

**IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF ILLINOIS**

**ARABILITY IP LLC**

Plaintiff,

v.

**LG ELECTRONICS U.S.A., INC.,**

Defendant.

C.A. No. 1:22-cv-03886

**JURY TRIAL DEMANDED**

**PATENT CASE**

**ORIGINAL COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff Arability IP LLC. files this Original Complaint for Patent Infringement against LG Electronics U.S.A., Inc. and would respectfully show the Court as follows:

**I. THE PARTIES**

1. Plaintiff Arability IP LLC (“Arability” or “Plaintiff”) is a Texas limited liability company having an address at 6009 W Parker Rd, Ste 149 - 1023, Plano, TX 75093.

2. On information and belief, Defendant LG Electronics U.S.A., Inc. (“Defendant”) has a place of business at 1001 Johnson Drive, Buffalo Grove, IL 60089. Defendant has a registered agent at United States Corporation Company of Illinois, 801 Adlai Stevenson Drive, Springfield, IL 62703.

**II. JURISDICTION AND VENUE**

3. This action arises under the patent laws of the United States, Title 35 of the United States Code. This Court has subject matter jurisdiction of such action under 28 U.S.C. §§ 1331 and 1338(a).

4. On information and belief, Defendant is subject to this Court’s specific and general personal jurisdiction, pursuant to due process and the Illinois Long-Arm Statute, due at least to its

business in this forum, including at least a portion of the infringements alleged herein, at 1001 Johnson Drive, Buffalo Grove, IL 60089.

5. Without limitation, on information and belief, within this Illinois, Defendant has used the patented inventions thereby committing, and continuing to commit, acts of patent infringement alleged herein. In addition, on information and belief, Defendant has derived revenues from its infringing acts occurring within Illinois. Further, on information and belief, Defendant is subject to the Court's general jurisdiction, including from regularly doing or soliciting business, engaging in other persistent courses of conduct, and deriving substantial revenue from goods and services provided to persons or entities in Illinois. Further, on information and belief, Defendant is subject to the Court's personal jurisdiction at least due to its sale of products and/or services within Illinois. Defendant has committed such purposeful acts and/or transactions in Illinois such that it reasonably should know and expect that it could be haled into this Court as a consequence of such activity.

6. Venue is proper in this district under 28 U.S.C. § 1400(b). On information and belief, Defendant has businesses in this district at 1001 Johnson Drive, Buffalo Grove, IL 60089. On information and belief, from and within this District Defendant has committed at least a portion of the infringements at issue in this case.

7. For these reasons, personal jurisdiction exists, and venue is proper in this Court under 28 U.S.C. § 1400(b).

**III. COUNT I**  
**(PATENT INFRINGEMENT OF UNITED STATES PATENT NO. 11,262,908)**

8. Plaintiff incorporates the above paragraphs herein by reference.

9. On March 1, 2022, United States Patent No. 11,262,908 ("the '908 Patent") was duly and legally issued by the United States Patent and Trademark Office. The '908 Patent is titled

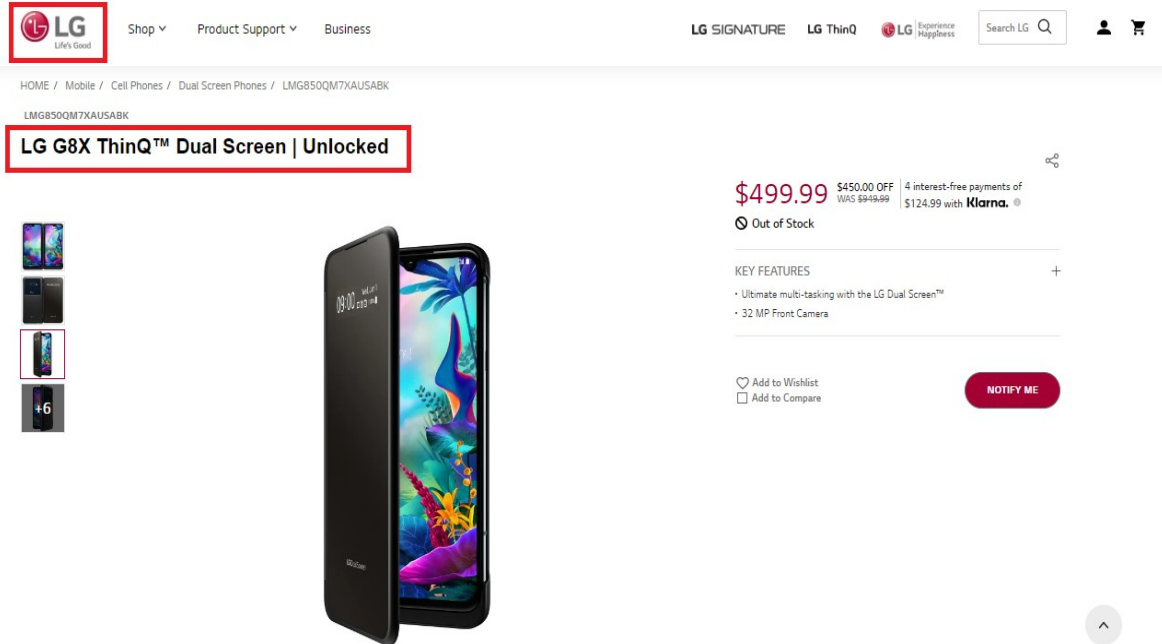
“Method of Adjusting an UI and User Terminal Using the Same.” A true and correct copy of the ‘908 Patent is attached hereto as Exhibit A and incorporated herein by reference.

10. Arability is the assignee of all right, title, and interest in the ‘908 patent, including all rights to enforce and prosecute actions for infringement and to collect damages for all relevant times against infringers of the ‘908 Patent. Accordingly, Arability possesses the exclusive right and standing to prosecute the present action for infringement of the ‘908 Patent by Defendant.

11. The invention in the ‘908 Patent relates to the field of user interfaces (“UI”) and adjusting the UI for a user terminal. (Ex. A at 1:25-26).

12. The invention solves the problem of UIs failing to provide a sufficient interface to allow one handed use. (*Id.* at 1:30-37). In recent times the display size of smart phones has increased making it easier to view video clips and other visual displays. (*Id.* at 1:30-30-32). However, as the size of the smartphones get larger, it becomes more difficult to manipulate the smartphone with one hand. (*Id.* at 1:32-33). When manipulating a smart phone with one hand, the thumb is used in most cases, but since the thumb is shorter compared to the other fingers, manipulation of the smartphone display becomes more difficult as the display size increases. (*Id.* at 1:33-37). The inventors therefore created a new method for adjusting a user interface to allow the screen to be more easily manipulated using one hand and with a thumb. (*Id.* at 1:65-2:3).

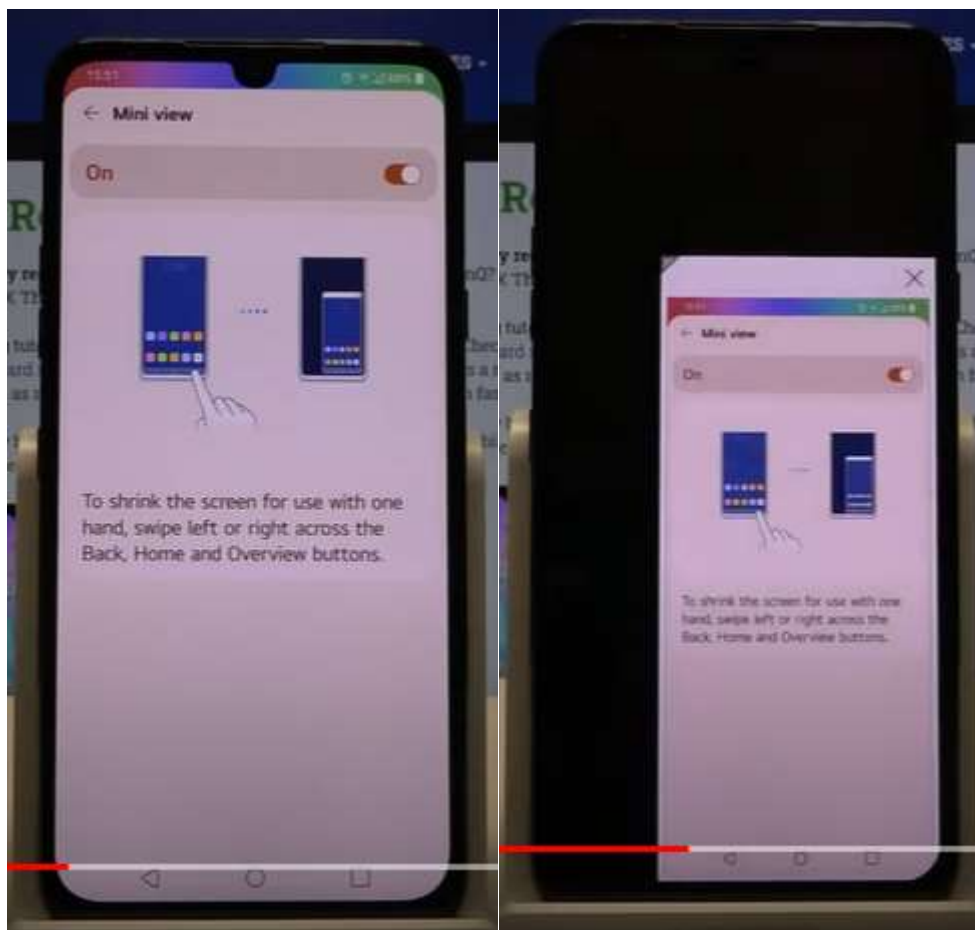
13. **Direct Infringement.** Upon information and belief, Defendant has been directly infringing claims 1-2, 4-5, and 8-9 of the ‘908 Patent in Illinois, and elsewhere in the United States, by performing the claimed method for adjusting a user interface on a user terminal using the LG G8X ThinQ (“Accused Instrumentality”):



(E.g., <https://www.lg.com/us/cell-phones/lg-lmg850qm7xausabk-unlocked-g8x-thinq-dual-screen>).

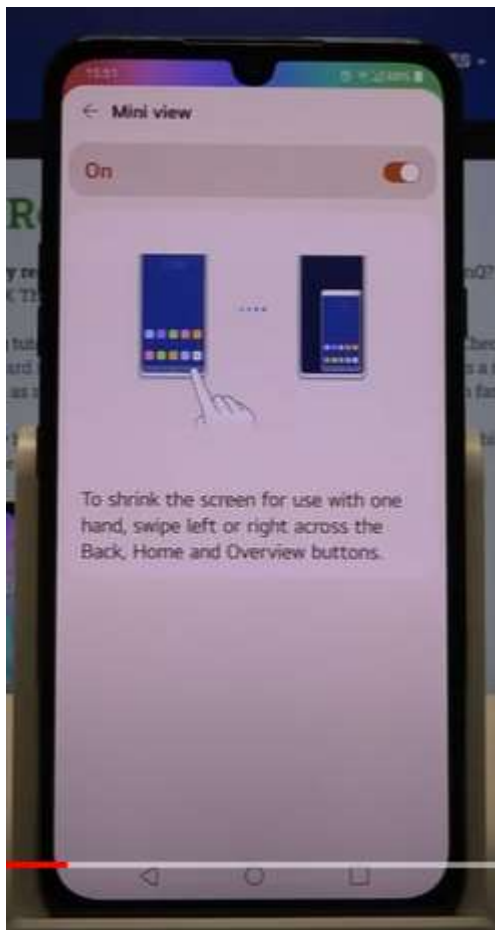
- **Auto-rotate screen:** Automatically rotate the screen according to the device's orientation.
- **Screen saver:** Display a screen saver when the device is connected to the holder or charger. Select a screen saver type to display.
- **Mini view:** Make the screen size smaller to conveniently use the device with one hand. Drag the Home touch button at the bottom of the screen to the left or right.

(E.g., [https://www.sprint.com/content/dam/sprint/commerce/devices/lg/lg-g8x-thinq/documents/LM-G850UM\\_SPR\\_UG\\_Web\\_EN\\_V1.0\\_191021.pdf](https://www.sprint.com/content/dam/sprint/commerce/devices/lg/lg-g8x-thinq/documents/LM-G850UM_SPR_UG_Web_EN_V1.0_191021.pdf)).



(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).

14. As shown below, the Accused Instrumentality performs the step of displaying a UI on a display unit of a user terminal (e.g., display screen of the Accused Instrumentality), wherein the display unit includes a screen that defines a screen size.



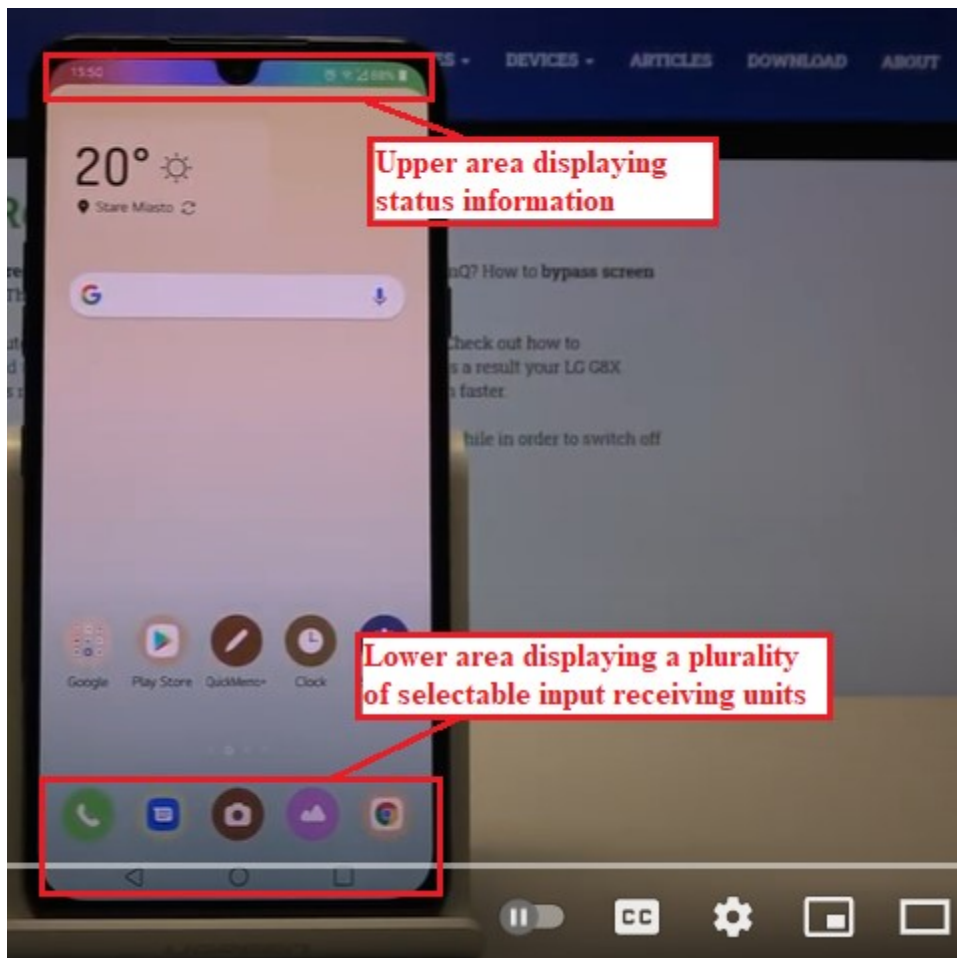
(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).

## TECHNICAL SPECIFICATIONS

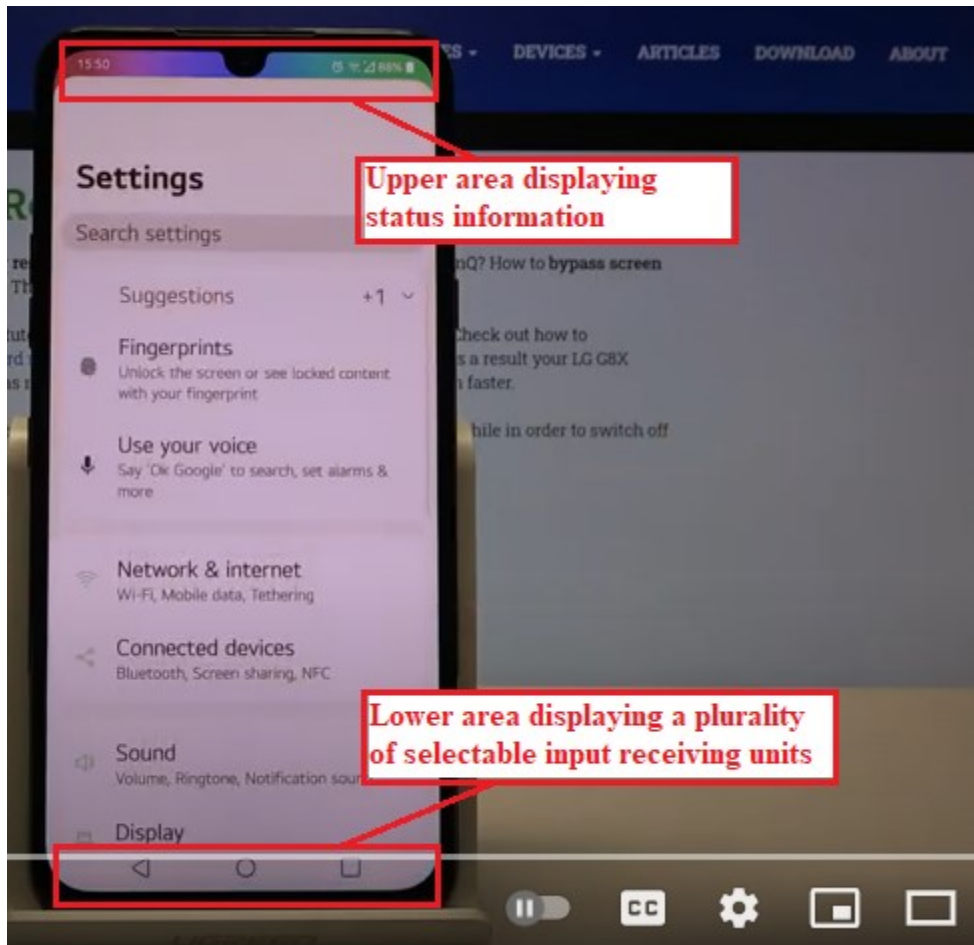
Display	6.4" FHD+ OLED Display (2340 x 1080, including notch)
Processor	Qualcomm Snapdragon™ 855 Octa-core
Frequencies	
Weight	6.79 oz.

(E.g., <https://www.lg.com/us/cell-phones/lg-lmg850qm7xausabk-unlocked-g8x-thinq-dual-screen>).

15. As shown below, the Accused Instrumentality performs the step of displaying a UI, wherein the UI includes an upper area displaying status information (e.g., battery, signal strength, etc.) pertaining to the user terminal, wherein the status information includes an indication of battery charge, and a lower area displaying a plurality of selectable input receiving units (e.g., input receiving interfaces); wherein the plurality of selectable input receiving units comprises one or more software applications (e.g., applications like phone, camera, etc.) represented by graphical icons (e.g., icons of applications); wherein a size of the upper area and lower area in relation to the UI defines a ratio. As shown, the upper area and lower area changes in proportion, during one-hand mode, defining a ratio.

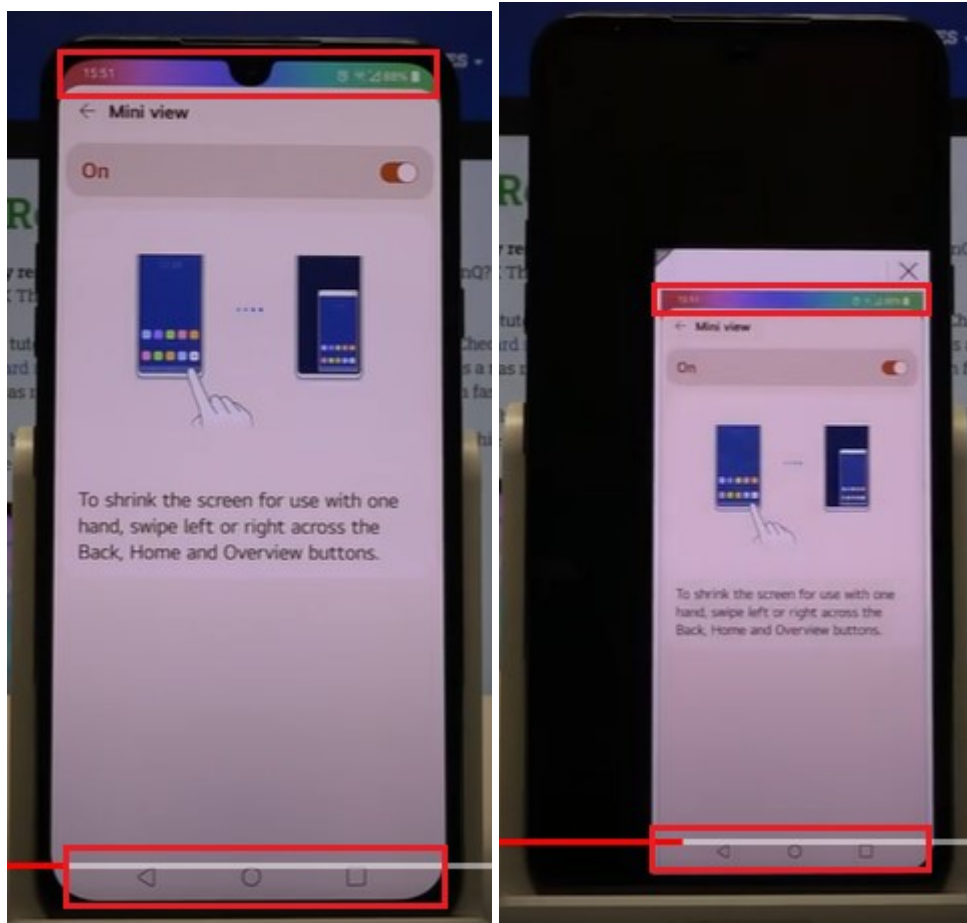


(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).



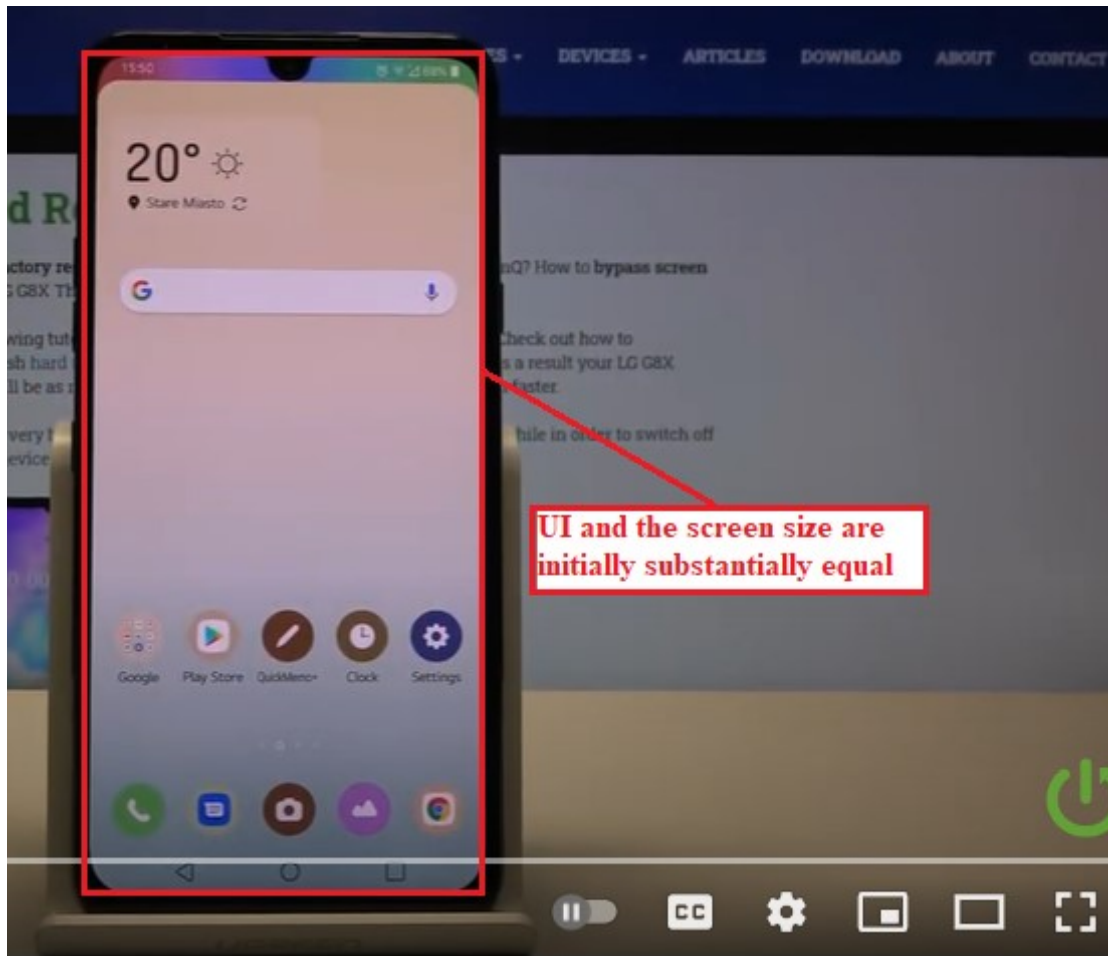
(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).



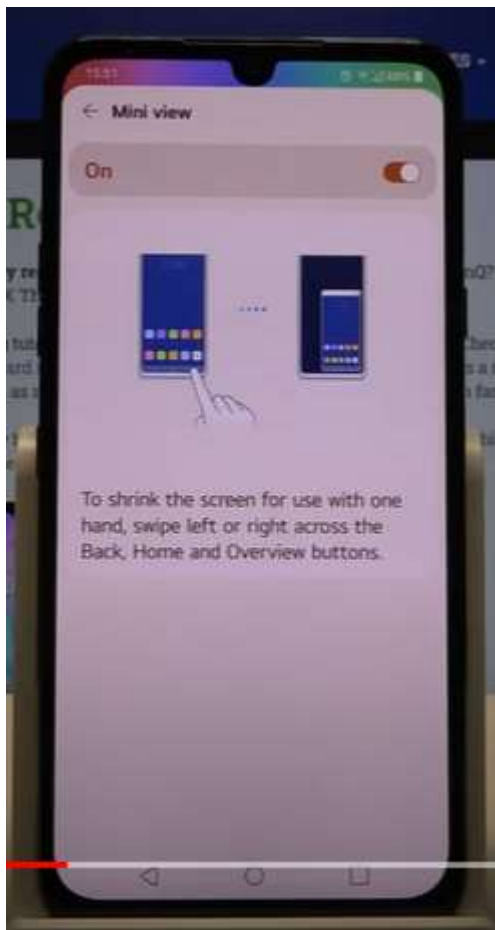


(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).

16. As shown below, the Accused Instrumentality performs the step of displaying a UI, wherein the UI and the screen size are initially substantially equal in size, thereby defining an initial UI size.



(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).

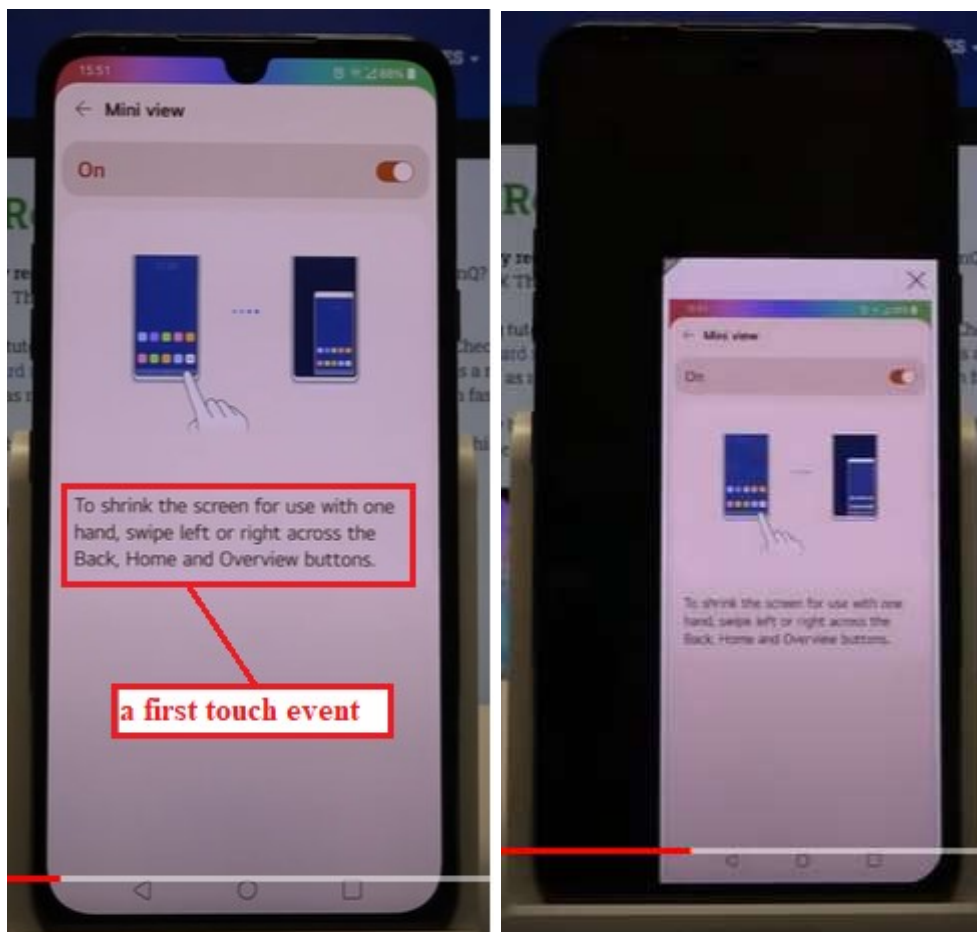


(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).

17. As shown below, the Accused Instrumentality performs the step of receiving a first touch event (e.g., swipe left or right across the Back, Home, and Overview buttons).

- **Auto-rotate screen:** Automatically rotate the screen according to the device's orientation.
- **Screen saver:** Display a screen saver when the device is connected to the holder or charger. Select a screen saver type to display.
- **Mini view:** Make the screen size smaller to conveniently use the device with one hand. Drag the Home touch button at the bottom of the screen to the left or right.

(E.g., [https://www.sprint.com/content/dam/sprint/commerce/devices/lg/lg-g8x-thing/documents/LM-G850UM\\_SPR\\_UG\\_Web\\_EN\\_V1.0\\_191021.pdf](https://www.sprint.com/content/dam/sprint/commerce/devices/lg/lg-g8x-thing/documents/LM-G850UM_SPR_UG_Web_EN_V1.0_191021.pdf)).

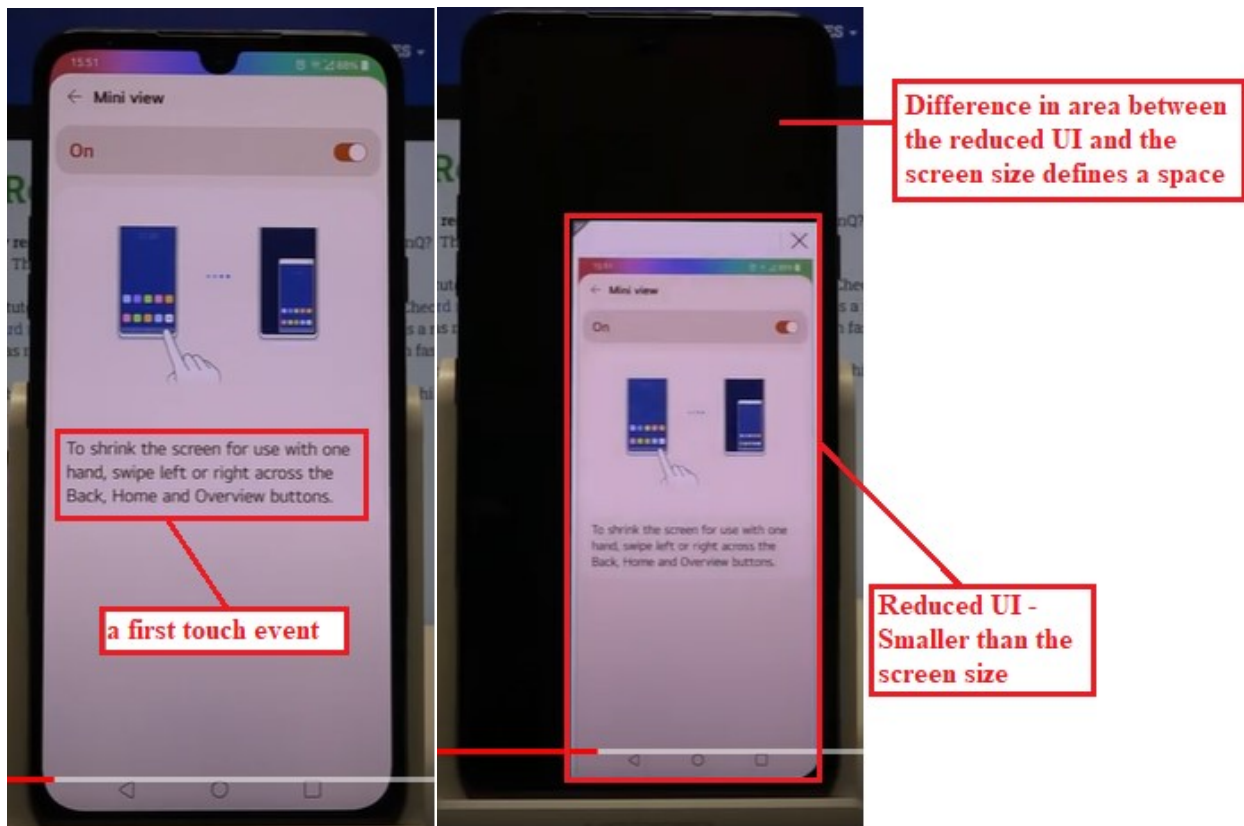


(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).

18. As shown below, the Accused Instrumentality performs the step of resizing the UI into a reduced form to define a reduced UI according to the first touch event (e.g., swiping down from the center to the bottom right or left corner), wherein the reduced UI is smaller than the screen size and wherein a difference in area between the reduced UI and the screen size defines a space.

- **Auto-rotate screen:** Automatically rotate the screen according to the device's orientation.
- **Screen saver:** Display a screen saver when the device is connected to the holder or charger. Select a screen saver type to display.
- **Mini view:** Make the screen size smaller to conveniently use the device with one hand. Drag the Home touch button at the bottom of the screen to the left or right.

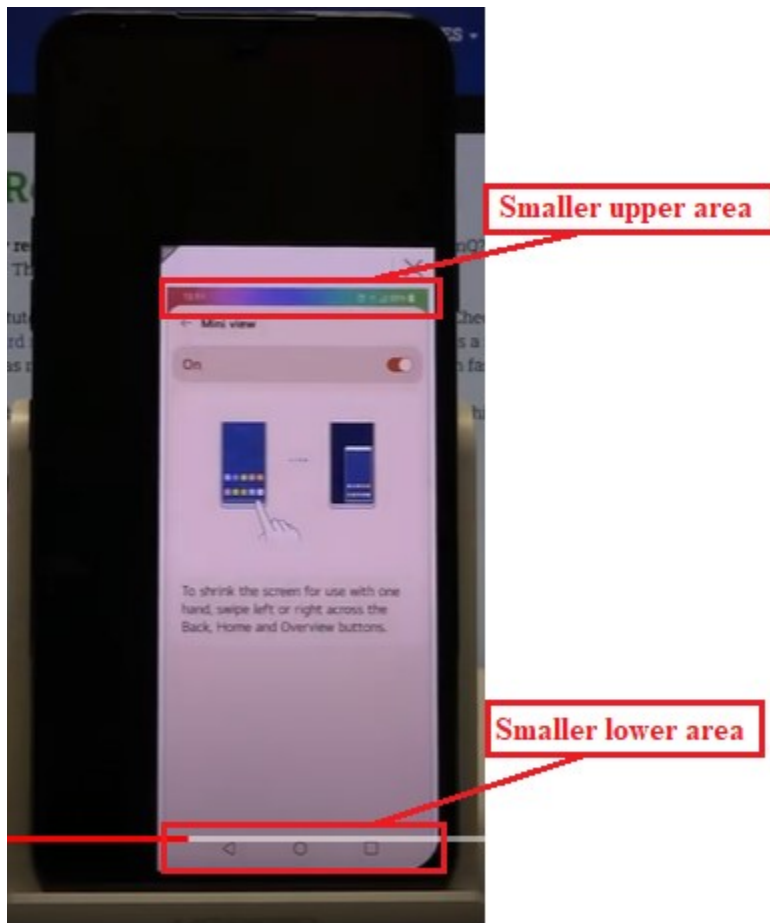
(E.g., [https://www.sprint.com/content/dam/sprint/commerce/devices/lg/lg-g8x-thing/documents/LM-G850UM\\_SPR\\_UG\\_Web\\_EN\\_V1.0\\_191021.pdf](https://www.sprint.com/content/dam/sprint/commerce/devices/lg/lg-g8x-thing/documents/LM-G850UM_SPR_UG_Web_EN_V1.0_191021.pdf)).



(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).

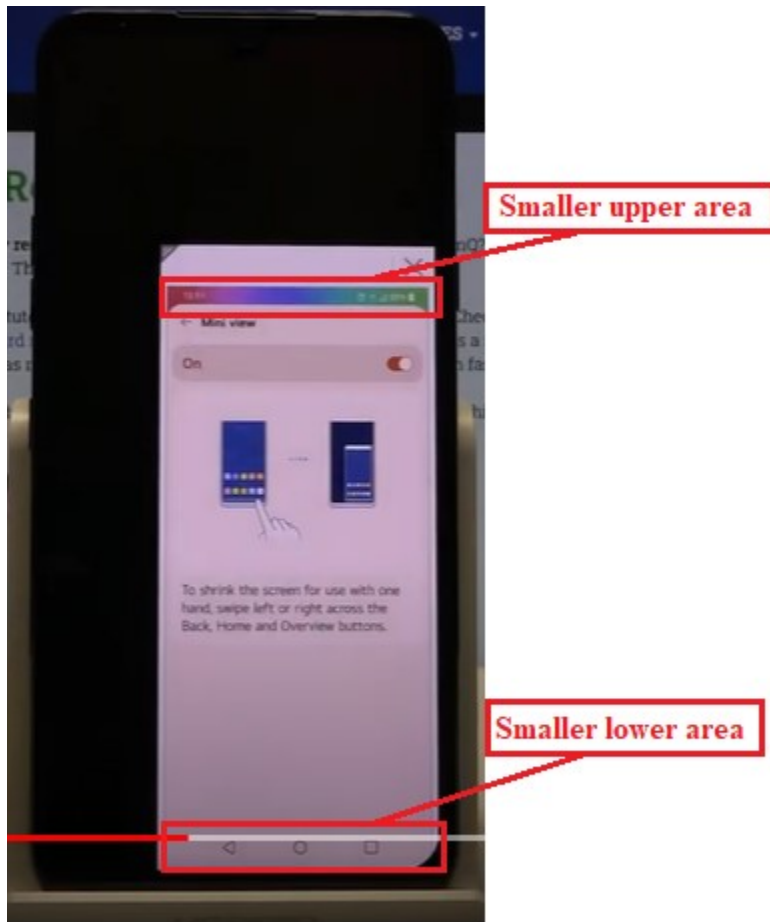
19. As shown below, the Accused Instrumentality performs the step of displaying the reduced UI wherein the reduced UI defines a smaller upper area and a smaller lower area, wherein a size of the smaller upper area and smaller lower area in relation to the reduced UI substantially

maintains the ratio. As shown below, the upper area and lower area changes in proportion, during one-hand mode, defining a ratio.

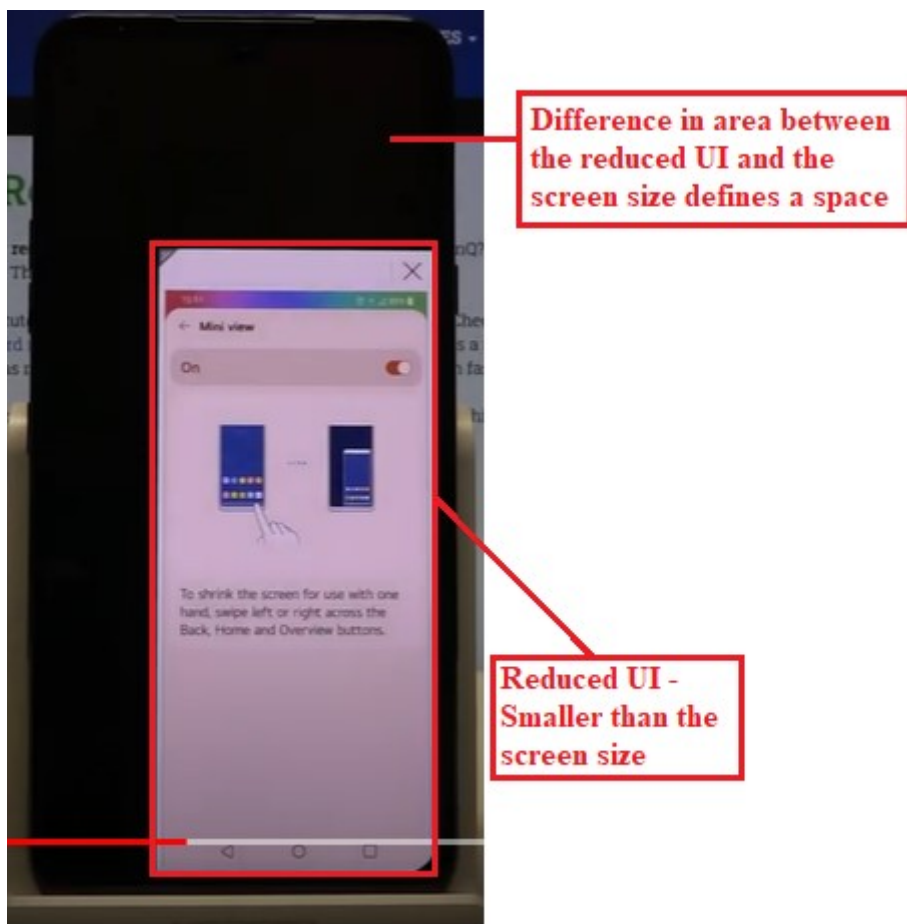


(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).

20. As shown below, the Accused Instrumentality performs the step of defining the space wherein the space excludes the smaller upper area and smaller lower area.



(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).



(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).

21. As shown below, the Accused Instrumentality performs the step of executing an application (e.g., phone, camera, settings, etc.) within the reduced UI when the application is requested to be executed by a user while the reduced UI is being displayed. As shown below, the Accused Instrumentality practices executing the settings application within the reduced UI.



- **Auto-rotate screen:** Automatically rotate the screen according to the device's orientation.
- **Screen saver:** Display a screen saver when the device is connected to the holder or charger. Select a screen saver type to display.
- **Mini view:** Make the screen size smaller to conveniently use the device with one hand. Drag the Home touch button at the bottom of the screen to the left or right.

(E.g., [https://www.sprint.com/content/dam/sprint/commerce/devices/lg/lg-g8x-thing/documents/LM-G850UM\\_SPR\\_UG\\_Web\\_EN\\_V1.0\\_191021.pdf](https://www.sprint.com/content/dam/sprint/commerce/devices/lg/lg-g8x-thing/documents/LM-G850UM_SPR_UG_Web_EN_V1.0_191021.pdf)).

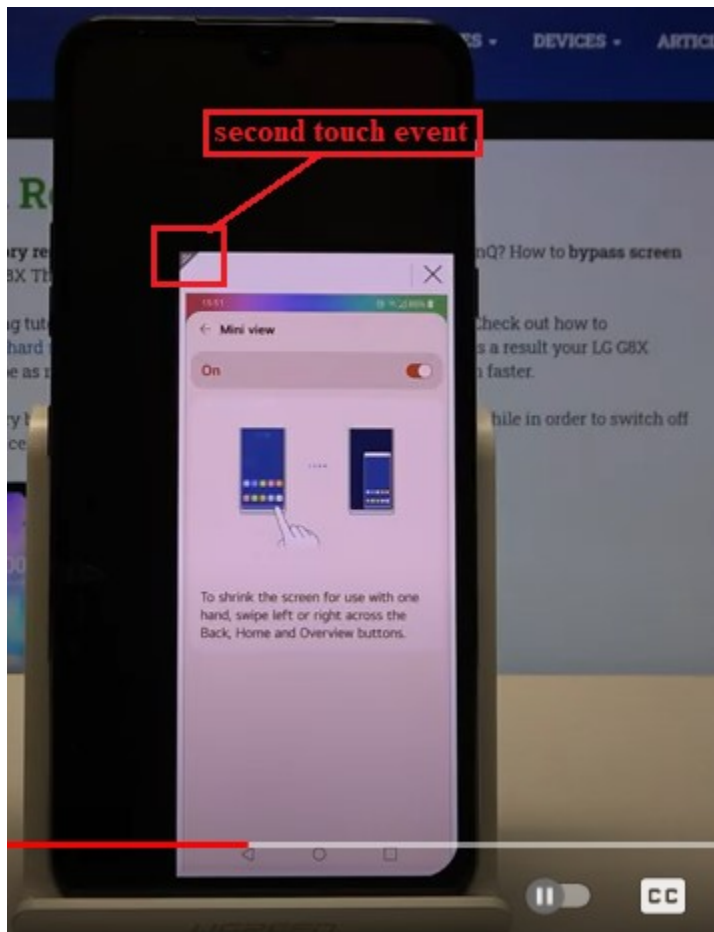


(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).

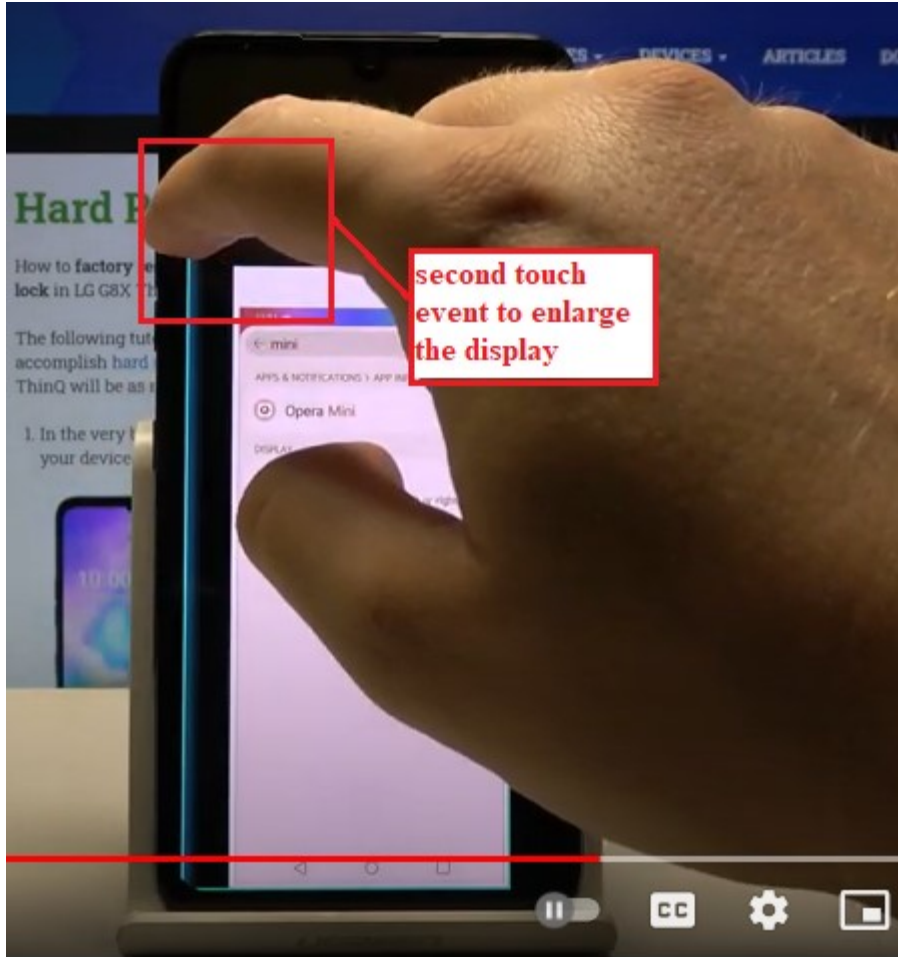
22. As shown below, the Accused Instrumentality performs the step of receiving a second touch event (e.g., a second touch event to enlarge the display).

- **Auto-rotate screen:** Automatically rotate the screen according to the device's orientation.
- **Screen saver:** Display a screen saver when the device is connected to the holder or charger. Select a screen saver type to display.
- **Mini view:** Make the screen size smaller to conveniently use the device with one hand. Drag the Home touch button at the bottom of the screen to the left or right.

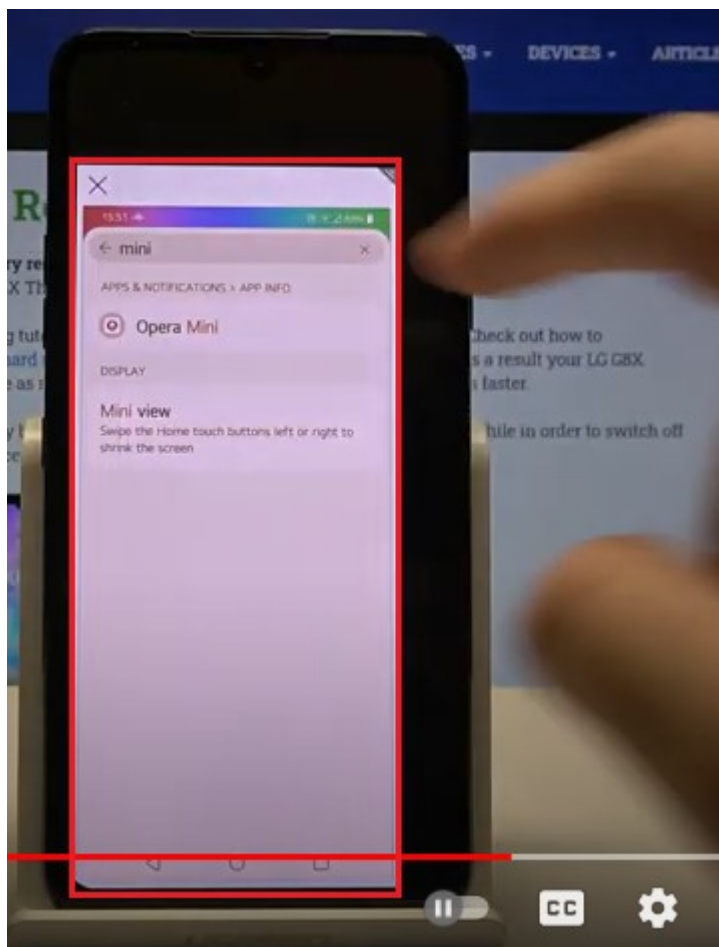
(E.g., [https://www.sprint.com/content/dam/sprint/commerce/devices/lg/lg-g8x-thing/documents/LM-G850UM\\_SPR\\_UG\\_Web\\_EN\\_V1.0\\_191021.pdf](https://www.sprint.com/content/dam/sprint/commerce/devices/lg/lg-g8x-thing/documents/LM-G850UM_SPR_UG_Web_EN_V1.0_191021.pdf)).



(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).



(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).

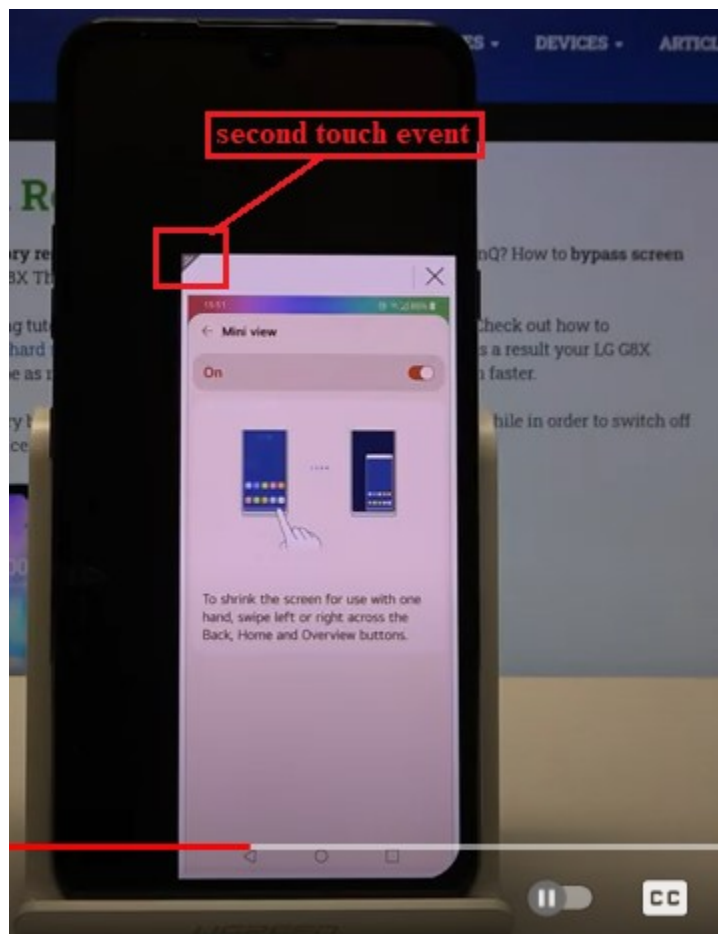


(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).

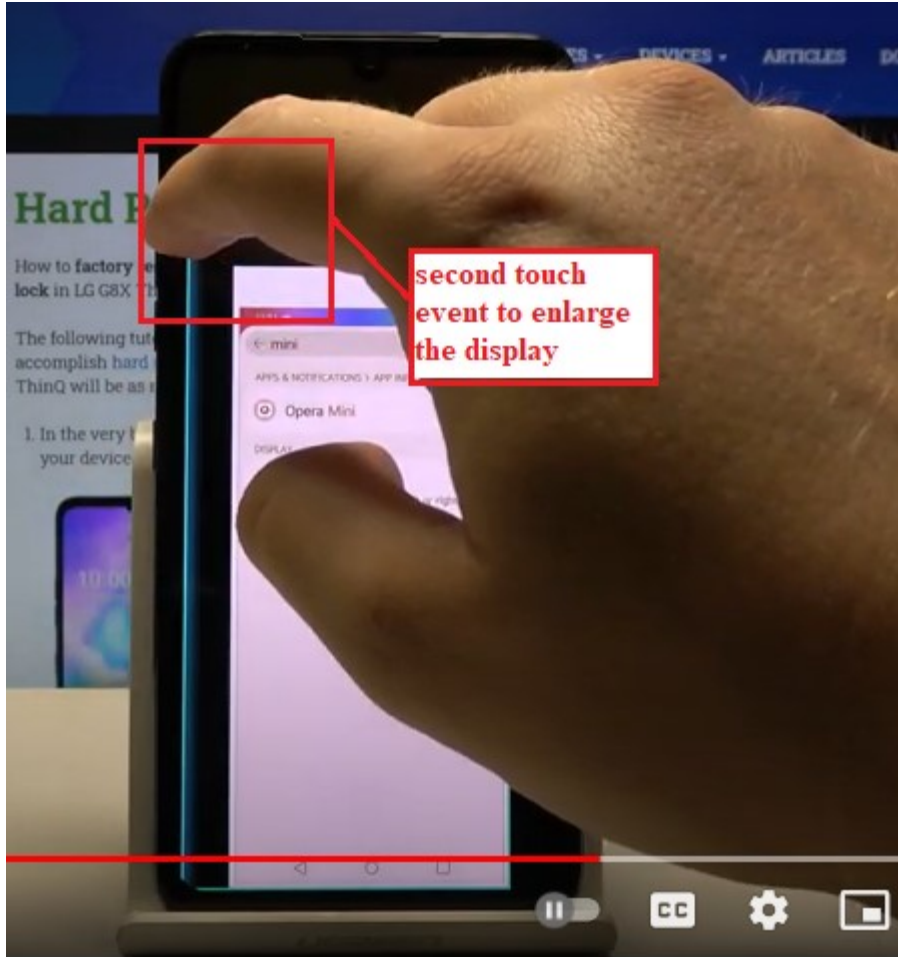
23. As shown below, the Accused Instrumentality performs the step of resizing the reduced UI into an enlarged UI according to the second touch event (e.g., a second touch event to enlarge the display), wherein the enlarged UI is larger than the reduced UI; wherein the enlarged UI defines an enlarged upper area and enlarged lower area.

- **Auto-rotate screen:** Automatically rotate the screen according to the device's orientation.
- **Screen saver:** Display a screen saver when the device is connected to the holder or charger. Select a screen saver type to display.
- **Mini view:** Make the screen size smaller to conveniently use the device with one hand. Drag the Home touch button at the bottom of the screen to the left or right.

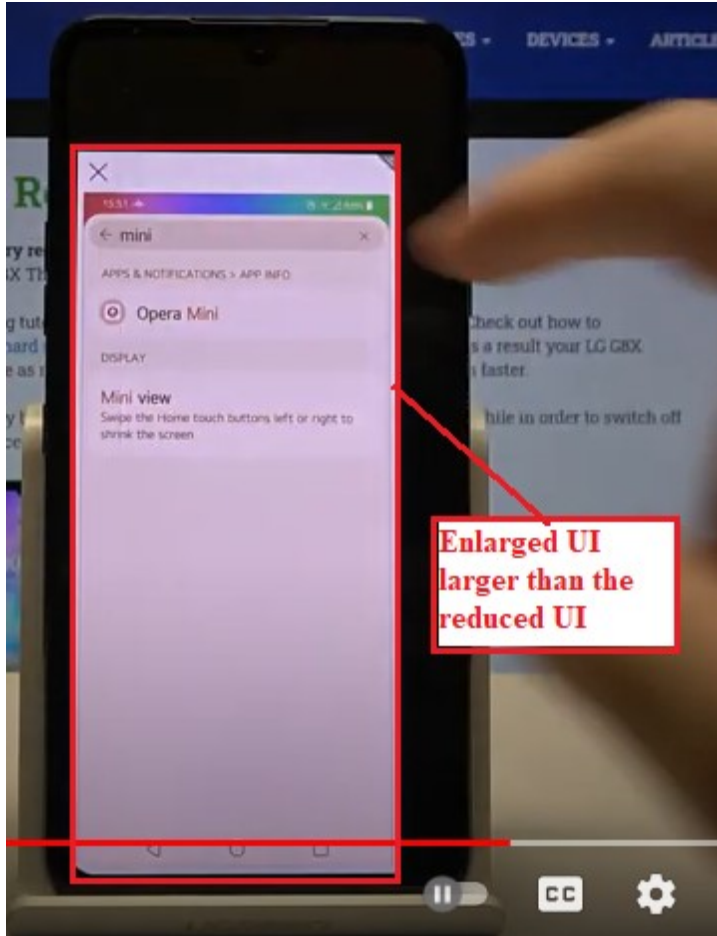
(E.g., [https://www.sprint.com/content/dam/sprint/commerce/devices/lg/lg-g8x-thing/documents/LM-G850UM\\_SPR\\_UG\\_Web\\_EN\\_V1.0\\_191021.pdf](https://www.sprint.com/content/dam/sprint/commerce/devices/lg/lg-g8x-thing/documents/LM-G850UM_SPR_UG_Web_EN_V1.0_191021.pdf)).



(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).

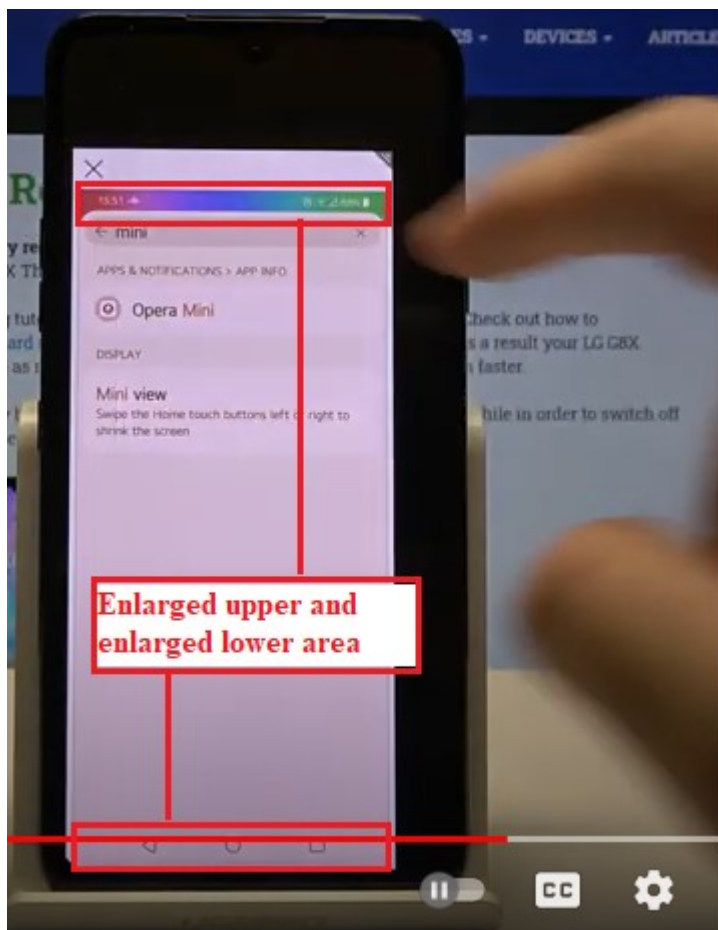


(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).



(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).

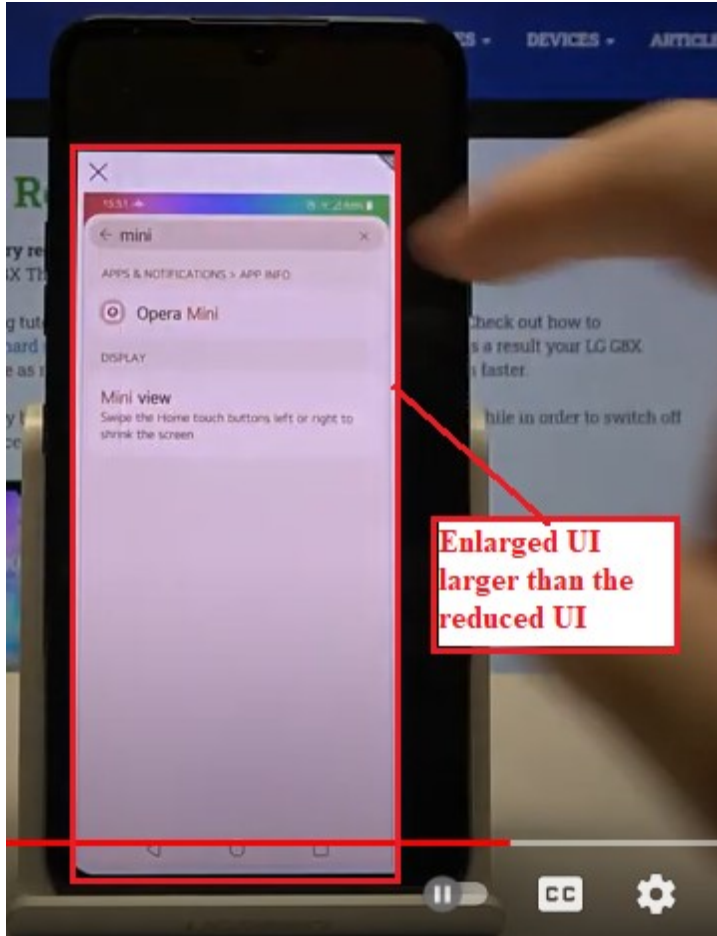




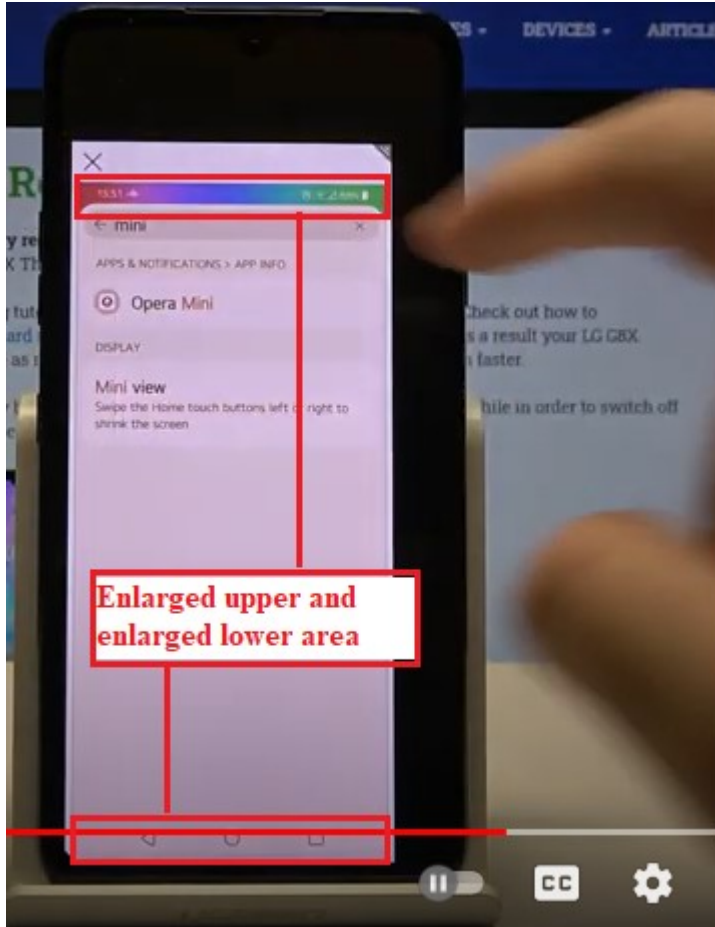
(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).

24. As shown below, the Accused Instrumentality performs the step of wherein a size of the enlarged upper area and enlarged lower area in relation to the enlarged UI maintains the ratio. As shown below, the upper area and lower area changes in proportion, during one-hand mode, defining a ratio.

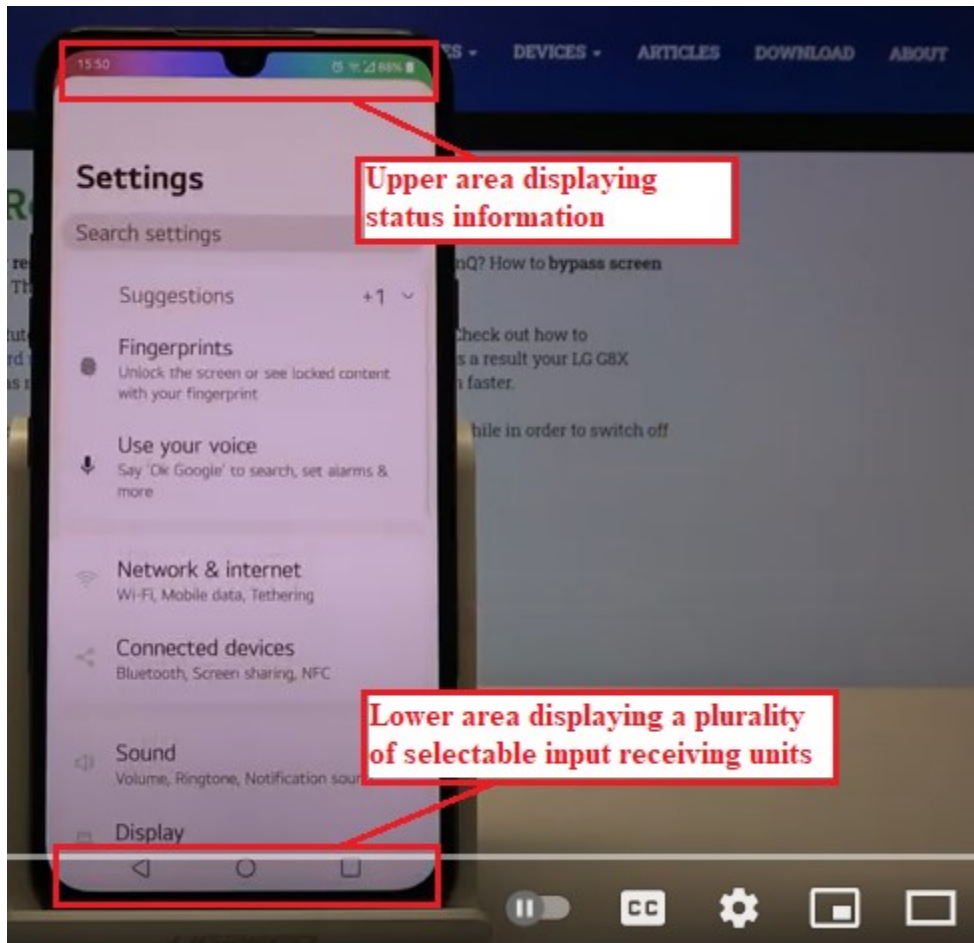




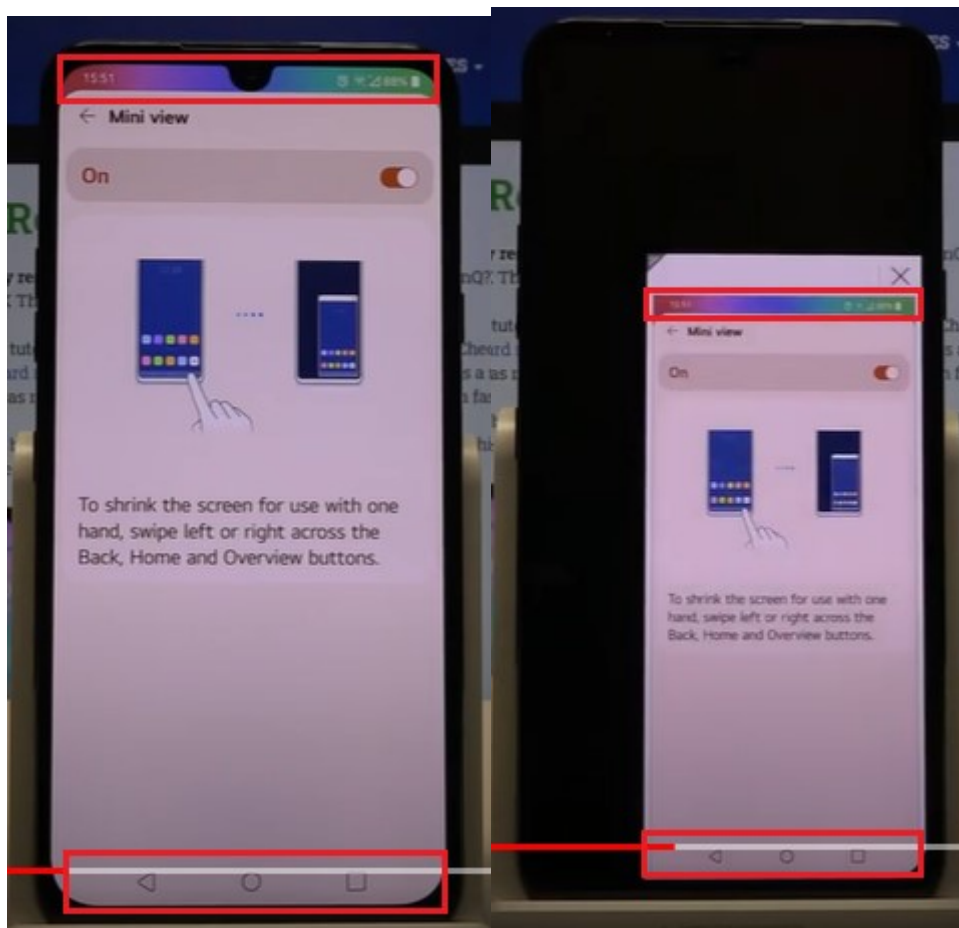
(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).



(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).



(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).

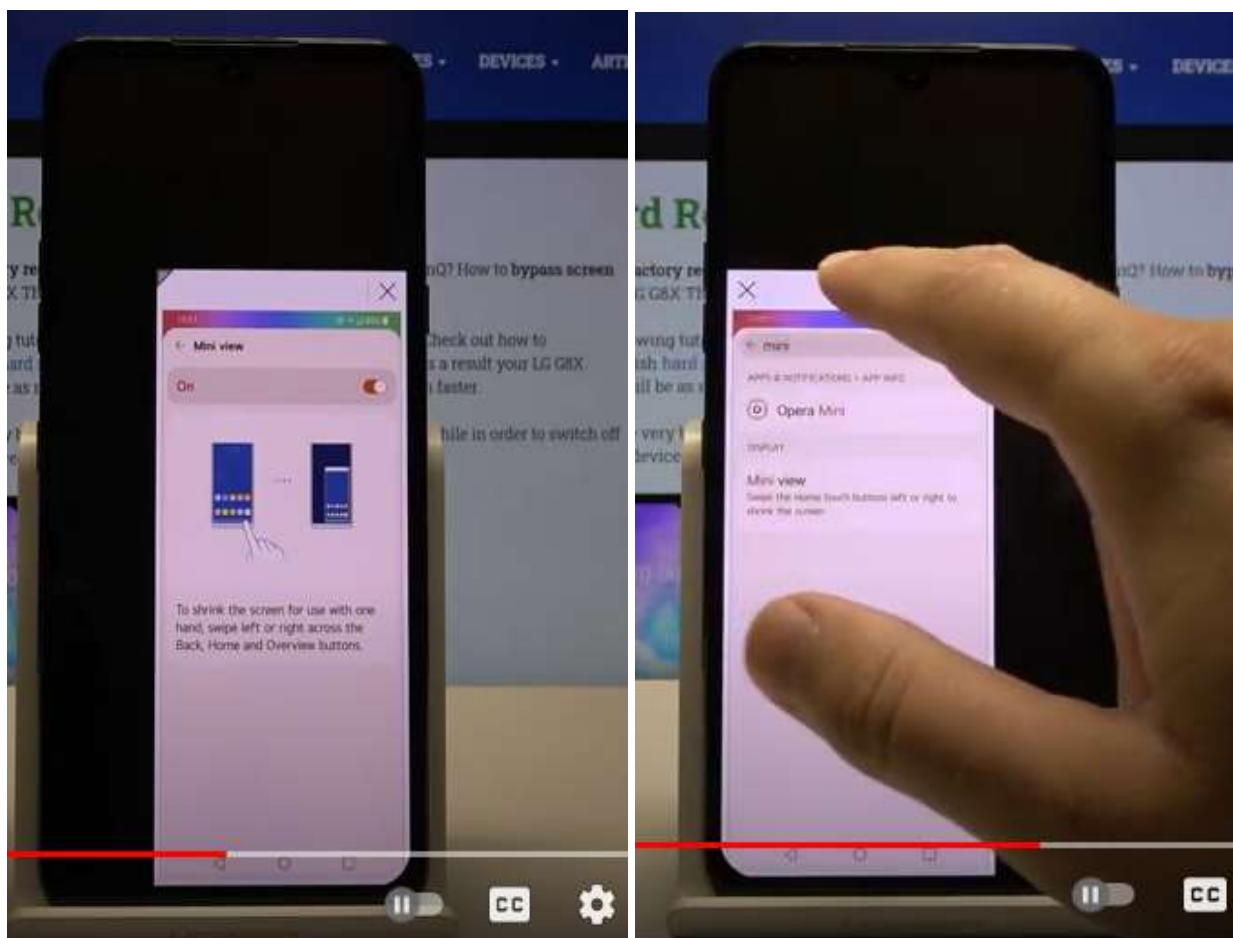


(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).

25. The Accused Instrumentality satisfies the limitation of dependent claim 2 because, as shown below, the Accused Instrumentality performs the step of wherein the reduced UI is displayed on a left side, a lower left side, a right side, or a lower right side of the display unit. As shown below, the reduced UI can be displayed on a lower left side or a lower right side of the display unit.

- **Auto-rotate screen:** Automatically rotate the screen according to the device's orientation.
- **Screen saver:** Display a screen saver when the device is connected to the holder or charger. Select a screen saver type to display.
- **Mini view:** Make the screen size smaller to conveniently use the device with one hand. Drag the Home touch button at the bottom of the screen to the left or right.

(E.g., [https://www.sprint.com/content/dam/sprint/commerce/devices/lg/lg-g8x-thing/documents/LM-G850UM\\_SPR\\_UG\\_Web\\_EN\\_V1.0\\_191021.pdf](https://www.sprint.com/content/dam/sprint/commerce/devices/lg/lg-g8x-thing/documents/LM-G850UM_SPR_UG_Web_EN_V1.0_191021.pdf)).



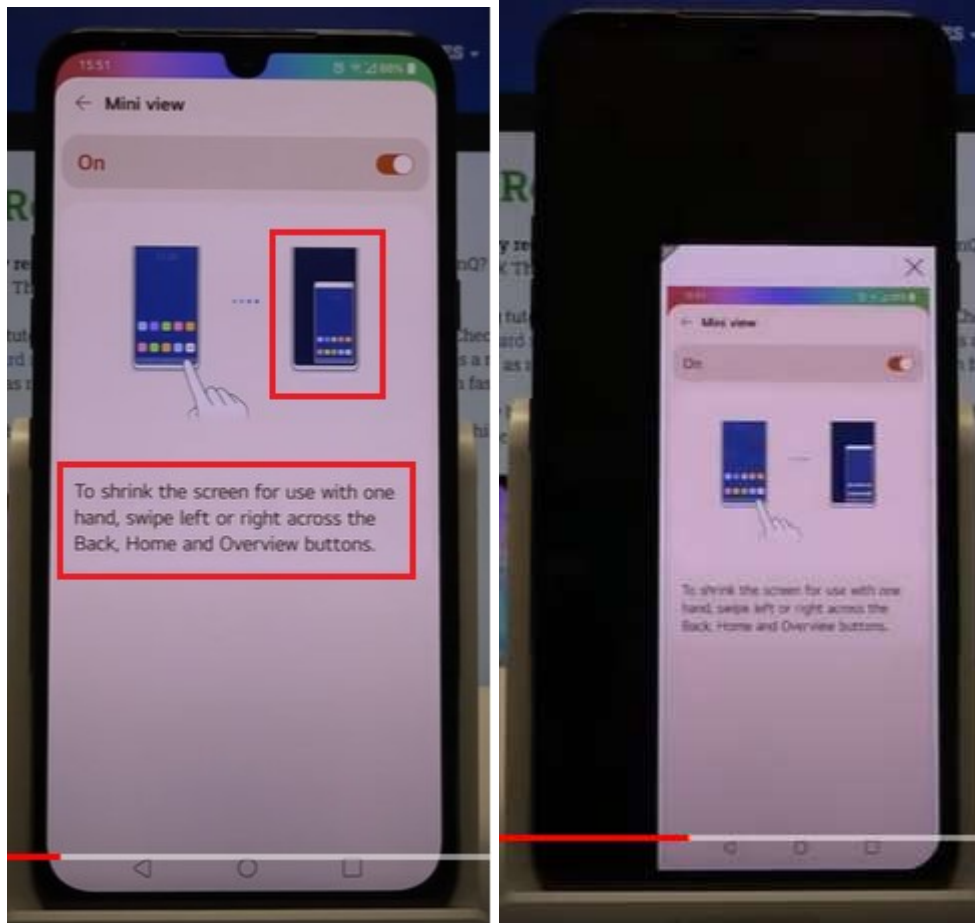
(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).

26. The Accused Instrumentality satisfies the limitation of dependent claim 4 because, as shown below, the Accused Instrumentality performs the step of receiving a third touch event

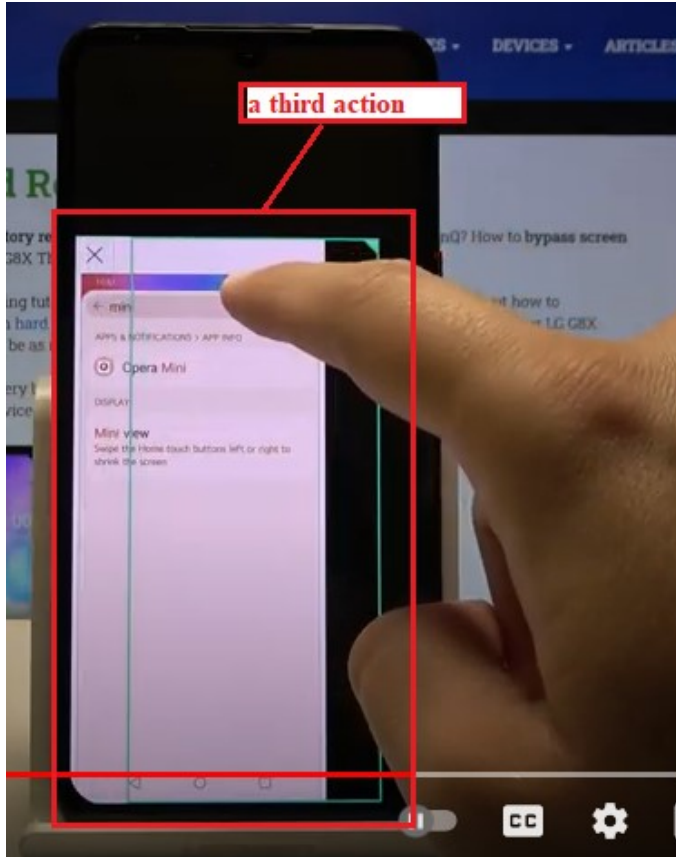
(e.g., dragging to move the screen to the left side or to the right side); shifting the reduced UI to a position that is adjacent to a left side of the display unit in accordance with the third touch event. As shown below, the Accused Instrumentality displays an icon for adjusting the position of the reduced form of display.

- **Auto-rotate screen:** Automatically rotate the screen according to the device's orientation.
- **Screen saver:** Display a screen saver when the device is connected to the holder or charger. Select a screen saver type to display.
- **Mini view:** Make the screen size smaller to conveniently use the device with one hand. Drag the Home touch button at the bottom of the screen to the left or right.

(E.g., [https://www.sprint.com/content/dam/sprint/commerce/devices/lg/lg-g8x-thing/documents/LM-G850UM\\_SPR\\_UG\\_Web\\_EN\\_V1.0\\_191021.pdf](https://www.sprint.com/content/dam/sprint/commerce/devices/lg/lg-g8x-thing/documents/LM-G850UM_SPR_UG_Web_EN_V1.0_191021.pdf)).

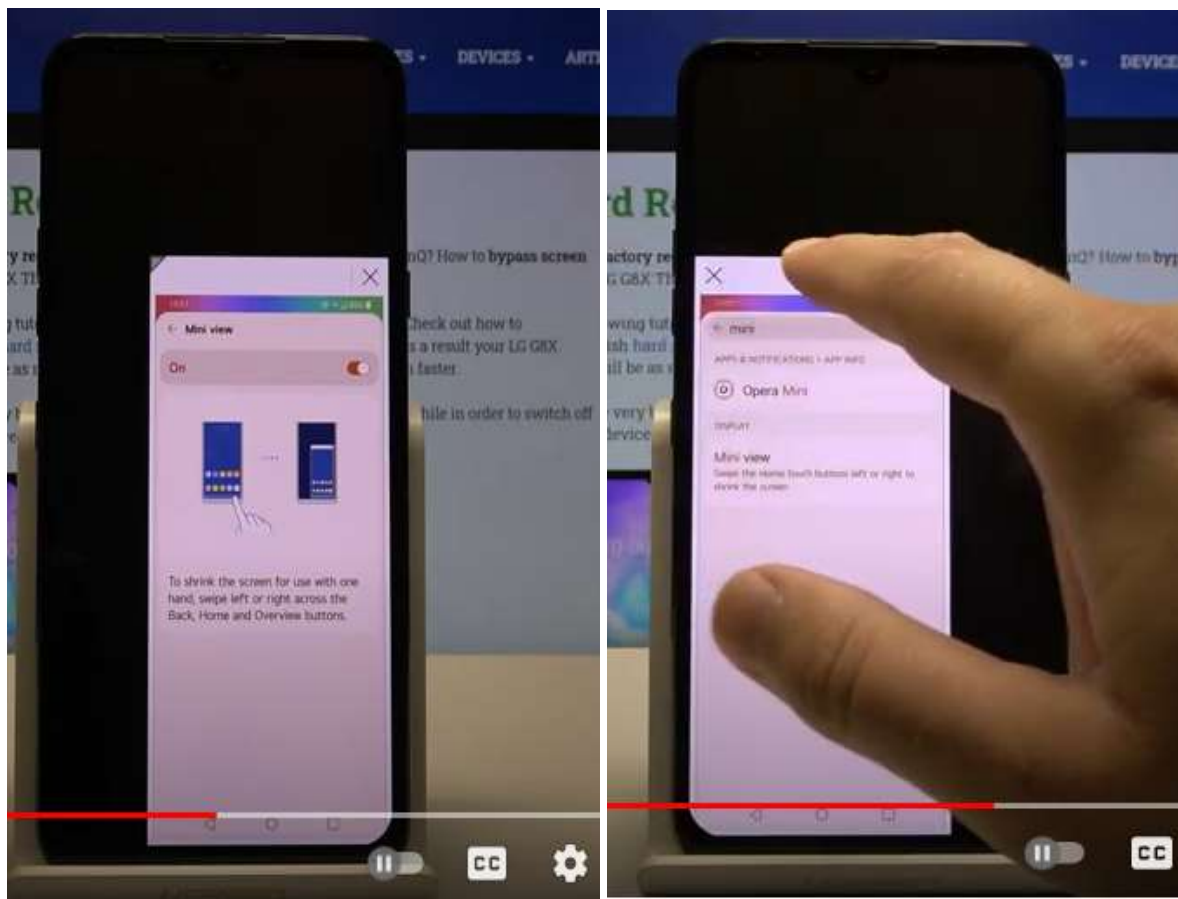


(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).



(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).



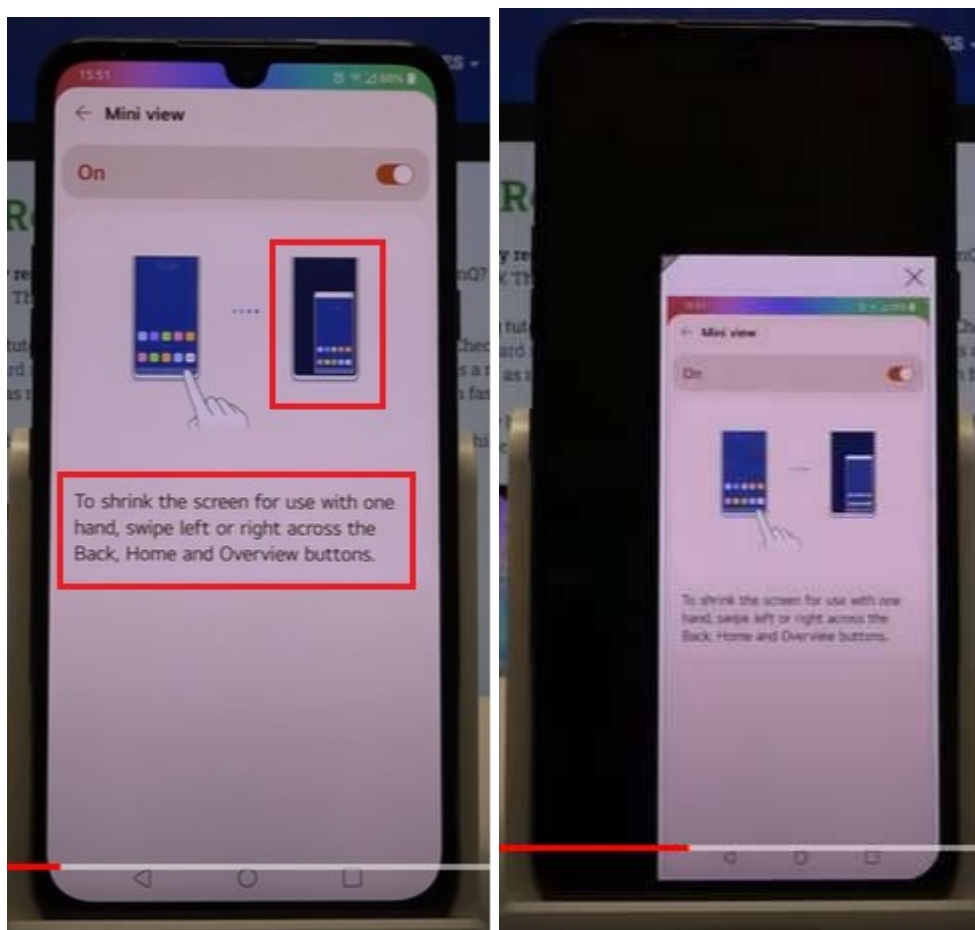


(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).

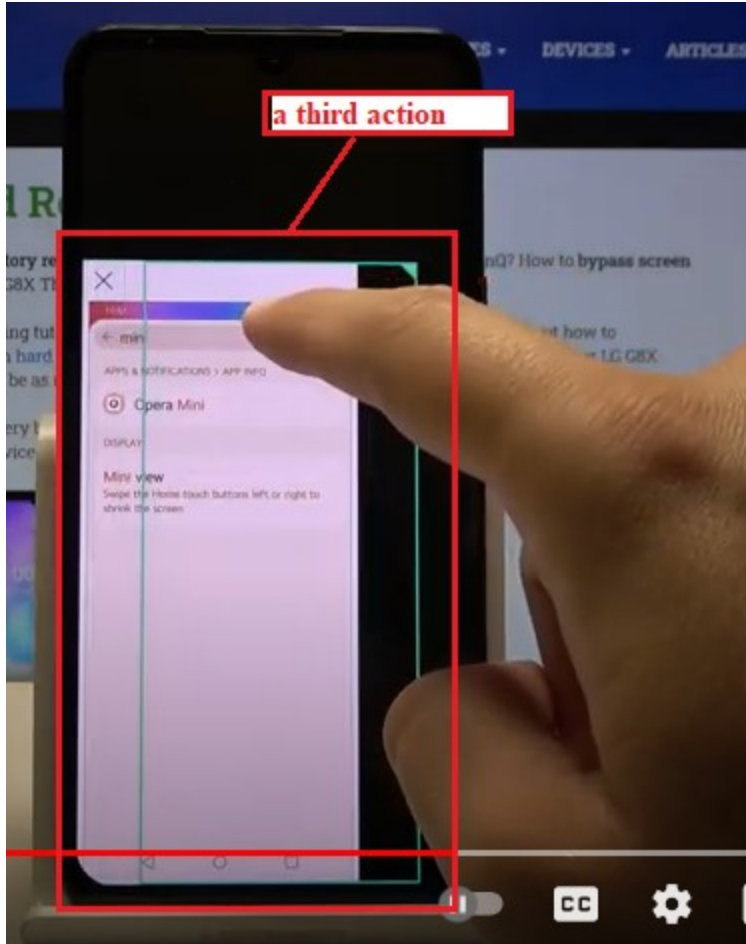
27. The Accused Instrumentality satisfies the limitation of dependent claim 5 because, as shown below, the Accused Instrumentality performs the step of receiving a third touch event (e.g., dragging to move the screen to the left side or to the right side); shifting the reduced UI to a position that is adjacent to a right side of the display unit in accordance with the third touch event. As shown below, the Accused Instrumentality displays an icon for adjusting the position of the reduced form of display.

- **Auto-rotate screen:** Automatically rotate the screen according to the device's orientation.
- **Screen saver:** Display a screen saver when the device is connected to the holder or charger. Select a screen saver type to display.
- **Mini view:** Make the screen size smaller to conveniently use the device with one hand. Drag the Home touch button at the bottom of the screen to the left or right.

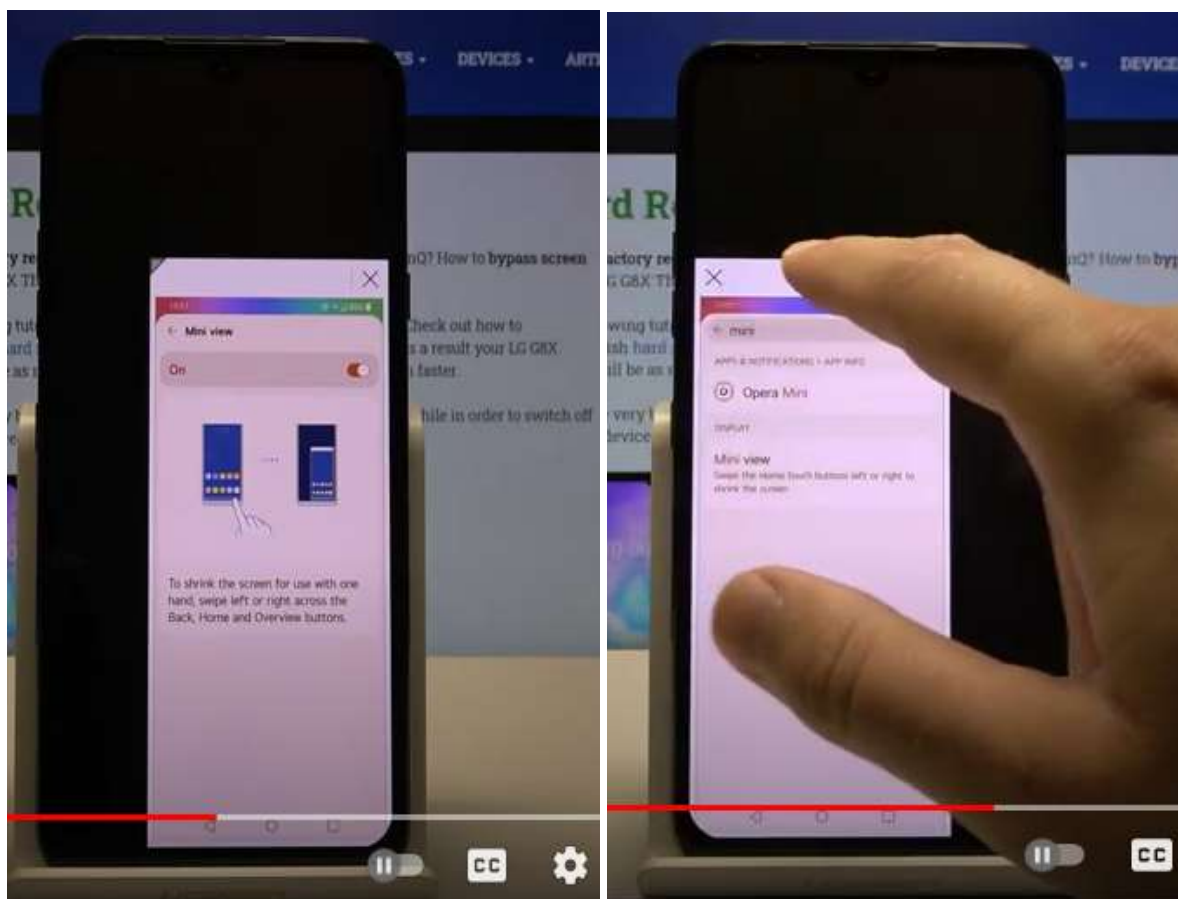
(E.g., [https://www.sprint.com/content/dam/sprint/commerce/devices/lg/lg-g8x-thing/documents/LM-G850UM\\_SPR\\_UG\\_Web\\_EN\\_V1.0\\_191021.pdf](https://www.sprint.com/content/dam/sprint/commerce/devices/lg/lg-g8x-thing/documents/LM-G850UM_SPR_UG_Web_EN_V1.0_191021.pdf)).



(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).

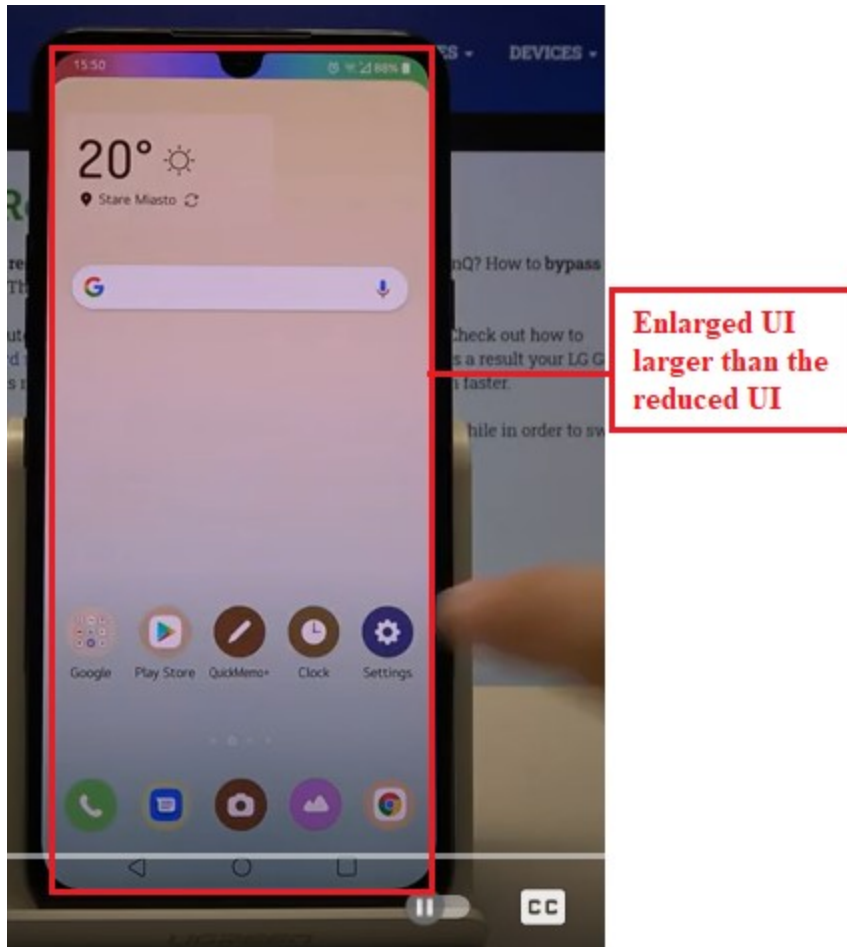


(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).

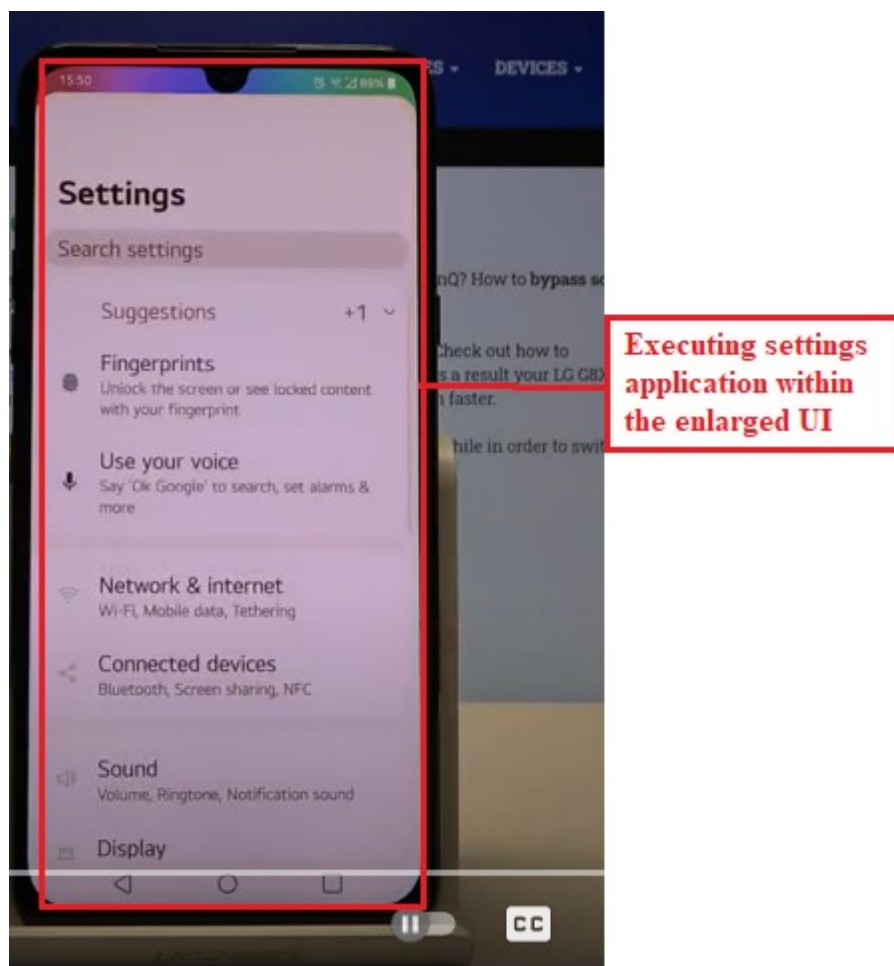


(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).

28. The Accused Instrumentality satisfies the limitation of dependent claim 8 because, as shown below, the Accused Instrumentality performs the step of executing an application (e.g., phone, settings, camera, etc.) within the enlarged UI. As shown, the Accused Instrumentality practices executing settings application within the enlarged UI.

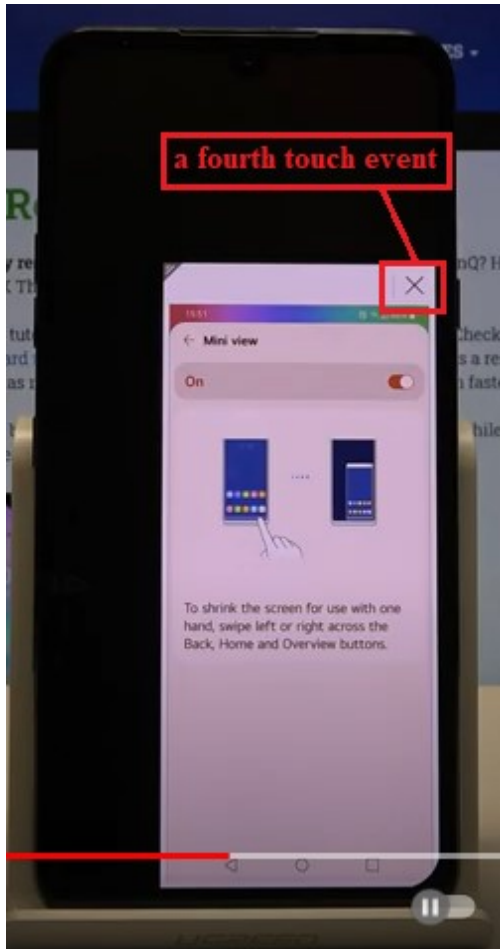


(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).

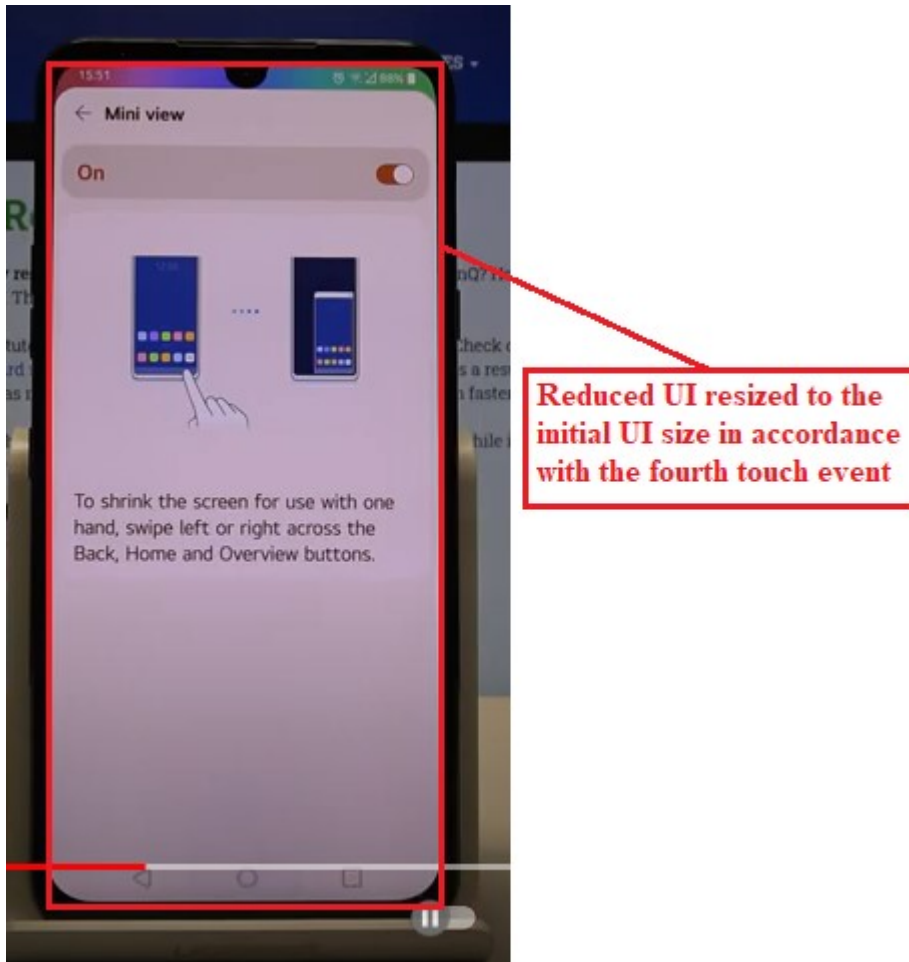


(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).

29. The Accused Instrumentality satisfies the limitation of dependent claim 9 because, as shown below, the Accused Instrumentality performs the step of receiving a fourth touch event (e.g., tapping outside reduced display area); resizing the reduced UI to the initial UI size (full screen) in accordance with the fourth touch event.

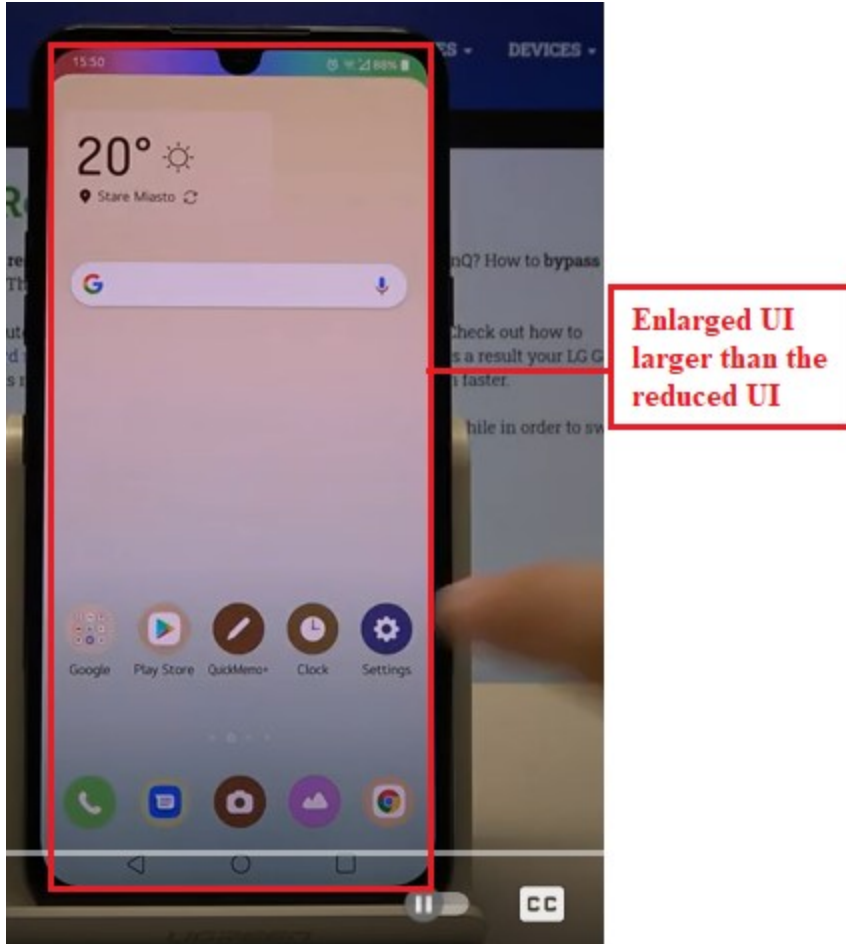


(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).



(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).





(E.g., <https://www.youtube.com/watch?v=K69M-e7mDFE>).

30. Plaintiff has been damaged as a result of Defendant's infringing conduct. Defendant is thus liable to Plaintiff for damages in an amount that adequately compensates Plaintiff for such Defendant's infringement of the '908 patent, *i.e.*, in an amount that by law cannot be less than would constitute a reasonable royalty for the use of the patented technology, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

31. Arability is only asserting method claims in this complaint and as such the marking requirements of 35 U.S.C. 287(a) do not apply and have thus been complied with. *Crown Packaging Technology, Inc. v. Rexam, Beverage Can Co.*, 559 F.3d 1308, 1316-1317 (Fed. Cir. 2009) ("Because Rexam asserted only the method claims of the '839 patent, the marking

requirement of 35 U.S.C. 287(a) does not apply.”); *Hanson v. Alpine Valley Ski Area, Inc.*, 718 F.2d 1075, 1083 (Fed.Cir. 1983) (“It is ‘settled in the case law that the notice requirement of this statute does not apply where the patent is directed to a process or method.’” (*Quoting Bandag, Inc. v. Gerrard Tire Co.*, 704 F.2d 1578, 1581, 217 USPQ 977, 979 (Fed. Cir. 1983)); *Intellectual Ventures I LLC v. Symantec Corp.*, 2015 U.S. Dist. LEXIS 6399 \*3 (D.Del. Jan. 21, 2015).

#### **V. JURY DEMAND**

Plaintiff, under Rule 38 of the Federal Rules of Civil Procedure, requests a trial by jury of any issues so triable by right.

#### **VI. PRAYER FOR RELIEF**

WHEREFORE, Plaintiff respectfully requests that the Court find in its favor and against Defendant, and that the Court grant Plaintiff the following relief:

- a. Judgment that one or more claims of United States Patent No. 11,262,908 have been infringed, either literally and/or under the doctrine of equivalents, by Defendant;
- b. Judgment that Defendant account for and pay to Plaintiff all damages to and costs incurred by Plaintiff because of Defendant’s infringing activities and other conduct complained of herein, and an accounting of all infringements and damages not presented at trial;
- c. That Plaintiff be granted pre-judgment and post-judgment interest on the damages caused by Defendant’s infringing activities and other conduct complained of herein; and
- d. That Plaintiff be granted such other and further relief as the Court may deem just and proper under the circumstances.

July 27, 2022

Respectfully Submitted,

DIRECTION IP LAW

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