APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
[1.pre] A digital image recording and reproducing apparatus connectable to a display module, said apparatus comprising:	Each of the Accused Samsung '198 Products[1] is a digital image recording and reproducing apparatus connectable to a display module. *See* User Guide and Technical Specifications of each of the Accused Samsung '198 Products available at Samsung's website showing that each device is a digital image recording and reproducing apparatus connectable to a display module. For example, each of the Accused Samsung '198 Products is a digital image recording and reproducing apparatus connectable to a display module. The device is configured to record digital images, for example, by taking photos and videos with its integrated cameras. The device is also configured to reproduce digital images, for example, by displaying photos and videos based on connection of the camera and processor with its own display and/or with an external display via mirroring or casting (e.g., Smart View). The apparatus's functions for recording and reproducing images are utilized when running the Gallery, Netflix, or Samsung TV Plus applications. **Galaxy S25**

[1] The Accused Samsung '198 Products include the Galaxy A Quantum, Galaxy A03s, Galaxy A04s, Galaxy A10s, Galaxy A11, Galaxy A12, Galaxy A12s (aka Nacho), Galaxy A13, Galaxy A13 5G, Galaxy A14, Galaxy A14 5G, Galaxy A20, Galaxy A20e, Galaxy A20s, Galaxy A21, Galaxy A21s, Galaxy A22, Galaxy A22s 5G, Galaxy A23, Galaxy A23 5G, Galaxy A24 4G, Galaxy A30, Galaxy A30s, Galaxy A32, Galaxy A32 5G, Galaxy A33 5G, Galaxy A34, Galaxy A36 5G, Galaxy A40, Galaxy A42 5G, Galaxy A50, Galaxy A50s, Galaxy A51, Galaxy A51 5G, Galaxy A51 5G UW, Galaxy A52, Galaxy A52 5G, Galaxy A53 5G, Galaxy A54 5G, Galaxy A60, Galaxy A70, Galaxy A70s, Galaxy A71, Galaxy A71 5G, Galaxy A71 5G UW, Galaxy A72, Galaxy A73 5G, Galaxy A8, Galaxy A8+, Galaxy A80, Galaxy A90 5G, Galaxy Fold, Galaxy Fold 5G, Galaxy Note10, Galaxy Note10 5G, Galaxy Note10 Lite, Galaxy Note10+, Galaxy Note10+ 5G, Galaxy Note20, Galaxy Note20 5G, Galaxy Note20 Ultra, Galaxy Note20 Ultra 5G, Galaxy Note9, Galaxy S10, Galaxy S10 5G, Galaxy S10 Lite, Galaxy S10+, Galaxy S10e, Galaxy S20, Galaxy S20 5G, Galaxy S205G UW, Galaxy S20 FE, Galaxy S20 FE 5G, Galaxy S20 Ultra, Galaxy S20 Ultra 5G, Galaxy S20+, Galaxy S20+ 5G, Galaxy S21 5G, Galaxy S21 FE 5G, Galaxy S21 Ultra 5G, Galaxy S21+ 5G, Galaxy S22 5G, Galaxy S22 Ultra 5G, Galaxy S22+ 5G, Galaxy S23, Galaxy S23 FE, Galaxy S23 Ultra, Galaxy S23+, Galaxy S24, Galaxy S24+, Galaxy S24 Ultra, Galaxy S25, Galaxy S25+, Galaxy S25 Ultra, Galaxy S9, Galaxy S9+, Galaxy Xcover FieldPro, Galaxy Xcover Pro, Galaxy Xcover6 Pro, Galaxy Z Flip, Galaxy Z Flip 5G, Galaxy Z Flip3 5G, Galaxy Z Flip4, Galaxy Z Flip5, Galaxy Z Flip6, Galaxy Z Fold2 5G, Galaxy Z Fold3 5G, Galaxy Z Fold4, Galaxy Z Fold5, Galaxy Z Fold6, Galaxy A15 5G, Galaxy A25 5G, Galaxy A35 5G, Galaxy Z Fold7, Galaxy Z Flip7, Galaxy Z Flip7 FE, Galaxy Tab Active Pro, Galaxy Tab Active3, Galaxy Tab Active4 Pro, Galaxy Tab S5e, Galaxy Tab S6, Galaxy Tab S6 5G, Galaxy Tab S7, Galaxy Tab S7+, Galaxy Tab S8, Galaxy Tab S8 Ultra, Galaxy Tab S8+, Galaxy Tab S9, Galaxy Tab S9 FE, Galaxy Tab S9 FE+, Galaxy Tab S9 Ultra, Galaxy Tab S9+, Galaxy Tab A9+ 5G, Galaxy Tab Active5 5G, Galaxy Tab S10 Ultra, Galaxy Tab S10+, Galaxy Tab S10 FE+, Galaxy Tab S10 FE. Maxell reserves the right to accuse additional products as discovery proceeds in this investigation.

IPR2025-01314; Samsung
Ex. 1023 - Page 1

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement

Samsung Galaxy S25

Released 2025, February 03
162g, 7.2mm thickness
Android 15, up to 7 major upgrades, One UI 7
128GB/256GB/512GB storage, no card slot

45%
2,662,210 HITS

325
BECOME A FAN

6.2"
1080x2340 pixels

50MP
4320p

12GB RAM
Snapdragon 8 Elite

4000mAh
25W 15W

DISPLAY	Type	Dynamic LTPO AMOLED 2X, 120Hz, HDR10+, 2600 nits (peak)
	Size	6.2 inches, 94.4 cm^2 (~91.1% screen-to-body ratio)
	Resolution	1080 x 2340 pixels, 19.5:9 ratio (~416 ppi density)
	Protection	Corning Gorilla Glass Victus 2
		Always-on display
MAIN CAMERA	Triple	50 MP, f/1.8, 24mm (wide), 1/1.56", 1.0µm, dual pixel PDAF, OIS 10 MP, f/2.4, 67mm (telephoto), 1/3.94", 1.0µm, PDAF, OIS, 3x optical zoom 12 MP, f/2.2, 13mm, 120˚ (ultrawide), 1/2.55" 1.4µm, Super Steady video
	Features	Best Face, LED flash, auto-HDR, panorama
	Video	8K@24/30fps, 4K@30/60fps, 1080p@30/60/120/240fps, 10-bit HDR, HDR10+, stereo sound rec., gyro-EIS
SELFIE CAMERA	Single	12 MP, f/2.2, 26mm (wide), 1/3.2", 1.12µm, dual pixel PDAF
	Features	HDR, HDR10+
	Video	4K@30/60fps, 1080p@30fps

https://www.gsmarena.com/samsung_galaxy_s25-13610.php

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement

Camera

Camera resolution (Front)	Camera resolution (Rear)	Video Recording Resolution
12.0 MP	50.0 MP + 10.0 MP + 12.0 MP	UHD 8K (7680 x 4320)@30fps
Main Camera - Flash	**Main Camera - Auto Focus**	**Front Camera - F Number**
Yes	Yes	F2.2
Front Camera - Auto Focus	**Slow Motion**	**Main Camera - F Number (Multiple)**
Yes	240fps @FHD,120fps @FHD,120fps @UHD	F1.8 , F2.4 , F2.2
Main Camera - OIS	**Main Camera - Zoom**	
Yes	Optical Zoom 3x, Optical quality Zoom 2x (Enabled by Adaptive Pixel sensor) , Digital Zoom up to 30x	

Video

Video Playing Format	Video Playing Resolution	Stereo Support
MP4,M4V,3GP,3G2,AVI,FLV,MKV,WEBM	UHD 8K (7680 x 4320)@60fps	Yes

Services and Applications

Samsung DeX Support	Gear Manager	Mobile TV
Yes	Galaxy Ring,Galaxy Buds3 Pro,Galaxy Buds2 Pro,Galaxy Buds Pro,Galaxy Buds Live,Galaxy Buds+,Galaxy Buds3,Galaxy Buds2,Galaxy Buds,Galaxy Buds FE,Galaxy Fit3,Galaxy Fit2,Galaxy Fit e,Galaxy Fit,Galaxy Watch FE,Galaxy Watch Ultra,Galaxy Watch7,Galaxy Watch6,Galaxy Watch5,Galaxy Watch4,Galaxy Watch3,Galaxy Watch,Galaxy Watch Active2,Galaxy Watch Active	No

Samsung Galaxy S25 Technical Spec: https://www.samsung.com/us/smartphones/galaxy-s25/buy/galaxy-s25-128gb-unlocked-sm-s931uzkaxaa/

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement

Camera

Introduction

Take pictures and record videos using various modes and settings.

Camera etiquette

- Do not take pictures or record videos of other people without their permission.
- Do not take pictures or record videos where legally prohibited.
- Do not take pictures or record videos in places where you may violate other people's privacy.

Taking pictures

1 Open the **Camera** app.

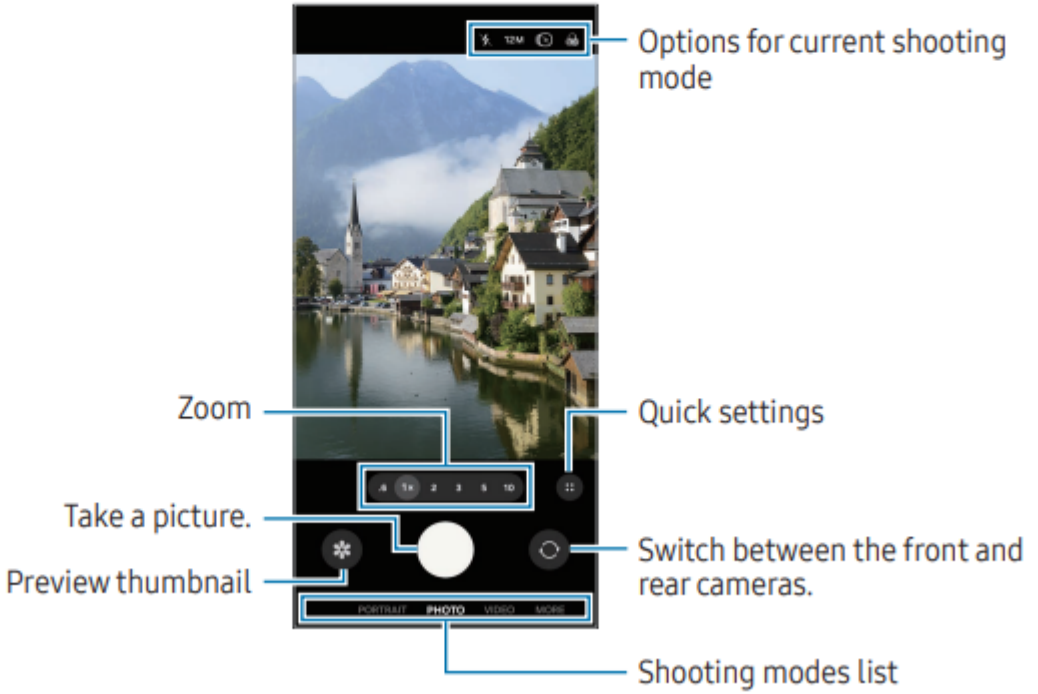
You can also open the app by pressing the Side button twice or dragging to the left on the locked screen.

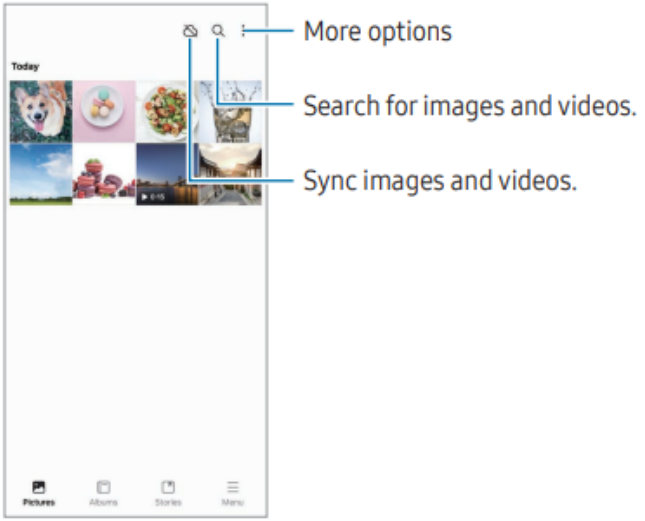
- Some camera features are not available when you open the **Camera** app from the locked screen or when the screen is turned off while the screen lock method is set.
- The camera automatically shuts off when unused.
- Some methods may not be available depending on the carrier or model.

2 Tap the image on the preview screen where the camera should focus.

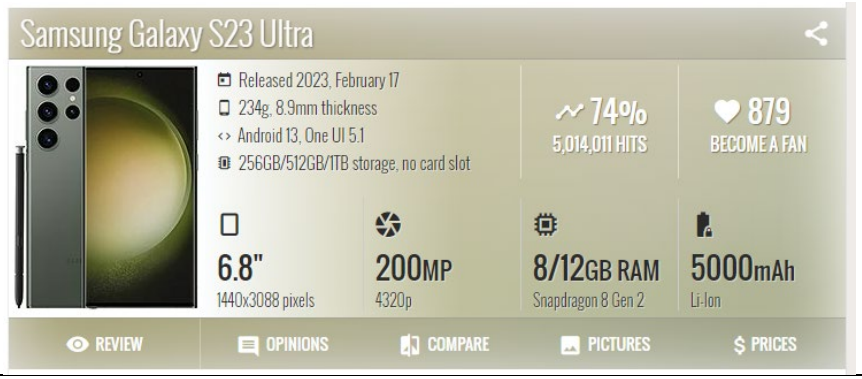
To adjust the brightness of pictures, drag the adjustment bar that appears above or below the circular frame.

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

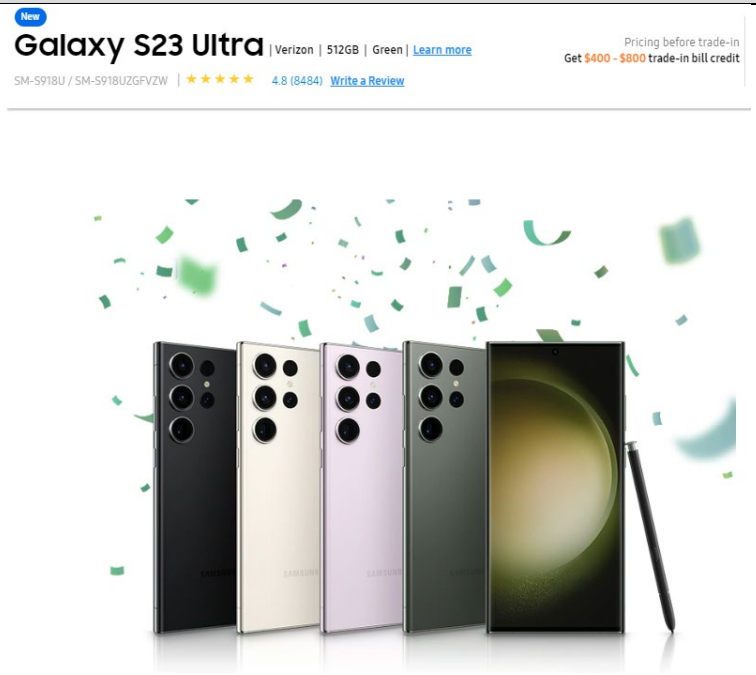
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	3 Tap ◯ to take a picture. To change the shooting mode, drag the shooting modes list to the left or right, or swipe to the left or right on the preview screen. 

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	# Gallery ## Introduction Access images and videos stored in your device. You can also manage images and videos by album or create stories. ## Using Gallery Open the **Gallery** app. 

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

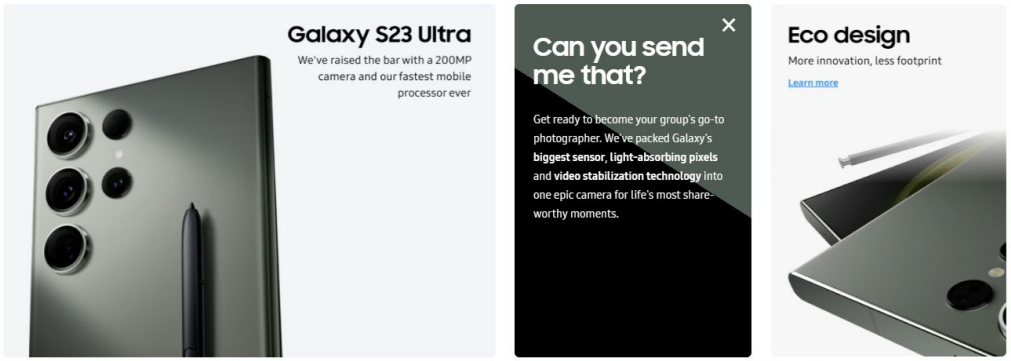
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Samsung TV Plus Select the channels like you would use a TV and enjoy various video content free of charge. Open the **TV** app. Samsung Galaxy S25 User Manual: https://www.galaxys25userguide.com/wp-content/uploads/pdf/galaxy-s25-user-guide-SM-S93X-EU-15-English.pdf **Galaxy S23 Ultra** 

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 Galaxy S23 Ultra technical specifications; https://www.samsung.com/us/smartphones/galaxy-s23-ultra/buy/galaxy-s23-ultra-512gb-verizon-sm-s918uzgfvzw/?modelCode=SM-S918UZGFXAU; https://www.gsmarena.com/samsung_galaxy_s23_ultra-12024.php

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

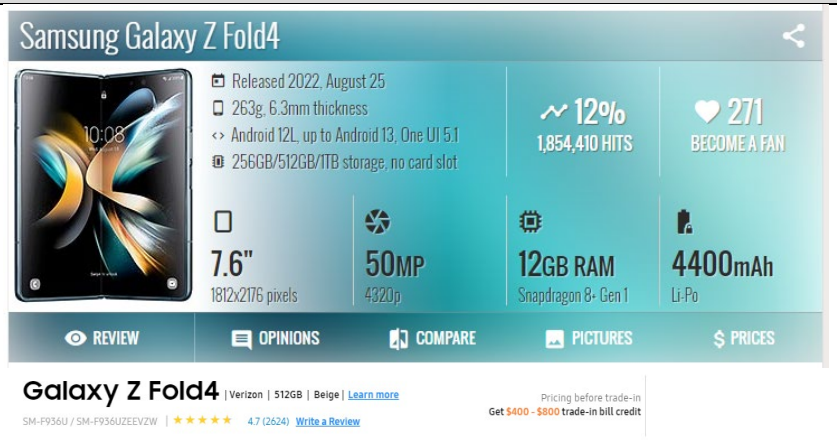
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement



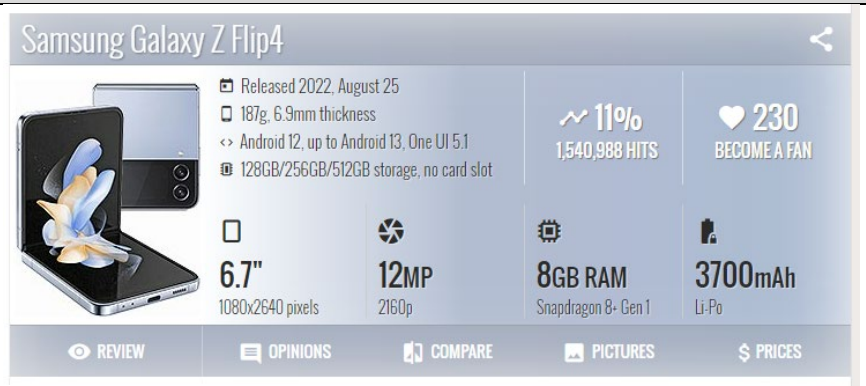
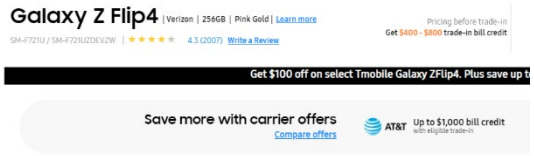
MAIN CAMERA	Quad	200 MP, f/1.7, 24mm (wide), 1/1.3", 0.6µm, multi-directional PDAF, Laser AF, OIS
		10 MP, f/4.9, 230mm (periscope telephoto), 1/3.52", 1.12µm, Dual Pixel PDAF, OIS, 10x optical zoom
		10 MP, f/2.4, 70mm (telephoto), 1/3.52", 1.12µm, Dual Pixel PDAF, OIS, 3x optical zoom
		12 MP, f/2.2, 13mm, 120˚ (ultrawide), 1/2.55", 1.4µm, Dual Pixel PDAF, Super Steady video
	Features	LED flash, auto-HDR, panorama
	Video	8K@24/30fps, 4K@30/60fps, 1080p@30/60/240fps, 1080p@960fps, HDR10+, stereo sound rec., gyro-EIS
SELFIE CAMERA	Single	12 MP, f/2.2, 26mm (wide), Dual Pixel PDAF
	Features	Dual video call, Auto-HDR, HDR10+
	Video	4K@30/60fps, 1080p@30fps

Galaxy S23 Ultra technical specifications; https://www.samsung.com/us/smartphones/galaxy-s23-ultra/buy/galaxy-s23-ultra-512gb-verizon-sm-s918uzgfvzw/?modelCode=SM-S918UZGFXAU; https://www.gsmarena.com/samsung_galaxy_s23_ultra-12024.php.

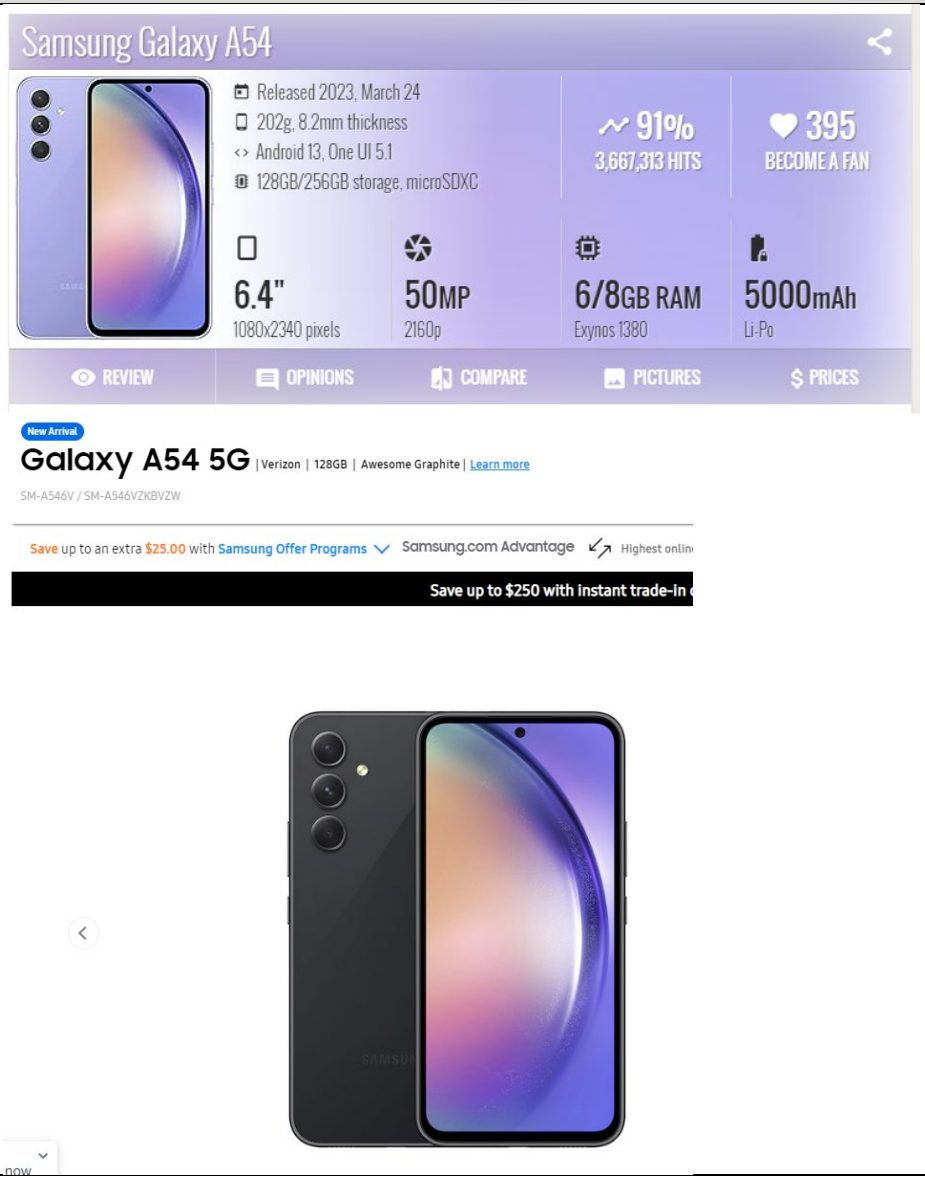
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 Galaxy Z Fold4 technical specifications; https://www.samsung.com/us/smartphones/galaxy-z-fold4/buy/galaxy-z-fold4-512gb-att-sm-f936uzeeatt/; https://www.gsmarena.com/samsung_galaxy_z_fold4-11737.php

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

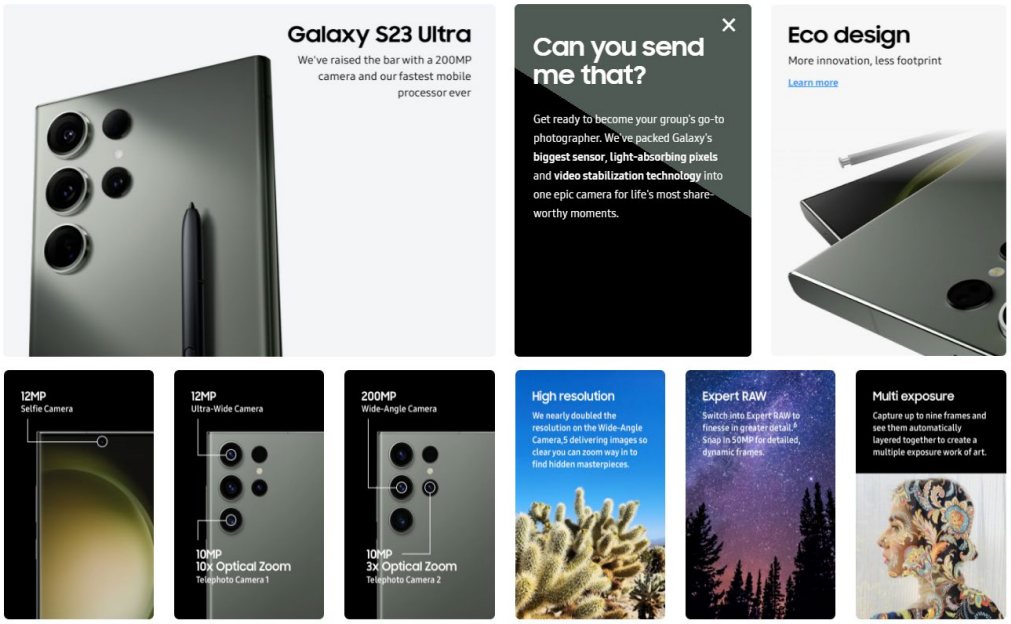
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	  Galaxy Z Flip4 technical specifications; https://www.samsung.com/us/smartphones/galaxy-z-flip4/buy/galaxy-z-flip4-256gb-t-mobile-sm-f721uzdexau/; https://www.gsmarena.com/samsung_galaxy_z_flip4-11538.php

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	

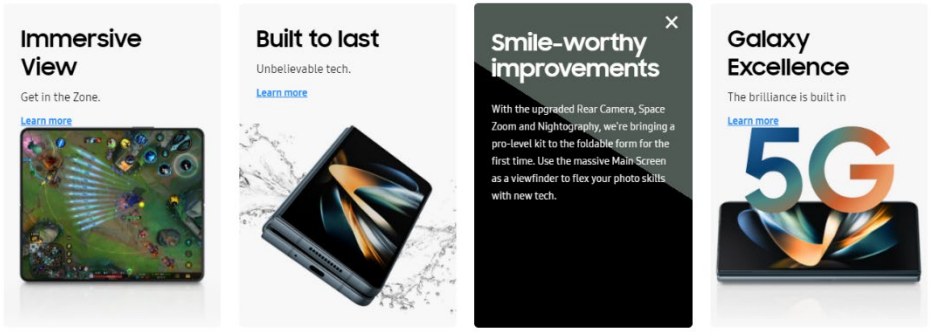
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Galaxy A54 5G technical specifications; https://www.samsung.com/us/mobile/phones/galaxy-a54/buy/; https://www.gsmarena.com/samsung_galaxy_a54-12070.php



MAIN CAMERA	Quad	200 MP, f/1.7, 24mm (wide), 1/1.3", 0.6µm, multi-directional PDAF, Laser AF, OIS
		10 MP, f/4.9, 230mm (periscope telephoto), 1/3.52", 1.12µm, Dual Pixel PDAF, OIS, 10x optical zoom
		10 MP, f/2.4, 70mm (telephoto), 1/3.52", 1.12µm, Dual Pixel PDAF, OIS, 3x optical zoom
		12 MP, f/2.2, 13mm, 120˚ (ultrawide), 1/2.55", 1.4µm, Dual Pixel PDAF, Super Steady video
	Features	LED flash, auto-HDR, panorama
	Video	8K@24/30fps, 4K@30/60fps, 1080p@30/60/240fps, 1080p@960fps, HDR10+, stereo sound rec., gyro-EIS
SELFIE CAMERA	Single	12 MP, f/2.2, 26mm (wide), Dual Pixel PDAF
	Features	Dual video call, Auto-HDR, HDR10+
	Video	4K@30/60fps, 1080p@30fps

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Galaxy S23 Ultra technical specifications; https://www.samsung.com/us/smartphones/galaxy-s23-ultra/buy/galaxy-s23-ultra-512gb-verizon-sm-s918uzgfvzw/?modelCode=SM-S918UZGFXAU; https://www.gsmarena.com/samsung_galaxy_s23_ultra-12024.php.



MAIN CAMERA	Triple	50 MP, f/1.8, 23mm (wide), 1.0µm, Dual Pixel PDAF, OIS
		10 MP, f/2.4, 66mm (telephoto), 1.0µm, PDAF, OIS, 3x optical zoom
		12 MP, f/2.2, 123˚, 12mm (ultrawide), 1.12µm
	Features	LED flash, HDR, panorama
	Video	8K@24fps, 4K@60fps, 1080p@60/240fps (gyro-EIS), 720p@960fps (gyro-EIS), HDR10+
SELFIE CAMERA	Single	4 MP, f/1.8, 26mm (wide), 2.0µm, under display
		Cover camera:
		10 MP, f/2.2, 24mm (wide), 1/3", 1.22µm
	Features	HDR
	Video	4K@30/60fps, 1080p@30/60fps, gyro-EIS

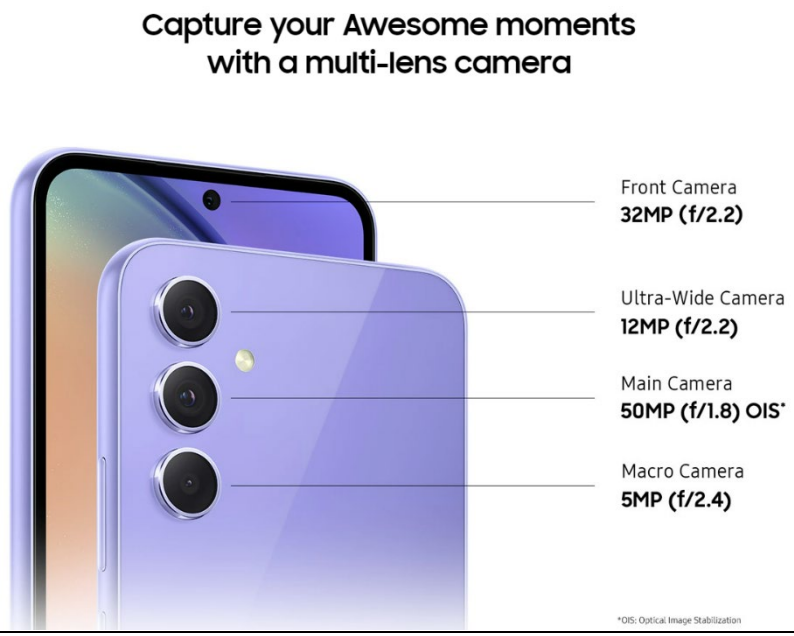
Galaxy Z Fold4 technical specifications; https://www.samsung.com/us/smartphones/galaxy-z-fold4/buy/galaxy-z-fold4-512gb-att-sm-f936uzeeatt/; https://www.gsmarena.com/samsung_galaxy_z_fold4-11737.php.

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement

MAIN CAMERA	Dual	12 MP, f/1.8, 24mm (wide), 1/1.76", 1.8µm, Dual Pixel PDAF, OIS 12 MP, f/2.2, 123˚ (ultrawide), 1.12µm
	Features	LED flash, HDR, panorama
	Video	4K@30/60fps, 1080p@60/240fps, 720p@960fps, HDR10+
SELFIE CAMERA	Single	10 MP, f/2.4, 26mm (wide), 1.22µm
	Features	HDR
	Video	4K@30fps

Galaxy Z Flip4 technical specifications; https://www.gsmarena.com/samsung_galaxy_z_flip4-11538.php.



APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement

MAIN CAMERA	Triple	50 MP, f/1.8, (wide), 1/1.56", 1.0µm, PDAF, OIS
		12 MP, f/2.2, 123° (ultrawide), 1.12µm
		5 MP, f/2.4, (macro)
	Features	LED flash, panorama, HDR
	Video	4K@30fps, 1080p@30/60fps, 720p@480fps
SELFIE CAMERA	Single	32 MP, f/2.2, 26mm (wide), 1/2.8", 0.8µm
	Video	4K@30fps, 1080p@30/60fps

Samsung Galaxy A54 5G technical specifications; Galaxy A54 5G, 128GB (Unlocked) Phones - SM-A546UZKBXAA | Samsung US; https://www.gsmarena.com/samsung_galaxy_a54-12070.php.

For example, each of the Accused Samsung '198 Products include an operating system and Samsung One UI, that when executed on a processor provide functions for recording and reproducing image information, such as photos.

Processor

Qualcomm Snapdragon 8 Gen2 Mobile Platform for Galaxy

PLATFORM	OS	Android 13, One UI 5.1
	Chipset	Qualcomm SM8550-AC Snapdragon 8 Gen 2 (4 nm)
	CPU	Octa-core (1x3.36 GHz Cortex-X3 & 2x2.8 GHz Cortex-A715 & 2x2.8 GHz Cortex-A710 & 3x2.0 GHz Cortex-A510)
	GPU	Adreno 740

Galaxy S23 Ultra technical specifications; https://www.samsung.com/us/smartphones/galaxy-s23-ultra/buy/galaxy-s23-ultra-512gb-verizon-sm-s918uzgfvzw/?modelCode=SM-S918UZGFXAU; https://www.gsmarena.com/samsung_galaxy_s23_ultra-12024.php.

Processor

Snapdragon 8+ Gen 1
Up to 3.2GHz

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement

PLATFORM		
	OS	Android 12L, upgradable to Android 13, One UI 5.1
	Chipset	Qualcomm SM8475 Snapdragon 8+ Gen 1 (4 nm)
	CPU	Octa-core (1x3.19 GHz Cortex-X2 & 3x2.75 GHz Cortex-A710 & 4x1.80 GHz Cortex-A510)
	GPU	Adreno 730

Galaxy Z Fold4 technical specifications; https://www.samsung.com/us/smartphones/galaxy-z-fold4/buy/galaxy-z-fold4-512gb-att-sm-f936uzeeatt/; https://www.gsmarena.com/samsung_galaxy_z_fold4-11737.php.

Processor

Snapdragon 8+ Gen 1
Up to 3.2GHz

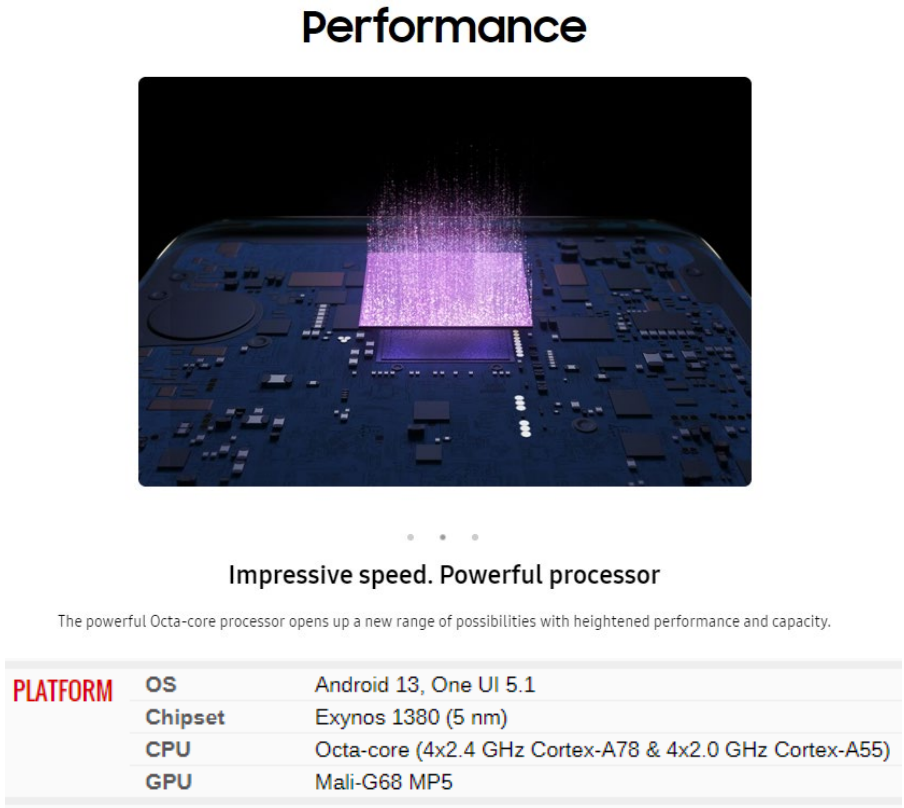
PLATFORM		
	OS	Android 12, upgradable to Android 13, One UI 5.1
	Chipset	Qualcomm SM8475 Snapdragon 8+ Gen 1 (4 nm)
	CPU	Octa-core (1x3.19 GHz Cortex-X2 & 3x2.75 GHz Cortex-A710 & 4x1.80 GHz Cortex-A510)
	GPU	Adreno 730

Galaxy Z Flip4 technical specifications; https://www.samsung.com/us/smartphones/galaxy-z-flip4/buy/galaxy-z-flip4-256gb-t-mobile-sm-f721uzdexau/; https://www.gsmarena.com/samsung_galaxy_z_flip4-11538.php.

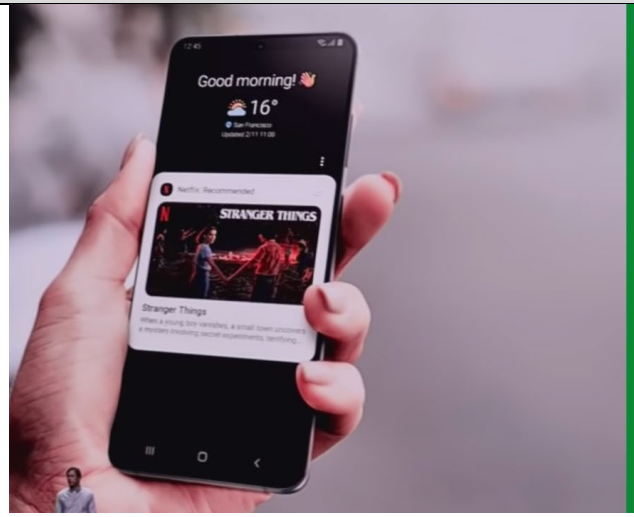
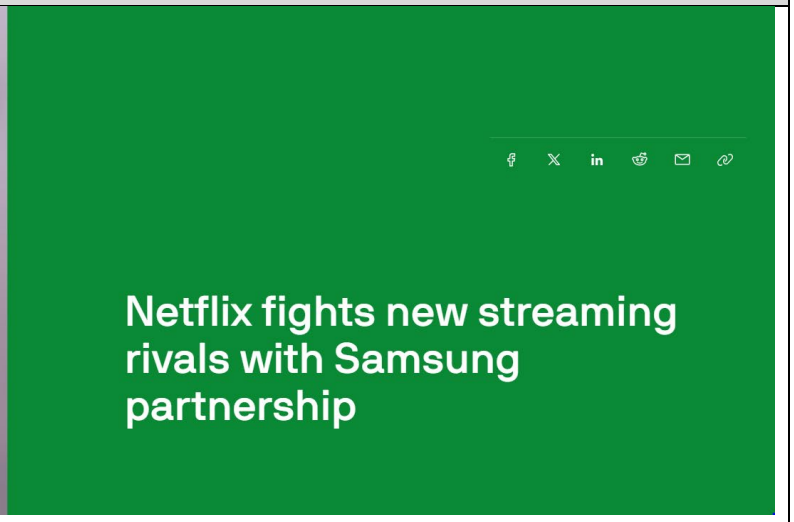
Processor

CPU Type	CPU Speed
Octa-Core	2.4GHz,2GHz

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 Galaxy A54 5G technical specifications; https://www.samsung.com/us/mobile/phones/galaxy-a/galaxy-a54-5g-128gb-verizon-sm-a546vzkbvzw/; https://www.gsmarena.com/samsung_galaxy_a54-12070.php. Upon information and belief Netflix comes preinstalled on the Accused Samsung '198 Products and/or Samsung induces users to download Netflix application at setup.

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	  https://techcrunch.com/2020/02/13/netflix-fends-off-new-streaming-rivals-by-way-of-samsung-partnership/ Each of the Accused Samsung '198 Products are also connectable to an external display using Smart View. The following from the Samsung's website demonstrates using "Smart View" to connect the Samsung's phones with external devices through wireless communications by mirroring or casting the screen to the external devices.

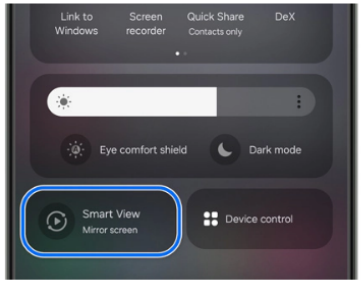
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement

Mirror your phone with Smart View

Important: Make sure your TV is turned on and connected to the same Wi-Fi network as your phone. Some TVs may require you to switch inputs or turn on screen mirroring. Compatibility with non-Samsung TVs may vary or may not be available. Check your TV's user manual for specific details. SmartView is not an app you download on your phone and is located in the Quick settings panel.

Make a big statement by projecting photos or videos from your phone or tablet onto your TV. You can also do the opposite and stream your TV to your phone's or tablet's screen!

1. Open the Quick settings panel by swiping down from the top of the screen using two fingers. Tap **Smart View**.



2. Tap your TV from the list of Available devices, and then tap **Start now**. If prompted, enter a PIN or allow access to complete the connection.
3. Your device's screen will now appear on the TV.
4. If you want to stream the TV's screen to your phone or tablet, you can do just that if the TV supports it. Navigate back to the Smart View main page, tap **Other device → Phone**, and then select your TV.
5. To switch back, tap **Phone → Other device.**

When you are done using Smart View, tap the **Smart View** icon on your phone, and then tap **Disconnect**. If you need help editing the icons in the Quick settings panel, check out our **guide**.

https://www.samsung.com/us/support/answer/ANS00062585/

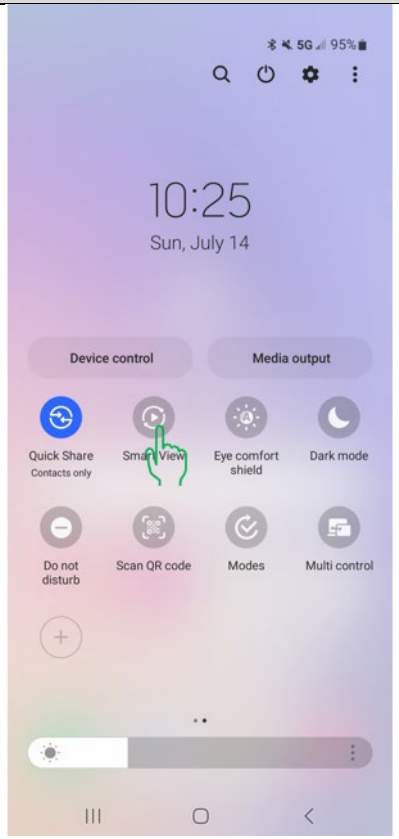
• **Smart View:** Show your device's screen or play videos on a nearby TV.

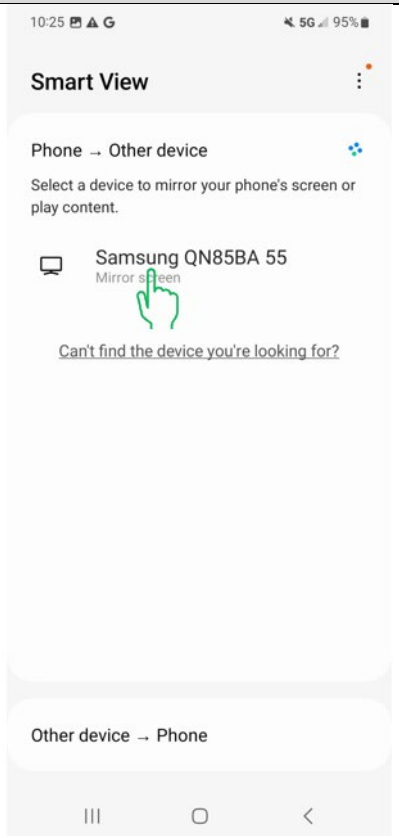
Galaxy A54 5G user manual at 110, https://downloadcenter.samsung.com/content/UM/202402/20240228080435606/SAM_A546_EN_UG_OS14_022124_FINAL.pdf.

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Smart View **(Mirroring on a TV screen)** View your phone's displayed content on a large screen by connecting your phone to a screen mirroring-enabled TV or monitor. 1 Open the notification panel, swipe downwards, and then tap **Smart View**. 2 Select a device to mirror your phone's screen. When you play a video with Smart View, the resolution may vary depending on the TV model. **App cast** Only display the video on the connected screen while you are checking private messages or using other features on your phone at the same time. Open the app to cast a video on the connected screen and tap → **App cast**. Some apps may not support this feature. Galaxy S24 User Guide at 124; https://downloadcenter.samsung.com/content/UM/202402/20240220134027613/S92X_UG_CA_UU_ENG_D9.pdf The annotated screenshots of the Galaxy A54 5G below demonstrates how the "Smart View" gets initiated on an exemplary Accused Samsung '198 products to connect to an external display:

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement

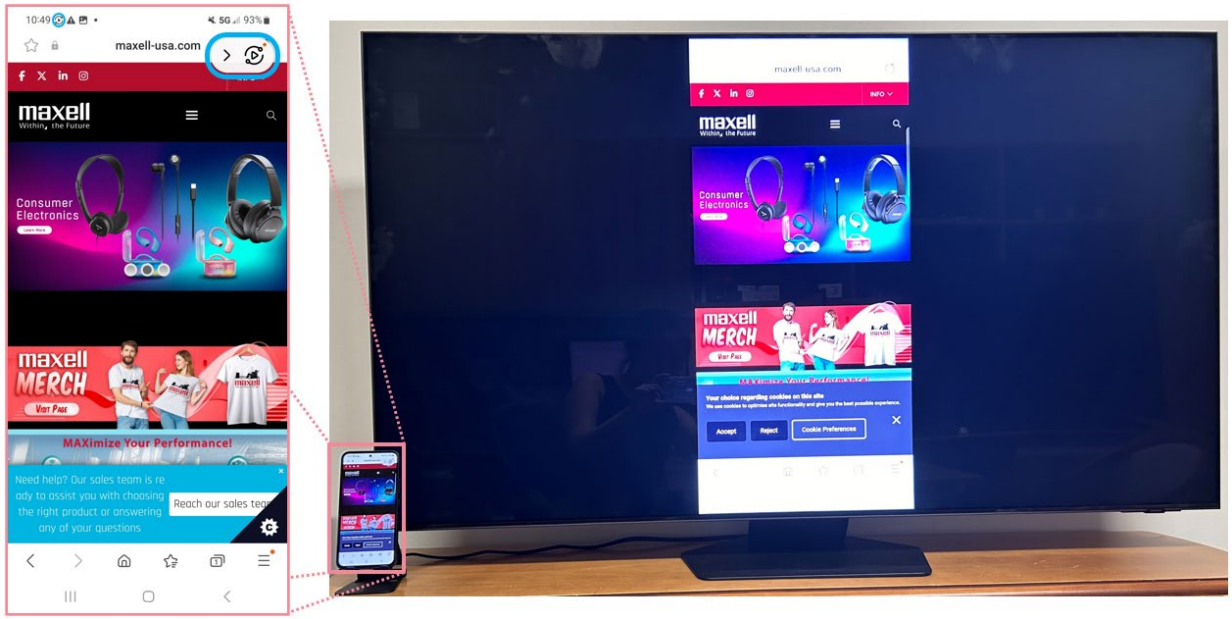




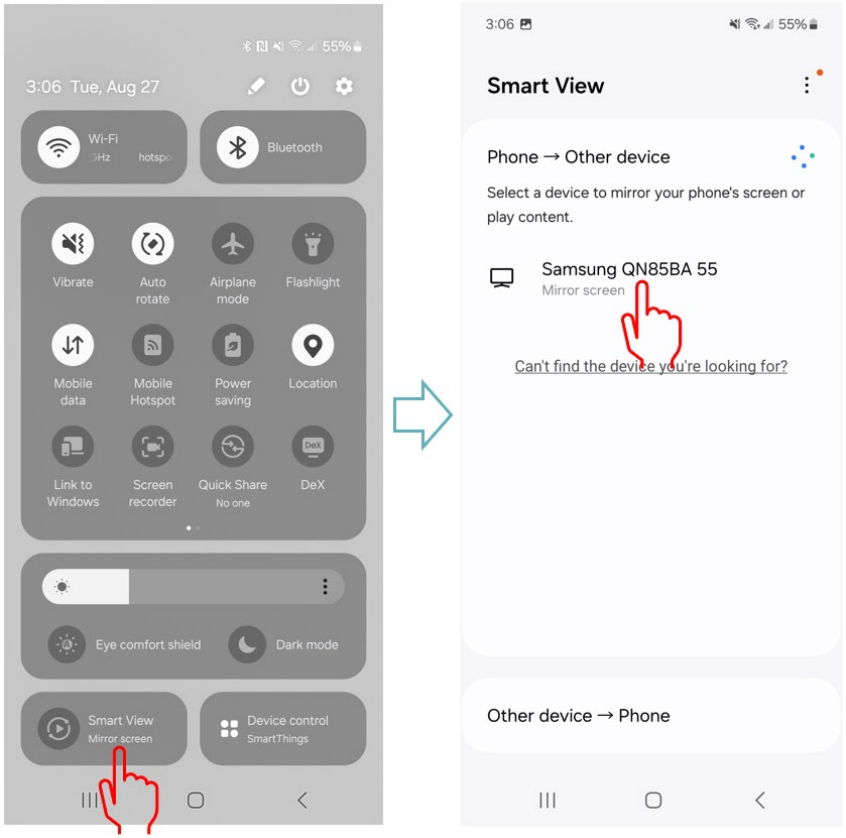
The user swipes down from the top of the display to get to the first screen where "Smart View" icon is displayed. Upon selecting "Smart View" (an exemplary first user operation), the external devices that can be used for "Smart View" appears. User selects a specific device ("Samsung QN85BA 55") as an external device to mirror the screen through "Smart View."

Once the pairing of the Galaxy A54 5G to the TV through "Smart View" has been established, the screen on the phone gets displayed on the TV, while the display on the phone indicates that the screen is being mirrored.

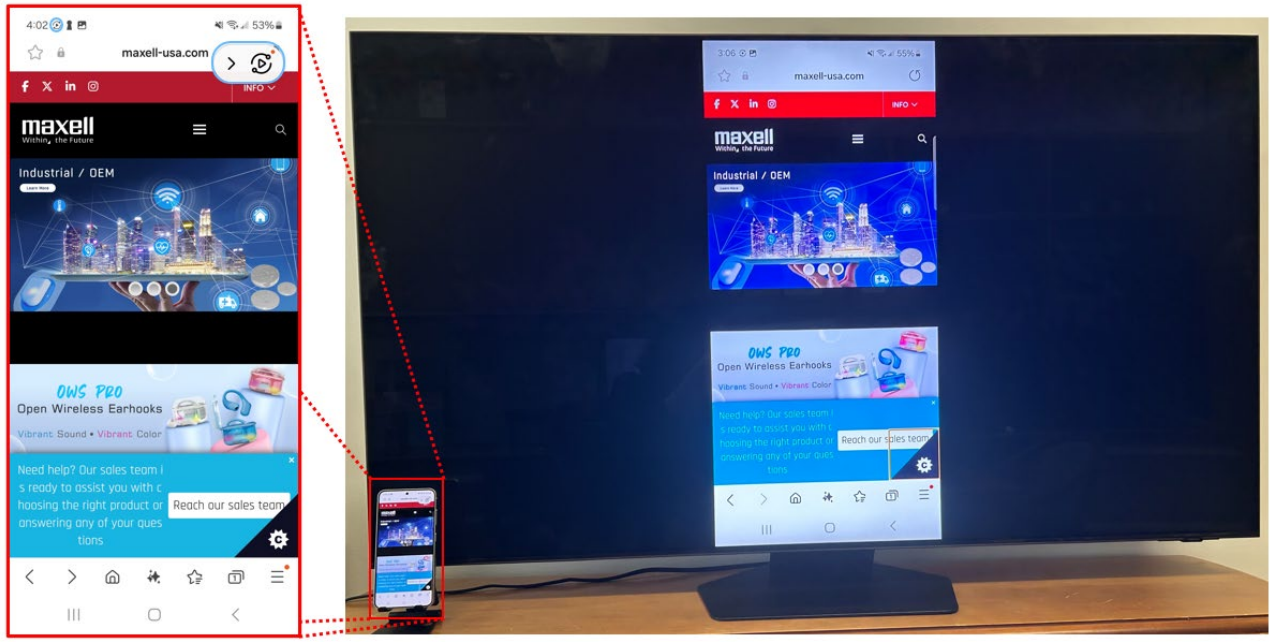
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 The annotated screenshots of the Galaxy S24 below demonstrates how the "Smart View" gets initiated on an exemplary Accused Samsung '198 product:

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 The user swipes down from the top of the display to get to the first screen where "Smart View" icon is displayed. Upon selecting "Smart View" (an exemplary first user operation), the external devices that can be used for "Smart View" appears. User selects a specific device ("Samsung QN85BA 55") as an external device to mirror the screen through "Smart View."

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 Once the pairing of the Galaxy S24 to the TV through "Smart View" has been established, the screen on the phone gets displayed on the TV, while the display on the phone indicates that the screen is being mirrored.
[1.a] an output module which displays a plurality of digital images and a plurality of related information concerning said digital images recorded in a recording medium on the display module, each digital image corresponding to one of said plurality of related information; and	Each of the Accused Samsung '198 Products includes an output module which displays a plurality of digital images and a plurality of related information concerning said digital images recorded in a recording medium on the display module, each digital image corresponding to one of said plurality of related information. *See* User Guide and Technical Specifications of the Accused Samsung '198 Products available at Samsung's website showing that each of the devices include an output module which displays a plurality of digital images and a plurality of related information concerning said digital images recorded in a recording medium on the display module, each digital image corresponding to one of said plurality of related information. For example, each of the Accused Samsung '198 Products, working in conjunction with the software interface of an active application (whether Gallery, Netflix, or TV Plus), acts as the output module. The device's output module displays multiple digital images—such as photo thumbnails in the Gallery or video and show thumbnails in Netflix and TV Plus. Along with the digital images, the output module presents

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	their associated related information—for example, recognized faces linked to photos, or genres and descriptions linked to videos. The related information is sourced from the phone's storage or is streamed, and each image is presented with its corresponding data on the device's display. Further, upon information and belief related information is based on one or more of location information of the photos, certain date ranges, people, pets, and/or additional information that is used to associate pictures/videos together. Each of the Accused Samsung '198 Products include an output module such as software and hardware (e.g., graphical signal processor, display circuitry, display drivers etc) outputting digital images on the display and/or Wi-Fi circuitry for outputting digital images to an external display via Smart View. For example, the Samsung Galaxy S25 includes hardware and software that constitute the claimed wireless communication interface. The wireless communication interface is configured to perform Wi-Fi communication, which is a type of communication over a wireless local area network. COMMS WLAN: Wi-Fi 802.11 a/b/g/n/ac/6e/7, tri-band, Wi-Fi Direct Bluetooth: 5.4, A2DP, LE Positioning: GPS, GLONASS, BDS, GALILEO, QZSS NFC: Yes Radio: No USB: USB Type-C 3.2, DisplayPort 1.2, OTG https://www.gsmarena.com/samsung_galaxy_s25-13610.php

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement

Network

2G GSM	3G UMTS	4G FDD LTE
GSM850,GSM900,DCS1800,PCS1900	B1(2100),B2(1900),B4(AWS),B5(850),B8(900)	B1(2100),B2(1900),B3(1800),B4(AWS),B5(850),B7(2600),B8(900),B12(700),B13(700),B14(700),B18(800),B19(800),B20(800),B25(1900),B26(850),B28(700),B29(700),B30(2300),B66(AWS-3),B71(600)
4G TDD LTE	**SIM Slot Type**	**5G FDD Sub6**
B38(2600),B39(1900),B40(2300),B41(2500),B48(3600)	SIM 1 + eSIM / Dual eSIM	N1(2100),N2(1900),N5(850),N7(2600),N25(1900),N28(700),N66(AWS-3),N71(600)

Connectivity

Wi-Fi Connectivity	USB	Bluetooth®
802.11a/b/g/n/ac/ax/be 2.4GHz+5GHz+6GHz, EHT320, MIMO, 4096-QAM	USB 3.2 Gen 1	Bluetooth v5.4
Location Technology	**Earjack**	**MHL**
GPS,Glonass,Beidou,Galileo	USB Type-C	No
Wi-Fi Direct	**NFC**	**PC Sync.**
Yes	Yes	Smart Switch (PC version)
USB Interface		
USB Type-C		

OS

OS

Android

Samsung Galaxy S25 Technical Spec: https://www.samsung.com/us/smartphones/galaxy-s25/buy/galaxy-s25-128gb-unlocked-sm-s931uzkaxaa/

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Wi-Fi Turn on the Wi-Fi feature to connect to a Wi-Fi network and access the internet or other network devices. **Connecting to a Wi-Fi network** 1 On the Settings screen, tap **Connections** → **Wi-Fi** and tap the switch to turn it on. 2 Select a network from the Wi-Fi networks list. Networks with a lock icon require a password. • Once the device connects to a Wi-Fi network, the device will reconnect to that network each time it is available without requiring a password. To prevent the device from connecting to the network automatically, tap next to the network and tap the **Auto reconnect** switch to turn it off. • If you cannot connect to a Wi-Fi network properly, restart your device's Wi-Fi feature or the wireless router. **Sharing Wi-Fi network passwords** If you make a request to a person who is connected to a secured Wi-Fi network to share its password, you can connect to the network without entering the password. This feature is available between the devices which have contacts each other and the screen of the other device must be turned on. 1 On the Settings screen, tap **Connections** → **Wi-Fi** and tap the switch to turn it on. 2 Select a network from the Wi-Fi networks list. 3 Tap **Request password**. 4 Accept the share request on the other device. The Wi-Fi password is entered on your device and it is connected to the network. Samsung Galaxy S25 User Manual at 115: https://www.galaxys25userguide.com/wp-content/uploads/pdf/galaxy-s25-user-guide-SM-S93X-EU-15-English.pdf **Galaxy S23 Ultra:**

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement

NETWORK		
	Technology	GSM / CDMA / HSPA / EVDO / LTE / 5G COLLAPSE ▲
	2G bands	GSM 850 / 900 / 1800 / 1900 - SIM 1 & SIM 2 (Dual SIM model only)
		CDMA 800 / 1900 & TD-SCDMA
	3G bands	HSDPA 850 / 900 / 1700(AWS) / 1900 / 2100
		CDMA2000 1xEV-DO
	4G bands	1, 2, 3, 4, 5, 7, 8, 12, 13, 17, 18, 19, 20, 25, 26, 28, 32, 38, 39, 40, 41, 66 - International
		1, 2, 3, 4, 5, 7, 8, 12, 13, 14, 18, 19, 20, 25, 26, 28, 29, 30, 38, 39, 40, 41, 46, 48, 66, 71 - USA
	5G bands	1, 2, 3, 5, 7, 8, 12, 20, 25, 28, 38, 40, 41, 66, 75, 77, 78 SA/NSA/Sub6 - International
		1, 7, 28, 41, 66, 71, 78, 258, 260, 261 SA/NSA/Sub6/mmWave - USA
	Speed	HSPA, LTE-A (up to 7CA), 5G

COMMS		
	WLAN	Wi-Fi 802.11 a/b/g/n/ac/6e, tri-band, Wi-Fi Direct
	Bluetooth	5.3, A2DP, LE
	Positioning	GPS, GLONASS, BDS, GALILEO
	NFC	Yes
	Radio	No
	USB	USB Type-C 3.2, OTG

Galaxy S23 Ultra technical specifications; https://www.gsmarena.com/samsung_galaxy_s23_ultra-12024.php

Galaxy Z Flip4:

NETWORK		
	Technology	GSM / CDMA / HSPA / EVDO / LTE / 5G COLLAPSE ▲
	2G bands	GSM 850 / 900 / 1800 / 1900
		CDMA 800 / 1900
	3G bands	HSDPA 850 / 900 / 1700(AWS) / 1900 / 2100
		HSDPA 850 / 900 / 1900 / 2100
		CDMA2000 1xEV-DO
	4G bands	1, 2, 3, 4, 5, 7, 8, 12, 13, 17, 18, 19, 20, 25, 26, 28, 32, 38, 39, 40, 41, 66
	5G bands	1, 2, 3, 5, 7, 8, 12, 20, 25, 28, 38, 40, 41, 66, 75, 77, 78 SA/NSA/Sub6 - International
		SA/NSA/Sub6/mmWave - USA
	Speed	HSPA, LTE-A (6CA), 5G

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement

COMMS		
	WLAN	Wi-Fi 802.11 a/b/g/n/ac/6, dual-band, Wi-Fi Direct
	Bluetooth	5.2, A2DP, LE
	Positioning	GPS, GLONASS, GALILEO, BDS
	NFC	Yes
	Radio	No
	USB	USB Type-C 2.0, OTG

Galaxy Z Flip4 technical specifications; https://www.gsmarena.com/samsung_galaxy_z_flip4-11538.php.

Galaxy Z Fold4:

NETWORK	Technology	GSM / CDMA / HSPA / EVDO / LTE / 5G COLLAPSE ▲
	2G bands	GSM 850 / 900 / 1800 / 1900 - SIM 1 & SIM 2 (dual-SIM model only)
		CDMA 800 / 1900
	3G bands	HSDPA 850 / 900 / 1700(AWS) / 1900 / 2100
		CDMA2000 1xEV-DO
	4G bands	LTE
	5G bands	SA/NSA/Sub6/mmWave
	Speed	HSPA 42.2/5.76 Mbps, LTE-A (7CA) Cat20 2000/200 Mbps, 5G

COMMS		
	WLAN	Wi-Fi 802.11 a/b/g/n/ac/6e, dual-band, Wi-Fi Direct
	Bluetooth	5.2, A2DP, LE, aptX HD
	Positioning	GPS, GLONASS, GALILEO, BDS
	NFC	Yes
	Radio	No
	USB	USB Type-C 3.2, OTG

Galaxy Z Fold4 technical specifications; https://www.gsmarena.com/samsung_galaxy_z_fold4-11737.php.

Galaxy A54 5G:

NETWORK	Technology	GSM / HSPA / LTE / 5G COLLAPSE ▲
	2G bands	GSM 850 / 900 / 1800 / 1900 - SIM 1 & SIM 2 (dual-SIM model only)
	3G bands	HSDPA 850 / 900 / 1700(AWS) / 1900 / 2100
	4G bands	1, 2, 3, 4, 5, 7, 8, 12, 17, 20, 26, 28, 32, 38, 40, 41, 66 - International
		1, 2, 3, 4, 5, 7, 12, 13, 14, 20, 25, 26, 29, 30, 38, 39, 40, 41, 46, 48, 66, 71 - USA
	5G bands	1, 3, 7, 8, 20, 28, 38, 40, 41, 77, 78 SA/NSA/Sub6 - International
		25, 41, 66, 71 SA/NSA/Sub6/mmWave - USA
	Speed	HSPA, LTE-A, 5G

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement

COMMS	WLAN	Wi-Fi 802.11 a/b/g/n/ac/6, dual-band, Wi-Fi Direct
	Bluetooth	5.3, A2DP, LE
	Positioning	GPS, GLONASS, GALILEO, BDS
	NFC	Yes (market/region dependent)
	Radio	No
	USB	USB Type-C 2.0, OTG

Samsung Galaxy A54 5G technical specifications; Galaxy A54 5G, 128GB (Unlocked) Phones - SM-A546UZKBXAA | Samsung US; https://www.gsmarena.com/samsung_galaxy_a54-12070.php.

Further, each of the Accused '198 Products include an output module (*e.g.*, circuitry supporting display functions and/or implementing display functions).

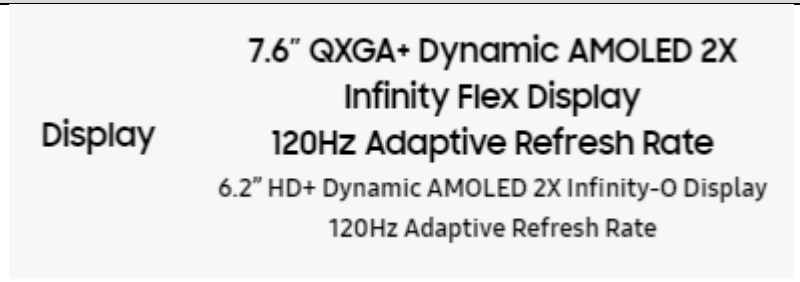
Display	6.8" Dynamic AMOLED 2X Infinity-O QHD+, Edge Screen 120Hz Adaptive Refresh Rate 500ppi, 1,750nit (Outdoor Peak)

DISPLAY	Type	Dynamic AMOLED 2X, 120Hz, HDR10+, 1200 nits (HBM), 1750 nits (peak)
	Size	6.8 inches, 114.7 cm^2 (~89.9% screen-to-body ratio)
	Resolution	1440 x 3088 pixels, 19.3:9 ratio (~500 ppi density)
	Protection	Corning Gorilla Glass Victus 2
		Always-on display

Galaxy S23 Ultra technical specifications; https://www.samsung.com/us/smartphones/galaxy-s23-ultra/buy/galaxy-s23-ultra-512gb-verizon-sm-s918uzgfvzw/?modelCode=SM-S918UZGFXAU; https://www.gsmarena.com/samsung_galaxy_s23_ultra-12024.php

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement



DISPLAY		
	Type	Foldable Dynamic AMOLED 2X, 120Hz, HDR10+, 1200 nits (peak)
	Size	7.6 inches, 183.2 cm^2 (~90.9% screen-to-body ratio)
	Resolution	1812 x 2176 pixels (~373 ppi density)
		Cover display:
		Dynamic AMOLED 2X, 120Hz, Corning Gorilla Glass Victus+
		6.2 inches, 904 x 2316 pixels, 23.1:9 ratio

Galaxy Z Fold4 technical specifications; https://www.samsung.com/us/smartphones/galaxy-z-fold4/buy/galaxy-z-fold4-512gb-att-sm-f936uzeeatt/; https://www.gsmarena.com/samsung_galaxy_z_fold4-11737.php

DISPLAY		
	Type	Foldable Dynamic AMOLED 2X, 120Hz, HDR10+, 1200 nits (peak)
	Size	6.7 inches, 101.5 cm^2 (~85.4% screen-to-body ratio)
	Resolution	1080 x 2640 pixels (~426 ppi density)
		Cover display:
		Super AMOLED, 1.9 inches, 260 x 512 pixels (Gorilla Glass Victus+)

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Galaxy Z Flip4 technical specifications; https://www.samsung.com/us/smartphones/galaxy-z-flip4/buy/galaxy-z-flip4-256gb-t-mobile-sm-f721uzdexau/; https://www.gsmarena.com/samsung_galaxy_z_flip4-11538.php Key features Crisp detail. Clear display. Enjoy binge-watching on a clear, 6.4" screen* that provides a smooth entertainment experience. Scroll through social feeds and watch action-packed movies, catching all the details you need on your Galaxy A54 5G. *Measured diagonally, the screen size is 6.4" in the full rectangle and 6.3" accounting for the rounded corners. Actual viewable area is less due to the rounded corners and the camera cutout. DISPLAY Type: Super AMOLED, 120Hz, HDR10+, 1000 nits (HBM) Size: 6.4 inches, 100.5 cm^2 (~82.9% screen-to-body ratio) Resolution: 1080 x 2340 pixels, 19.5:9 ratio (~403 ppi density) Protection: Corning Gorilla Glass 5 Galaxy A54 5G technical specifications; https://www.samsung.com/us/mobile/phones/galaxy-a54/buy/; https://www.gsmarena.com/samsung_galaxy_a54-12070.php **People Album** The Gallery application on an Accused Samsung '198 Products associates related information and displays images in multiple ways. **First**, as shown in the following series of screenshots, swiping up on a photo in the Gallery application will display thumbnails of the faces contained in the photo. Tapping on one of the unnamed people will display several photos containing the unnamed person selected

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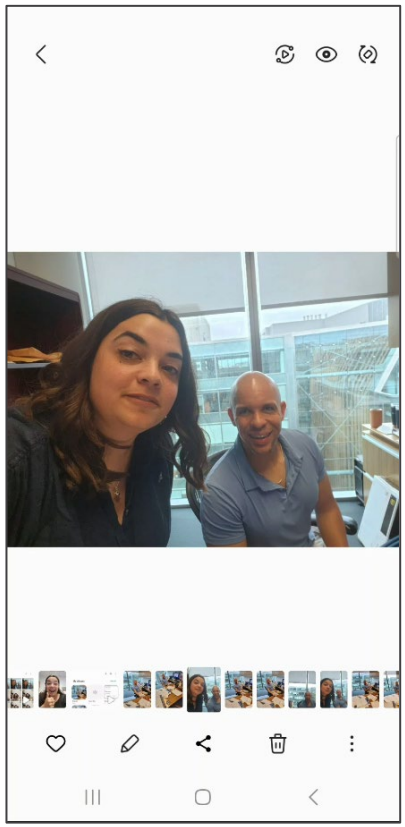
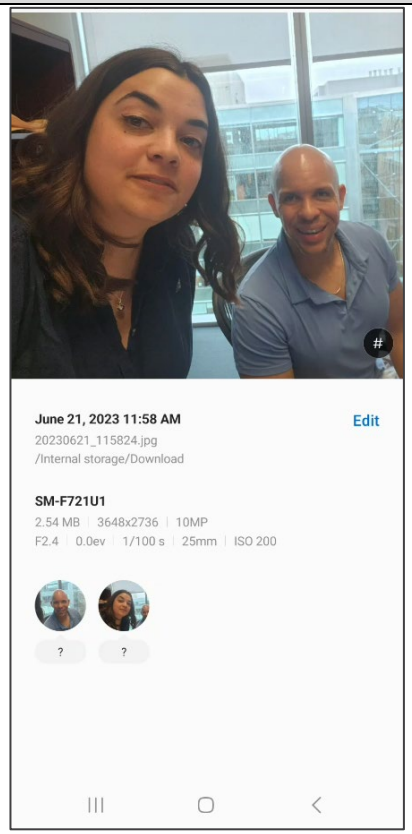
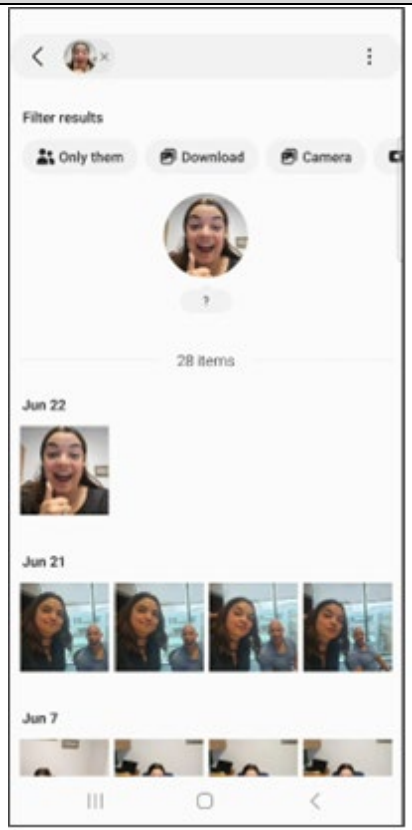
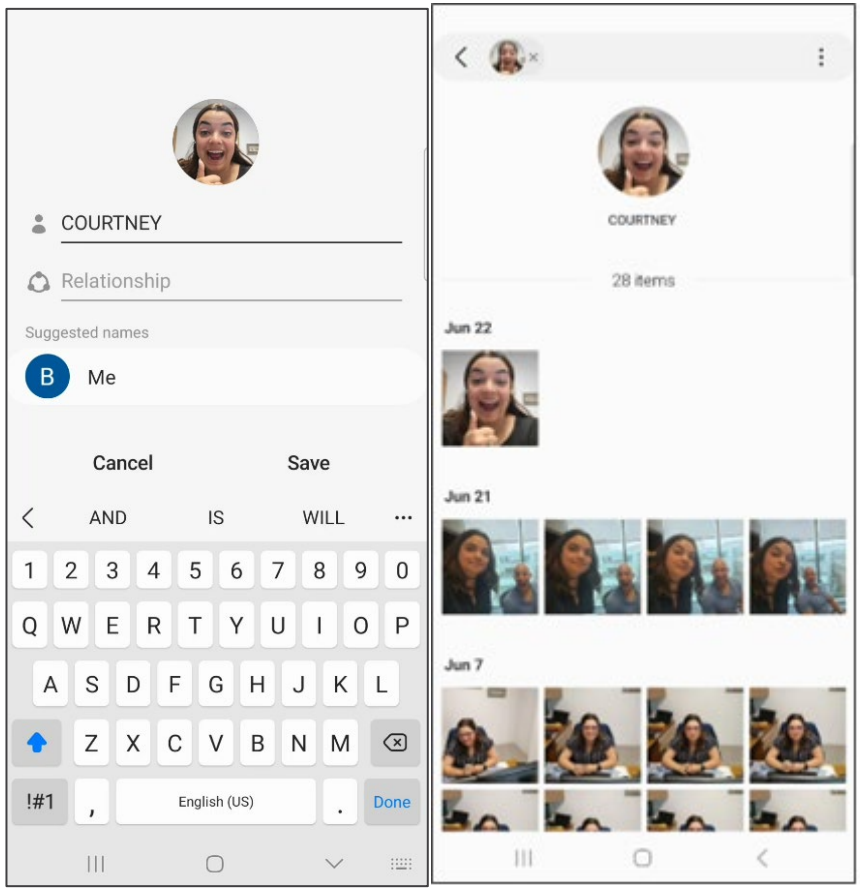
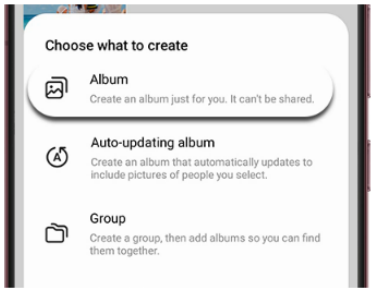
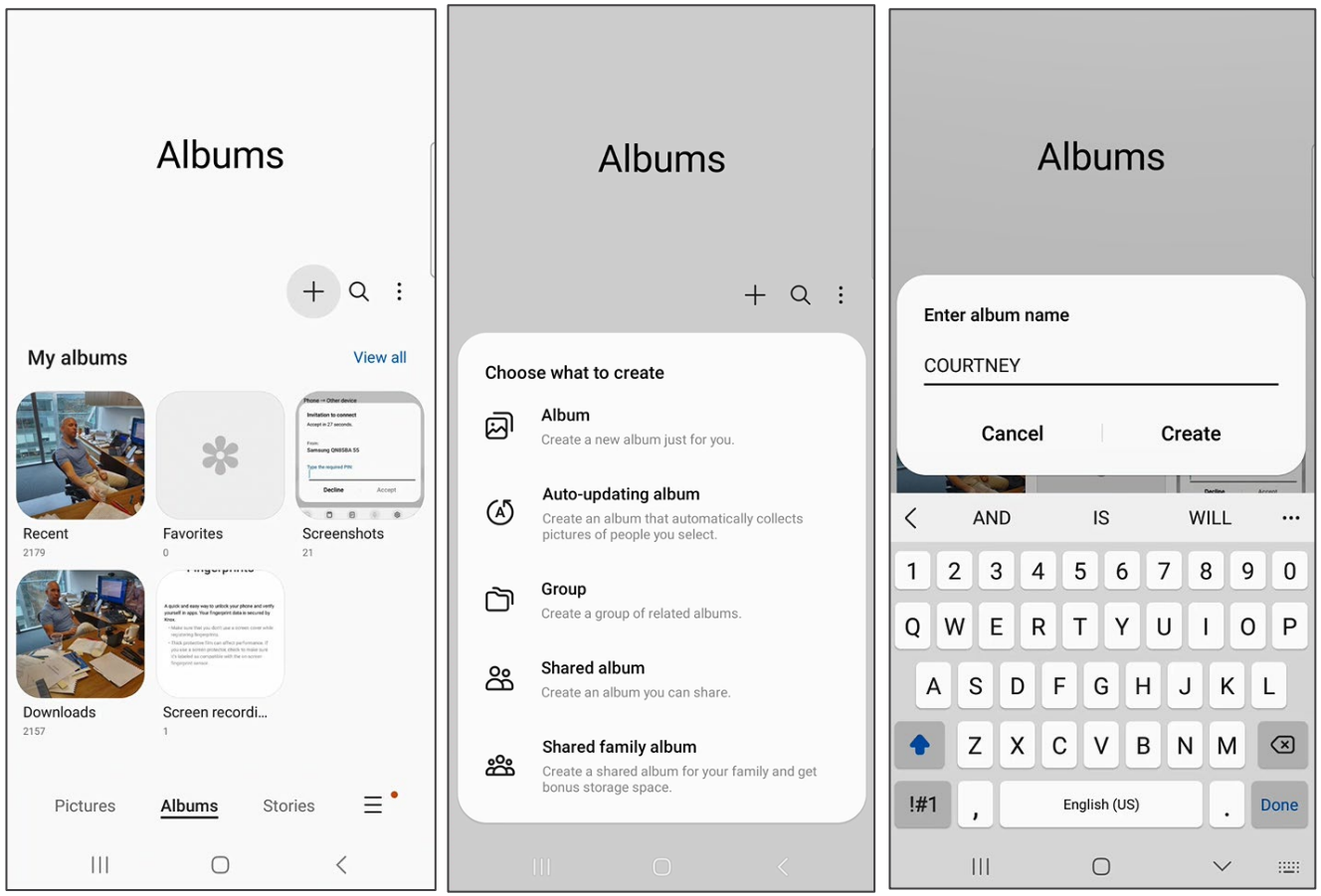
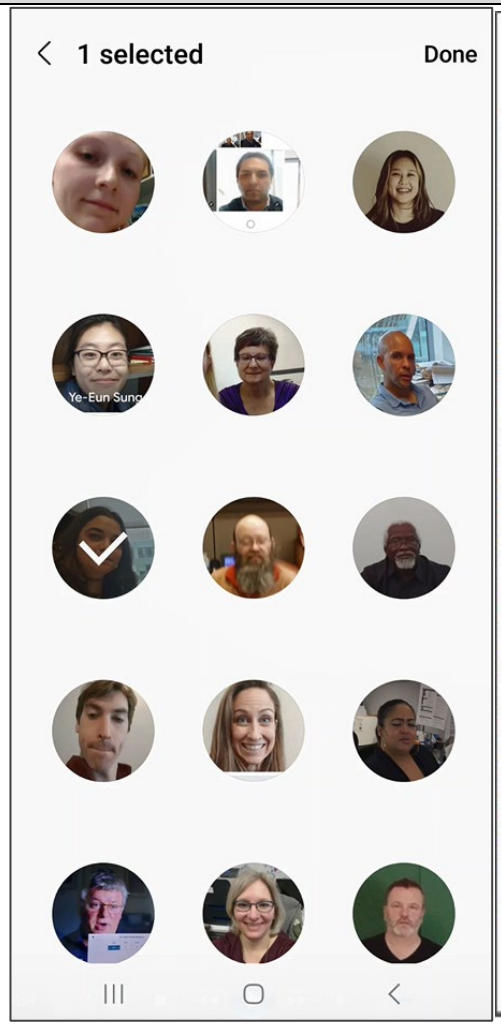
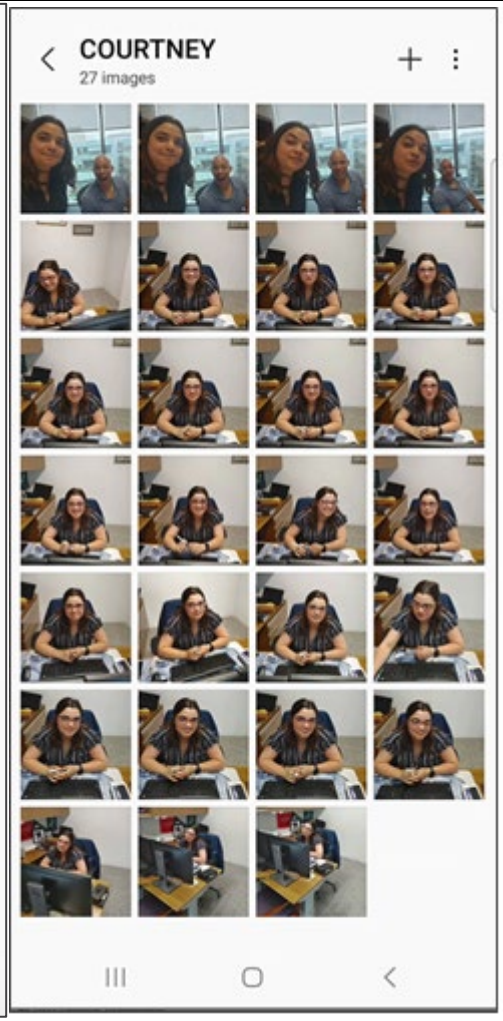
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	   Naming the previously unnamed person ("Courtney") will display photos and videos including that individual stored on the recording medium:

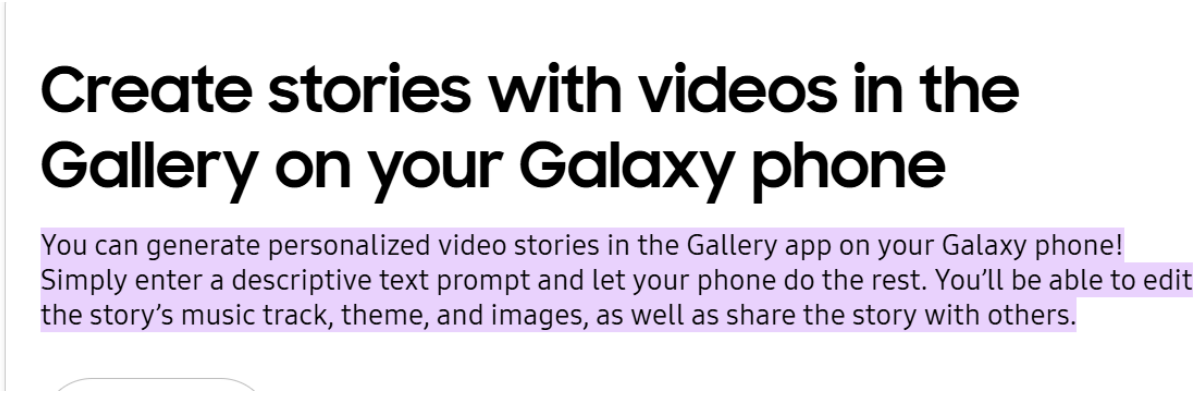
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 The above screenshots show the Samsung Galaxy S23 Ultra's Gallery app, acting as the output module, displaying a collection of images based on a recognized person. The screen presents a plurality of digital images in the form of multiple photo thumbnails, with the total count listed as "28 items." Simultaneously, the screen displays related information, most notably the person's recognized face in the large circle at the top, which serves as the primary grouping criterion. The clear organization of all the photo thumbnails under that single recognized face demonstrates the correspondence between the many images and their

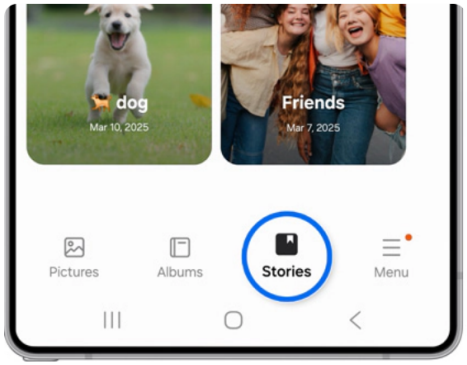
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	shared related information. The remaining accused products, including the Samsung Galaxy S25, Z Fold6, and Z Flip6, include the same accused functionality of face recognition. **Second**, as shown in the following series of screenshots, tapping on the plus icon in the Gallery application will display an option to create an "auto-updating album" based on a specific person. Tapping on an unnamed person will create an album that displays several photos containing the unnamed person selected. **Create albums** With so many photos and videos, your Gallery can get a little disorganized. Just create an album to get rid of the clutter. 1. From **Gallery**, tap the **Albums** tab, and then tap **Add** (the plus sign). You can select from the following album types:  • **Album:** Create a standard album. • **Auto-updating album:** Create an album that will automatically update to include pictures of people that you select. • **Group:** Create a group, and then add albums to the group. You can view the next section for more information. • **Shared album:** Create an album that you can share with others. 2. Enter the desired name for your new album, and then tap **Create**. 3. If you chose a standard album, you can add pictures or videos to your new album. Select either Album or Pictures at the bottom. 4. Select the pictures or videos you want to add, and then tap **Done**. 5. Then, choose how you'd like to move the pictures or videos by selecting **Copy** or **Move**.

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Description of how to create auto-updating albums based on face recognition; https://www.samsung.com/us/support/answer/ANS00079026/  Naming the album after the unnamed person ("Courtney") will display photos and videos including that individual stored on the recording medium:

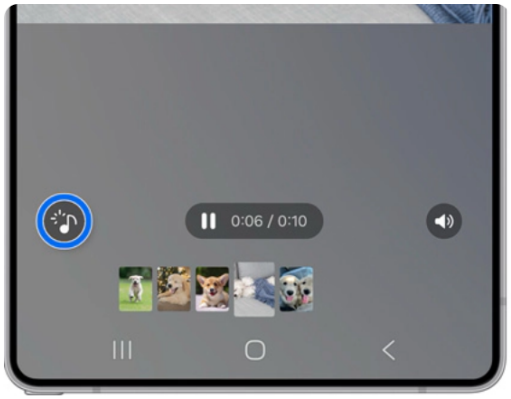
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	  when an "Auto-Update Album" feature is utilized on an Accused Samsung '198 Product, the output module again displays a plurality of digital images (the photos of the person for whom the album was created). The related information is the specific person selected for the auto-update album, and correspondence is

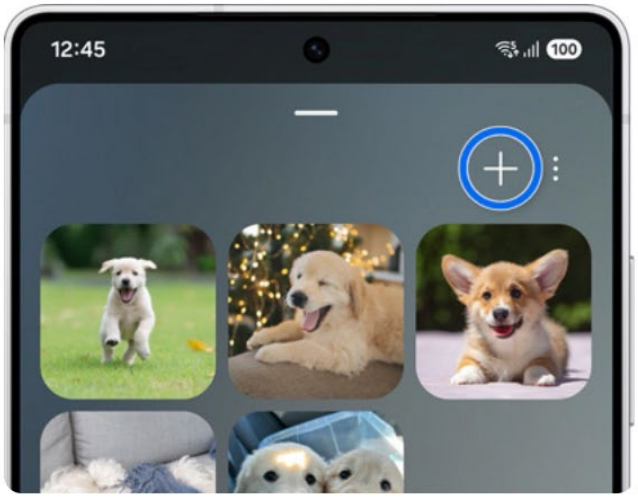
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	demonstrated by the album containing photos of that chosen individual. In this manner, the screen presents multiple photos grouped by a person's identity. **Third**, when generating "Stories," the output module displays a plurality of digital images (*e.g.*, photo thumbnails) along with a plurality of related information concerning those images, such as the dates, locations, or people associated with them. The display shows the correspondence between the images and the information, for example, by grouping photos under a specific date or location header. 

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

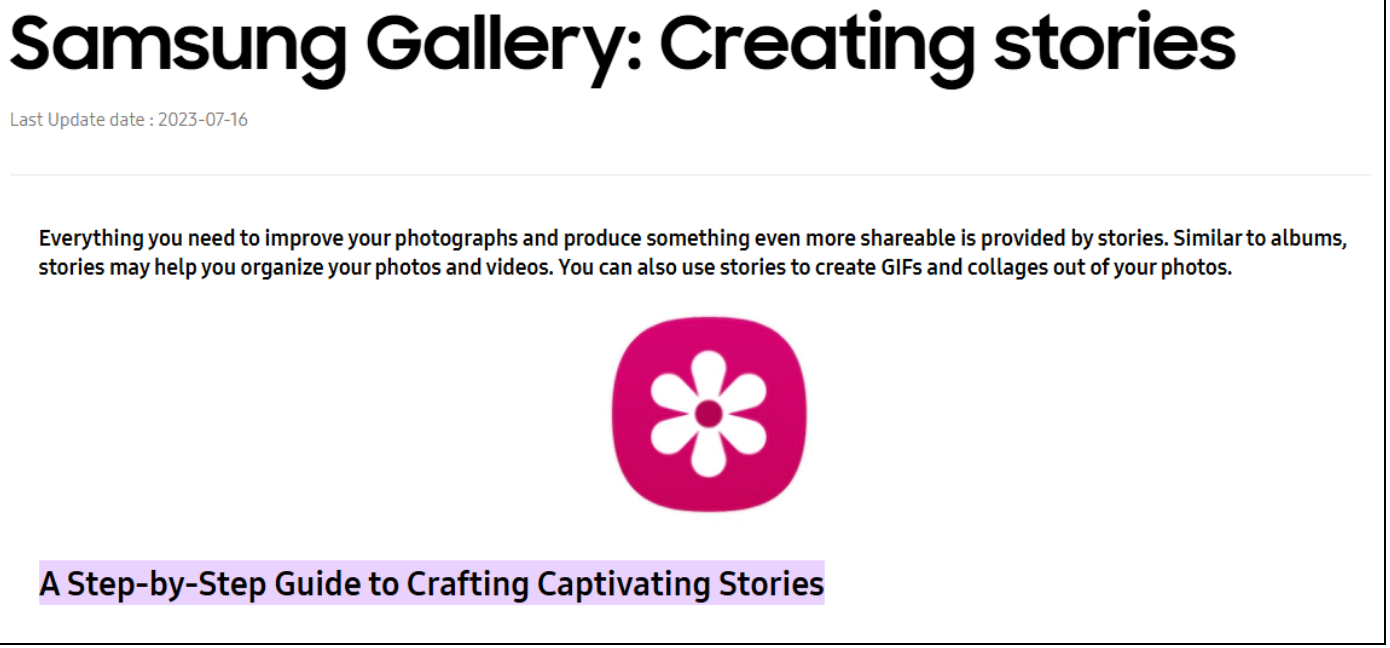
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Create a video story Video stories can be generated using different text or voice prompts. You can follow our instructions to begin creating your story! **1** Navigate to and open the **Gallery** app, and then tap the **Stories** tab. Tap the **Describe a story** text box, and then use the keyboard to type a story prompt.  **Note**: Tap the **Voice search** icon (the microphone) to use a voice command instead. **2** Tap the **Search** icon on the keyboard; your story will be created using Gallery images related to your prompt. **3** The story will begin playing. A music track and filter theme will be automatically selected for your story, but you can change this by tapping the **Themes** icon (the music note in the bottom left corner).

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

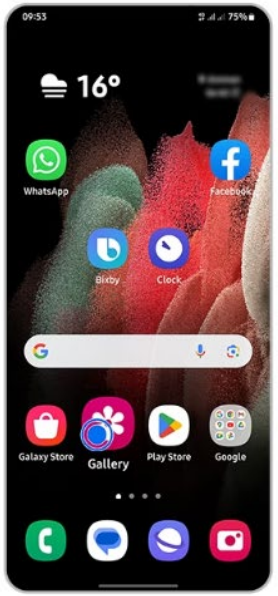
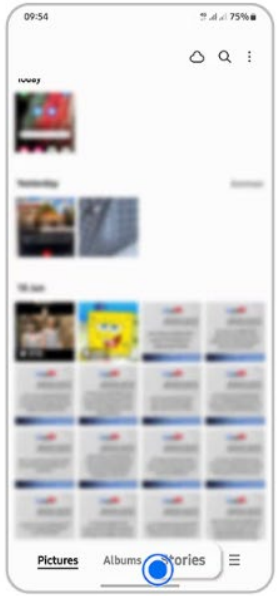
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 **4** Swipe through the filters at the bottom of the screen and select a new one. You can also tap the **Background music** icon (the music note in the bottom right corner), and swipe through the categories and options until you find a track that you like. **Note**: Tap the **Download** icon next to certain tracks to download them. **5** Tap **Back** twice to return to the story. When the story is finished playing, you can tap **Watch again** to replay it. **6** To save your story, tap **Back** again, and tap **Save** when prompted. **Note**: Tap **Discard** to delete the story instead. **7** Your new story will appear on the Stories tab. Select your story and swipe up to view the images that have been automatically included.

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	8 To add images, tap **Add** (the plus sign), and then select the images. Tap **Done**.  **9** To remove images, tap **More options** (the three vertical dots), and then tap **Select**. Select your desired images, and then tap **Remove from story** at the bottom of the screen. Tap **Remove**. Upon information and belief the stories are based on one or more of related information such as location information of the photos, certain date ranges, people, pets, and/or additional information that is used to associate pictures/videos together.

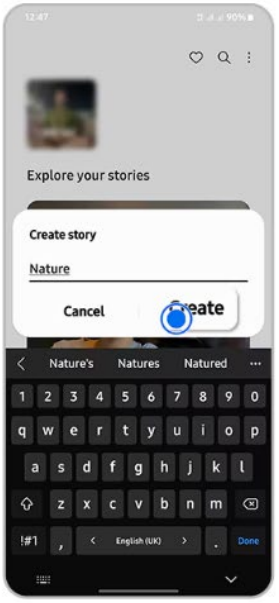
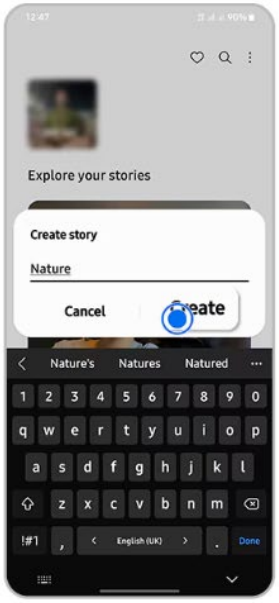
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	

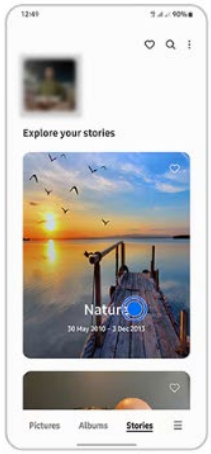
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 **Step 1**. Open the **Gallery** app  **Step 2**. Tap **Stories** **Step 3**. Tap the **Options** icon. it will appear as three dots **Step 4**. Tap **Create Story**

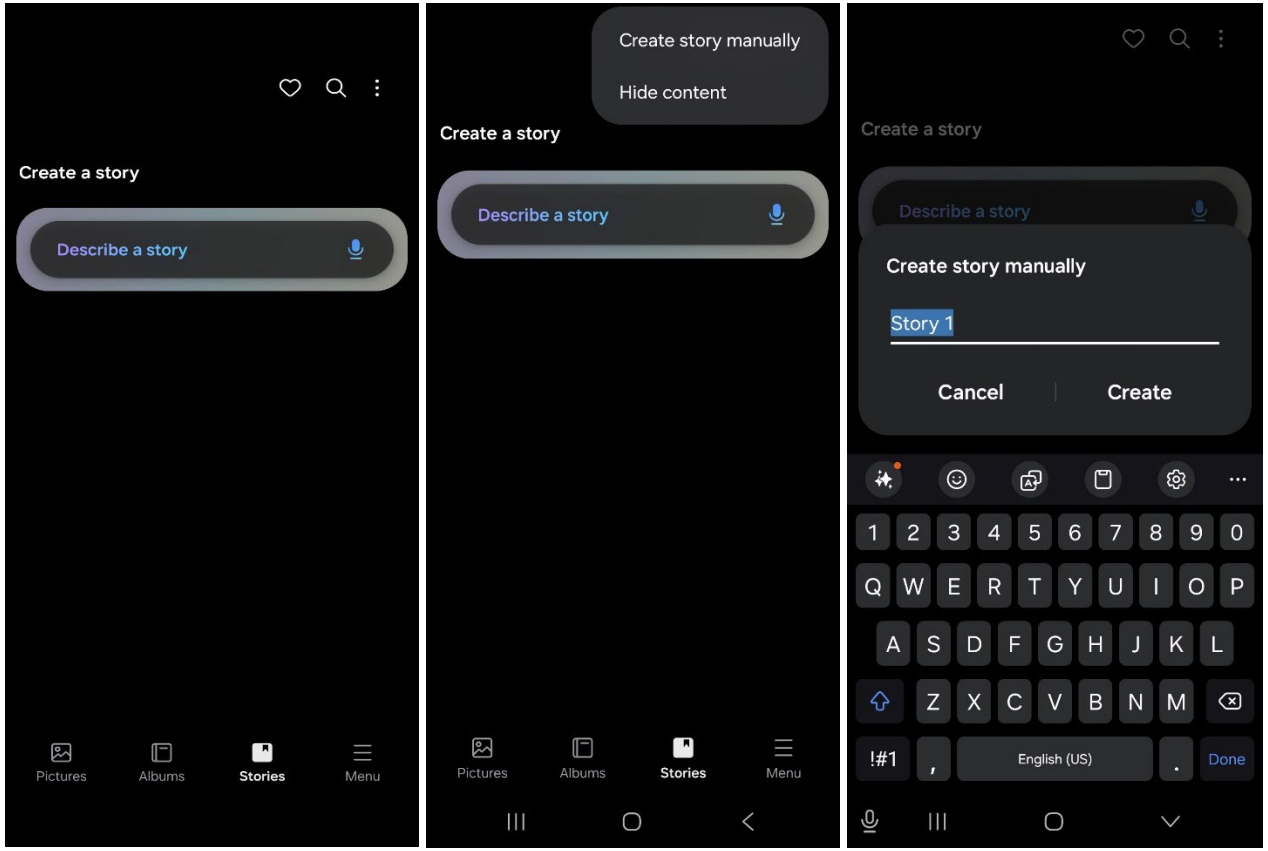
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 **Step 5**. Give your story a **name**.  **Step 6**. Tap **Create**. **Step 7**. Tap on the **photos** and **videos** that you want to add to your story. **Step 8**. Add the media to your story.

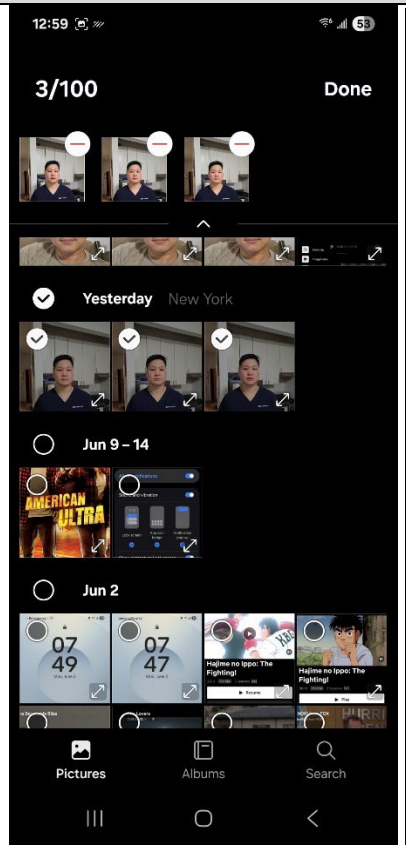
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

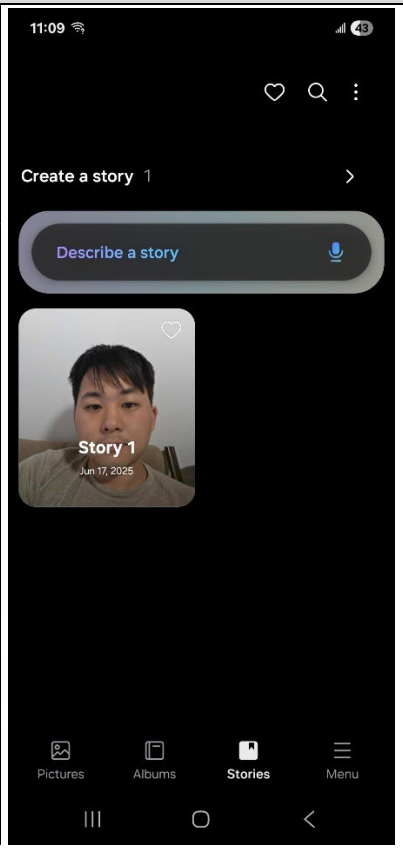
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Your story will be added to the Stories section of the Gallery app but you can continue adding or removing images. **Step 9**. Tap **Done**  **Step 10**. Tap your **story** **Step 11**. Tap the **options** icon **Step 12**. Tap **Add** to add more images to your story. Tap **edit** if you'd like to remove an image from your story

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	

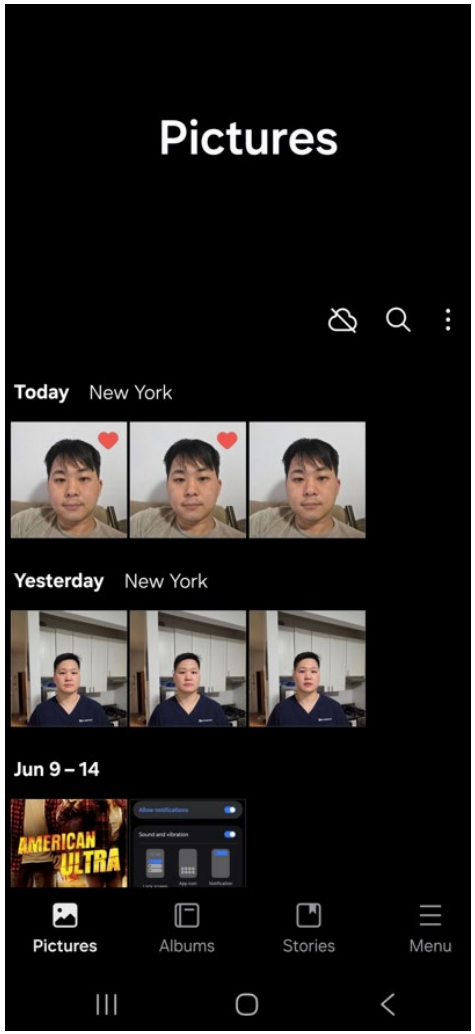
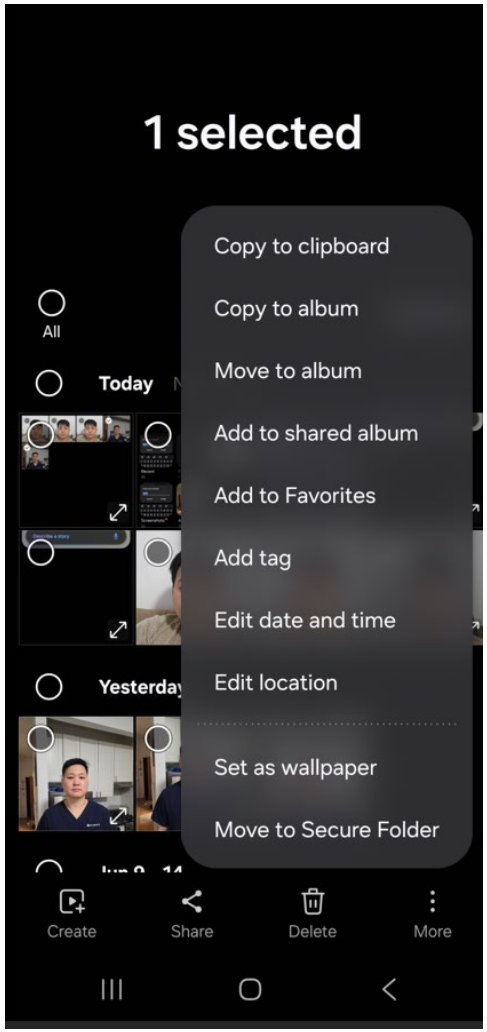
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement





The screenshots above demonstrate the steps to create a story. The screen displays images corresponding to specific dates ("Yesterday") and locations ("New York").

Fourth, the Gallery app displays a favorite status as a form of related information. As shown in the screenshot of the main "Pictures" tab, the output module displays a plurality of digital images (the photo thumbnails). It also displays a plurality of related information, including the dates of the photos (*e.g.*, "Today," "Yesterday") and a heart icon that signifies a photo's "favorite" status. The correspondence is

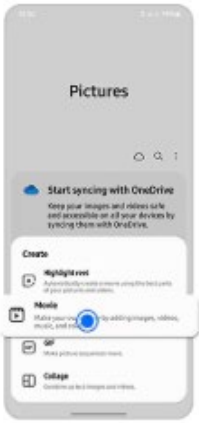
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	shown by the heart icon appearing directly on the specific photos that have been designated as favorites by the user.  

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Fifth, when selecting pictures to create a movie, the output module displays a plurality of digital images in a grid of thumbnails. The screen also displays related information, such as the selection count (*e.g.*, "20/60"), which concerns the collection of images. **Samsung Gallery: Creating a movie** Last Update date : 2023-06-25 **Want to change up the way you share your favorite pictures a little bit? You can put still photographs and moving video clips together to create a movie. Making a movie is quite simple. You can decide whether to let the Gallery app make a highlight reel or to independently edit the media to exercise complete creative control.** **Note**: This feature has previously been called a video collage and stories.

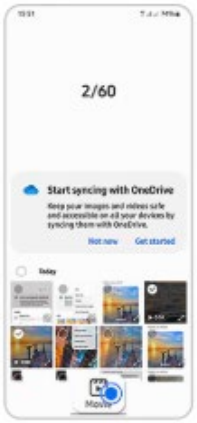
Step 1. Open the Gallery app

Step 2. Tap the Create movie

Step 3. Tap the photos and videos that you would like to add to your movie

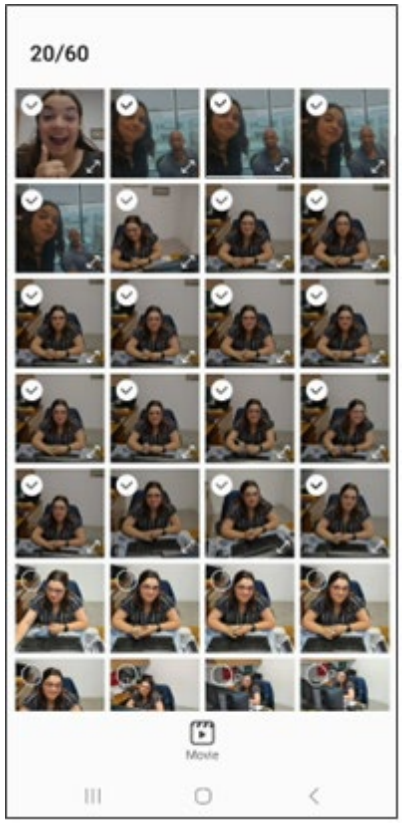


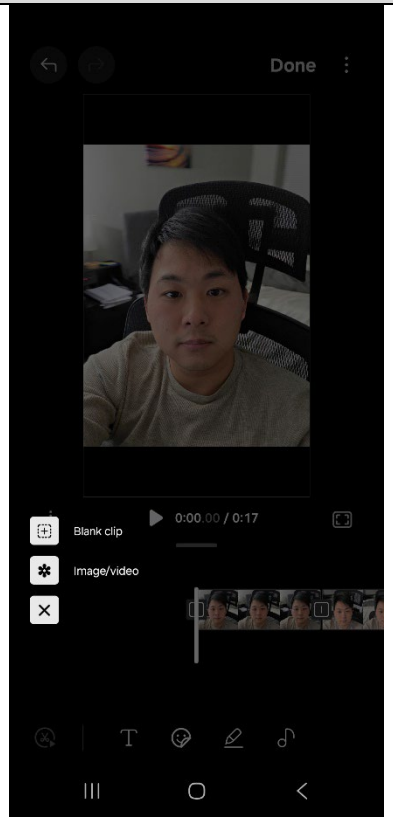
Step 4. Tap Create movie



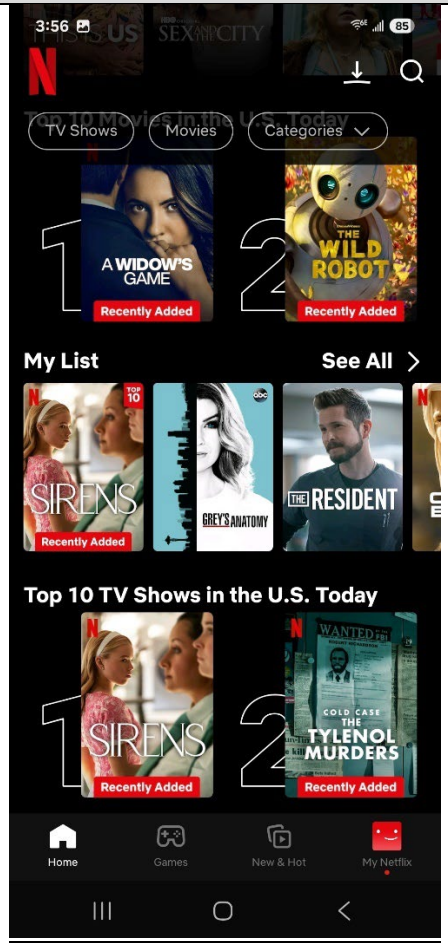
Step 5. Tap on Movies

Step 6. Tap Highlight reel or edit yourself.

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	https://www.samsung.com/ae/support/mobile-devices/samsung-gallery-creating-a-movie/  **Sixth**, the movie editor screen acts as an output module by displaying a plurality of images and related information. It displays a main preview image of the current clip as well as a plurality of digital images in the form of thumbnails for each clip in the video timeline. It also displays a plurality of related information, such as the video's total duration and the icons for various editing tools.

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 **Netflix** The Netflix application displays a plurality of digital images with corresponding related information in multiple ways. **First**, the main "Home" screen presents numerous video thumbnails organized into various category rows. The titles of these rows—such as "My List" or "Top 10 TV Shows in the U.S. Today"—constitute the plurality of related information, and each thumbnail is placed within its corresponding category row.

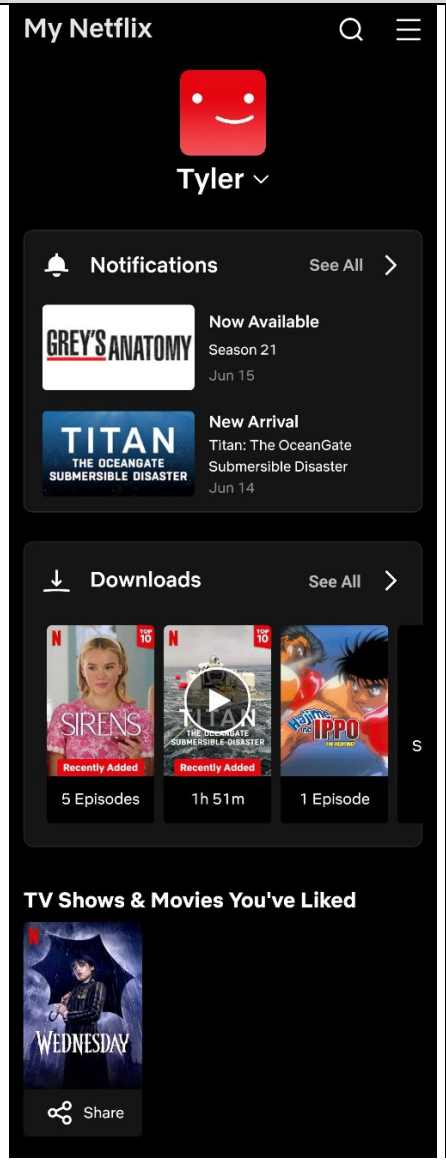
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

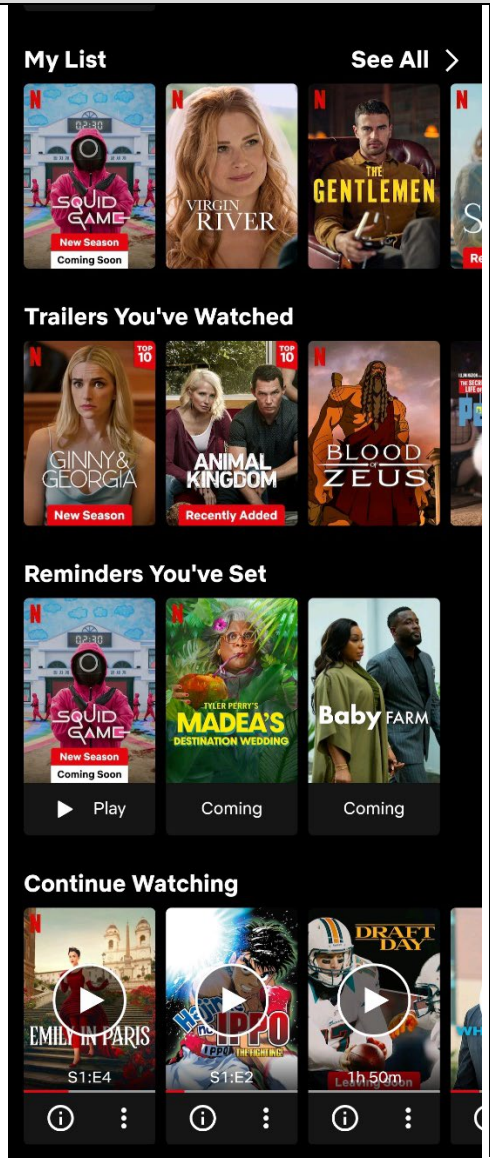
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 The screenshot of the Netflix application running on a Samsung Galaxy S25 shows the Netflix interface, acting as the output module, presenting numerous video thumbnails. The collection of these thumbnails for shows satisfies the requirement for a plurality of digital images. The interface also displays a plurality of related information, such as the title appearing with each video and the name of each category row, like "My List" or "Top 10 TV Shows in the U.S. Today." The correspondence is demonstrated by each title

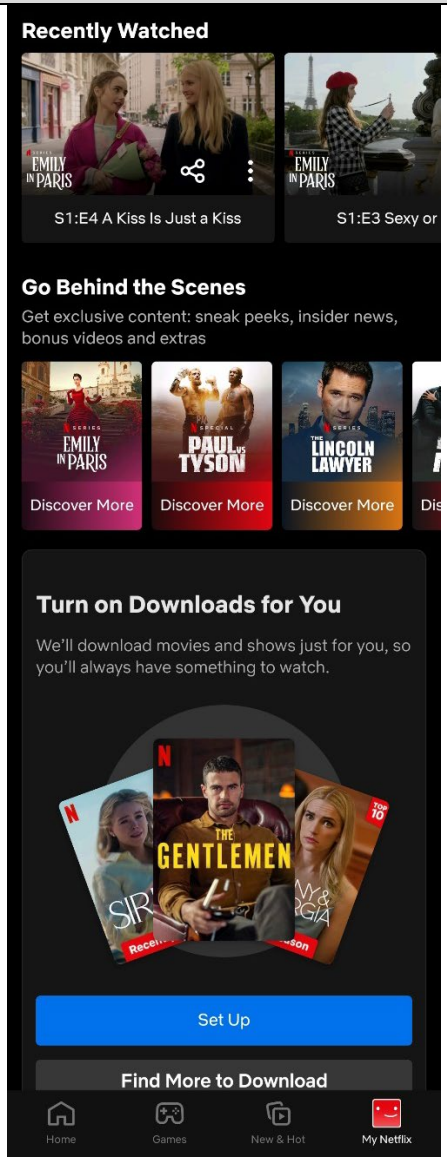
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	being visually matched to its specific thumbnail, and by each video's placement within a particular category row, linking the image to its genre. **Second**, the "My Netflix" tab displays multiple carousels of digital images. Each carousel corresponds to a specific piece of related information, which is the title of the row itself (*e.g.,* "Downloads," "My List," "Continue Watching").

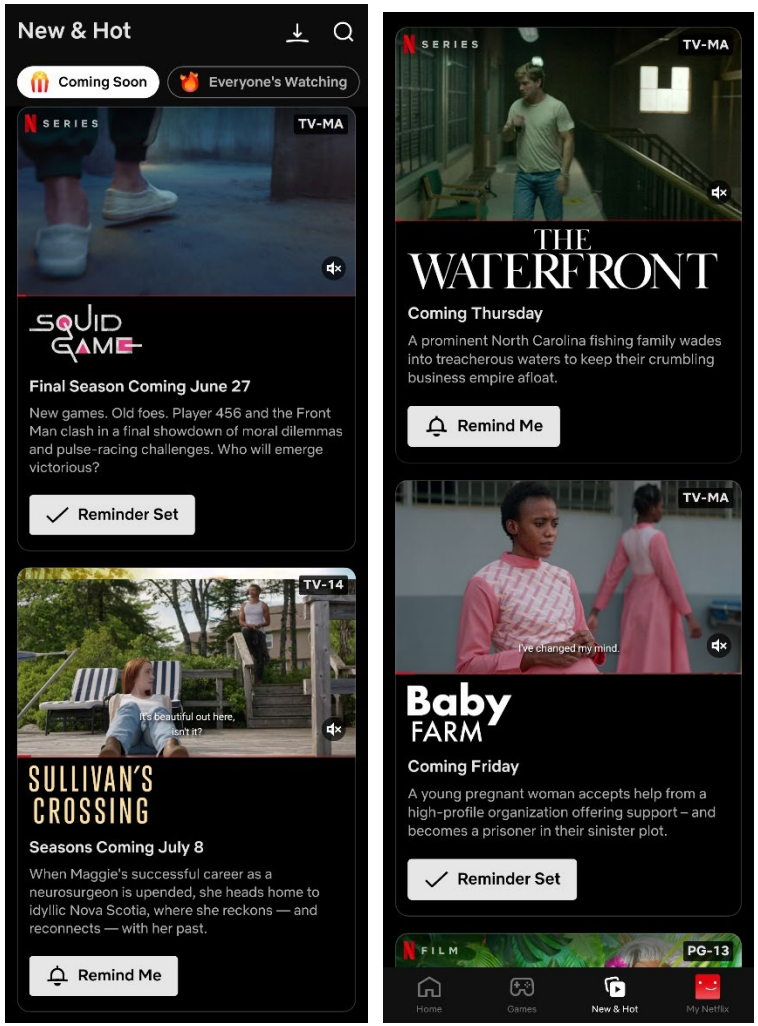
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement







U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Third, the "New & Hot" tab displays a plurality of digital images and a plurality of related information, including each show's title, its specific release date ("Final Season Coming June 27"), and its category ("Coming Soon"). 

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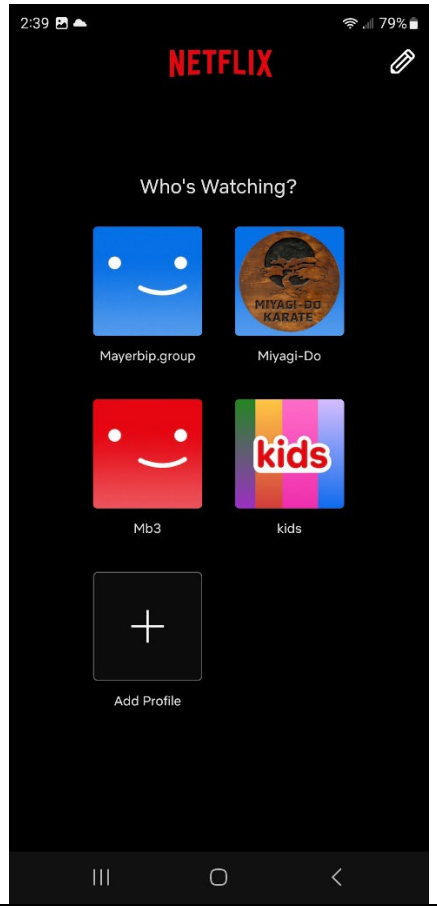
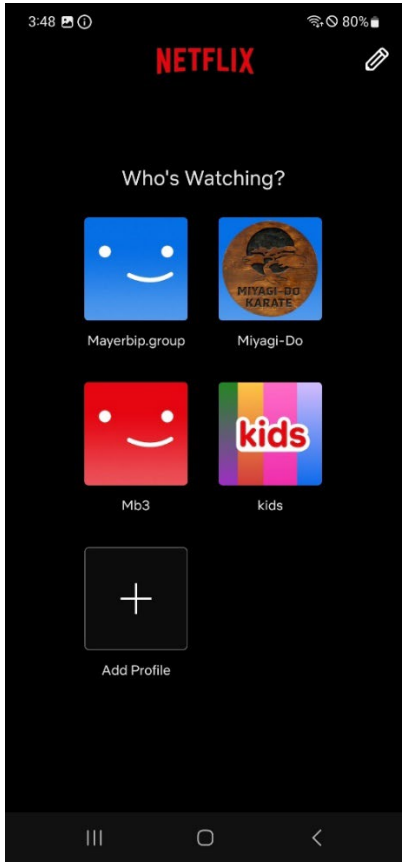
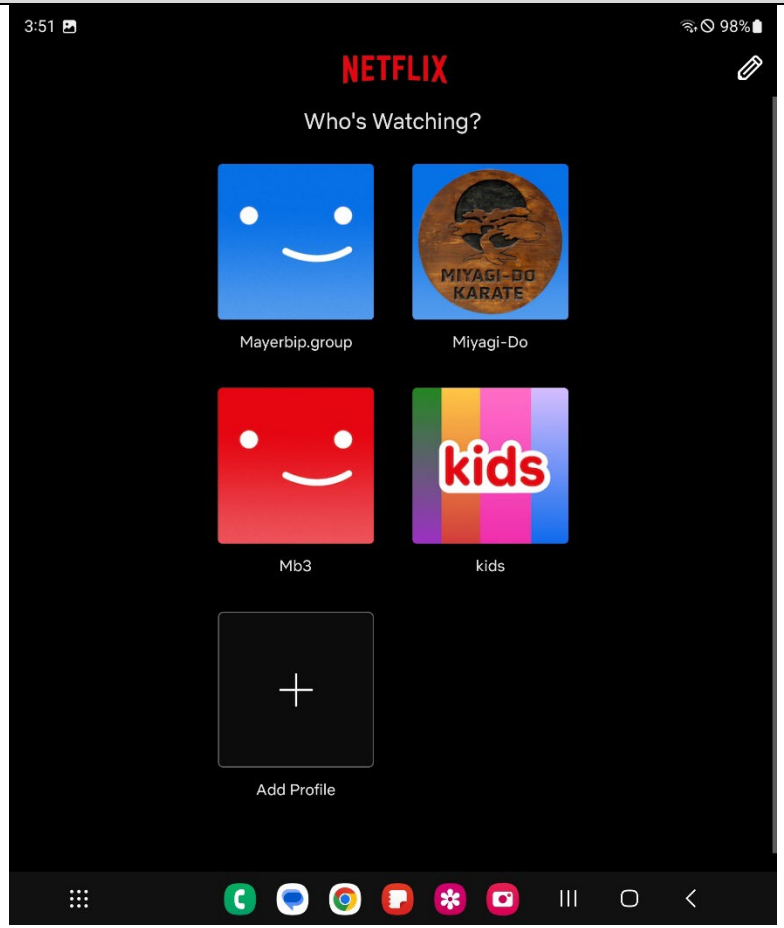
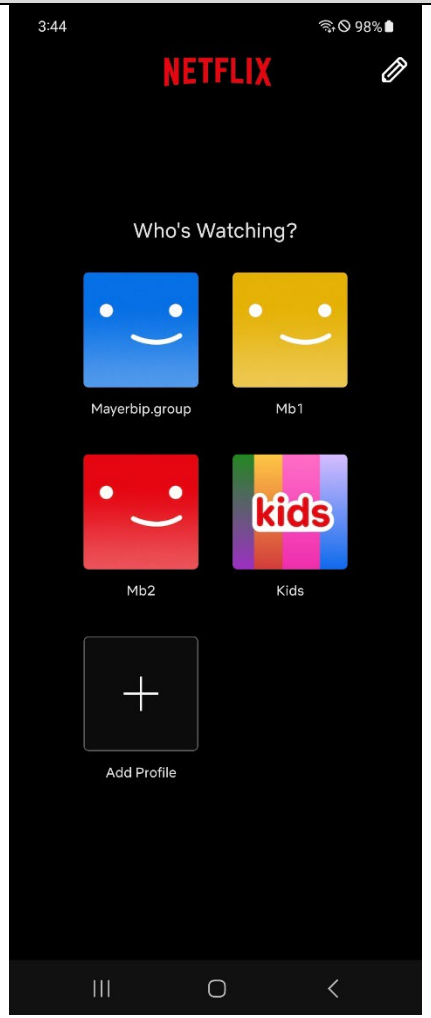
	The remaining Accused Samsung '198 Products operate in a similar manner based on the preinstalled Netflix application. *See* https://techcrunch.com/2020/02/13/netflix-fends-off-new-streaming-rivals-by-way-of-samsung-partnership/#:~:text=At%20Samsung's%20Unpacked%20event%20this,streaming%20service%20with%20Samsung%20devices; *see also* https://help.netflix.com/en/node/54816 and the following additional evidence: **Galaxy S23 Ultra**: 

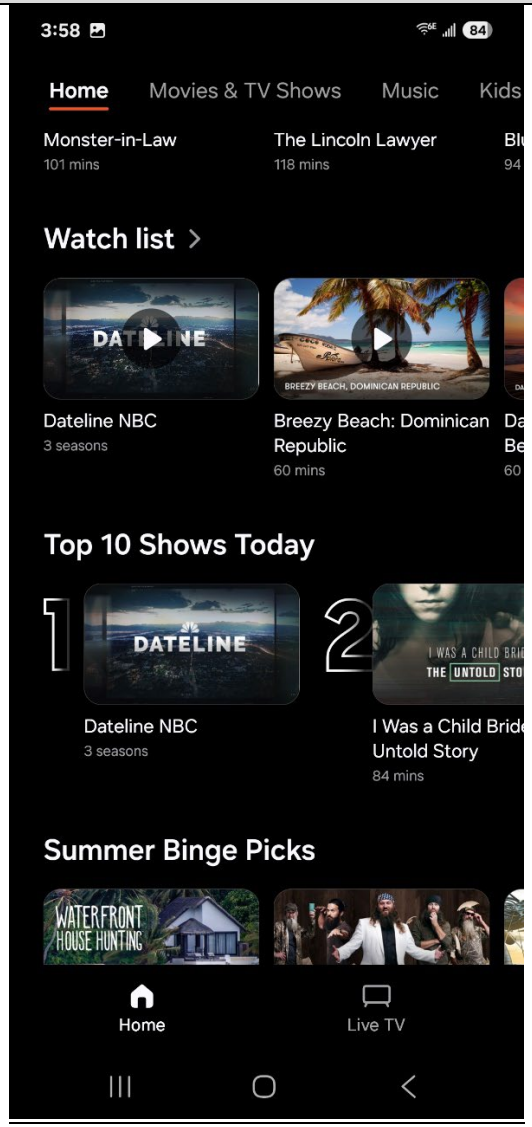
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Samsung Galaxy A54 5G:  Samsung Galaxy Zfold 4:

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

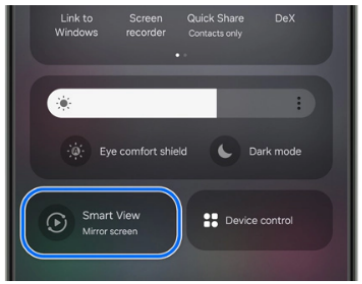
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 Samsung Galaxy Zflip 4:

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 **Samsung TV Plus**

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement

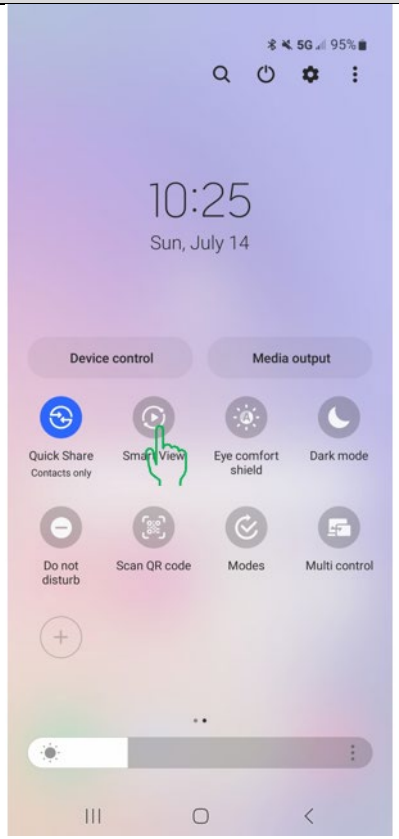


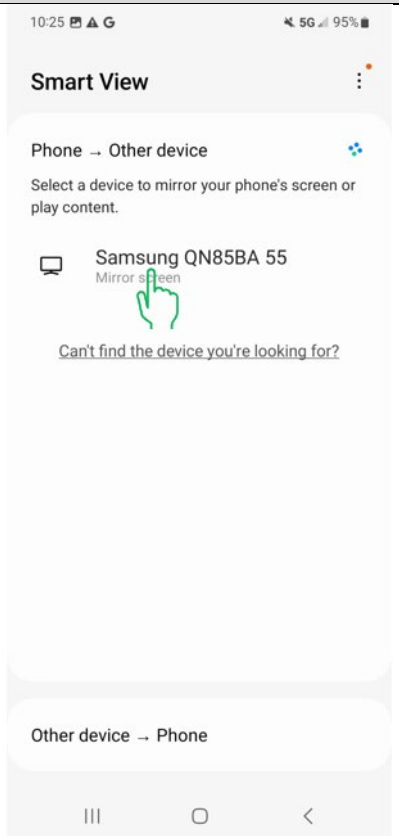
The screenshot of the Samsung TV Plus app running on a Samsung Galaxy S25 shows its interface acting as the output module. The output module presents a plurality of digital images through its numerous video

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	thumbnails for shows. The screen also displays a plurality of related information, including the titles for each show, their season counts, and the names of category rows like "Watch list" and "Top 10 Shows Today." Correspondence is shown, as each title is visually matched with its specific thumbnail, and each thumbnail is organized within a relevant category row. The plurality of images are also output to an external connectable display via Smart View: **Mirror your phone with Smart View** **Important:** Make sure your TV is turned on and connected to the same Wi-Fi network as your phone. Some TVs may require you to switch inputs or turn on screen mirroring. Compatibility with non-Samsung TVs may vary or may not be available. Check your TV's user manual for specific details. SmartView is not an app you download on your phone and is located in the Quick settings panel. Make a big statement by projecting photos or videos from your phone or tablet onto your TV. You can also do the opposite and stream your TV to your phone's or tablet's screen! 1. Open the Quick settings panel by swiping down from the top of the screen using two fingers. Tap **Smart View**.  2. Tap your TV from the list of Available devices, and then tap **Start now**. If prompted, enter a PIN or allow access to complete the connection. 3. Your device's screen will now appear on the TV. 4. If you want to stream the TV's screen to your phone or tablet, you can do just that if the TV supports it. Navigate back to the Smart View main page, tap **Other device → Phone**, and then select your TV. 5. To switch back, tap **Phone → Other device.** When you are done using Smart View, tap the **Smart View** icon on your phone, and then tap **Disconnect**. If you need help editing the icons in the Quick settings panel, check out our **guide**.

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	https://www.samsung.com/us/support/answer/ANS00062585/ • **Smart View:** Show your device's screen or play videos on a nearby TV. Galaxy A54 5G user manual at 110, https://downloadcenter.samsung.com/content/UM/202402/20240228080435606/SAM_A546_EN_UG_OS14_022124_FINAL.pdf. **Smart View** **(Mirroring on a TV screen)** View your phone's displayed content on a large screen by connecting your phone to a screen mirroring-enabled TV or monitor. 1 Open the notification panel, swipe downwards, and then tap **Smart View**. 2 Select a device to mirror your phone's screen. When you play a video with Smart View, the resolution may vary depending on the TV model. **App cast** Only display the video on the connected screen while you are checking private messages or using other features on your phone at the same time. Open the app to cast a video on the connected screen and tap → **App cast**. Some apps may not support this feature. Galaxy S24 User Guide at 124; https://downloadcenter.samsung.com/content/UM/202402/20240220134027613/S92X_UG_CA_UU_ENG_D9.pdf The annotated screenshots of the Galaxy A54 5G below demonstrates how the "Smart View" gets initiated on an exemplary Accused Samsung '198 products to connect to an external display:

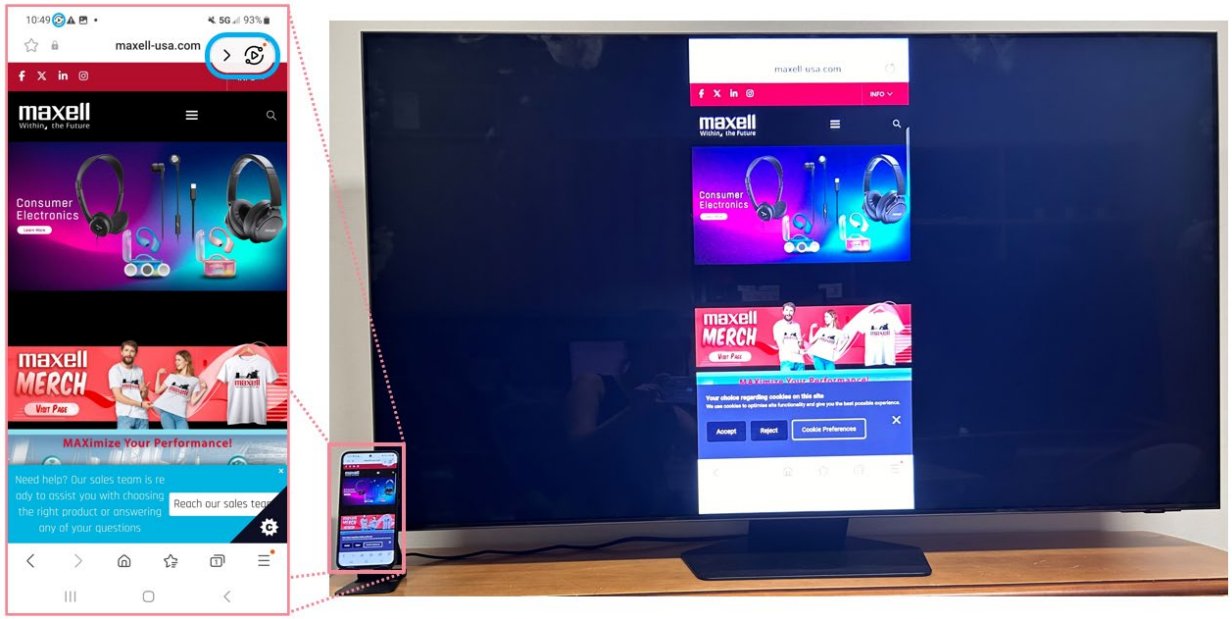
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement





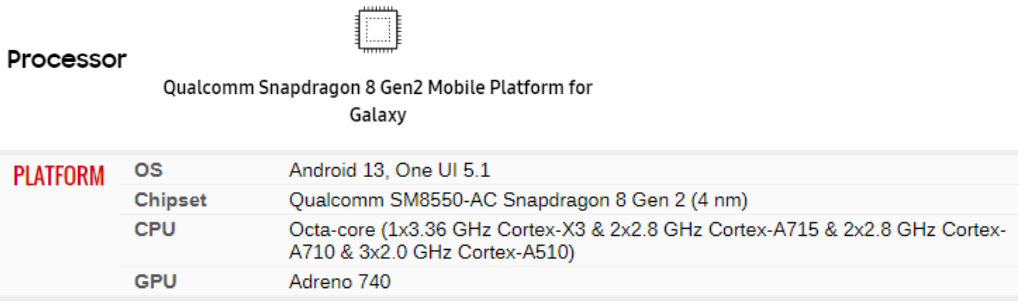
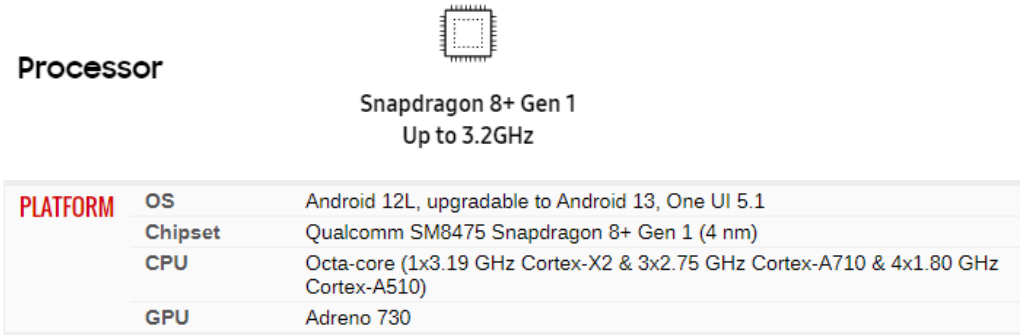
The user swipes down from the top of the display to get to the first screen where "Smart View" icon is displayed. Upon selecting "Smart View" (an exemplary first user operation), the external devices that can be used for "Smart View" appears. User selects a specific device ("Samsung QN85BA 55") as an external device to mirror the screen through "Smart View."

Once the pairing of the Galaxy A54 5G to the TV through "Smart View" has been established, the screen on the phone gets displayed on the TV, while the display on the phone indicates that the screen is being mirrored.

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 <u>Doctrine of Equivalents</u> To the extent Samsung argues that this limitation is not literally met in any Accused Samsung '198 Products, Maxell asserts that this limitation is met under the doctrine of equivalents because the identified structure matches the function, way, and result of the claimed element and, to the extent there is a difference, the difference is insubstantial. For example, to the extent that Samsung argues that the combination of a general-purpose processor and application software does not constitute a singular "output module", the combination of the device's processor, graphics processor, and application software is an equivalent structure. Using this combined structure performs substantially the same function, which is to display multiple images and their corresponding related information on a display module. It does so in substantially the same way, by processing image and metadata files and rendering them for the user on the display. This achieves substantially the same result: presenting an organized visual interface where multiple images are shown with their associated context.

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
[1.b] a control module which selects a digital image to add in a playlist, based on one of the plurality of information concerning the digital image recorded in said recording medium;	Each of the Accused Samsung '198 Products includes a control module which selects a digital image to add in a playlist, based on one of the plurality of information concerning the digital image recorded in said recording medium. *See* User Guide and Technical Specifications of the Accused Samsung '198 Products available at Samsung's website showing that each of the devices includes a control module which selects a digital image to add in a playlist, based on one of the plurality of information concerning the digital image recorded in said recording medium. The processor within each of the Accused Samsung '198 Products, when executing the instructions of an active application (whether Gallery, Netflix, or TV Plus), acts as the control module. The device's control module performs the function of selecting digital images for inclusion in various forms of playlists. On information and belief, such a selection is based on specific related information; for instance, the control module selects photos for a People Album based on facial recognition data, or it selects videos for "My List" and recommendations based on criteria like genre or viewing history. Galaxy S25 Processor **CPU Type** — **CPU Speed** Octa-Core — 4.47GHz,3.5GHz Samsung Galaxy S25 Technical Specification: https://www.samsung.com/us/smartphones/galaxy-s25/buy/galaxy-s25-128gb-unlocked-sm-s931uzkaxaa PLATFORM OS: Android 15, up to 7 major Android upgrades, One UI 7 Chipset: Qualcomm SM8750-AB Snapdragon 8 Elite (3 nm) CPU: Octa-core (2x4.47 GHz Oryon V2 Phoenix L + 6x3.53 GHz Oryon V2 Phoenix M) GPU: Adreno 830

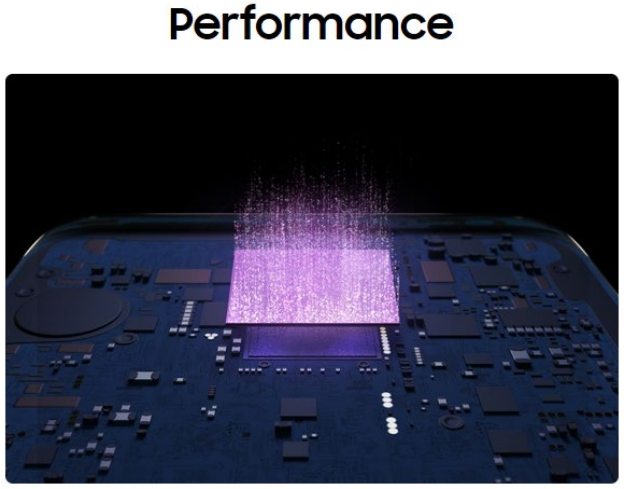
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	https://www.gsmarena.com/samsung_galaxy_s25-13610.php Galaxy S23 Ultra  Galaxy S23 Ultra technical specifications; https://www.samsung.com/us/smartphones/galaxy-s23-ultra/buy/galaxy-s23-ultra-512gb-verizon-sm-s918uzgfvzw/?modelCode=SM-S918UZGFXAU; https://www.gsmarena.com/samsung_galaxy_s23_ultra-12024.php.  Galaxy Z Fold4 technical specifications; https://www.samsung.com/us/smartphones/galaxy-z-fold4/buy/galaxy-z-fold4-512gb-att-sm-f936uzeeatt/; https://www.gsmarena.com/samsung_galaxy_z_fold4-11737.php.

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 PLATFORM OS: Android 12, upgradable to Android 13, One UI 5.1 Chipset: Qualcomm SM8475 Snapdragon 8+ Gen 1 (4 nm) CPU: Octa-core (1x3.19 GHz Cortex-X2 & 3x2.75 GHz Cortex-A710 & 4x1.80 GHz Cortex-A510) GPU: Adreno 730 Galaxy Z Flip4 technical specifications; https://www.samsung.com/us/smartphones/galaxy-z-flip4/buy/galaxy-z-flip4-256gb-t-mobile-sm-f721uzdexau/; https://www.gsmarena.com/samsung_galaxy_z_flip4-11538.php.

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

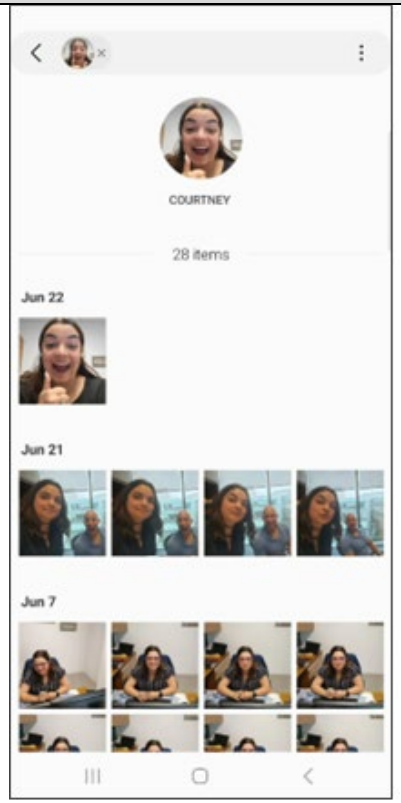
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement

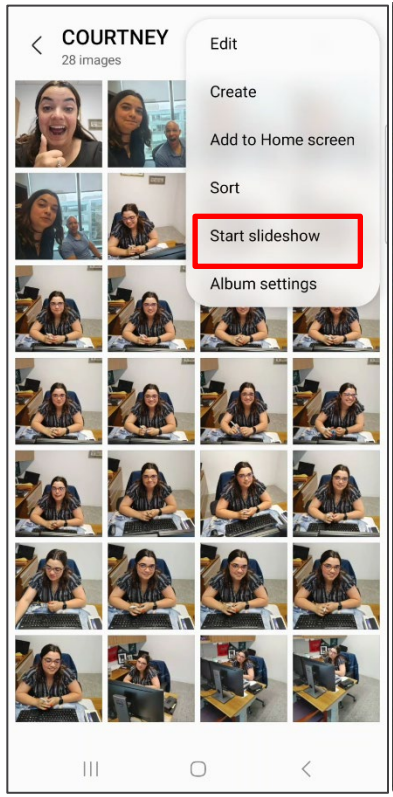


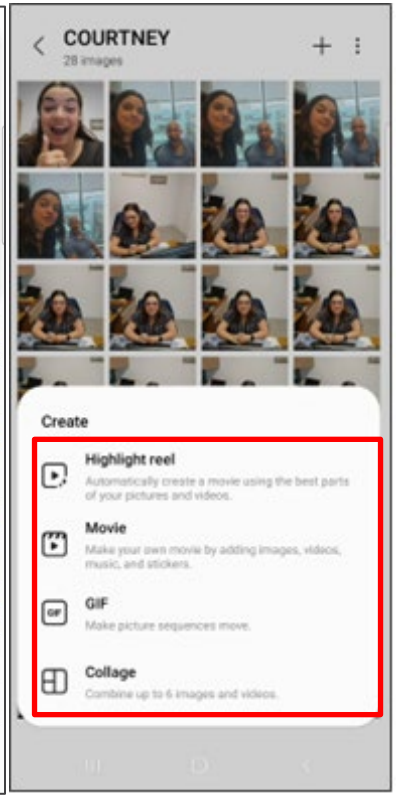
Galaxy A54 5G technical specifications; https://www.samsung.com/us/mobile/phones/galaxy-a/galaxy-a54-5g-128gb-verizon-sm-a546vzkbvzw/; https://www.gsmarena.com/samsung_galaxy_a54-12070.php.

People Album

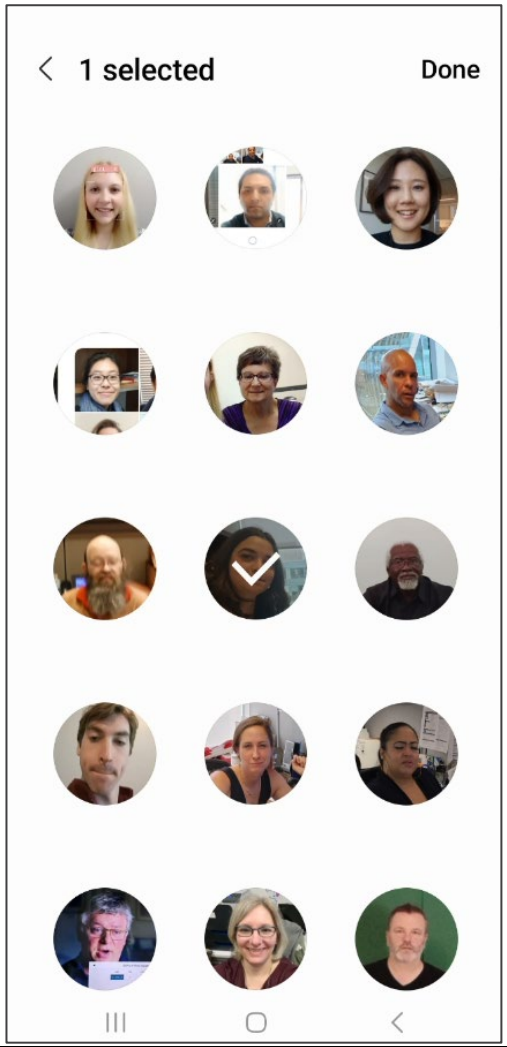
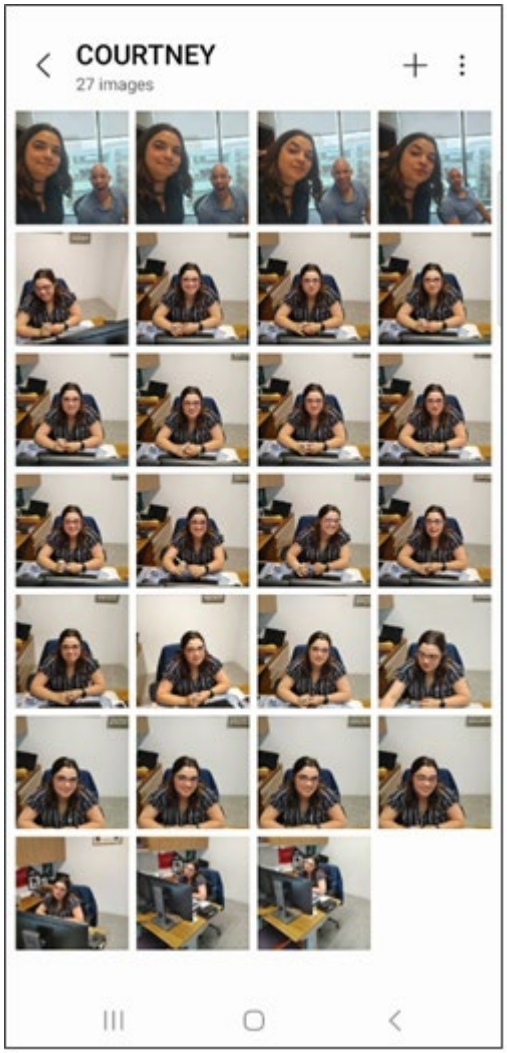
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement



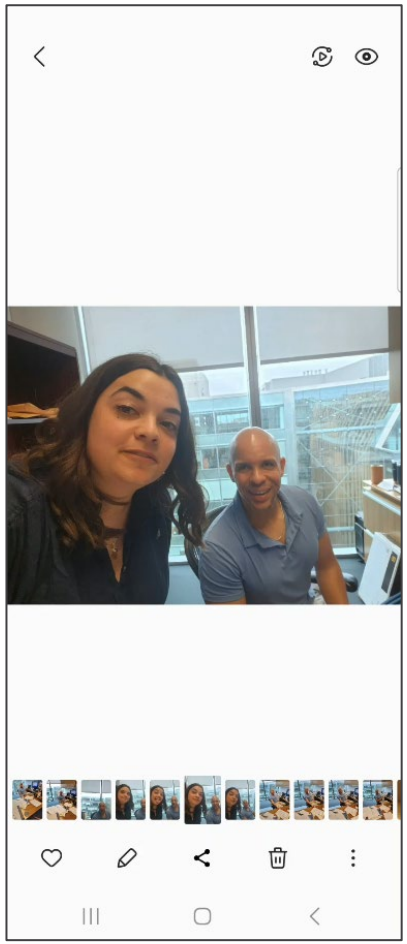
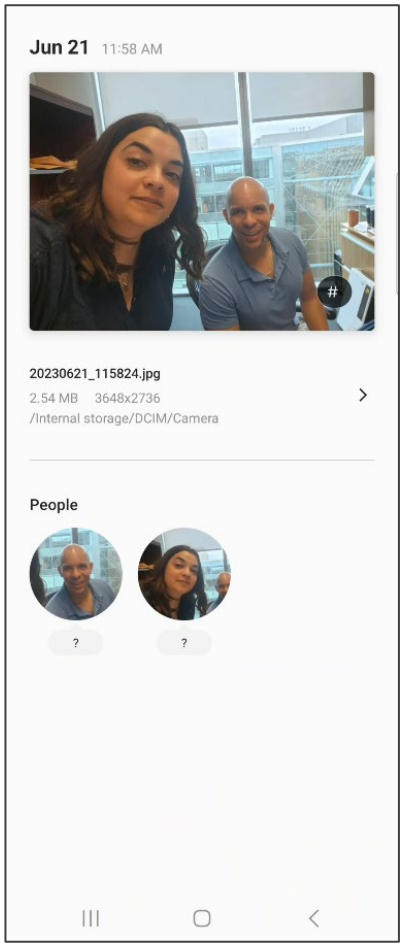
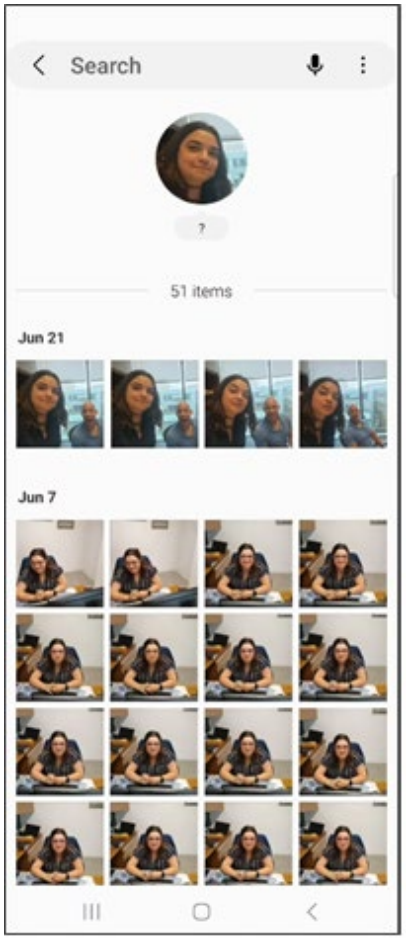




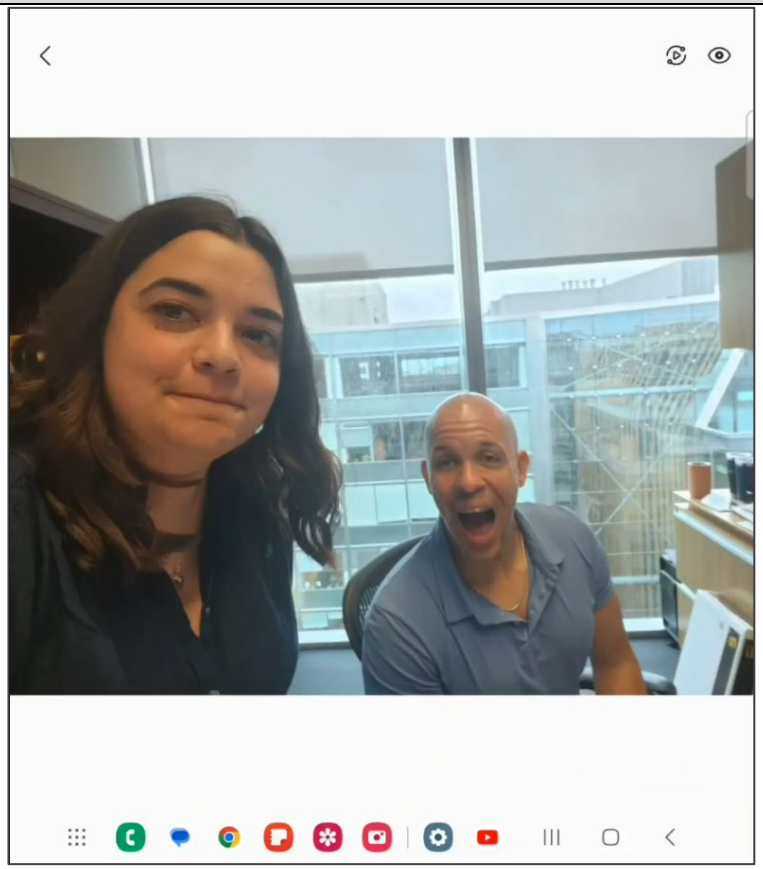
First, the screenshot of the Gallery application on an Samsung Galaxy S23 Ultra demonstrates the selection process. The application's software acts as the control module. On information and belief, the control module selects digital images to add to a playlist. In this context, the "People Album" (the collection of photos for a recognized and registered specific person, such as "COURTNEY" shown in the screenshots) itself functions as the playlist. The recorded image information for this registered specific person can be selectively reproduced by selecting options such as "Movie," or "Slideshow" from menus accessible within Courtney's album. The selection of images by the control module for this People Album (playlist) is based on related information, specifically the shared recognized face of "COURTNEY," as detailed in element [1.a]. The formation of this curated album, which is explicitly usable for generating such movies or

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	slideshows, shows that the control module selects images for a playlist using shared facial data as the related information. Same functionality exists in each of the Accused Samsung '198 Products:  

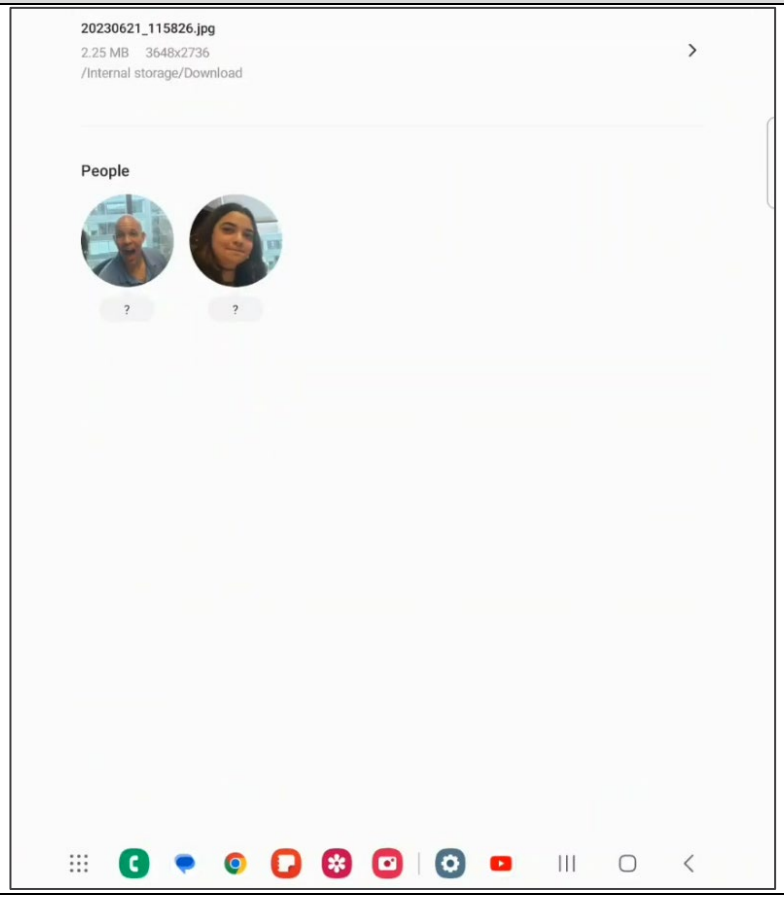
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Galaxy A54 5G    Galaxy Flip4

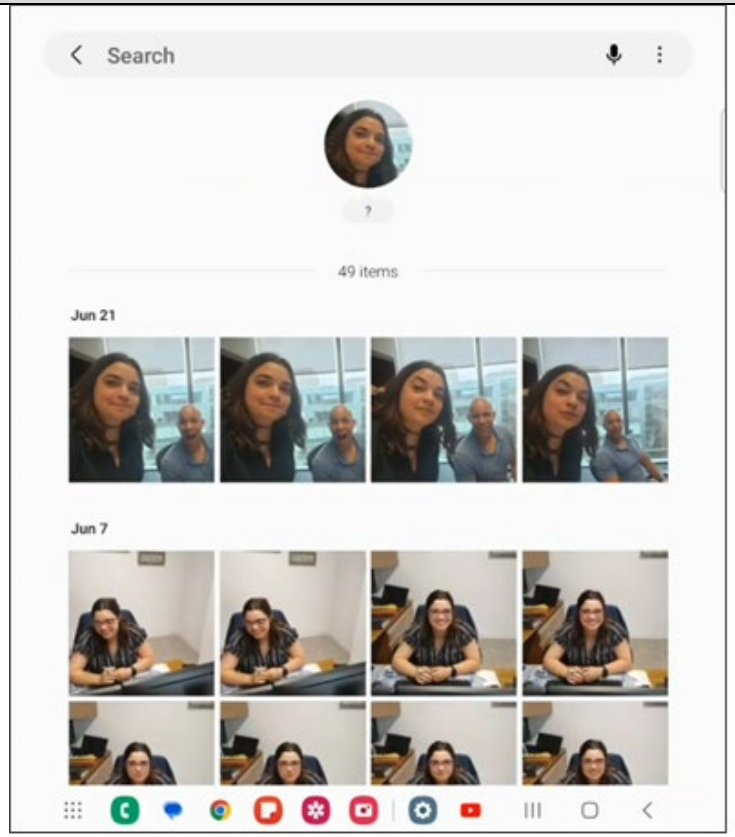
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

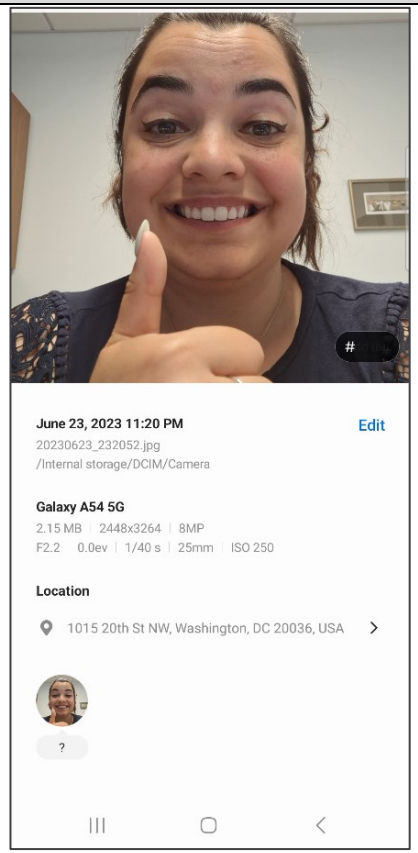
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	

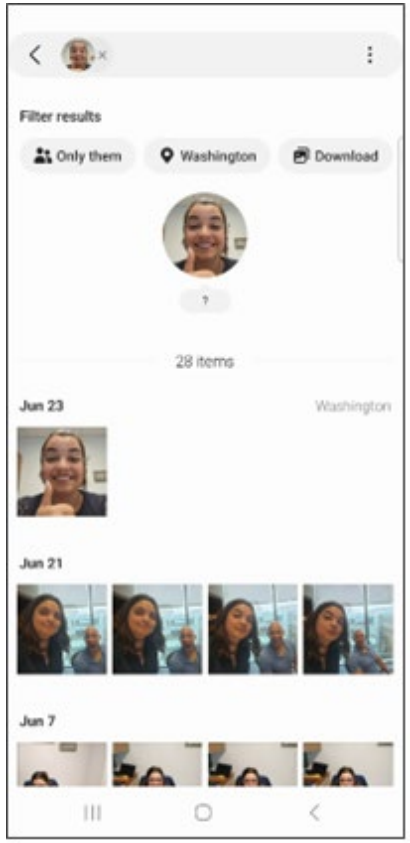
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 Galaxy Fold4

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement





Galaxy A54 5G

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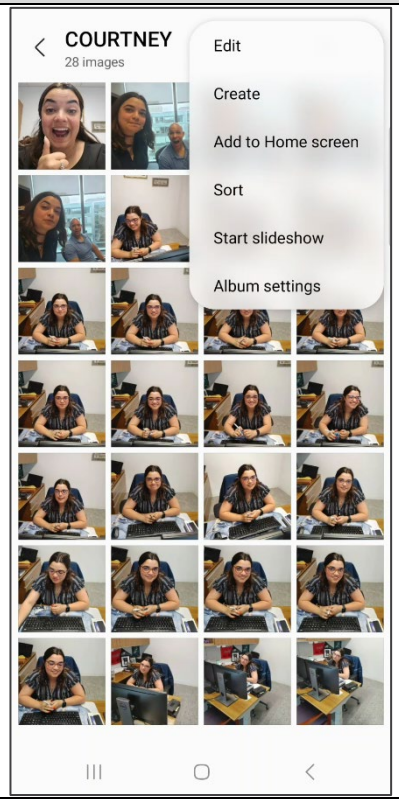
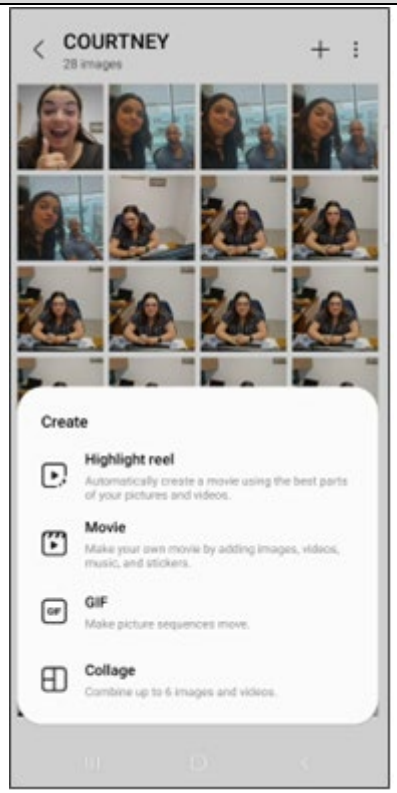
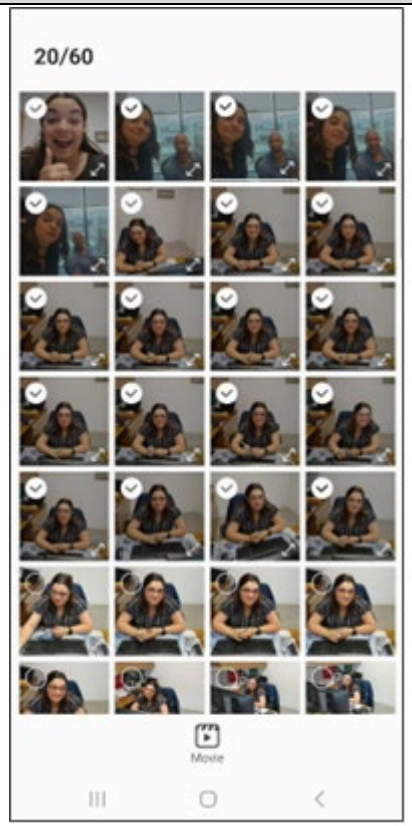
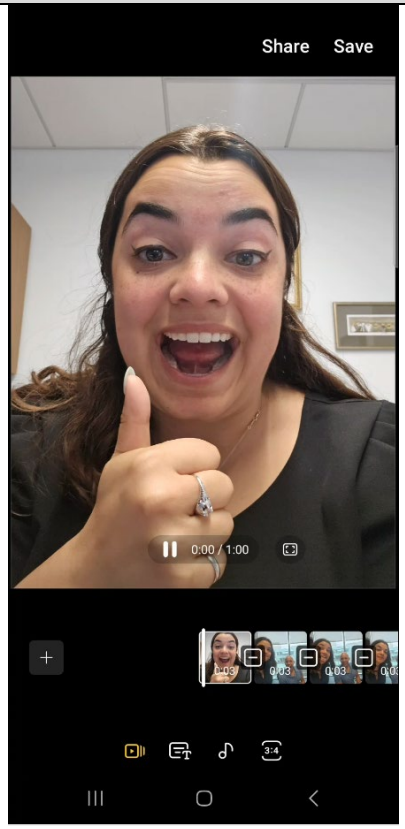
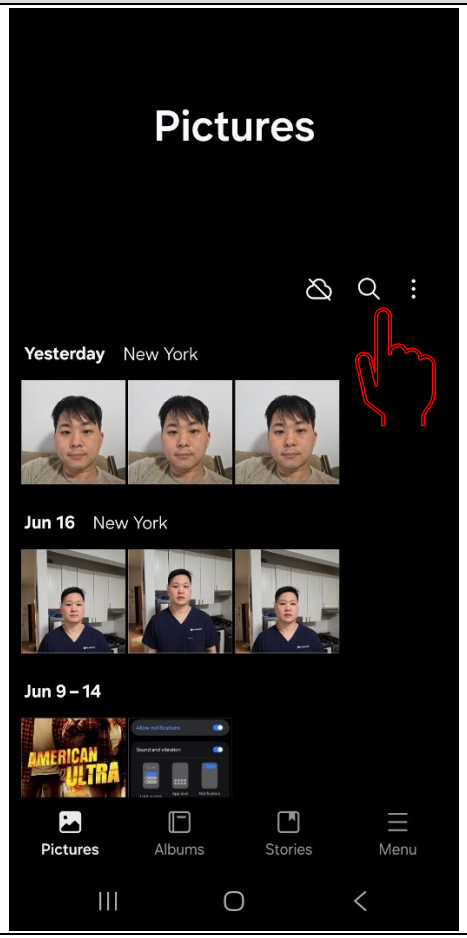
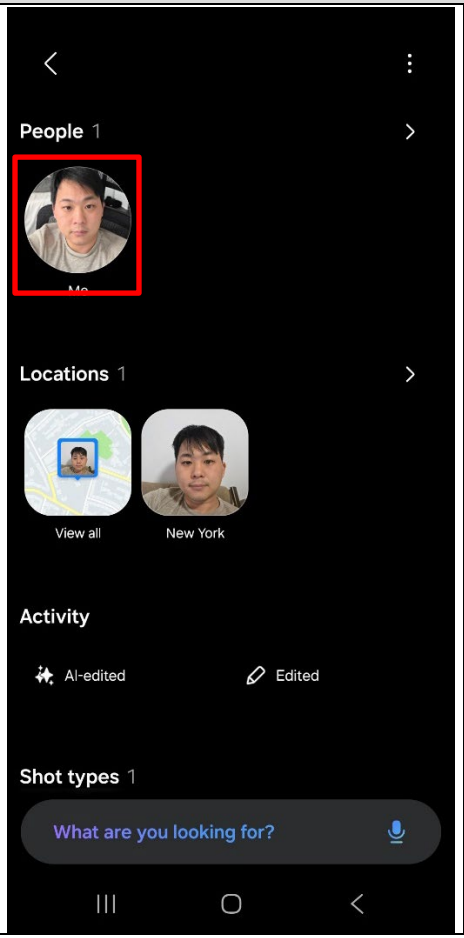
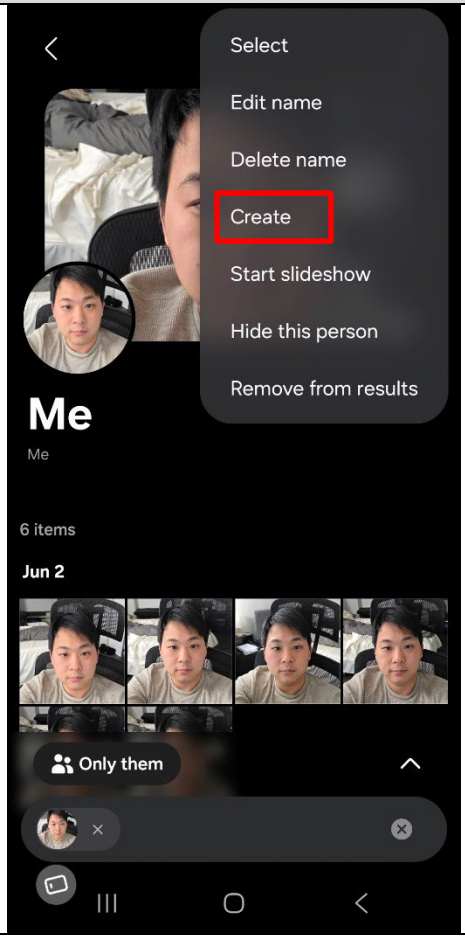
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 

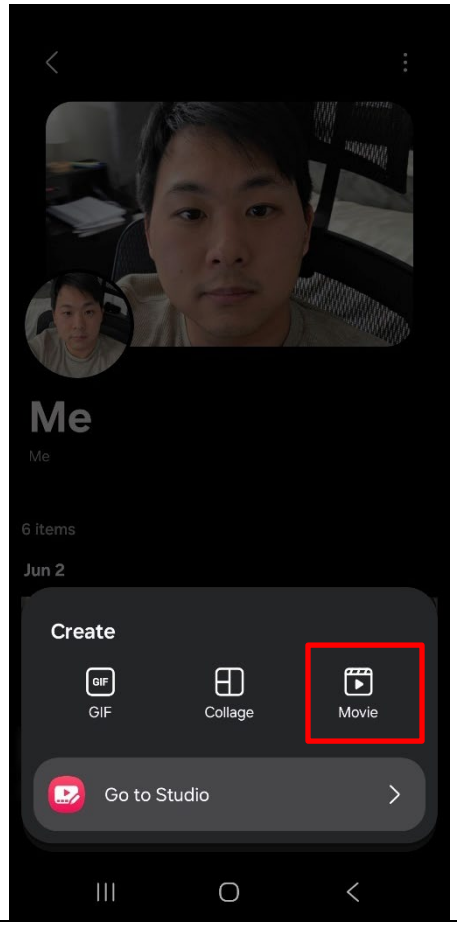
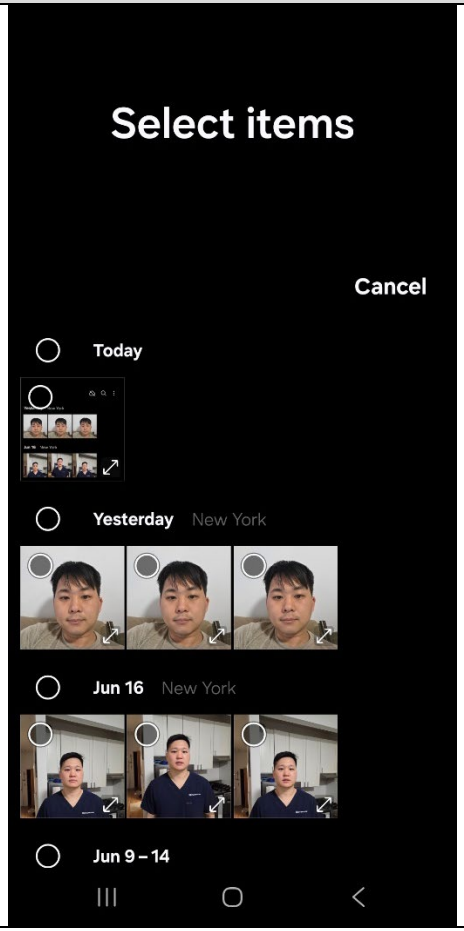
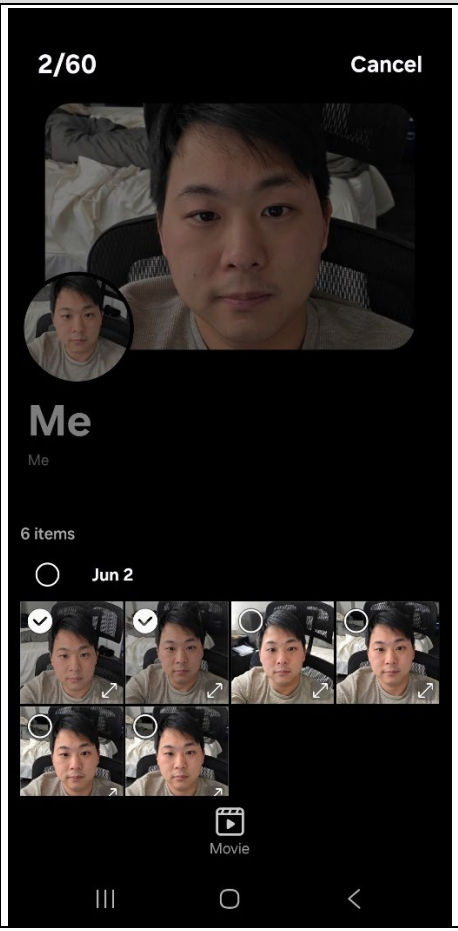
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	  Galaxy S23 Ultra (creating a movie)

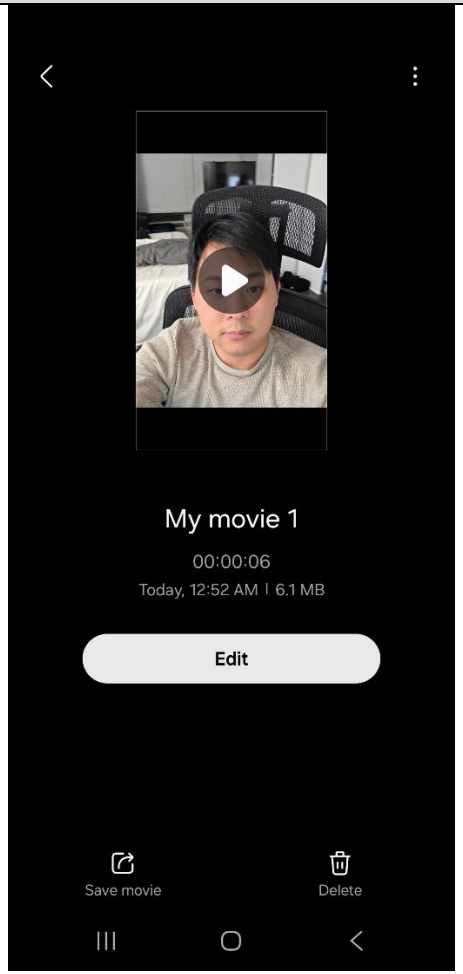
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	  

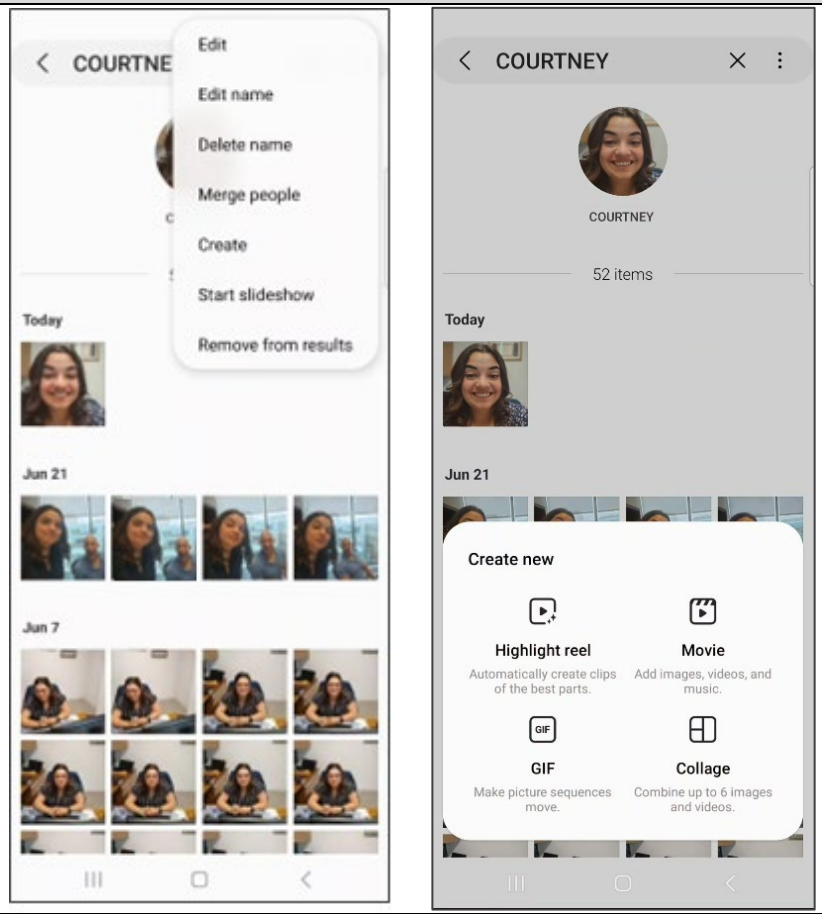
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	  

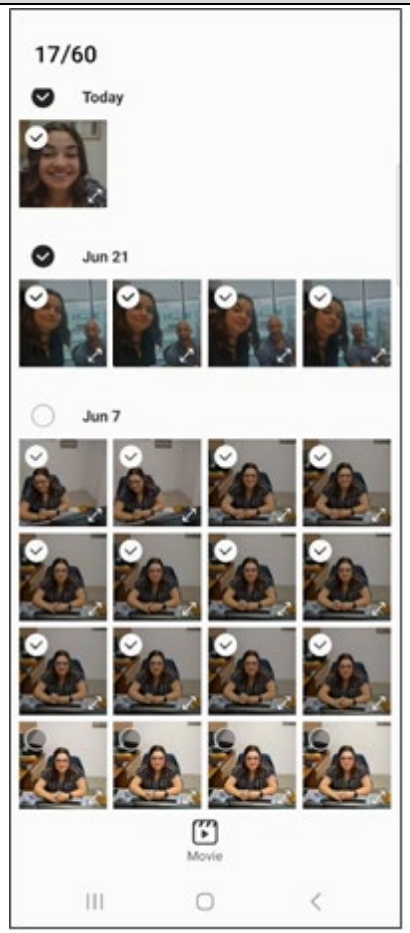
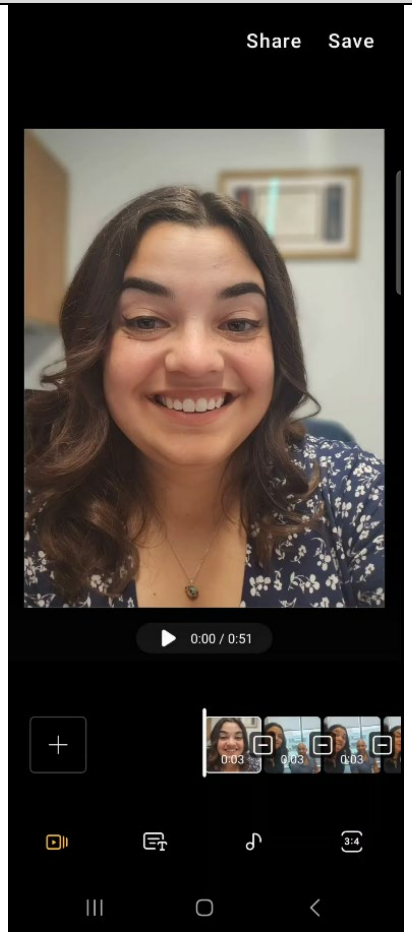
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 Galaxy S25 (creating a movie)

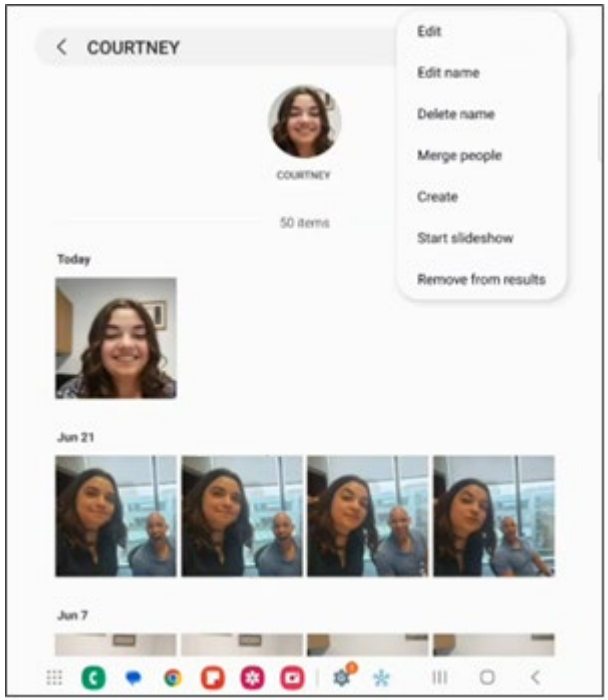
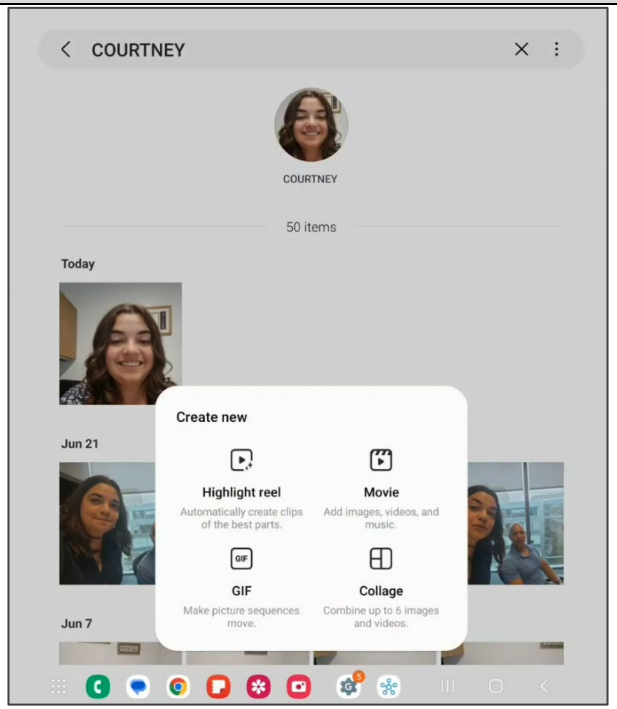
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	

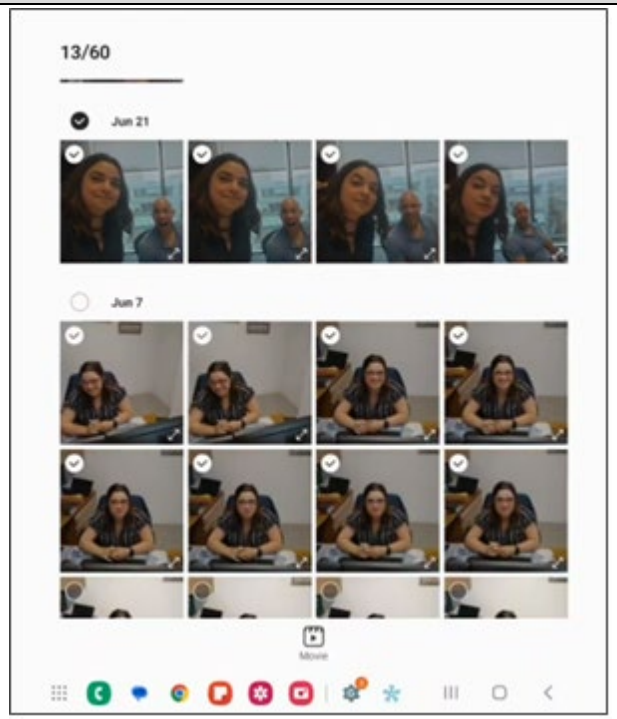
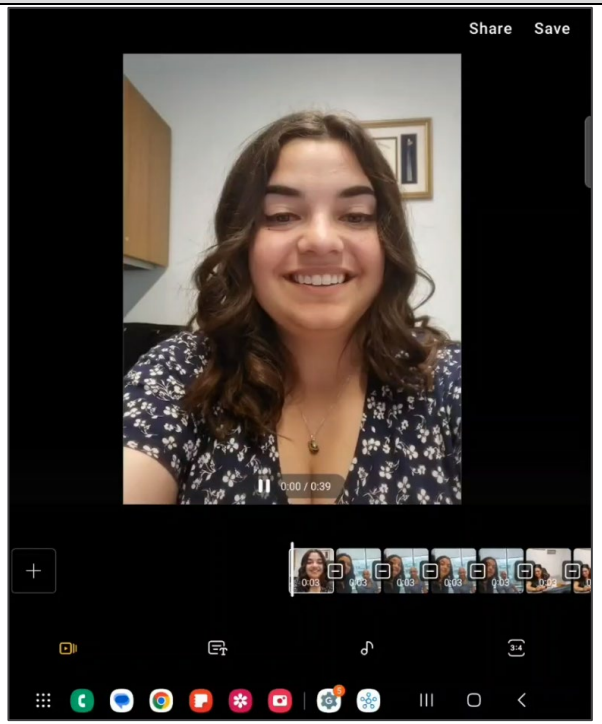
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

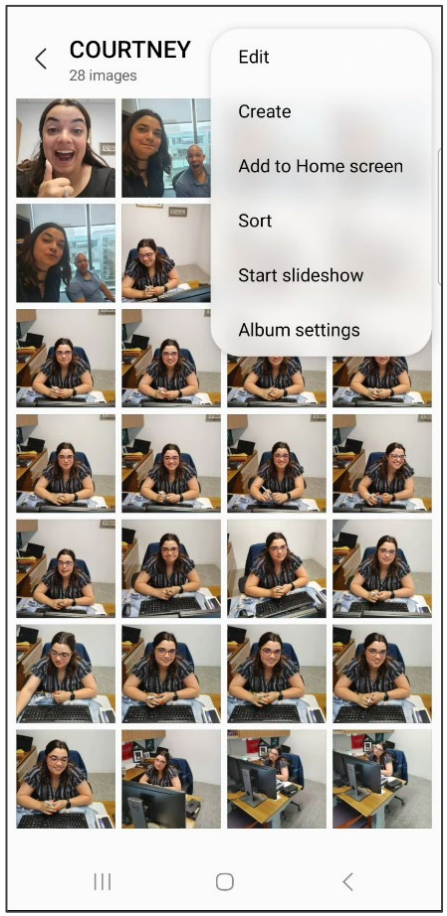
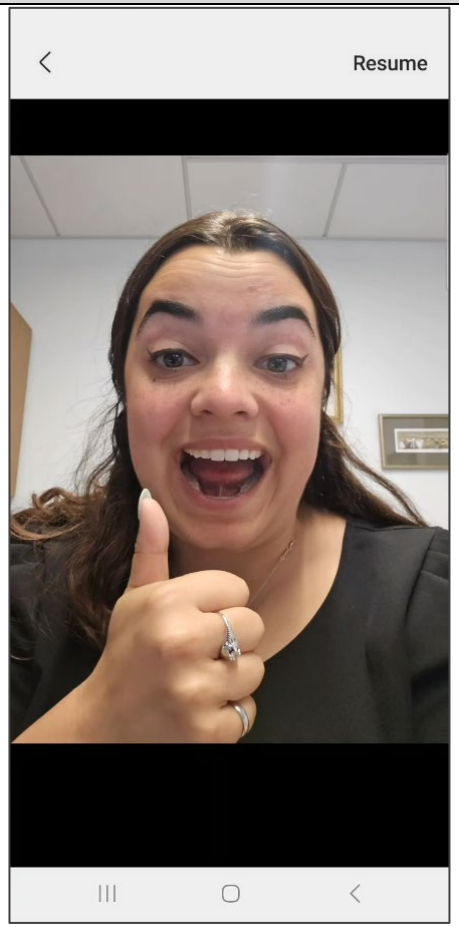
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	  Galaxy Z Flip4 (creating a movie)

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

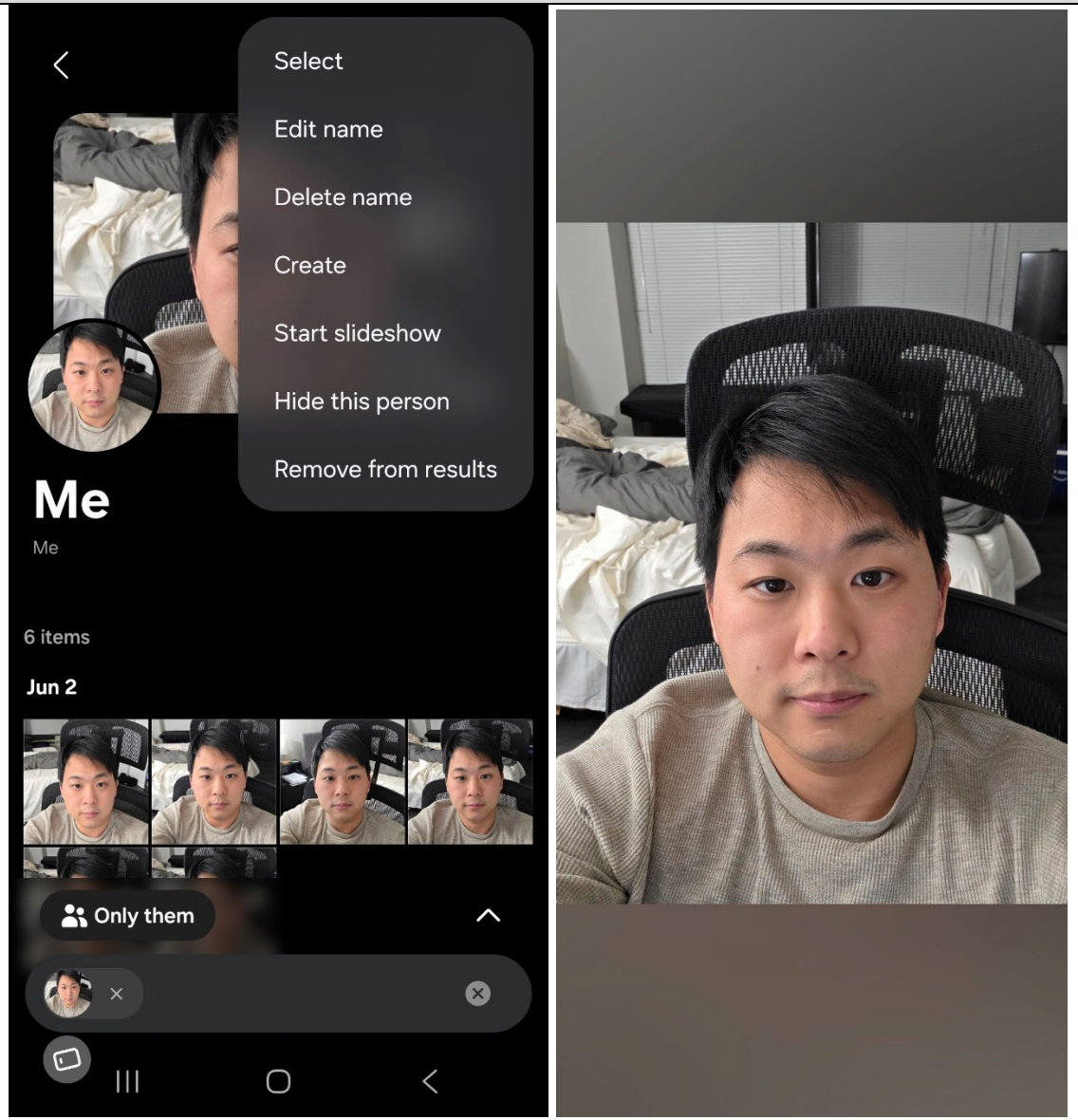
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

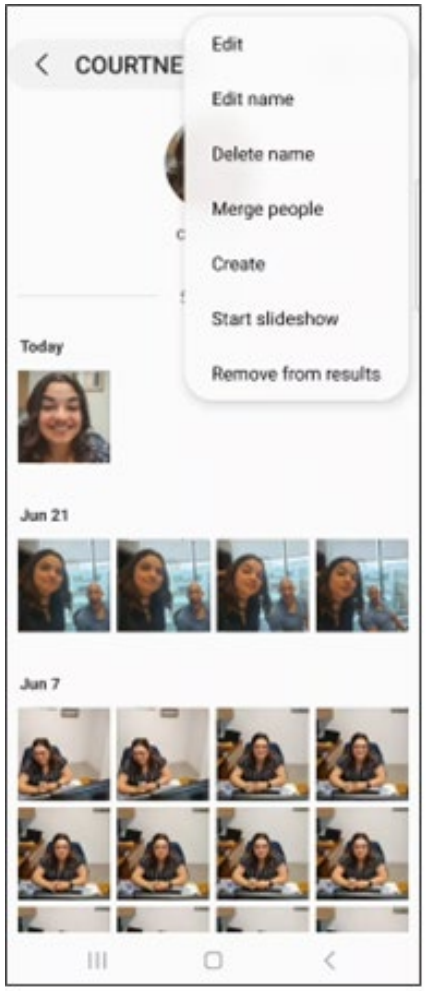
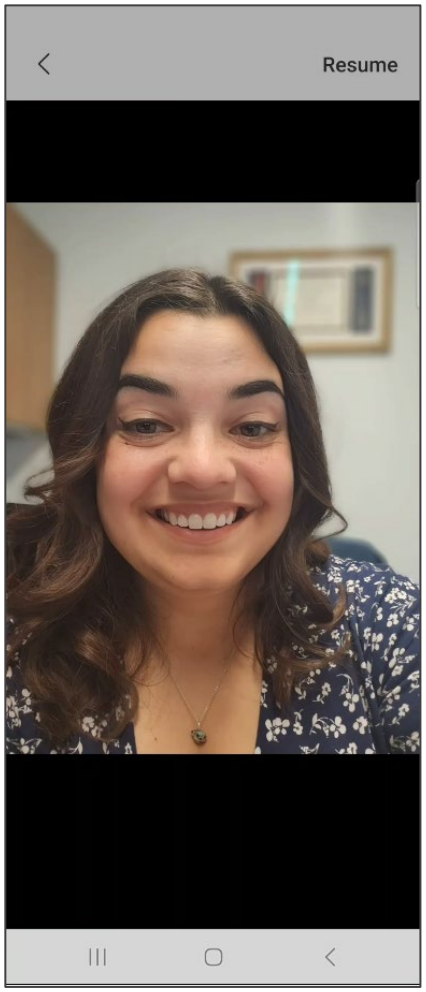
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	  Galaxy Z Fold4 (creating a movie)

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	  Galaxy S23 Ultra (creating a slideshow)

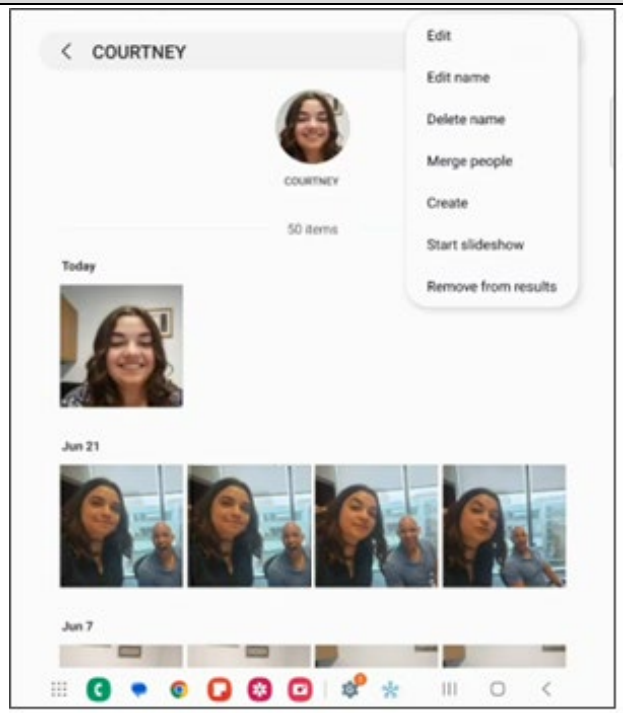
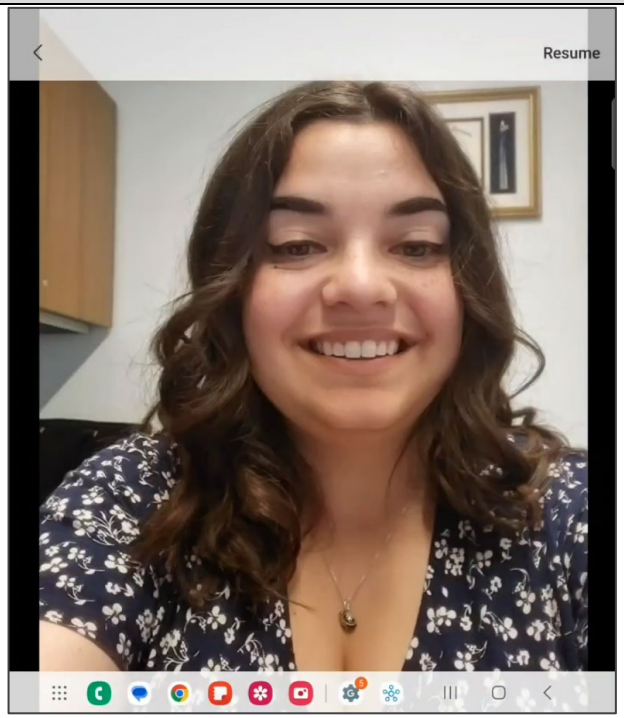
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement

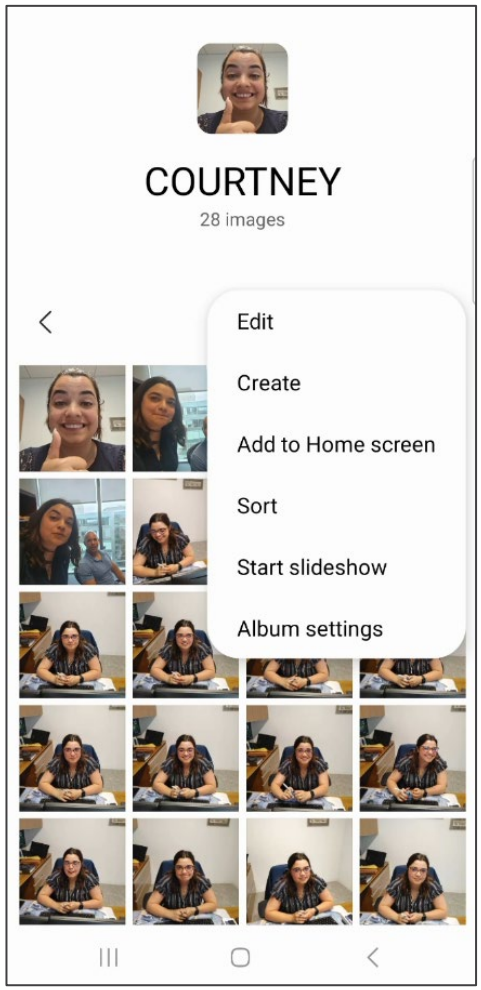


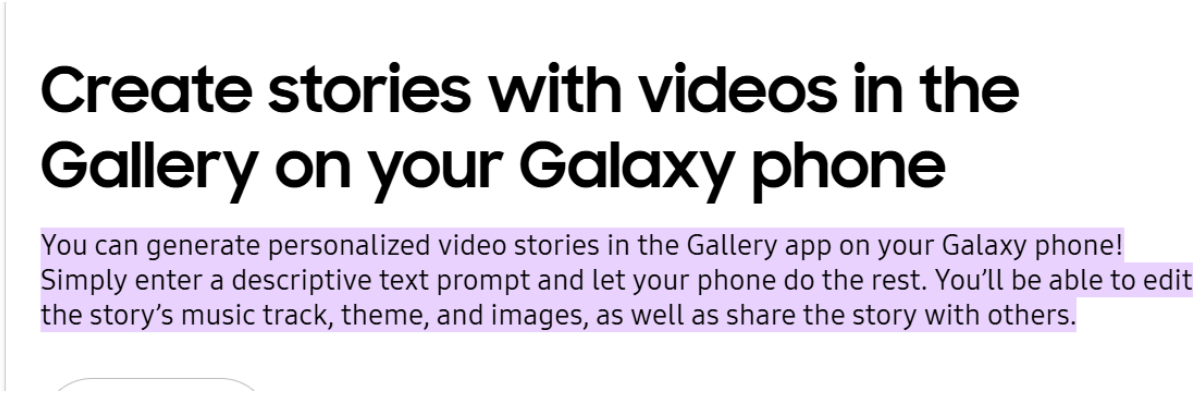
Galaxy S25 (creating a slideshow)

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	  Galaxy Z Flip4 (creating a slideshow)

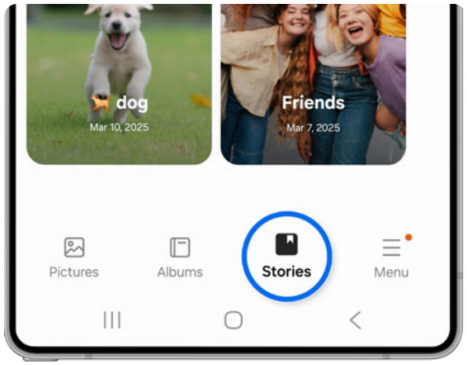
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

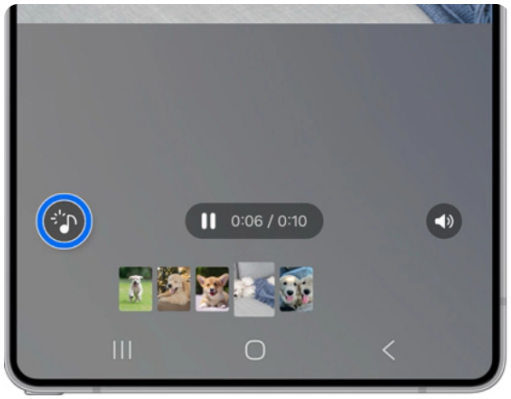
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	  Galaxy Z Fold4 (creating a slideshow)

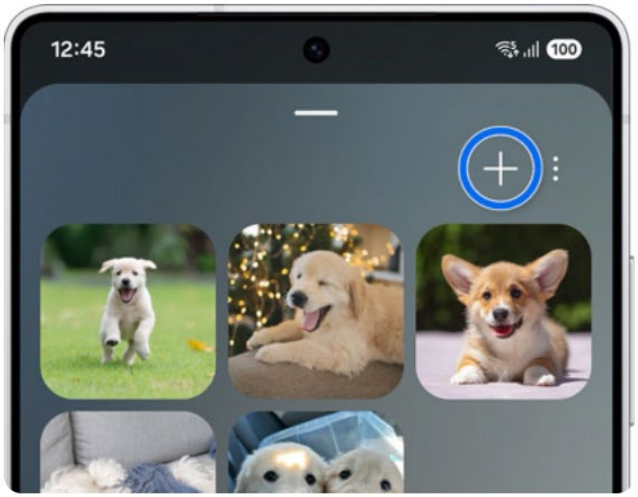
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 Galaxy A54 5G (creating a slideshow)

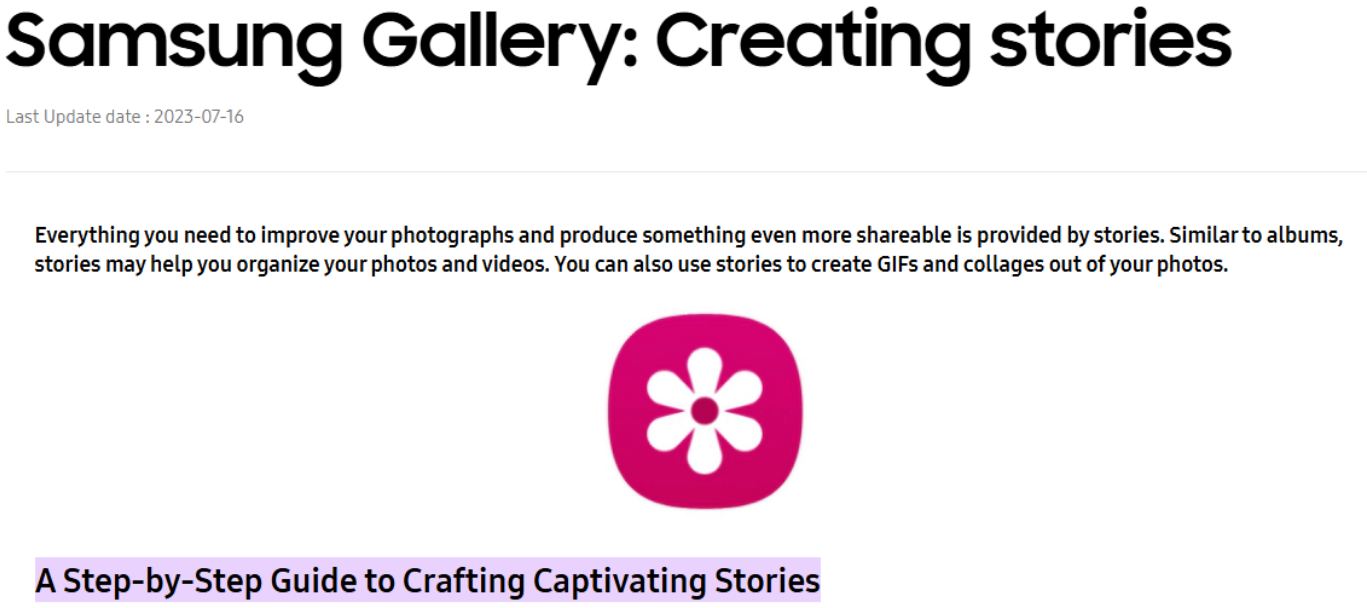
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Second, the Accused Samsung '198 Products include a control module (e.g., CPU executing Gallery application) that selects a digital image to add in a playlist to make "Stories": 

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

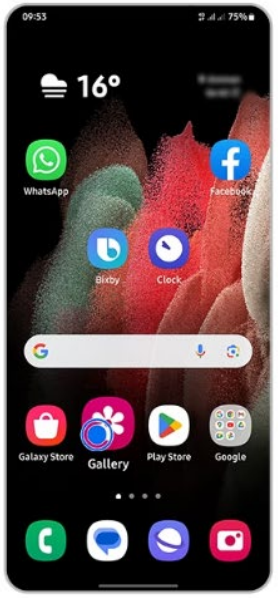
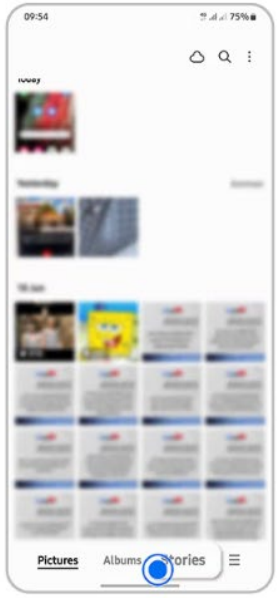
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Create a video story Video stories can be generated using different text or voice prompts. You can follow our instructions to begin creating your story! **1** Navigate to and open the **Gallery** app, and then tap the **Stories** tab. Tap the **Describe a story** text box, and then use the keyboard to type a story prompt.  **Note**: Tap the **Voice search** icon (the microphone) to use a voice command instead. **2** Tap the **Search** icon on the keyboard; your story will be created using Gallery images related to your prompt. **3** The story will begin playing. A music track and filter theme will be automatically selected for your story, but you can change this by tapping the **Themes** icon (the music note in the bottom left corner).

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 **4** Swipe through the filters at the bottom of the screen and select a new one. You can also tap the **Background music** icon (the music note in the bottom right corner), and swipe through the categories and options until you find a track that you like. **Note**: Tap the **Download** icon next to certain tracks to download them. **5** Tap **Back** twice to return to the story. When the story is finished playing, you can tap **Watch again** to replay it. **6** To save your story, tap **Back** again, and tap **Save** when prompted. **Note**: Tap **Discard** to delete the story instead. **7** Your new story will appear on the Stories tab. Select your story and swipe up to view the images that have been automatically included.

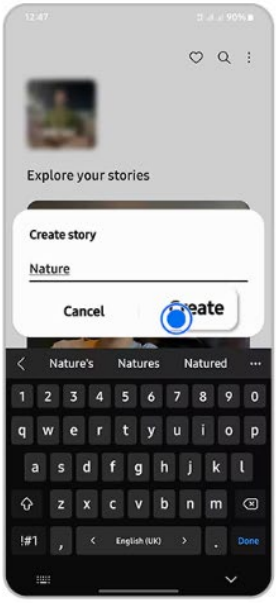
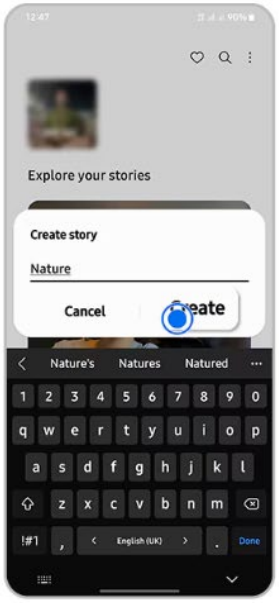
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	8 To add images, tap **Add** (the plus sign), and then select the images. Tap **Done**.  **9** To remove images, tap **More options** (the three vertical dots), and then tap **Select**. Select your desired images, and then tap **Remove from story** at the bottom of the screen. Tap **Remove**. Upon information and belief the stories are based on one or more of related information such as location information of the photos, certain date ranges, people, pets, and/or additional information that is used to associate pictures/videos together.

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	

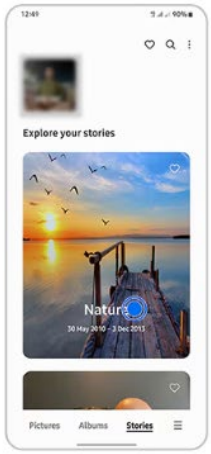
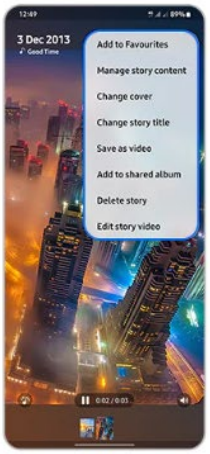
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 **Step 1**. Open the **Gallery** app  **Step 2**. Tap **Stories** **Step 3**. Tap the **Options** icon. it will appear as three dots **Step 4**. Tap **Create Story**

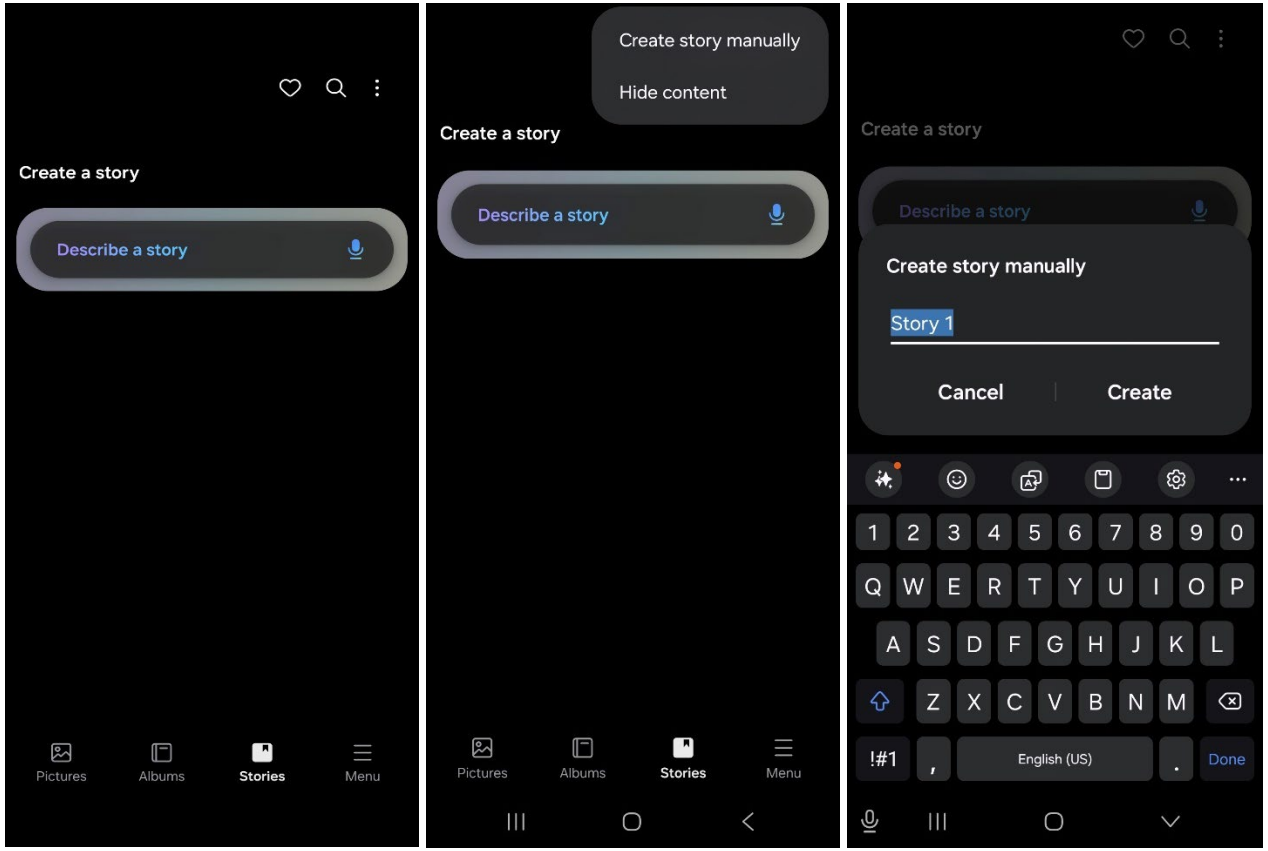
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

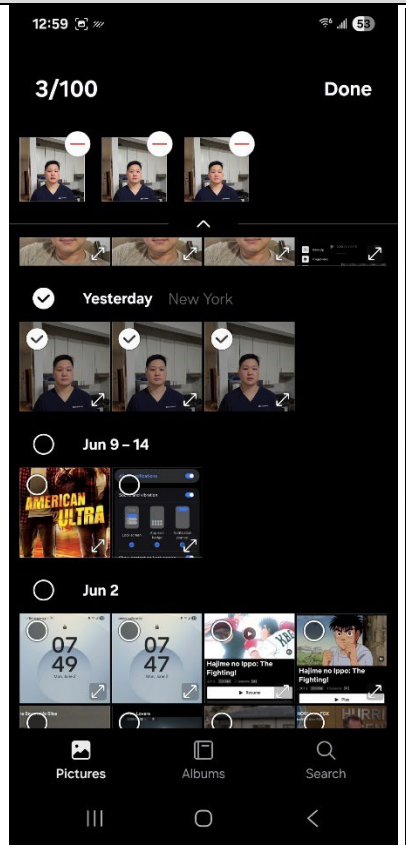
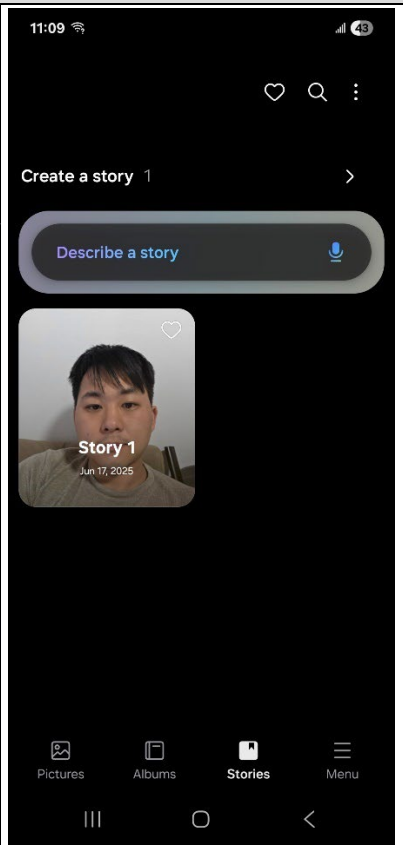
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 **Step 5**. Give your story a **name**.  **Step 6**. Tap **Create**. **Step 7**. Tap on the **photos** and **videos** that you want to add to your story. **Step 8**. Add the media to your story.

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

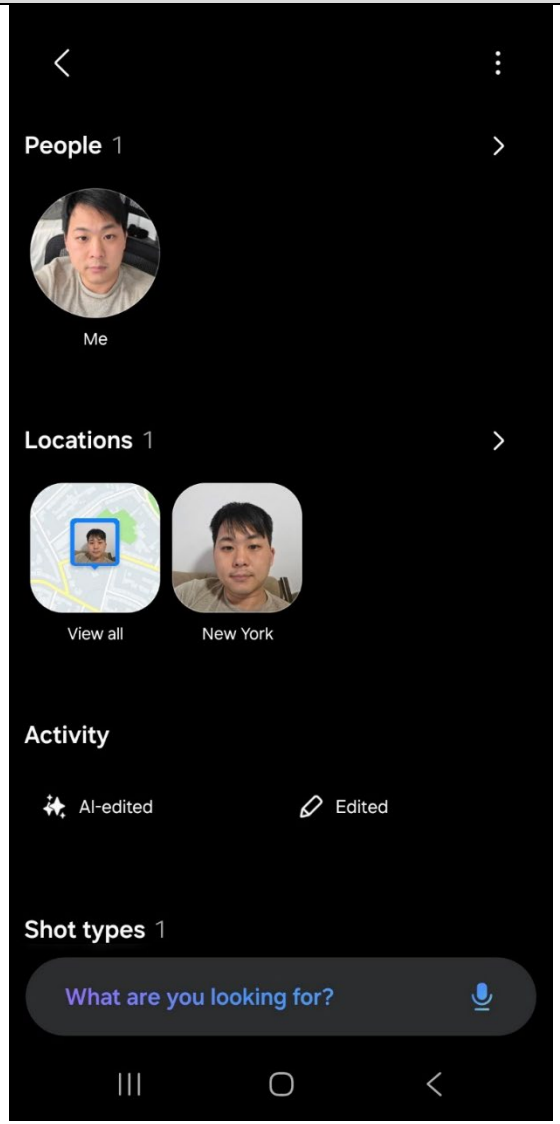
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Your story will be added to the Stories section of the Gallery app but you can continue adding or removing images. **Step 9**. Tap **Done**  **Step 10**. Tap your **story** **Step 11**. Tap the **options** icon  **Step 12**. Tap **Add** to add more images to your story. Tap **edit** if you'd like to remove an image from your story

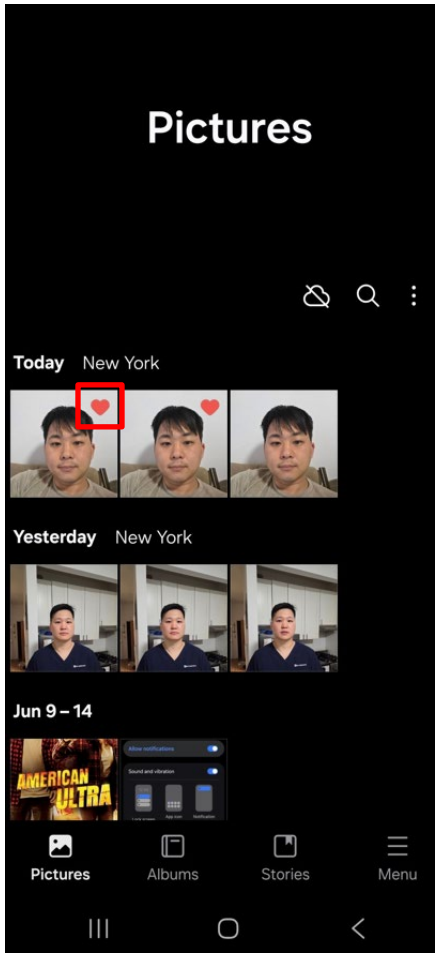
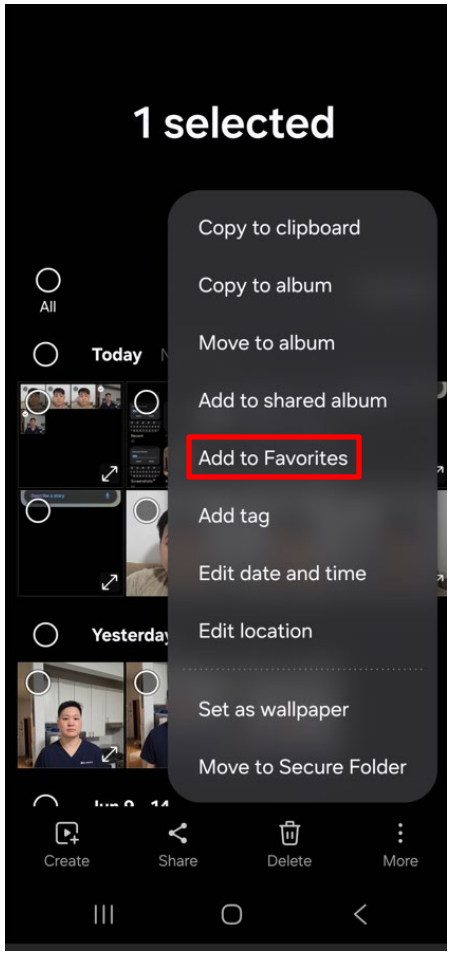
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

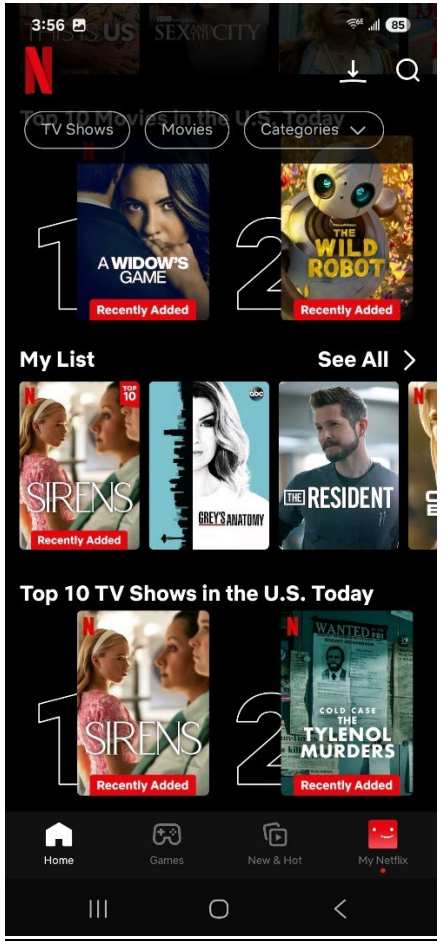
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	  **Third**, on the "Search" tab, the control module pre-selects images into playlists like "People" and "Locations" based on their recorded metadata (facial data and geotags).

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	

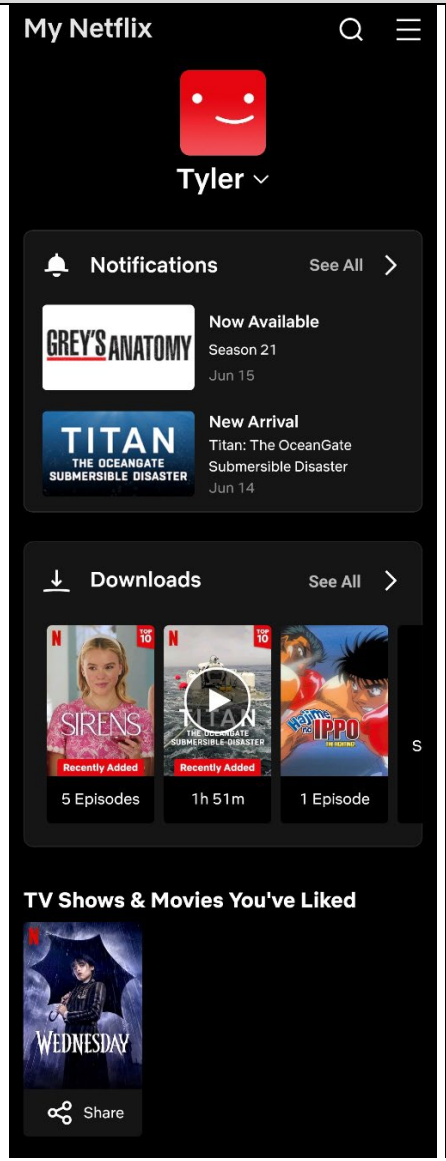
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Fourth, when a user taps the heart icon on a photo or selects "Add to Favorites" from a menu, the control module selects that image to add to the "Favorites" playlist based on that user command.   **Netflix**

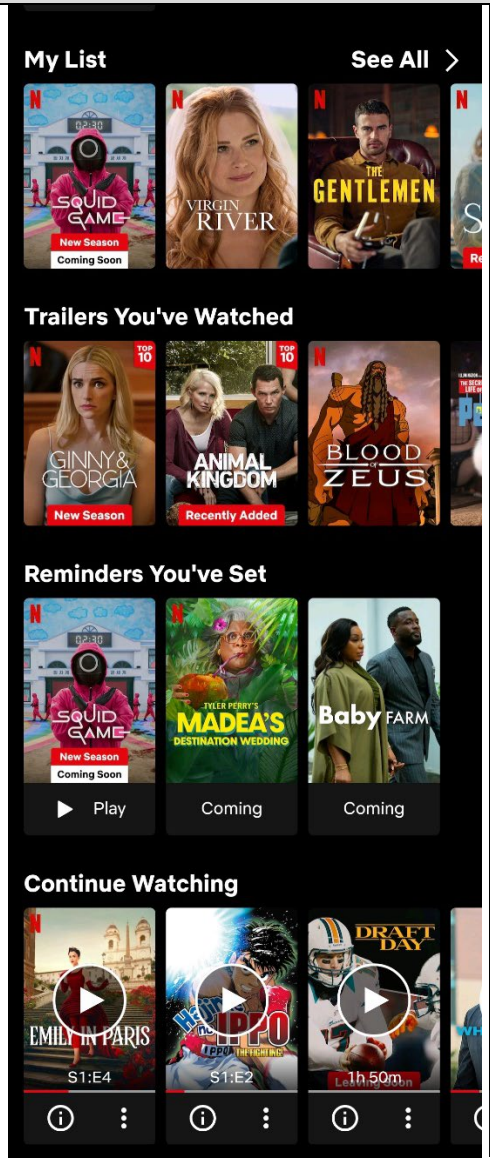
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	The screenshot of the Netflix application on a Samsung Galaxy S25 demonstrates the selection process. The application's software acts as the control module. On information and belief, the control module selects digital images in multiple ways.  **First**, the control module selects videos to populate the "My List" row based on the user's explicit commands to add those specific items. In this case, the related information is the user's direct input. Additionally, the control module selects different videos to populate the "Top 10 TV Shows in the U.S.

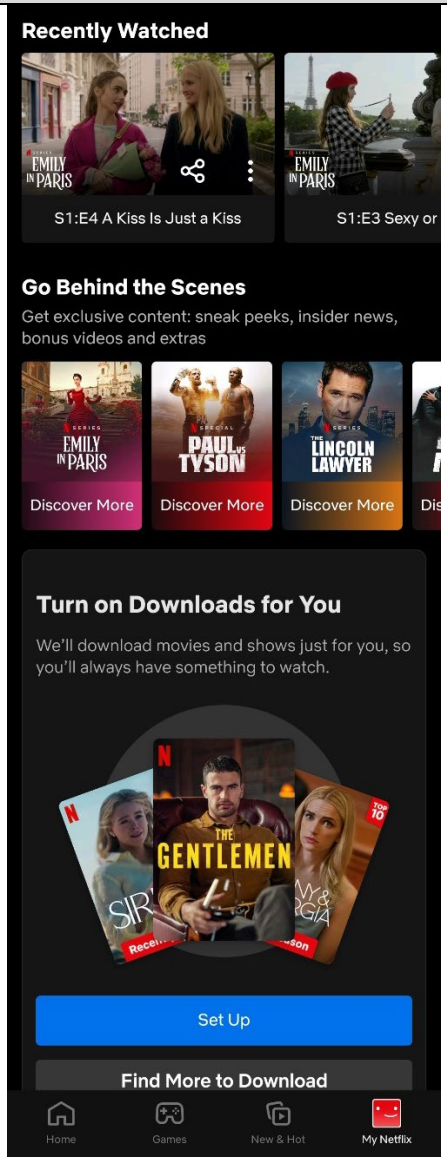
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Today" row. On information and belief, this second selection is based on related information concerning system-wide viewership and popularity data. The presence of these curated rows demonstrates that the control module selects digital images for different playlists based on various types of related information.

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement

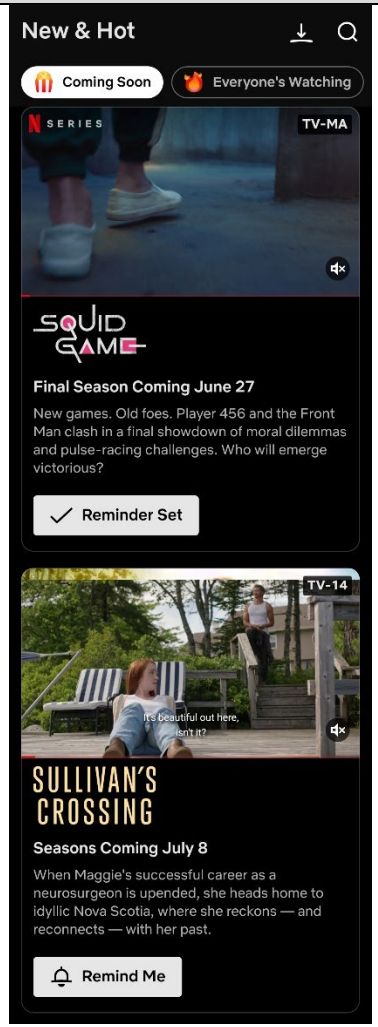


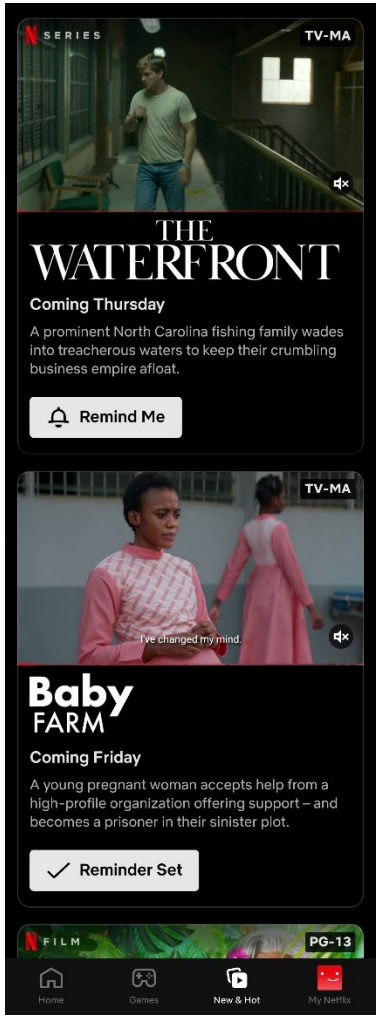




U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Second, on the "My Netflix" tab, the control module selects images for multiple playlists based on different types of related information. It selects images for the "My List" playlist based on the user's explicit commands to add those titles. It selects images for the "Downloads" playlist based on the user's command to download the content. It selects images for the "Continue Watching" playlist based on the user's viewing history.

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement





Third, on the "New & Hot" tab, when a user taps "Remind Me," the control module selects that show to add to a personal "reminders" playlist based on the user's command.

Further, the Accused Samsung '198 Products include a control module (e.g., CPU executing Netflix application) that selects a digital image to add in a playlist based on recommendation engine:

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	About Welcome to the Netflix information hub for Personalization, Recommendations and Search research. This page showcases our journey in enhancing member experiences through the research and application of state-of-the-art technologies. Recommendation and Search algorithms are at the heart of Netflix's services. They are pivotal in providing our members around the world with personalized entertainment suggestions that align with their preferences at any given moment. Recognizing the critical role these recommendations play, we are committed to continuous improvement and advancement in this field. While our research has made many significant improvements to recommendation systems over th years, there is still a long way to go until every member is given the perfect recommendation at the top of their page while understanding why it will be great for them. Thus, we continue to improve our algorithms while looking for new areas we can personalize. We conduct research in areas of machine learning with the goal to make member experience better. Our work on recommender systems, contextual bandits, reinforcement learning, natural language processing, foundational models, and causal inference is published at leading conferences. https://research.netflix.com/research-area/recommendations

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Recommendations and Results Organization in Netflix Search **Abstract** "Personalized recommendations on the Netflix Homepage are based on a user's viewing habits and the behavior of similar users. These recommendations, organized for efficient browsing, enable users to discover the next great video to watch and enjoy without additional input or an explicit expression of their intents or goals. The Netflix Search experience, on the other hand, allows users to take active control of discovering new videos by explicitly expressing their entertainment needs via search queries. https://help.netflix.com/en/node/100639

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	How Netflix's Recommendations System Works Our business is a subscription service model that offers personalized recommendations, to help you find shows, movies, and games we think you might enjoy. To do this we have created an innovative recommendations system This article provides a high level description of our recommendations system in plain language. **The basics** Whenever you access the Netflix service, our recommendations system strives to help you find a show, movie, or game to enjoy with ease. We estimate the likelihood that you will enjoy a particular title in our catalog based on a number of factors including: • your interactions with our service (such as your viewing history and how you rated other titles), • other members with similar tastes and preferences on our service, and • information about the titles, such as their genre, categories, actors, release year, etc.

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	In addition to knowing what you have watched on Netflix, to best personalize the recommendations we also consider factors including: • the time of day you're enjoying Netflix, • the languages you prefer • the devices you are enjoying Netflix on, and • how long you enjoyed a Netflix title. All of these signals are used as some of the inputs that we process in our algorithms. (An algorithm is a process or set of rules followed in a problem solving operation.) The recommendations system does not include demographic information (such as age or gender) as part of the decision making process. If you're not seeing something you want to watch, you can always search the entire catalog available to you. We try to make searching as easy and quick as possible. When you enter a search query, the top results we return are based on a number of factors, including the actions of other members who have entered the same or similar queries, our prediction of what you'd like to enjoy on Netflix, and others. Below is a description of how the system works over time, and how these pieces of information influence what we present to you.

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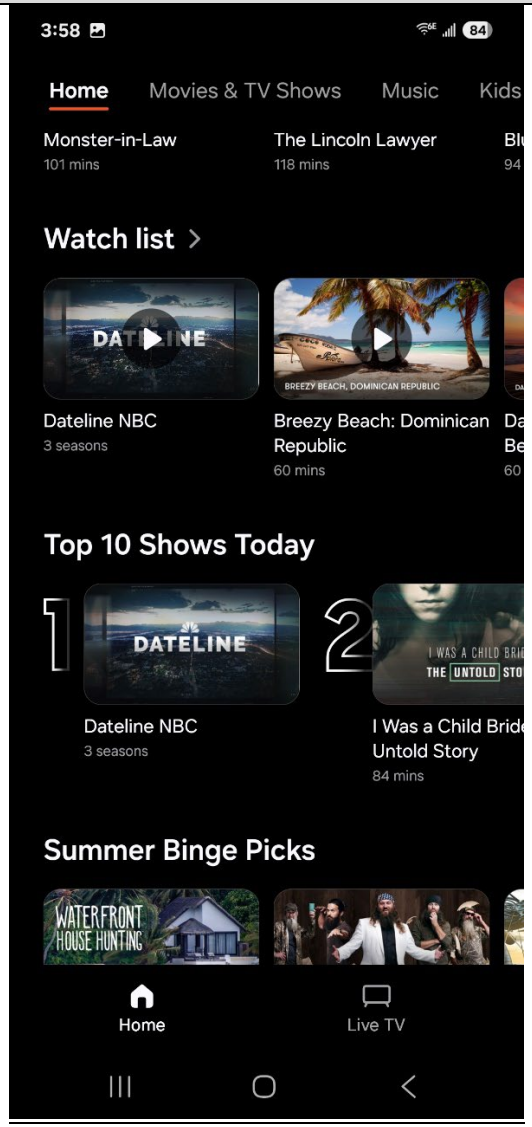
Ex. 1023 - Page 113

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	"Jump starting" the recommendations system When you create your Netflix account, or add a new profile in your account, we ask you to choose a few titles that you like. We use these titles to "jump start" your recommendations. Choosing a few titles you like is optional. If you choose to forego this step then we will start you off with a diverse and popular set of titles to get you going. Once you start engaging with titles on the service, this will "supersede" any initial preferences you provided us. As you continue to enjoy Netflix over time, the titles you engage with more recently will outweigh titles you engaged with in the past in terms of driving our recommendations system. **Rows, rankings and title representation** When you look at your Netflix homepage, our systems have ranked titles and positioned them in a way that is designed to present the best possible ordering of titles that you may enjoy. On each page, there are multiple layers of personalization. For example, in a row, we may personalize the following: • the choice of row (such as Continue Watching) • which titles appear in the row, and • the order of those titles. https://help.netflix.com/en/node/100639 **Samsung TV Plus**

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement



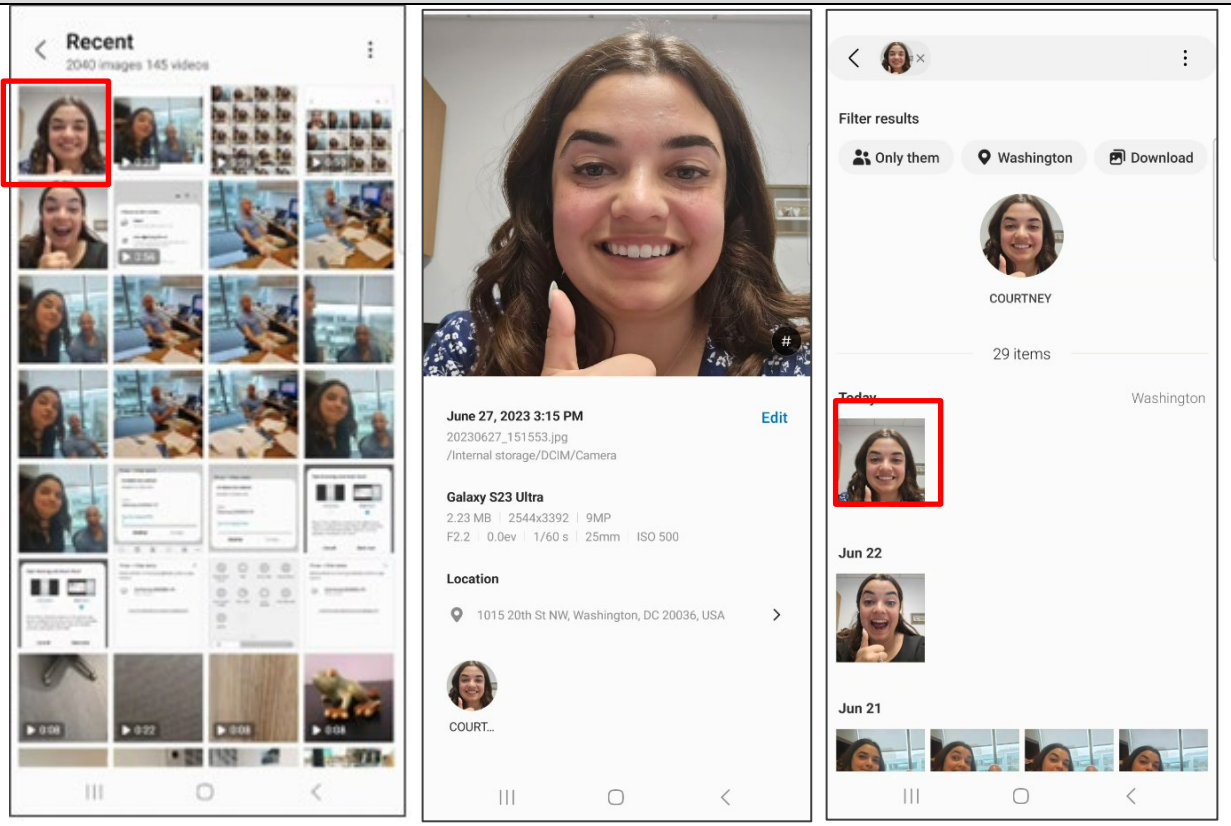
The screenshot of the Samsung TV Plus application on a Samsung Galaxy S25 demonstrates the selection process. The application's software acts as the control module. On information and belief, the control

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	module selects digital images in multiple ways. The control module selects videos to populate the "Watch list" row based on the user's explicit commands to add those specific items. In this instance, the related information is the user's direct input. Additionally, the control module selects different videos to populate the "Top 10 Shows Today" row. On information and belief, this second selection is based on related information concerning system-wide viewership and popularity data. The presence of these curated rows proves that the control module selects digital images for different playlists based on various types of related information. Further, the Accused Samsung '198 Products include a control module (e.g., CPU executing Samsung TV application) that selects a digital image to add in a playlist based on recommendation engine: Recommendations and Customised Content The SmartTV is designed to enable you to easily find and access video programming and other content. For example, you may access information about live television programs distributed to you by your cable or satellite operator and on-demand video content offerings distributed by third-party content providers through searchable guides displayed on your SmartTV. In the case of live television programs, we determine what content is available to you based in part on your zip code. In addition, the SmartTV helps make the searchable guides and other SmartTV content more relevant to you by highlighting programming and content that is likely to interest you, such as episodes of programs that you may have missed and new programs, applications and other content that we believe you will find of interest. We base these recommendations on: Information about content that you have watched, purchased, downloaded, or streamed through Samsung applications on your SmartTV or other devices;

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Information about applications you have accessed through the SmartTV panels; Information about your clicks on the "Like," "Dislike," "Watch Now," and other buttons on your SmartTV; The query terms you enter into SmartTV search features, including when you search for particular video content; and Other SmartTV usage and device information, including, but not limited to, IP address, information stored in cookies and similar technologies, information that identifies your hardware or software configuration, browser information, and the page(s) you request. In addition, if you enable the collection of information about video streams viewed on your SmartTV, we may collect that information and additional information about the network, channels, and programs that you view through the SmartTV. We will use such information to improve the recommendations that we deliver to you on the SmartTV. Please visit the "settings" menu of your SmartTV for choices that may be available to you if you do not wish to continue to receive personalised recommendations on your SmartTV. If you disable personalised recommendations, then the information and content displayed on your SmartTV may not be as relevant to you. Samsung may still collect information about your usage of the SmartTV for the purposes described in this Samsung Privacy Policy. https://www.samsung.com/us/info/privacy/smarttv/ Doctrine of Equivalents To the extent Samsung argues that this limitation is not literally met in any Accused Samsung '198 Products, Maxell asserts that this limitation is met under the doctrine of equivalents because the identified structure matches the function, way, and result of the claimed element and, to the extent there is a difference, the difference is insubstantial. For example, to the extent that Samsung argues that a general-purpose processor executing an application's instructions does not constitute a singular "control module",

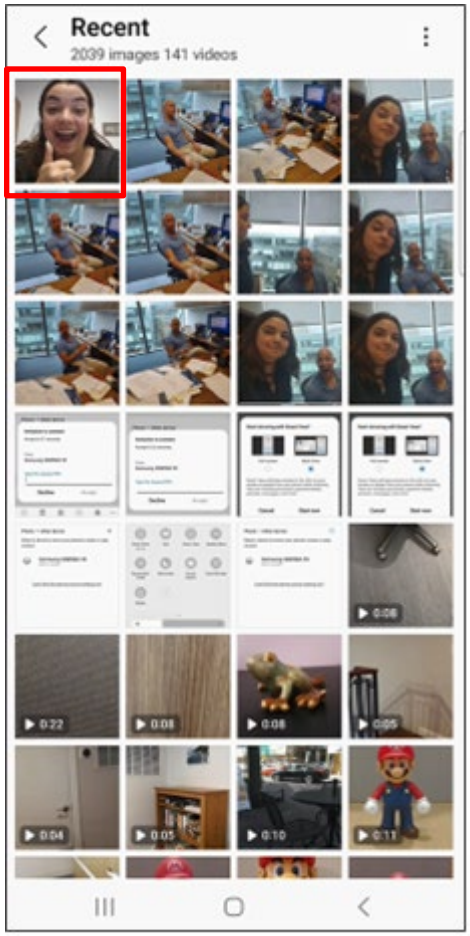
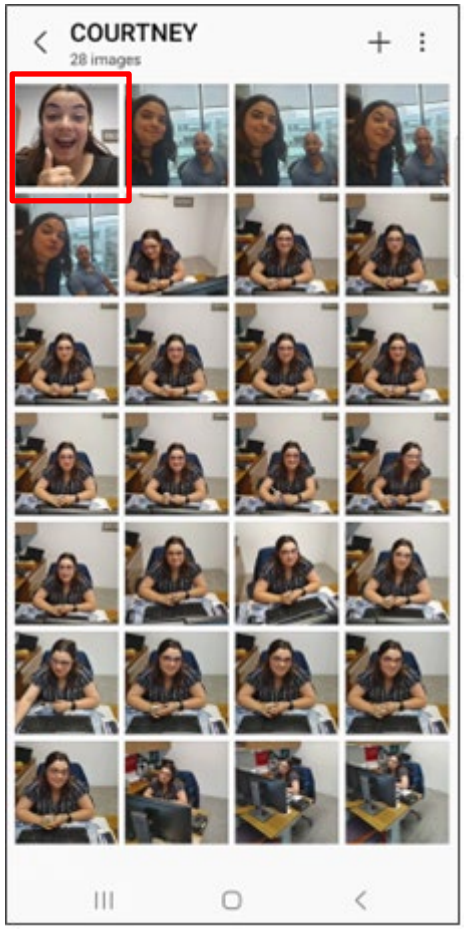
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	the processor executing the software instructions of an active application is an equivalent structure. Using this structure performs substantially the same function, which is to select digital images for inclusion in a playlist based on related information. It does so in substantially the same way, by computationally processing metadata and user inputs to identify and designate images for a playlist. This achieves substantially the same result: the curation of images into a specific playlist according to a certain criterion.
[1.c] wherein for a selected digital image selected by the user, said control module; retrieves other digital images whose related information is the same as the selected digital image, the other digital images being candidates for adding in said playlist,	In each of the Accused Samsung '198 Products, for a selected digital image selected by the user, said control module retrieves other digital images whose related information is the same as the selected digital image, the other digital images being candidates for adding in said playlist. *See* User Guide and Technical Specifications of the Accused Samsung '198 Products available at Samsung's website showing that in each of the devices, for a selected digital image selected by the user, the control module retrieves other digital images whose related information is the same as the selected digital image, the other digital images being candidates for adding in said playlist. **People Album** **First**, through its general face recognition, grouping, and tagging functionality, after a user selects a specific recognized person or an existing "People Album"(e.g., by tapping on an album named for a recognized person or a system-identified face group), the control module (the Gallery's software), on information and belief, then retrieves other digital images from the device's storage. This occurs not only during initial album formation but also on an ongoing basis. For instance, when new photos are added to the Gallery, the system's facial recognition automatically processes these images including for making "stories," "movies," and/or "slideshows" based on related information (*e.g.*, same face, location, date, and/or other information associating the pictures in a relationship).

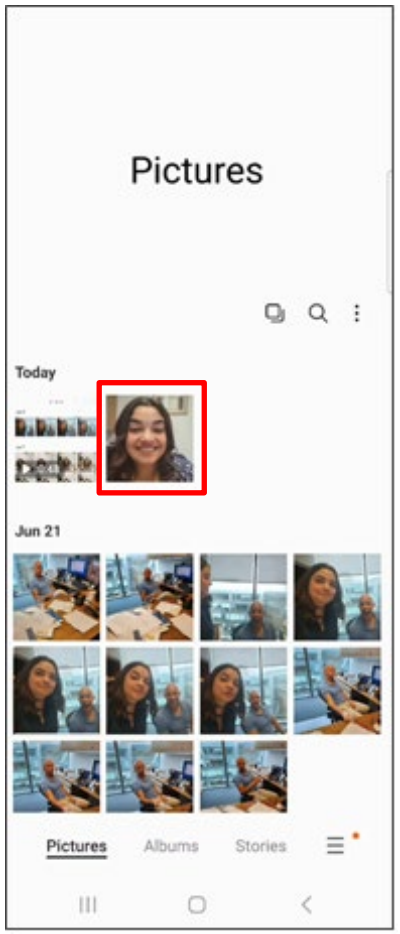
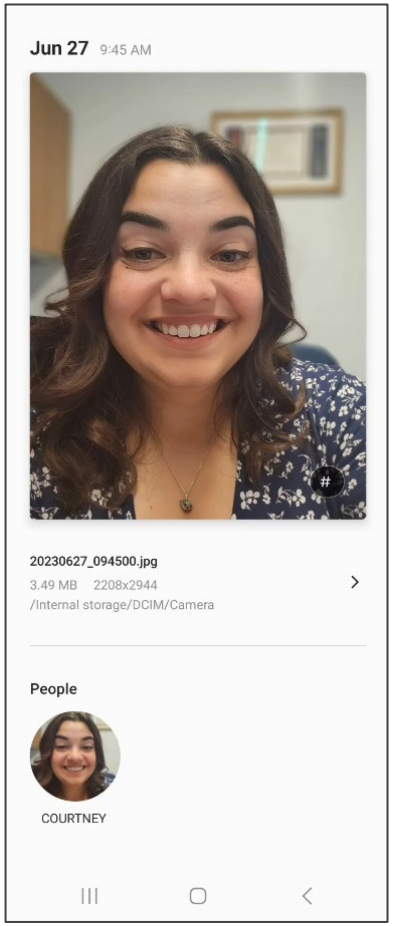
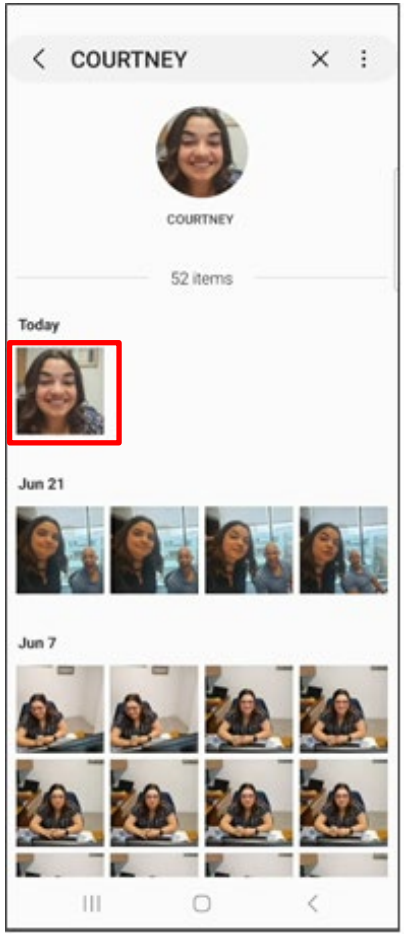
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement



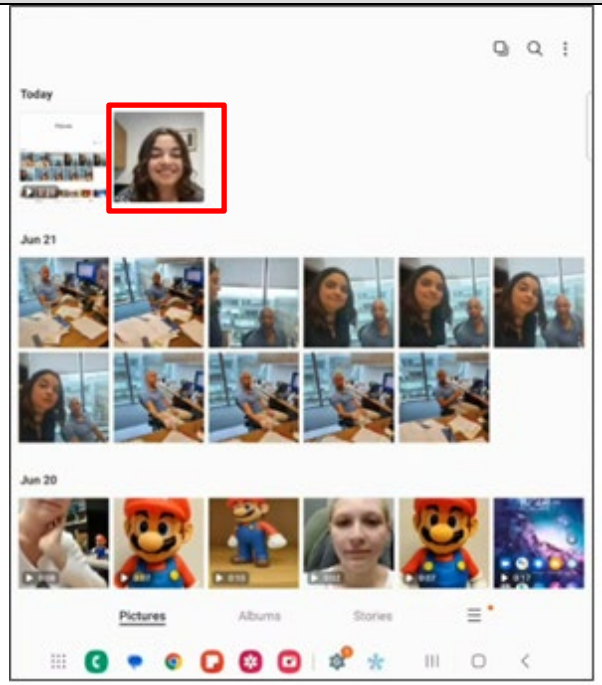
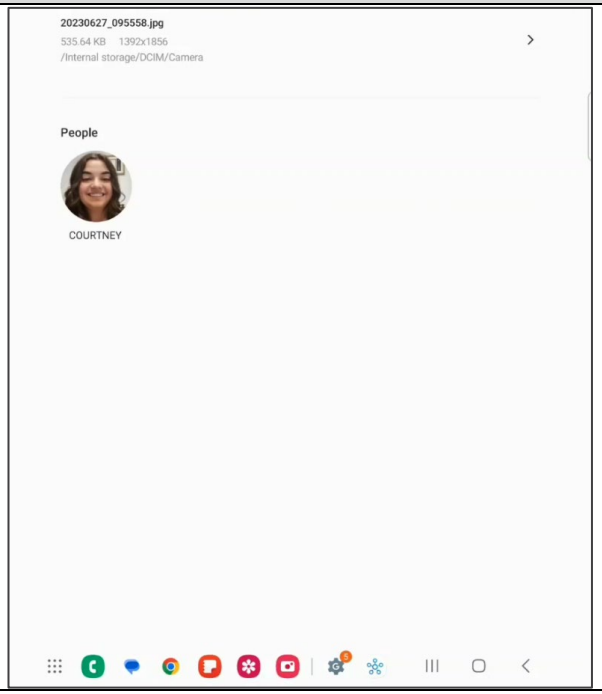
Screenshots from Galaxy S23 Ultra illustrates this limitation. If a new photo of "Courtney" is identified, that new photo is effectively retrieved by the control module based on the same related information (Courtney's unique facial signature). Such newly identified photos of Courtney then serve as candidates for adding in said playlist (Courtney's existing standard album).

Second, through the "Auto-Update Album" feature, when a user initiates the creation of an "Auto-Update Album" by selecting a specific person, this constitutes the user selection. The control module, on information and belief, then retrieves all current digital images of that person from storage, based on the same related information (the selected person's identity), to initially populate the album (the playlist),

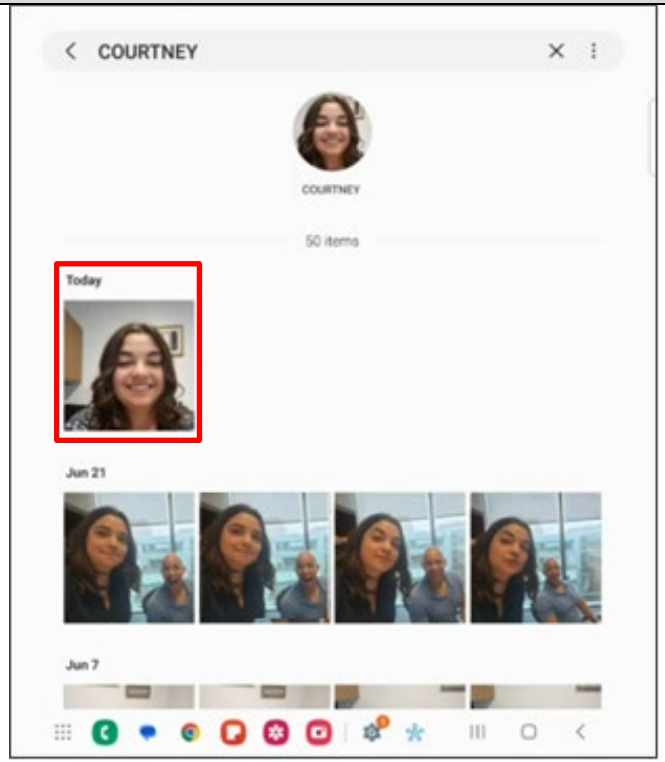
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	treating these as initial candidates. Furthermore, when new photos of that person are added to the Gallery, the control module's facial recognition automatically identifies them; these new images are retrieved as ongoing candidates and, on information and belief, are automatically added to the auto-update album (the playlist).  

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	A screenshot from Galaxy S23 Ultra showing a populated auto-update album for a selected person illustrates the result of this ongoing retrieval and candidate addition including when a new picture of "Courtney" is captured.    Galaxy Z Flip4

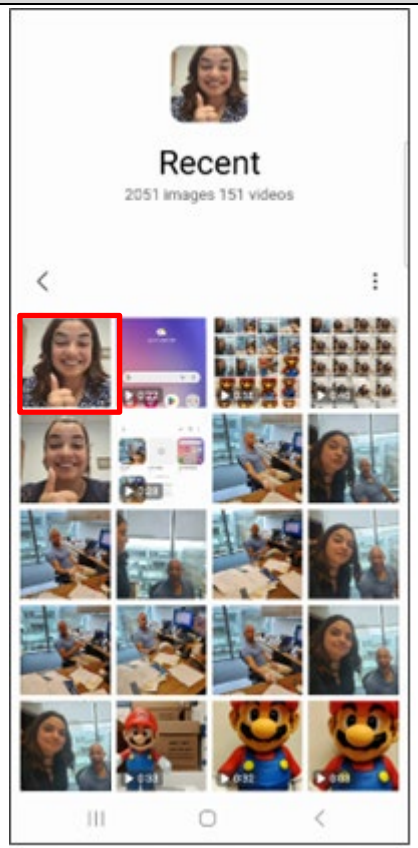
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

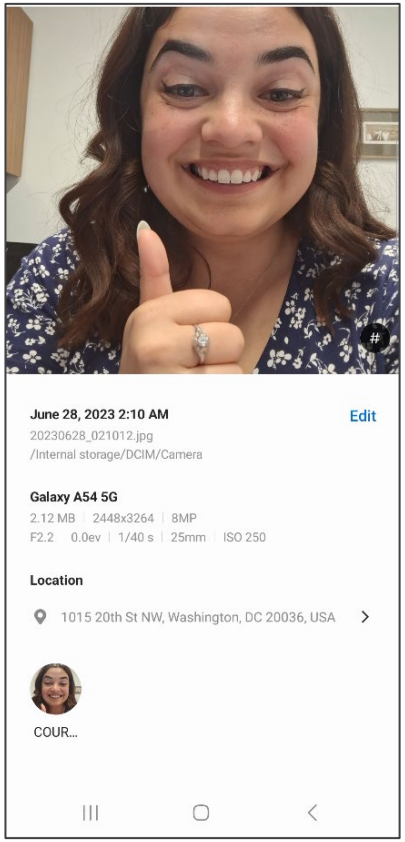
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 

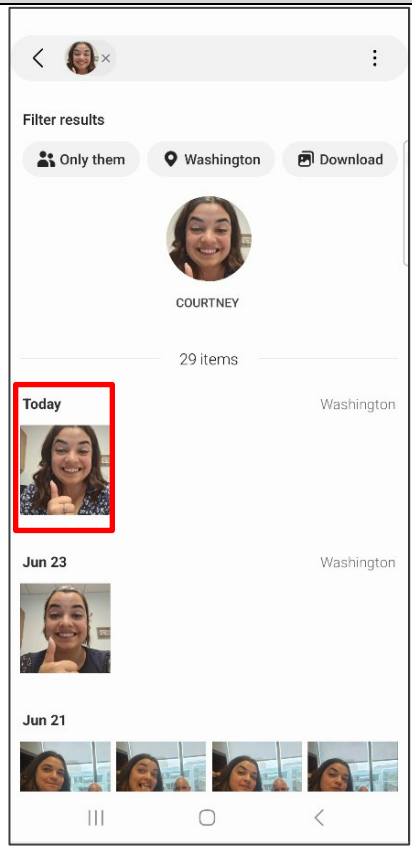
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 Galaxy Z Fold4

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement

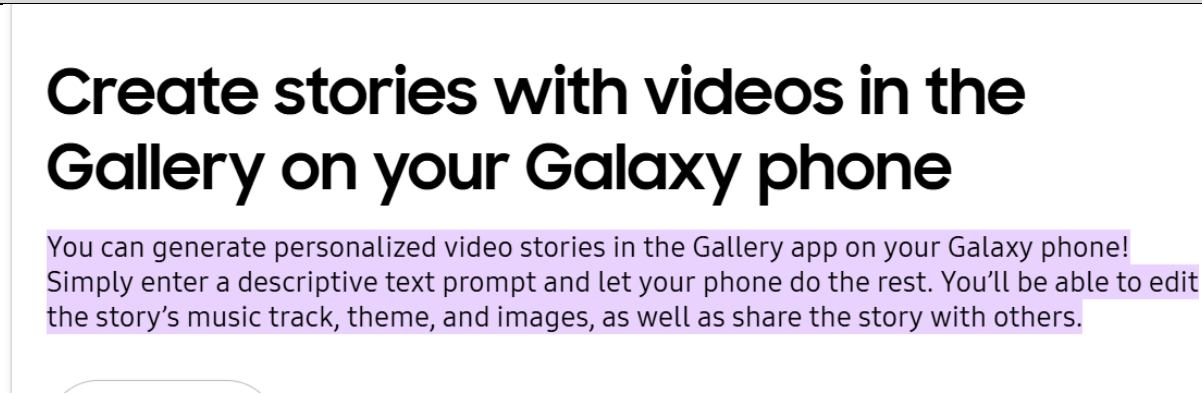




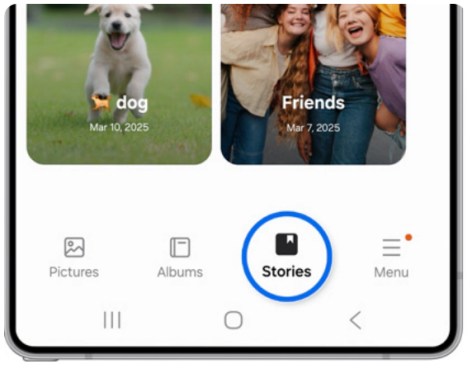


Galaxy A54 5G

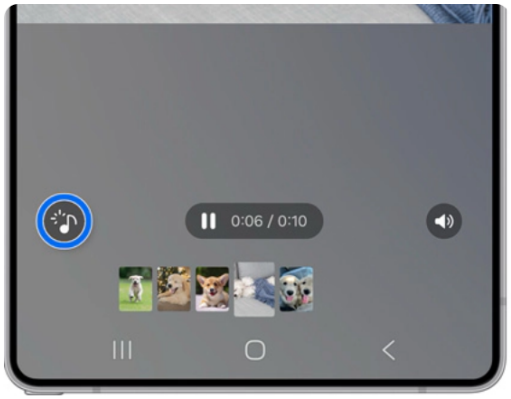
Third, the Accused Samsung '198 Products retrieve other digital images whose related information is the same as the selected digital image (e.g., location, person, date etc), the other digital images being candidates for adding in said playlist for generating "Stories."

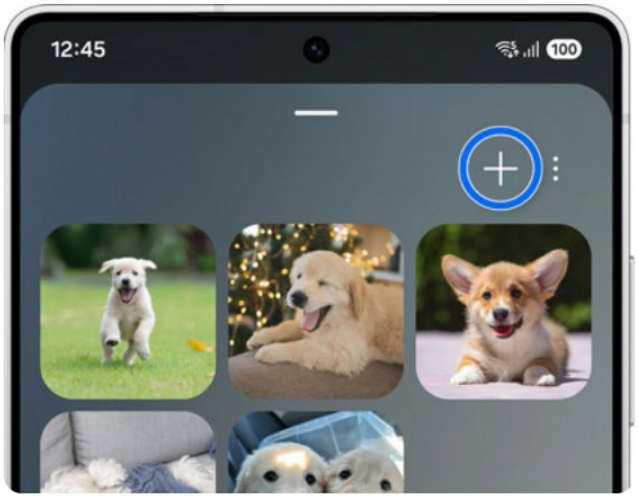
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	

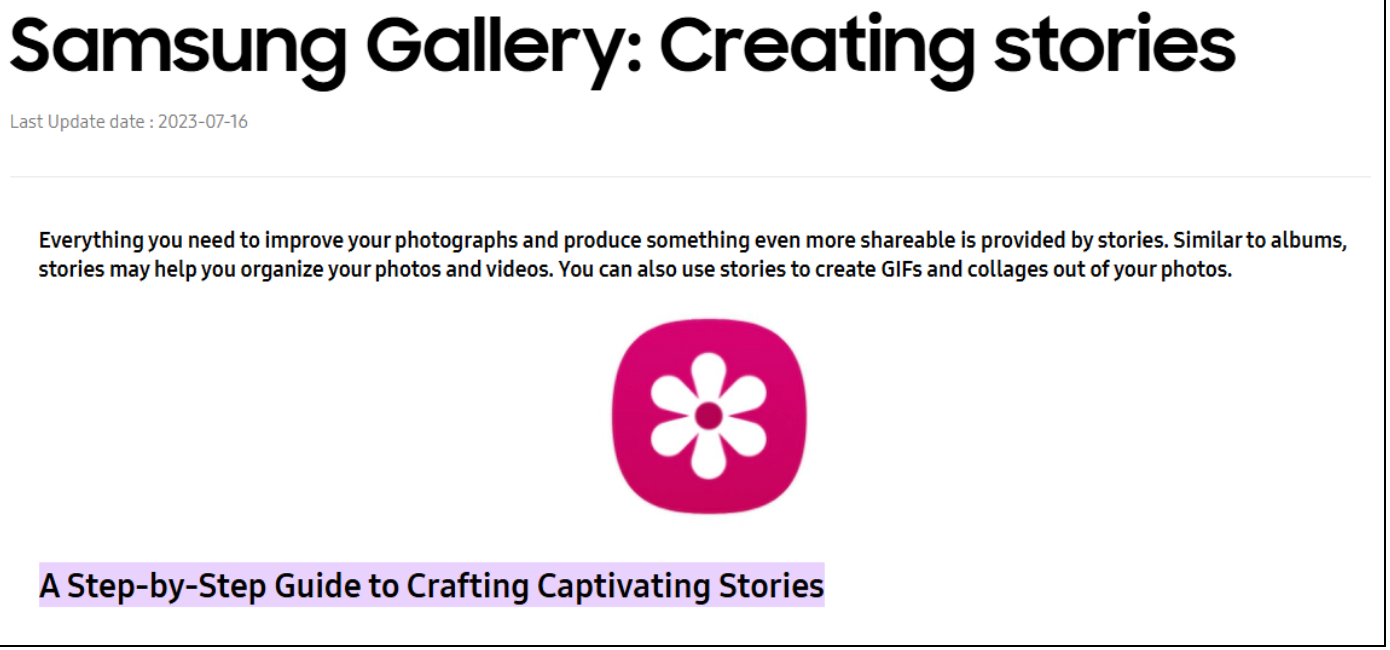
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Create a video story Video stories can be generated using different text or voice prompts. You can follow our instructions to begin creating your story! **1** Navigate to and open the **Gallery** app, and then tap the **Stories** tab. Tap the **Describe a story** text box, and then use the keyboard to type a story prompt.  **Note**: Tap the **Voice search** icon (the microphone) to use a voice command instead. **2** Tap the **Search** icon on the keyboard; your story will be created using Gallery images related to your prompt. **3** The story will begin playing. A music track and filter theme will be automatically selected for your story, but you can change this by tapping the **Themes** icon (the music note in the bottom left corner).

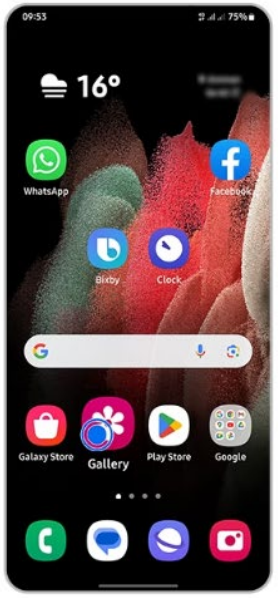
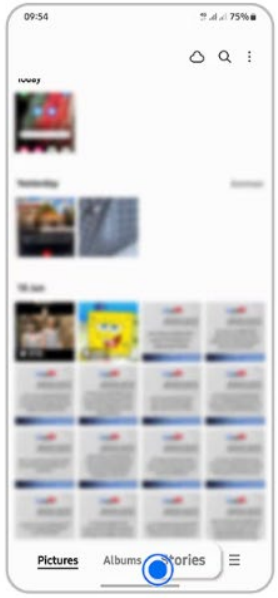
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 **4** Swipe through the filters at the bottom of the screen and select a new one. You can also tap the **Background music** icon (the music note in the bottom right corner), and swipe through the categories and options until you find a track that you like. **Note**: Tap the **Download** icon next to certain tracks to download them. **5** Tap **Back** twice to return to the story. When the story is finished playing, you can tap **Watch again** to replay it. **6** To save your story, tap **Back** again, and tap **Save** when prompted. **Note**: Tap **Discard** to delete the story instead. **7** Your new story will appear on the Stories tab. Select your story and swipe up to view the images that have been automatically included.

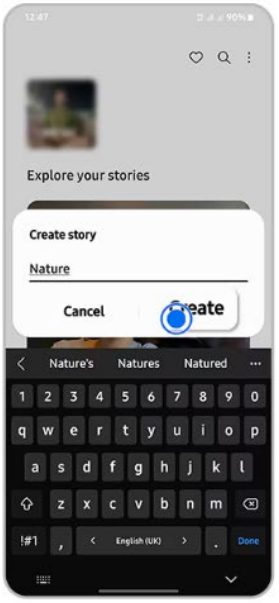
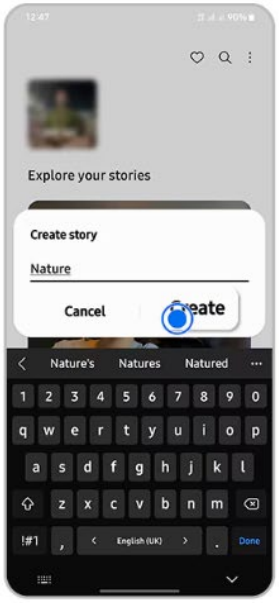
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	8 To add images, tap **Add** (the plus sign), and then select the images. Tap **Done**.  **9** To remove images, tap **More options** (the three vertical dots), and then tap **Select**. Select your desired images, and then tap **Remove from story** at the bottom of the screen. Tap **Remove**. Upon information and belief the stories are based on one or more of related information such as location information of the photos, certain date ranges, people, pets, and/or additional information that is used to associate pictures/videos together.

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	

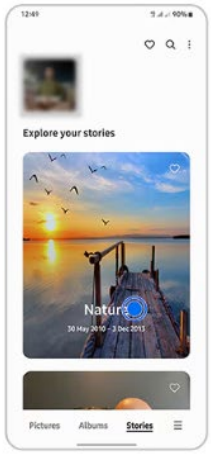
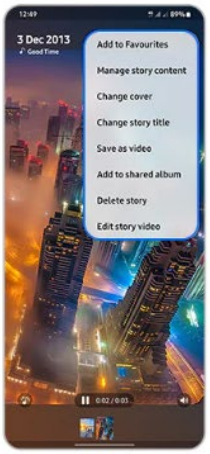
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 **Step 1**. Open the **Gallery** app  **Step 2**. Tap **Stories** **Step 3**. Tap the **Options** icon. it will appear as three dots **Step 4**. Tap **Create Story**

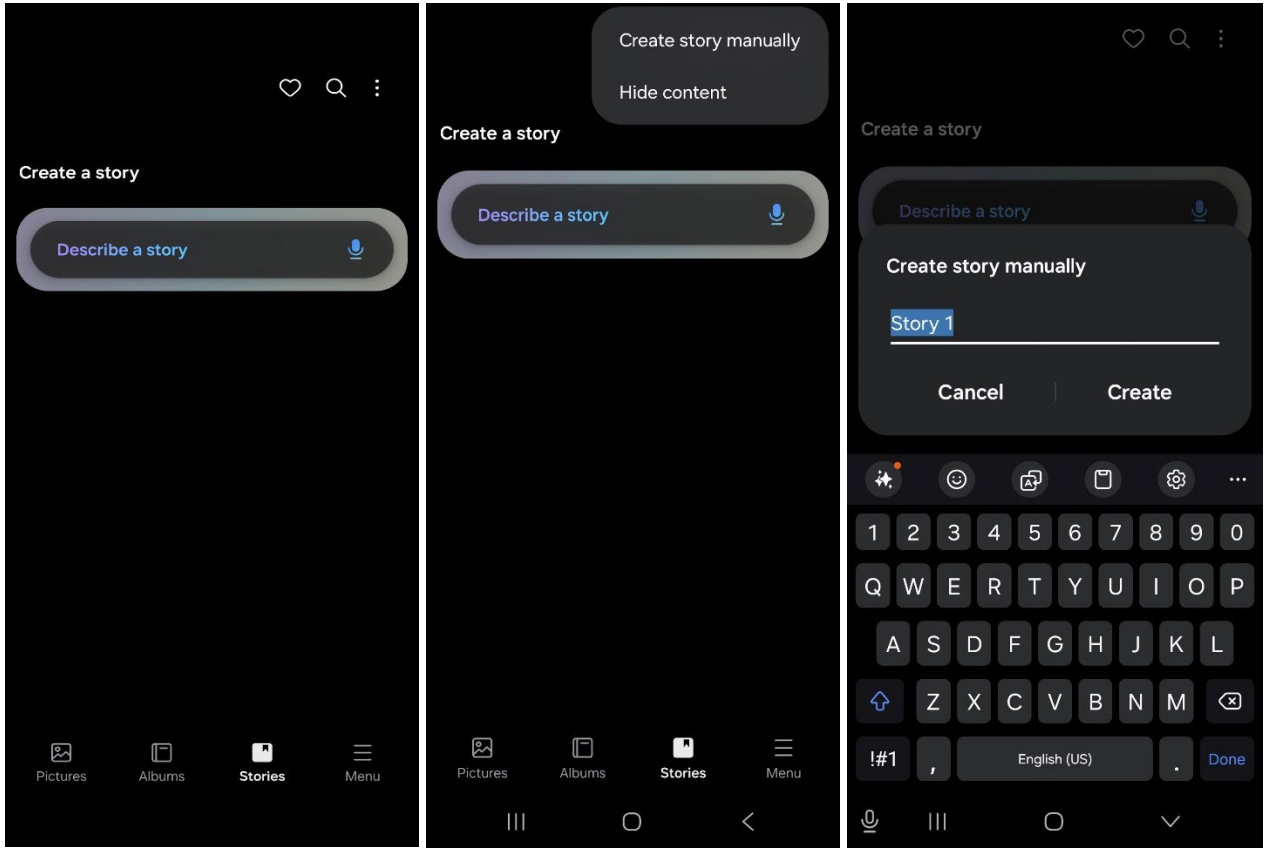
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

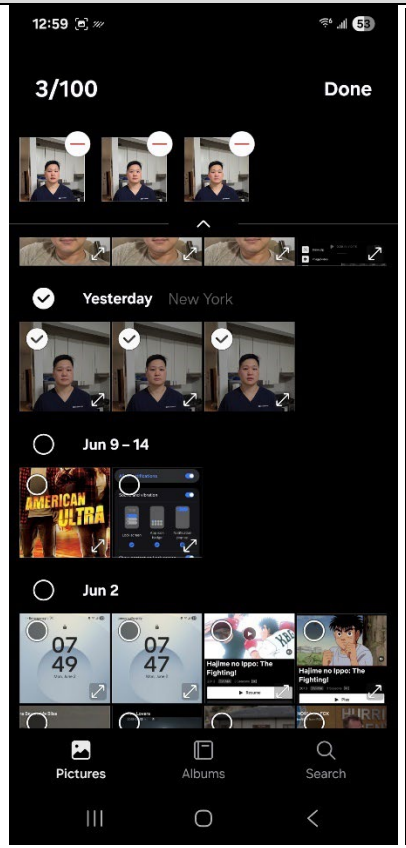
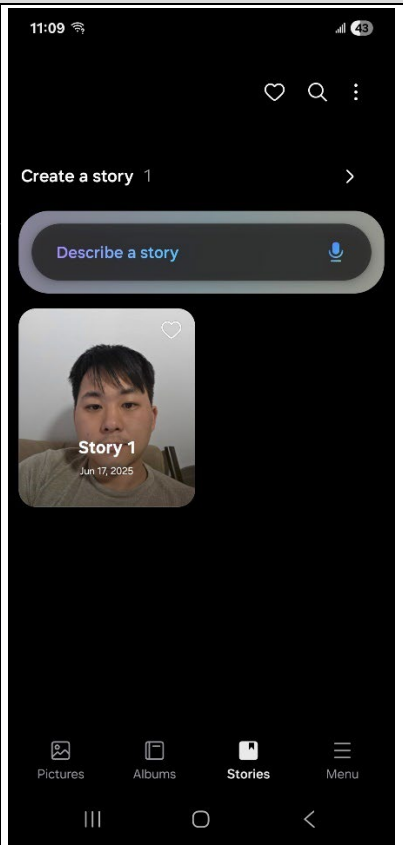
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 **Step 5**. Give your story a **name**.  **Step 6**. Tap **Create**. **Step 7**. Tap on the **photos** and **videos** that you want to add to your story. **Step 8**. Add the media to your story.

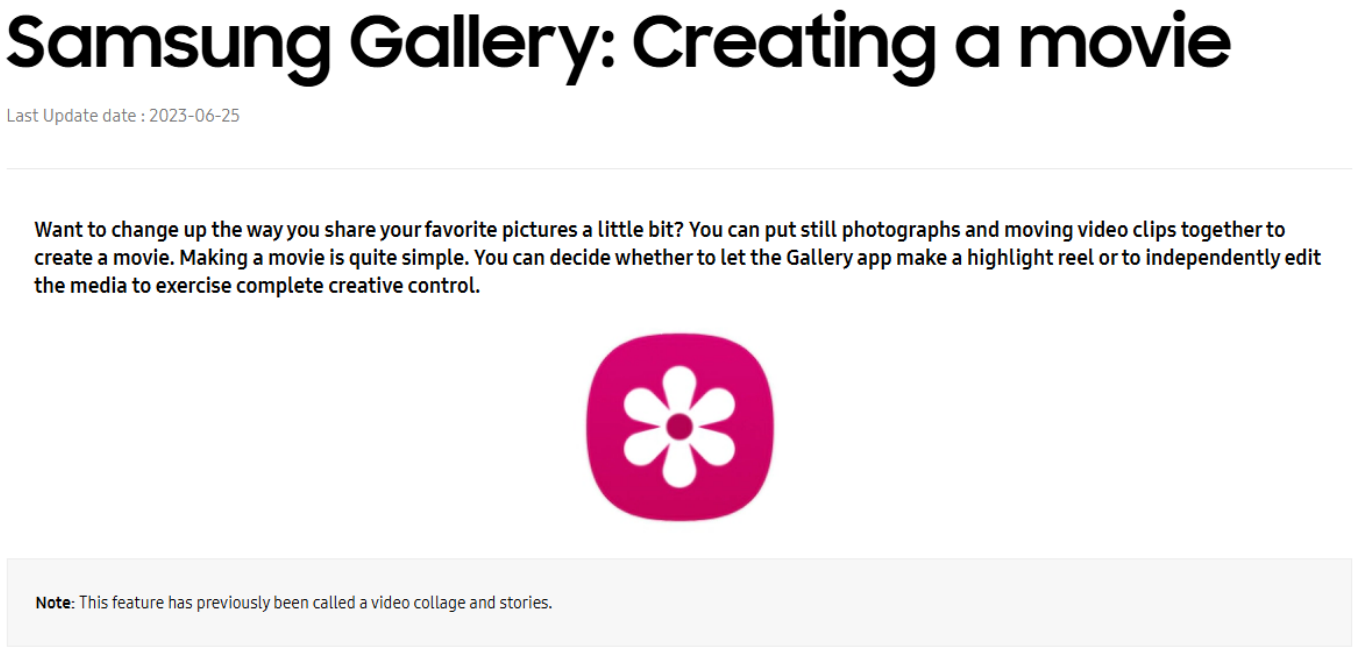
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Your story will be added to the Stories section of the Gallery app but you can continue adding or removing images. **Step 9**. Tap **Done**  **Step 10**. Tap your **story** **Step 11**. Tap the **options** icon  **Step 12**. Tap **Add** to add more images to your story. Tap **edit** if you'd like to remove an image from your story

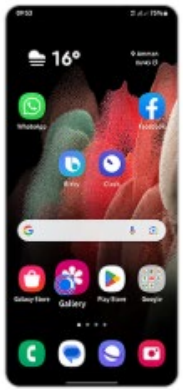
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	  **Fourth**, when creating a movie, if a user first selects a source album, the control module retrieves all digital images from that album. These retrieved images, which share the same related information of belonging to that album, are presented as candidates for the movie playlist, as shown on the selection screen.

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	

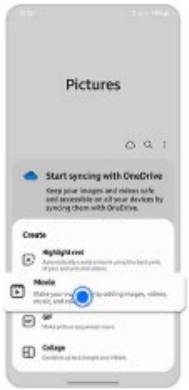
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement



Step 1. Open the Gallery app

Step 2. Tap the Create movie

Step 3. Tap the photos and videos that you would like to add to your movie

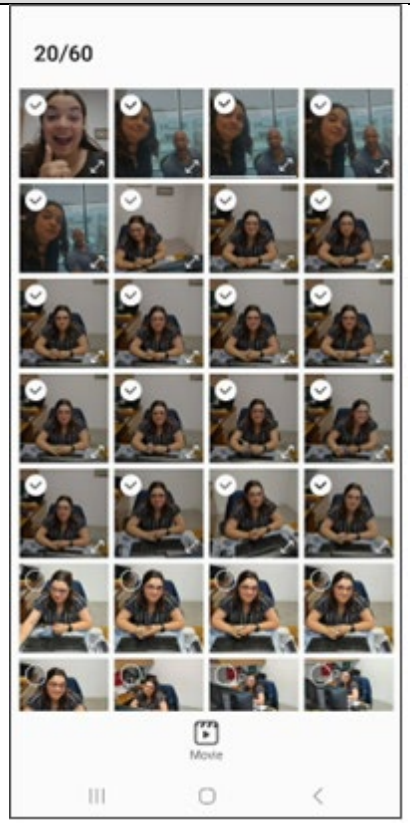


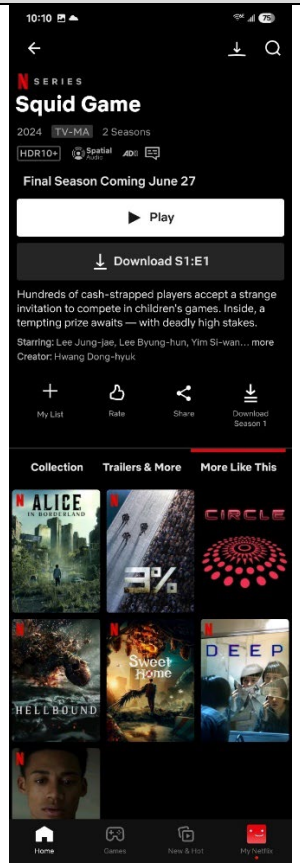
Step 4. Tap Create movie

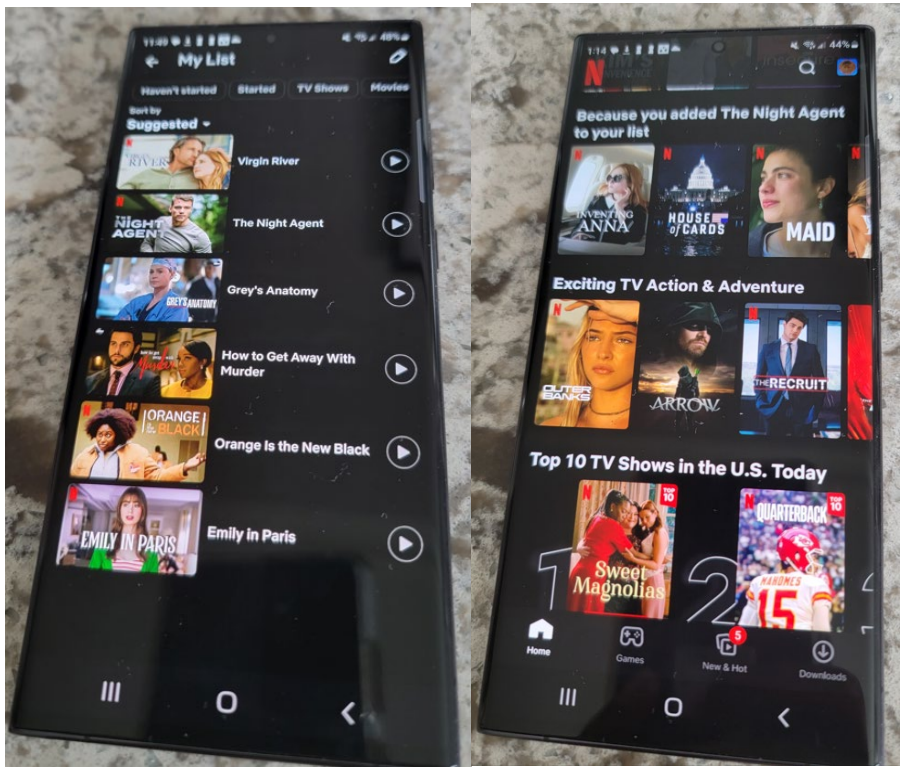
Step 5. Tap on Movies

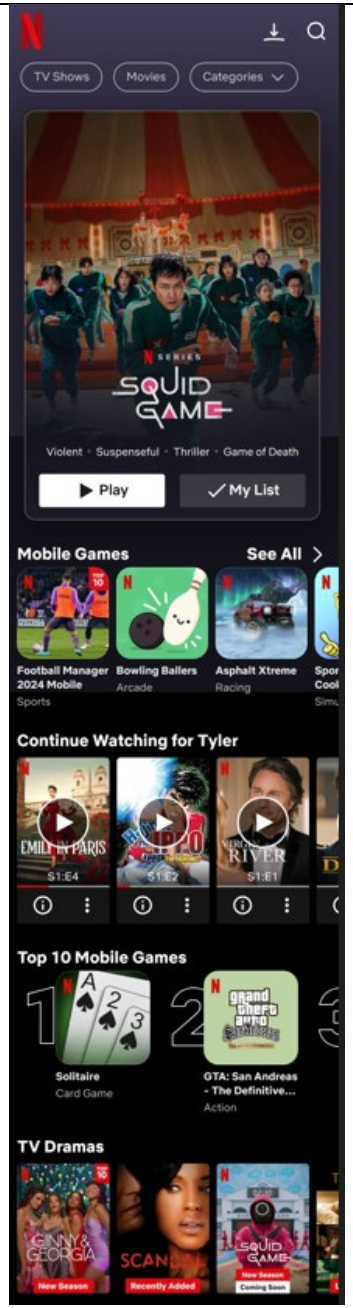
Step 6. Tap Highlight reel or edit yourself.

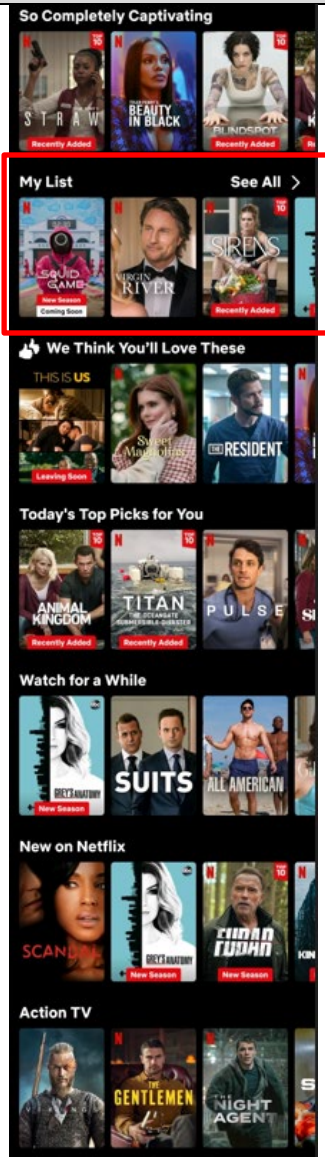
https://www.samsung.com/ae/support/mobile-devices/samsung-gallery-creating-a-movie/

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 A list of retrieved candidates is displayed for selection after the user chooses to create a movie from an album. **Netflix**

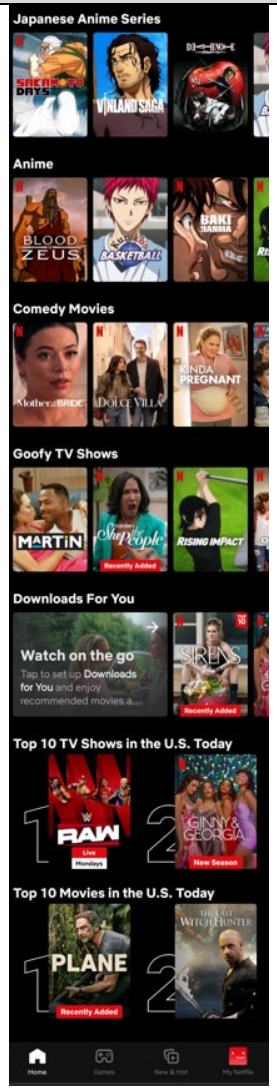
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 For example, the screenshot of the Netflix application on a Samsung Galaxy S25 demonstrates this limitation. After a user selects a specific video, in this instance by navigating to the detail page for "Squid Game", the control module (Netflix's recommendation engine), on information and belief, retrieves other digital images (other videos). These retrieved videos are displayed under the "More Like This" tab, as shown in the screenshot, and include titles such as "Alice in Borderland" and "3%." Such retrieval under the "More Like This" label is based on the same related information as "Squid Game" (e.g., genre, themes, or viewing patterns of similar users). These newly retrieved videos are presented as candidates for adding in said playlist ("My List").

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Additional examples include the Accused Samsung '198 Products displaying recommendations for adding to "My List" or "Downloads" based on a user selecting a particular image ("Because you added the Night Agent"):  Additional examples include the Accused Samsung '198 Products displaying recommendations for adding to "My Listbased on a user selecting a particular image as shown in the user profile home screen.


TV Shows
Movies
Categories
SQUID GAME
Violent · Suspenseful · Thriller · Game of Death
Play
My List
Mobile Games
See All
Football Manager 2024 Mobile
Sports
Bowling Ballers
Arcade
Asphalt Xtreme
Racing
Continue Watching for Tyler
S1:E4
S1:E2
S1:E1
Top 10 Mobile Games
Solitaire
Card Game
GTA: San Andreas - The Definitive...
Action
TV Dramas
New Season
Recently Added
New Season
Coming Soon

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	About Welcome to the Netflix information hub for Personalization, Recommendations and Search research. This page showcases our journey in enhancing member experiences through the research and application of state-of-the-art technologies. Recommendation and Search algorithms are at the heart of Netflix's services. They are pivotal in providing our members around the world with personalized entertainment suggestions that align with their preferences at any given moment. Recognizing the critical role these recommendations play, we are committed to continuous improvement and advancement in this field. While our research has made many significant improvements to recommendation systems over th years, there is still a long way to go until every member is given the perfect recommendation at the top of their page while understanding why it will be great for them. Thus, we continue to improve our algorithms while looking for new areas we can personalize. We conduct research in areas of machine learning with the goal to make member experience better. Our work on recommender systems, contextual bandits, reinforcement learning, natural language processing, foundational models, and causal inference is published at leading conferences. https://research.netflix.com/research-area/recommendations

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Recommendations and Results Organization in Netflix Search **Abstract** "Personalized recommendations on the Netflix Homepage are based on a user's viewing habits and the behavior of similar users. These recommendations, organized for efficient browsing, enable users to discover the next great video to watch and enjoy without additional input or an explicit expression of their intents or goals. The Netflix Search experience, on the other hand, allows users to take active control of discovering new videos by explicitly expressing their entertainment needs via search queries. https://help.netflix.com/en/node/100639

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	How Netflix's Recommendations System Works Our business is a subscription service model that offers personalized recommendations, to help you find shows, movies, and games we think you might enjoy. To do this we have created an innovative recommendations system This article provides a high level description of our recommendations system in plain language. **The basics** Whenever you access the Netflix service, our recommendations system strives to help you find a show, movie, or game to enjoy with ease. We estimate the likelihood that you will enjoy a particular title in our catalog based on a number of factors including: • your interactions with our service (such as your viewing history and how you rated other titles), • other members with similar tastes and preferences on our service, and • information about the titles, such as their genre, categories, actors, release year, etc.

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	In addition to knowing what you have watched on Netflix, to best personalize the recommendations we also consider factors including: • the time of day you're enjoying Netflix, • the languages you prefer • the devices you are enjoying Netflix on, and • how long you enjoyed a Netflix title. All of these signals are used as some of the inputs that we process in our algorithms. (An algorithm is a process or set of rules followed in a problem solving operation.) The recommendations system does not include demographic information (such as age or gender) as part of the decision making process. If you're not seeing something you want to watch, you can always search the entire catalog available to you. We try to make searching as easy and quick as possible. When you enter a search query, the top results we return are based on a number of factors, including the actions of other members who have entered the same or similar queries, our prediction of what you'd like to enjoy on Netflix, and others. Below is a description of how the system works over time, and how these pieces of information influence what we present to you.

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	"Jump starting" the recommendations system When you create your Netflix account, or add a new profile in your account, we ask you to choose a few titles that you like. We use these titles to "jump start" your recommendations. Choosing a few titles you like is optional. If you choose to forego this step then we will start you off with a diverse and popular set of titles to get you going. Once you start engaging with titles on the service, this will "supersede" any initial preferences you provided us. As you continue to enjoy Netflix over time, the titles you engage with more recently will outweigh titles you engaged with in the past in terms of driving our recommendations system. **Rows, rankings and title representation** When you look at your Netflix homepage, our systems have ranked titles and positioned them in a way that is designed to present the best possible ordering of titles that you may enjoy. On each page, there are multiple layers of personalization. For example, in a row, we may personalize the following: • the choice of row (such as Continue Watching) • which titles appear in the row, and • the order of those titles. https://help.netflix.com/en/node/100639 **Samsung TV Plus**

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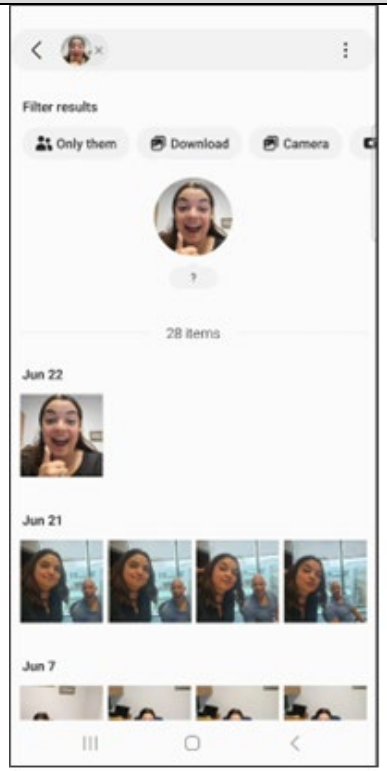
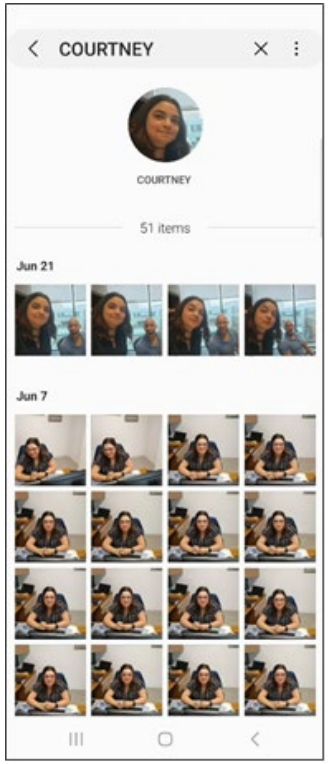
Ex. 1023 - Page 147

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 For example, the screenshot of the Samsung TV Plus application on an Accused Samsung '198 Product demonstrates this limitation. After a user selects a specific video, in this instance by navigating to the detail page for "Alienoid," the control module (the application's recommendation engine), on information and

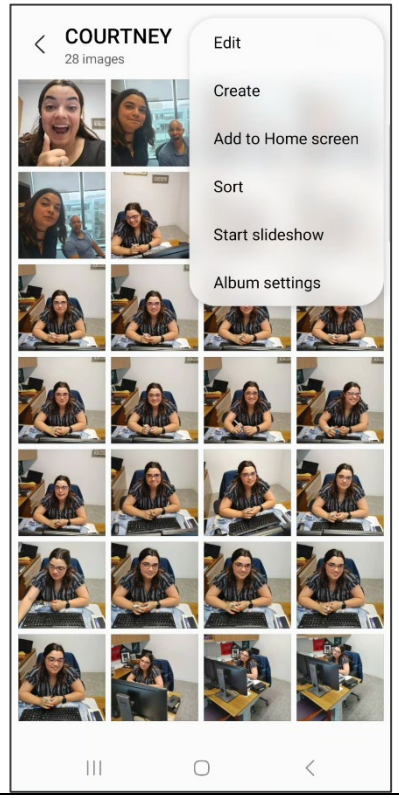
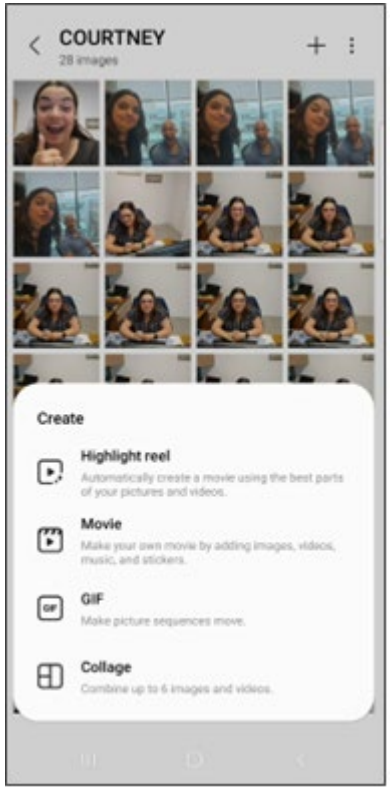
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	belief, retrieves other digital images (other movies or shows). These retrieved videos are displayed under the "More like this" section, as shown in the screenshot, and include titles such as "The Moon" and "Minotaur." Such retrieval under the "More like this" label is based on the same related information as "Alienoid" (e.g., its listed genres of Action, Fantasy, Adventure, Science Fiction, or viewing patterns of similar users). These newly retrieved videos are presented as candidates for adding in said playlist (the "Watch list") Further, the Accused Samsung '198 Products include a control module (e.g., CPU executing Samsung TV application) that provides candidate images based on recommendation engine: Recommendations and Customised Content The SmartTV is designed to enable you to easily find and access video programming and other content. For example, you may access information about live television programs distributed to you by your cable or satellite operator and on-demand video content offerings distributed by third-party content providers through searchable guides displayed on your SmartTV. In the case of live television programs, we determine what content is available to you based in part on your zip code. In addition, the SmartTV helps make the searchable guides and other SmartTV content more relevant to you by highlighting programming and content that is likely to interest you, such as episodes of programs that you may have missed and new programs, applications and other content that we believe you will find of interest. We base these recommendations on: Information about content that you have watched, purchased, downloaded, or streamed through Samsung applications on your SmartTV or other devices;

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Information about applications you have accessed through the SmartTV panels; Information about your clicks on the "Like," "Dislike," "Watch Now," and other buttons on your SmartTV; The query terms you enter into SmartTV search features, including when you search for particular video content; and Other SmartTV usage and device information, including, but not limited to, IP address, information stored in cookies and similar technologies, information that identifies your hardware or software configuration, browser information, and the page(s) you request. In addition, if you enable the collection of information about video streams viewed on your SmartTV, we may collect that information and additional information about the network, channels, and programs that you view through the SmartTV. We will use such information to improve the recommendations that we deliver to you on the SmartTV. Please visit the "settings" menu of your SmartTV for choices that may be available to you if you do not wish to continue to receive personalised recommendations on your SmartTV. If you disable personalised recommendations, then the information and content displayed on your SmartTV may not be as relevant to you. Samsung may still collect information about your usage of the SmartTV for the purposes described in this Samsung Privacy Policy. https://www.samsung.com/us/info/privacy/smarttv/ Doctrine of Equivalents To the extent Samsung argues that this limitation is not literally met, Maxell asserts that this limitation is met under the doctrine of equivalents because the identified functionality matches the function, way, and result of the claimed element and, to the extent there is a difference, the difference is insubstantial. For example, to the extent that Samsung argues that the related information for a retrieved candidate image is

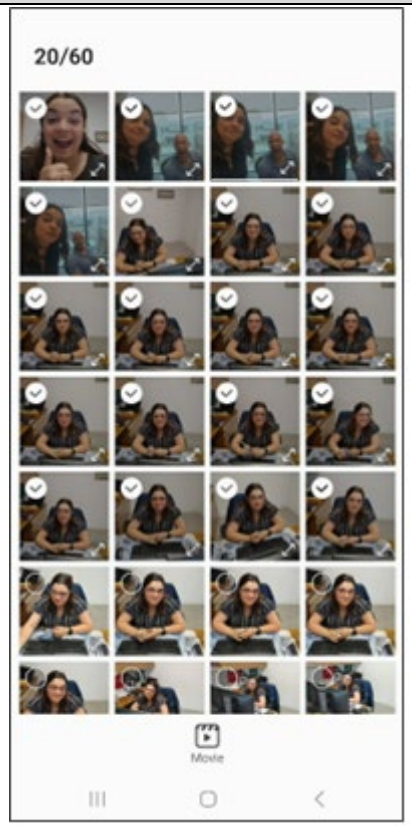
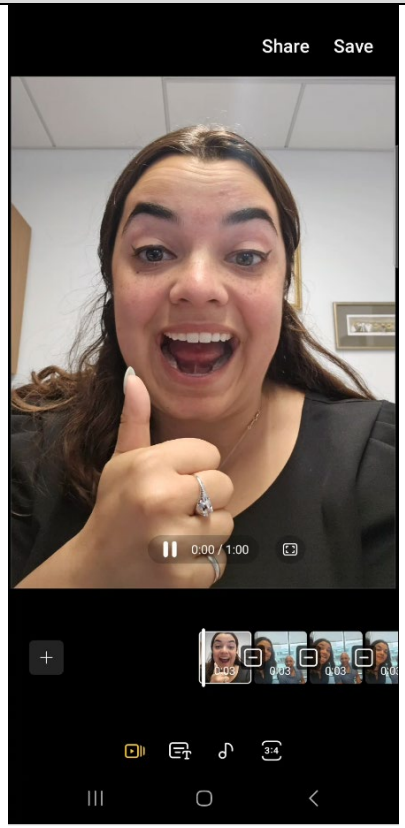
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	not exactly the "same" as the user-selected image, the use of algorithmic similarity is an equivalent implementation. Using this method performs substantially the same function, which is to retrieve candidate images based on a common characteristic with a selected image. It does so in substantially the same way, by using shared metadata like genre, themes, or event type as the basis for retrieval. This achieves substantially the same result: presenting the user with a curated list of relevant candidate images for potential addition to a playlist.
[1.d] outputs a list identifying the other digital images retrieved based on their related information to select another digital image to add in said playlist when said another digital image is selected from other digital images as the candidates by the user,	Each of the Accused Samsung '198 Products includes a control module which outputs a list identifying the other digital images retrieved based on their related information to select another digital image to add in said playlist when said another digital image is selected from other digital images as the candidates by the user. *See* User Guide and Technical Specifications of the Accused Samsung '198 Products available at Samsung's website showing that each of the devices includes a control module which outputs a list identifying the other digital images retrieved based on their related information to select another digital image to add in said playlist when said another digital image is selected from other digital images as the candidates by the user. **<u>People Album</u>**

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	  For example, a screenshot (shown on the left) from the Samsung Gallery app on a Samsung Galaxy S23 Ultra outputs a list identifying the other digital images retrieved (which were retrieved based on facial recognition as detailed in element [1.c]) by displaying a collection of photo thumbnails, specifically "28 items" associated with a recognized but unnamed person (represented by the large circular photo with a "?"). These "28 items" are presented as candidates for that person's new album, which will function as the playlist. The user's subsequent action from such a screen, typically naming or registering this person, selects these displayed candidates from the outputted list to be added to, and thereby form, said playlist (shown on the right) As an additional example, selecting "Courtney" results in displaying a list of digital images to generate a movie or slideshow:

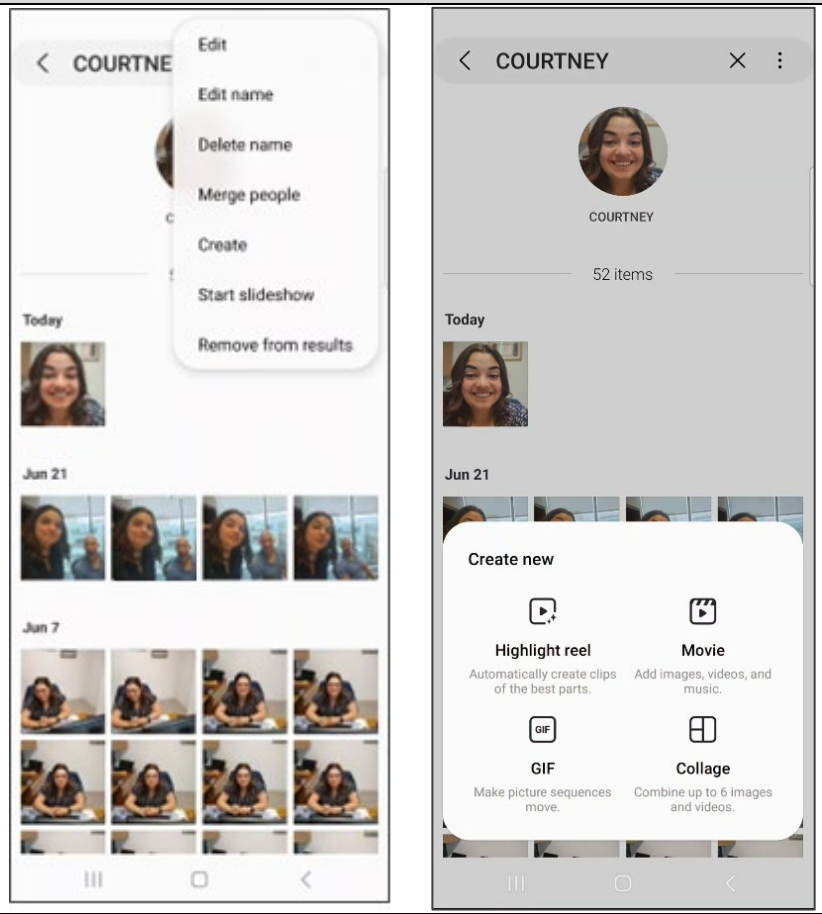
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 

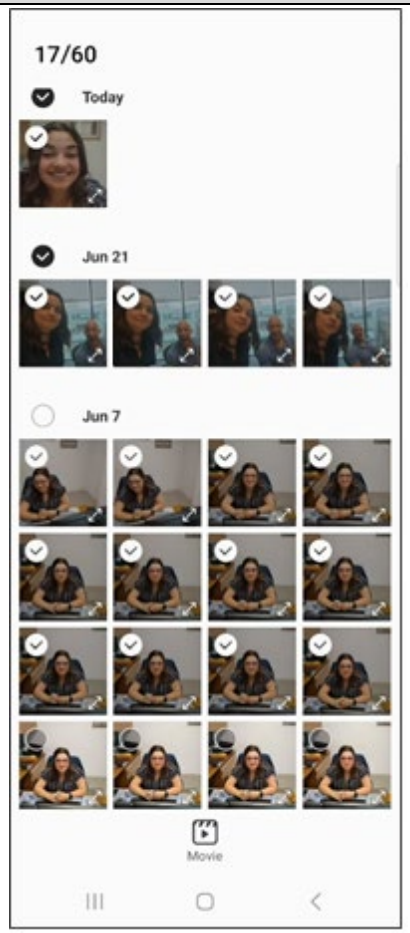
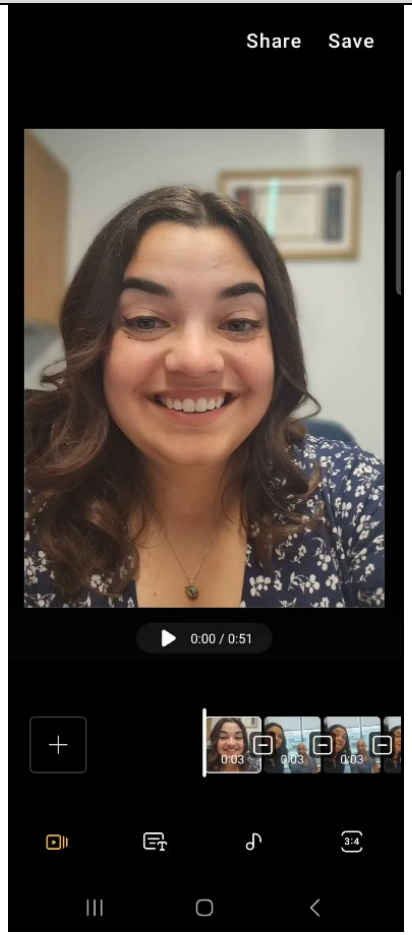
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	  Galaxy S23 Ultra (creating a movie)

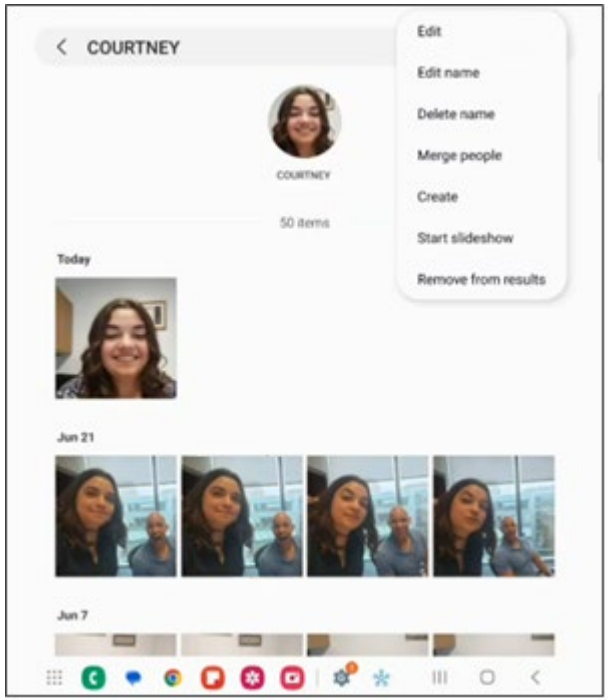
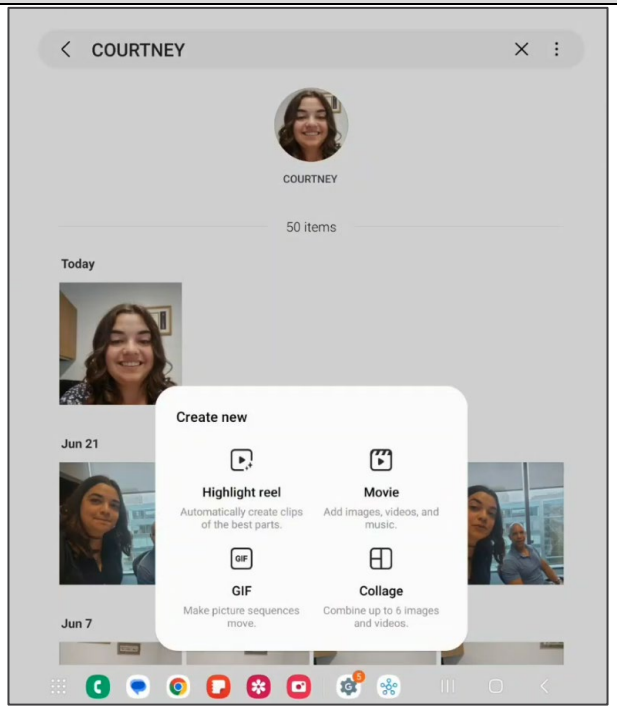
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	

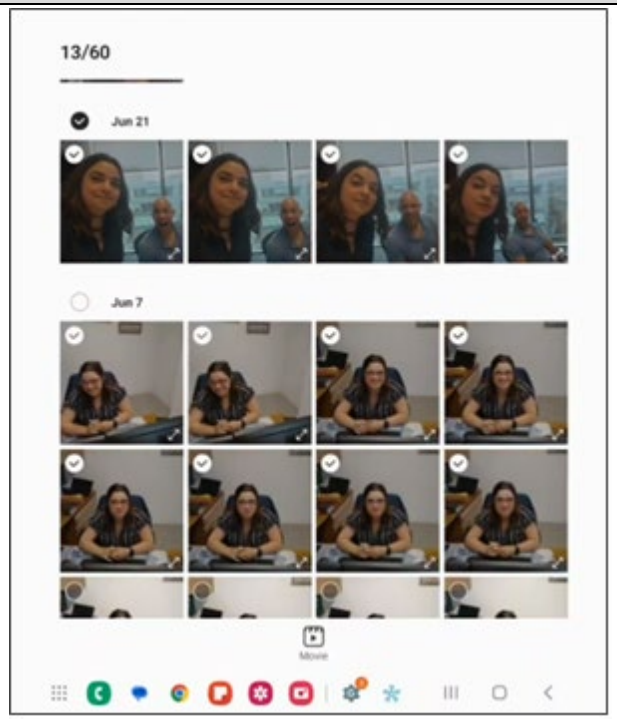
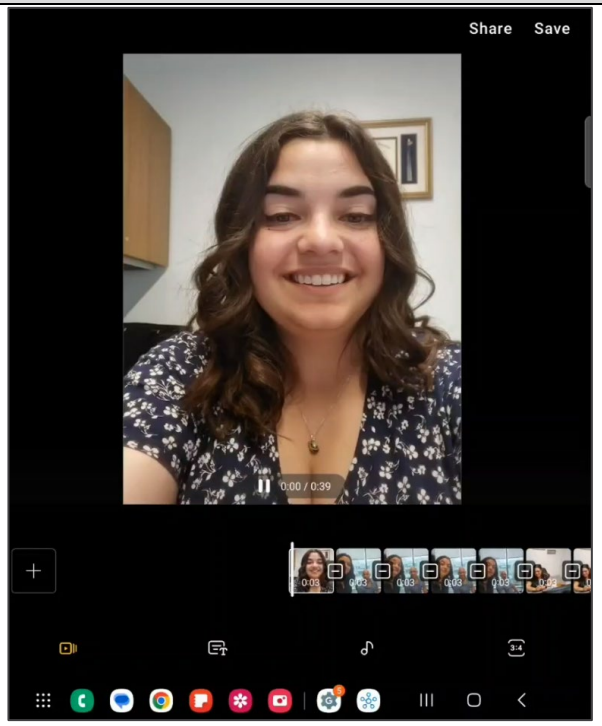
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	  Galaxy Z Flip4 (creating a movie)

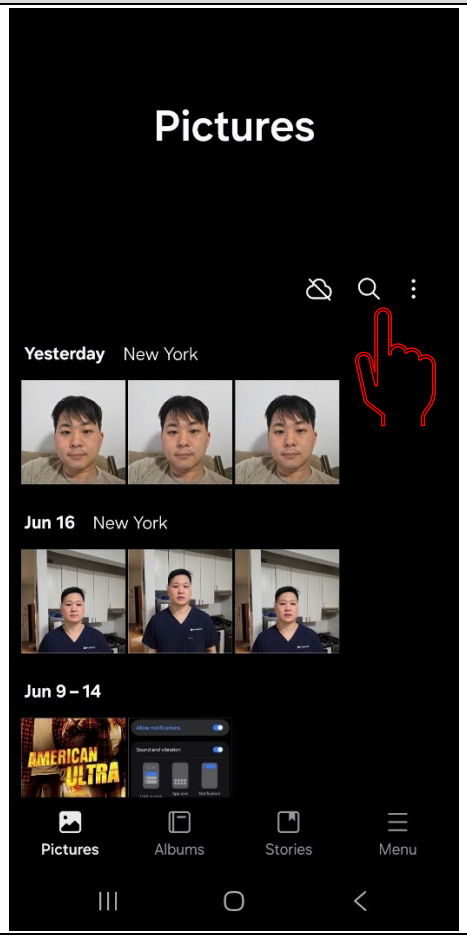
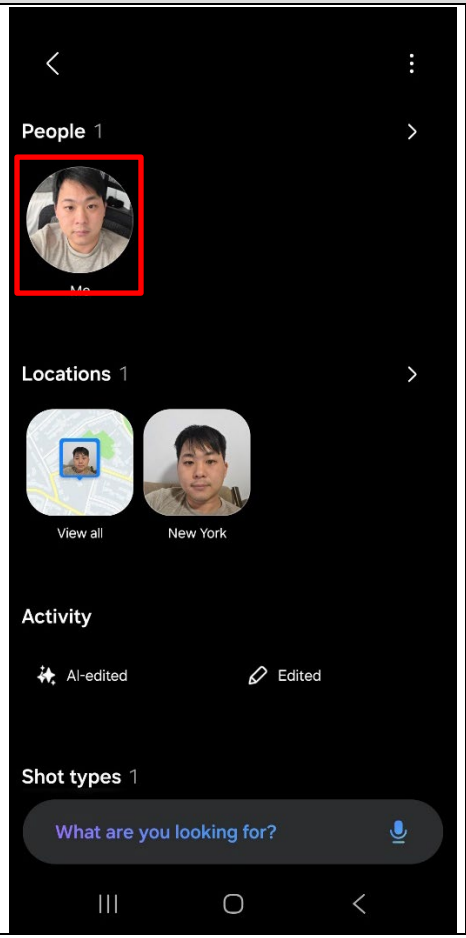
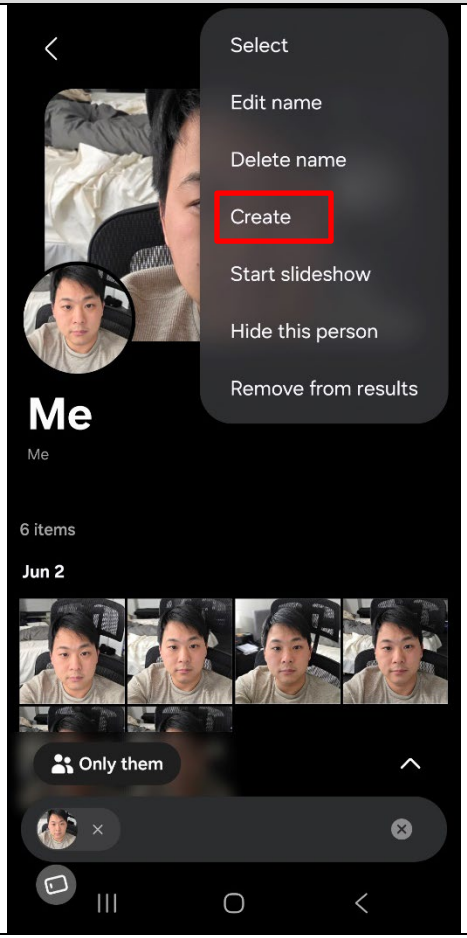
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 

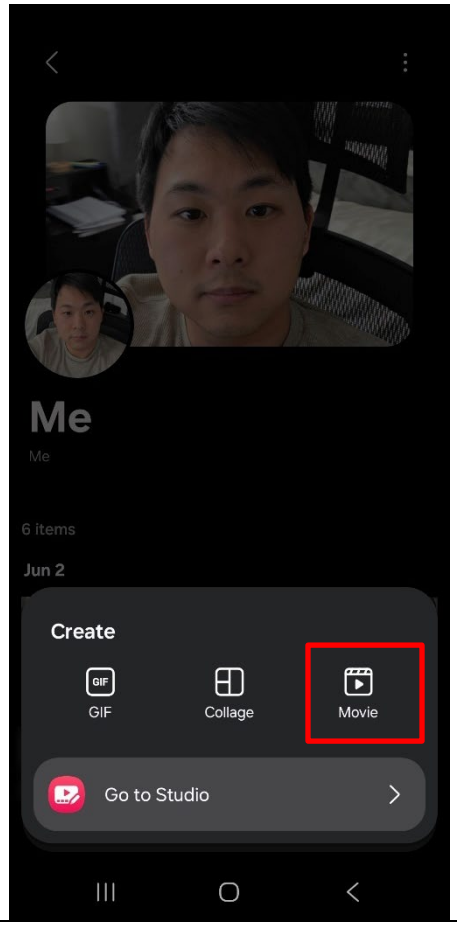
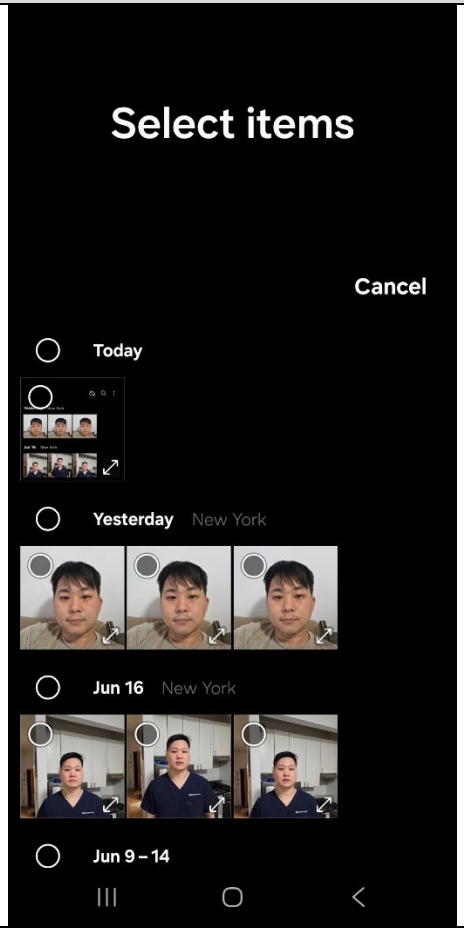
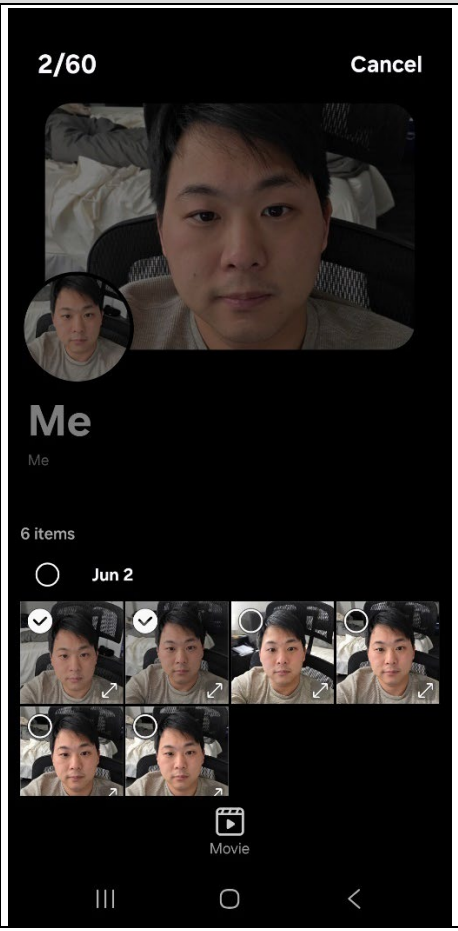
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

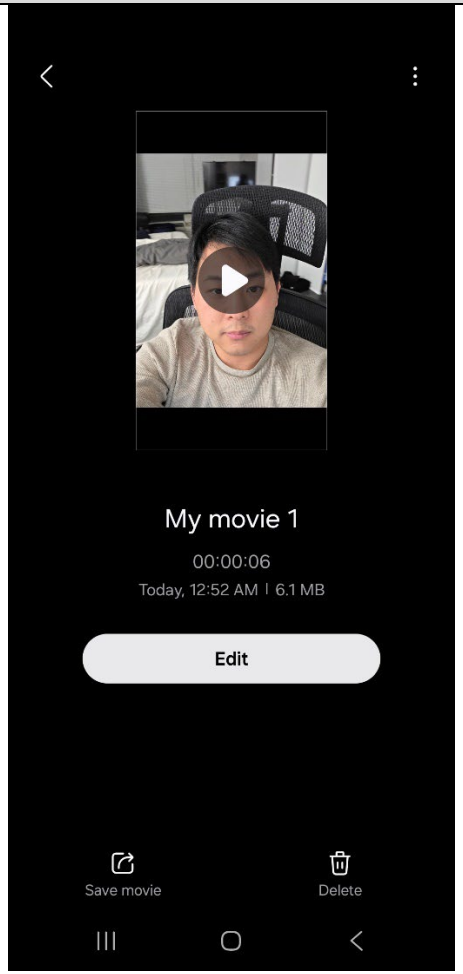
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	  Galaxy Z Fold4 (creating a movie)

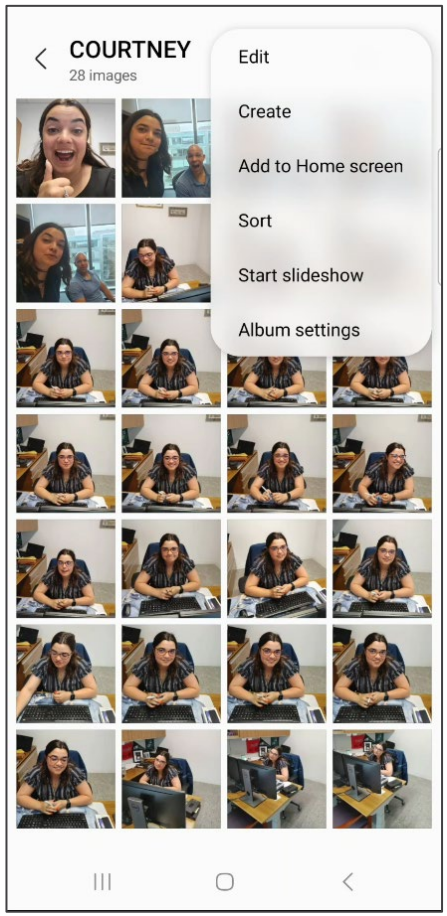
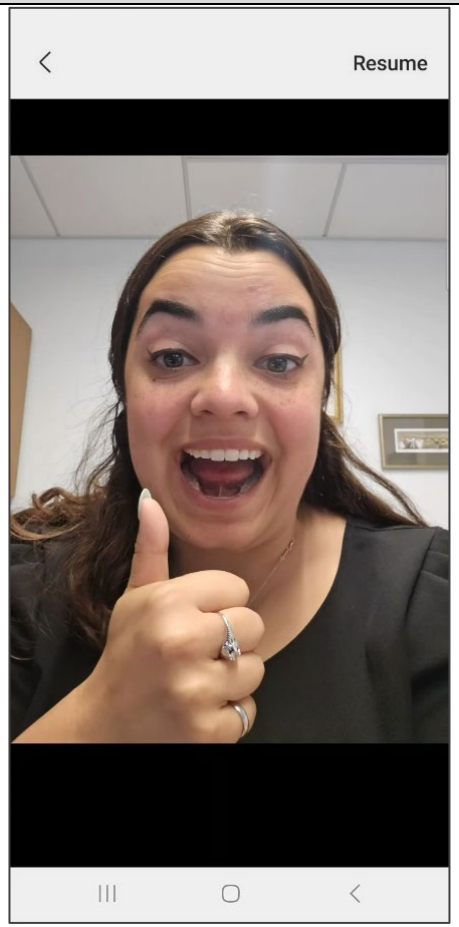
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

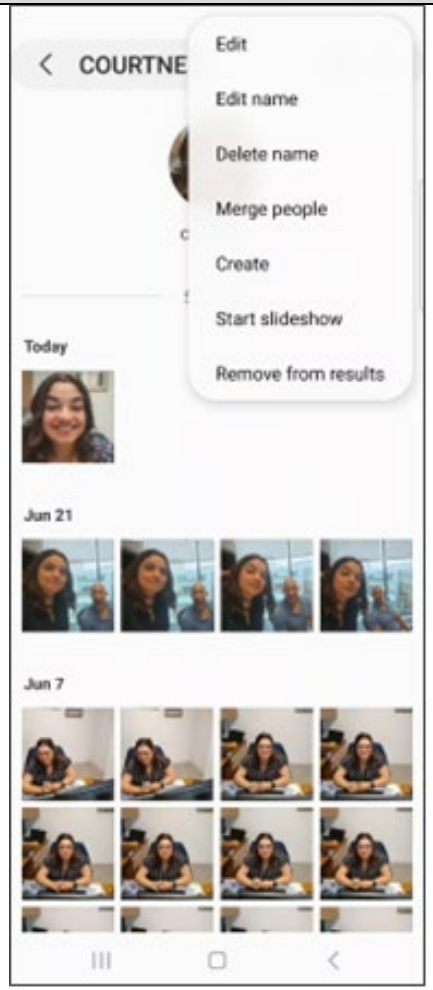
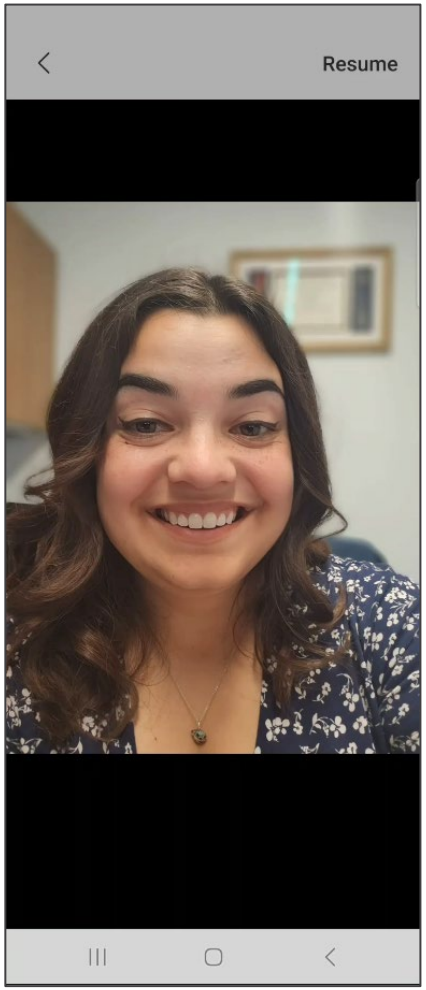
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	  

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	  

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 Galaxy S25 (creating a movie)

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	  Galaxy S23 Ultra (creating a slideshow)

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	  Galaxy Z Flip4 (creating a slideshow)

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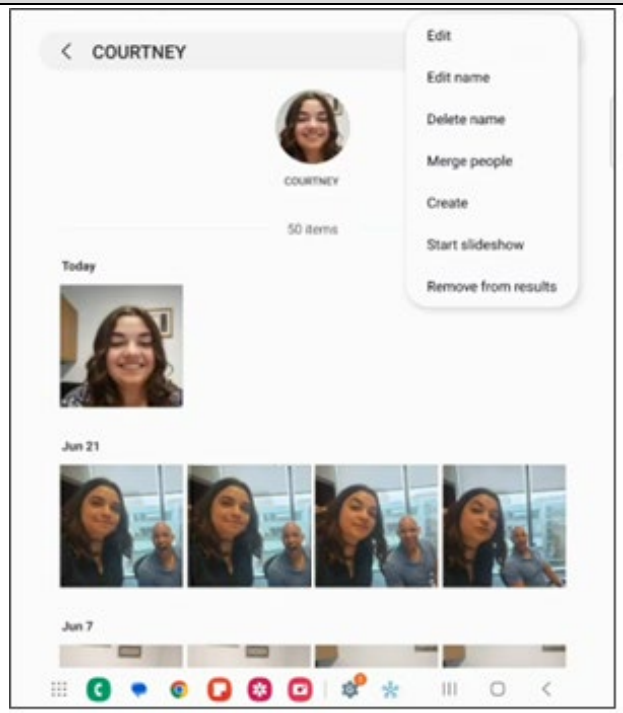
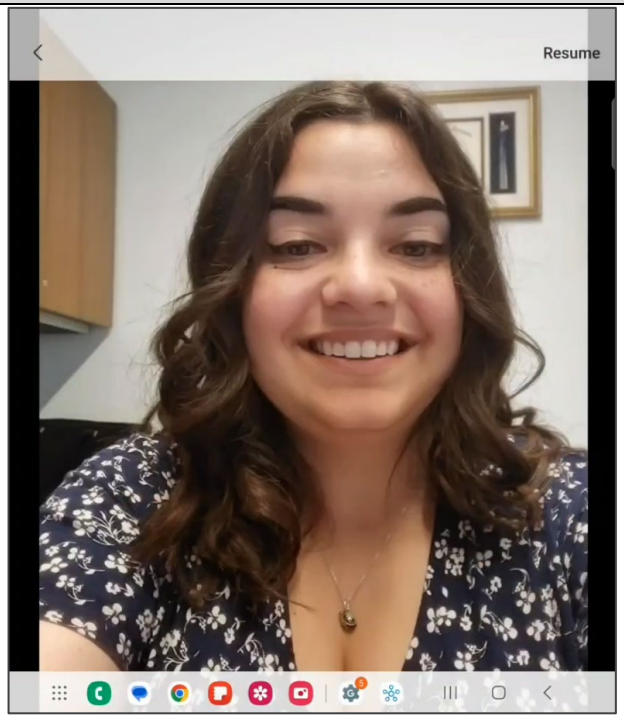
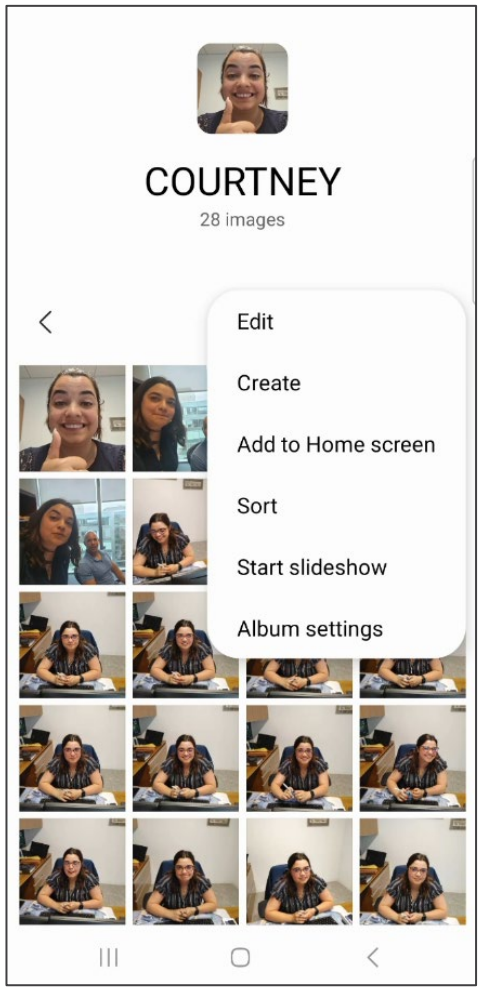
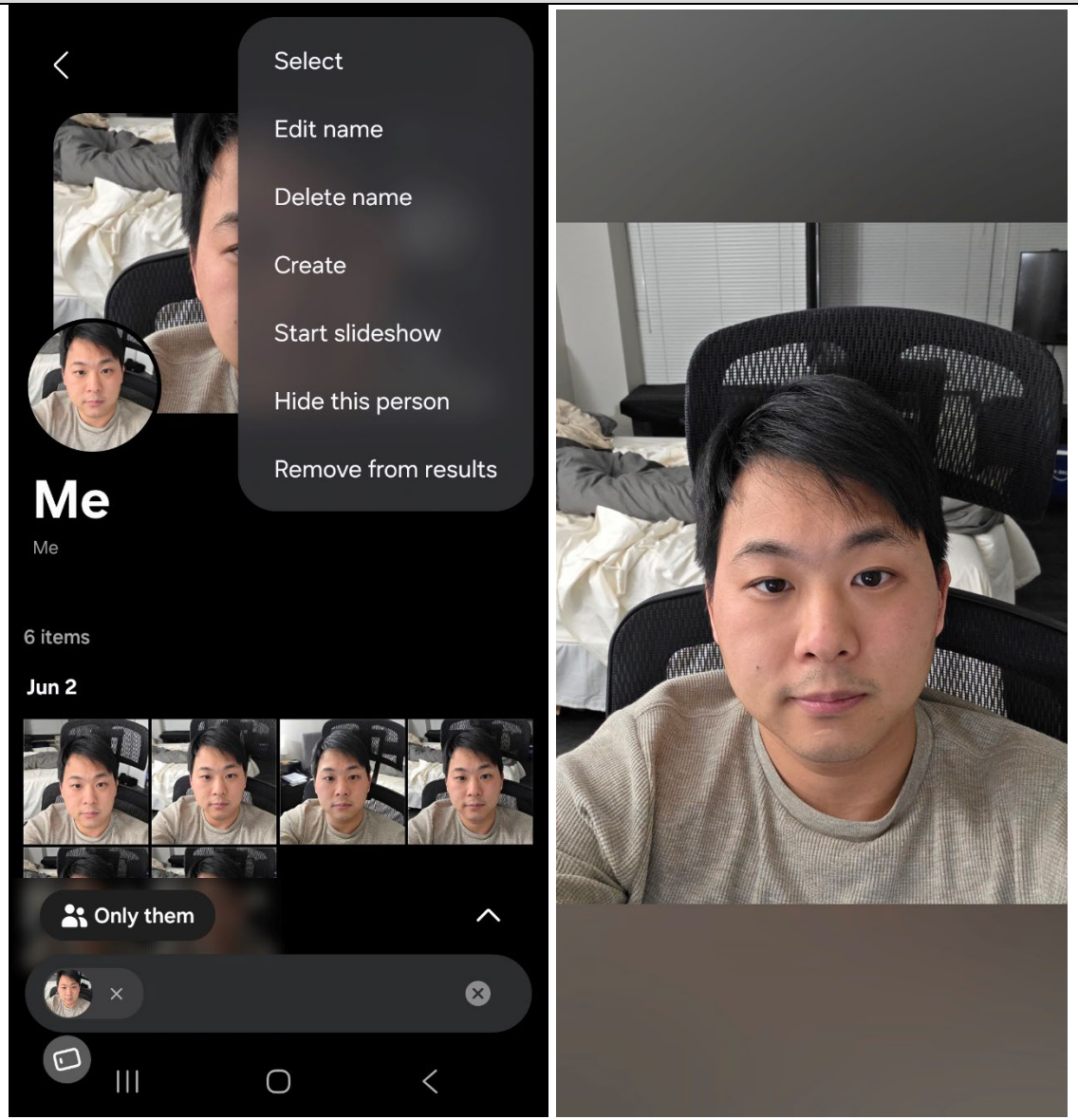
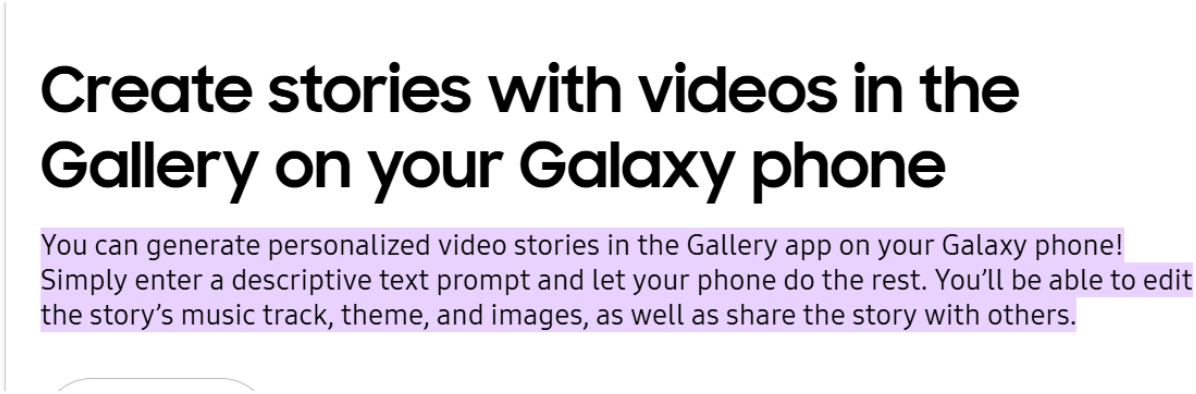
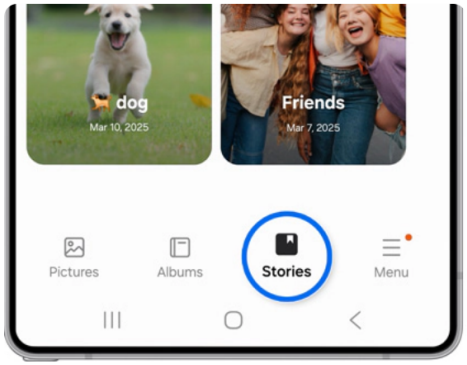
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	  Galaxy Z Fold4 (creating a slideshow)

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 Galaxy A54 5G (creating a slideshow)

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 Galaxy S25 (creating a slideshow)

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Similar lists are displayed when generating stories: 

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Create a video story Video stories can be generated using different text or voice prompts. You can follow our instructions to begin creating your story! **1** Navigate to and open the **Gallery** app, and then tap the **Stories** tab. Tap the **Describe a story** text box, and then use the keyboard to type a story prompt.  **Note**: Tap the **Voice search** icon (the microphone) to use a voice command instead. **2** Tap the **Search** icon on the keyboard; your story will be created using Gallery images related to your prompt. **3** The story will begin playing. A music track and filter theme will be automatically selected for your story, but you can change this by tapping the **Themes** icon (the music note in the bottom left corner).

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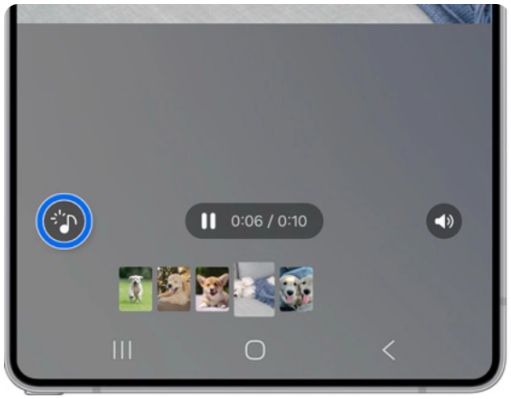
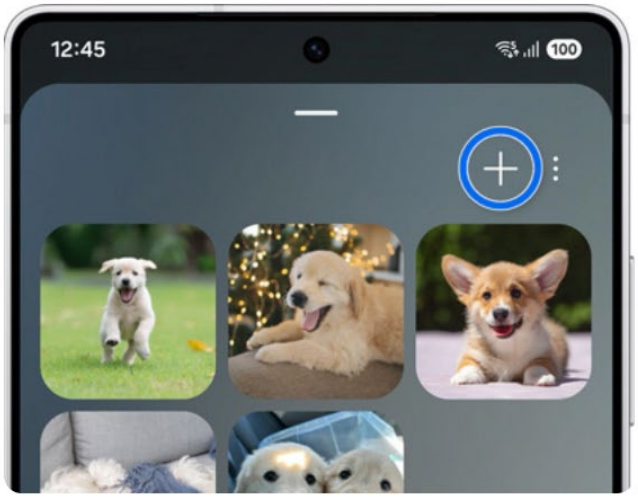
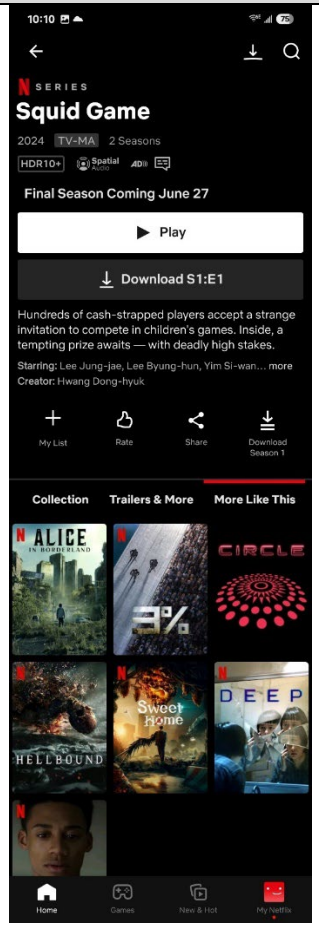
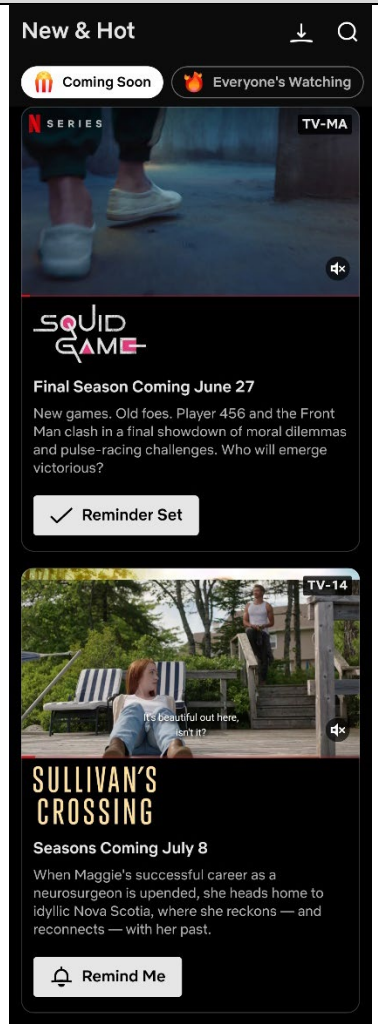
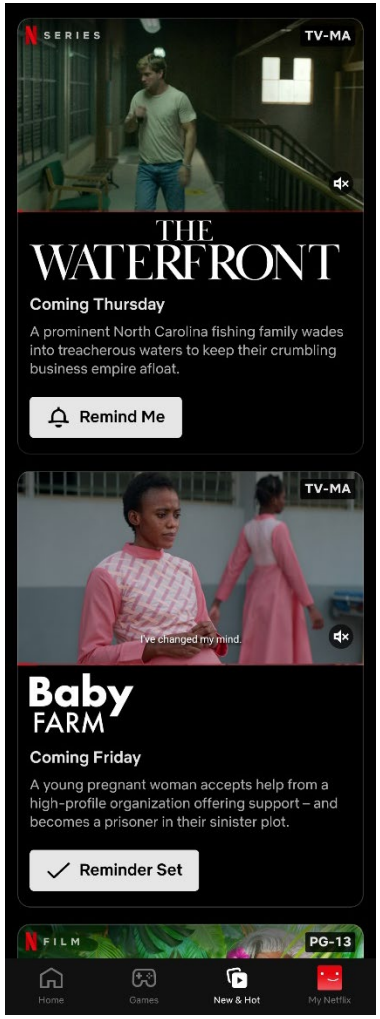
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 **4** Swipe through the filters at the bottom of the screen and select a new one. You can also tap the **Background music** icon (the music note in the bottom right corner), and swipe through the categories and options until you find a track that you like. **Note**: Tap the **Download** icon next to certain tracks to download them. **5** Tap **Back** twice to return to the story. When the story is finished playing, you can tap **Watch again** to replay it. **6** To save your story, tap **Back** again, and tap **Save** when prompted. **Note**: Tap **Discard** to delete the story instead. **7** Your new story will appear on the Stories tab. Select your story and swipe up to view the images that have been automatically included.

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	8 To add images, tap **Add** (the plus sign), and then select the images. Tap **Done**.  9 To remove images, tap **More options** (the three vertical dots), and then tap **Select**. Select your desired images, and then tap **Remove from story** at the bottom of the screen. Tap **Remove**. https://www.samsung.com/us/support/answer/ANS10004859/ **Netflix** For example, after the control module retrieves candidate videos (as detailed in our analysis of [1.c]), the Netflix application on an Accused Samsung '198 Product outputs a list identifying these other digital images retrieved.

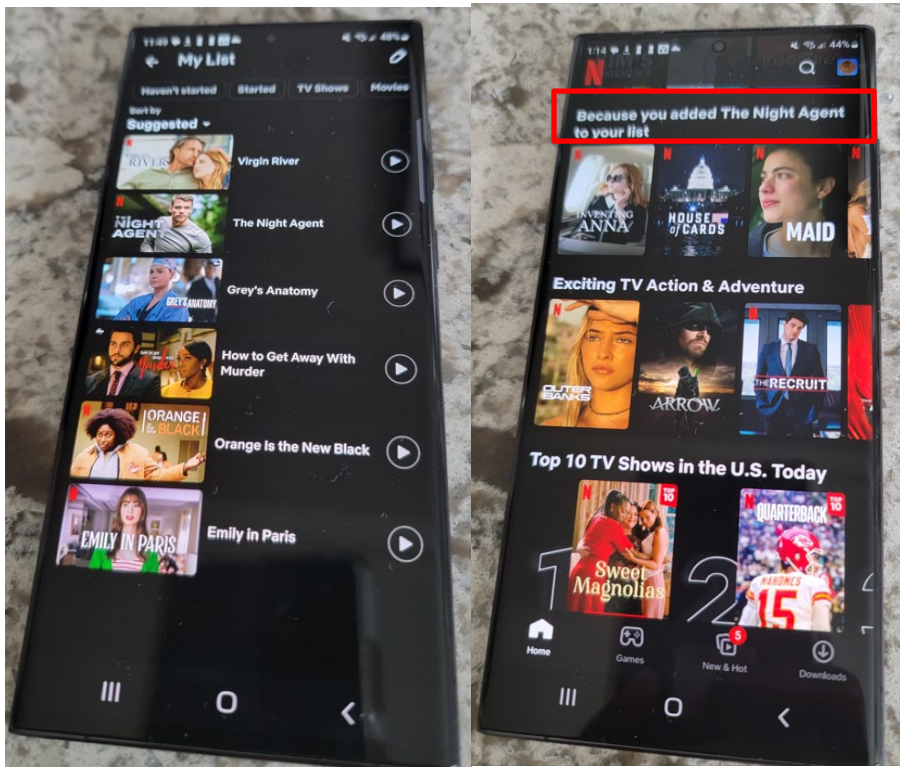
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 **First**, a detail page for a selected show like "Squid Game," which then displays a "More Like This" demonstrates this. These rows, populated with video thumbnails, constitute the outputted list of candidates. From this outputted list, the user can select another digital image (a candidate video) by tapping on its thumbnail. Such action typically navigates to the video's detail page, from where the user can choose to add it in said playlist ("My List").

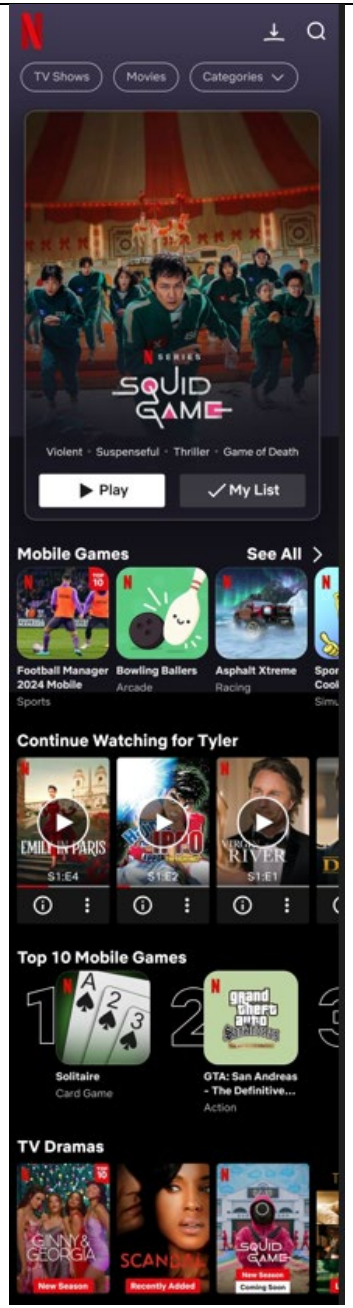
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement

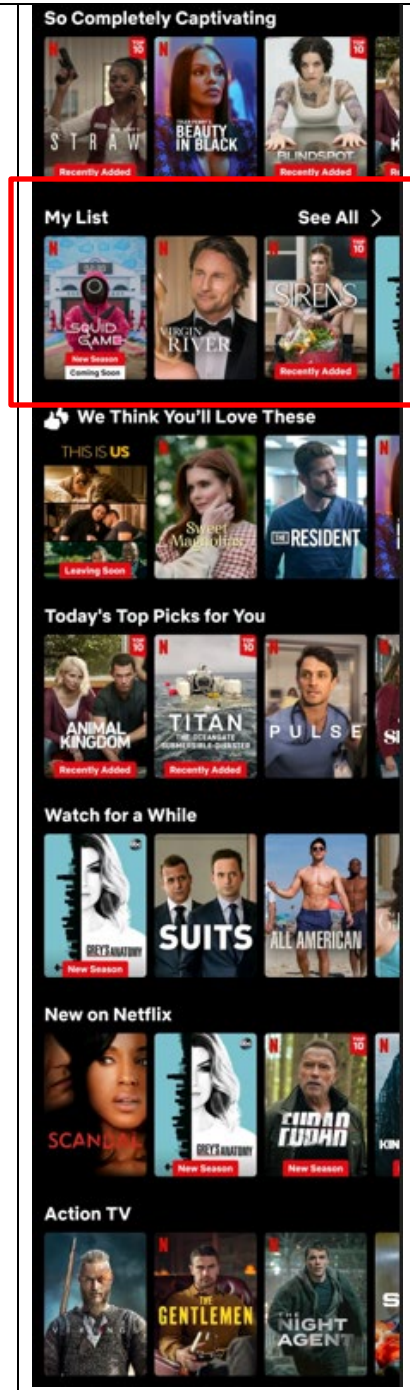


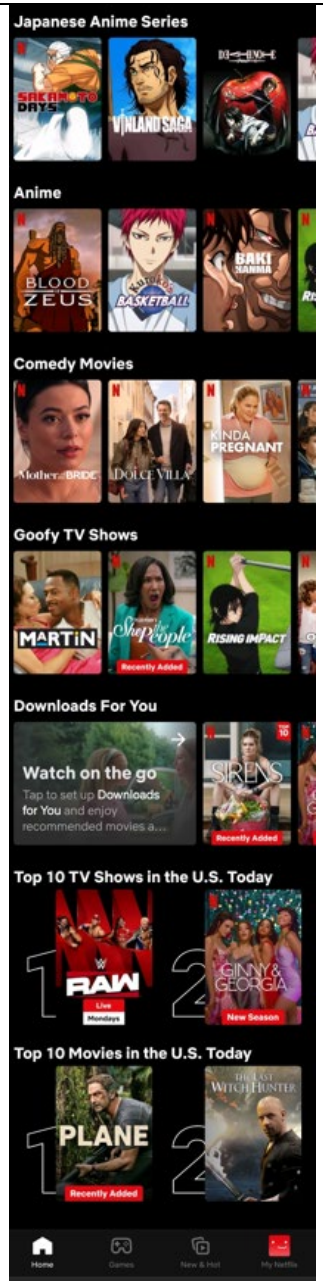


Second, the "New & Hot" tab outputs a list of upcoming shows. A user can select a show from this list of candidates to add to their "reminders" playlist by tapping the "Remind Me" button.

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Additional examples include the Accused Samsung '198 Products displaying recommendations for adding to "My List" or "Downloads" based on a user selecting a particular image ("Because you added the Night Agent"):  Additional examples include the Accused Samsung '198 Products displaying recommendations for adding to "My List" based on a user selecting a particular image as shown in the user profile home screen.

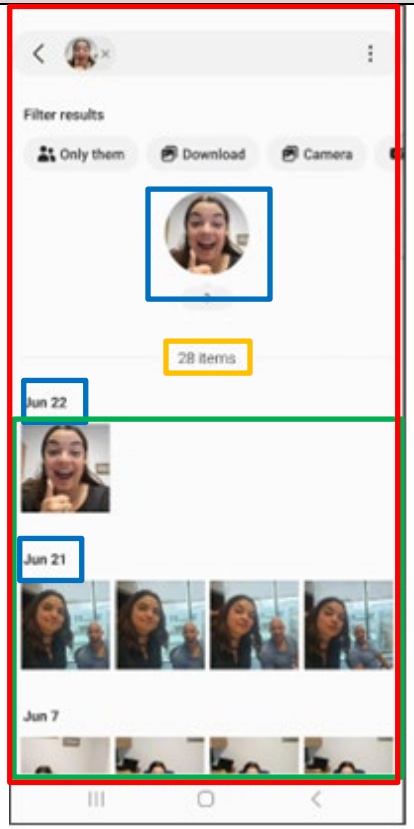

TV Shows
Movies
Categories
SQUID GAME
Violent · Suspenseful · Thriller · Game of Death
Play
My List
Mobile Games
See All
Football Manager 2024 Mobile
Sports
Bowling Ballers
Arcade
Asphalt Xtreme
Racing
Continue Watching for Tyler
S1:E4
S1:E2
S1:E1
Top 10 Mobile Games
Solitaire
Card Game
GTA: San Andreas - The Definitive...
Action
TV Dramas
New Season
Recently Added
New Season
Coming Soon


So Completely Captivating
STRAW
BEAUTY IN BLACK
BLINDSPOT
Recently Added
My List
See All
SQUID GAME
New Season
Coming Soon
VIRGIN RIVER
SIRENS
Recently Added
We Think You'll Love These
THIS IS US
Leaving Soon
RESIDENT
Today's Top Picks for You
ANIMAL KINGDOM
TITAN
PULSE
Watch for a While
SUITS
ALL AMERICAN
New on Netflix
New Season
Action TV
THE GENTLEMEN
THE NIGHT AGENT


Japanese Anime Series
Anime
Comedy Movies
Goofy TV Shows
Downloads For You
Watch on the go
Tap to set up Downloads for You and enjoy recommended movies a...
Top 10 TV Shows in the U.S. Today
Top 10 Movies in the U.S. Today
PLANE
Recently Added
Home
Games
New & Hot
My Netflix

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Samsung TV Plus For example, after the control module retrieves candidate shows or movies (as detailed in our analysis of [1.c]), the Samsung TV Plus application on a Samsung Galaxy S25 outputs a list identifying these other digital images retrieved. A screenshot, such as one showing the detail page for a selected movie like "Alienoid" which then displays a "More like this" section demonstrates this. The "More like this" section,

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	populated with thumbnails of other shows or movies, constitutes the outputted list of candidates. From this outputted list, the user can select another digital image (a candidate video) by tapping on its thumbnail. Such action typically navigates to the candidate's detail page, from where the user can choose to add it in said playlist (the "Watch list").
[1.e] outputs said playlist including a plurality of said digital images added, wherein said plurality of digital images, said plurality of related information, said list identifying the other digital images, and said playlist are outputted in a same display, and	Each of the Accused Samsung '198 Products includes a control module which outputs said playlist including a plurality of said digital images added, wherein said plurality of digital images, said plurality of related information, said list identifying the other digital images, and said playlist are outputted in a same display. *See* User Guide and Technical Specifications of the Accused Samsung '198 Products available at Samsung's website showing that each of the devices includes a control module which outputs said playlist including a plurality of said digital images added, wherein said plurality of digital images, said plurality of related information, said list identifying the other digital images, and said playlist are outputted in a same display. **People Album** The Gallery app provides several interfaces that demonstrate the functionality described in this element. Face Grouping

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 The face grouping screen shows a collection of photos for a recognized person("Courtney"). This screen outputs all four required components. The **playlist** is effectively the entire collection of 28 items, which will form the album once the user registers the person. The **list of candidates** consists of these same 28 items which were retrieved by the system and are presented for user selection. The screen displays a **plurality of digital images** (the photo thumbnails) and a **plurality of related information** (the recognized face and dates), all on the same display. Story Creation

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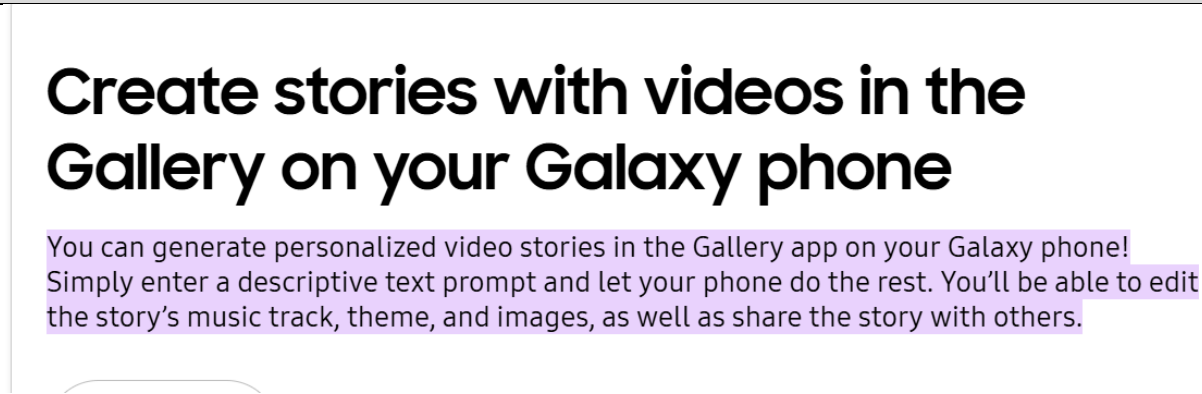
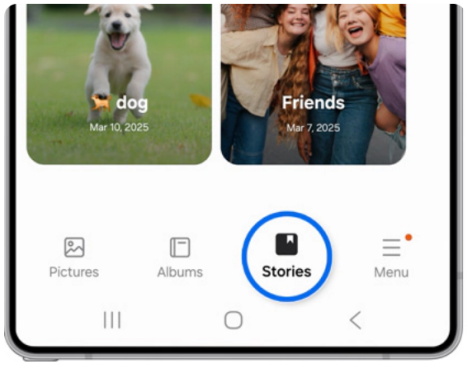
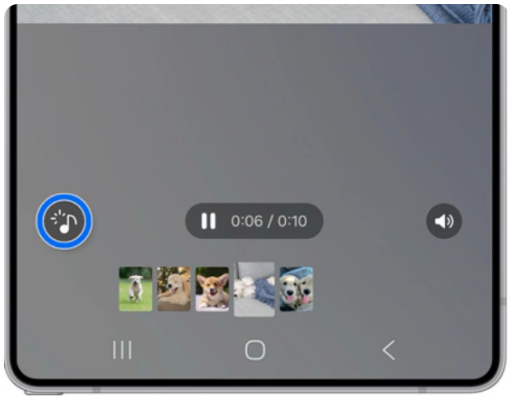
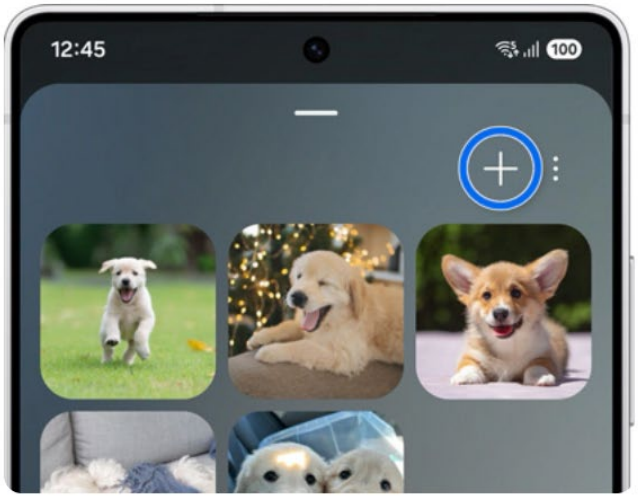
	

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Create a video story Video stories can be generated using different text or voice prompts. You can follow our instructions to begin creating your story! **1** Navigate to and open the **Gallery** app, and then tap the **Stories** tab. Tap the **Describe a story** text box, and then use the keyboard to type a story prompt.  **Note**: Tap the **Voice search** icon (the microphone) to use a voice command instead. **2** Tap the **Search** icon on the keyboard; your story will be created using Gallery images related to your prompt. **3** The story will begin playing. A music track and filter theme will be automatically selected for your story, but you can change this by tapping the **Themes** icon (the music note in the bottom left corner).

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 **4** Swipe through the filters at the bottom of the screen and select a new one. You can also tap the **Background music** icon (the music note in the bottom right corner), and swipe through the categories and options until you find a track that you like. **Note**: Tap the **Download** icon next to certain tracks to download them. **5** Tap **Back** twice to return to the story. When the story is finished playing, you can tap **Watch again** to replay it. **6** To save your story, tap **Back** again, and tap **Save** when prompted. **Note**: Tap **Discard** to delete the story instead. **7** Your new story will appear on the Stories tab. Select your story and swipe up to view the images that have been automatically included.

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	8 To add images, tap **Add** (the plus sign), and then select the images. Tap **Done**.  **9** To remove images, tap **More options** (the three vertical dots), and then tap **Select**. Select your desired images, and then tap **Remove from story** at the bottom of the screen. Tap **Remove**. Upon information and belief the stories are based on one or more of related information such as location information of the photos, certain date ranges, people, pets, and/or additional information that is used to associate pictures/videos together.

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	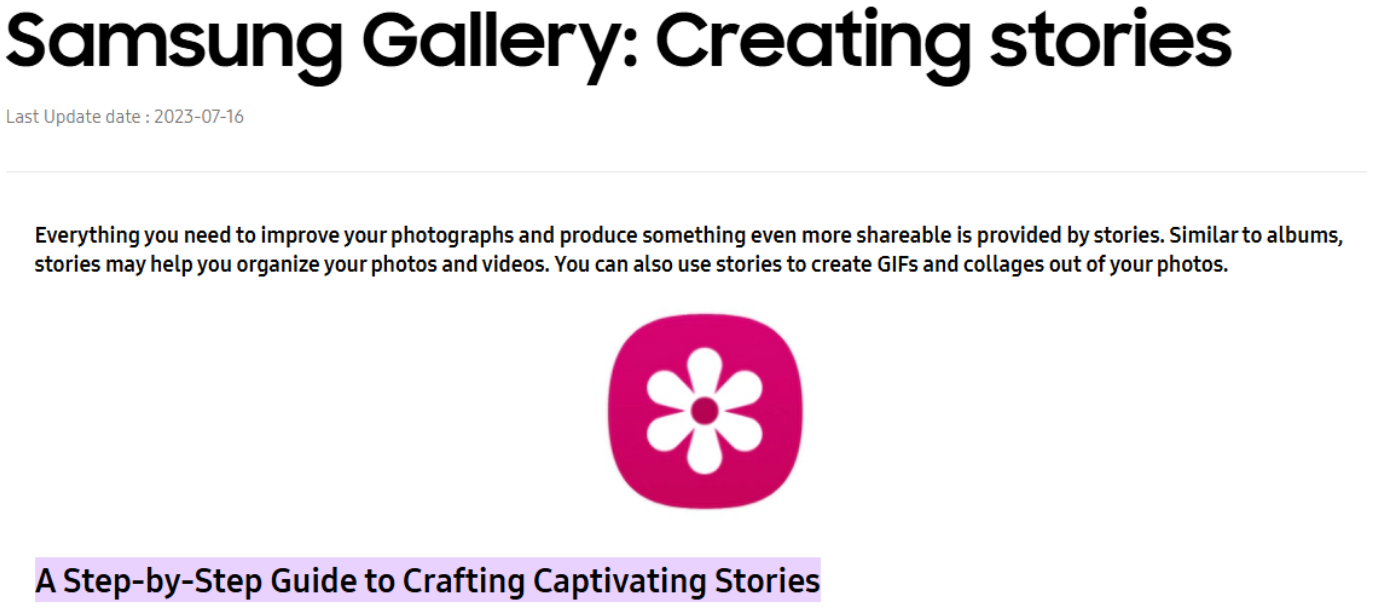

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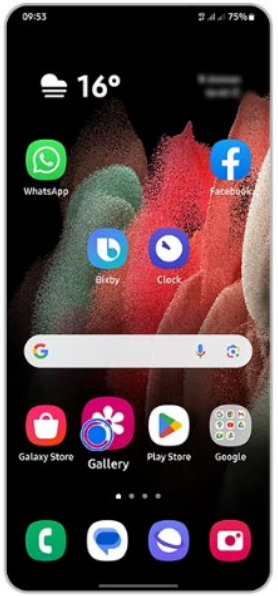
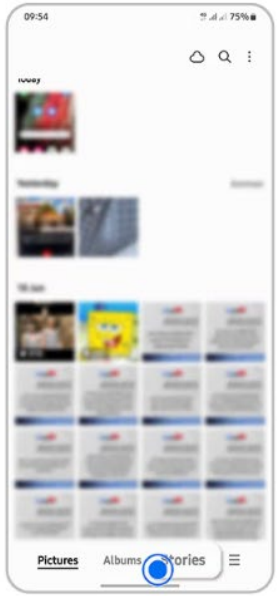
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 **Step 1**. Open the **Gallery** app  **Step 2**. Tap **Stories** **Step 3**. Tap the **Options** icon. it will appear as three dots **Step 4**. Tap **Create Story**

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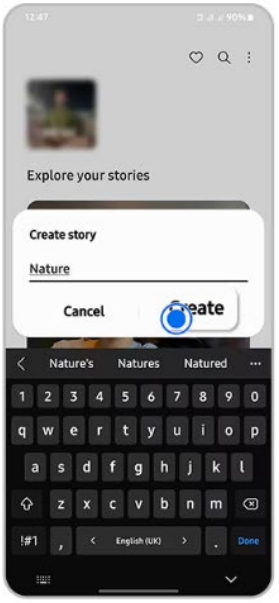
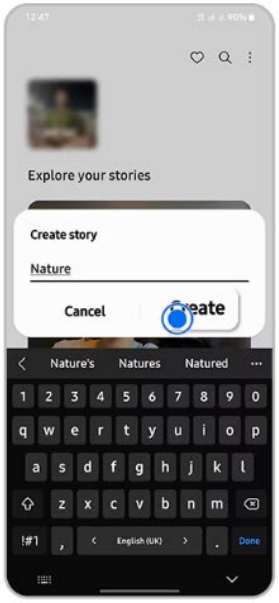
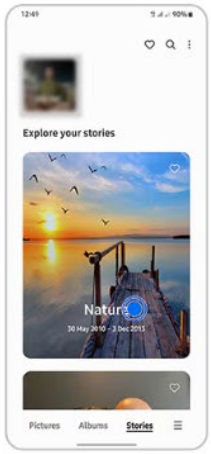
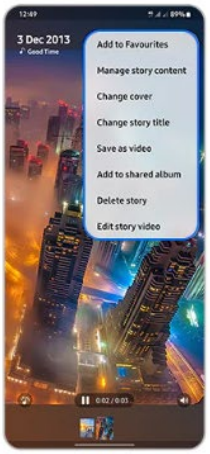
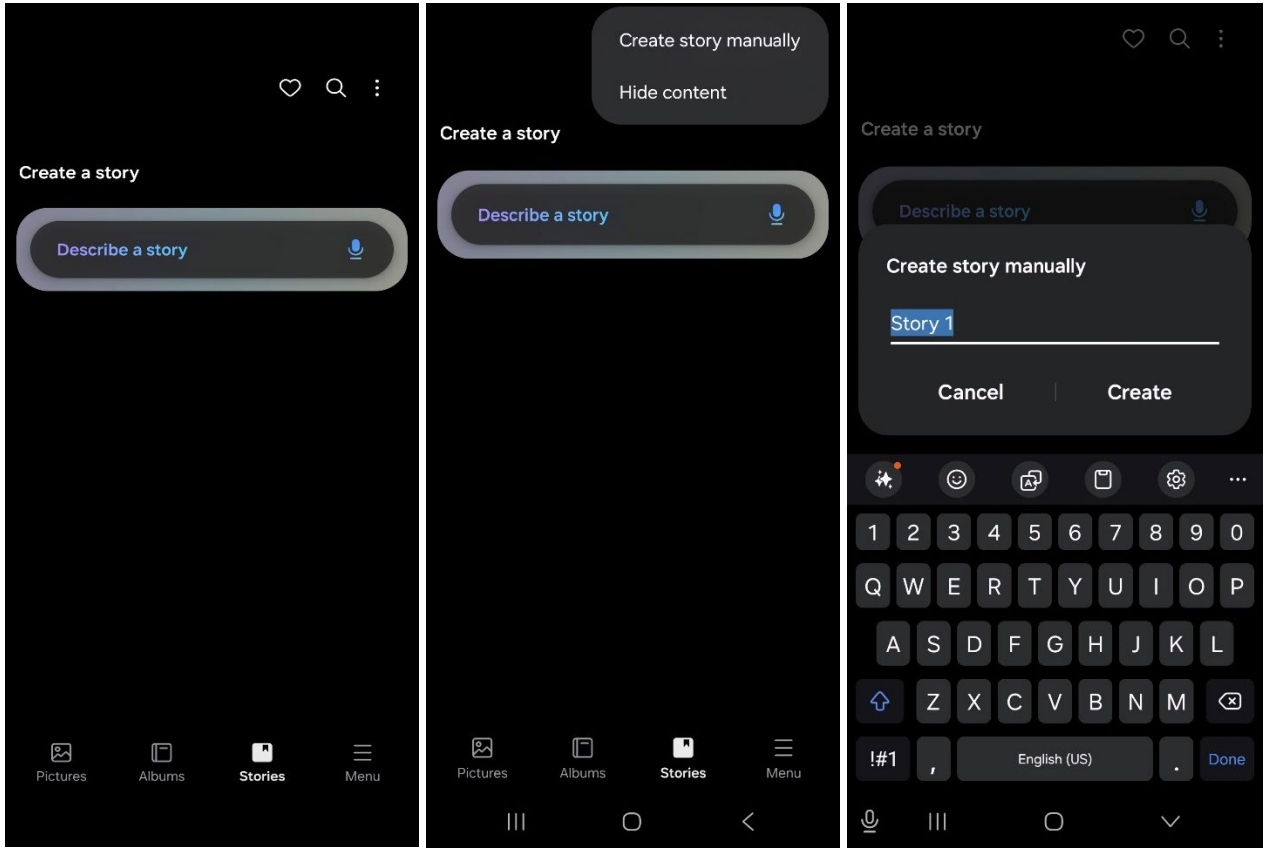
	 **Step 5**. Give your story a **name**.  **Step 6**. Tap **Create**. **Step 7**. Tap on the **photos** and **videos** that you want to add to your story. **Step 8**. Add the media to your story.

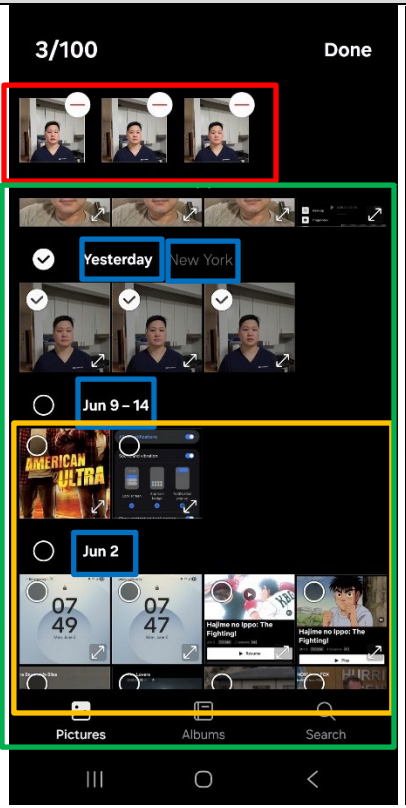
APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

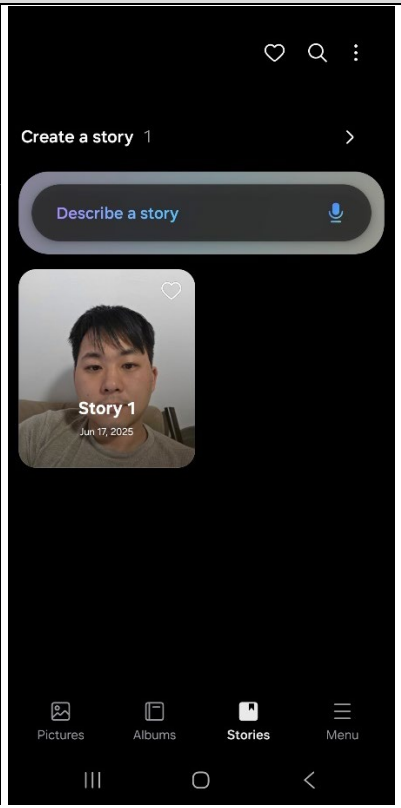
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Your story will be added to the Stories section of the Gallery app but you can continue adding or removing images. **Step 9**. Tap **Done**  **Step 10**. Tap your **story** **Step 11**. Tap the **options** icon  **Step 12**. Tap **Add** to add more images to your story. Tap **edit** if you'd like to remove an image from your story

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement

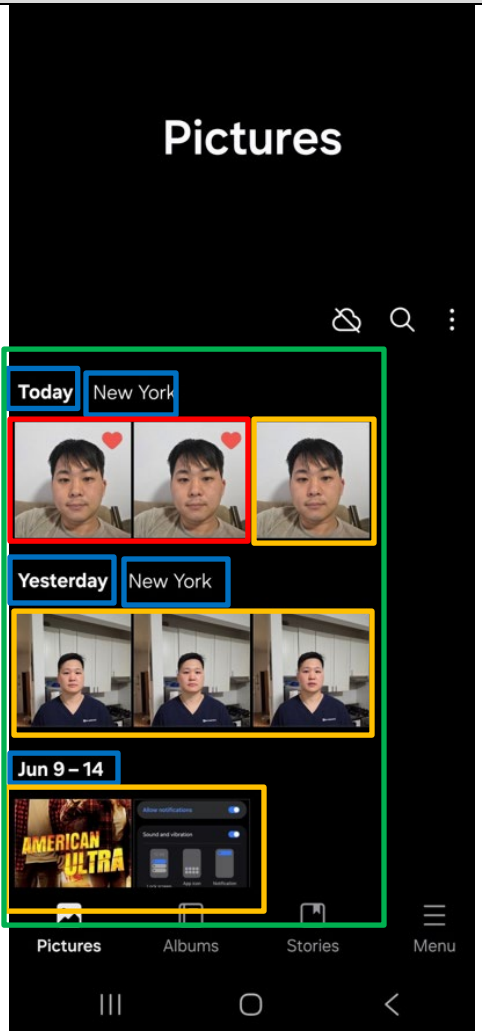


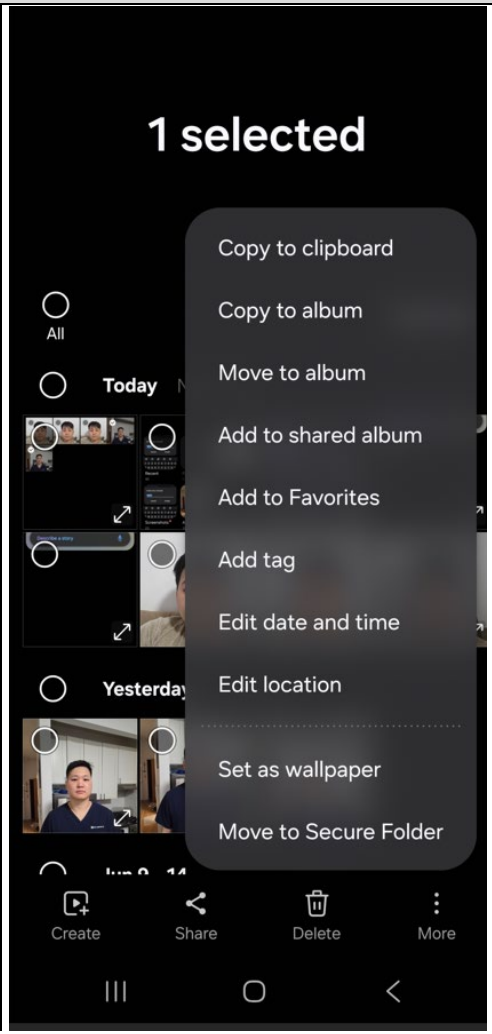


Similarly, the story creation screen displays all four components. The **playlist** is the collection of images selected at the top of the screen. The **list of candidates** is the body of unselected images below, from which the user can choose. The screen displays a **plurality of images** and a **plurality of related information**, such as dates and locations.

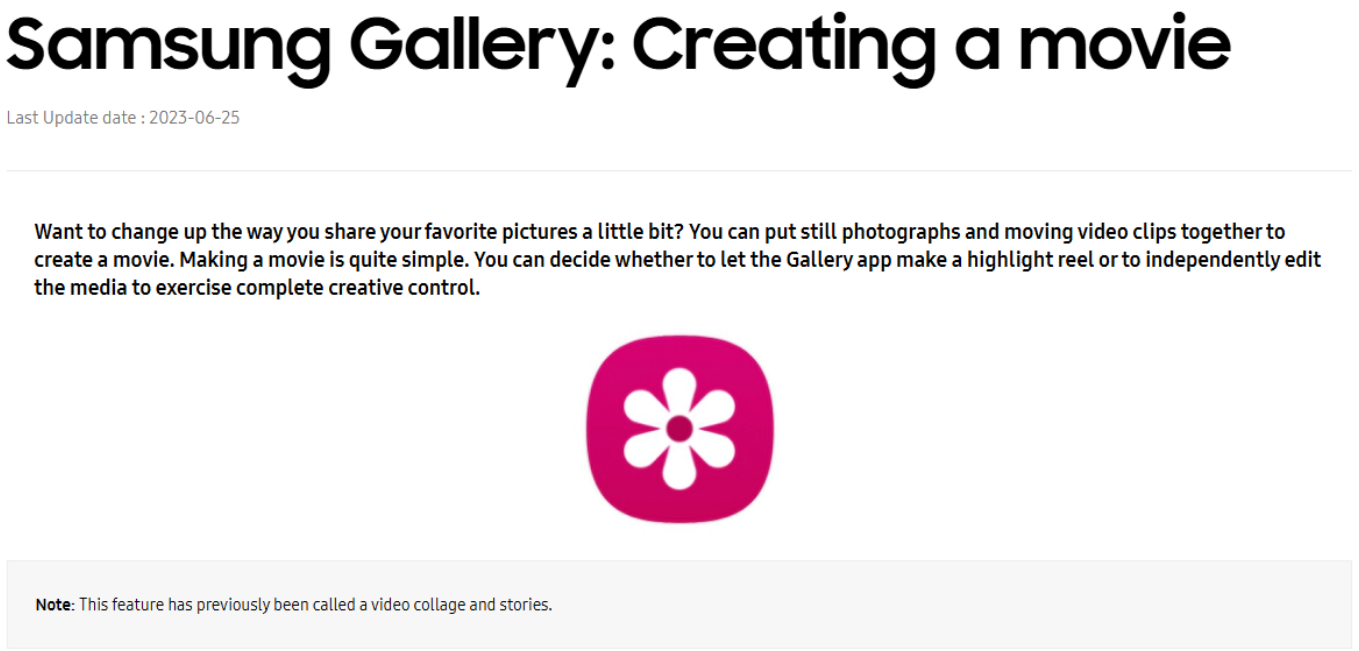
Favorites

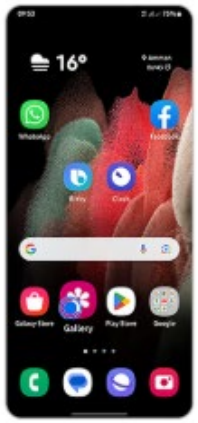
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement





The main "Pictures" tab provides another example when the "Favorites" feature is used. The **playlist** is the collection of all photos marked with a heart icon. The **list of candidates** is comprised of all other photos on the same screen that do not have a heart icon. The screen simultaneously displays a **plurality of images** and **related information**, such as dates and locations.

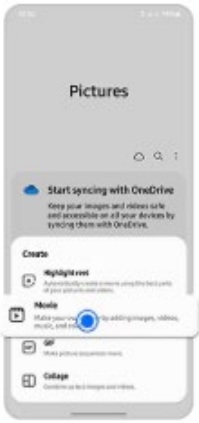
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Movie Creation 



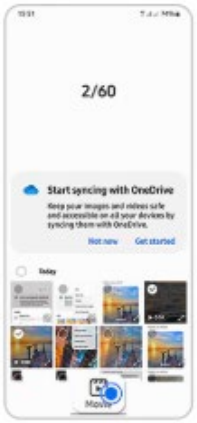
Step 1. Open the Gallery app

Step 2. Tap the Create movie

Step 3. Tap the photos and videos that you would like to add to your movie

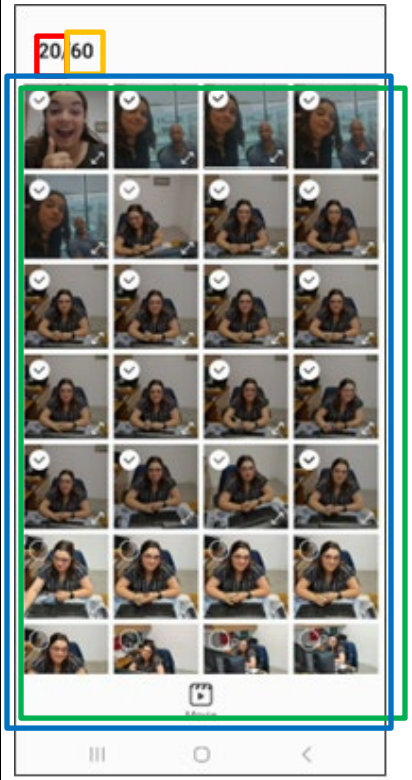


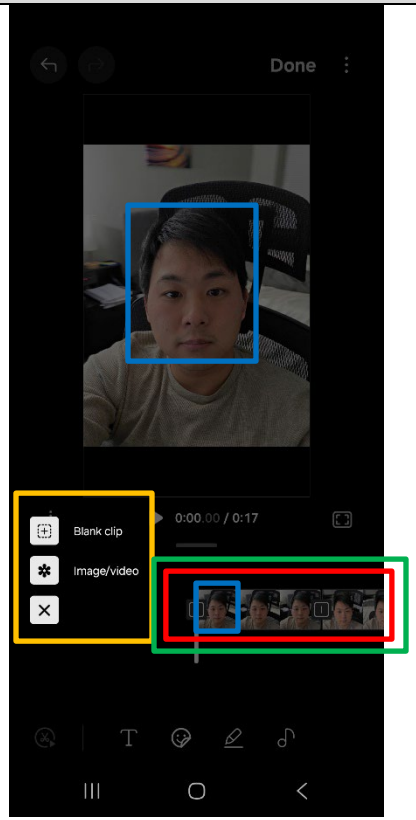
Step 4. Tap Create movie

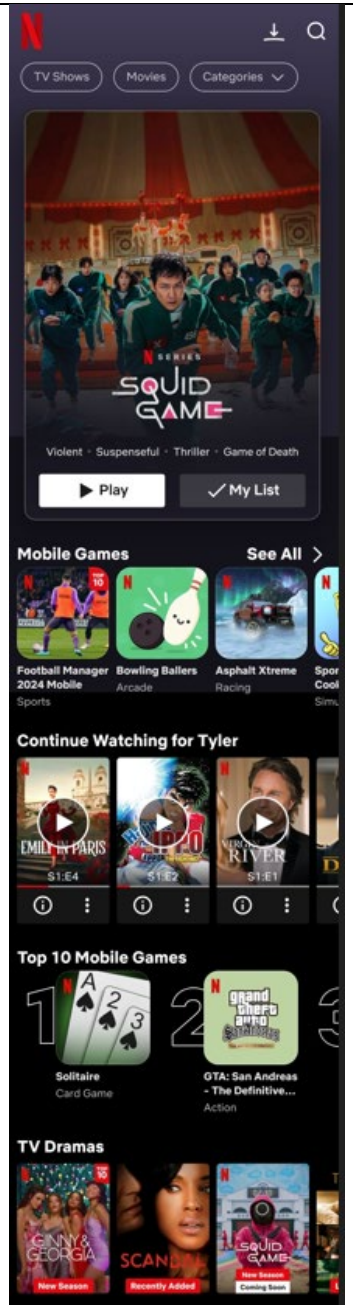


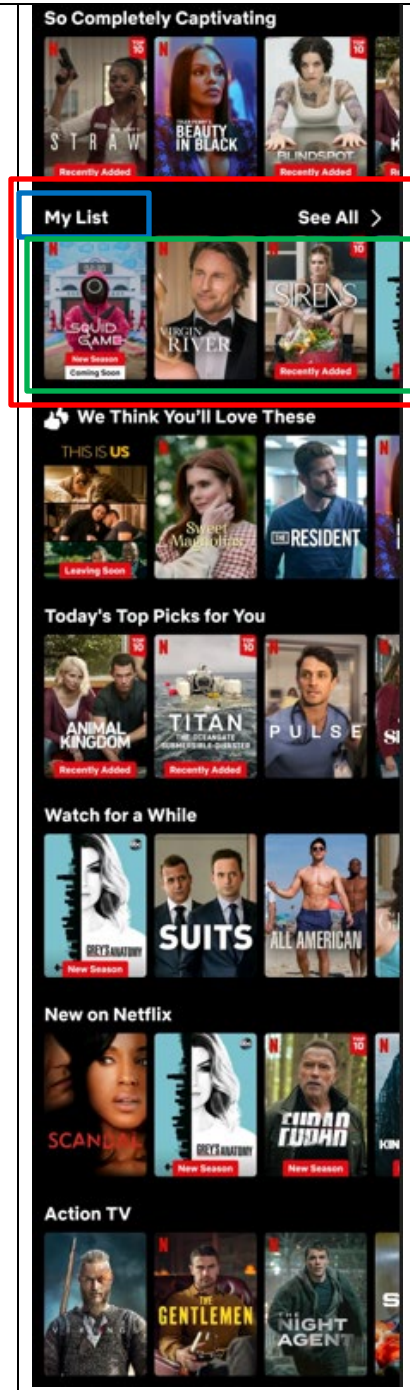
Step 5. Tap on Movies

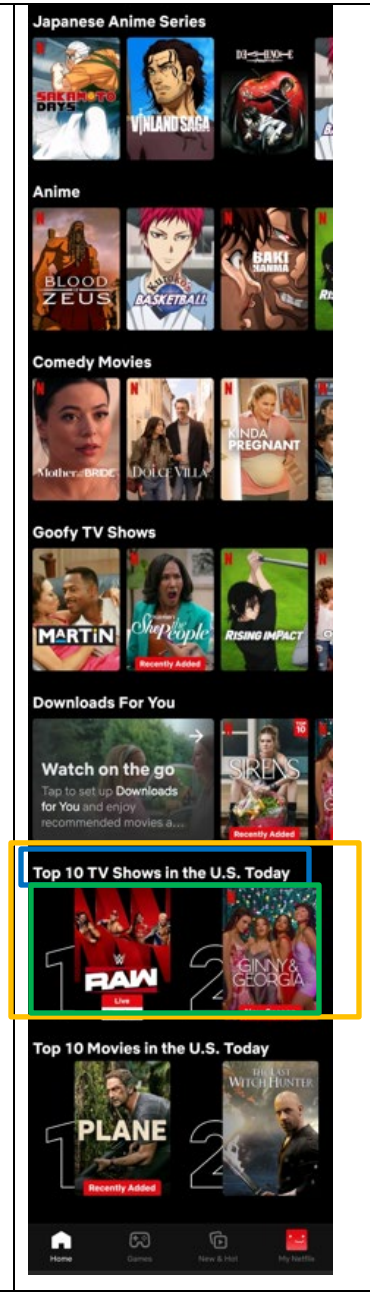
Step 6. Tap Highlight reel or edit yourself.

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	https://www.samsung.com/ae/support/mobile-devices/samsung-gallery-creating-a-movie/  When creating a movie, the selection screen displays all four components on the same display. The **playlist** consists of the images the user has selected (e.g., the "20" in "20/60"). The **list of candidates** is the entire grid of available photos (the "60") from which the user can select. The screen also displays a **plurality of digital images** (the thumbnails) and **related information** is the facial grouping of Courtney.

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 Further, movie editor screen demonstrates this functionality. The **playlist** is the timeline at the bottom of the screen, which displays a **plurality of digital images** in the form of clip thumbnails. The **list of candidates** is the menu that appears from the [+] button, which identifies the types of candidates that can be added ("Blank clip" and "Image/video"). Simultaneously, the screen displays a **plurality of related information**, such as the facial grouping of the person. **Netflix** Home screen

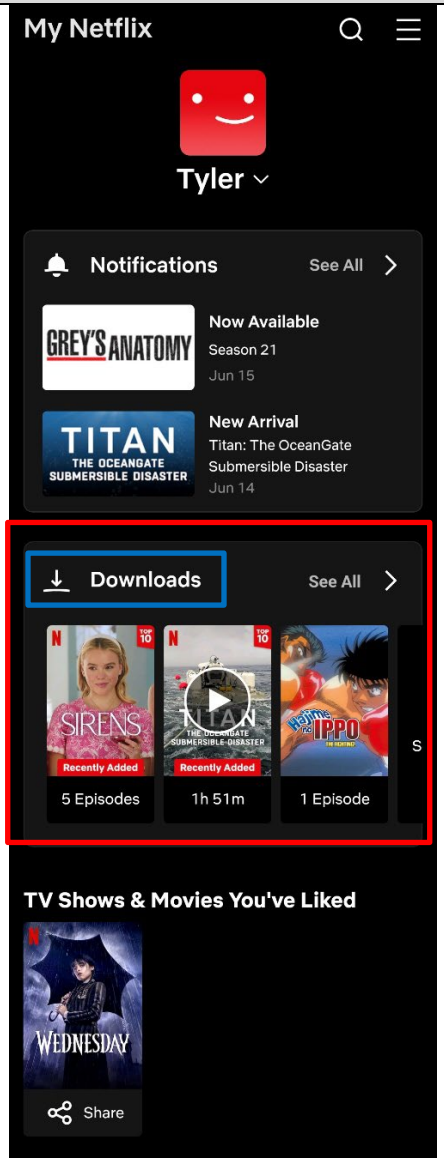

TV Shows
Movies
Categories
SQUID GAME
Violent · Suspenseful · Thriller · Game of Death
Play
My List
Mobile Games
See All
Football Manager 2024 Mobile
Sports
Bowling Ballers
Arcade
Asphalt Xtreme
Racing
Continue Watching for Tyler
S1:E4
S1:E2
S1:E1
Top 10 Mobile Games
Solitaire
Card Game
GTA: San Andreas - The Definitive...
Action
TV Dramas
New Season
Recently Added
New Season
Coming Soon

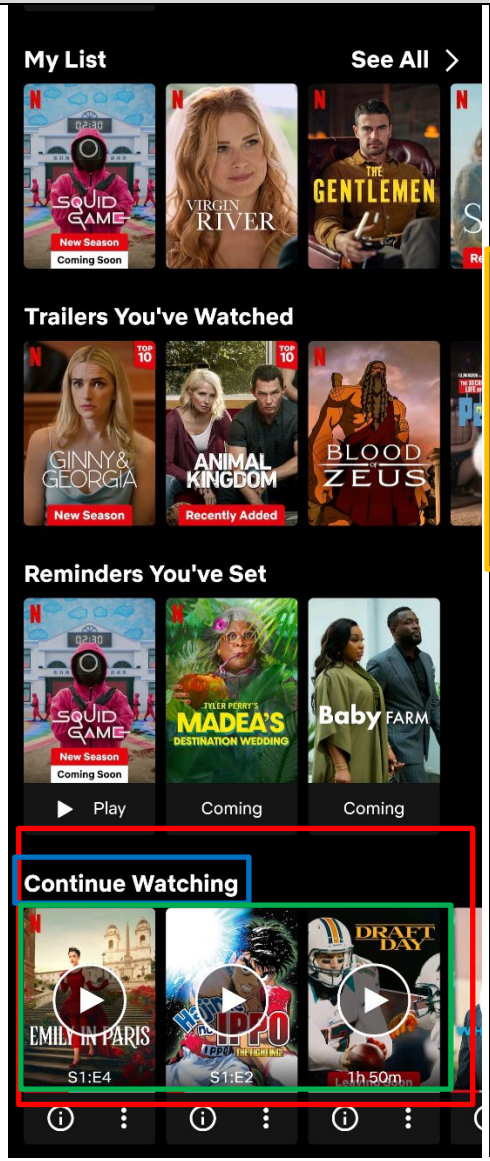

So Completely Captivating
My List
See All
We Think You'll Love These
Today's Top Picks for You
Watch for a While
New on Netflix
Action TV

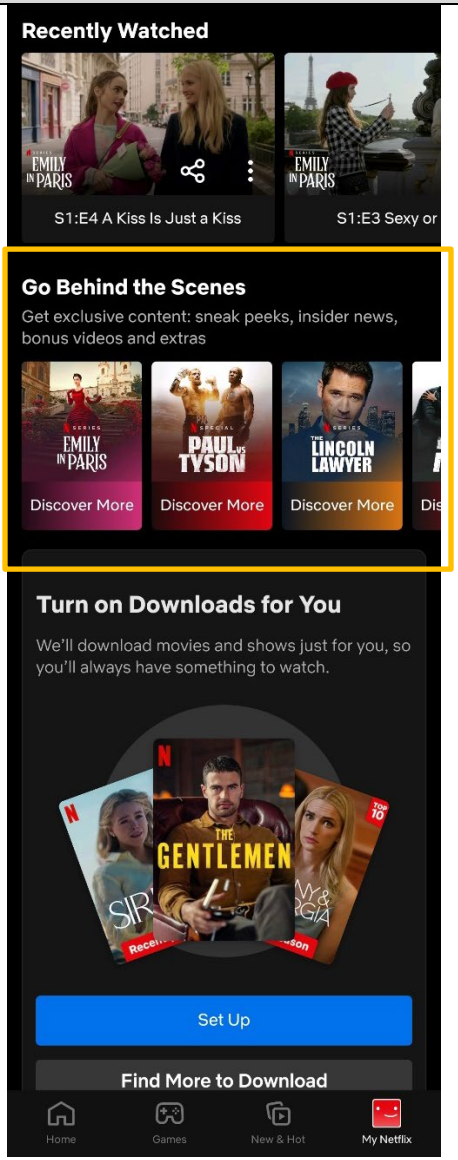

Japanese Anime Series
Anime
Comedy Movies
Goofy TV Shows
Downloads For You
Watch on the go
Top 10 TV Shows in the U.S. Today
Top 10 Movies in the U.S. Today
PLANE
Recently Added

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	The main "Home" screen provides an example of this functionality. On this screen, the **playlist** is the "My List" row, which contains content the user has personally selected. A separate recommendation row, such as "Top 10 TV Shows in the U.S. Today," functions as the **list of candidates**. Both lists are shown on the same display along with a **plurality of digital images** (the video thumbnails) and a **plurality of related information** (the row titles). My Netflix Tab

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement

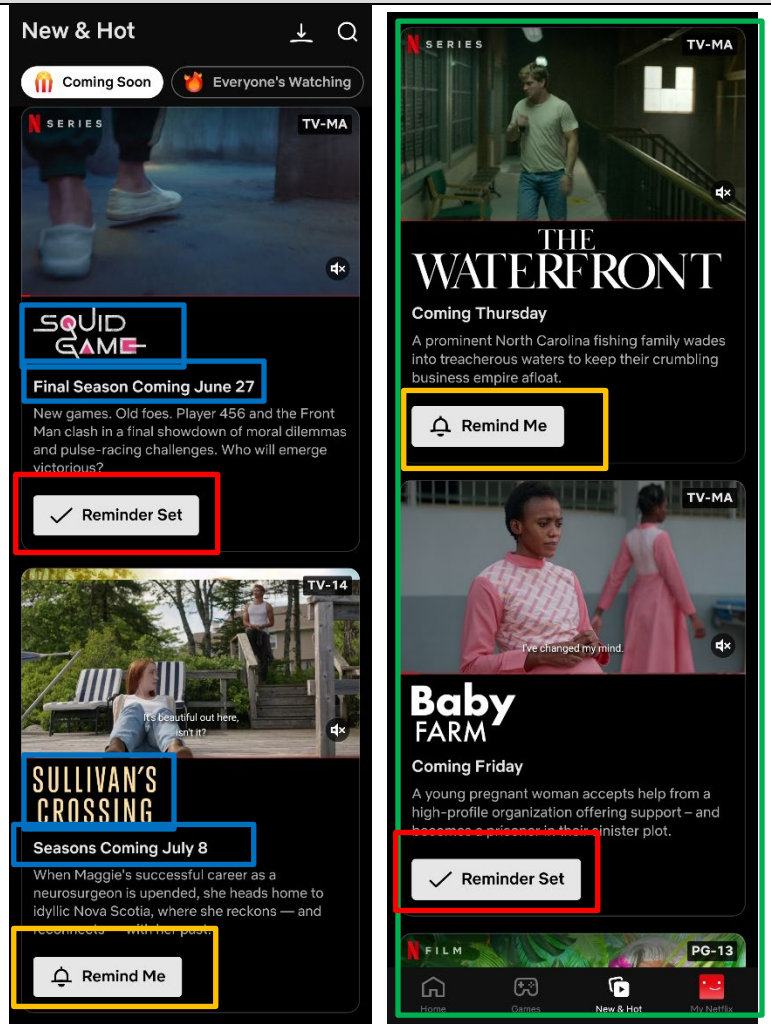


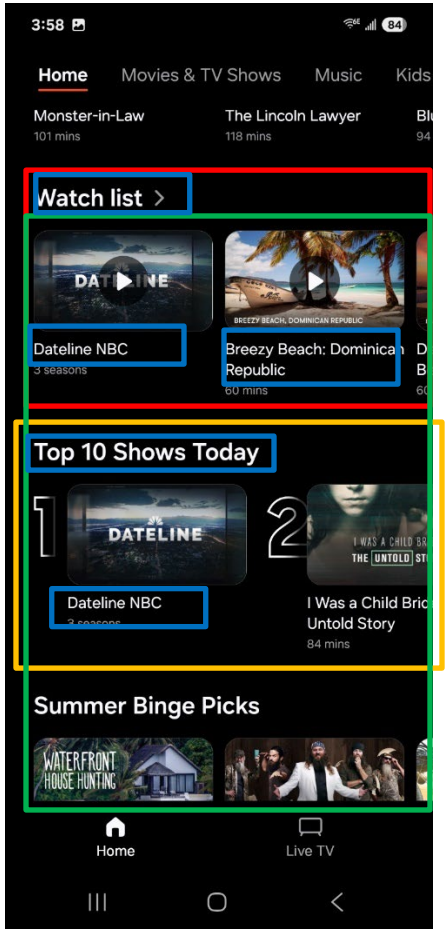




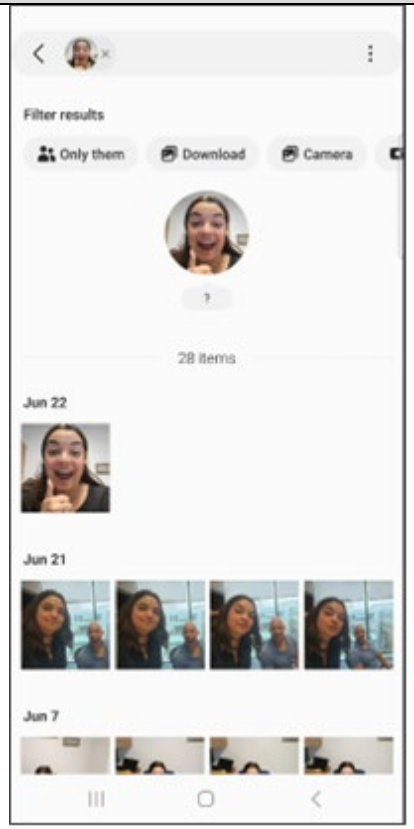
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	The "My Netflix" tab provides an example, where several different user-specific rows on the same screen can be defined as the playlist. For instance, the **"**Downloads**"** row can be considered the **playlist**, containing content the user chose to download. Another row on the same screen, such as the recommendation row "Go Behind The Scenes," can be the **list of candidates**. As another example on the same screen, the **"**Continue Watching**"** row can be the **playlist**, with its content added based on viewing history, while another row again serves as the **list of candidates**. The numerous thumbnails provide the **plurality of images**, and the distinct row titles ("Downloads," "Continue Watching") provide the **plurality of related information**. New & Hot Tab

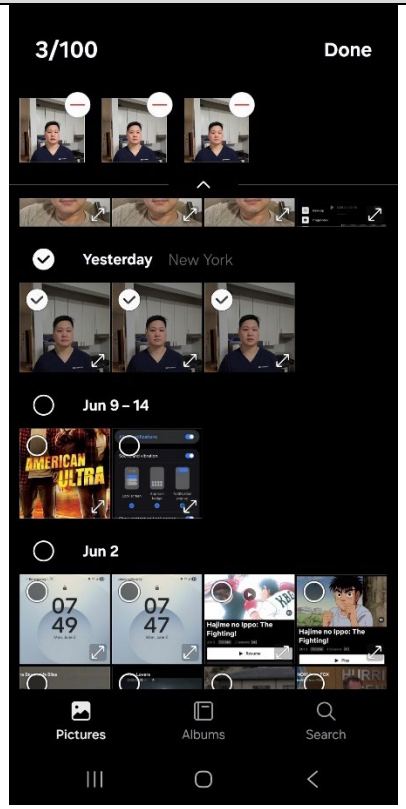
IPR2025-01314; Samsung
Ex. 1023 - Page 200

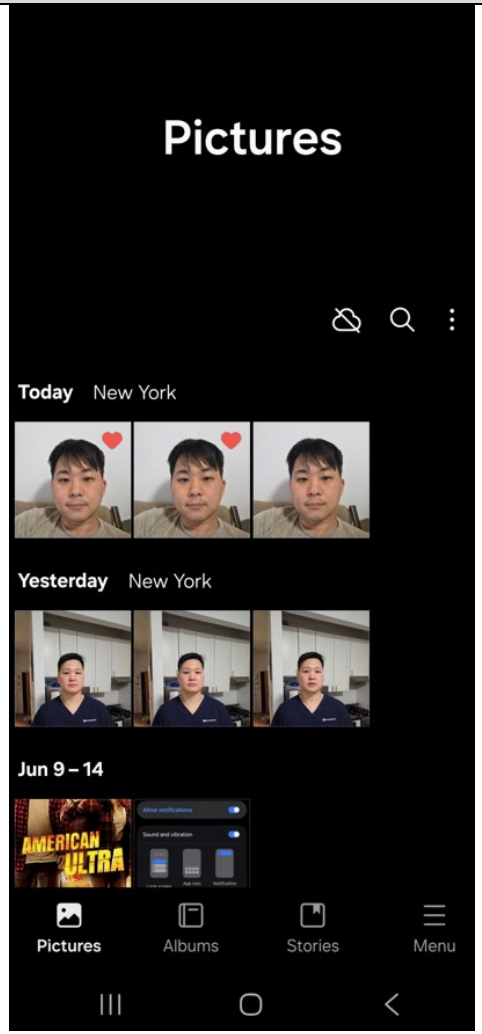
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 The "New & Hot" tab also demonstrates all four components on a single screen. The **playlist** is the collection of shows for which a user has set a reminder, indicated by "Reminder Set." The **list of candidates** is the group of other shows on the screen that still display a "Remind Me" button. The screen

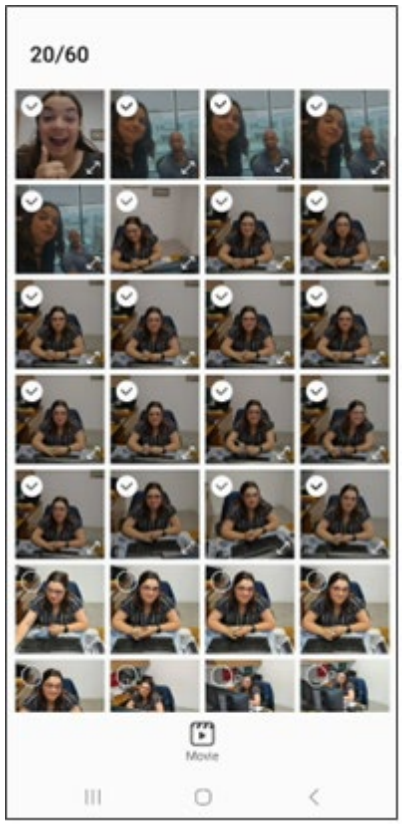
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	contains a **plurality of images** (the thumbnails) and **related information** (such as release dates and titles), all outputted together. **Samsung TV Plus**  The Samsung TV Plus application demonstrates this element on its main screen. On this single display, the application outputs the **playlist**, which is the "Watch list" row containing shows like "Dateline NBC" and

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	"Breezy Beach: Dominican Republic". It simultaneously outputs the **list of candidates**, which is another row such as the "Top 10 Shows Today". The screen also contains a **plurality of digital images**, in the form of numerous video thumbnails, and a **plurality of related information**, shown through the video titles and the names of the category rows. All four components are present on the same display, with a show like "Dateline NBC" notably appearing in both the playlist and a candidate list. Doctrine of Equivalents To the extent Samsung argues that this limitation is not literally met in any Accused Samsung '198 Products, Maxell asserts that this limitation is met under the doctrine of equivalents because the identified functionality matches the function, way, and result of the claimed element and, to the extent there is a difference, the difference is insubstantial. For example, to the extent that Samsung argues these applications do not output a playlist and a list of candidates on the "same display" because a user may have to scroll to view both rows, the use of a single, scrollable interface is an equivalent implementation. Using this interface performs substantially the same function—outputting all necessary information for a user to manage a playlist—in substantially the same way—by presenting them together in a single, continuous screen space. This achieves substantially the same result: allowing the user to view and select from a list of candidates to add to a playlist within one unified interface.
[1.f] outputs one of the other digital images to be positioned next to another one of the other digital images in said list identifying the other digital images.	Each of the Accused Samsung '198 Products includes a control module which outputs one of the other digital images to be positioned next to another one of the other digital images in said list identifying the other digital images. *See* User Guide and Technical Specifications of the Accused Samsung '198 Products available at Samsung's website showing that each of the devices includes a control module which outputs one of the other digital images to be positioned next to another one of the other digital images in said list identifying the other digital images. **People Album** Face Grouping

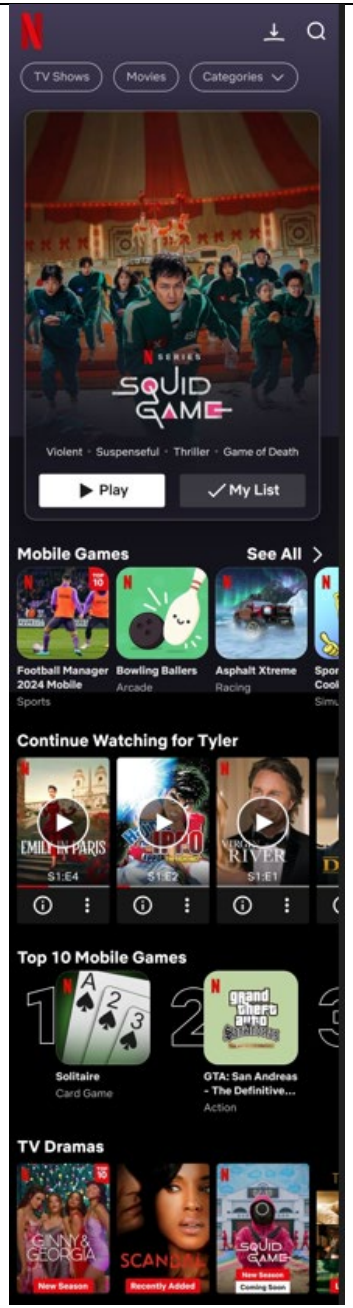
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 For example, for the Samsung Gallery app on a Samsung Galaxy S23 Ultra outputs a list identifying the other digital images (the candidates, as detailed in our analysis of [1.d], such as an initial grouping of photos for a recognized person), it outputs one of the other digital images to be positioned next to another. Specifically, the photo thumbnails in such a candidate list are typically displayed in a grid or row format. This layout inherently places each candidate image adjacent to others, either horizontally or vertically, on the display. <u>Story Creation</u>

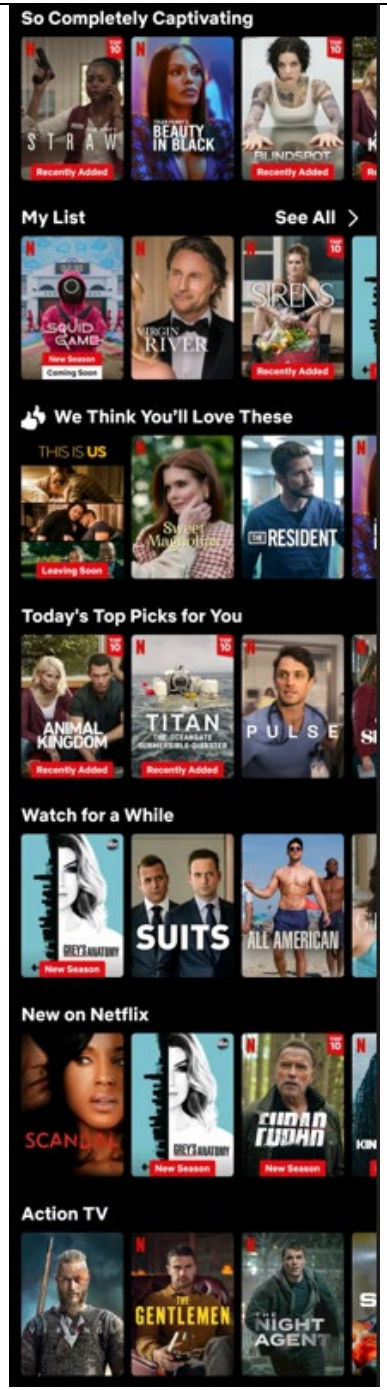
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 For Story Creation, the list of candidates is the main body of unselected photos available for the user to choose from. These candidates are displayed in a grid, which outputs one candidate image to be positioned next to another. Favorites

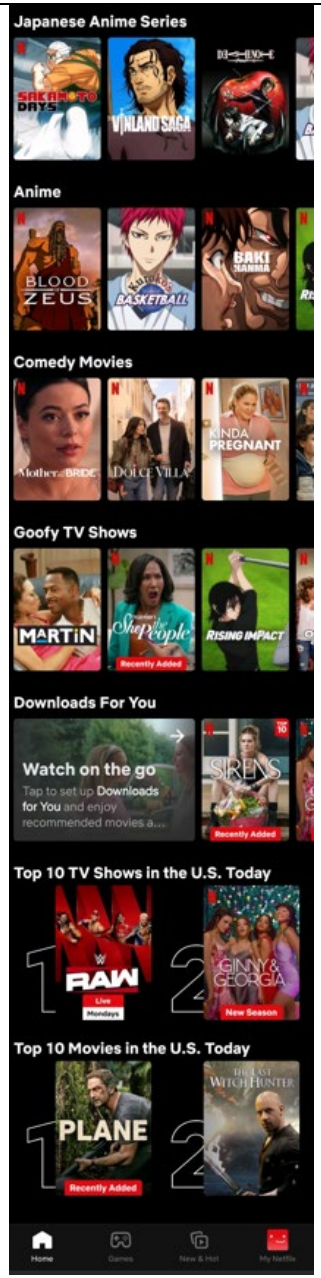
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 When using the Favorites feature, the list of candidates consists of all the photos in the main gallery view that do not have a heart icon. These candidates are arranged in a grid, meaning one candidate photo is positioned directly next to another.

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Movie Creation  The movie creation selection screen displays the list of candidates as a large grid of selectable photos. In this grid, the control module outputs each candidate thumbnail to be positioned next to its neighboring thumbnails. **Netflix**

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	The Netflix application demonstrates this functionality within its various recommendation lists, which serve as the "list identifying the other digital images" (the candidates). Within these lists, one candidate thumbnail is positioned next to another. Home screen


TV Shows
Movies
Categories
SQUID GAME
Violent · Suspenseful · Thriller · Game of Death
Play
My List
Mobile Games
See All
Football Manager 2024 Mobile
Sports
Bowling Ballers
Arcade
Asphalt Xtreme
Racing
Continue Watching for Tyler
S1:E4
S1:E2
S1:E1
Top 10 Mobile Games
Solitaire
Card Game
GTA: San Andreas - The Definitive...
Action
TV Dramas
New Season
Recently Added
New Season
Coming Soon

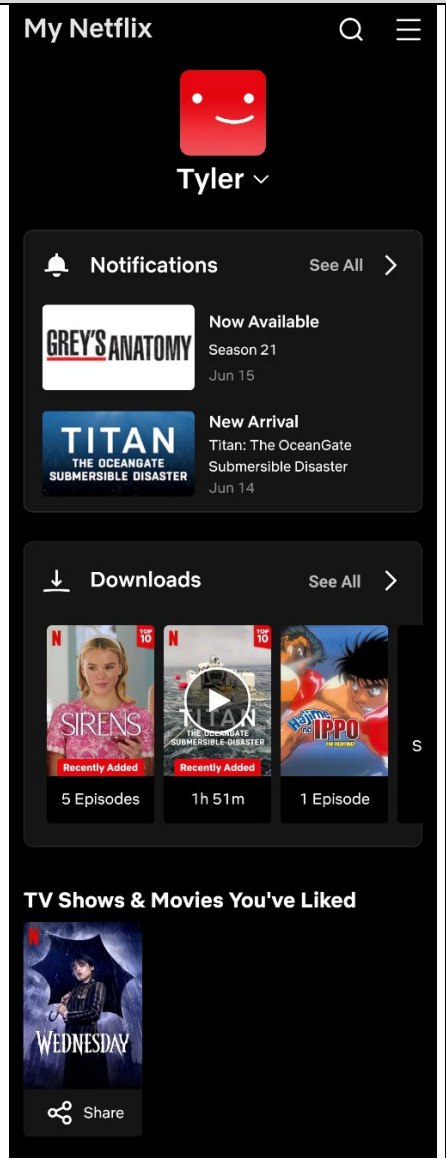

So Completely Captivating
STRAW
BEAUTY IN BLACK
BLINDSPOT
Recently Added
My List
See All
SQUID GAME
VIRGIN RIVER
SIRENS
New Season
Coming Soon
We Think You'll Love These
THIS IS US
Leaving Soon
RESIDENT
Today's Top Picks for You
ANIMAL KINGDOM
TITAN
PULSE
Watch for a While
SUITS
ALL AMERICAN
New on Netflix
Action TV
THE GENTLEMEN
THE NIGHT AGENT

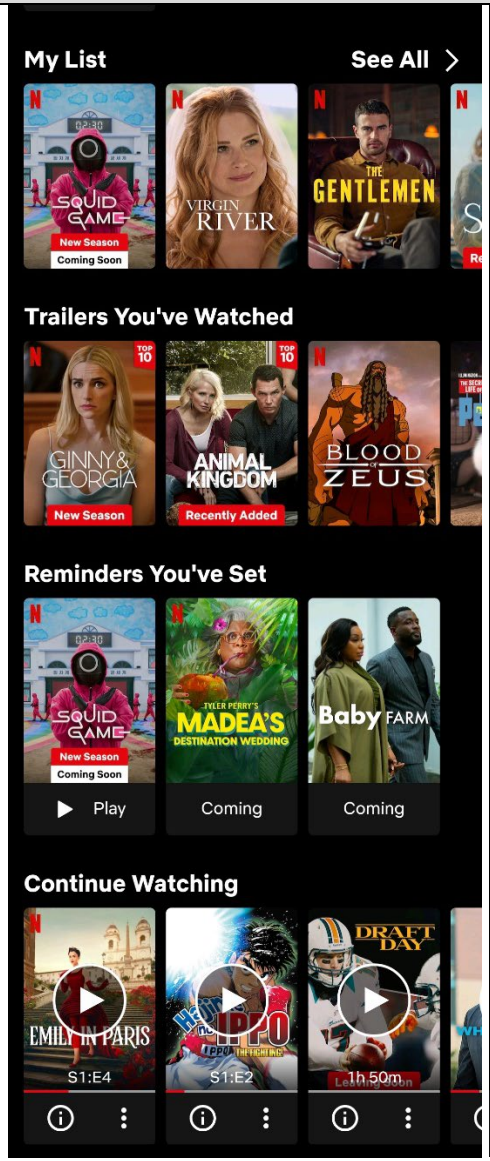

Japanese Anime Series
SAKAMOTO DAYS
VINLAND SAGA
Anime
BLOOD OF ZEUS
BASKETBALL
BAKI HANMA
Comedy Movies
Mother of the BRIDE
DOLCE VILLA
KINDA PREGNANT
Goofy TV Shows
MARTIN
Recently Added
RISING IMPACT
Downloads For You
Watch on the go
Tap to set up Downloads for You and enjoy recommended movies a...
SIRENS
Recently Added
Top 10 TV Shows in the U.S. Today
1
RAW
Live Mondays
2
GINNY & GEORGIA
New Season
Top 10 Movies in the U.S. Today
1
PLANE
Recently Added
2
WITCH HUNTER
Home
Games
New & Hot
My Netflix

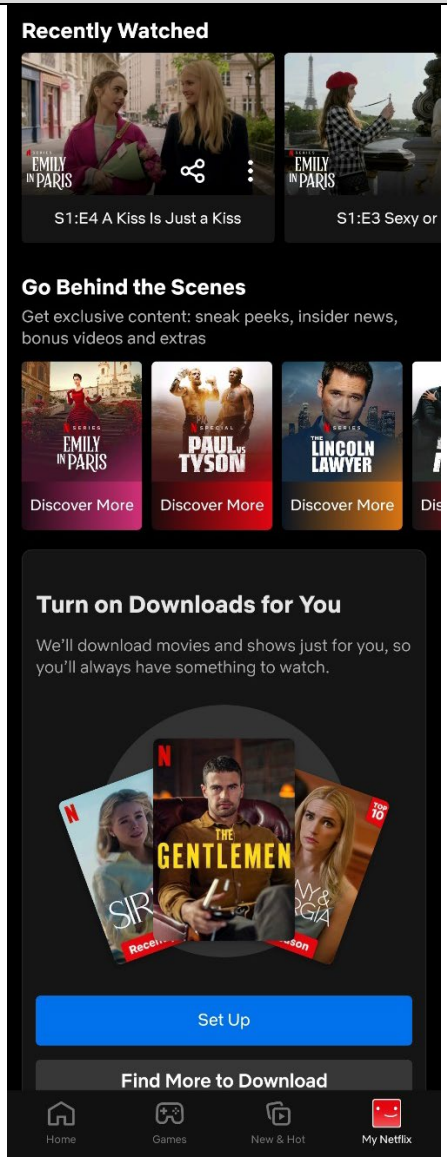
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	For example, on the main "Home" screen, a recommendation row like "Top 10 TV Shows in the U.S. Today" displays candidate thumbnails positioned next to each other horizontally. My Netflix Tab

APPENDIX 4: AUGUST 12, 2025 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1 AND 4 OF U.S. PATENT NO. 8,180,198 TO ACCUSED SAMSUNG '198 PRODUCTS

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement

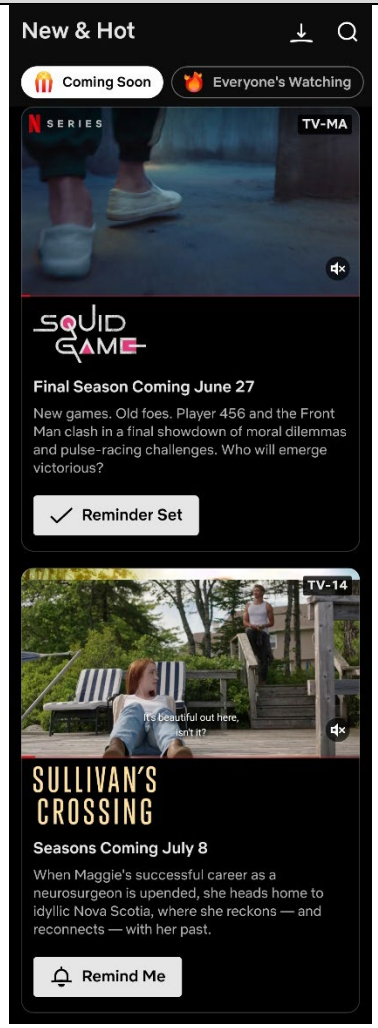


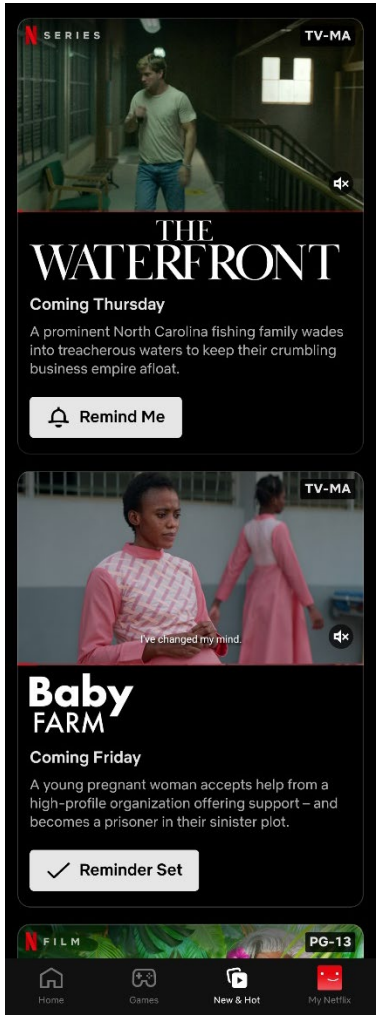




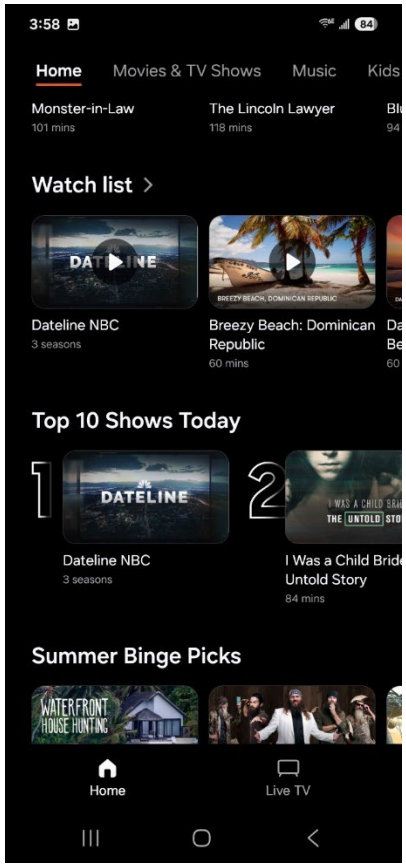
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Similarly, on the "My Netflix" tab, recommendation rows like "Go behind The Scenes" also display candidate thumbnails in a horizontal arrangement, positioning one next to another. New & Hot Tab

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement

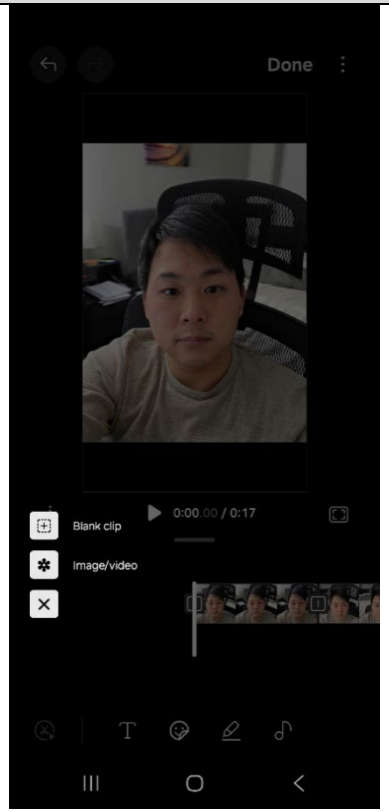


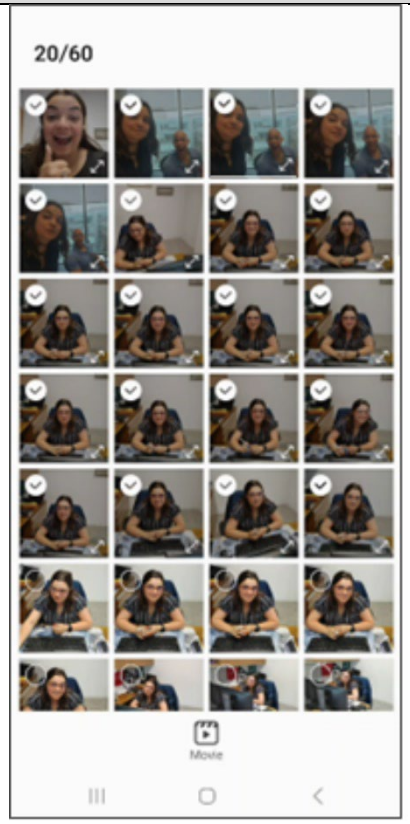


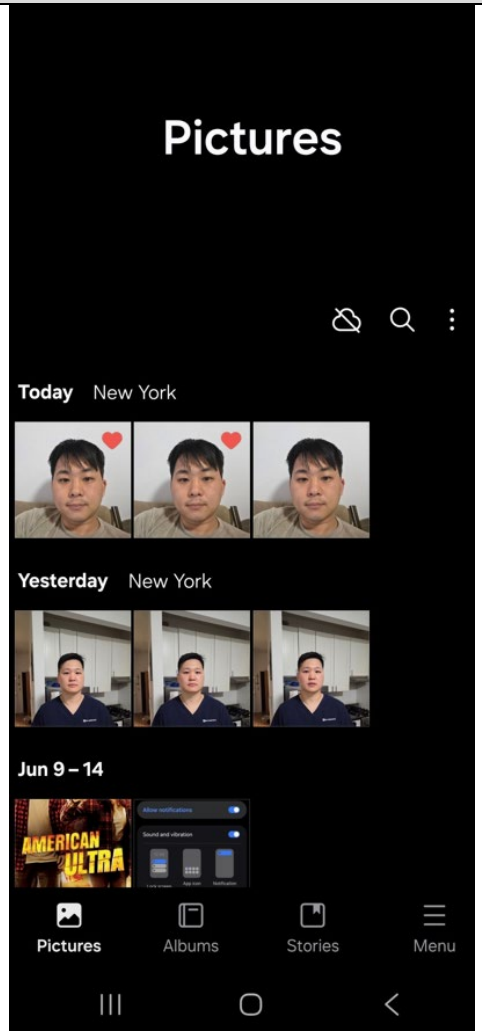
The "New & Hot" tab provides another example, where candidate shows are arranged in a vertical list, positioning one thumbnail directly above the next.

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	Samsung TV Plus  For example, the Samsung TV Plus application on a Samsung Galaxy S25 demonstrates this element. When the application outputs a "list identifying the other digital images" (the candidates)—such as the "Top 10 Shows Today" row—it outputs one of the other digital images to be positioned next to another. Specifically, the thumbnails for the candidate shows or movies within these rows are arranged horizontally. For instance, in the "Top 10 Shows Today" row, the thumbnail for "Dateline NBC" is positioned directly next to the thumbnail for "I Was a Child Bride: The Untold Story." This horizontal layout inherently places

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	each candidate image directly adjacent to other candidate images within that list, satisfying the claimed spatial relationship. Doctrine of Equivalents To the extent Samsung argues that this limitation is not literally met in any Accused Samsung '198 Products, Maxell asserts that this limitation is met under the doctrine of equivalents because the identified functionality matches the function, way, and result of the claimed element and, to the extent there is a difference, the difference is insubstantial. For example, to the extent that Samsung argues that images in a list with spacing or in a vertical arrangement are not "positioned next to another", the arrangement in a visually adjacent grid or row is an equivalent implementation. Using this arrangement performs substantially the same function, which is to display candidate images in an organized, adjacent manner. It does so in substantially the same way, by arranging them in a grid or row that indicates a clear spatial relationship for easy Browse. This achieves substantially the same result: presenting a list of candidates where images are positioned relative to each other for easy Browse and selection.
[4.] The digital image recording/reproduction apparatus according to claim 1, wherein a reduced image is displayed on said display module as the information showing the digital image selected by said control module.	Each of the Accused Samsung '198 Products is the digital image recording/reproduction apparatus according to claim 1, wherein a reduced image is displayed on said display module as the information showing the digital image selected by said control module. *See* User Guide and Technical Specifications of the Accused Samsung '198 Products available at Samsung's website showing that each of the devices is the digital image recording/reproduction apparatus according to claim 1, wherein a reduced image is displayed on said display module as the information showing the digital image selected by said control module. **People Album** For example, the Gallery app displays a reduced image as the information showing a digital image selected by the control module. The movie editor screen displays a timeline of reduced images, where each thumbnail represents a video clip selected by the control module for the movie playlist.

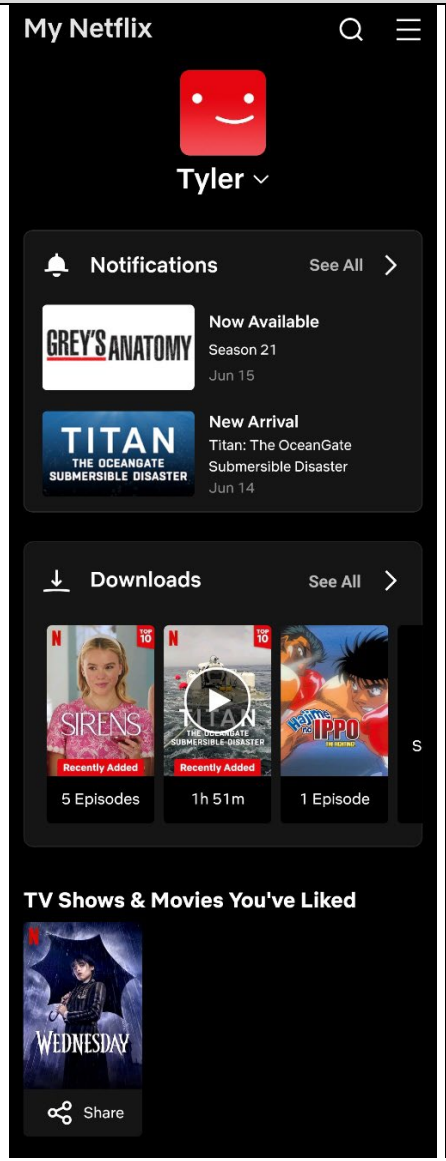
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 Similarly, the movie selection screen displays a grid of reduced images (thumbnails) representing the full-resolution photos selected by the control module as candidates for a movie.

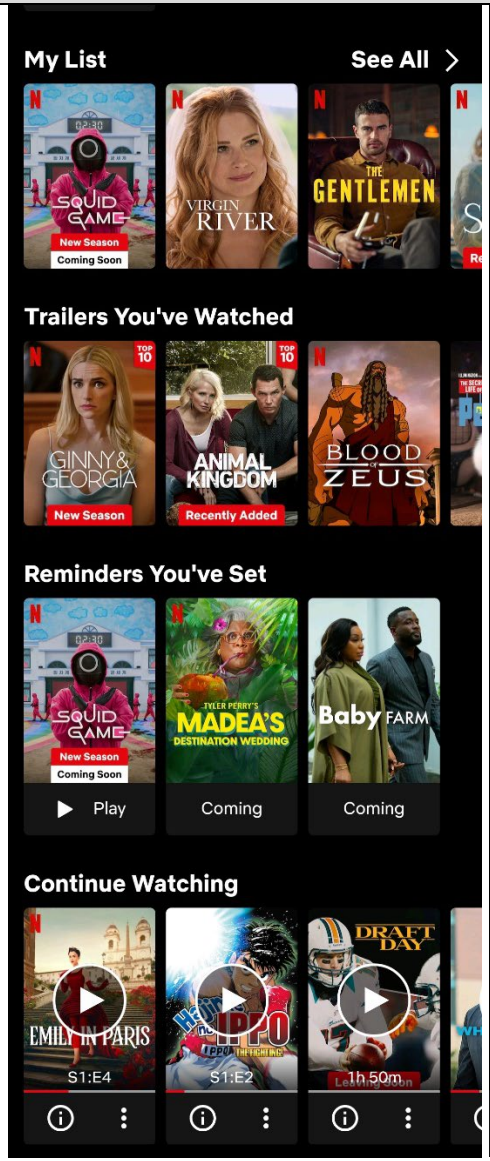
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 In the main "Pictures" tab, each photo is represented by a reduced image, and a heart icon on the reduced image represents a photo selected for the "Favorites" playlist.

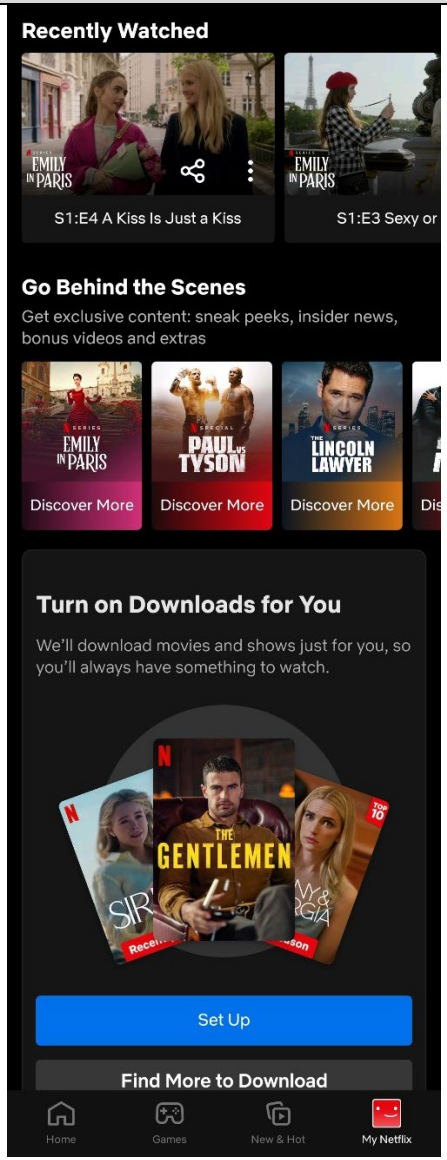
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	 **Netflix**

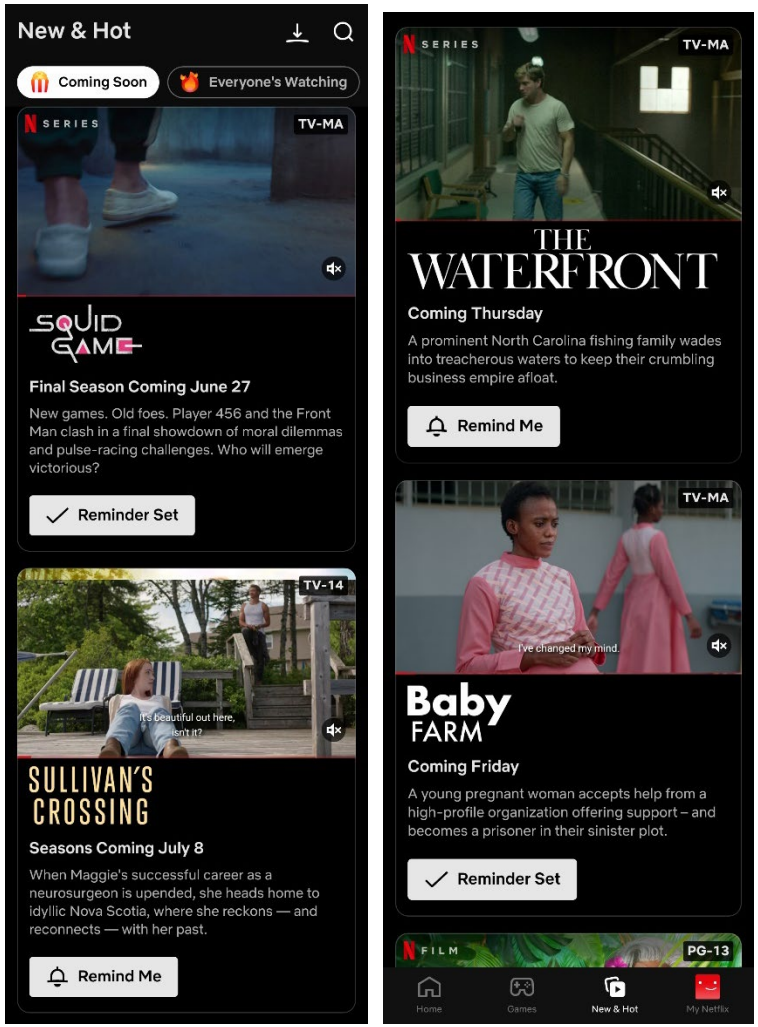
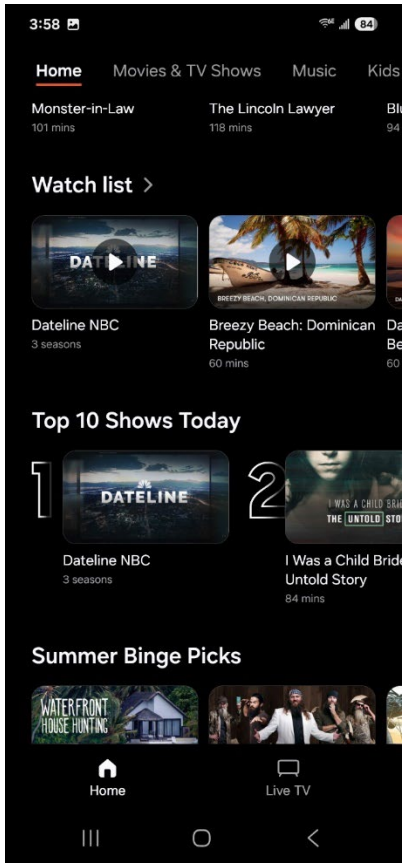
U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	For example, the Netflix application uses reduced images to show the digital images selected by the control module for its various lists. On the "My Netflix" tab and the "New & Hot" tab, all content is displayed as a reduced image (a thumbnail). These reduced images are the information showing the digital images (the full videos) that have been selected by the control module for playlists and for candidate lists. My Netflix Tab

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement







U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	New & Hot Tab  **Samsung TV Plus**

U.S. Patent No. 8,180,198	Exemplary Evidence of Infringement
	For example, the Samsung TV Plus application displays reduced images to show videos selected by the control module. On its Home screen, the videos selected for both the "Watch list" (the playlist) and the "Top 10 Shows Today" (the candidate list) are displayed as reduced images in the form of video thumbnails.