<p data-bbox="1514 175 1890 245">Samsung Galaxy Z Fold3 5G</p>  <p data-bbox="1528 480 1835 521">Snapdragon 888</p>
<p data-bbox="86 787 306 1175">[15d] a display unit, said display unit occupying practically the entire surface of the front surface of said device is integrated within said device;</p>	<p data-bbox="306 787 2028 850">Available at: https://www.samsung.com/us/smartphones/galaxy-s24-ultra/compare.</p> <p data-bbox="306 873 2028 937">The arguments, evidence, and functionality cited for this limitation have been demonstrated by exemplary models of the Accused Instrumentalities but apply equally to all Accused Instrumentalities.</p> <p data-bbox="306 959 2028 1023">The Accused Instrumentalities include a display unit that occupies practically the entire surface of the front surface of the device and is integrated within the device.</p> <p data-bbox="306 1045 2028 1109"><i>See, e.g., [1c].</i> The discussion and evidence disclosed in the section on [1c] is incorporated here by reference.</p>		
<p data-bbox="86 1188 306 1503">[15e] wherein plurality of icons corresponding to a plurality of applications are displayed by said processor on said display</p>	<p data-bbox="306 1188 2028 1252">The Accused Instrumentalities include a plurality of icons corresponding to a plurality of applications that are displayed by a processor on the display unit.</p> <p data-bbox="306 1274 2028 1338"><i>See, e.g., [3].</i> The discussion and evidence disclosed in the section on [3] is incorporated here by reference.</p>		

U.S. Patent No. 11,503,144	Samsung
<p>unit; and</p> <p>[15f] wherein upon identifying an input corresponding to a sweeping action provided on a touch sensitive surface of said device, said processor displays plurality of other icons corresponding to plurality of other applications on said display unit.</p>	<p>In the Accused Instrumentalities when an input corresponding to a sweeping action provided on a touch sensitive surface of the device is identified, the processor displays a plurality of other icons corresponding to plurality of other applications on the display unit.</p> <p><i>See, e.g.</i>, [3]. The discussion and evidence disclosed in the section on [3] is incorporated here by reference.</p>
<p>[16] The device of claim 15, wherein said display unit is touch sensitive and wherein said sweeping action is provided on said display unit.</p>	<p>The Accused Instrumentalities have a display unit that is touch sensitive where a sweeping action can be performed on the display unit.</p> <p>For example, every accused instrumentality has a touch sensitive display unit, and the sweeping action is performed on the touch sensitive display.</p> <p><i>See, e.g.</i>, [3] and [9c]. The discussion and evidence disclosed in the section on [3] and [9c] is incorporated here by reference.</p>
<p>[17] The device of claim 15, wherein upon providing a predefined interaction with an icon, the</p>	<p>In the Accused Instrumentalities when a user performs a predefined interaction with an icon, the corresponding application is opened on the screen.</p> <p><i>See, e.g.</i>, [4]. The discussion and evidence disclosed in the section on [4] is incorporated here by reference.</p>

U.S. Patent No. 11,503,144	Samsung
corresponding application is opened on the screen.	
[18] The device of claim 15, wherein said device does not include a physical key on the front surface of the device.	<p>The Accused Instrumentalities do not include a physical key on the front surface of the device.</p> <p><i>See, e.g.</i>, [1d]. The discussion and evidence disclosed in the section on [1d] is incorporated here by reference.</p>
[19] The device of claim 15, wherein said components of the mobile phone are integrated within the body such that none of said components is noticeably extended out from said the body.	<p>The Accused Instrumentalities have mobile phone components that are integrated within the body such that none of these components is noticeably extended out from the body.</p> <p><i>See, e.g.</i>, [1e]. The discussion and evidence disclosed in the section on [1e] is incorporated here by reference.</p>
[20] The device of claim 15, wherein said display unit is adapted to display text entered through a keyboard in landscape direction and in	<p>The Accused Instrumentalities include a display unit adapted to display text entered through a keyboard in landscape direction and in portrait direction on the display unit when the device is used, respectively, in landscape position and in portrait position.</p> <p><i>See, e.g.</i>, [5]. The discussion and evidence disclosed in the section on [5] is incorporated here by reference.</p>

**U.S. Patent No.
11,503,144**

Samsung

portrait direction
on said display
unit when the
device is used,
respectively, in
landscape
position and in
portrait position.