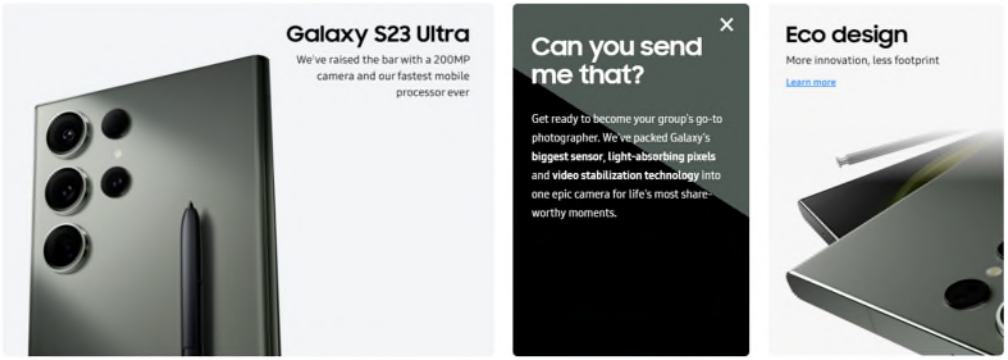
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
[1.pre] An information processing apparatus comprising:	To the extent the preamble is construed as a limitation, each of the Accused Samsung '815 Products[1] is an information processing apparatus. *See e.g.*, Technical Specifications of each of the Accused Samsung '815 Products available at Samsung's website show that each of the devices is an information processing apparatus that includes a processor to perform various functions. (https://www.samsung.com/us/mobile/). For example, the Accused Samsung '815 Products process information to display a user interface.

[1] The Accused Samsung '815 Products include the Galaxy A Quantum; Galaxy A01; Galaxy A01 Core; Galaxy A02s; Galaxy A03; Galaxy A03 Core; Galaxy A03s; Galaxy A04e; Galaxy A04s; Galaxy A10; Galaxy A10e; Galaxy A10s; Galaxy A11; Galaxy A12; Galaxy A12s (aka Nacho); Galaxy A13; Galaxy A13 5G; Galaxy A14; Galaxy A14 5G; Galaxy A2 Core; Galaxy A20; Galaxy A20e; Galaxy A20s; Galaxy A21; Galaxy A21s; Galaxy A22; Galaxy A22(s) 5G; Galaxy A23; Galaxy A23 5G; Galaxy A24 4G; Galaxy A30; Galaxy A30s; Galaxy A32; Galaxy A32 5G; Galaxy A33 5G; Galaxy A34; 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; 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 S20 5G 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 Ultra; Galaxy S23+, Galaxy S23 FE; Galaxy S9; Galaxy S9+; Galaxy Xcover 4s; 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 Fold2 5G; Galaxy Z Fold3 5G; Galaxy Z Fold4; Galaxy Z Fold5; Galaxy Tab A 10.1 (2019); Galaxy Tab A 10.5; Galaxy Tab A 8.0 & S Pen (2019); Galaxy Tab A 8.0 (2018); Galaxy Tab A 8.0 (2019); Galaxy Tab A 8.4 (2020); Galaxy Tab A7 10.4 (2020); Galaxy Tab A7 10.4 (2022); Galaxy Tab A7 Lite; Galaxy Tab A8 10.5 (2021); Galaxy Tab Active Pro; Galaxy Tab Active3; Galaxy Tab Active4 Pro; Galaxy Tab Advance2; Galaxy Tab S4 10.5; Galaxy Tab S5e; Galaxy Tab S6; Galaxy Tab S6 5G; Galaxy Tab S6 Lite; Galaxy Tab S6 Lite (2022); Galaxy Tab S7; Galaxy Tab S7 FE; Galaxy Tab S7+; Galaxy Tab S8; Galaxy Tab S8 Ultra; Galaxy Tab S8+; Galaxy Tab S9; Galaxy Tab S9+; Galaxy Tab S9 Ultra, Galaxy Tab S9 FE, Galaxy Tab S9 FE+, and Galaxy View2. Further, Maxell is aware of additional Samsung products being released on January 17th including the Samsung Galaxy S24, S24+, and S24 Ultra. To the extent these products implement the accused functionalities in the same manner as discussed herein, those products should also be considered accused. If they infringe upon release in a way differently than set forth herein, Maxell provides notice that intends to seek leave to amend the contentions to include these products and their infringing functionality within the scope of the current case.

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	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

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	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

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	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.

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 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	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.

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

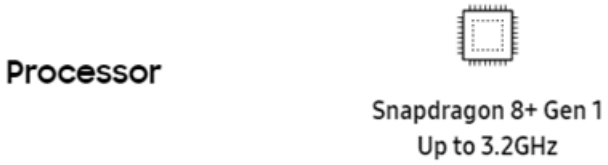
Snapdragon 8+ Gen 1
Up to 3.2GHz

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	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.



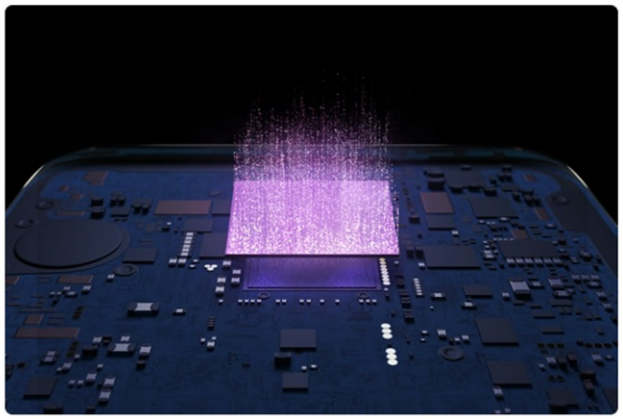
PLATFORM	OS	Android 12, upgradable to Android 13, One UI 5.1
	Chipset	Qualcomm SM8475 Snapdragon 8+ Gen 1 (4 nm)
	CPU	Octa-core (1x3.19 GHz Cortex-X2 & 3x2.75 GHz Cortex-A710 & 4x1.80 GHz Cortex-A510)
	GPU	Adreno 730

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.



U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

Performance



Impressive speed. Powerful processor

The powerful Octa-core processor opens up a new range of possibilities with heightened performance and capacity.

PLATFORM	OS	Android 13, One UI 5.1
	Chipset	Exynos 1380 (5 nm)
	CPU	Octa-core (4x2.4 GHz Cortex-A78 & 4x2.0 GHz Cortex-A55)
	GPU	Mali-G68 MP5

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.

In addition, the AIDA64 Reports show that each of the Accused Samsung '815 Products contains a front-facing and rear-facing camera for recording video, and associated software, which in conjunction with one or more processors (*e.g.*, CPU, ISP, or DSP) processes video.

Product	**AIDA 64 Report- Camera**

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
	Galaxy S23 Ultra	<< Rear-Facing Camera >> Resolution: 12 MP (4080 × 3060) Focal Length: 6.30 mm Focus Modes: infinity, auto, macro, continuous-video, continuous-picture Video Stabilization: Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Supported << Front-Facing Camera >> Resolution: 12 MP (4000 × 3000) Focal Length: 3.30 mm Focus Modes: infinity, auto, macro, continuous-video, continuous-picture Video Stabilization: Not Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Not Supported << Rear-Facing Camera >> Resolution: 12 MP (4000 × 3000) Focal Length: 2.20 mm Focus Modes: infinity, auto, macro, continuous-video, continuous-picture Video Stabilization: Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Not Supported	
	Galaxy Z Fold4	<< Rear-Facing Camera >> Resolution: 12 MP (4080 × 3060) Focal Length: 5.40 mm Focus Modes: infinity, auto, macro, continuous-video, continuous-picture Video Stabilization: Supported	

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
		Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Supported << Front-Facing Camera >> Resolution: 10.0 MP (3648 × 2736) Focal Length: 3.30 mm Focus Modes: fixed, infinity Video Stabilization: Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Not Supported << Rear-Facing Camera >> Resolution: 12 MP (4000 × 3000) Focal Length: 1.74 mm Focus Modes: fixed, infinity Video Stabilization: Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Not Supported	

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
	Galaxy Z Flip4	<< Rear-Facing Camera >> Resolution: 12 MP (4000 × 3000) Focal Length: 5.00 mm Focus Modes: infinity, auto, macro, continuous-video, continuous-picture Video Stabilization: Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Supported << Front-Facing Camera >> Resolution: 10.0 MP (3648 × 2736) Focal Length: 3.17 mm Focus Modes: fixed, infinity Video Stabilization: Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Not Supported << Rear-Facing Camera >> Resolution: 12 MP (4000 × 3000) Focal Length: 1.70 mm Focus Modes: fixed, infinity Video Stabilization: Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Not Supported	
	Galaxy A54 5G	<< Rear-Facing Camera >> Resolution: 12 MP (4080 × 3060) Focal Length: 5.54 mm Focus Modes: infinity, auto, continuous-video, continuous-picture Video Stabilization: Not Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Supported << Front-Facing Camera >> Resolution: 8.0 MP (3264 × 2448) Focal Length: 3.72 mm	

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

Focus Modes: fixed, infinity
Video Stabilization: Not Supported
Zoom: Supported
Auto Exposure Locking: Supported
Auto White Balance Locking: Supported
Flash: Not Supported

<< Rear-Facing Camera >>
Resolution: 12 MP (4000 × 3000)
Focal Length: 1.74 mm
Focus Modes: fixed, infinity
Video Stabilization: Not Supported
Zoom: Supported
Auto Exposure Locking: Supported
Auto White Balance Locking: Supported
Flash: Not Supported

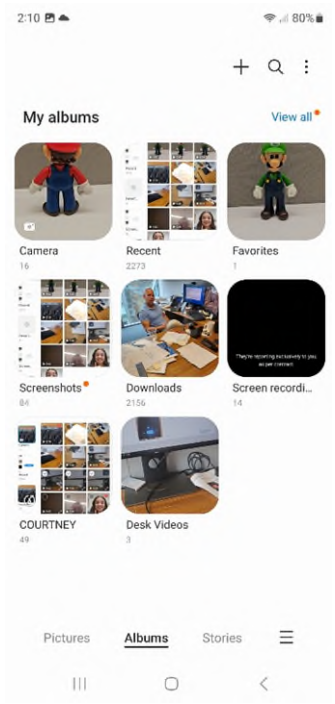
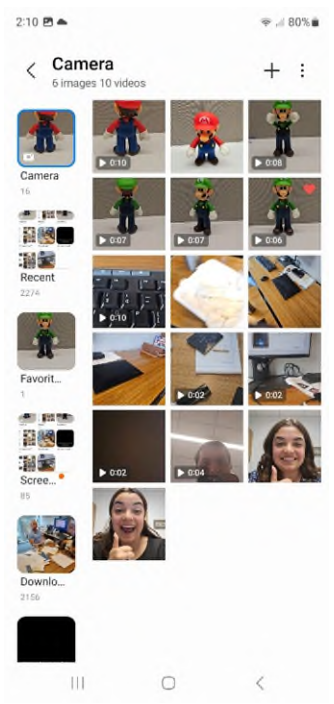
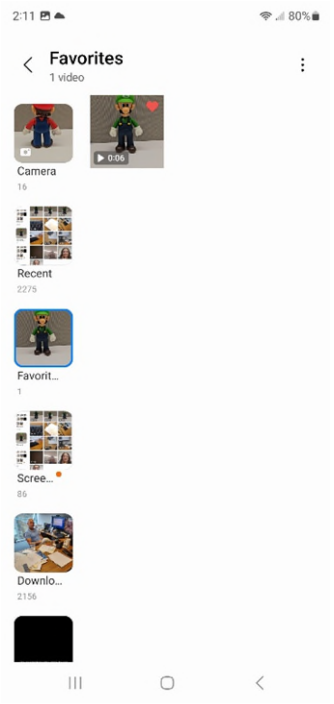
<< Front-Facing Camera >>
Resolution: 5.7 MP (2880 × 1980)
Focal Length: 3.72 mm
Focus Modes: fixed, infinity
Video Stabilization: Not Supported
Zoom: Supported
Auto Exposure Locking: Supported
Auto White Balance Locking: Supported
Flash: Not Supported

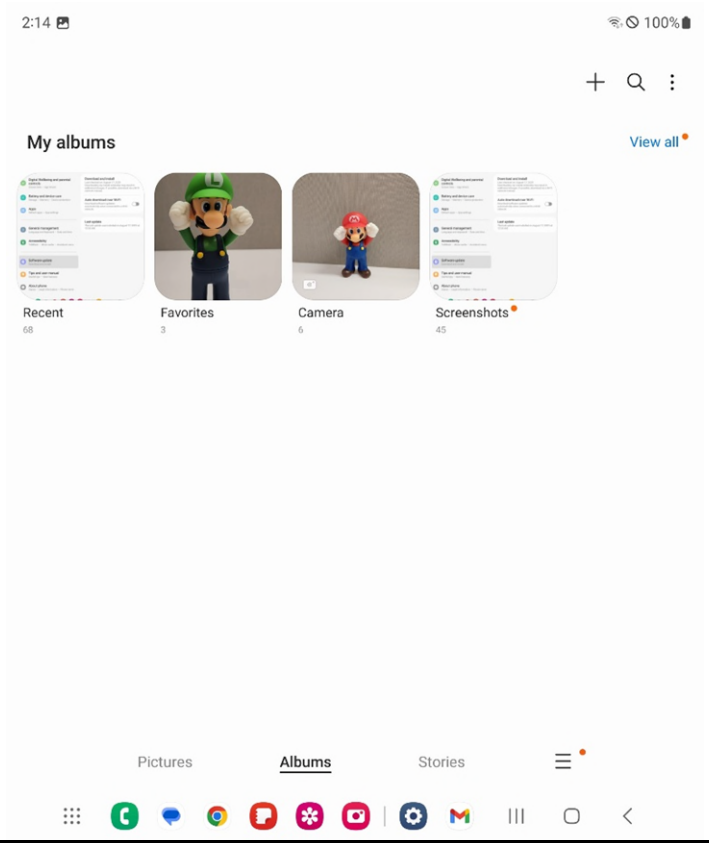
The AIDA64 Reports and tech specs show that the Accused Samsung '815 Products contain one or more processors.

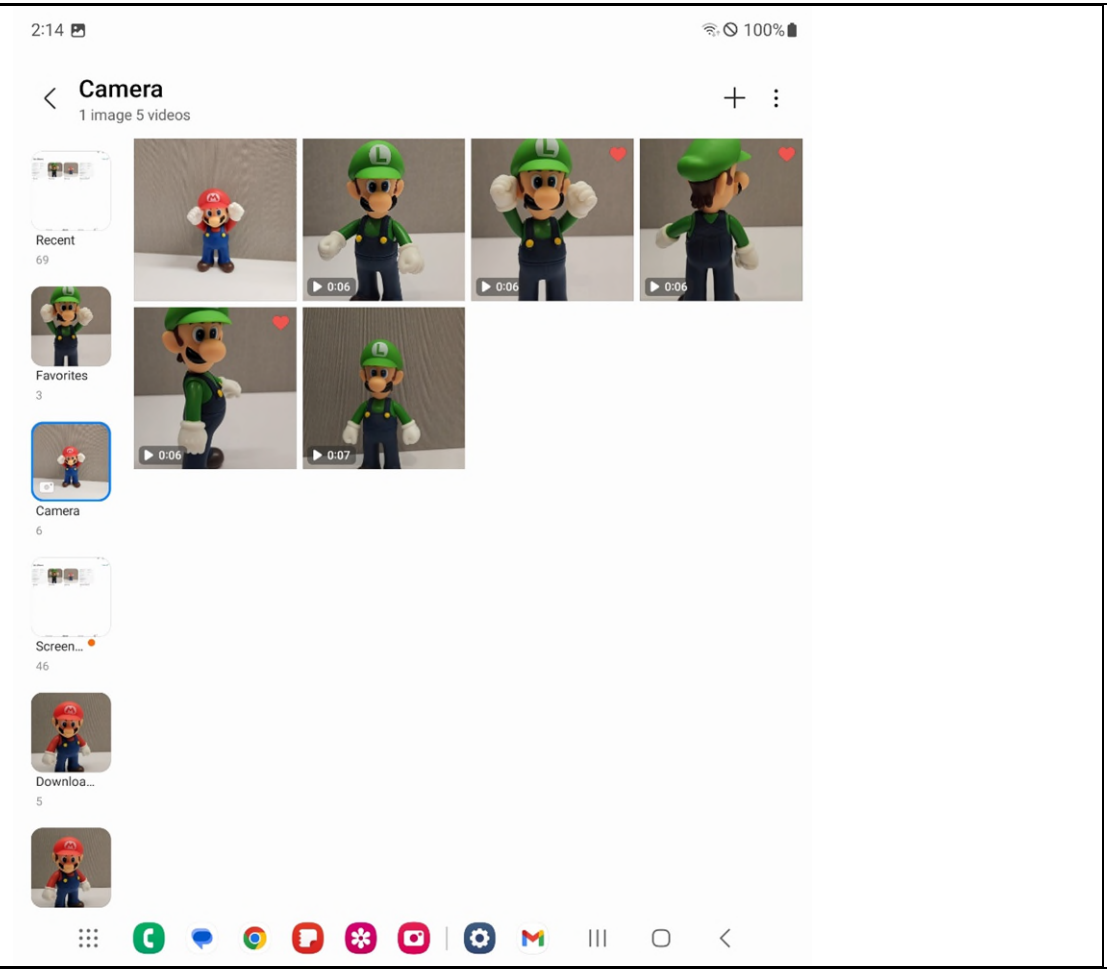
Product	AIDA 64 Report- Processor
Galaxy S23 Ultra	SoC Model: Qualcomm Snapdragon 8 Gen 2 (SM8550) Core Architecture: 3x ARM Cortex-A510 @ 2016 MHz

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement	
		2x ARM Cortex-A715 @ 2803 MHz 2x ARM Cortex-A710 @ 2803 MHz ARM Cortex-X3 @ 3360 MHz Manufacturing Process: 4 nm Instruction Set: 64-bit ARMv9-A CPU Revision: r1p0 CPU Cores: 8 CPU Clock Range: 307 - 3360 MHz
	Galaxy Z Fold4	SoC Model: Qualcomm Snapdragon 8+ Gen 1 (SM8475) Core Architecture: 4x ARM Cortex-A510 @ 2016 MHz 3x ARM Cortex-A710 @ 2745 MHz ARM Cortex-X2 @ 3187 MHz Manufacturing Process: 4 nm Instruction Set: 64-bit ARMv9-A CPU Revision: r2p0 CPU Cores: 8 CPU Clock Range: 300 - 3187 MHz
	Galaxy Z Flip4	SoC Model: Qualcomm Snapdragon 8+ Gen 1 (SM8475) Core Architecture: 4x ARM Cortex-A510 @ 2016 MHz 3x ARM Cortex-A710 @ 2745 MHz ARM Cortex-X2 @ 3187 MHz Manufacturing Process: 4 nm Instruction Set: 64-bit ARMv9-A CPU Revision: r2p0 CPU Cores: 8 CPU Clock Range: 300 - 3187 MHz
	Galaxy A54 5G	Core Architecture: 4x ARM Cortex-A55 @ 2002 MHz 4x ARM Cortex-A78 @ 2400 MHz Instruction Set: 64-bit ARMv8-A CPU Revision: r1p1 CPU Cores: 8 CPU Clock Range: 533 - 2400 MHz

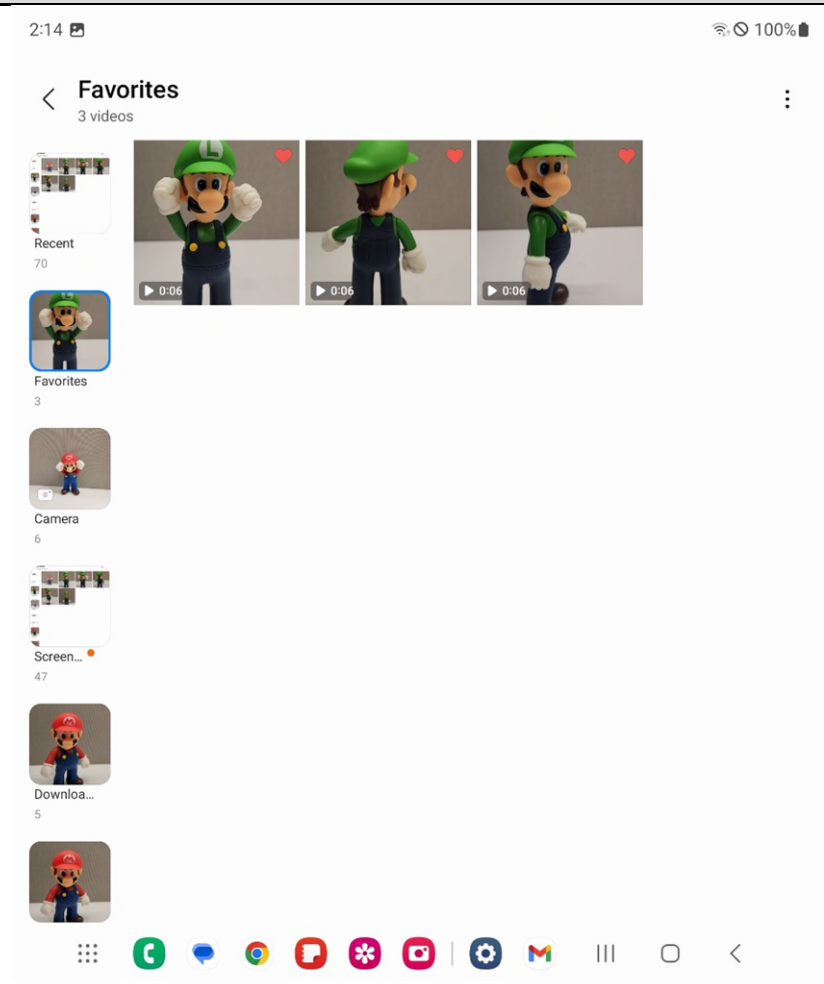
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

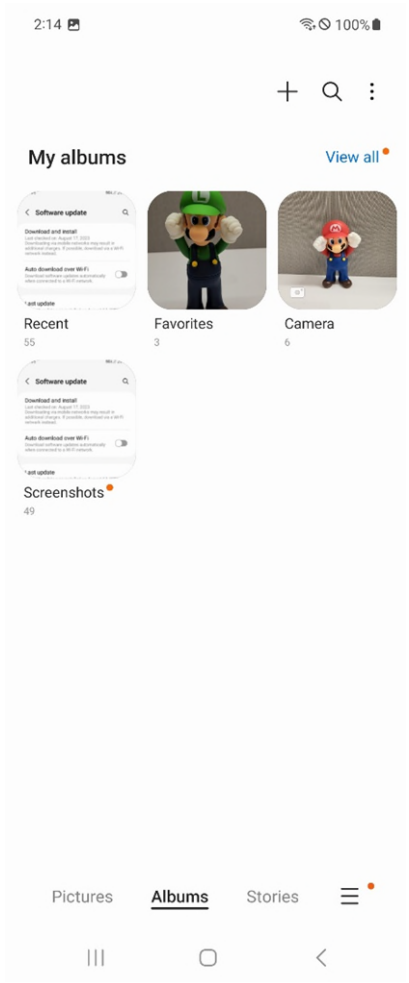
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**	
	Product	**Gallery Application Screenshots**
	Galaxy S23 Ultra	  

	Galaxy Z Fold4		


2:14
100%
Camera
1 image 5 videos
Recent
69
Favorites
3
Camera
6
Screen...
46
Downloa...
5
0:06
0:06
0:06
0:06
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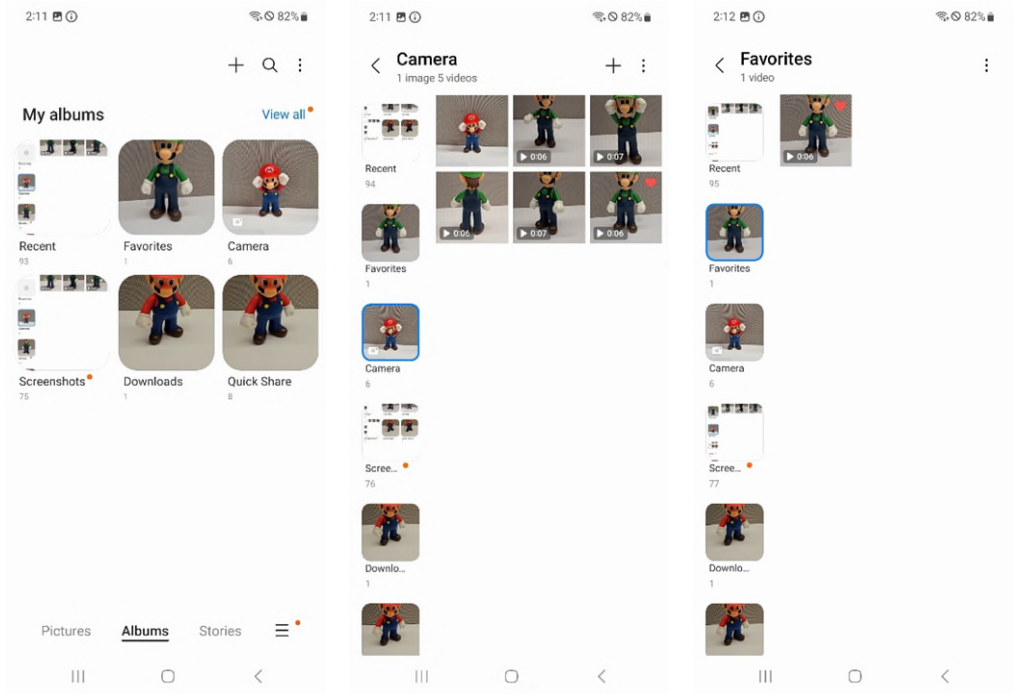
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

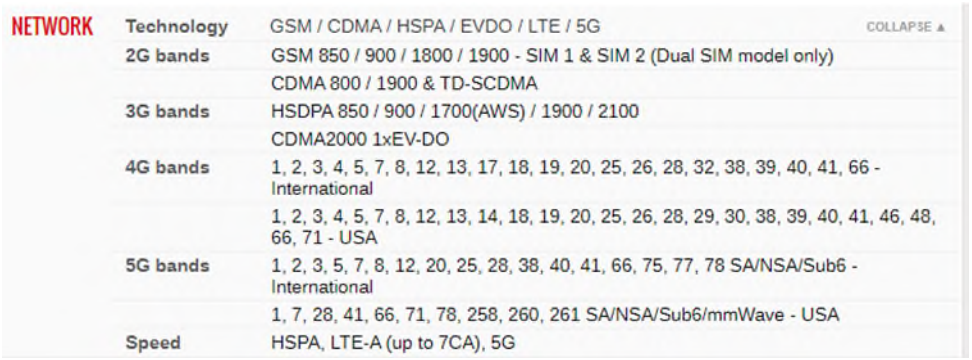
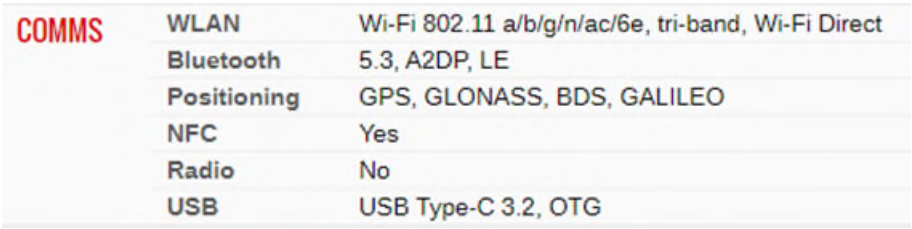
	Galaxy Z Flip4	 	

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Galaxy A54 5G 
	As shown above, the exemplary products all include Samsung's Gallery application that includes the same user interfaces and present a first area and second area in the same way. In addition, the remaining Accused Samsung '815 Products also include the same Samsung Gallery application including the same user interfaces. Thus, each of the Accused Samsung '815 Products infringe under the same theories as shown herein with one or more exemplary products. *See also* Appendix 8 showing that the remaining Accused Samsung '815 Products include front and back cameras for recording video, a display for displaying video, and one or more processors (*e.g.*, a CPU) with information processing capability.

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
[1.a] a network interface;	Each of the Accused Samsung '815 Products comprises a network interface. For example, each of the Accused Samsung '815 Products includes one or more wireless circuits comprising one or more modems that are a network interface, for example for cellular, Bluetooth, or WiFi communication. **Galaxy S23 Ultra:**  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:**

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

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

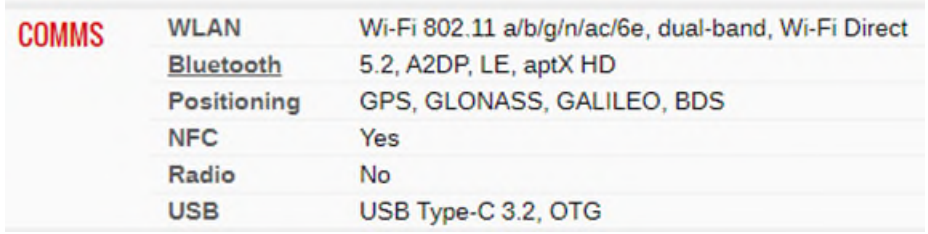
COMMS	WLAN	Wi-Fi 802.11 a/b/g/n/ac/6, dual-band, Wi-Fi Direct
	Bluetooth	5.2, A2DP, LE
	Positioning	GPS, GLONASS, GALILEO, BDS
	NFC	Yes
	Radio	No
	USB	USB Type-C 2.0, OTG

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

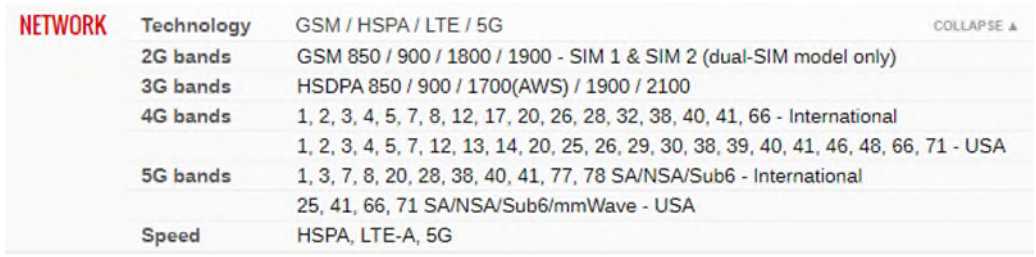
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement



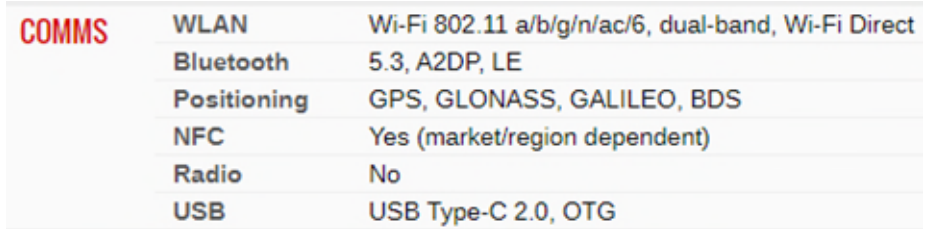
COMMS		
	WLAN	Wi-Fi 802.11 a/b/g/n/ac/6e, dual-band, Wi-Fi Direct
	Bluetooth	5.2, A2DP, LE, aptX HD
	Positioning	GPS, GLONASS, GALILEO, BDS
	NFC	Yes
	Radio	No
	USB	USB Type-C 3.2, OTG

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

Galaxy A54 5G:



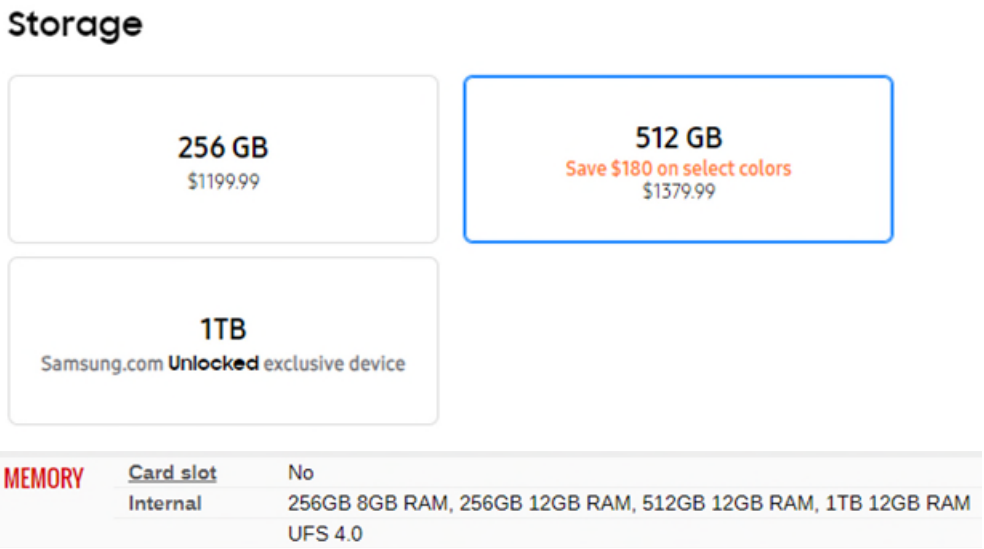
NETWORK			COLLAPSE ▲
	Technology	GSM / HSPA / LTE / 5G	
	2G bands	GSM 850 / 900 / 1800 / 1900 - SIM 1 & SIM 2 (dual-SIM model only)	
	3G bands	HSDPA 850 / 900 / 1700(AWS) / 1900 / 2100	
	4G bands	1, 2, 3, 4, 5, 7, 8, 12, 17, 20, 26, 28, 32, 38, 40, 41, 66 - International	
		1, 2, 3, 4, 5, 7, 12, 13, 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	



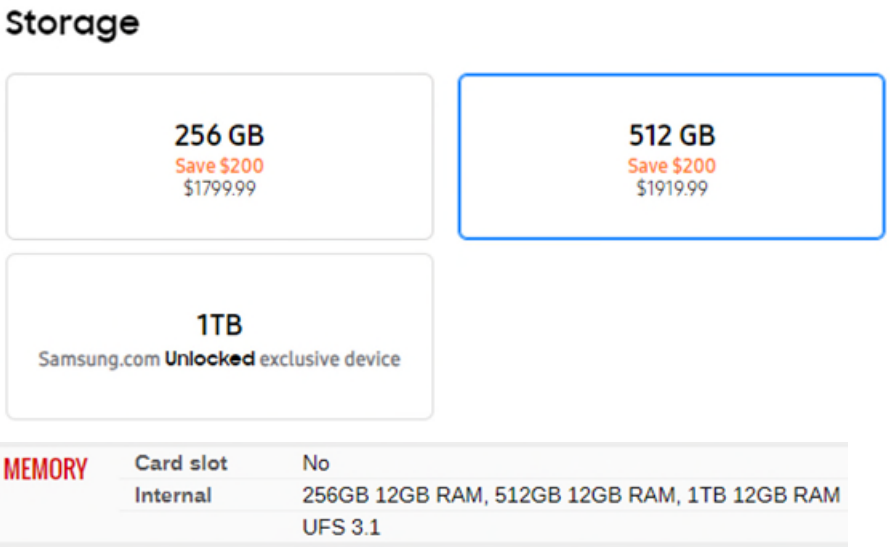
COMMS		
	WLAN	Wi-Fi 802.11 a/b/g/n/ac/6, dual-band, Wi-Fi Direct
	Bluetooth	5.3, A2DP, LE
	Positioning	GPS, GLONASS, GALILEO, BDS
	NFC	Yes (market/region dependent)
	Radio	No
	USB	USB Type-C 2.0, OTG

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.

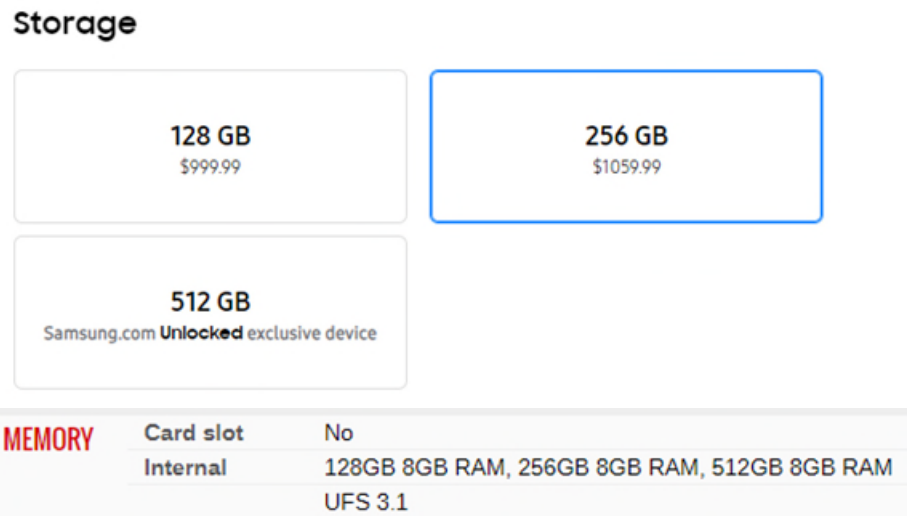
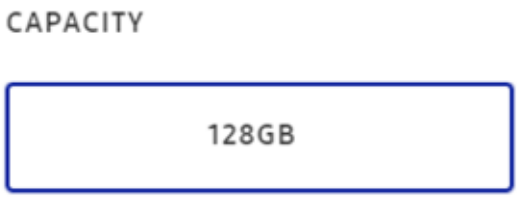
See also Appendix 8 showing that the remaining Accused Samsung '815 Products include a similar network interface for wireless communication (*e.g.*, WiFi, Bluetooth, and/or cellular chipset). *See* https://www.samsung.com/us/support/answer/ANS00087283/; *see also* https://www.samsung.com/us/support/answer/ANS00083184/.

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
[1.b] a recording medium on which is stored a plurality of video information including first video information received wirelessly by the network interface over a network from another information processing apparatus,	Each of the Accused Samsung '815 Products comprises a recording medium on which is stored a plurality of video information including first video information received wirelessly by the network interface over a network from another information processing apparatus. For example, each of the Accused Samsung '815 Products includes local memory such as ROM alone or in combination with RAM and/or cache memory that is a recording medium on which is stored a plurality of video information. For example, Accused Samsung '815 Products receive video information wirelessly over WiFi, cellular, or Bluetooth via text message, Quick Share, e-mail, downloading over the Internet, and/or via Bluetooth file share.  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 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	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 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

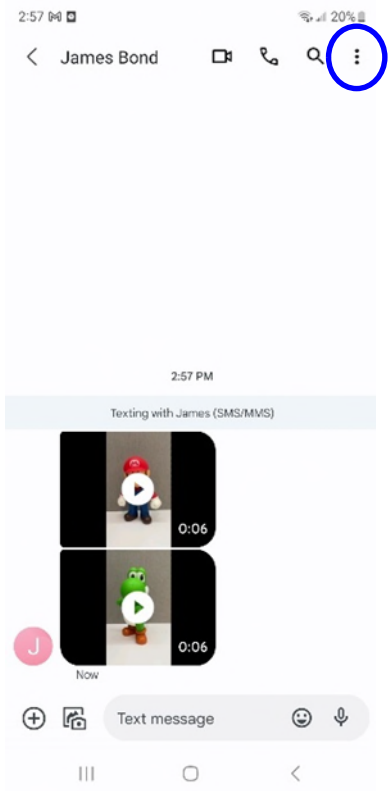
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Galaxy Z Flip4 technical specifications; https://www.samsung.com/us/smartphones/galaxy-z-flip4/buy/galaxy-z-flip4-256gb-t-mobile-sm-f721uzdexau/; https://www.gsmarena.com/samsung_galaxy_z_flip4-11538.php. 

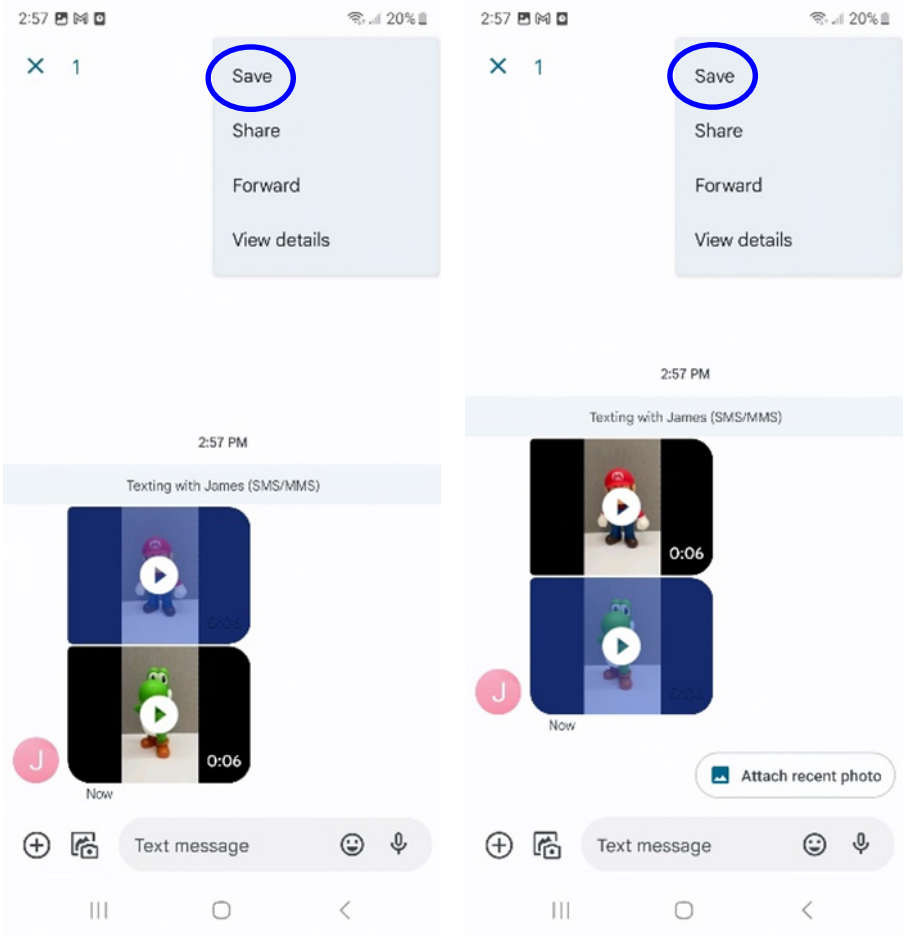
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

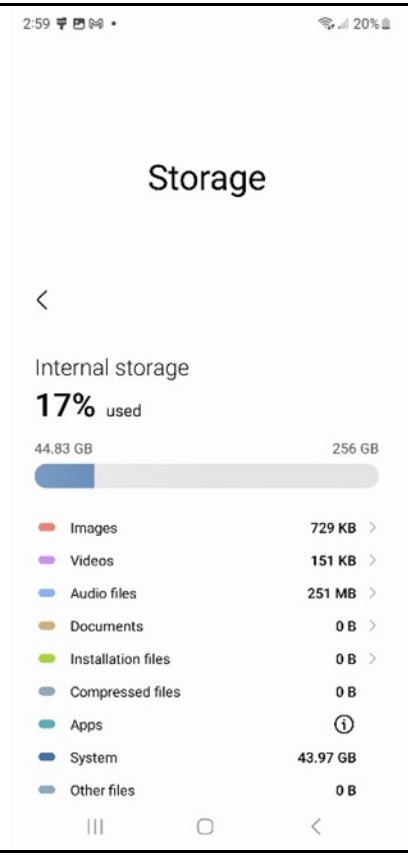
MEMORY	Card slot	microSDXC (uses shared SIM slot)
	Internal	128GB 6GB RAM, 128GB 8GB RAM, 256GB 6GB RAM, 256GB 8GB RAM

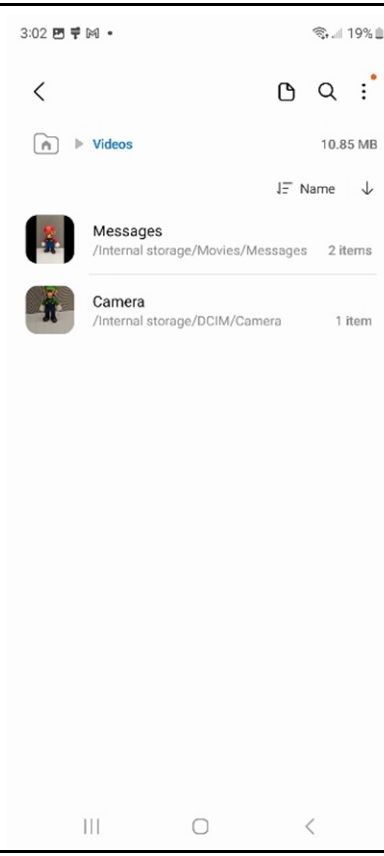
Galaxy A54 5G technical specifications; https://www.samsung.com/us/mobile/phones/galaxy-a/galaxy-a54-5g-128gb-verizon-sm-a546vzkbvzw/; https://www.gsmarena.com/samsung_galaxy_a54-12070.php.

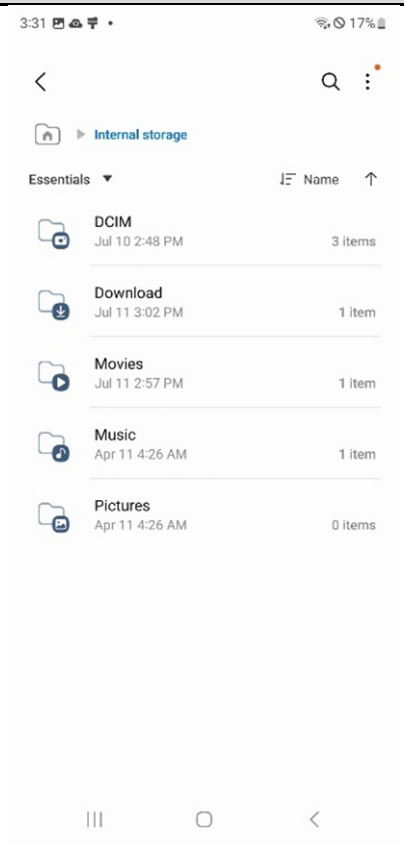
Product	Testing showing reception and storage of a video via text message
Samsung Galaxy S23 Ultra	

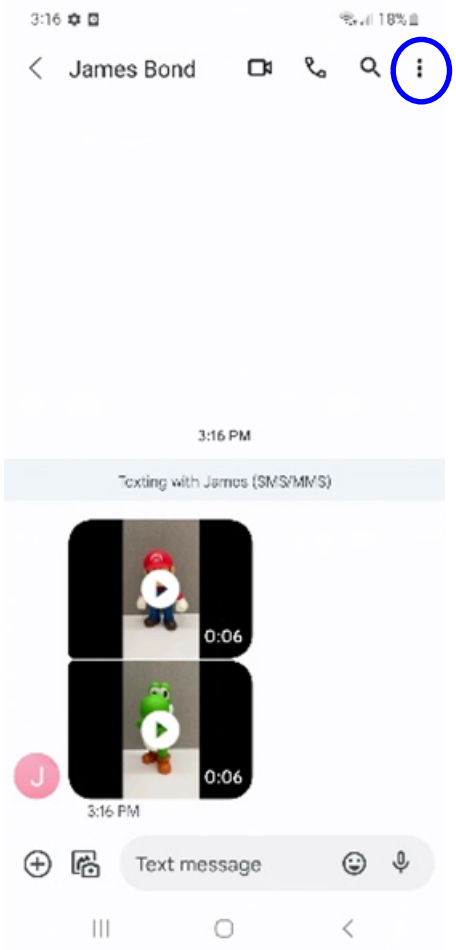
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Screenshot showing wireless reception of videos by text message.  Screenshots showing saving videos to local storage.

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Screenshot showing videos shown within Gallery application demonstrating local storage.

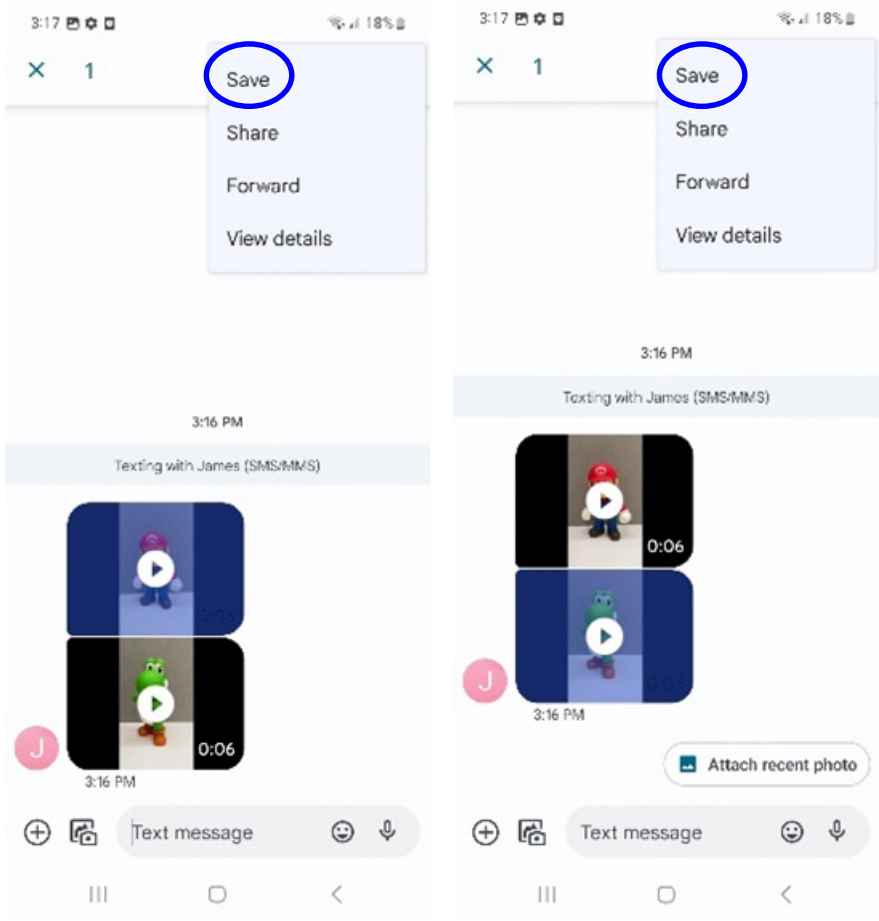

2:59
20%
Storage
Internal storage
17% used
44.83 GB
256 GB
Images 729 KB
Videos 151 KB
Audio files 251 MB
Documents 0 B
Installation files 0 B
Compressed files 0 B
Apps
System 43.97 GB
Other files 0 B


3:02
19%
Videos
10.85 MB
Name
Messages
/Internal storage/Movies/Messages
2 items
Camera
/Internal storage/DCIM/Camera
1 item

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Screenshots showing the internal storage capacity of the device and storing file paths.

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**		
	Samsung Galaxy A54 5G	 Screenshot showing wireless reception of videos by text message.	

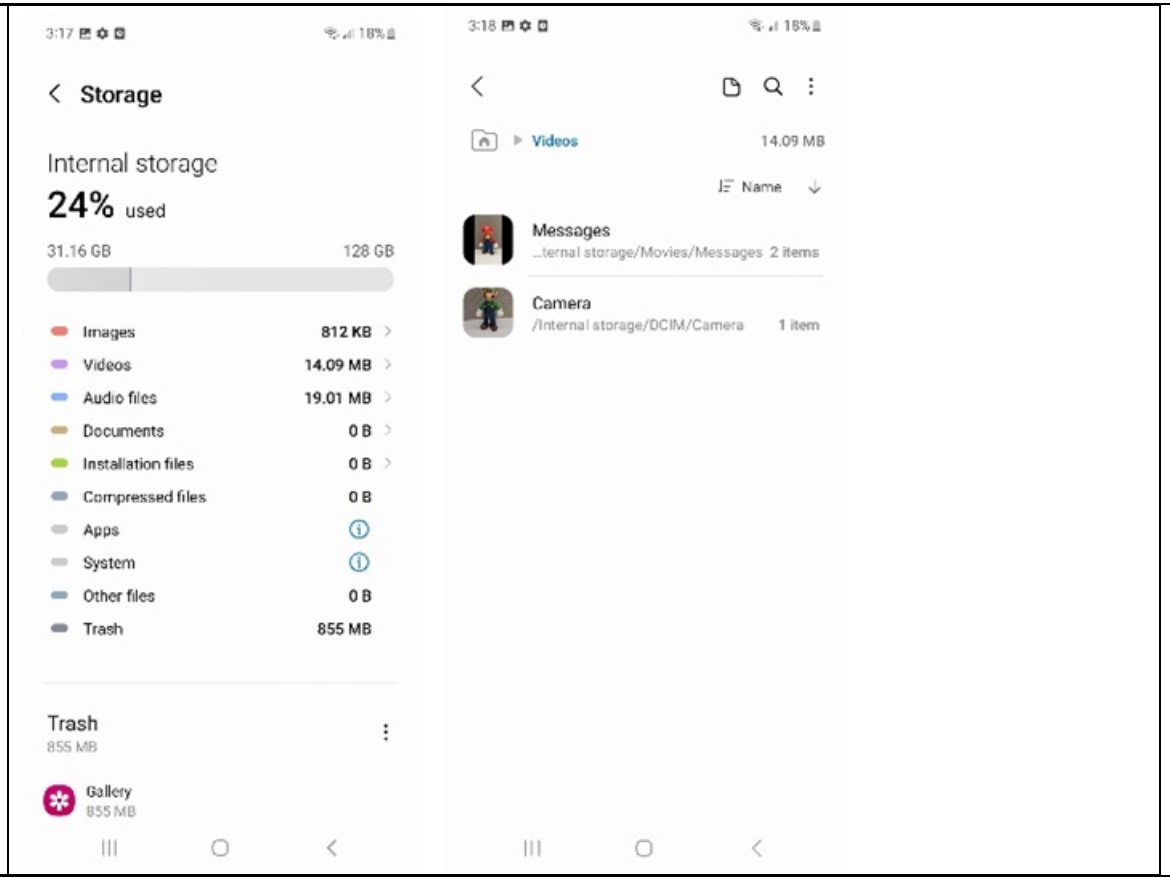
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

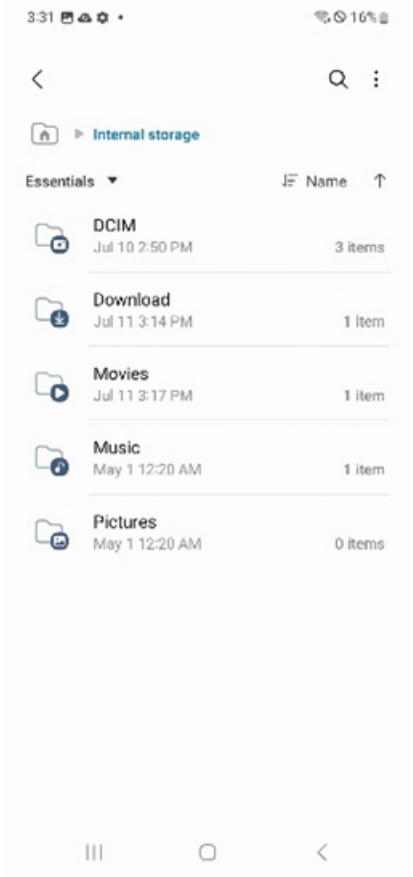


Screenshots showing saving videos to local storage.

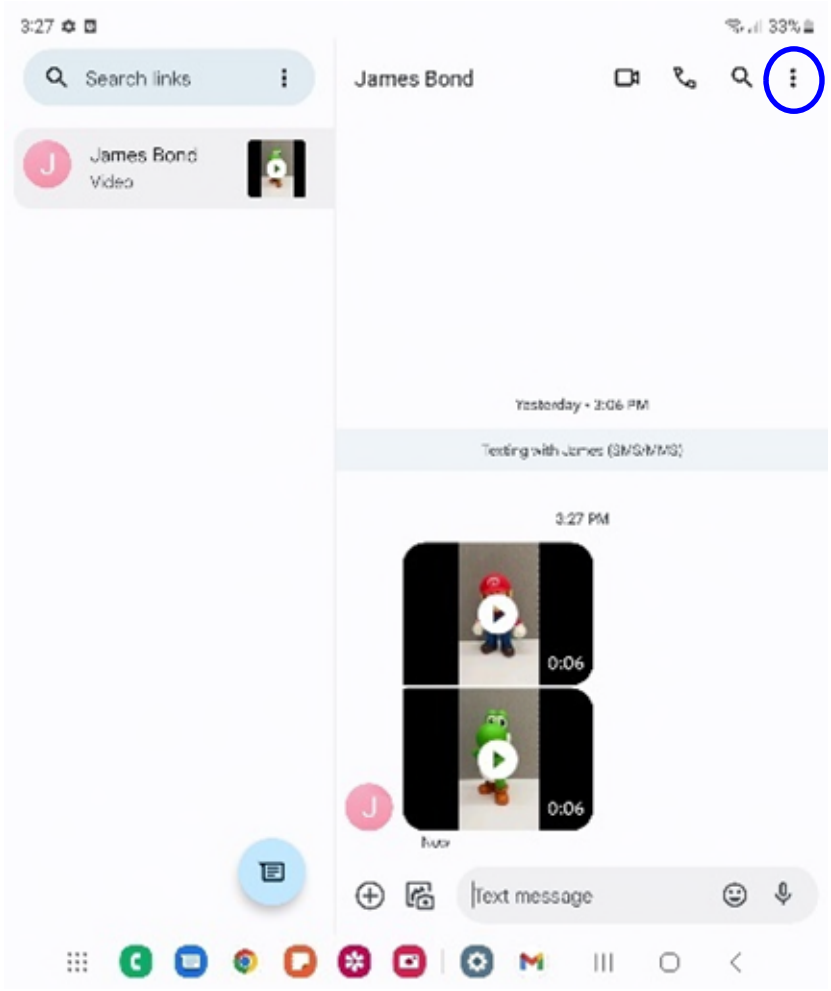
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

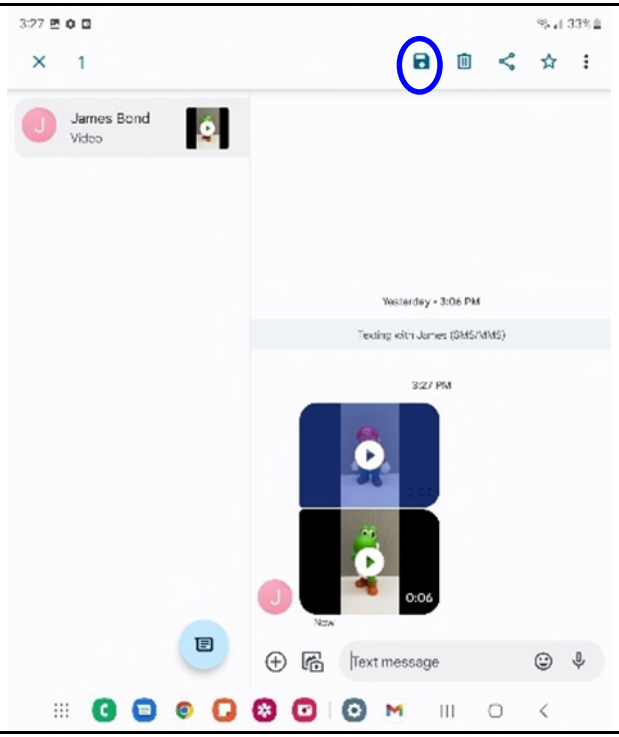
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
		Screenshot showing videos shown within Gallery application demonstrating local storage.	

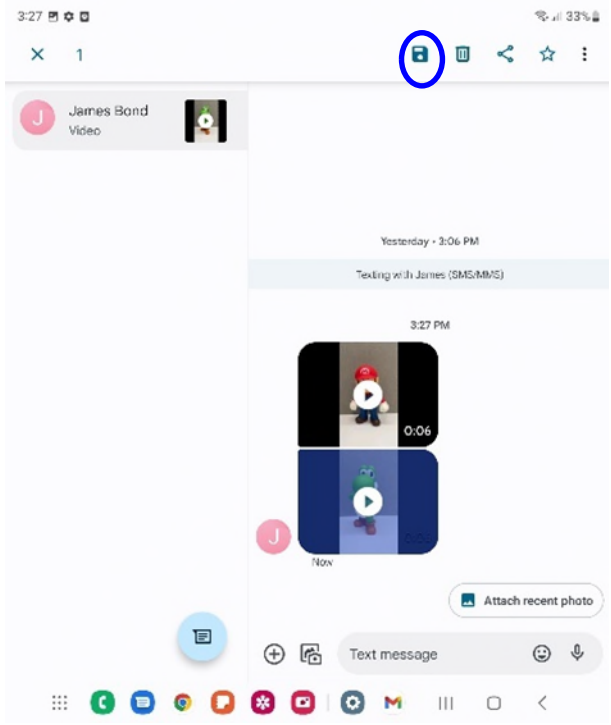

3:17
18%
Storage
Internal storage
24% used
31.16 GB
128 GB
Images 812 KB
Videos 14.09 MB
Audio files 19.01 MB
Documents 0 B
Installation files 0 B
Compressed files 0 B
Apps
System
Other files 0 B
Trash 855 MB
Trash
855 MB
Gallery
855 MB
3:18
18%
Videos
14.09 MB
Name
Messages
...ternal storage/Movies/Messages 2 items
Camera
/Internal storage/DCIM/Camera 1 item

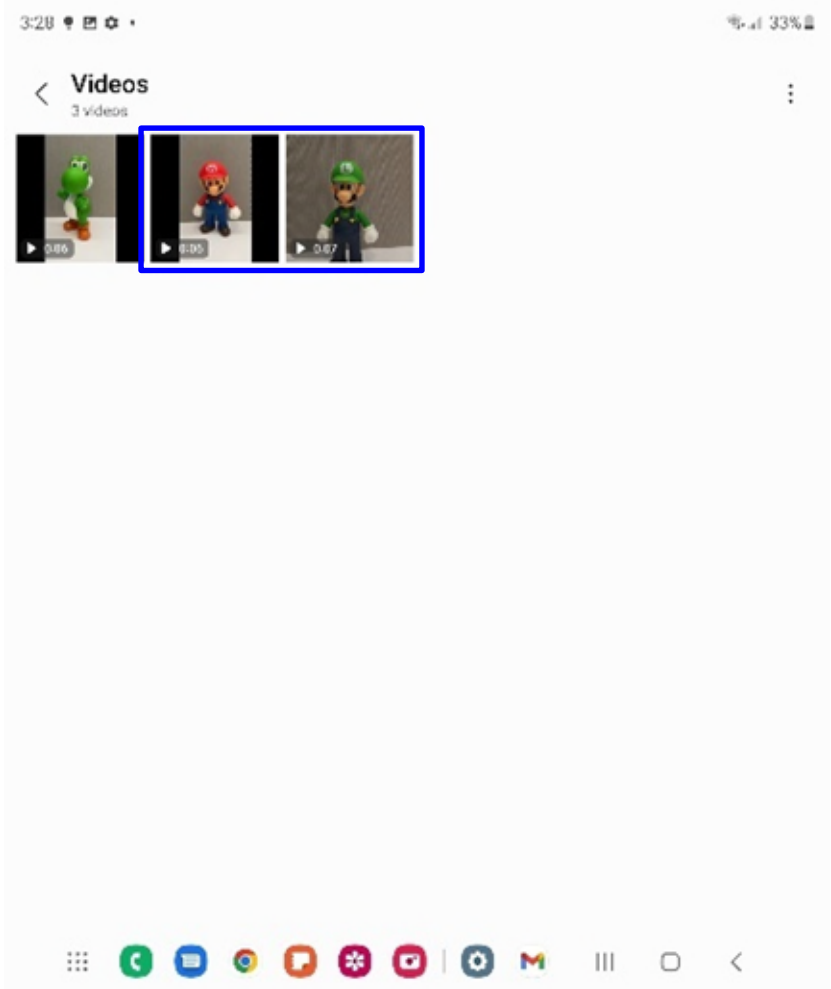
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Screenshots showing the internal storage capacity of the device and storing file paths.

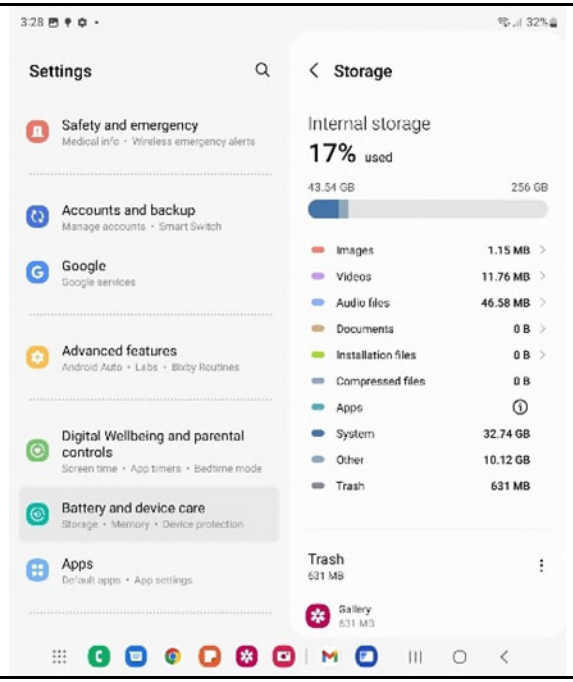
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
	Samsung Galaxy ZFold 4	 Screenshot showing wireless reception of videos by text message.	

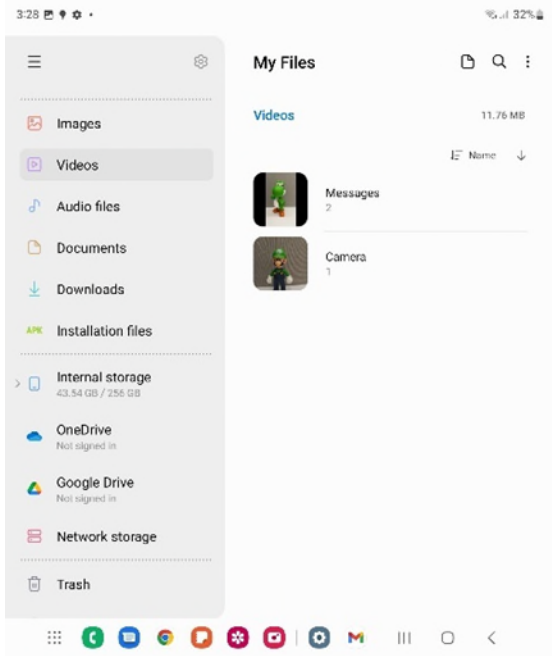
		 James Bond Video Yesterday • 3:06 PM 3:27 PM 0:06 Text message	

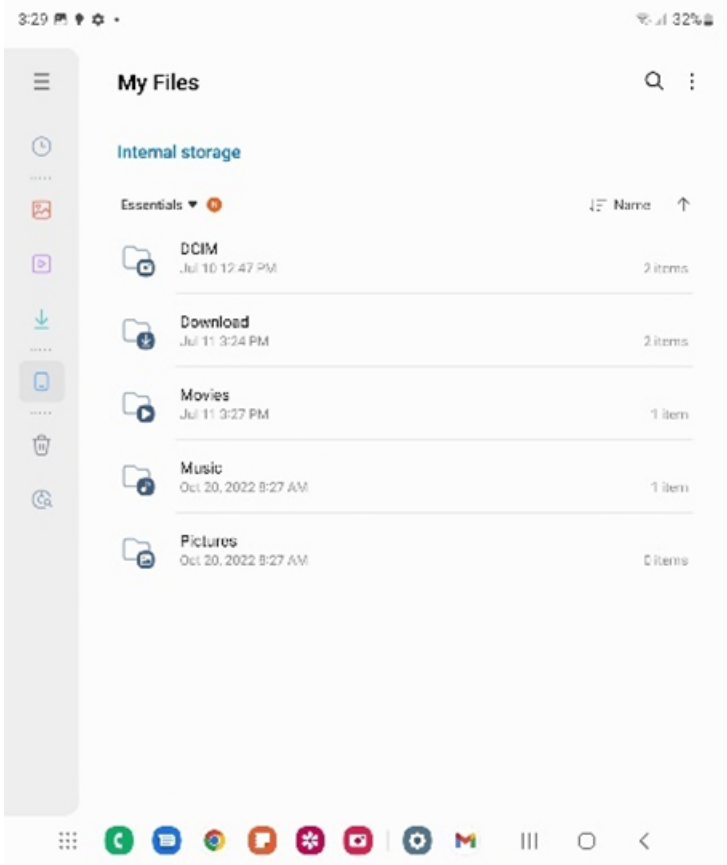
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Screenshots showing saving videos to local storage.

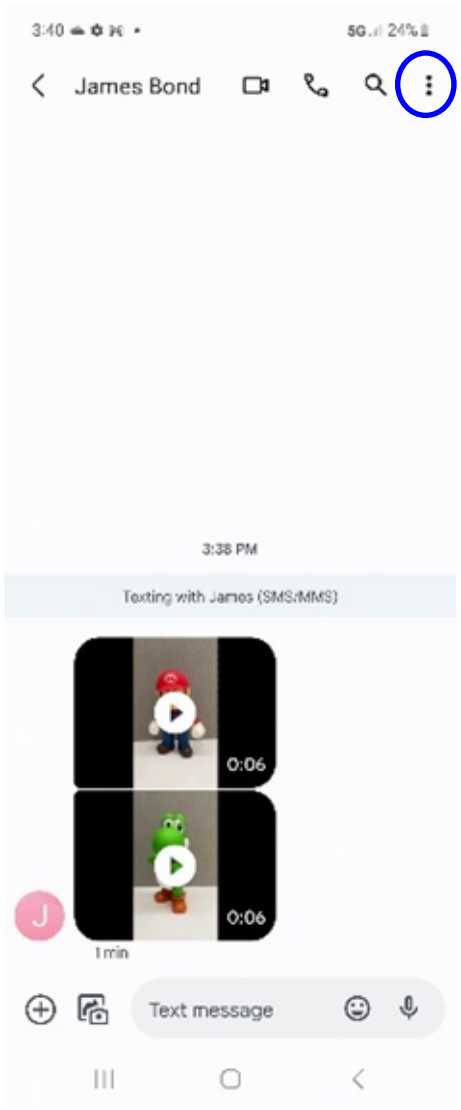
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Screenshot showing videos shown within Gallery application demonstrating local storage.


3:28
32%
Settings
Safety and emergency
Medical info • Wireless emergency alerts
Accounts and backup
Manage accounts • Smart Switch
Google
Google services
Advanced features
Android Auto • Labs • Bixby Routines
Digital Wellbeing and parental controls
Screen time • App timers • Bedtime mode
Battery and device care
Storage • Memory • Device protection
Apps
Default apps • App settings
Storage
Internal storage
17% used
43.54 GB
256 GB
Images 1.15 MB
Videos 11.76 MB
Audio files 46.58 MB
Documents 0 B
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Trash 631 MB
Trash
631 MB
Gallery
631 MB

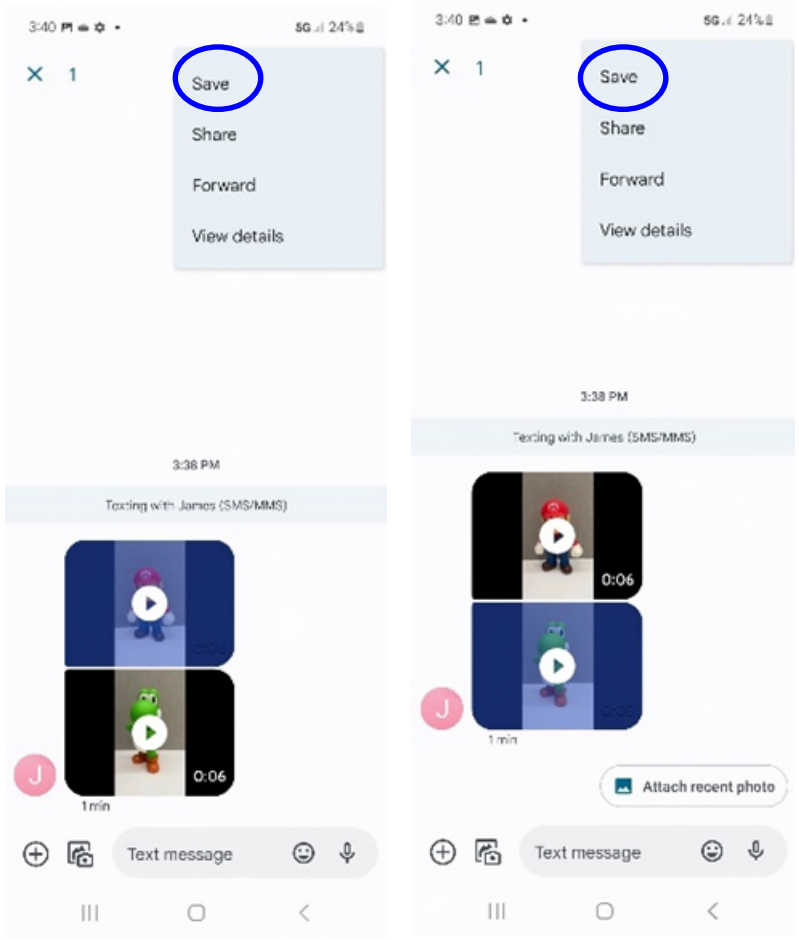
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Screenshots showing the internal storage capacity of the device and storing file paths.

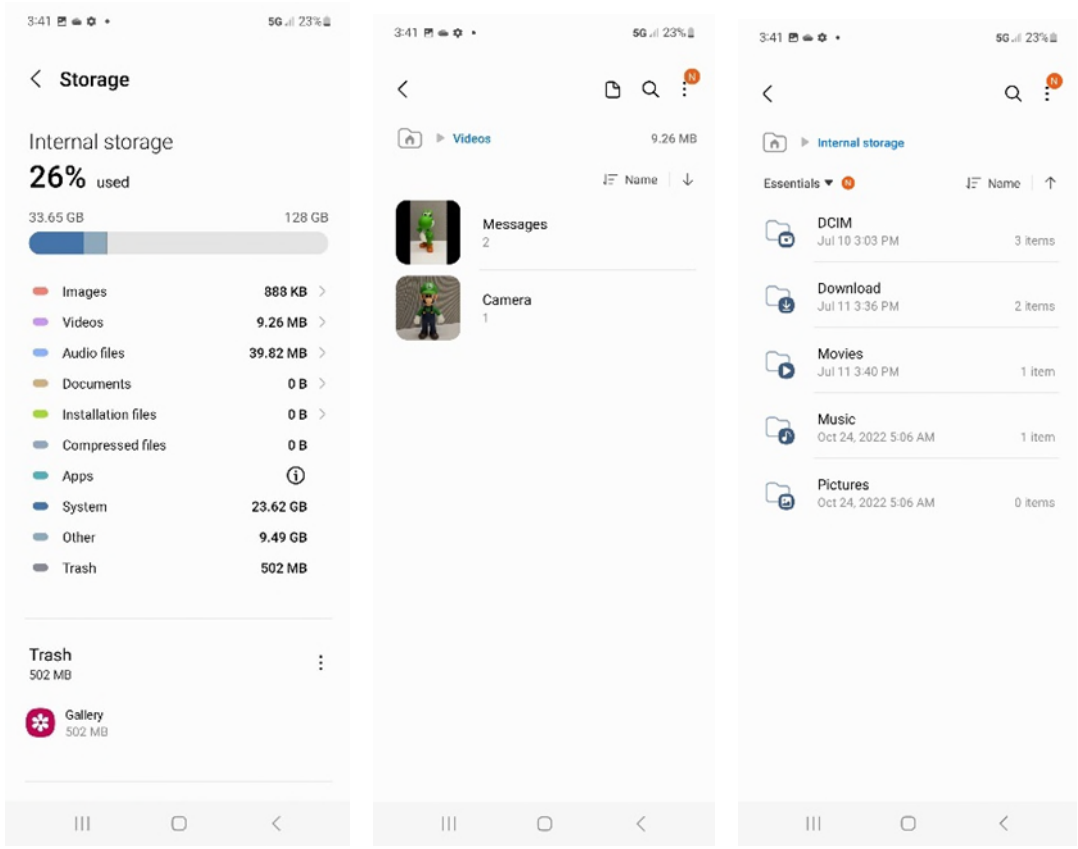
	Samsung Galaxy ZFlip 4:	 Screenshot showing wireless reception of videos by text message.	

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

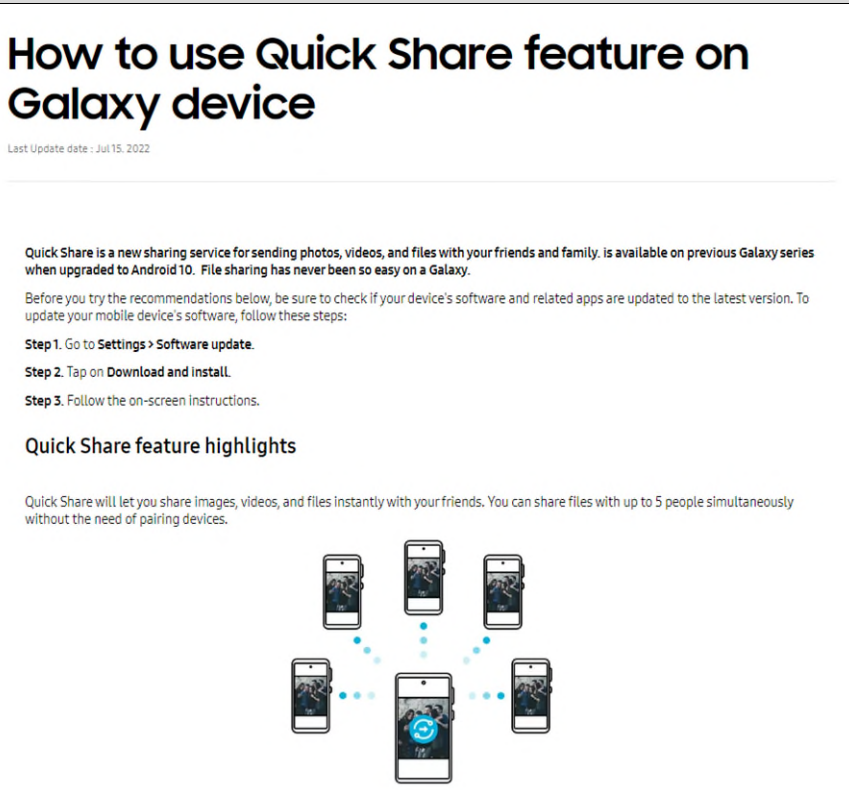


Screenshots showing saving videos to local storage.

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Screenshot showing videos shown within Gallery application demonstrating local storage.  Screenshots showing the internal storage capacity of the device and storing file paths. The Accused Samsung '815 Products also store video information after receiving it wirelessly over Quick Share:

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

How to use Quick Share feature on Galaxy device

Last Update date : Jul 15, 2022

Quick Share is a new sharing service for sending photos, videos, and files with your friends and family. is available on previous Galaxy series when upgraded to Android 10. File sharing has never been so easy on a Galaxy.

Before you try the recommendations below, be sure to check if your device's software and related apps are updated to the latest version. To update your mobile device's software, follow these steps:

Step 1. Go to **Settings > Software update**.

Step 2. Tap on **Download and install**.

Step 3. Follow the on-screen instructions.

Quick Share feature highlights

Quick Share will let you share images, videos, and files instantly with your friends. You can share files with up to 5 people simultaneously without the need of pairing devices.

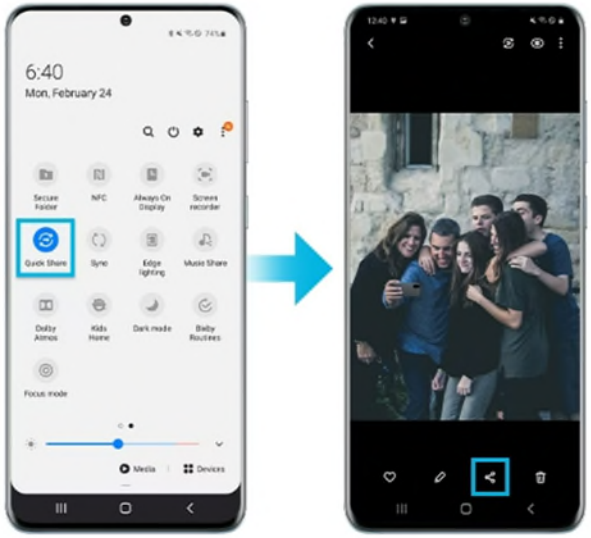
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

Step 1. First, make sure the Quick Share feature is turned on for both phones. On the other device, open the notification panel, swipe downwards, and then tap **Quick Share** to activate it. It will be blue when it's activated.

If the Quick Share icon does not appear in your Quick settings panel, you may need to add it.

Step 2. Launch the **Gallery** app and select an image. Tap the **Share** button and select a device to transfer the image. Accept the file transfer request on the other device.



Step 3. If you're having trouble connecting to another device, swipe down from the top of your screen to open Quick Settings, and then touch and hold the **Quick Share** icon. Tap the **switch** next to "**Show my position to others**" to let nearby devices see your device when they are using Quick Share. This option will only show if Quick Share is enabled.

The "Show my position to others" option is only available on select models.

https://www.samsung.com/ph/support/mobile-devices/how-to-use-quickshare-feature-on-galaxy-mobile-device/

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

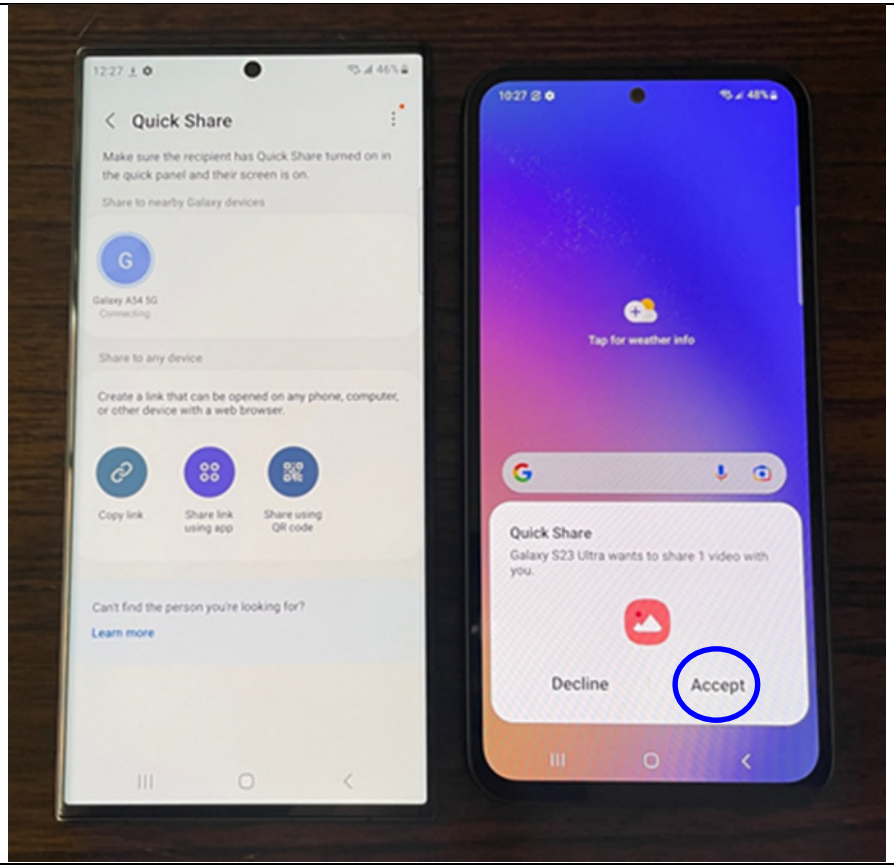
Video Information Transmitting Device (Samsung Galaxy S23 Ultra)	Video Information Receiving Device (Samsung Galaxy A54 5G)



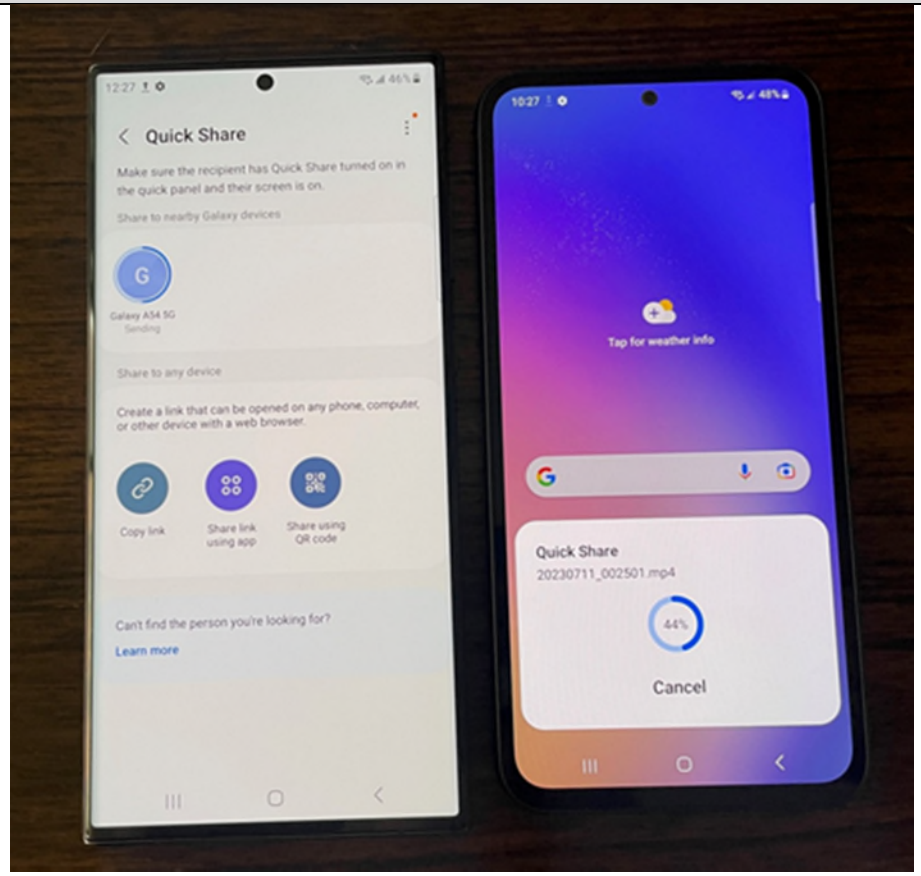
	 1 item Nearby Share No recommended people to share with Quick Share Bluetooth Drive Gmail Tap for weather info Galaxy Store Gallery Play Store Google

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

	 Quick Share Make sure the recipient has Quick Share turned on in the quick panel and their screen is on. Share to nearby Galaxy devices G Galaxy A54 5G Connecting Share to any device Create a link that can be opened on any phone, computer, or other device with a web browser. Copy link Share link using app Share using QR code Can't find the person you're looking for? Learn more Tap for weather info Quick Share Galaxy S23 Ultra wants to share 1 video with you. Decline Accept	

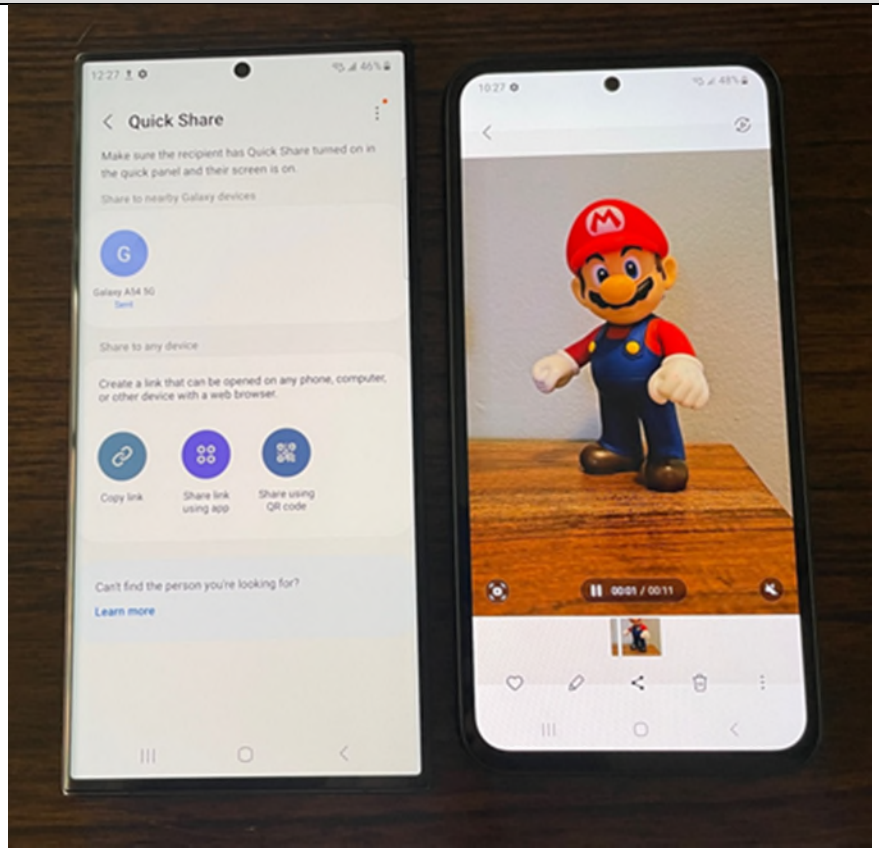
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

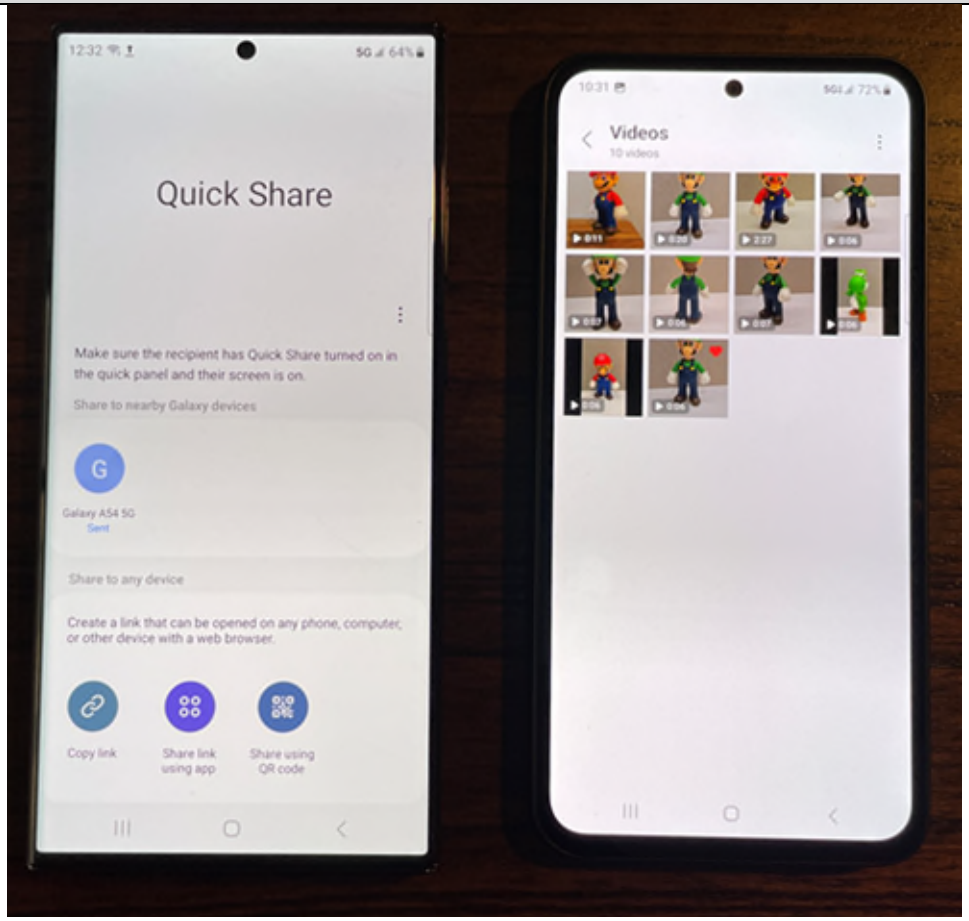
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 The Accused Samsung '815 Products also store video information after receiving it wirelessly over Bluetooth:

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

Video Information Transmitting Device (Samsung Galaxy S23 Ultra)	Video Information Receiving Device (Samsung Galaxy A54 5G)



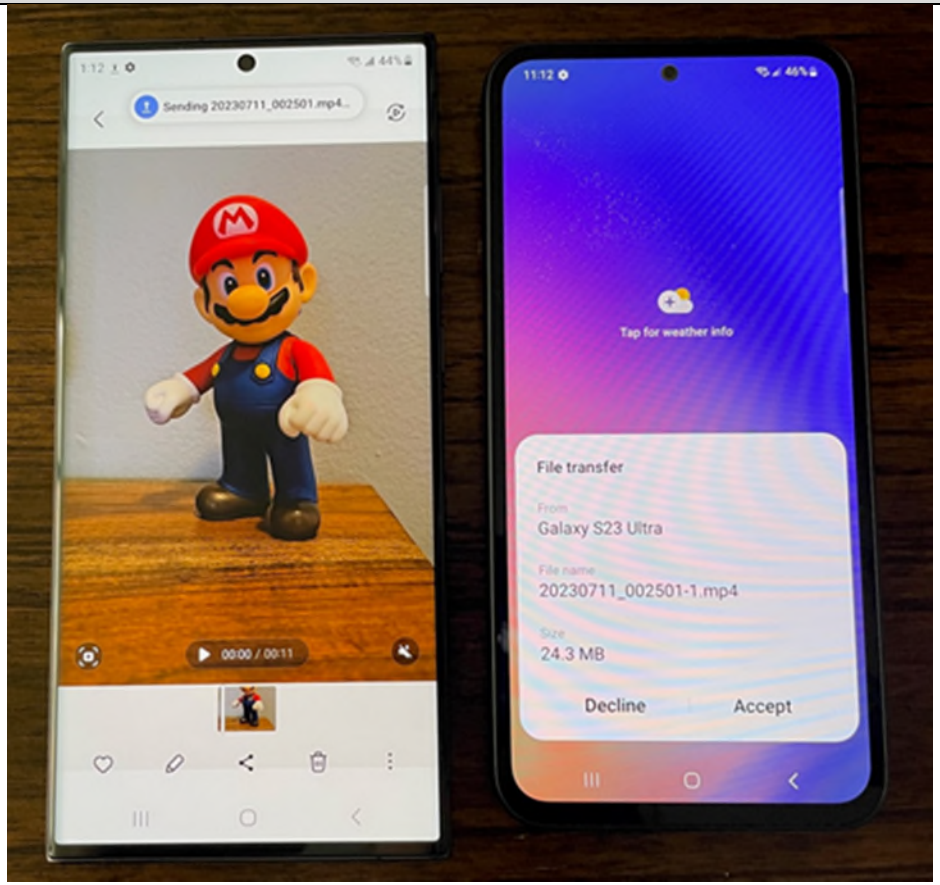
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

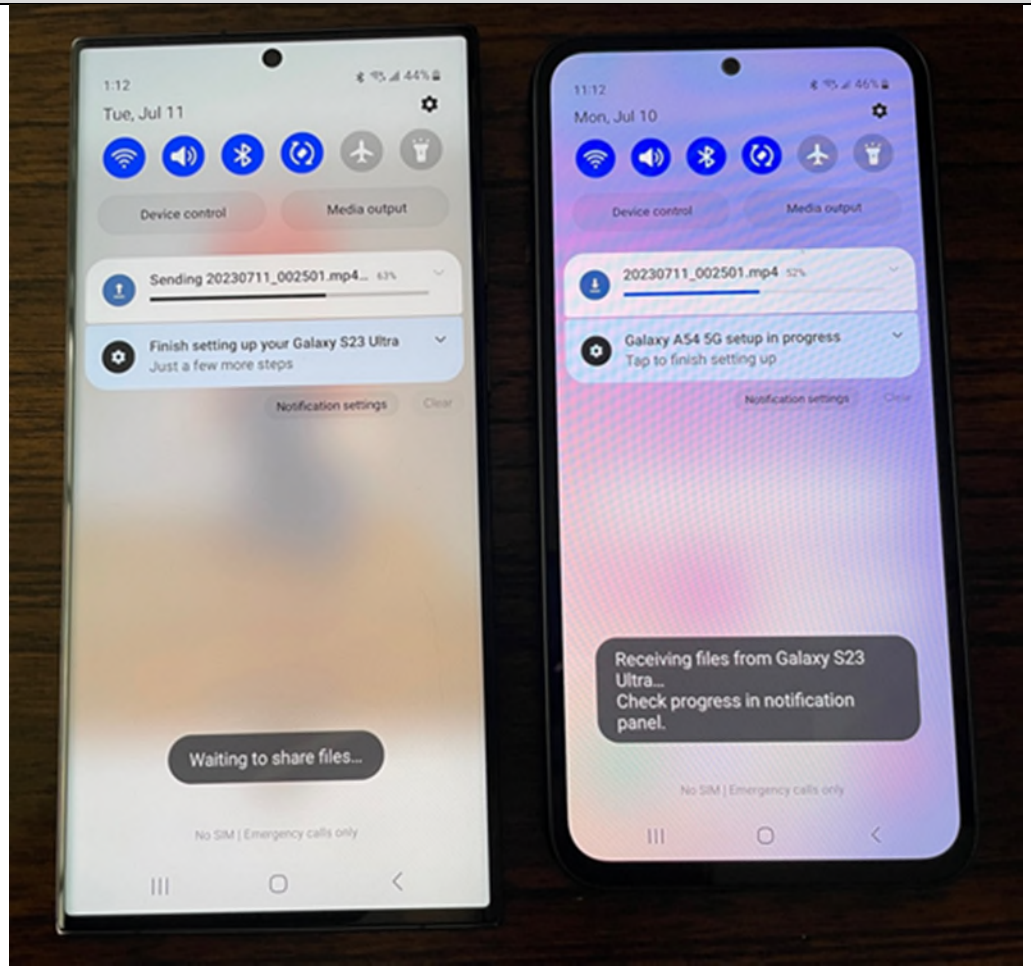
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

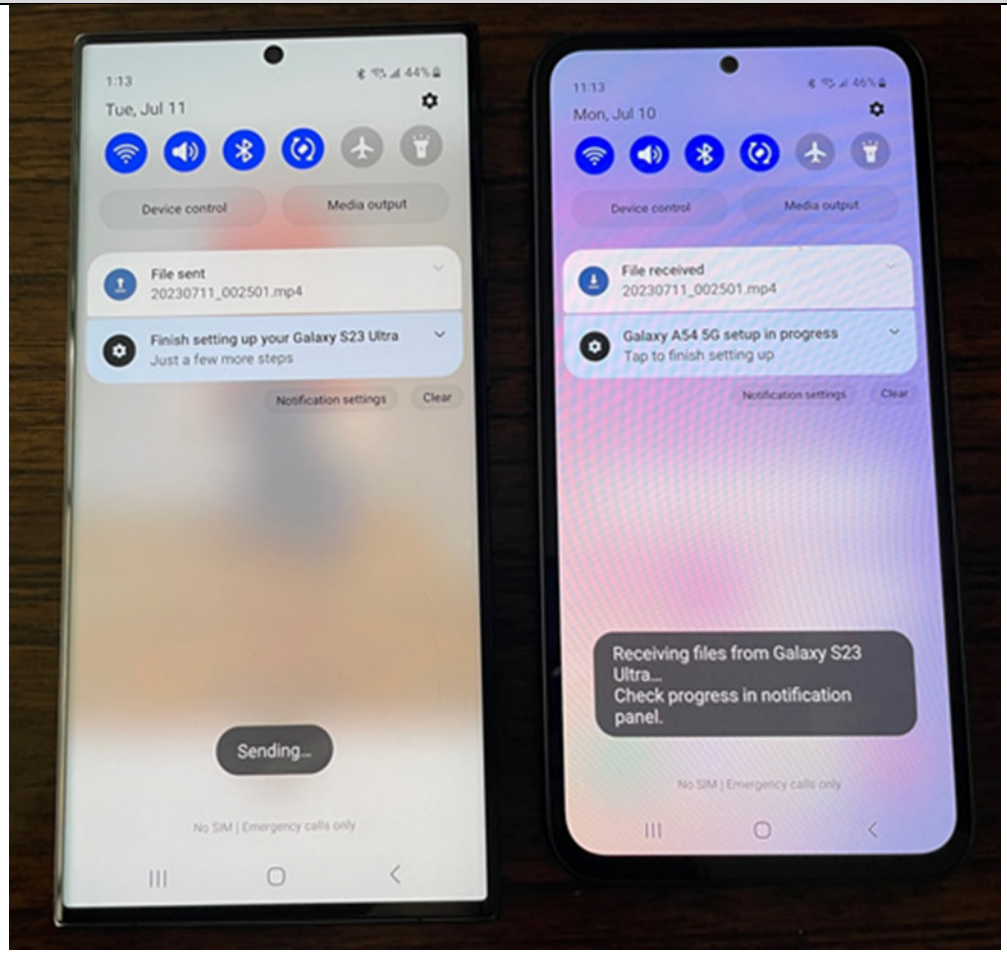
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

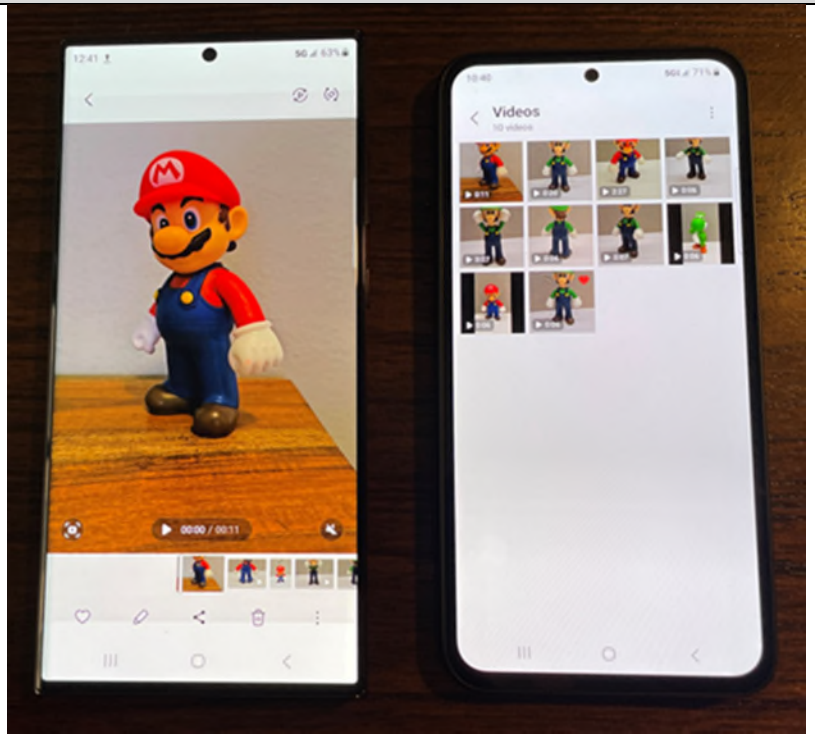
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

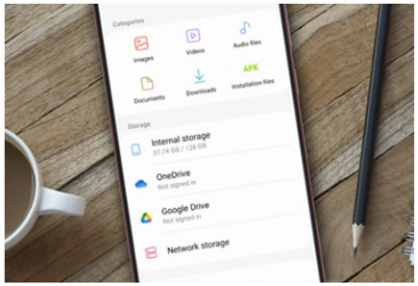
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

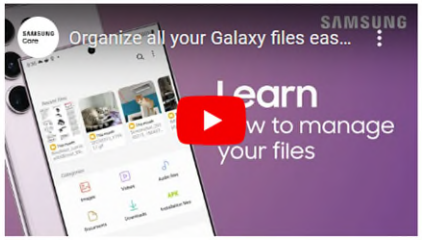
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

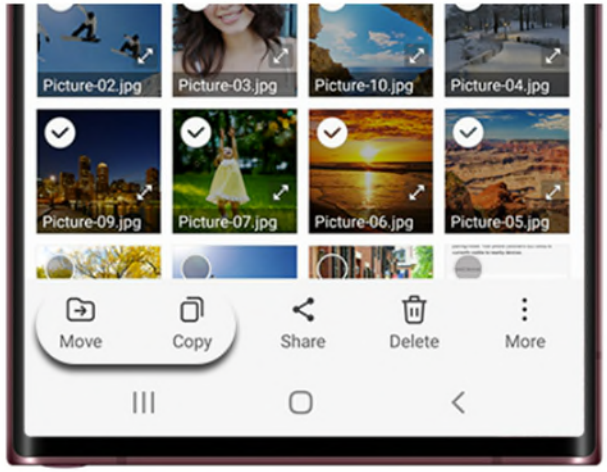
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	 *See also* Appendix 8 showing that the remaining Accused Samsung '815 Products operate in a similar manner and include a storage component (*e.g.*, memory) to store video information as viewed by Gallery or My Files. *See* https://www.samsung.com/us/support/answer/ANS00079026/.
[1.c] wherein at least some of the plurality of video information is associated with a user profile;	For each of the Accused Samsung '815 Products, at least some of the plurality of video information is associated with a user profile. For example, testing of the Accused Samsung '815 Products shows that at least some of the plurality of video information is associated with a user's profile associated with the Samsung account and is available under "My Files."

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

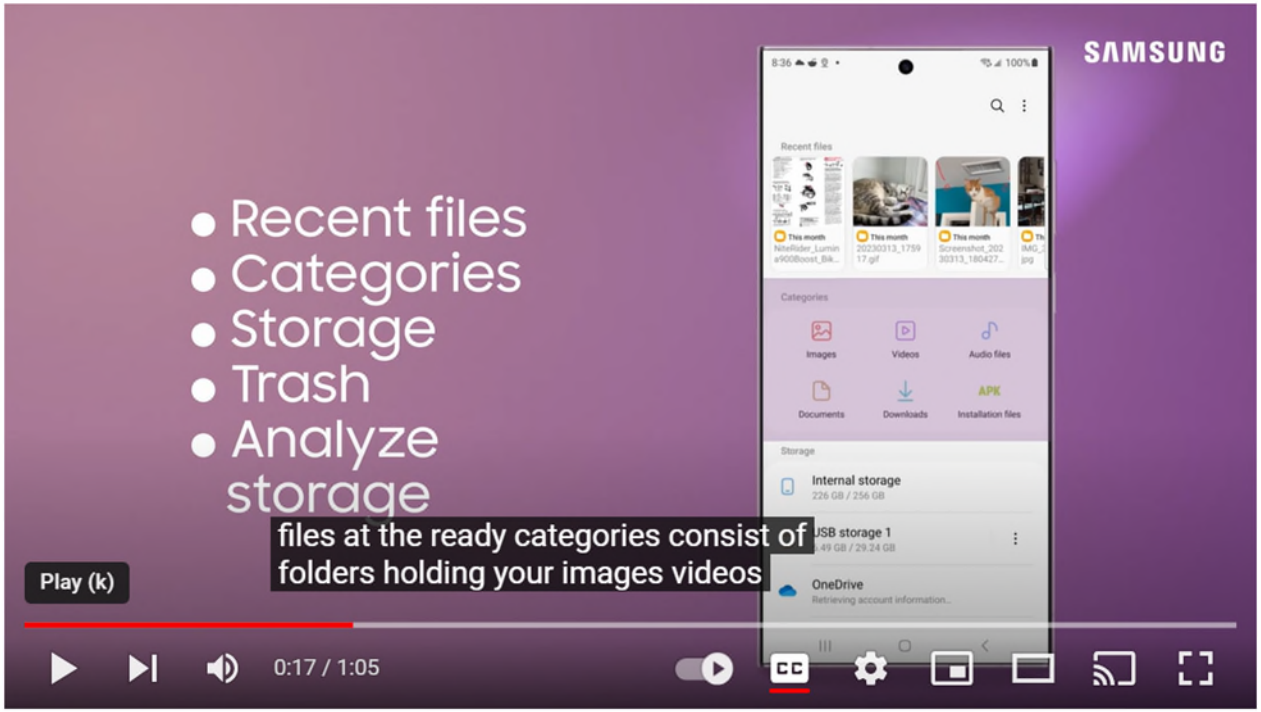
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Manage files on your Galaxy phone or tablet  Just like a PC, your Galaxy phone or tablet has a massive internal storage. You can easily copy or move these files to different locations with My Files. This includes Microsoft Word or Google documents, pictures, videos, audio files, and downloads. If you accumulate too many files in your internal memory, you can save room by moving them to an external storage system, such as a microSD card or a cloud service. Or, use Smart Switch to move your files to a new phone or tablet.

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

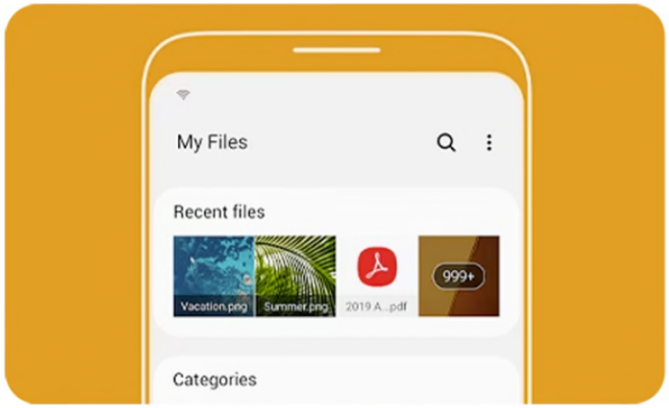
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Use My Files on your device The My Files app stores every file you have on your phone or tablet. It's like the File Explorer on a PC or Finder on Mac, where you can easily view and move photos, videos, music, documents, and more. You can also remove files from the My Files app if you no longer need them. The Trash feature in My Files should be on by default, but you should make sure it's turned on just in case. **Note:** Tablets do not have the Trash feature in My Files, so files can't be restored once they are deleted. 1. Navigate to and open the **My Files** app. It's usually in the Samsung folder. 2. Select your desired file category, such as Images, Videos, Audio files, Documents, Downloads, Installation files, Compressed, and Favorites. 3. If needed, select any additional folders that contain your desired files (i.e. Screenshots, etc.). Touch and hold the file(s) or folder(s) you want to move. 4. Tap **Copy** to create a copy of the files in a different storage area. Or, tap **Move** to completely remove the file and move it to a new location. 

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 5. Next, navigate to and select your desired destination: • **Internal storage:** Move the file(s) or folder(s) to a different location within the same internal storage. https://www.samsung.com/us/support/answer/ANS00076845/

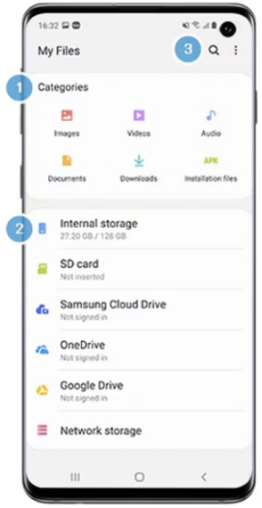
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement



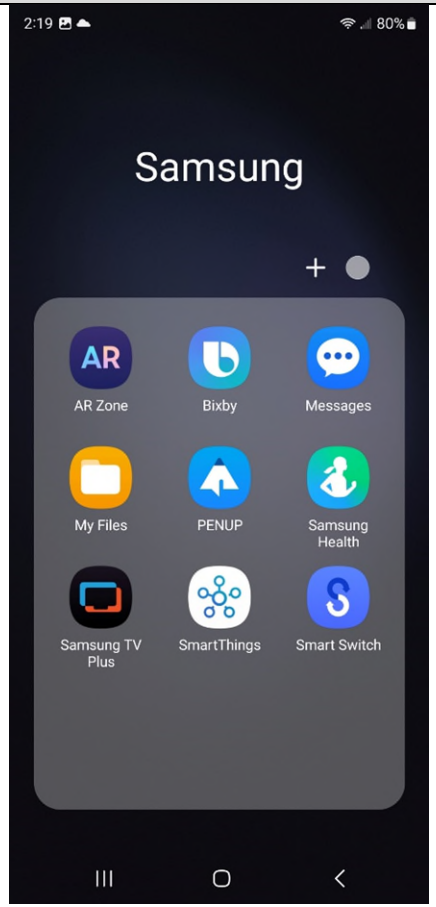
https://www.youtube.com/watch?v=bt1QjxjwtWU

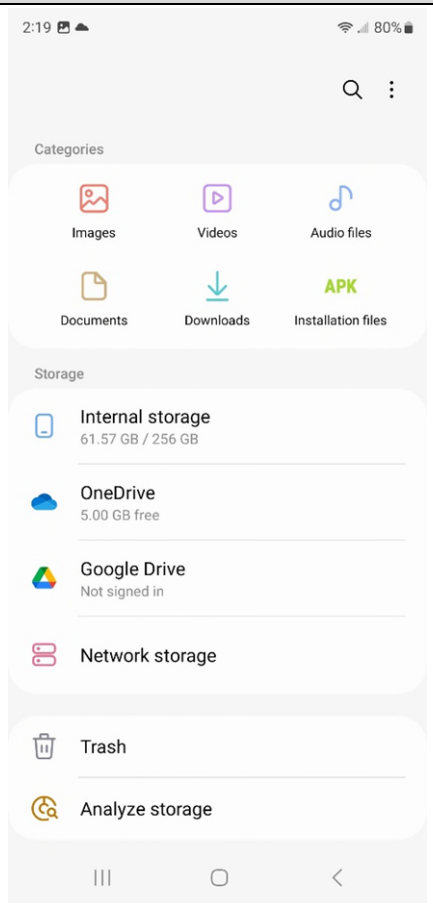
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	# How to use My Files  The My Files folder comes pre-installed on most Galaxy devices. This folder helps you manage and organise any file stored on your device or other locations (for example Samsung Cloud, Google Drive or an SD card). Using My Files, you can view your images, videos, audio files and documents, move files to and from internal and external storage and remove data. To find the My Files folder, search using the app search or in the default Samsung folder on your apps screen. https://www.samsung.com/uk/support/mobile-devices/how-to-use-my-files/

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Locate a file  1 Categories My Files sorts your files into categories, such as Images, Videos, Audio and Downloads. If you have recently downloaded a file and are trying to locate it, tap "Downloads" to access or delete the file. https://www.samsung.com/uk/support/mobile-devices/how-to-use-my-files/ Specifically, the screenshots below show the "My Files" folder associated with the user profile including at least some of the plurality video information in the "Downloads" or "Videos" folder. **Galaxy S23 Ultra:**

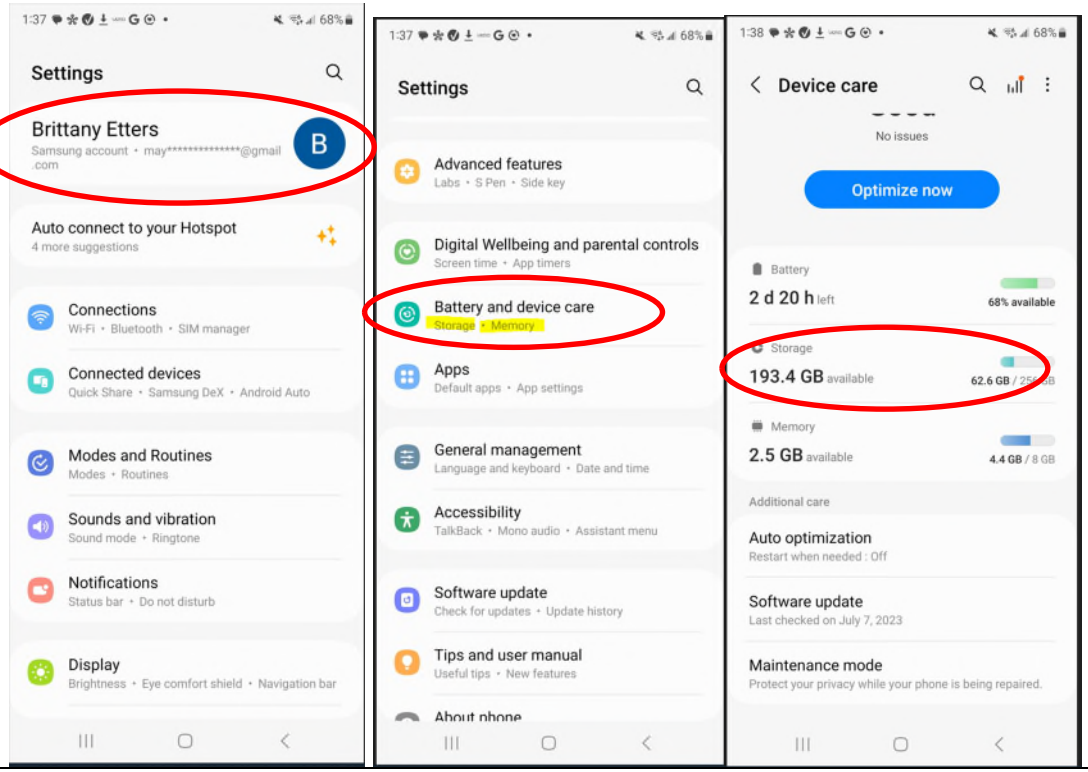
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement



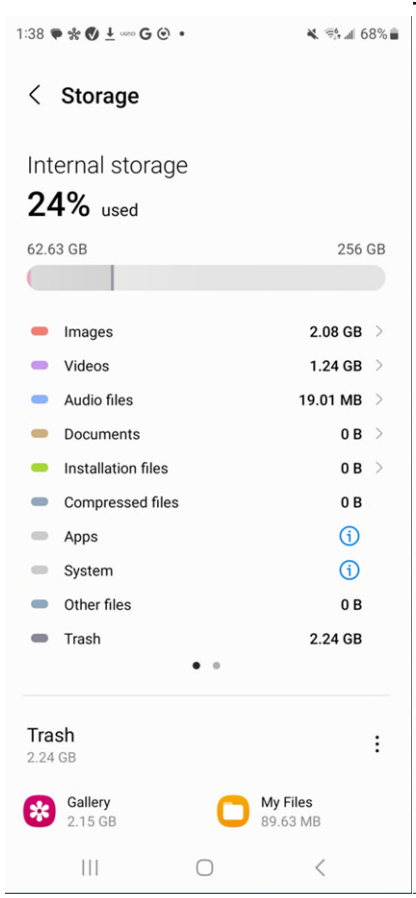
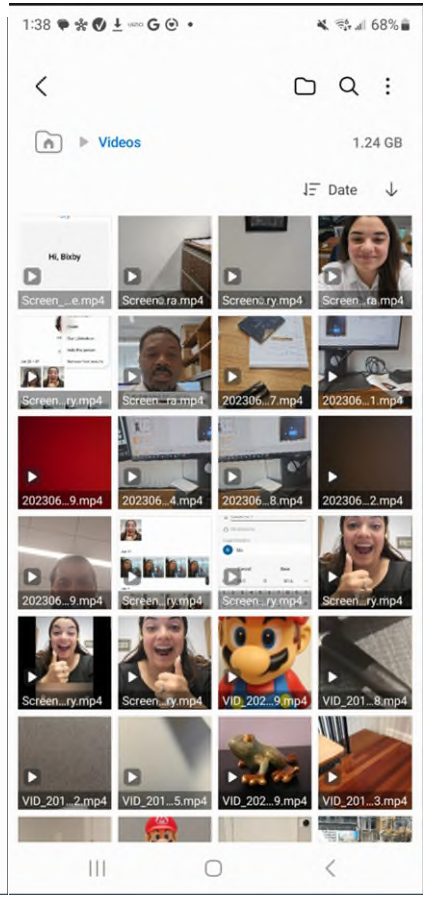


As an additional example, the "Settings" screen confirms that the plurality of video information is associated with a user profile linked to "Samsung account" of "Brittany Etters," with a specific email address. Specifically, the Settings screen associated with all the settings and the user profile of said Samsung Account includes the menu option of "Battery & Device Care," which is associated with "Storage," which is associated with "Videos," which when selected navigates the user to the stored video information.

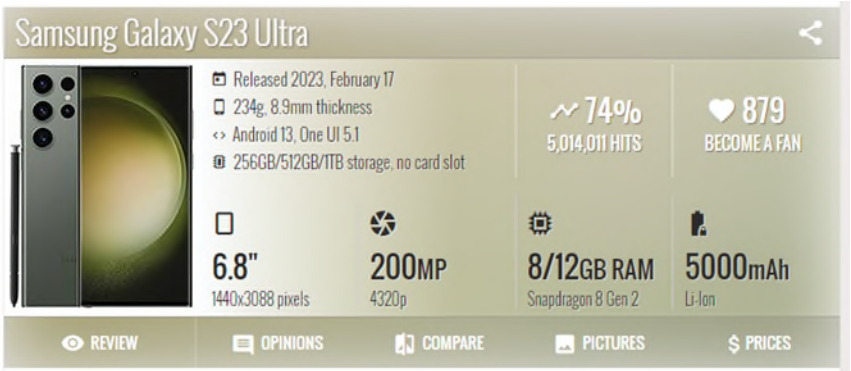
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

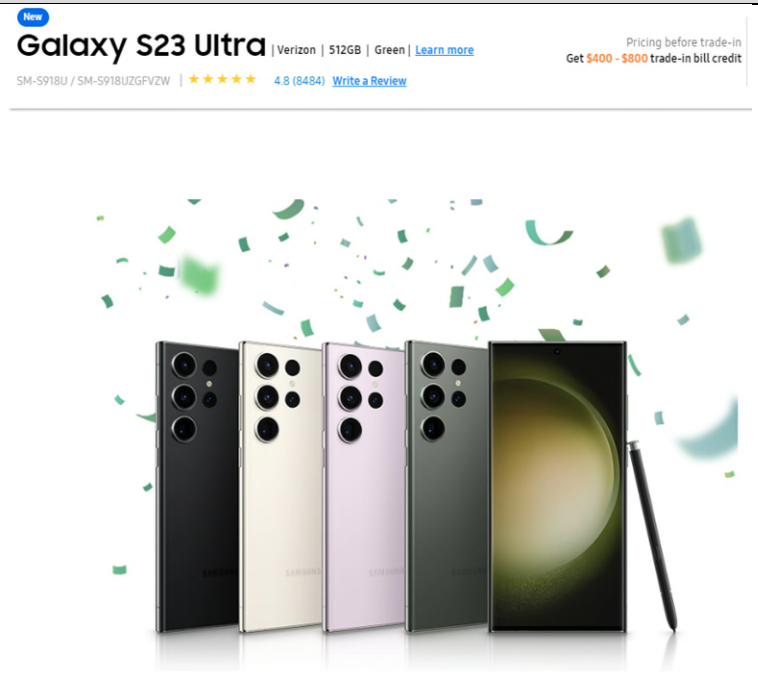
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Galaxy S23 Ultra: 

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

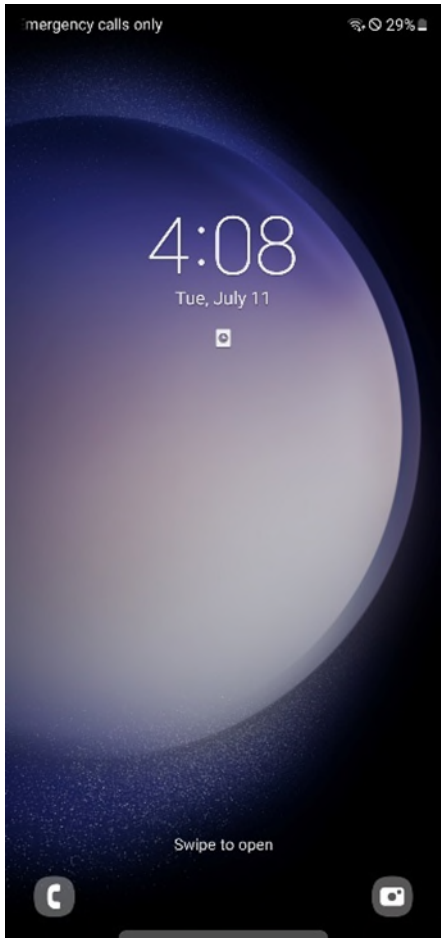
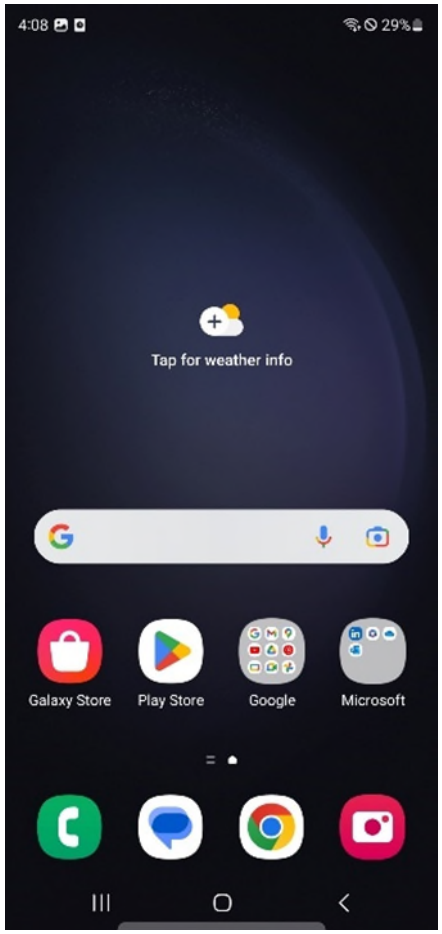
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	  *See also* Appendix 8 showing that the remaining Accused Samsung '815 Products operate in a similar manner (*e.g.*, including Gallery application that associates video with a user profile in storage). *See* https://www.samsung.com/us/support/answer/ANS00079026/.

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
[1.d] a display; and	Each of the Accused Samsung '815 Products comprises a display. For example, each of the Accused Samsung '815 Products includes a display module including a touchscreen. *See*, for example: **Galaxy S23 Ultra:**  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

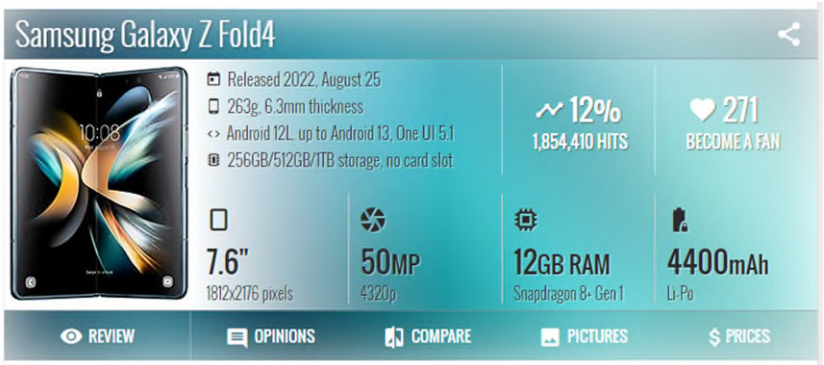
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Galaxy S23 Ultra technical specifications; https://www.samsung.com/us/smartphones/galaxy-s23-ultra/buy/galaxy-s23-ultra-512gb-verizon-sm-s918uzgfvzw/?modelCode=SM-S918UZGFXAU; https://www.gsmarena.com/samsung_galaxy_s23_ultra-12024.php

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	  Screenshots of home screen.

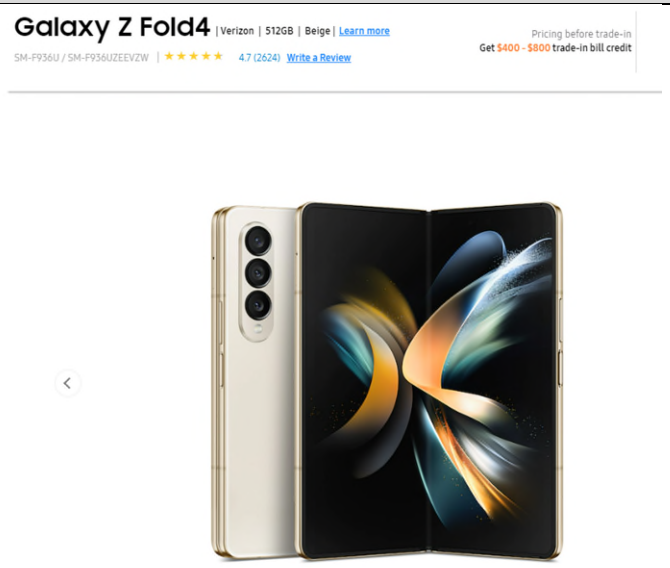
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Galaxy Z Fold4:

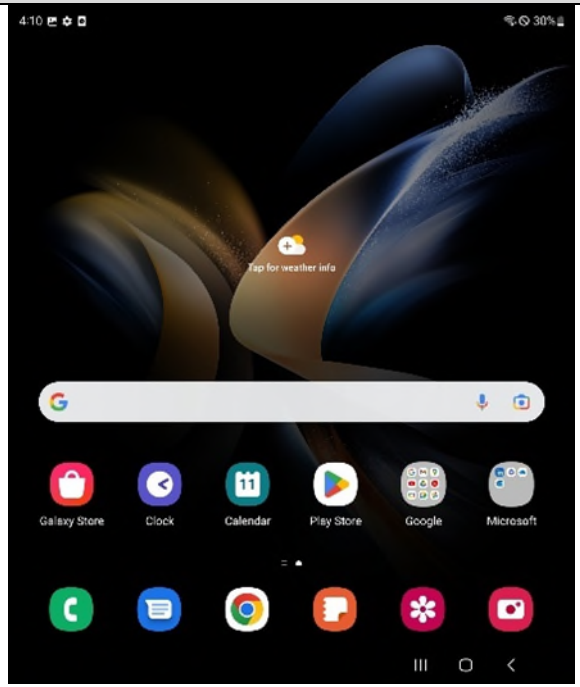


DISPLAY	Type	Foldable Dynamic AMOLED 2X, 120Hz, HDR10+, 1200 nits (peak)
	Size	7.6 inches, 183.2 cm^2 (~90.9% screen-to-body ratio)
	Resolution	1812 x 2176 pixels (~373 ppi density)
		Cover display:
		Dynamic AMOLED 2X, 120Hz, Corning Gorilla Glass Victus+
		6.2 inches, 904 x 2316 pixels, 23.1:9 ratio

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

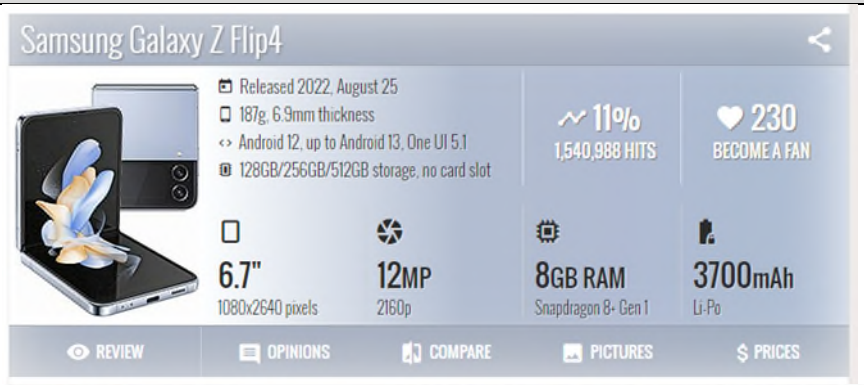
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Galaxy Z Fold4 technical specifications; https://www.samsung.com/us/smartphones/galaxy-z-fold4/buy/galaxy-z-fold4-512gb-att-sm-f936uzeeatt/; https://www.gsmarena.com/samsung_galaxy_z_fold4-11737.php :

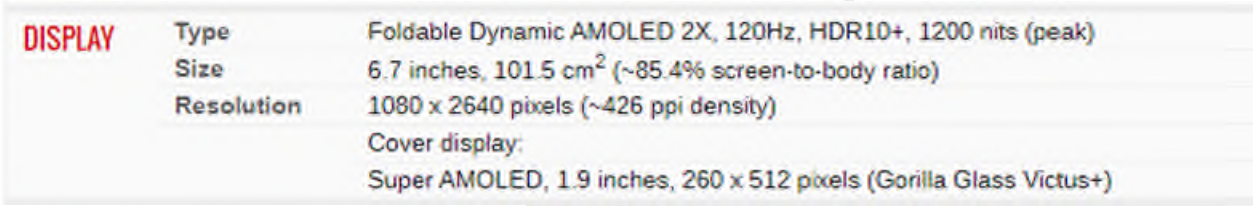
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

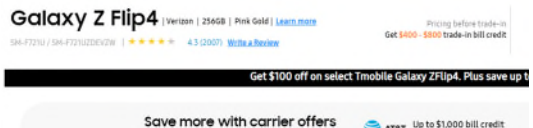
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	  Screenshots of home screen. **Galaxy Z Flip4:**

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement





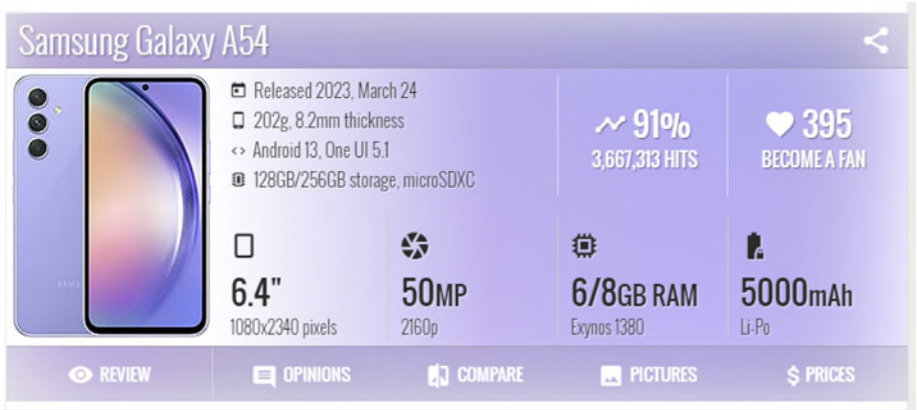




U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	Galaxy Z Flip4 technical specifications; https://www.samsung.com/us/smartphones/galaxy-z-flip4/buy/galaxy-z-flip4-256gb-t-mobile-sm-f721uzdexau/; https://www.gsmarena.com/samsung_galaxy_z_flip4-11538.php  Screenshots of home screen.

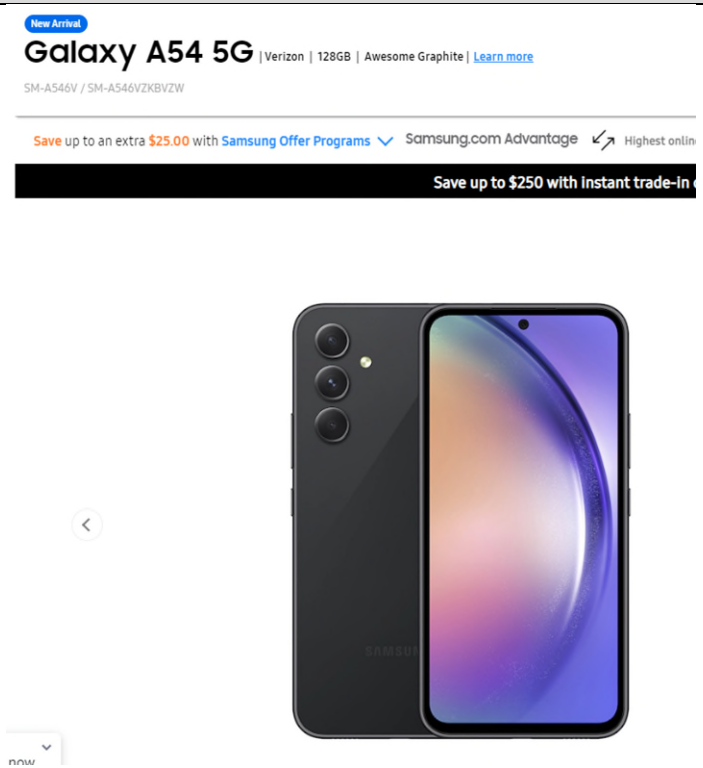
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

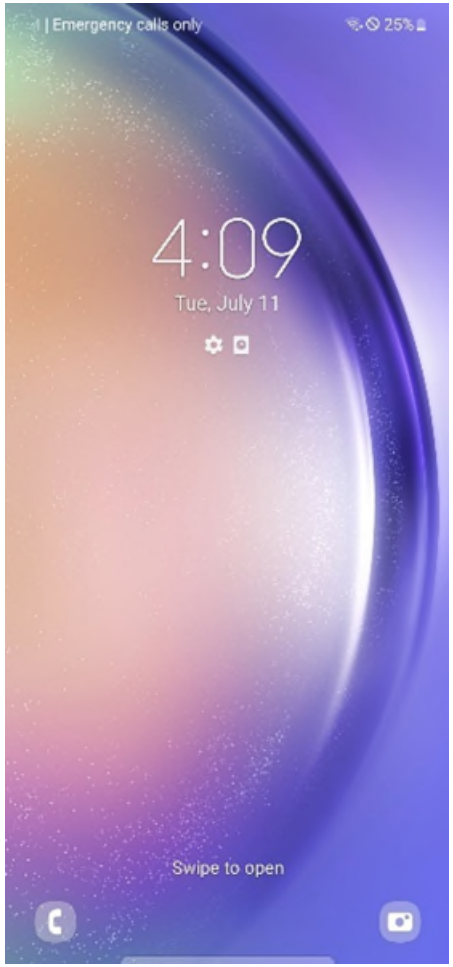
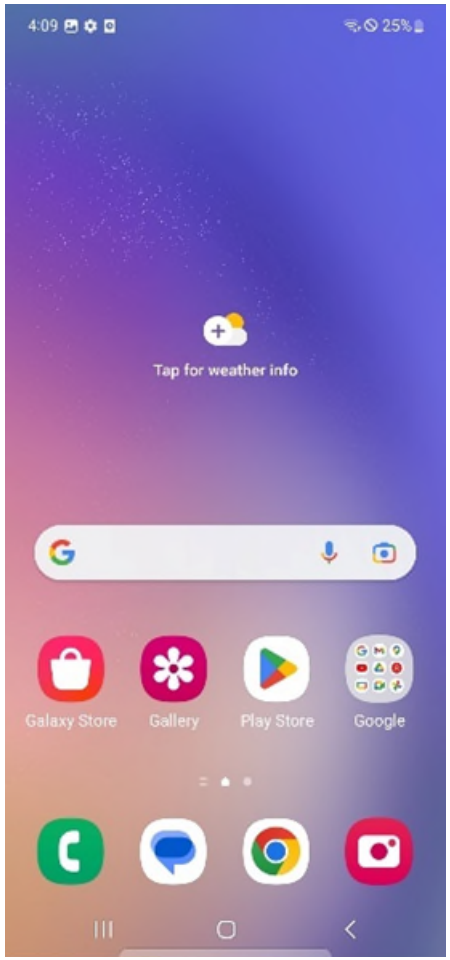
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Galaxy A54:



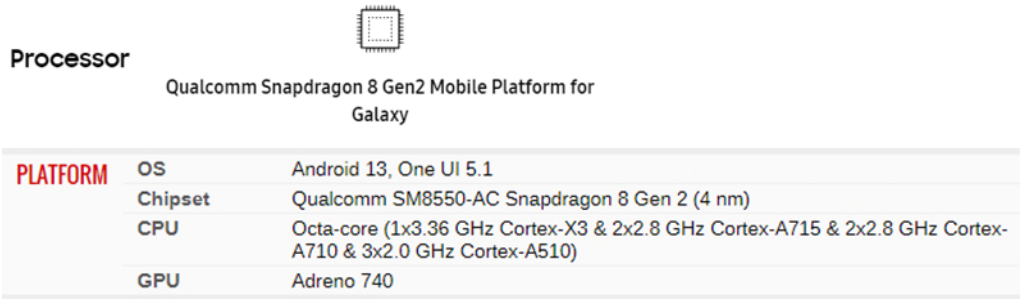
DISPLAY		
	Type	Foldable Dynamic AMOLED 2X, 120Hz, HDR10+, 1200 nits (peak)
	Size	7.6 inches, 183.2 cm^2 (~90.9% screen-to-body ratio)
	Resolution	1812 x 2176 pixels (~373 ppi density)
		Cover display:
		Dynamic AMOLED 2X, 120Hz, Corning Gorilla Glass Victus+
		6.2 inches, 904 x 2316 pixels, 23.1:9 ratio

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

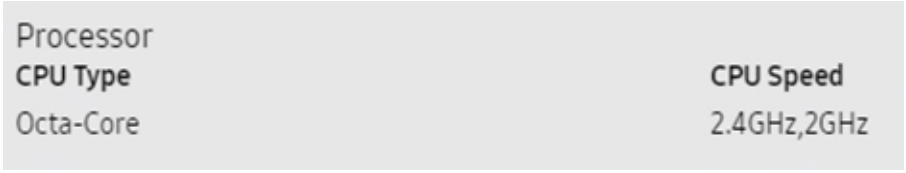
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Galaxy A54 5G technical specifications; https://www.samsung.com/us/mobile/phones/galaxy-a54/buy/; https://www.gsmarena.com/samsung_galaxy_a54-12070.php

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	  Screenshots of home screen. *See also* Appendix 8 showing that the remaining Accused Samsung '815 Products include a display.

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

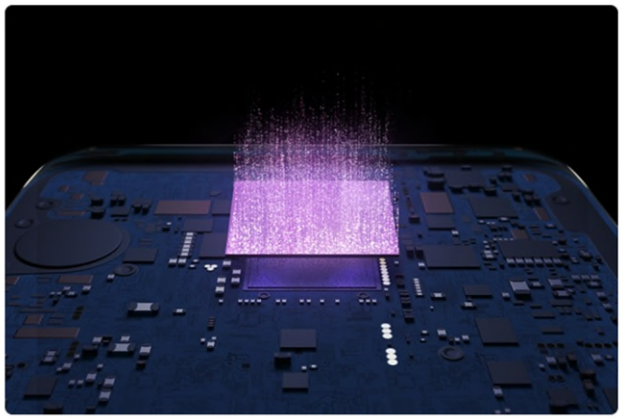
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
[1.e] a processor for controlling the display to display:	Each of the Accused Samsung '815 Products comprises a processor for controlling the display to display. For example, each of the Accused Samsung '815 Products includes a system on a chip (SoC) including a CPU and/or graphics processor that controls the 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.  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 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	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. 

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

Performance



Impressive speed. Powerful processor

The powerful Octa-core processor opens up a new range of possibilities with heightened performance and capacity.

PLATFORM	OS	Android 13, One UI 5.1
	Chipset	Exynos 1380 (5 nm)
	CPU	Octa-core (4x2.4 GHz Cortex-A78 & 4x2.0 GHz Cortex-A55)
	GPU	Mali-G68 MP5

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.

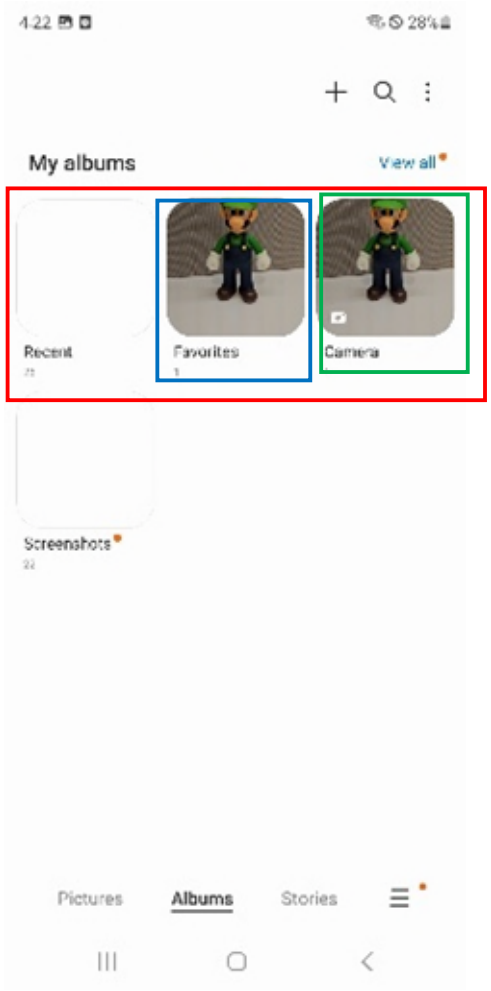
In addition, the AIDA64 Reports and tech specs show that the Accused Samsung '815 Products contain one or more processors.

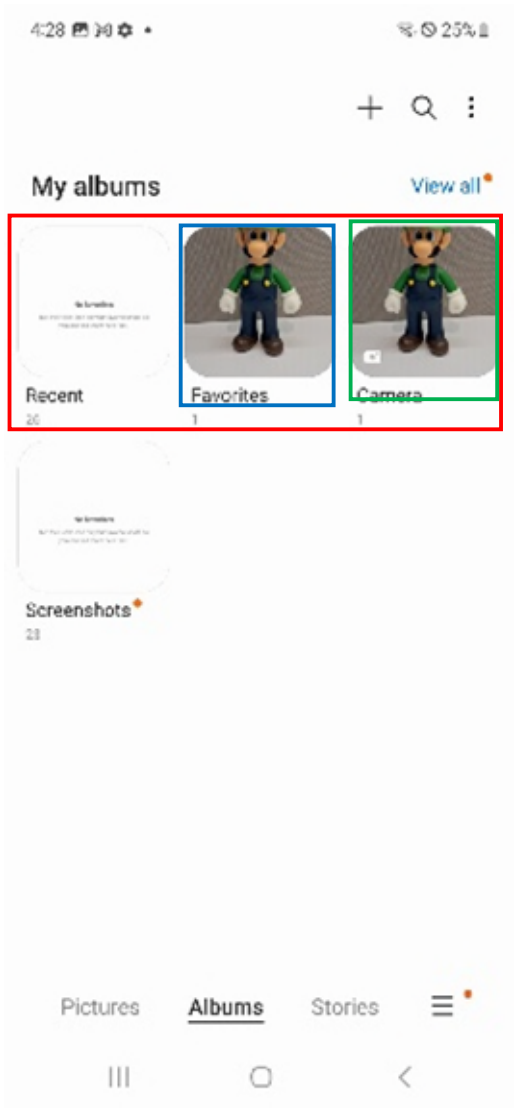
Product	AIDA 64 Report- Processor

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement	
	Galaxy S23 Ultra	SoC Model: Qualcomm Snapdragon 8 Gen 2 (SM8550) Core Architecture: 3x ARM Cortex-A510 @ 2016 MHz 2x ARM Cortex-A715 @ 2803 MHz 2x ARM Cortex-A710 @ 2803 MHz ARM Cortex-X3 @ 3360 MHz Manufacturing Process: 4 nm Instruction Set: 64-bit ARMv9-A CPU Revision: r1p0 CPU Cores: 8 CPU Clock Range: 307 - 3360 MHz
	Galaxy Z Fold4	SoC Model: Qualcomm Snapdragon 8+ Gen 1 (SM8475) Core Architecture: 4x ARM Cortex-A510 @ 2016 MHz 3x ARM Cortex-A710 @ 2745 MHz ARM Cortex-X2 @ 3187 MHz Manufacturing Process: 4 nm Instruction Set: 64-bit ARMv9-A CPU Revision: r2p0 CPU Cores: 8 CPU Clock Range: 300 - 3187 MHz
	Galaxy Z Flip4	SoC Model: Qualcomm Snapdragon 8+ Gen 1 (SM8475) Core Architecture: 4x ARM Cortex-A510 @ 2016 MHz 3x ARM Cortex-A710 @ 2745 MHz ARM Cortex-X2 @ 3187 MHz Manufacturing Process: 4 nm Instruction Set: 64-bit ARMv9-A CPU Revision: r2p0 CPU Cores: 8 CPU Clock Range: 300 - 3187 MHz

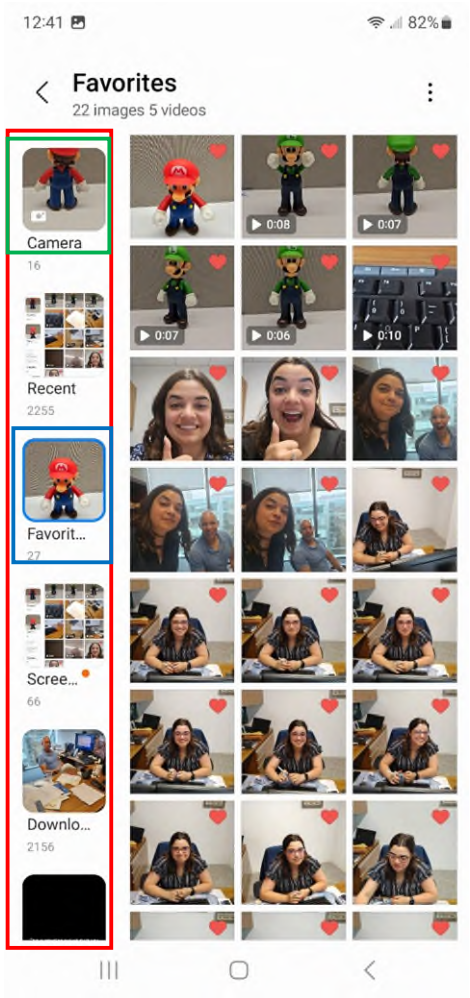
<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>
<table>
<tr><td>Galaxy A54 5G</td><td>Core Architecture: 4x ARM Cortex-A55 @ 2002 MHz
4x ARM Cortex-A78 @ 2400 MHz
Instruction Set: 64-bit ARMv8-A
CPU Revision: r1p1
CPU Cores: 8
CPU Clock Range: 533 - 2400 MHz</td></tr>
</table>
See also Appendix 8 showing that the remaining Accused Samsung '815 Products include a chipset with one or more processors that executes software (e.g., operating system including code for Gallery application) for controlling a display. See https://www.samsung.com/us/support/answer/ANS00079026/.
</td></tr>
<tr><td>[1.f] a first area including a first character associated with a first group of video information for a first classification and a second character associated with a second group of video information for a second classification different from the first classification,</td><td>
For each of the Accused Samsung '815 Products, the processor controls the display to display a first area including a first character associated with a first group of video information for a first classification and a second character associated with a second group of video information for a second classification different from the first classification.

For example, testing of the Accused Samsung '815 Products confirms that each of the Accused Samsung '815 Products includes a Gallery application that shows a first area (the "My albums" tab) that includes a first character (the word "Favorites," which includes at least one character) which corresponds to a first group of video information for a first classification (videos that have been favorited) and a second character (the word "Camera," which includes at least one character) which corresponds to a second group of video information for a second classification different from the first classification (all videos stored locally on the apparatus). The first classification corresponding to "Favorites" and the second classification corresponding to "Camera."
<table>
<tr><th>Product</th><th>First Area with First Character and Second Character</th></tr>
</table>
</td></tr>
</table>

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
	Samsung Galaxy S23 Ultra	 Red rectangle includes "first area", Blue rectangle includes "first character", Green rectangle includes "second character."	

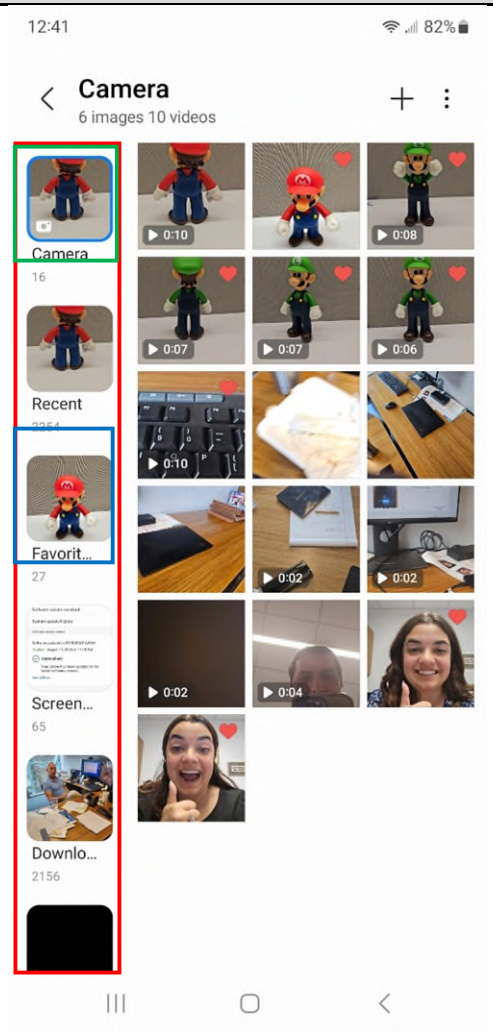
	Samsung Galaxy A54 5G	 Red rectangle includes "first area", Blue rectangle includes "first character", Green rectangle includes "second character."	

<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>As an additional example, testing of the Accused Samsung '815 Products confirms that each of the Accused Samsung '815 Products includes a UI that shows a first area (the thumbnails in the left column) that includes a first character (the word "Favorites," which includes at least one character) which corresponds to a first group of video information for a first classification (videos that have been favorited) and a second character (the word "Camera," which includes at least one character) which corresponds to a second group of video information for a second classification different from the first classification (all videos stored locally on the apparatus).<table><tr><th>Product</th><th>First Area with First Character and Second Character</th></tr></table></td></tr>
</table>

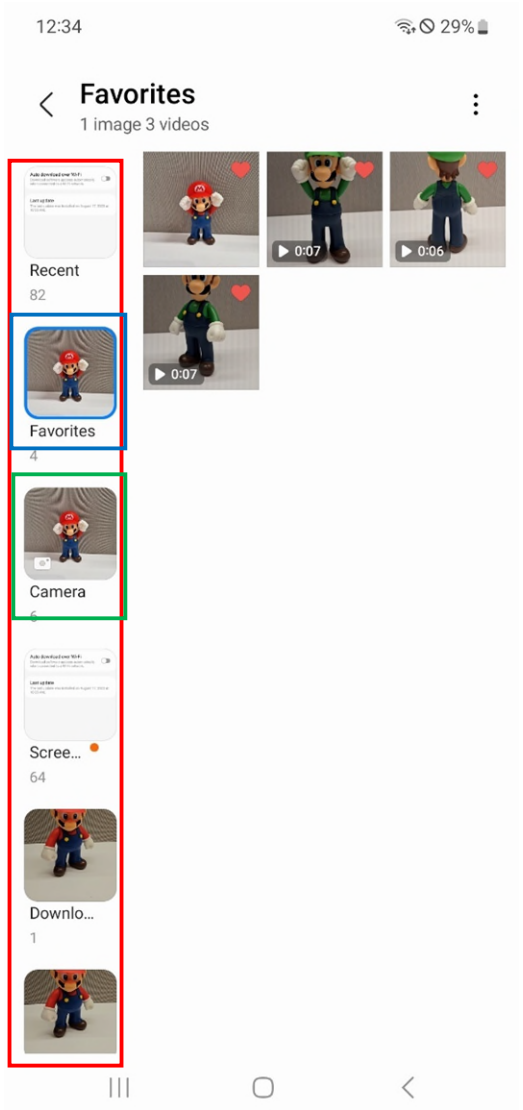
	Samsung Galaxy S23 Ultra		

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

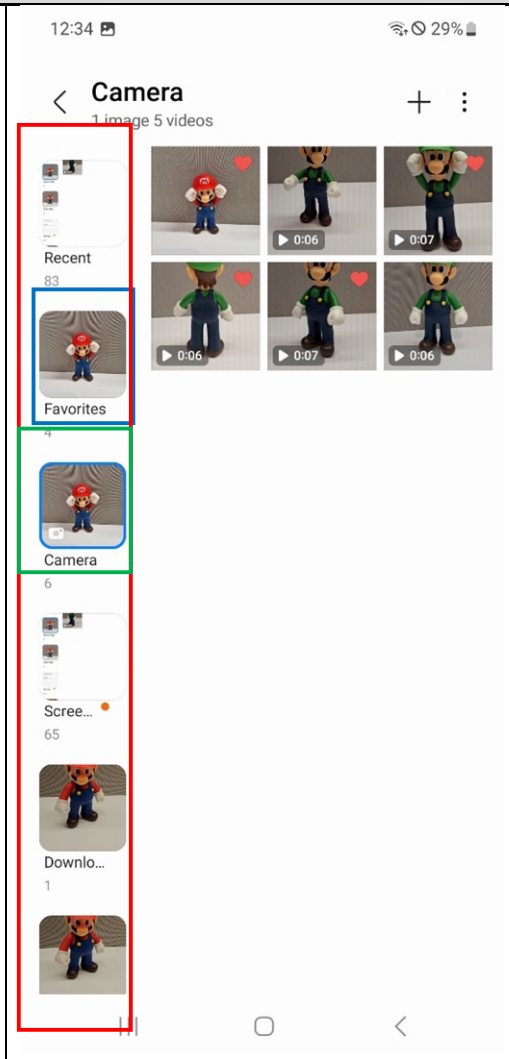
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement



U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
		Red rectangle includes "first area", Blue rectangle includes "first character", Green rectangle includes "second character."	

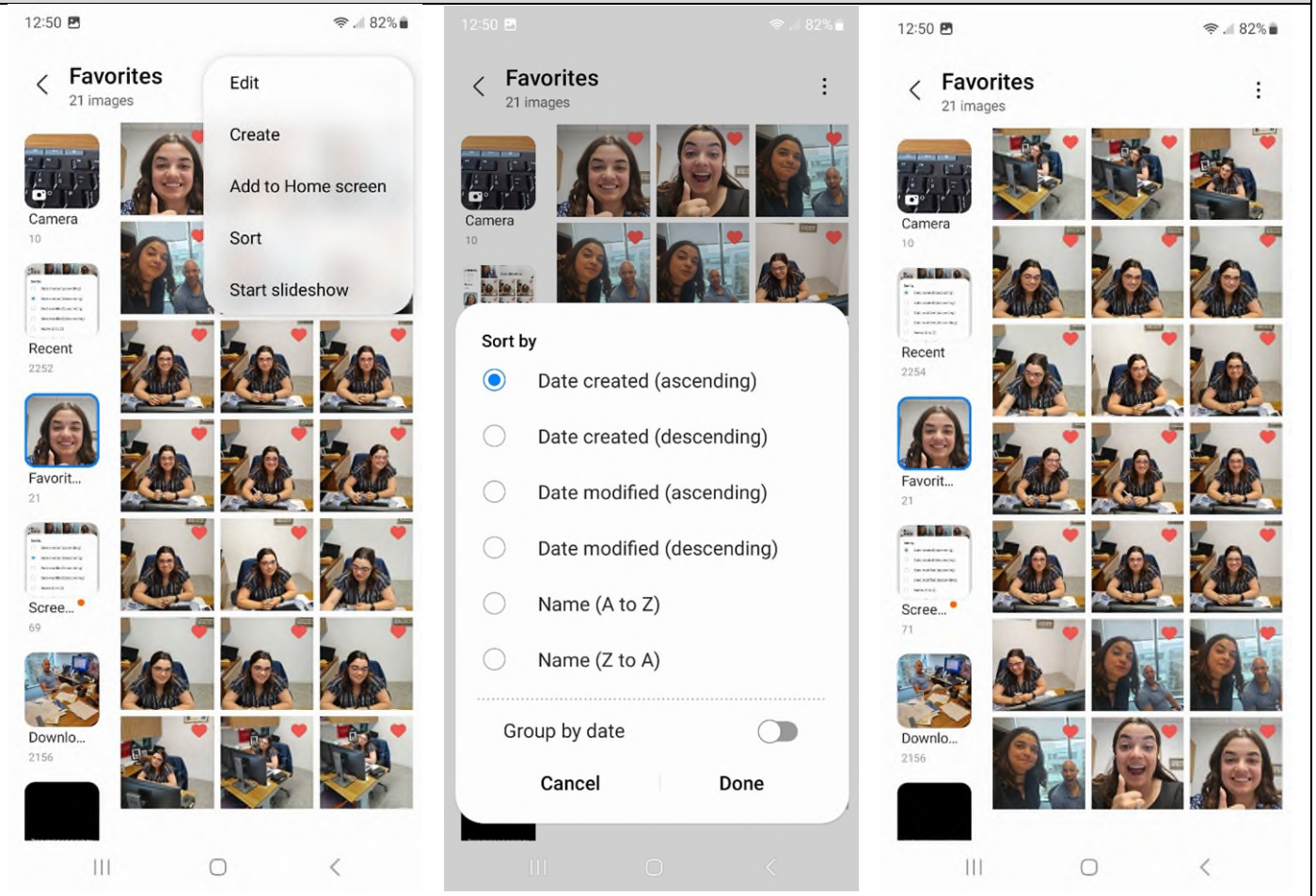
	Samsung Galaxy A54 5G		

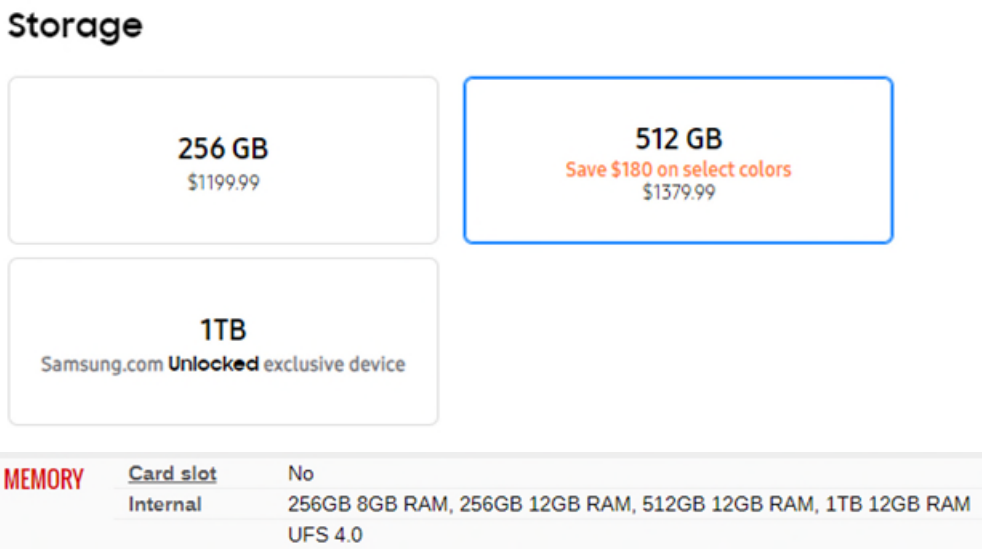
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

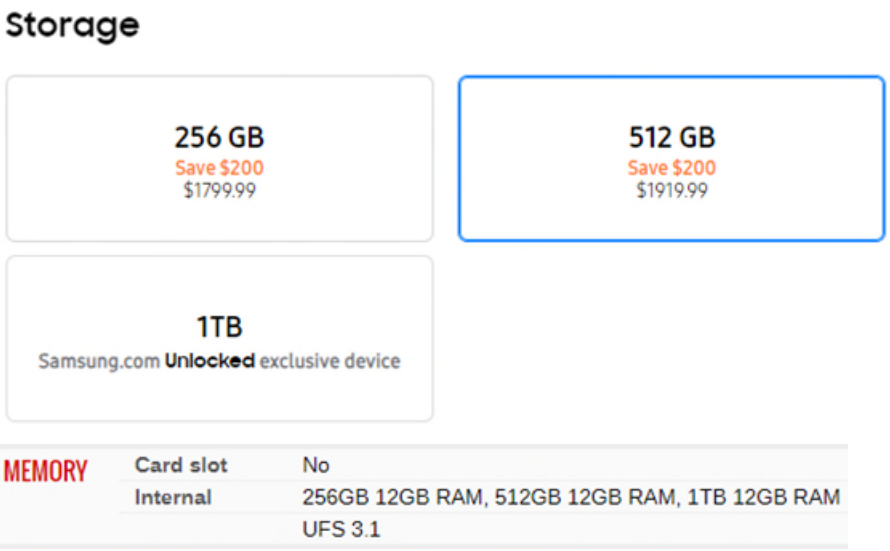


U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	<table><tr><td></td><td>Red rectangle includes "first area", Blue rectangle includes "first character", Green rectangle includes "second character."</td></tr></table> *See also* Appendix 8 showing that the remaining Accused Samsung '815 Products also include a Gallery application. *See* https://www.samsung.com/us/support/answer/ANS00079026/.
[1.g] the first group of video information being configured to allow a user to edit,	For each of the Accused Samsung '815 Products, the first group of video information is configured to allow a user to edit. For example, testing of the Accused Samsung '815 Products confirms that the first group of video information (the "favorites" album) is configured to allow a user to edit, for example, by selecting "Edit" or by selecting "Sort" and selecting one or more options for sorting, which would edit the order in which the first group of video information is being configured to allow a user to edit.

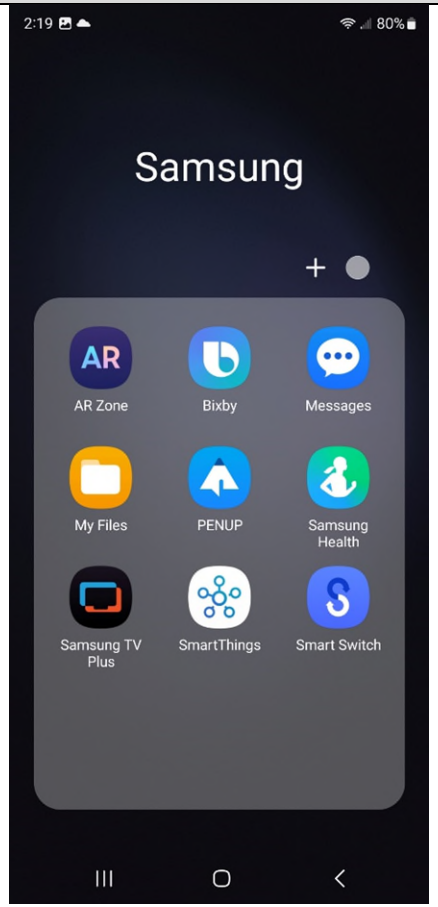
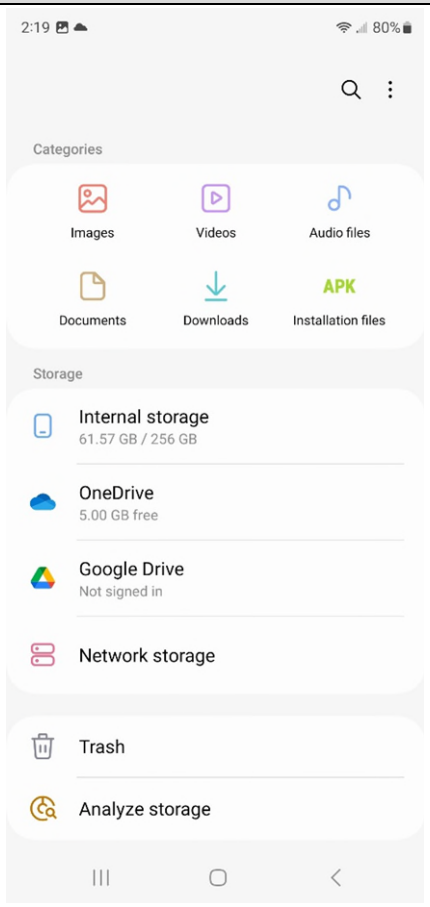
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Samsung Galaxy S23 Ultra

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	See also Appendix 8 showing that the remaining Accused Samsung '815 Products also include a Gallery application. *See* https://www.samsung.com/us/support/answer/ANS00079026/.
[1.h] wherein the first group of video information and the second group of video information are part of the plurality of stored video information, and	For each of the Accused Samsung '815 Products, the first group of video information and the second group of video information are part of the plurality of stored video information. The technical specifications of each device confirm that local storage may be used for videos:  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.

U.S. Patent No. 11,017,815	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. Further, testing of the Accused Samsung '815 Products confirms that first group of video information and the second group of video information are part of the plurality of stored video information as shown by "My Files" and "Settings" menu where it shows that the videos are stored within "Internal Storage":

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

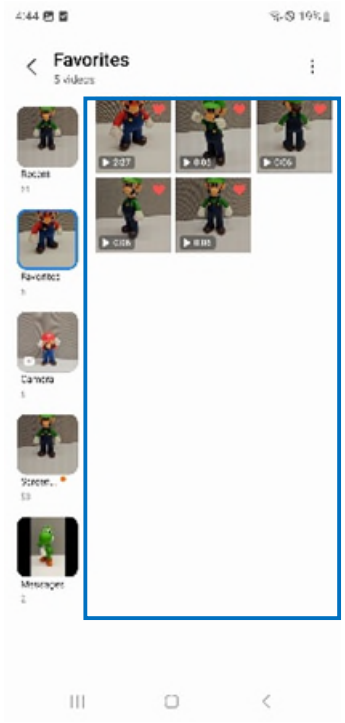
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

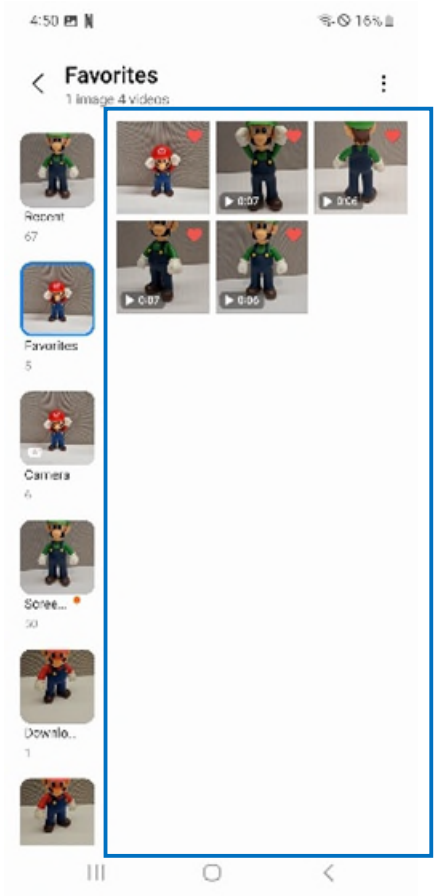
<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>See also Appendix 8 showing that the remaining Accused Samsung '815 Products also include a Gallery application and memory for storing video information. See https://www.samsung.com/us/support/answer/ANS00079026/.</td></tr>
<tr><td>[1.i] a second area displaying thumbnails corresponding to at least a portion of the plurality of stored video information,</td><td>For each of the Accused Samsung '815 Products, the processor controls the display to display a second area displaying thumbnails corresponding to at least a portion of the plurality of stored video information.

For example, testing of the Accused Samsung '815 Products confirms that each of the Accused Samsung '815 Products includes a Gallery application that shows a second area (for example the "favorites" album) that displays thumbnails corresponding to at least a portion of the plurality of stored video information (i.e. thumbnails of at least some videos within the "favorites" album).

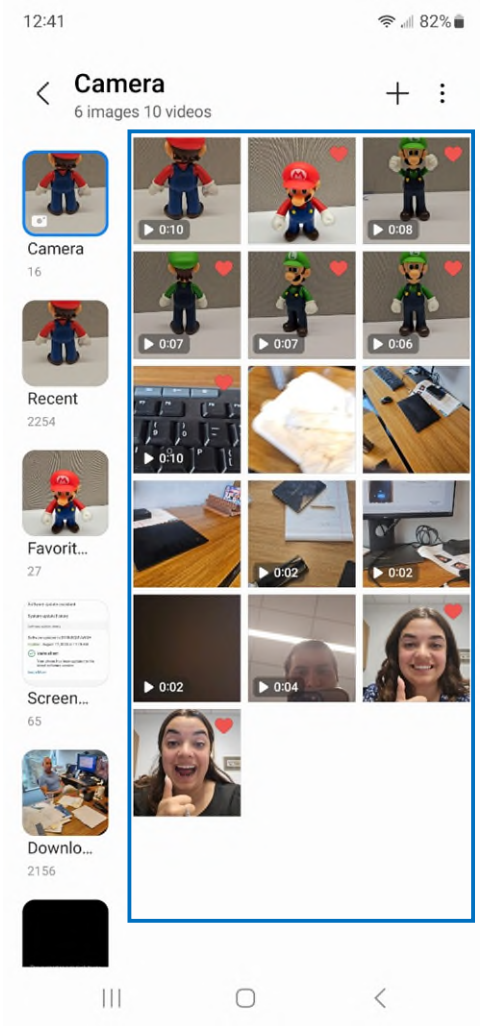
<table>
<tr><th>Product</th><th>Second area</th></tr>
</table>
</td></tr>
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APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

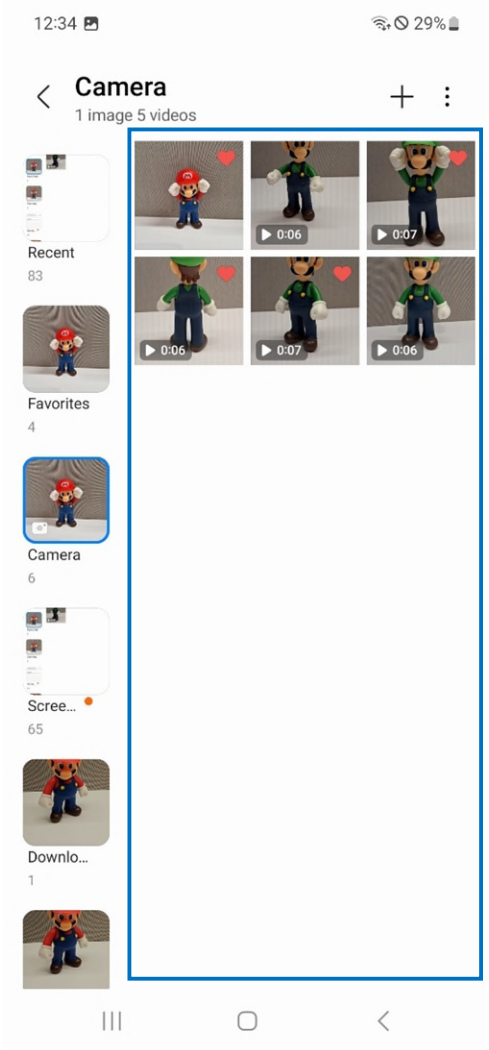
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
	Samsung Galaxy S23 Ultra		

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**		
	Samsung Galaxy A54 5G:	 (Second area (shown in blue) when showing Favorites album)	

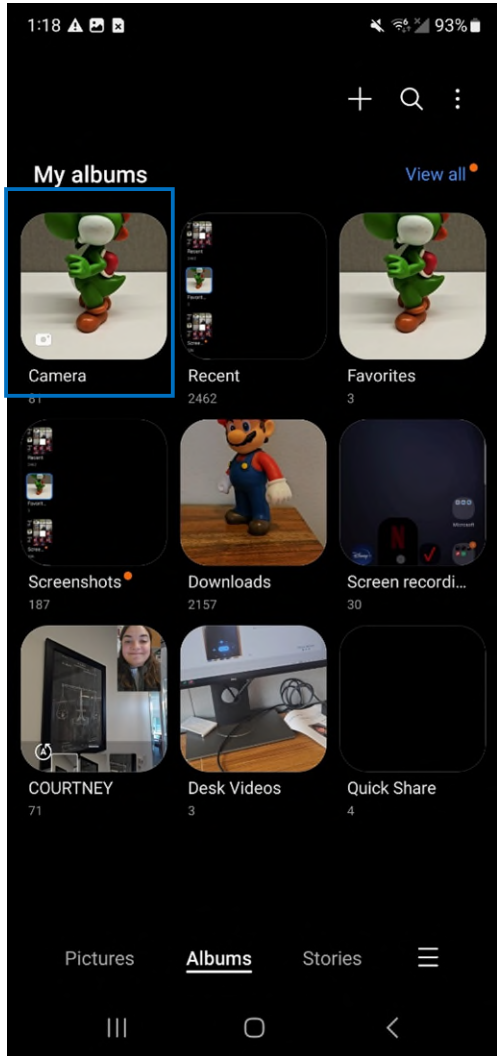
<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>Similarly, selecting “Camera” displays thumbnails corresponding to stored plurality of video information.
<table>
<tr><th>Product</th><th>Second Area</th></tr>
</table>
</td></tr>
</table>

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**		
	Samsung Galaxy S23 Ultra	 Second area (shown in blue) when showing Camera album	

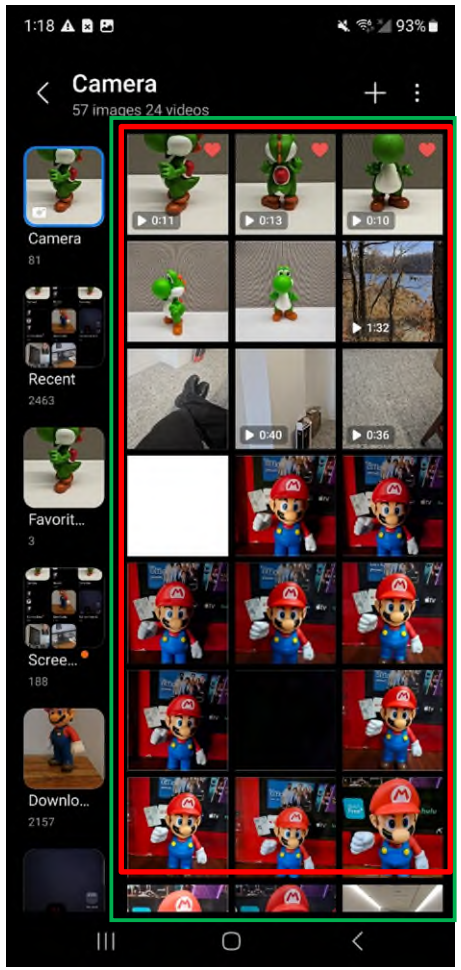
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
	Samsung Galaxy A54 5G		

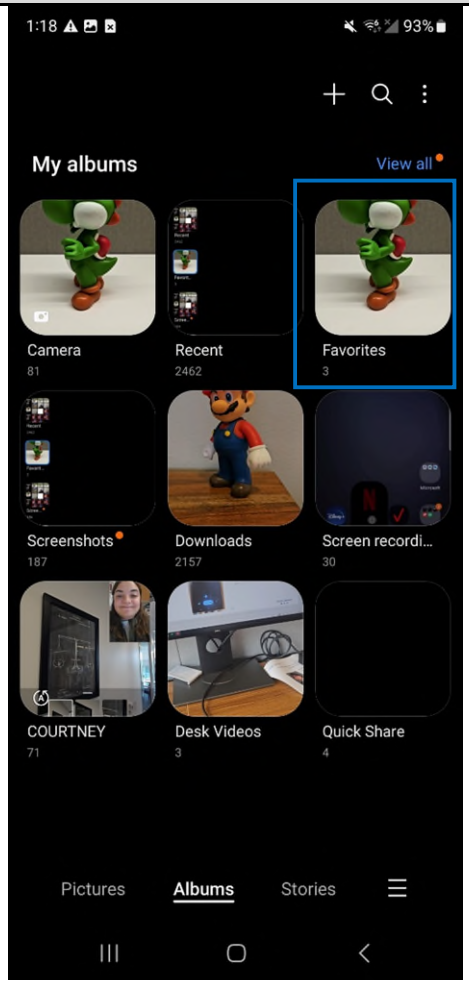
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	<table><tr><td></td><td>Second area (shown in blue) when showing Camera album</td></tr></table> As an additional example, testing of the Accused Samsung '815 Products confirms that each of the Accused Samsung '815 Products includes a UI that shows an additional example of second area when a user selects a thumbnail from the albums tab.

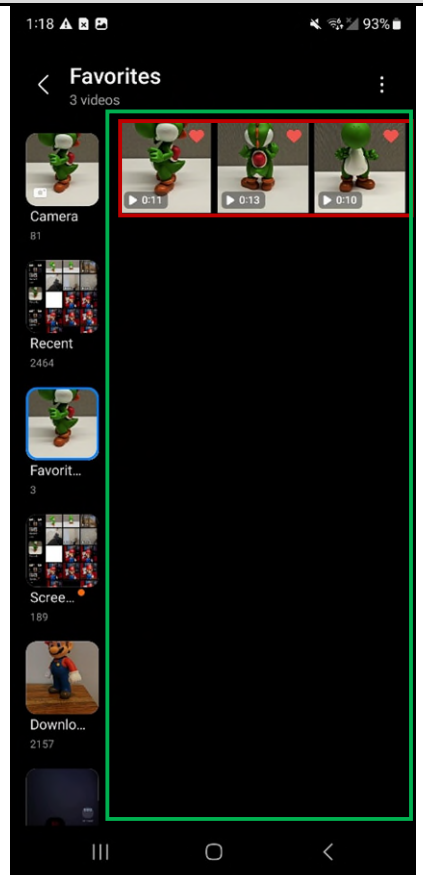
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**		
	Samsung Galaxy S23 Ultra		

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement



U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement			
			User selecting second character (in blue), prompts device to show the second group of thumbnails (in red) corresponding to the "Camera" album in the second area (in green).	

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 User selecting first character (in blue), prompts device to show thumbnail (in red) corresponding to the "Favorites" album in the second area (in green).

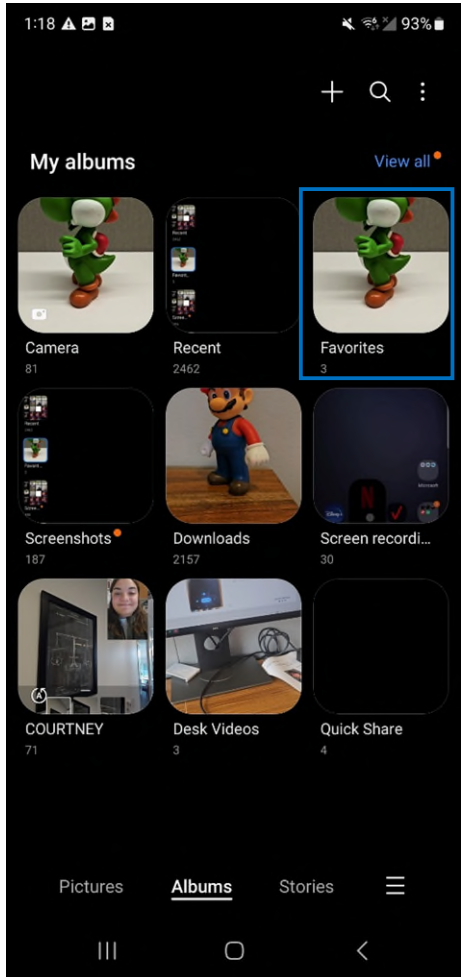
<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>See also Appendix 8 showing that the remaining Accused Samsung '815 Products operate in a similar manner (e.g., by including the Samsung Gallery application). See https://www.samsung.com/us/support/answer/ANS00079026/.

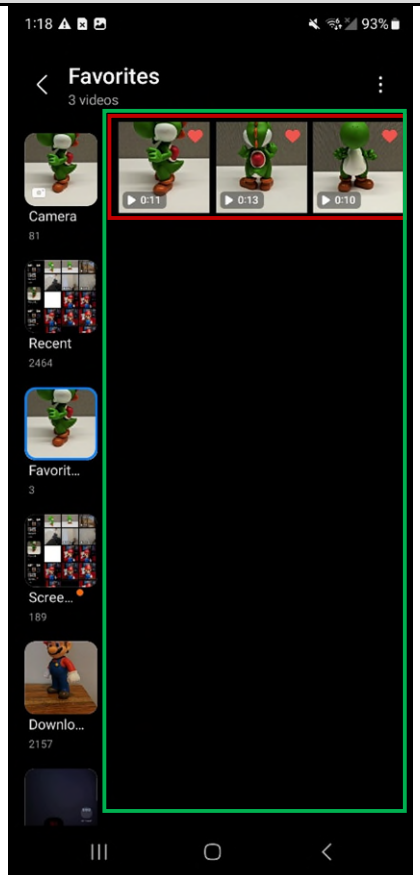
Doctrine of Equivalents:

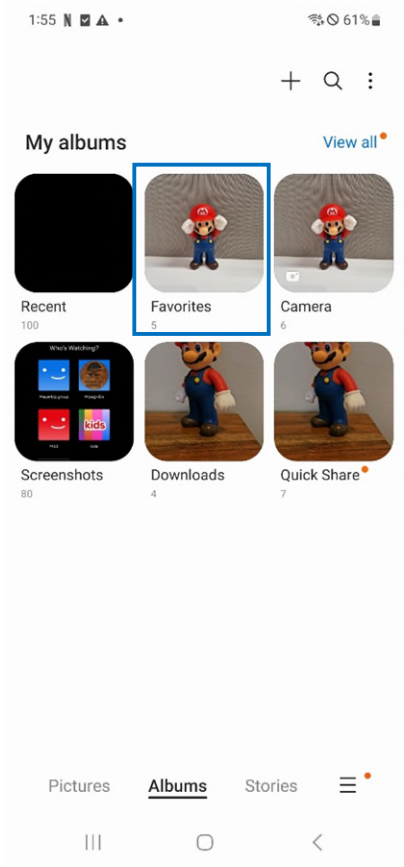
This limitation is also met under the doctrine of equivalents because the display of the "favorites" album (for example) matches the function, way, and result of the second area and, to the extent there is a difference, the difference is insubstantial. Specifically, to the extent that the display of the "favorites" album is not literally a second area, the display of the "favorites" album satisfies the same function as that of a second area, namely a separate area showing a discrete grouping of video thumbnails upon selection of the characters corresponding to the "favorites" album. The claimed "second area" displays information within a "file" when that file is selected, which, for example, is equivalent to the selection of the "favorites" album leading to the display of the thumbnails of the videos within the "favorites" album. See '815 Patent at 5:61-6:18, Figs. 4-5. This specific display organization also achieves substantially the same result as a second area.</td></tr>
<tr><td>[1.j] wherein user selection of the first character enables the display of a first group of thumbnails corresponding to the first group of video information in the second area,</td><td>For each of the Accused Samsung '815 Products, user selection of the first character enables the display of a first group of thumbnails corresponding to the first group of video information in the second area.

For example, testing of the Accused Samsung '815 Products confirms that user selection of the first character (i.e. a user selecting the "favorites" album within the first area) enables the display of a first group of thumbnails corresponding to the first group of video information in the second area (i.e. display of the thumbnails within the "favorites" album).

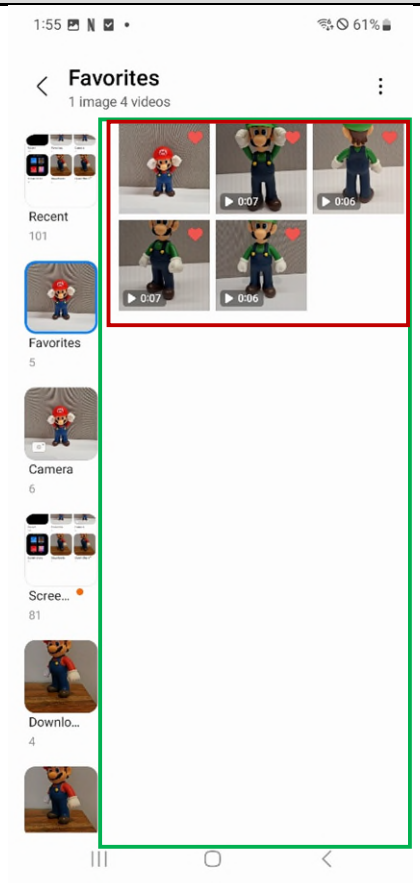
<table>
<tr><th>Product</th><th>Section of first character and display of thumbnails corresponding to the first group of video information in the second area</th></tr>
</table>
</td></tr>
</table>

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**		
	Samsung Galaxy S23 Ultra		

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 User selecting first character (in blue), prompts device to show the first group of thumbnails (in red) corresponding to the "favorites" album in the second area (in green).

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**		
	Samsung Galaxy A54 5G		

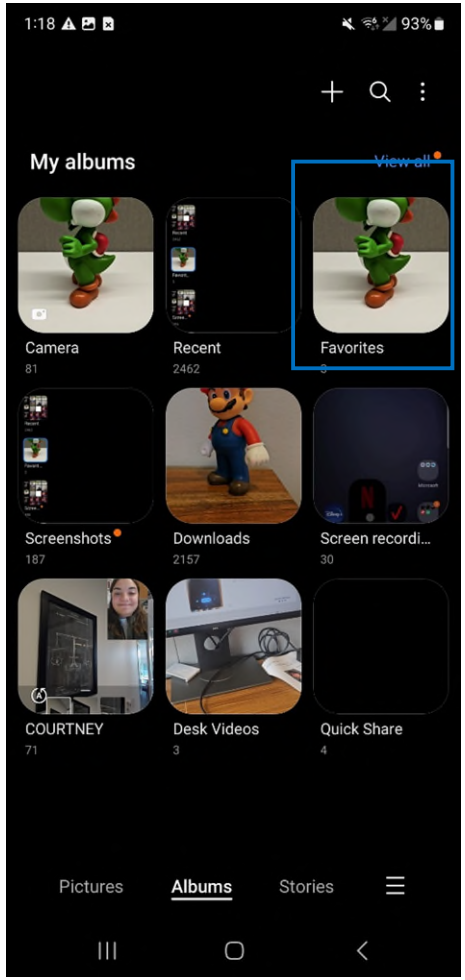
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

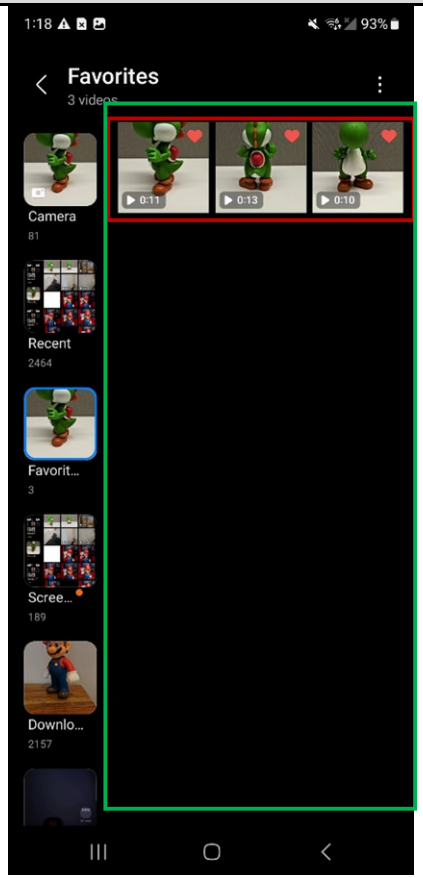


User selecting first character (in blue), prompts device to show the first group of thumbnails (in red) corresponding to the "favorites" album in the second area (in green).

As an additional example, testing of the Accused Samsung '815 Products confirms that user selection of the first character (i.e. a user selecting the "favorites" album within the first area, *i.e.*, top portion of the display)

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	enables the display of a first group of thumbnails corresponding to the first group of video information in the second area (i.e. display of the thumbnails within the "favorites" album).

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**		
	Samsung Galaxy S23 Ultra		

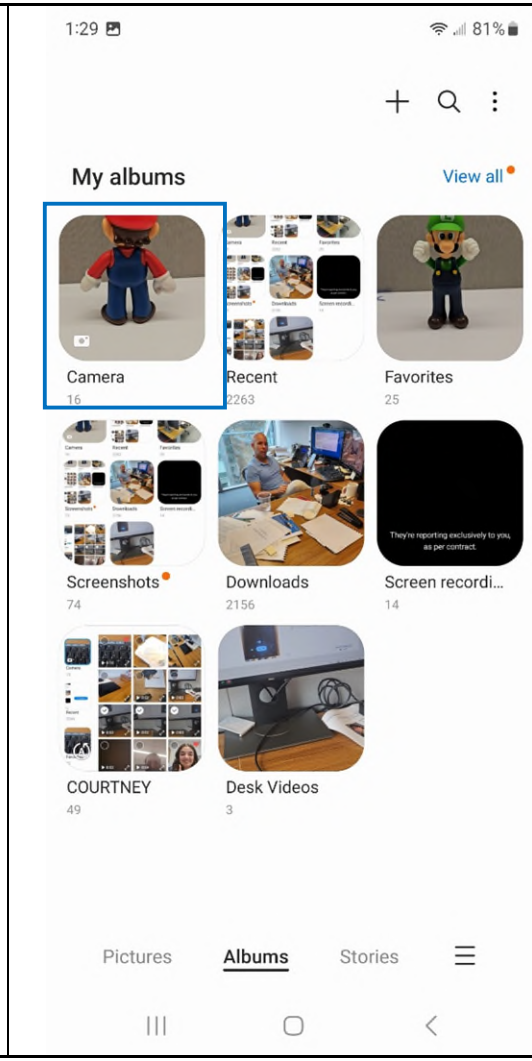
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 User selecting first character (in blue), prompts device to show thumbnail (in red) corresponding to the "Favorites" album in the second area (in green).

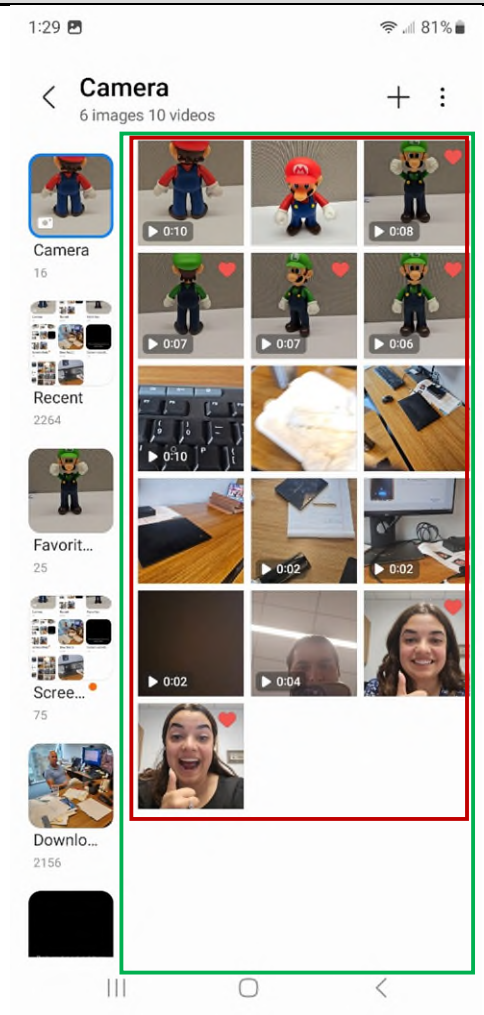
<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>Doctrine of Equivalents:

This limitation is also met under the doctrine of equivalents because the display of the "favorites" album matches the function, way, and result of the second area and, to the extent there is a difference, the difference is insubstantial. Specifically, to the extent that the display of the "favorites" album is not literally a second area, the display of the "favorites" album satisfies the same function as that of a second area, namely a separate area showing a discrete grouping of video thumbnails upon selection of the characters corresponding to the "favorites" album. The claimed "second area" displays information within a "file" when that file is selected, which, for example, is equivalent to the selection of the "favorites" album leading to the display of the thumbnails of the videos within the "favorites" album. See '815 Patent at 5:61-6:18, Figs. 4-5. This specific display organization also achieves substantially the same result as a second area.</td></tr>
<tr><td>[1.k] wherein user selection of the second character enables the display of a second group of thumbnails corresponding to the second group of video information in the second area,</td><td>For each of the Accused Samsung '815 Products, user selection of the second character enables the display of a second group of thumbnails corresponding to the second group of video information in the second area.

For example, testing of the Accused Samsung '815 Products confirms that user selection of the second character (i.e. a user selecting the "Camera" album within the first area) enables the display of a second group of thumbnails corresponding to the second group of video information in the second area (i.e. display of the thumbnails within the "Camera" album).

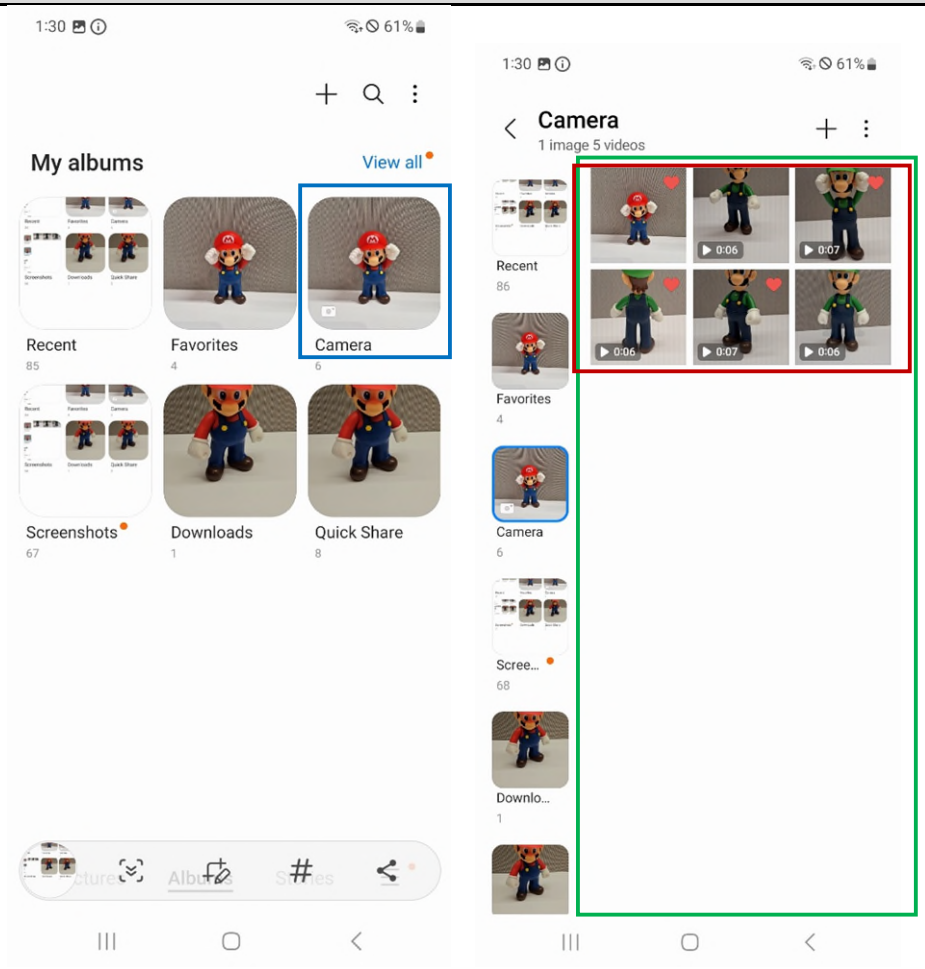
<table>
<tr><th>Product</th><th>Section of second character and display of thumbnails corresponding to the second group of video information in the second area</th></tr>
<tr><td>Samsung Galaxy S23 Ultra</td><td></td></tr>
</table>
</td></tr>
</table>


1:29
81%
My albums
View all
Camera
16
Recent
2263
Favorites
25
Screenshots
74
Downloads
2156
Screen recordi...
14
They're reporting exclusively to you, as per contract.
COURTNEY
49
Desk Videos
3
Pictures
Albums
Stories

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
		User selecting second character (in blue), prompts device to show the second group of thumbnails (in red) corresponding to the "Camera" album in the second area (in green).	
	Samsung Galaxy A54 5G		

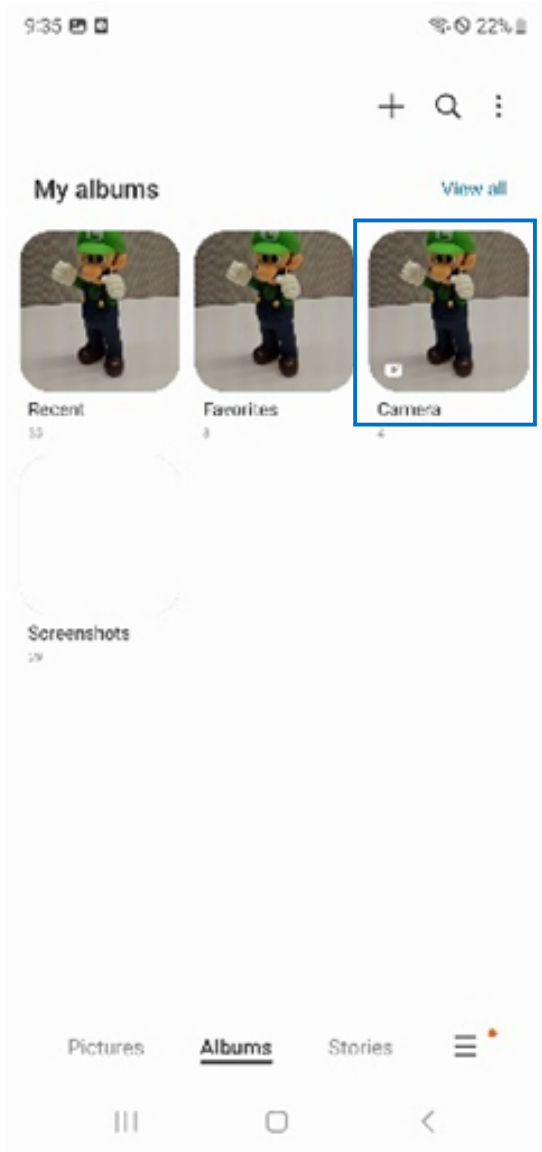
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

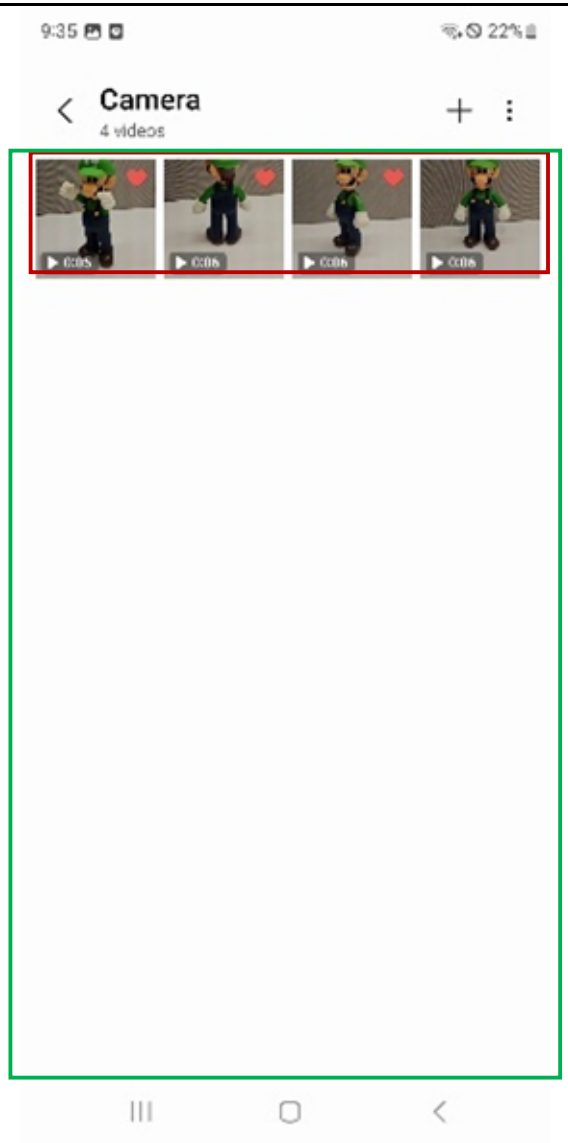


User selecting second character (in blue), prompts device to show the second group of thumbnails (in red) corresponding to the "Camera" album in the second area (in green).

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	As an additional example, testing of the Accused Samsung '815 Products confirms that user selection of the second character (i.e. a user selecting the "Camera" album within the first area, (*i.e.*, under the albums tab) enables the display of a second group of thumbnails corresponding to the second group of video information in the second area (i.e. display of the thumbnails within the "Camera" album).

	Samsung Galaxy S23 Ultra		

		 9:35 22% Camera 4 videos	

<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>
<table>
<tr><td></td><td>User selecting second character (in blue), prompts device to show the second group of thumbnails (in red) corresponding to the "Camera" album in the second area (in green).</td></tr>
</table>

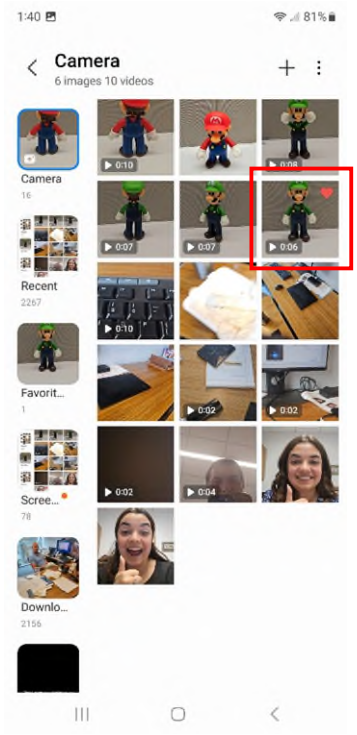
See also Appendix 8 showing that the remaining Accused Samsung '815 Products operate in a similar manner (e.g., they include the Samsung Gallery application). See https://www.samsung.com/us/support/answer/ANS00079026/.

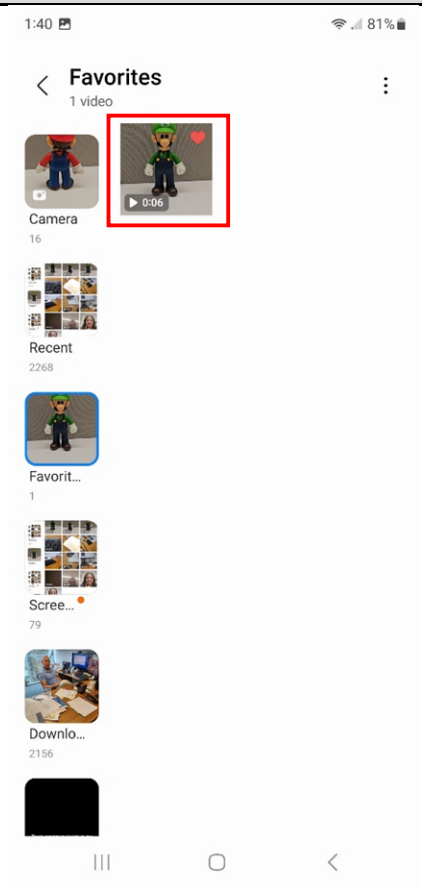
Doctrine of Equivalents:

This limitation is also met under the doctrine of equivalents because the display of the "videos" album matches the function, way, and result of the second area and, to the extent there is a difference, the difference is insubstantial. Specifically, to the extent that the display of the "videos" album is not literally a second area, the display of the "videos" album satisfies the same function as that of a second area, namely a separate area showing a discrete grouping of video thumbnails upon selection of the characters corresponding to the "videos" album in the first area. The claimed "second area" displays information within a "file" when that file is selected, which, for example, is equivalent to the selection of the "videos" album leading to the display of the thumbnails of the videos within the "videos" album. See '815 Patent at 5:61-6:18, Figs. 4-5. This specific display organization also achieves substantially the same result as a second area.</td></tr>
<tr><td>[1.l] wherein, upon one video information stored on the recording medium included in both the first group of video information and the second group of video information being deleted from</td><td>For each of the Accused Samsung '815 Products, upon one video information stored on the recording medium included in both the first group of video information and the second group of video information being deleted from the first group of video information, the one video information continues to be included in the second group of video information.

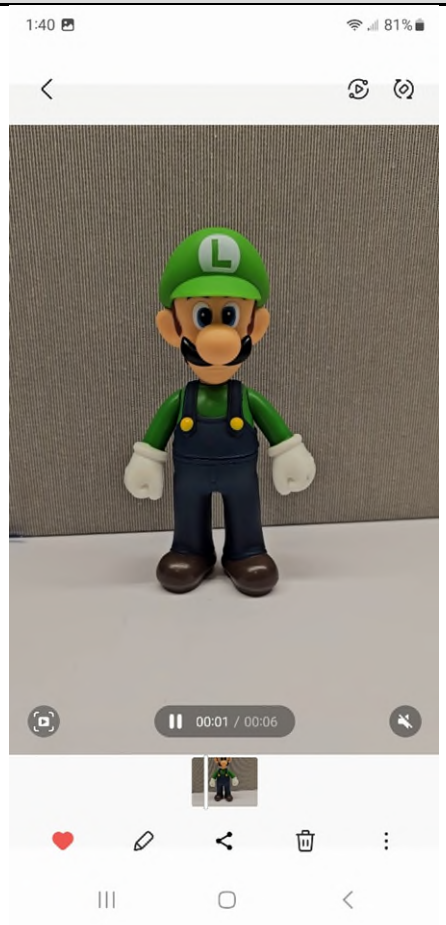
For example, testing of the Accused Samsung '815 Products confirms that when a video that is included in both the "favorites" album and "Camera" album is "unfavorited" (i.e. the favorite designation is removed), the video is deleted from the favorites album but remains included in the Camera album.

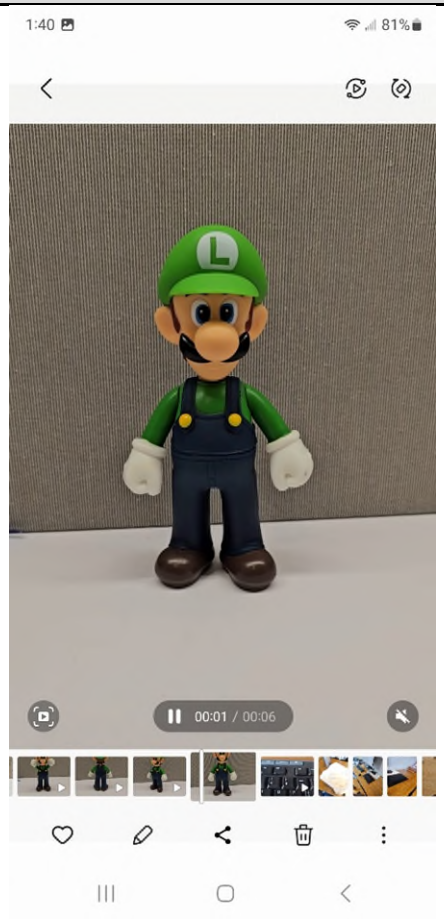
<table>
<tr><th>Product</th><th>Deleting a video from the "favorites" album does not delete it from the "Camera" album</th></tr>
</table>
</td></tr>
</table>

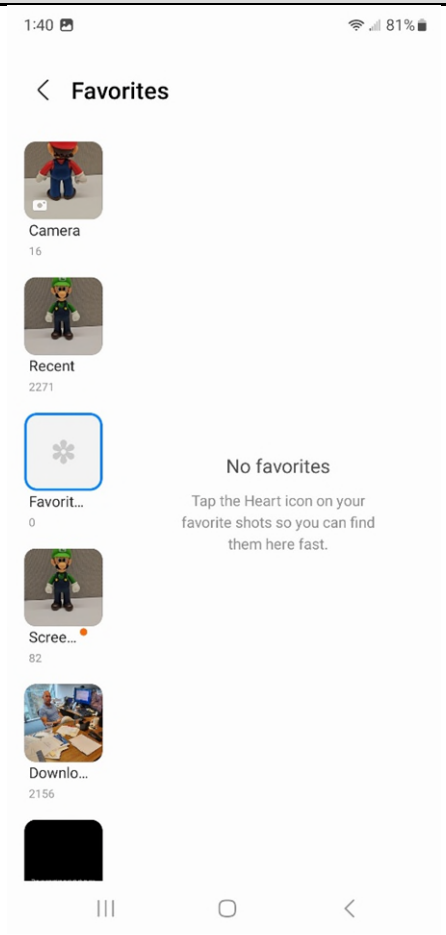
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**		
the first group of video information, the one video information continues to be included in the second group of video information and	Samsung Galaxy S23 Ultra		

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 (favorites folder includes a video (in red) that is also included in the Camera folder)

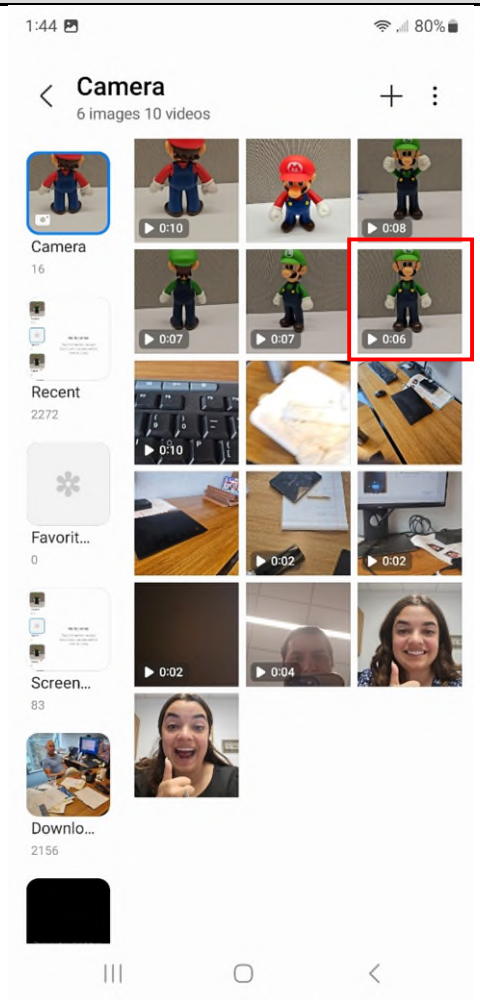
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Removing "favorites" designation to remove from favorites folder

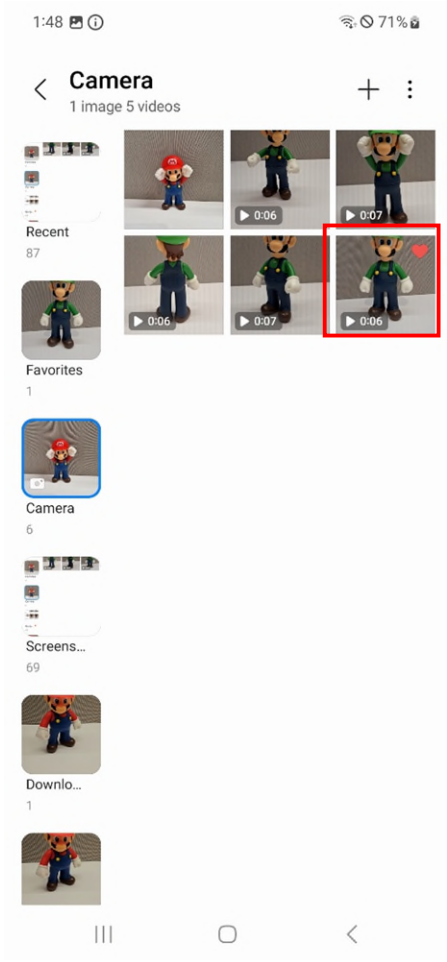
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Favorites album does not include removed video

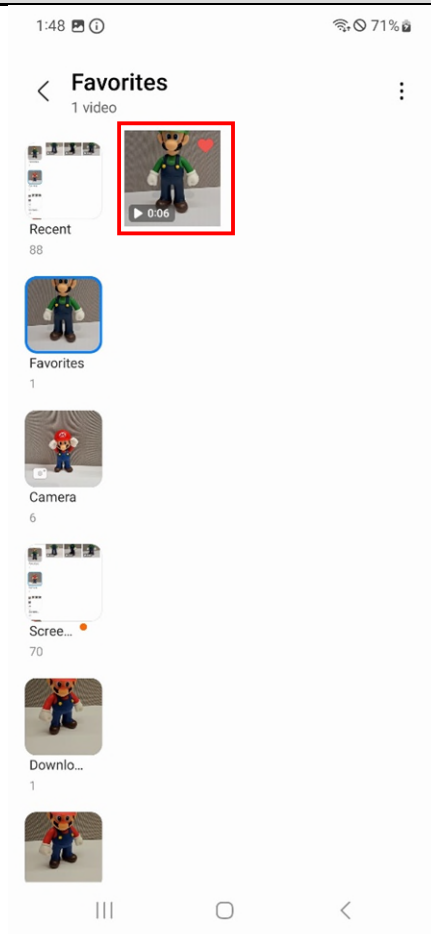
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement



Removed video continues to be included within the Camera album (in red)

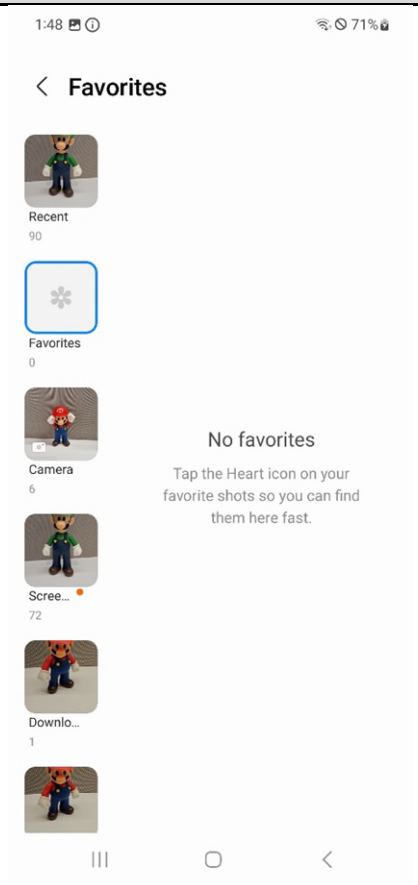
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
	Samsung Galaxy A54 5G		

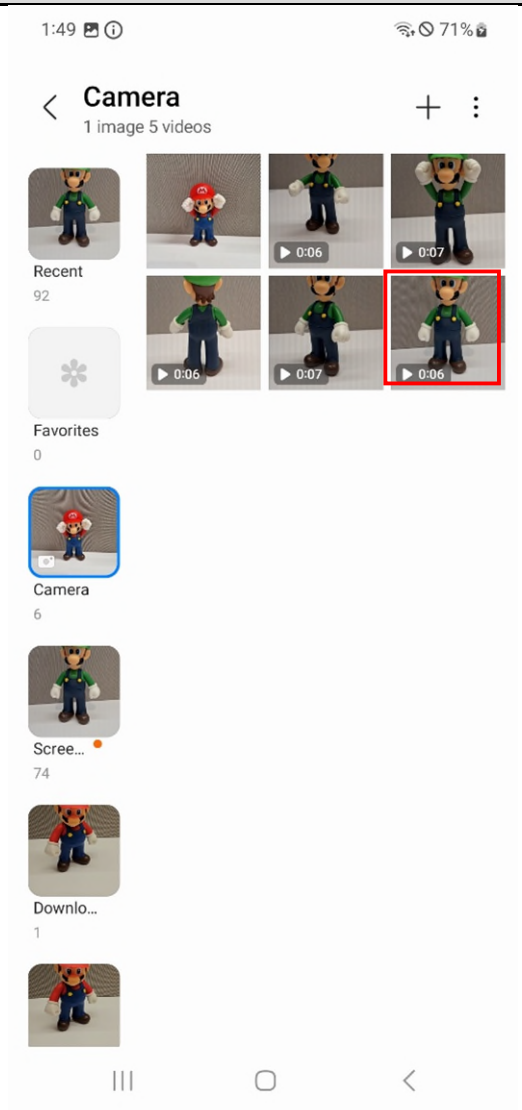
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Favorites folder includes a video (in red) that is also included in the Camera folder.

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

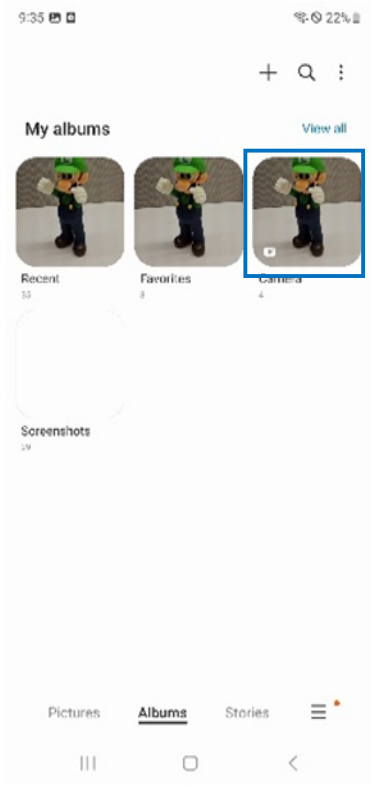
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Removing "favorites" designation to remove from favorites folder

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Favorites album does not include removed video

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

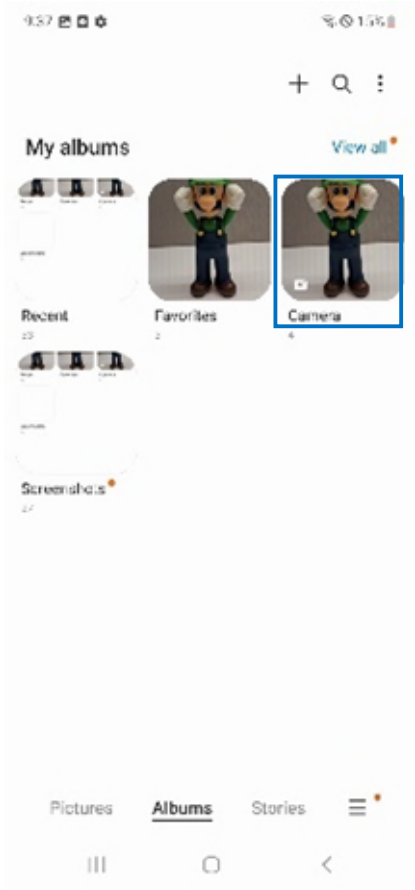


<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>
<table>
<tr><td></td><td>Removed video continues to be included within the Camera album (in red)</td></tr>
</table>
See also Appendix 8 showing that the remaining Accused Samsung '815 Products include a memory and operate in a similar manner (e.g., by including the Gallery application). See https://www.samsung.com/us/support/answer/ANS00079026/.
</td></tr>
<tr><td>[1.m] the processor controls the display to display a thumbnail corresponding to the one video information as one of the second group of thumbnails when the second character is selected.</td><td>
For each of the Accused Samsung '815 Products, the processor controls the display to display a thumbnail corresponding to the one video information as one of the second group of thumbnails when the second character is selected.
For example, testing of the Accused Samsung '815 Products confirms that the thumbnail of the video deleted from the favorites album is displayed as a part of the "Camera" album when the second character is selected.
<table>
<tr><th>Product</th><th>Displaying a thumbnail within the "Camera" album of the video deleted from the "favorites" album</th></tr>
</table>
</td></tr>
</table>

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
	Samsung Galaxy S23 Ultra		

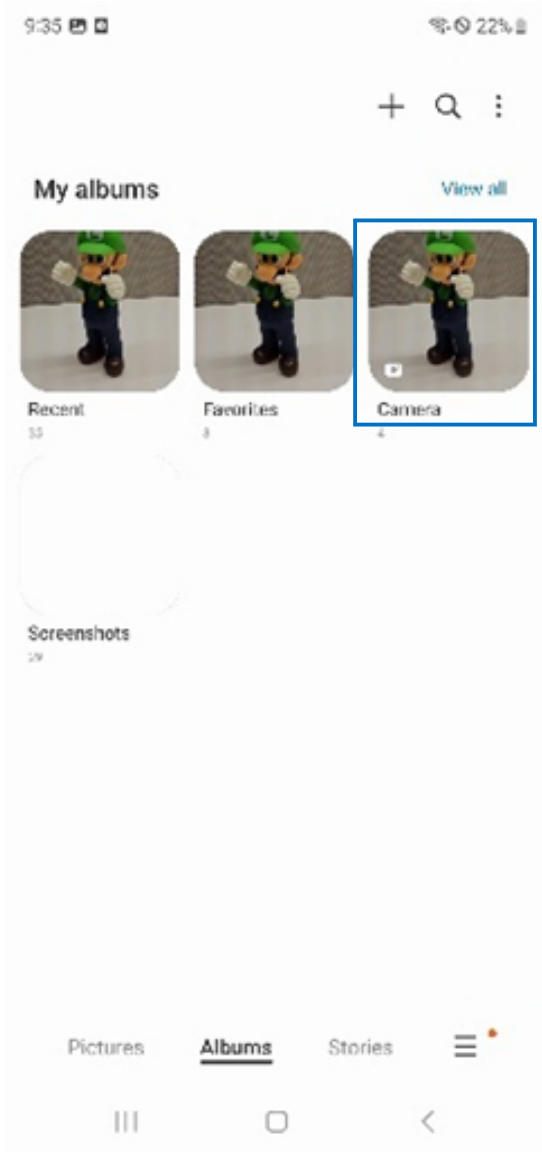
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 When the second character is selected (in blue), the apparatus shows the thumbnail of the removed video (in red).

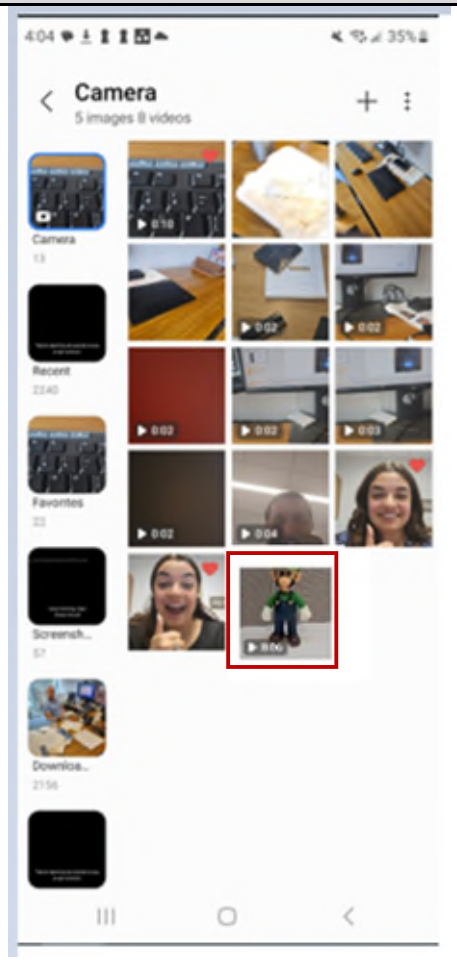
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

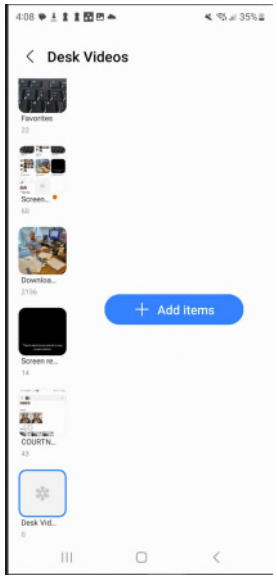
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
	Samsung Galaxy A54 5G		

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 When the second character is selected (in blue), the apparatus shows the thumbnail of the removed video (in red).

<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>As an additional example, the processor controls the display to display a thumbnail corresponding to the one video information as one of the second group of thumbnails when the second character is selected in the bottom half of the screen when there are additional videos.
<table>
<tr><th>Product</th><th>Section of second character and display of thumbnails corresponding to the second group of video information in the second area</th></tr>
</table>
</td></tr>
</table>

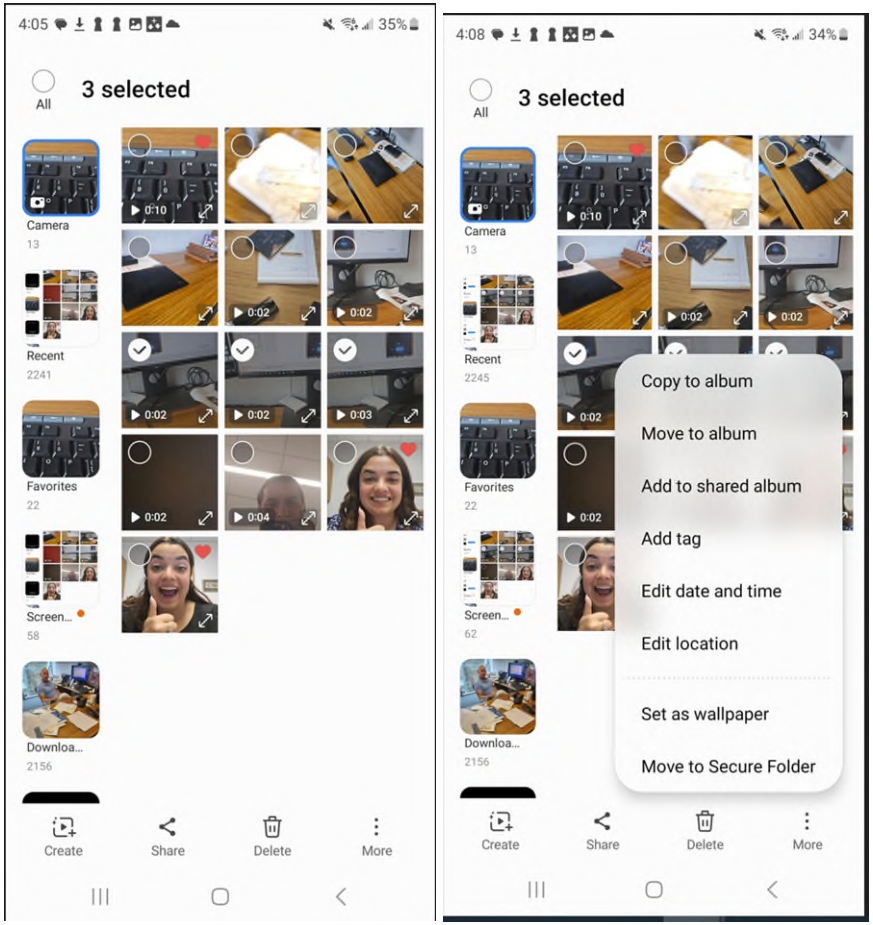
	Samsung Galaxy S23 Ultra		

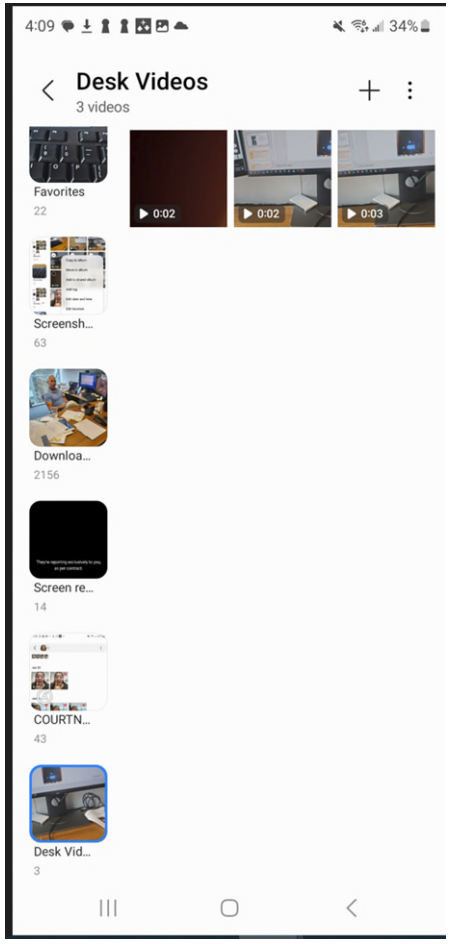
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 When the second character is selected (in blue), the apparatus shows the thumbnail of the removed video (in red).

<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>See also Appendix 8 showing that the remaining Accused Samsung '815 Products include a display and chipset with one or more processors and operate in a similar manner (e.g., by including a Gallery application). See https://www.samsung.com/us/support/answer/ANS00079026/.</td></tr>
<tr><td>2. The information processing apparatus of claim 1, further comprising: wherein the processor generates a group of video information based on user preferences determined by the user selections of the video information, and wherein, upon user selection of the group, the processor controls the display to display thumbnails that correspond to the video information and no other thumbnails associated with</td><td>Each of the Accused Samsung '815 Products comprises a processor that generates a group of video information based on user preferences determined by the user selections of the video information, and upon user selection of the group, the processor controls the display to display thumbnails that correspond to the video information and no other thumbnails associated with video information of other users (e.g., user provides its preferences by selecting pictures to be included in a new album. Then the display displays thumbnails that correspond to the video information and no other thumbnails are shown other than those that are included based on the preferences of a user.
<table>
<tr><th>Product</th><th>Album "Desk Videos" Does Not include Any Thumbnails Prior to User Selections</th></tr>
<tr><td>Samsung Galaxy S23 Ultra</td><td> 
</td></tr>
</table></td></tr>
</table>

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**

video information of other users.

Product	**User's Preferences are indicated based on user selections of three videos and selecting "Copy" or "Move" to album**
Samsung Galaxy S23 Ultra	

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**		
	Product	**Upon user selection of "Desk Videos" thumbnails of the videos based on user preferences are displayed and no other thumbnails associated with video information of other users are displayed**	
	Samsung Galaxy S23 Ultra		

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	See also Appendix 8 showing that the remaining Accused Samsung '815 Products include a chipset with one or more processors that operate in a similar manner (e.g., by including a Gallery application). *See* https://www.samsung.com/us/support/answer/ANS00079026/.
3. The information processing apparatus of claim 1, further comprising: an antenna for wirelessly receiving the first video information from the other information processing apparatus.	Each of the Accused Samsung '815 Products comprises an antenna for wirelessly receiving the first video information from the other information processing apparatus. For example, each of the Accused Samsung '815 Products can receive a video via cellular antenna (e.g., MMS or downloading from Internet), via a WiFi antenna (e.g., MMS or downloading from Internet or Quick Share), or via a Bluetooth antenna (e.g., Bluetooth file transfer). **Galaxy S23 Ultra:**  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

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

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	

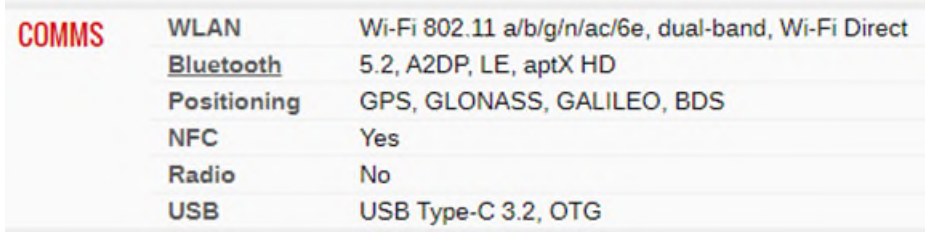
COMMS	WLAN	Wi-Fi 802.11 a/b/g/n/ac/6, dual-band, Wi-Fi Direct
	Bluetooth	5.2, A2DP, LE
	Positioning	GPS, GLONASS, GALILEO, BDS
	NFC	Yes
	Radio	No
	USB	USB Type-C 2.0, OTG

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	

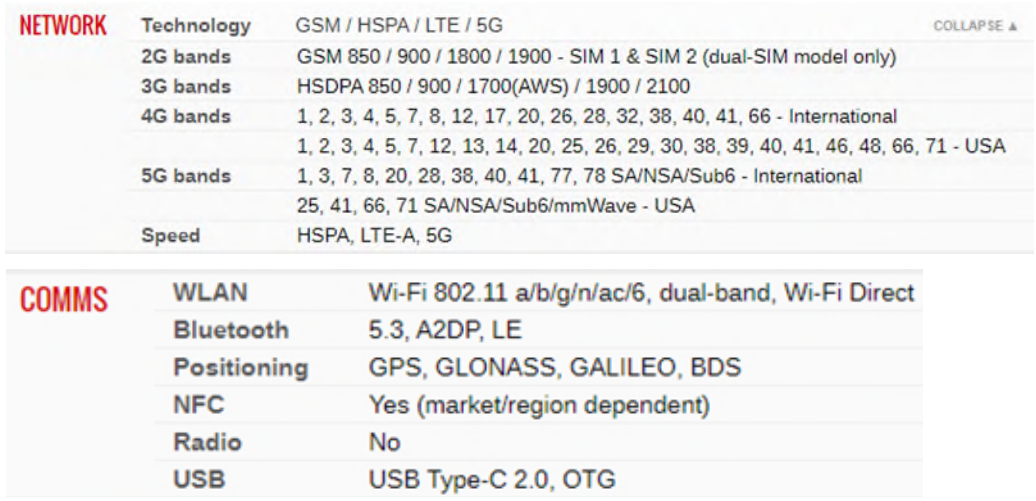
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement



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
	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

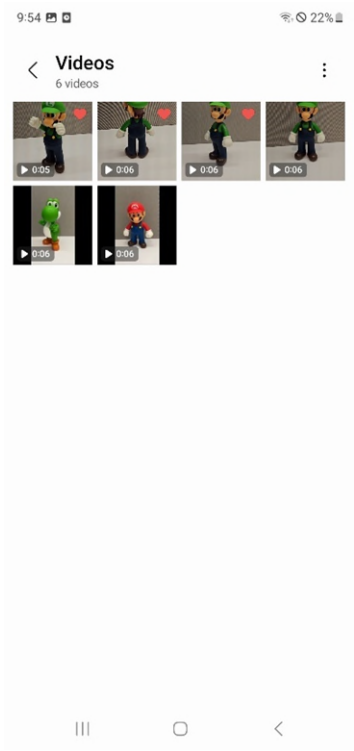
COMMS		
	WLAN	Wi-Fi 802.11 a/b/g/n/ac/6, dual-band, Wi-Fi Direct
	Bluetooth	5.3, A2DP, LE
	Positioning	GPS, GLONASS, GALILEO, BDS
	NFC	Yes (market/region dependent)
	Radio	No
	USB	USB Type-C 2.0, OTG

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.

See also Appendix 8 showing that the remaining Accused Samsung '815 Products include one or more of a WiFi chipset, cellular chipset, or Bluetooth chipset that will include an antenna.

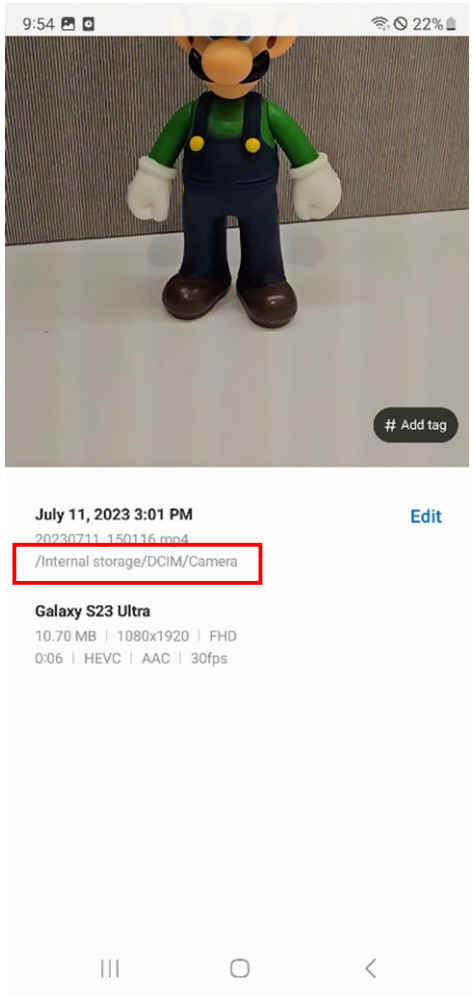
<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td>[4.a] The information processing apparatus of claim 1, wherein the plurality of stored video information includes third video information recorded by the information processing apparatus, fourth video information, and fifth video information,</td><td>For each of the Accused Samsung '815 Products, the plurality of stored video information includes third video information recorded by the information processing apparatus, fourth video information, and fifth video information.

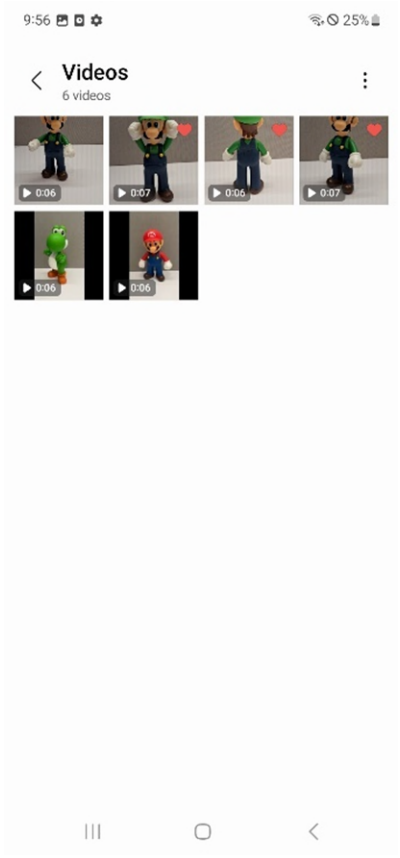
For example, testing of the Accused Samsung '815 Products confirms that the Accused Samsung '815 Products includes more than five videos, wherein the third has been recorded by the apparatus.

<table>
<tr><th>Product</th><th>Demonstrating five or more stored videos, and that the third was recorded by the camera application of the device</th></tr>
<tr><td>Samsung Galaxy S23 Ultra</td><td> 
</td></tr>
</table>
</td></tr>
</table>

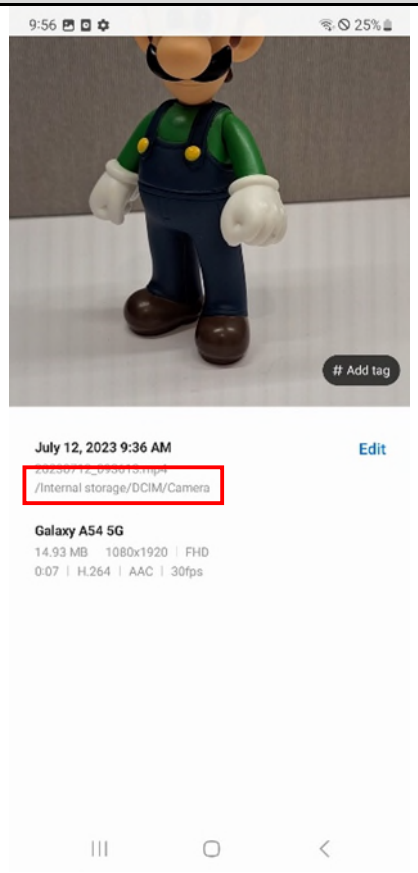
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

Videos stored by the device



U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
		"Camera" designation on exemplary third video indicating that the video was taken with the apparatus	
	Samsung Galaxy A54 5G	 Videos stored by the device	

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

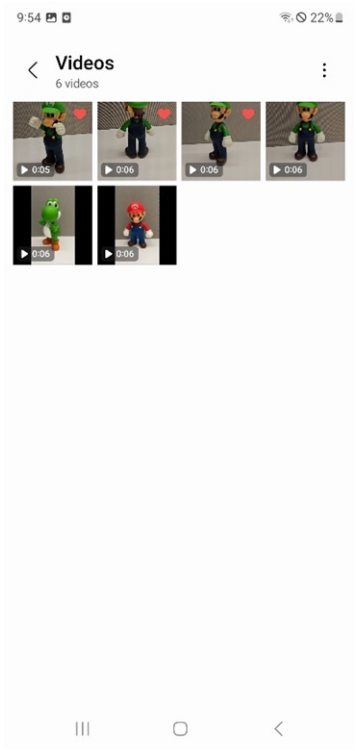


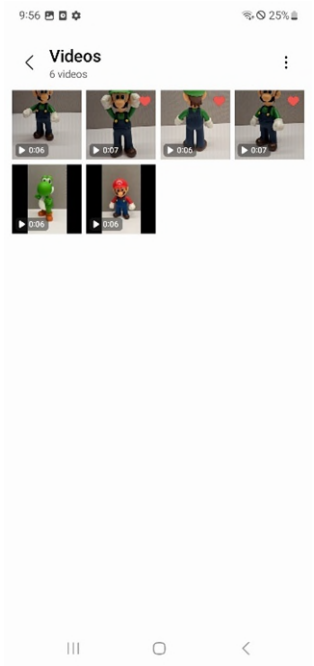
"Camera" designation on exemplary third video indicating that the video was taken with the apparatus

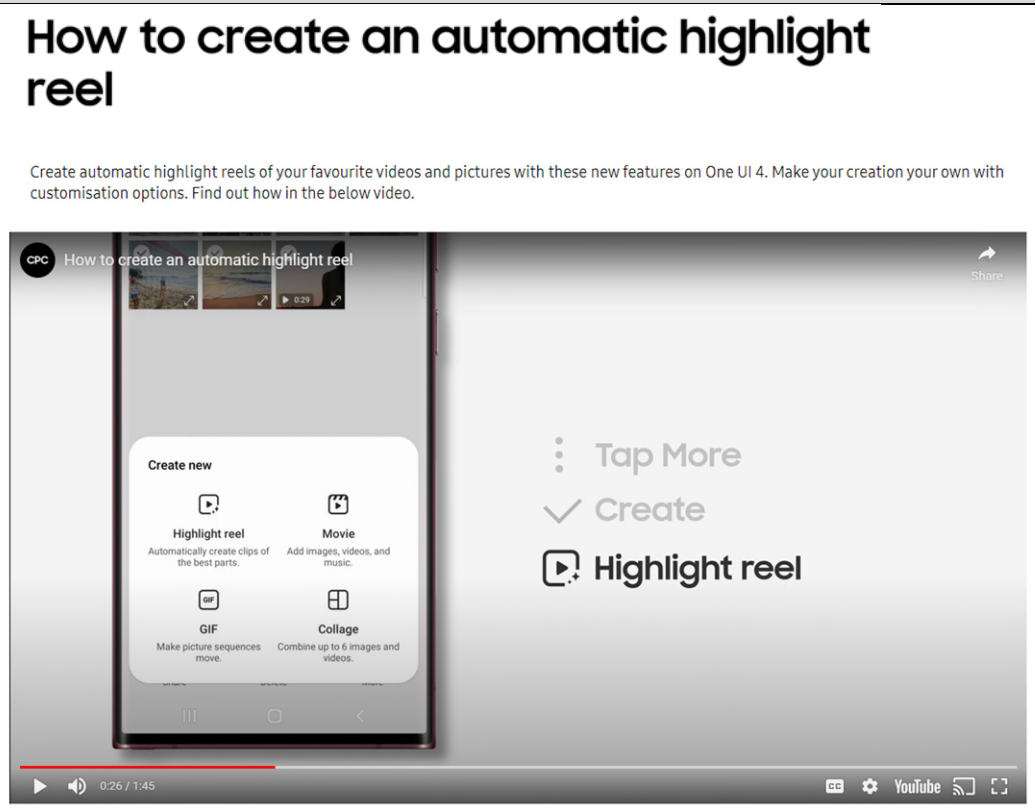
See also Appendix 8 showing that the remaining Accused Samsung '815 Products include a memory for recording additional video information and operates in a similar manner (e.g., by including a Gallery application). *See* https://www.samsung.com/us/support/answer/ANS00079026/.

<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td>[4.b] wherein the display displays a user interface having thumbnails corresponding to each of the third, fourth, and fifth video information.</td><td>For each of the Accused Samsung '815 Products, the display displays a user interface having thumbnails corresponding to each of the third, fourth, and fifth video information.

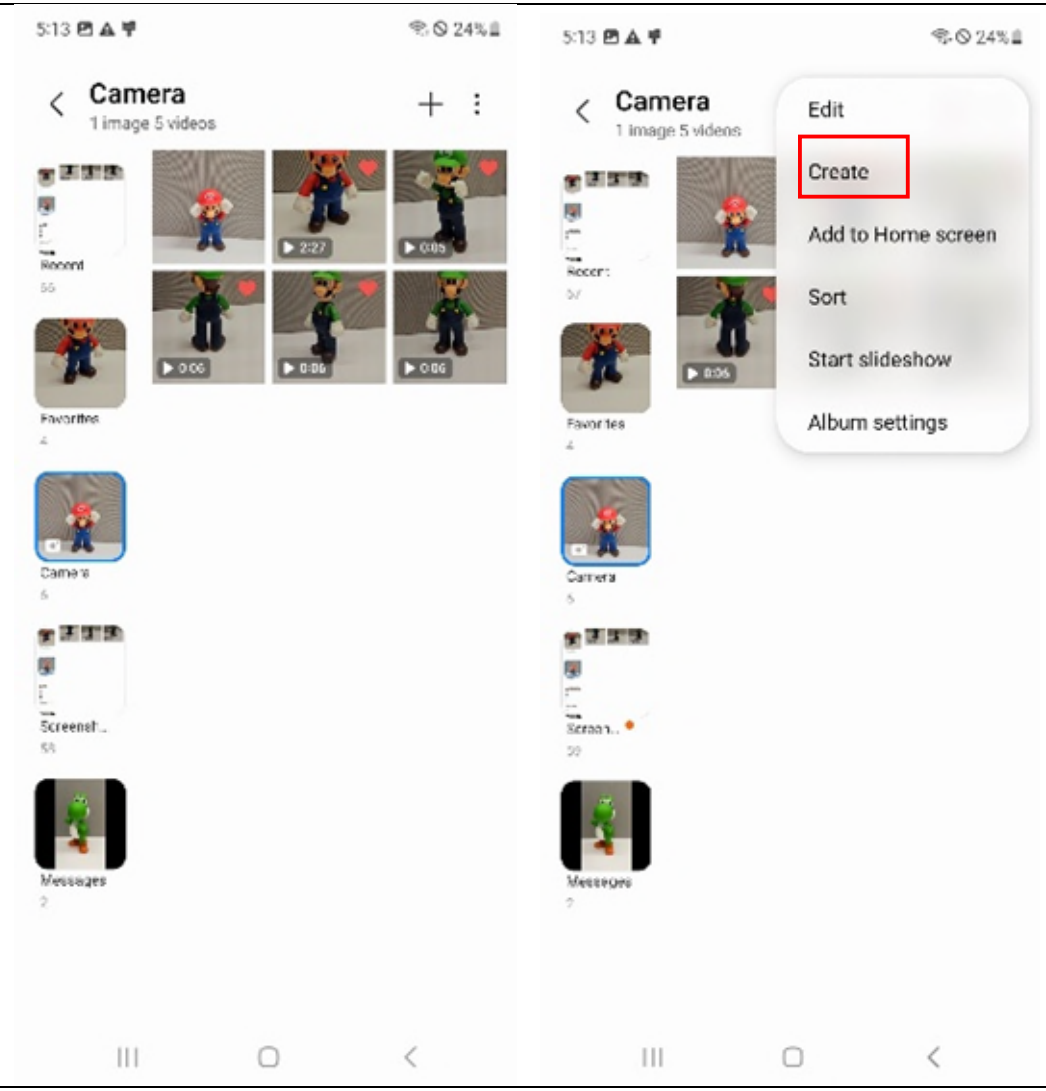
For example, testing of the Accused Samsung '815 Products confirms that the Accused Samsung '815 Products includes a user interface wherein thumbnails are shown corresponding to at least the third, fourth, and fifth video information.

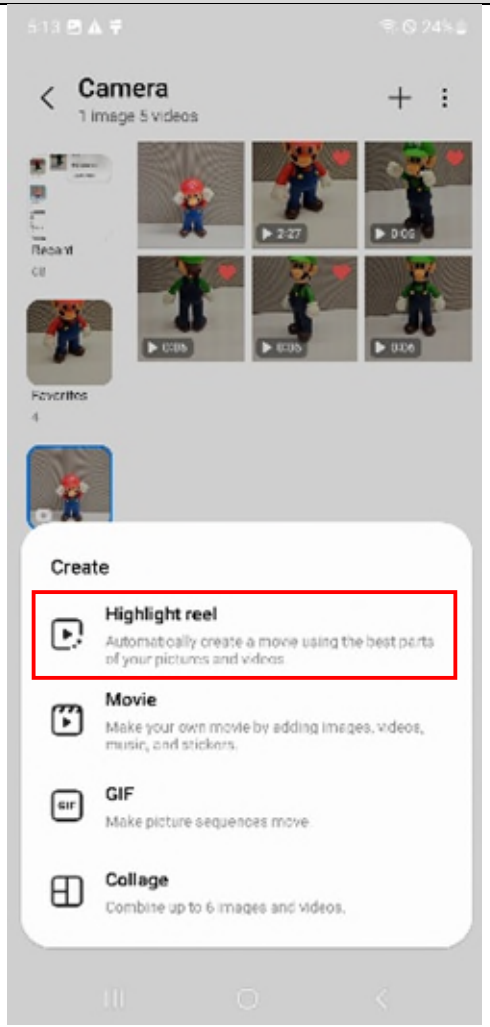
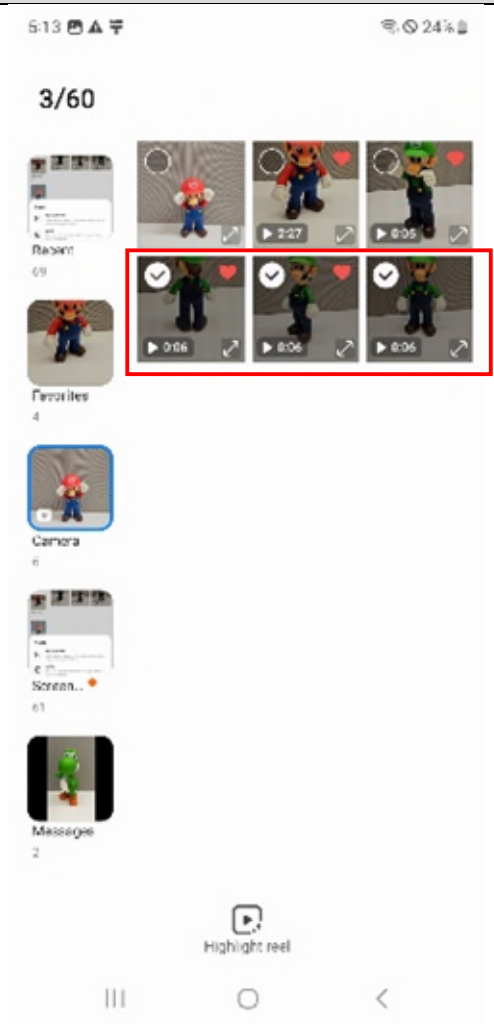
<table>
<tr><th>Product</th><th>Thumbnails corresponding to exemplary third, fourth, and fifth videos</th></tr>
<tr><td>Samsung Galaxy S23 Ultra</td><td> 
</td></tr>
</table>
</td></tr>
</table>

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	Samsung Galaxy A54 5G  *See also* Appendix 8 showing that the remaining Accused Samsung '815 Products include a display and operate in a similar manner (e.g., by including the Samsung Gallery application). *See* https://www.samsung.com/us/support/answer/ANS00079026/.
5. The information processing apparatus of claim 4, wherein the display displays the third, fourth, and fifth video	For each of the Accused Samsung '815 Products, the plurality of stored video information includes third video information, fourth video information, and fifth video information wherein the display displays the third, fourth, and fifth video information according to predetermined playback sequence. For example, the Accused Samsung '815 Products display displays the third, fourth, and fifth video information according to predetermined playback sequence using the "Highlight reel" or "Movie" functionality provided in the album.

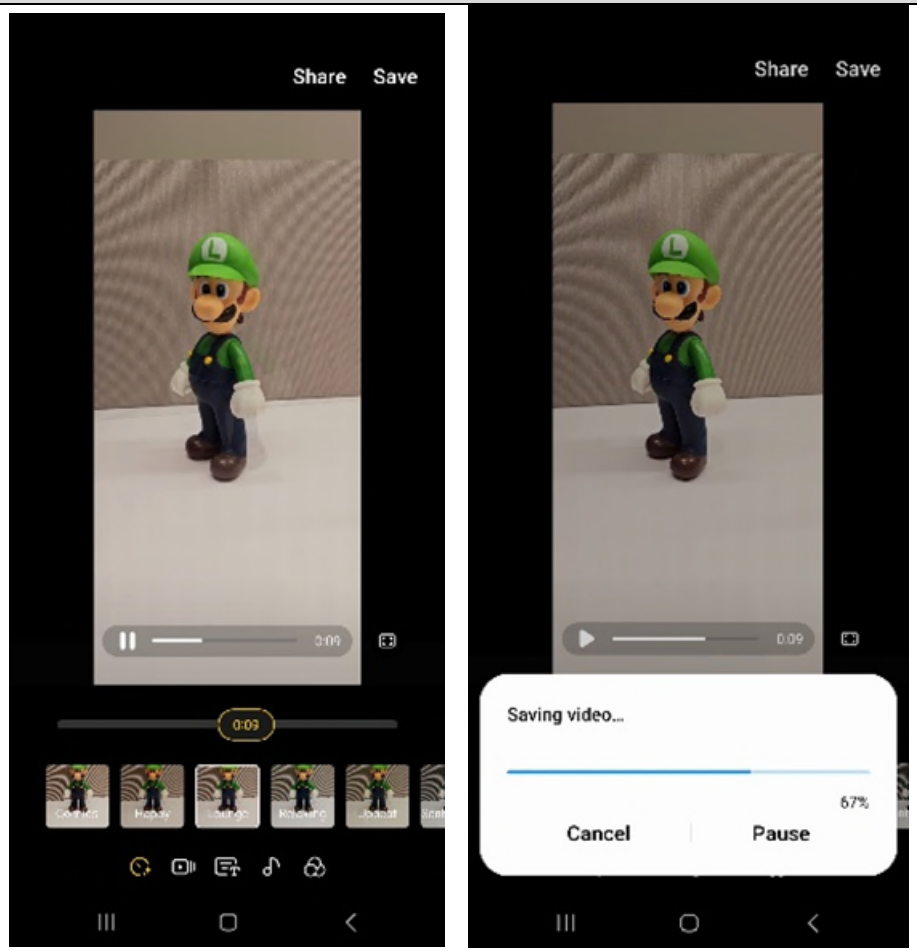
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
information according to predetermined playback sequence.	

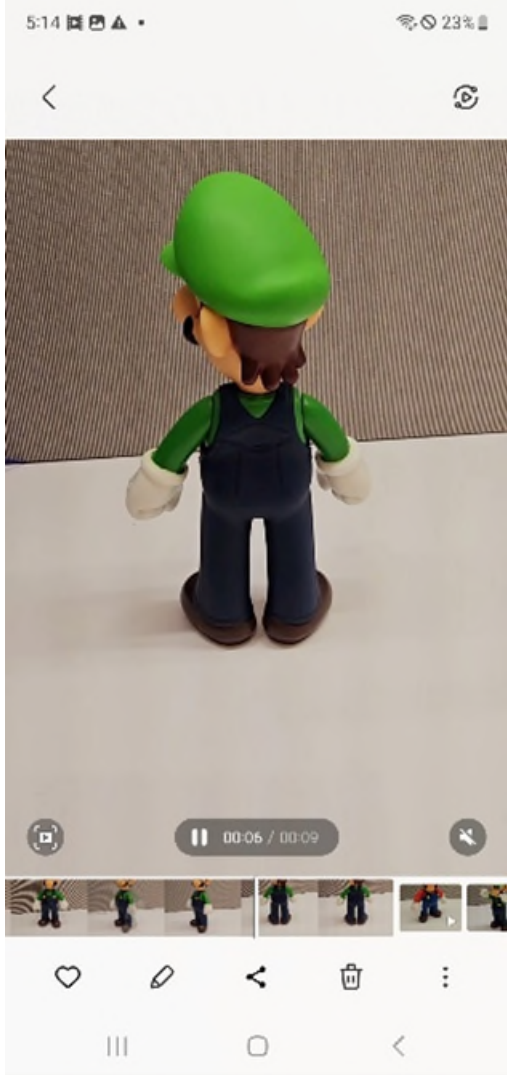
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Transcript: How to create an automatic highlight reel Open Gallery Select your favourite photos and videos Tap More Create Highlight reel An automatic reel will be created https://www.samsung.com/uk/support/mobile-devices/how-to-create-an-automatic-highlight-reel/ **Samsung Galaxy S23 Ultra:**


5:13
24%
Camera
1 image 5 videos
Edit
Create
Add to Home screen
Sort
Start slideshow
Album settings

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	  Third, fourth, and fifth video information is selected.

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

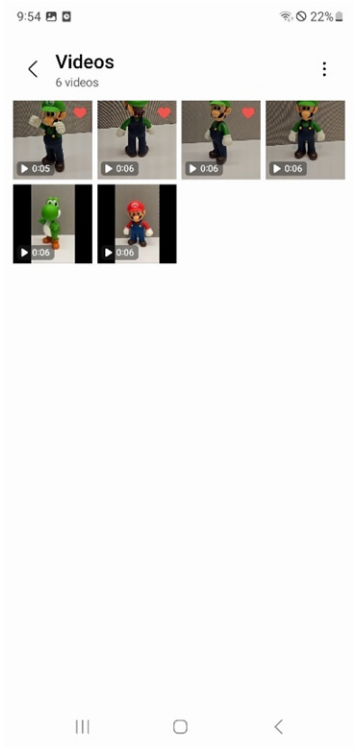
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

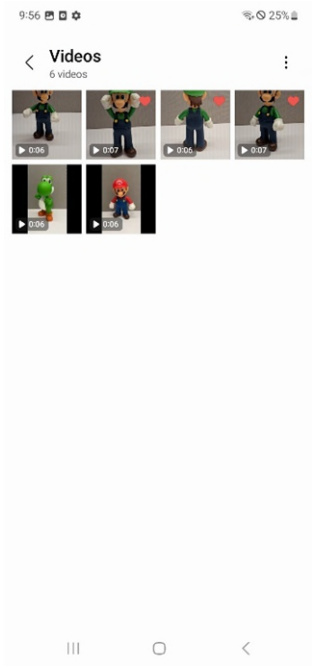
<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>Screenshot showing third, fourth, and fifth video information played according to predetermined playback sequence within a highlight reel.

See also Appendix 8 showing that the remaining Accused Samsung '815 Products include a display and operate in a similar manner (e.g., by including the Samsung Gallery application). See https://www.samsung.com/us/support/answer/ANS00079026/.</td></tr>
<tr><td>[6.a] The information processing apparatus of claim 1, wherein the plurality of stored video information includes third video information, fourth video information, and fifth video information,</td><td>For each of the Accused Samsung '815 Products, the plurality of stored video information includes third video information, fourth video information, and fifth video information.

For example, testing of the Accused Samsung '815 Products confirms that the Accused Samsung '815 Products includes at least third, fourth, and fifth video information.

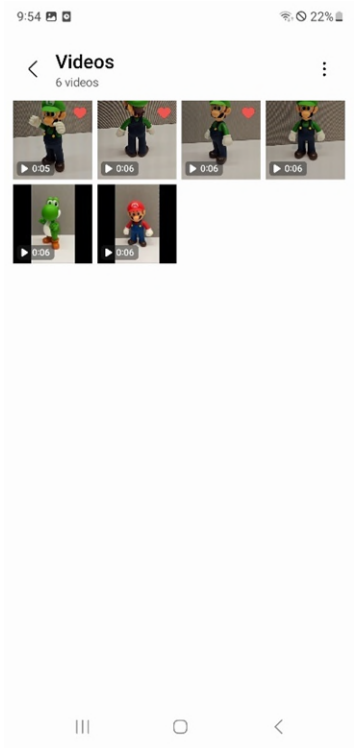
<table><tr><th>Product</th><th>Thumbnails showing exemplary third, fourth, and fifth videos</th></tr></table></td></tr>
</table>

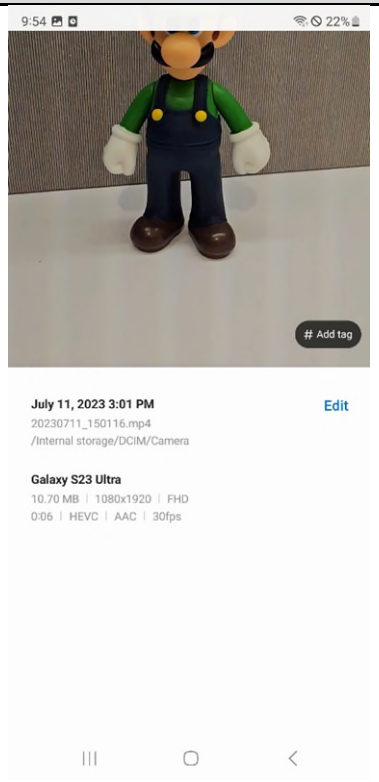
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**		
	Samsung Galaxy S23 Ultra		

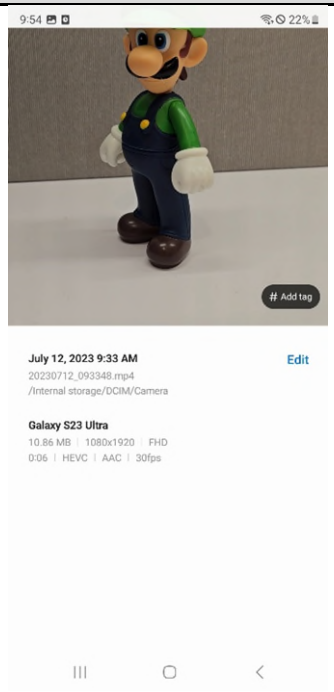
<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>
<table>
<tr><td>Samsung Galaxy A54 5G</td><td> 
</td></tr>
</table>
See also Appendix 8 showing that the remaining Accused Samsung '815 Products include a memory and operate in a similar manner (e.g., by including the Samsung Gallery application). See https://www.samsung.com/us/support/answer/ANS00079026/.</td></tr>
<tr><td>[6.b] wherein the plurality of stored video information includes management information corresponding to</td><td>For each of the Accused Samsung '815 Products, the plurality of stored video information includes management information corresponding to the third, fourth, and fifth video information.

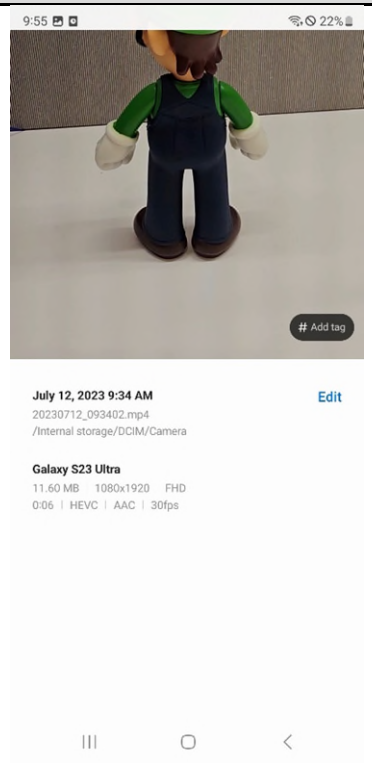
For example, testing of the Accused Samsung '815 Products confirms that the Accused Samsung '815 Products display management information corresponding to the third, fourth, and fifth video information.

<table>
<tr><th>Product</th><th>Management information for third, fourth, and fifth videos</th></tr>
</table></td></tr>
</table>

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**		
the third, fourth, and fifth video information,	Samsung Galaxy S23 Ultra		

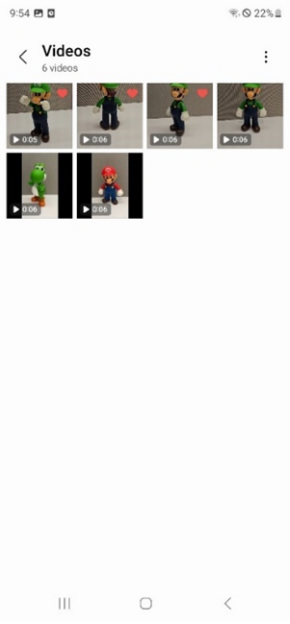
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Management information for third video

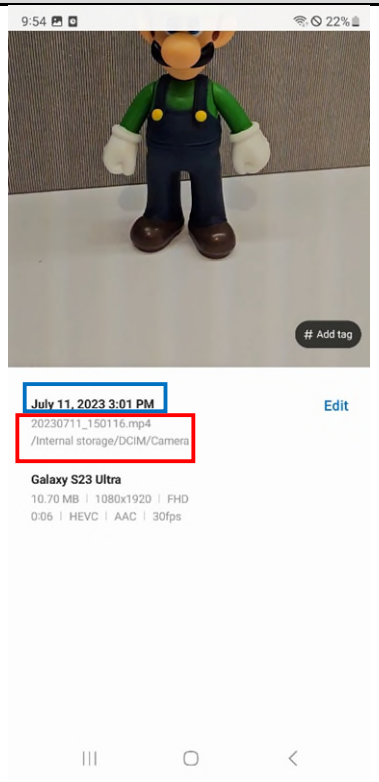
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Management information for fourth video

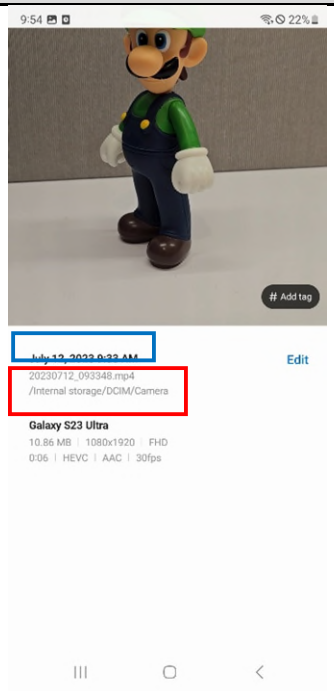
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	 Management information for fifth video *See also* Appendix 8 showing that the remaining Accused Samsung '815 Products include a memory and operate in a similar manner (*e.g.*, by including the Samsung Gallery application). *See* https://www.samsung.com/us/support/answer/ANS00079026/.
[6.c] wherein the management information	For each of the Accused Samsung '815 Products, the management information includes filename information and timing information for each of the third, fourth, and fifth video information such that when the third,

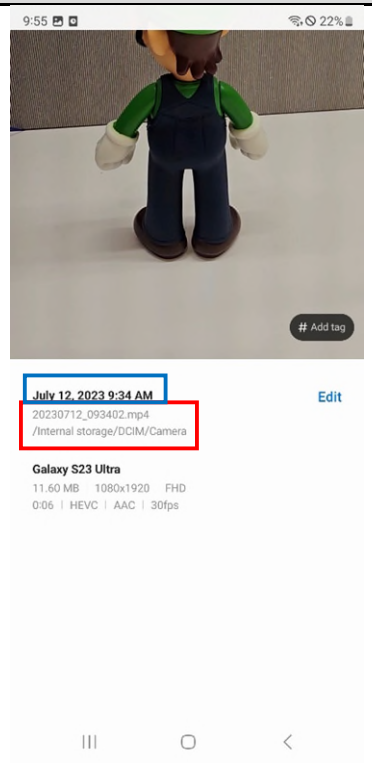
<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td>includes filename information and timing information for each of the third, fourth, and fifth video information such that when the third, fourth, and fifth video information is stored in the recording medium the filename information is updated according to a predetermined sequence.</td><td>fourth, and fifth video information is stored in the recording medium the filename information is updated according to a predetermined sequence.

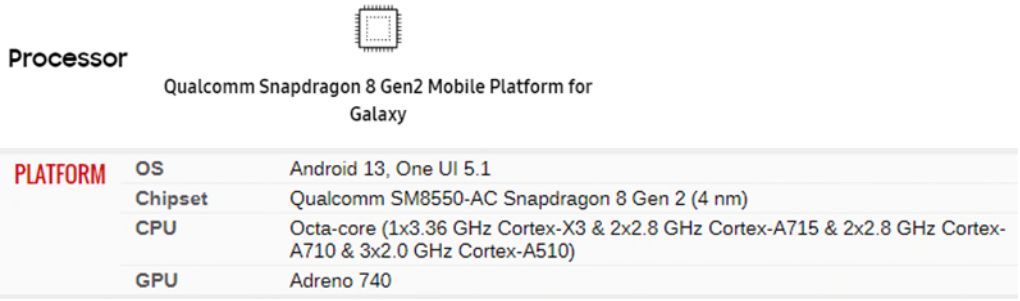
For example, testing of the Accused Samsung '815 Products confirms that the Accused Samsung '815 Products display management information that includes filename information and timing information for each of the third, fourth, and fifth video information such that when the third, fourth, and fifth video information is stored in the recording medium the filename information is updated according to a predetermined sequence. For example, the filename provided includes certain numbers that upon information and belief are generated based on a predetermined sequence based on the sequence of storing of the video information.

<table>
<tr><th>Product</th><th>Management information for third, fourth, and fifth videos</th></tr>
<tr><td>Samsung Galaxy S23 Ultra</td><td> 
</td></tr>
</table>
</td></tr>
</table>

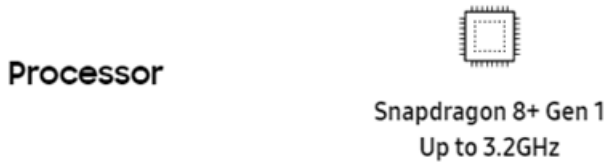
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 File name information (red) and date/time captured (blue) for third video.

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 File name information (red) and date/time captured (blue) for fourth video.

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 File name information (red) and date/time captured (blue) for fifth video. *See also* Appendix 8 showing that the remaining Accused Samsung '815 Products include a memory and operate in a similar manner (*e.g.*, by including the Samsung Gallery application). *See* https://www.samsung.com/us/support/answer/ANS00079026/.
[7.a] The information processing	Each of the Accused Samsung '815 Products includes an analog to digital converter for converting analog audio information being recorded into digital audio information.

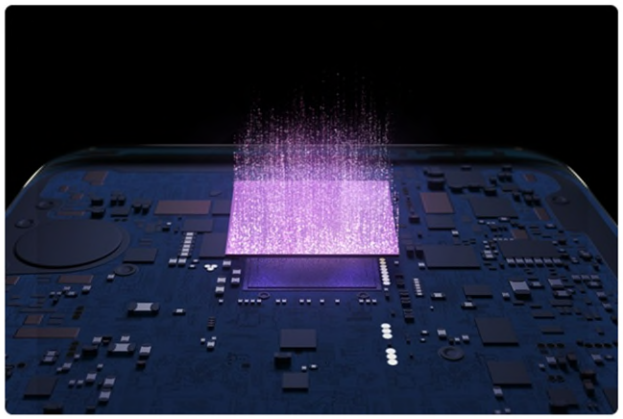
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
apparatus of claim 1, further comprising: an analog to digital converter for converting analog audio information being recorded into digital audio information;	For example, upon information and belief, each of the Accused Samsung '815 Products include one or more microphones that either alone or in combination with the system on a chip (SoC) of each Accused Samsung '815 Products convert analog audio information being recorded (i.e. voice or ambient sound accompanying a video) into digital audio information (i.e. the audio information stored in digital format as a part of the video mp4 file).  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 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	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.  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: Octa-Core CPU Speed: 2.4GHz,2GHz

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

Performance



Impressive speed. Powerful processor

The powerful Octa-core processor opens up a new range of possibilities with heightened performance and capacity.

PLATFORM	OS	Android 13, One UI 5.1
	Chipset	Exynos 1380 (5 nm)
	CPU	Octa-core (4x2.4 GHz Cortex-A78 & 4x2.0 GHz Cortex-A55)
	GPU	Mali-G68 MP5

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.

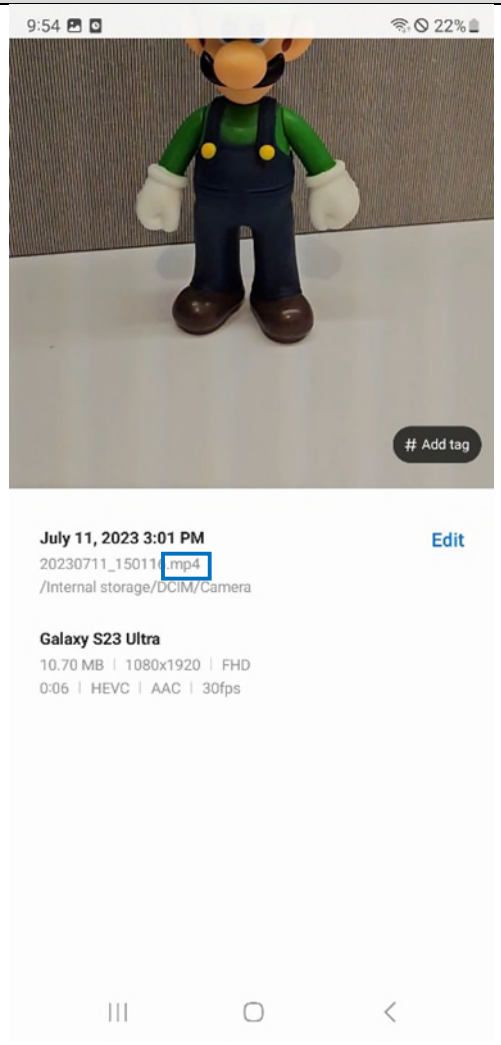
The AIDA64 Reports and tech specs show that the Accused Samsung '815 Products contain one or more processors.

Product	AIDA 64 Report- Processor

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement	
	Galaxy S23 Ultra	SoC Model: Qualcomm Snapdragon 8 Gen 2 (SM8550) Core Architecture: 3x ARM Cortex-A510 @ 2016 MHz 2x ARM Cortex-A715 @ 2803 MHz 2x ARM Cortex-A710 @ 2803 MHz ARM Cortex-X3 @ 3360 MHz Manufacturing Process: 4 nm Instruction Set: 64-bit ARMv9-A CPU Revision: r1p0 CPU Cores: 8 CPU Clock Range: 307 - 3360 MHz
	Galaxy Z Fold4	SoC Model: Qualcomm Snapdragon 8+ Gen 1 (SM8475) Core Architecture: 4x ARM Cortex-A510 @ 2016 MHz 3x ARM Cortex-A710 @ 2745 MHz ARM Cortex-X2 @ 3187 MHz Manufacturing Process: 4 nm Instruction Set: 64-bit ARMv9-A CPU Revision: r2p0 CPU Cores: 8 CPU Clock Range: 300 - 3187 MHz
	Galaxy Z Flip4	SoC Model: Qualcomm Snapdragon 8+ Gen 1 (SM8475) Core Architecture: 4x ARM Cortex-A510 @ 2016 MHz 3x ARM Cortex-A710 @ 2745 MHz ARM Cortex-X2 @ 3187 MHz Manufacturing Process: 4 nm Instruction Set: 64-bit ARMv9-A CPU Revision: r2p0 CPU Cores: 8 CPU Clock Range: 300 - 3187 MHz

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	<table><tr><td>Galaxy A54 5G</td><td>Core Architecture: 4x ARM Cortex-A55 @ 2002 MHz 4x ARM Cortex-A78 @ 2400 MHz Instruction Set: 64-bit ARMv8-A CPU Revision: r1p1 CPU Cores: 8 CPU Clock Range: 533 - 2400 MHz</td></tr></table> *See also* Appendix 8 showing that the remaining Accused Samsung '815 Products include cameras that record videos providing evidence that the remaining Accused Samsung '815 Products include an analog to digital converter for operating in a similar manner.
[7.b] a compressor for compressing the plurality of video information including digital video information and the digital audio information;	Each of the Accused Samsung '815 Products includes a compressor for compressing the plurality of video information including digital video information and the digital audio information. For example, upon information and belief, the system on a chip (SoC) with processor of each Accused Samsung '815 Products acts to compress the plurality of video information including digital video information and the digital audio information, for example into an mp4 file format. *See*, for example: **Samsung Galaxy S23:**

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Recorded video is in mp4 format.

<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>See also Appendix 8 providing evidence that the remaining Accused Samsung '815 Products include a memory and a compressor to compress video information in a similar manner as evidenced by the Samsung Gallery application. See https://www.samsung.com/us/support/answer/ANS00079026/.</td></tr>
<tr><td>[7.c] a decoder for decoding, during playback, the compressed digital video information and the compressed digital audio information included in the plurality of stored video information and selected for reproduction by the user; and</td><td>Each of the Accused Samsung '815 Products includes a decoder for decoding, during playback, the compressed digital video information and the compressed digital audio information included in the plurality of stored video information and selected for reproduction by the user.

For example, upon information and belief, the system on a chip (SoC) with processor and/or additional circuity such as a digital signal processor of each Accused Samsung '815 Products acts to decode, during playback, the mp4 digital video information and audio information stored on the device to be able to render it for playback.

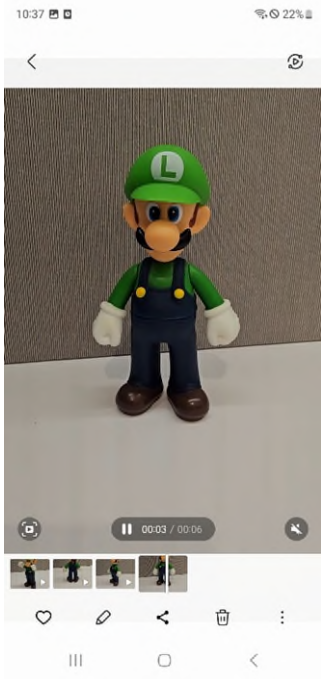
<table>
<tr><th>Product</th><th>Playback of mp4 videos</th></tr>
<tr><td>Samsung Galaxy S23 Ultra</td><td>  </td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>
<table>
<tr><td>Samsung A54 5G</td><td>  </td></tr>
</table>
See also Appendix 8 providing evidence that the remaining Accused Samsung '815 Products include a decoder to decode video information in a similar manner as evidenced by the Samsung Gallery application that playbacks video information. See https://www.samsung.com/us/support/answer/ANS00079026/.
</td></tr>
<tr><td>[7.d] a digital to analog converter for converting at least the decoded digital audio information into analog audio</td><td>
Each of the Accused Samsung '815 Products includes a digital to analog converter for converting at least the decoded digital audio information into analog audio information during playback.

For example, upon information and belief, the system on a chip (SoC) with processor and/or additional circuity such as a digital signal processor of each Accused Samsung '815 Products acts to convert the decoded digital audio information into analog audio information during playback of mp4 videos.
<table>
<tr><th>Product</th><th>Playback of mp4 videos</th></tr>
</table>
</td></tr>
</table>

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**		
information during playback.	Samsung Galaxy S23 Ultra		

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	Samsung A54 5G  *See also* Appendix 8 providing evidence that the remaining Accused Samsung '815 Products include a digital to analog converter for converting decoded digital audio information in a similar manner as evidenced by the Samsung Gallery application that playbacks audio information. *See* https://www.samsung.com/us/support/answer/ANS00079026/.
[8.a] The information processing apparatus of claim 1, further comprising: an on	Each of the Accused Samsung '815 Products includes an on screen display generator generating on screen display information. For example, upon information and belief, the system on a chip (SoC) with processor (including GPU) of each Accused Samsung '815 Products acts to generate on screen display information that is displayed during playback of video information including the total time of the video and time elapsed.

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**		
screen display generator generating on screen display information,	**Product**	**Playback mp4 videos with screen display information**	
	Samsung Galaxy S23 Ultra		

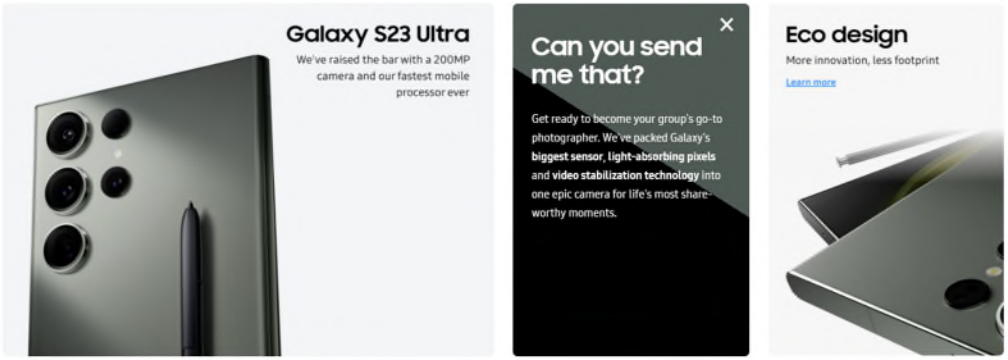
<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>
<table>
<tr><td>Samsung A54 5G</td><td>  </td></tr>
</table>
See also Appendix 8 showing that the remaining Accused Samsung '815 Products operate in a similar manner (e.g., by incluidng a Samsung Gallery application).
</td></tr>
<tr><td>[8.b] wherein the plurality of stored video information includes third video information such that, upon selection for playback, the third video information is</td><td>
For each of the Accused Samsung '815 Products, the plurality of stored video information includes third video information such that, upon selection for playback, the third video information is outputted with the on screen display information for display of the third video information and the on screen display information.

For example, testing of the Accused Samsung '815 Products confirms that the Accused Samsung '815 Products display on screen display information and the third video together as a part of playback.

Testing of the Accused Samsung '815 Products confirms that each plays mp4 videos (including a third video information) with display information that is at least the length of video and progress of playback.
<table>
<tr><th>Product</th><th>Playback mp4 videos with screen display information</th></tr>
</table>
</td></tr>
</table>

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**		
outputted with the on screen display information for display of the third video information and the on screen display information.	Samsung Galaxy S23 Ultra		

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	Samsung A54 5G  *See also* Appendix 8 showing that the remaining Accused Samsung '815 Products operate in a similar manner (*e.g.*, by incluidng a Samsung Gallery application).
[9. pre] An information processing method implemented on an information processing apparatus, the information	To the extent the preamble is construed as a limitation, each of the Accused Samsung '815 Products performs an information processing method implemented on an information processing apparatus. *See e.g.*, Technical Specifications of each of the Accused Samsung '815 Products available at Samsung's website show that each of the devices is an information processing apparatus that includes a processor to perform various functions. (https://www.samsung.com/us/mobile/). For example, the Accused Samsung '815 Products process information to display a user interface.

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
processing method comprising:	 **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. 11,017,815	**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

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	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.

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.



U.S. Patent No. 11,017,815	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](https://www.gsmarena.com/samsung_galaxy_a54-12070.php).



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.



APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	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.



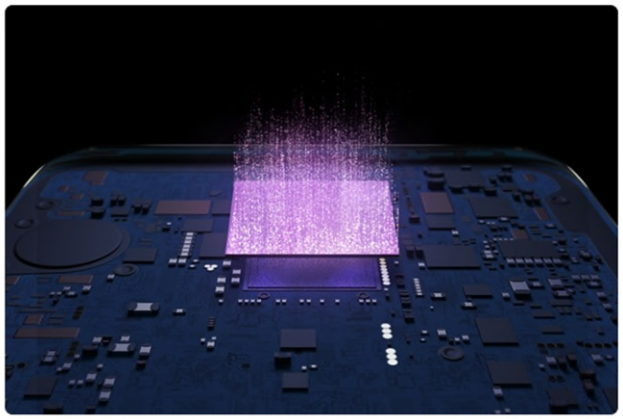
PLATFORM	OS	Android 12, upgradable to Android 13, One UI 5.1
	Chipset	Qualcomm SM8475 Snapdragon 8+ Gen 1 (4 nm)
	CPU	Octa-core (1x3.19 GHz Cortex-X2 & 3x2.75 GHz Cortex-A710 & 4x1.80 GHz Cortex-A510)
	GPU	Adreno 730

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.



U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

Performance



Impressive speed. Powerful processor

The powerful Octa-core processor opens up a new range of possibilities with heightened performance and capacity.

PLATFORM	OS	Android 13, One UI 5.1
	Chipset	Exynos 1380 (5 nm)
	CPU	Octa-core (4x2.4 GHz Cortex-A78 & 4x2.0 GHz Cortex-A55)
	GPU	Mali-G68 MP5

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.

In addition, the AIDA64 Reports show that each of the Accused Samsung '815 Products contains a front-facing and rear-facing camera for recording video, and associated software, which in conjunction with one or more processors (*e.g.*, CPU, ISP, or DSP) processes video.

Product	**AIDA 64 Report- Camera**

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
	Galaxy S23 Ultra	<< Rear-Facing Camera >> Resolution: 12 MP (4080 × 3060) Focal Length: 6.30 mm Focus Modes: infinity, auto, macro, continuous-video, continuous-picture Video Stabilization: Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Supported << Front-Facing Camera >> Resolution: 12 MP (4000 × 3000) Focal Length: 3.30 mm Focus Modes: infinity, auto, macro, continuous-video, continuous-picture Video Stabilization: Not Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Not Supported << Rear-Facing Camera >> Resolution: 12 MP (4000 × 3000) Focal Length: 2.20 mm Focus Modes: infinity, auto, macro, continuous-video, continuous-picture Video Stabilization: Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Not Supported	
	Galaxy Z Fold4	<< Rear-Facing Camera >> Resolution: 12 MP (4080 × 3060) Focal Length: 5.40 mm Focus Modes: infinity, auto, macro, continuous-video, continuous-picture Video Stabilization: Supported	

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
		Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Supported << Front-Facing Camera >> Resolution: 10.0 MP (3648 × 2736) Focal Length: 3.30 mm Focus Modes: fixed, infinity Video Stabilization: Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Not Supported << Rear-Facing Camera >> Resolution: 12 MP (4000 × 3000) Focal Length: 1.74 mm Focus Modes: fixed, infinity Video Stabilization: Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Not Supported	

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
	Galaxy Z Flip4	<< Rear-Facing Camera >> Resolution: 12 MP (4000 × 3000) Focal Length: 5.00 mm Focus Modes: infinity, auto, macro, continuous-video, continuous-picture Video Stabilization: Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Supported << Front-Facing Camera >> Resolution: 10.0 MP (3648 × 2736) Focal Length: 3.17 mm Focus Modes: fixed, infinity Video Stabilization: Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Not Supported << Rear-Facing Camera >> Resolution: 12 MP (4000 × 3000) Focal Length: 1.70 mm Focus Modes: fixed, infinity Video Stabilization: Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Not Supported	
	Galaxy A54 5G	<< Rear-Facing Camera >> Resolution: 12 MP (4080 × 3060) Focal Length: 5.54 mm Focus Modes: infinity, auto, continuous-video, continuous-picture Video Stabilization: Not Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Supported << Front-Facing Camera >> Resolution: 8.0 MP (3264 × 2448) Focal Length: 3.72 mm	

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

Focus Modes: fixed, infinity
Video Stabilization: Not Supported
Zoom: Supported
Auto Exposure Locking: Supported
Auto White Balance Locking: Supported
Flash: Not Supported

<< Rear-Facing Camera >>
Resolution: 12 MP (4000 × 3000)
Focal Length: 1.74 mm
Focus Modes: fixed, infinity
Video Stabilization: Not Supported
Zoom: Supported
Auto Exposure Locking: Supported
Auto White Balance Locking: Supported
Flash: Not Supported

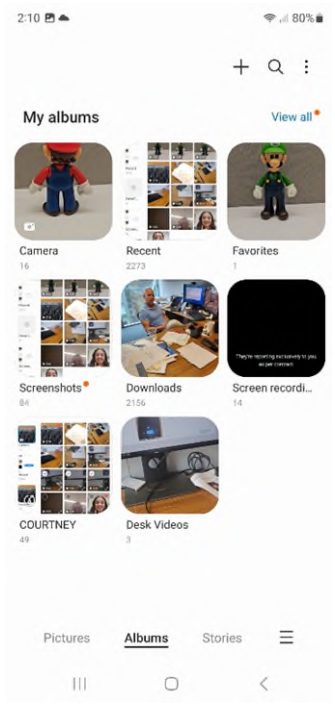
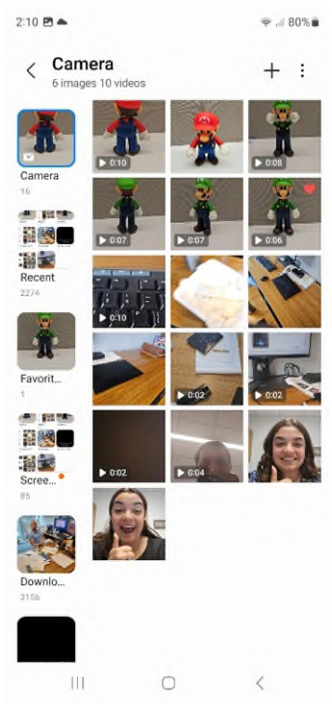
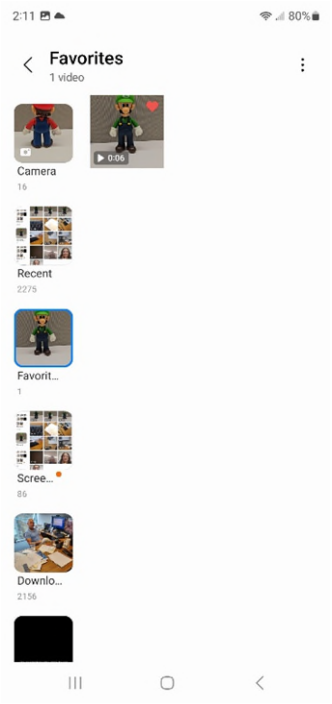
<< Front-Facing Camera >>
Resolution: 5.7 MP (2880 × 1980)
Focal Length: 3.72 mm
Focus Modes: fixed, infinity
Video Stabilization: Not Supported
Zoom: Supported
Auto Exposure Locking: Supported
Auto White Balance Locking: Supported
Flash: Not Supported

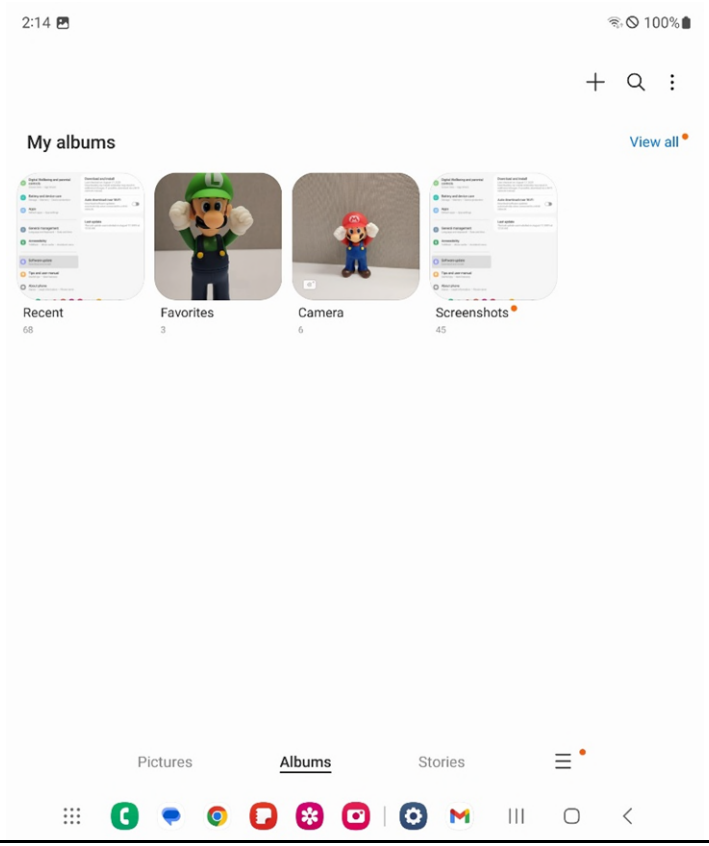
The AIDA64 Reports and tech specs show that the Accused Samsung '815 Products contain one or more processors.

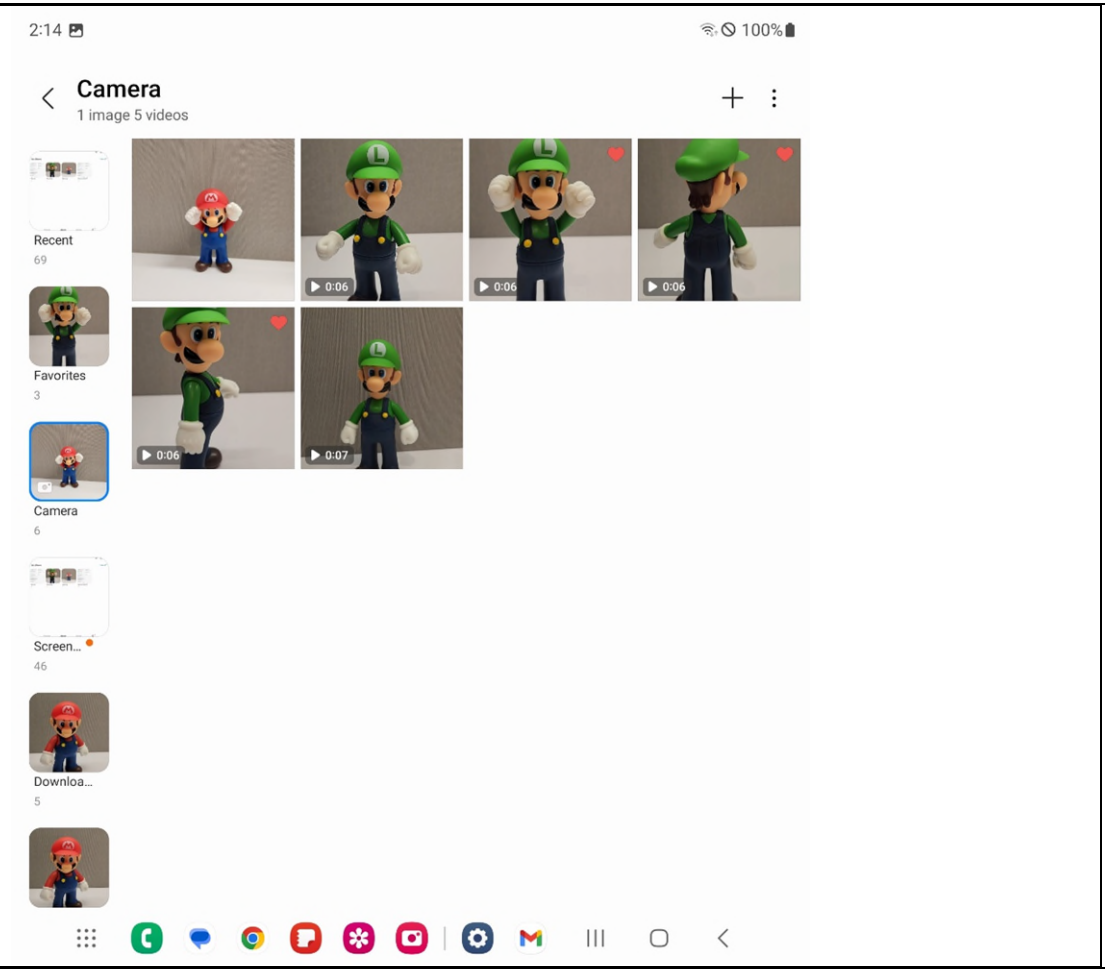
Product	AIDA 64 Report- Processor
Galaxy S23 Ultra	SoC Model: Qualcomm Snapdragon 8 Gen 2 (SM8550) Core Architecture: 3x ARM Cortex-A510 @ 2016 MHz

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement	
		2x ARM Cortex-A715 @ 2803 MHz 2x ARM Cortex-A710 @ 2803 MHz ARM Cortex-X3 @ 3360 MHz Manufacturing Process: 4 nm Instruction Set: 64-bit ARMv9-A CPU Revision: r1p0 CPU Cores: 8 CPU Clock Range: 307 - 3360 MHz
	Galaxy Z Fold4	SoC Model: Qualcomm Snapdragon 8+ Gen 1 (SM8475) Core Architecture: 4x ARM Cortex-A510 @ 2016 MHz 3x ARM Cortex-A710 @ 2745 MHz ARM Cortex-X2 @ 3187 MHz Manufacturing Process: 4 nm Instruction Set: 64-bit ARMv9-A CPU Revision: r2p0 CPU Cores: 8 CPU Clock Range: 300 - 3187 MHz
	Galaxy Z Flip4	SoC Model: Qualcomm Snapdragon 8+ Gen 1 (SM8475) Core Architecture: 4x ARM Cortex-A510 @ 2016 MHz 3x ARM Cortex-A710 @ 2745 MHz ARM Cortex-X2 @ 3187 MHz Manufacturing Process: 4 nm Instruction Set: 64-bit ARMv9-A CPU Revision: r2p0 CPU Cores: 8 CPU Clock Range: 300 - 3187 MHz
	Galaxy A54 5G	Core Architecture: 4x ARM Cortex-A55 @ 2002 MHz 4x ARM Cortex-A78 @ 2400 MHz Instruction Set: 64-bit ARMv8-A CPU Revision: r1p1 CPU Cores: 8 CPU Clock Range: 533 - 2400 MHz

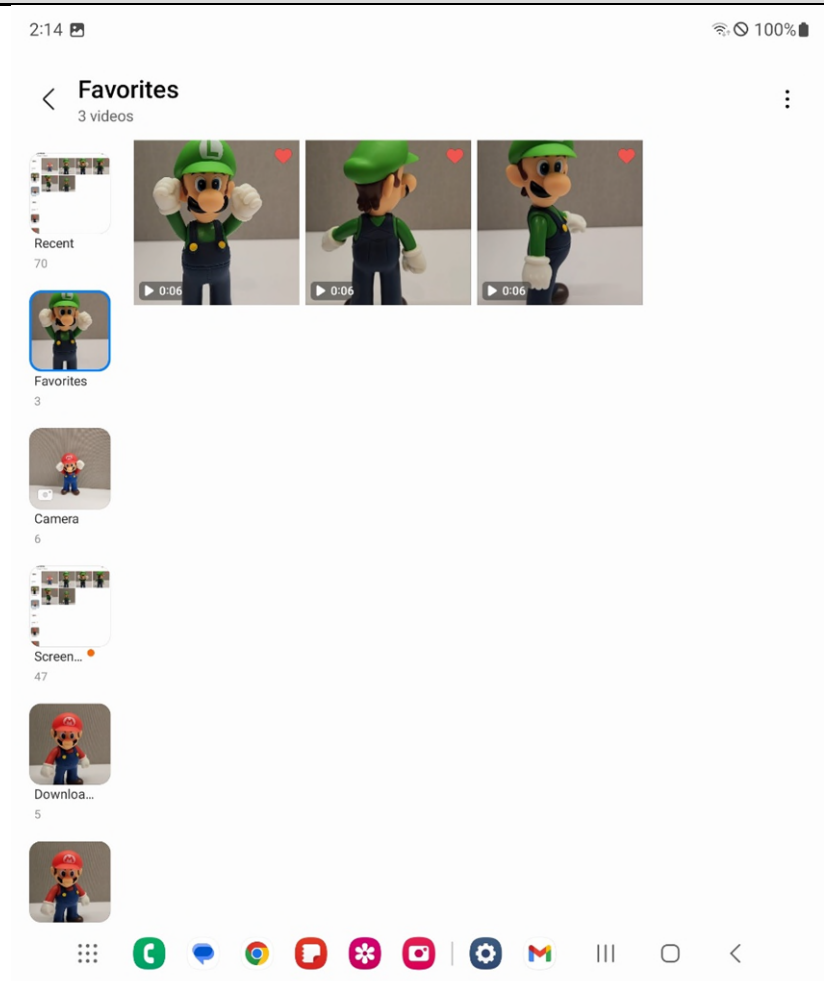
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

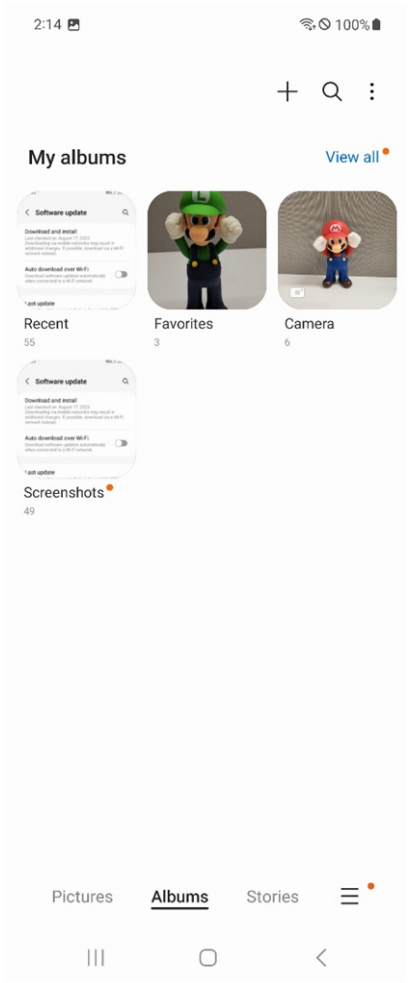
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement	
	Product	**Gallery Application Screenshots**
	Galaxy S23 Ultra	  

	Galaxy Z Fold4		


2:14
100%
Camera
1 image 5 videos
Recent
69
Favorites
3
Camera
6
Screen...
46
Downloa...
5
0:06
0:06
0:06
0:06
0:06
0:07

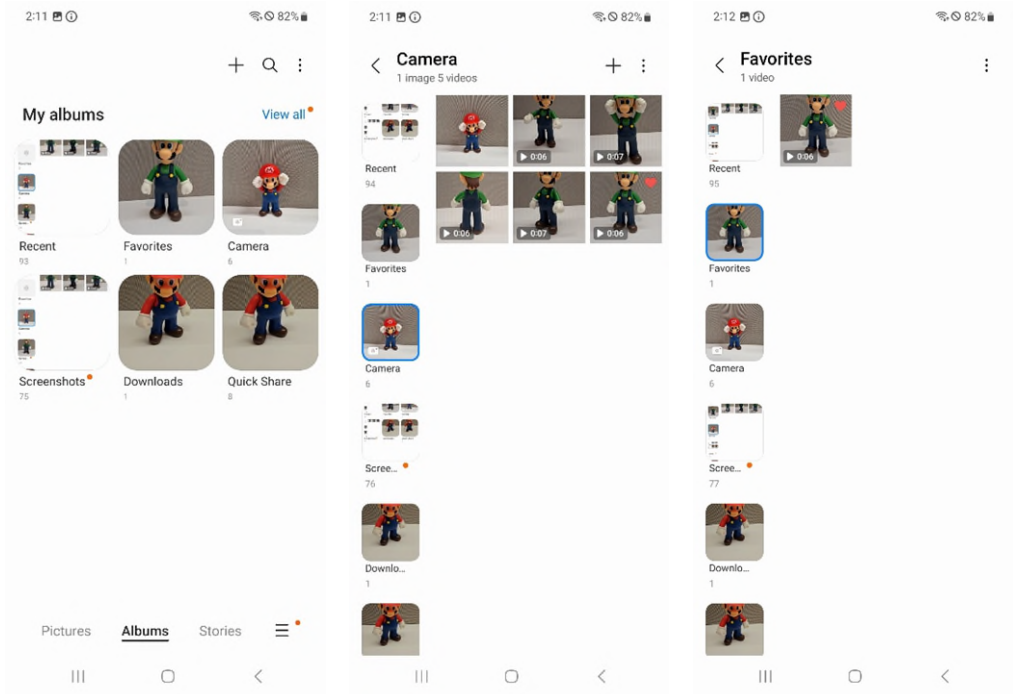
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

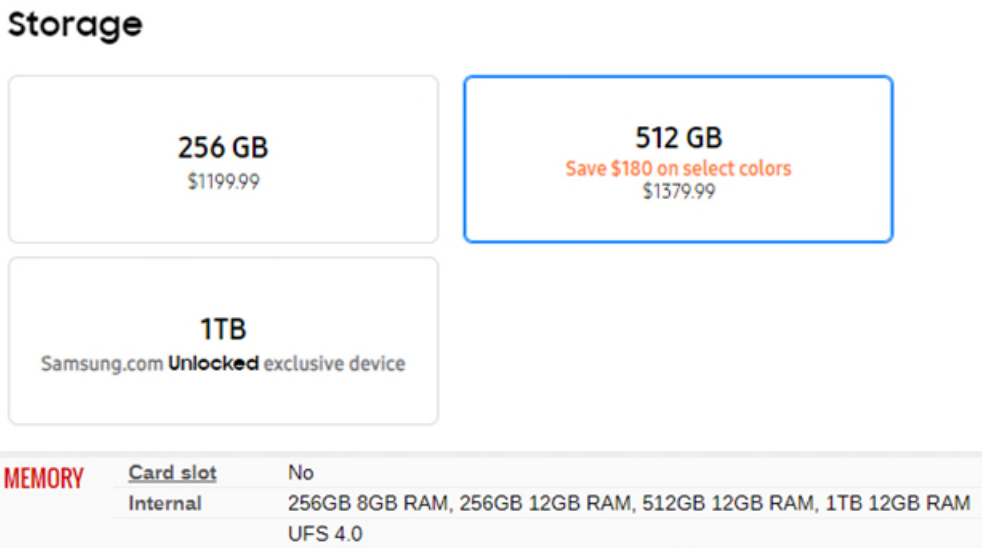
	Galaxy Z Flip4	 	

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

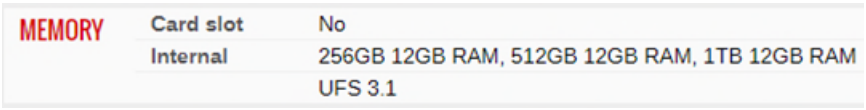
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

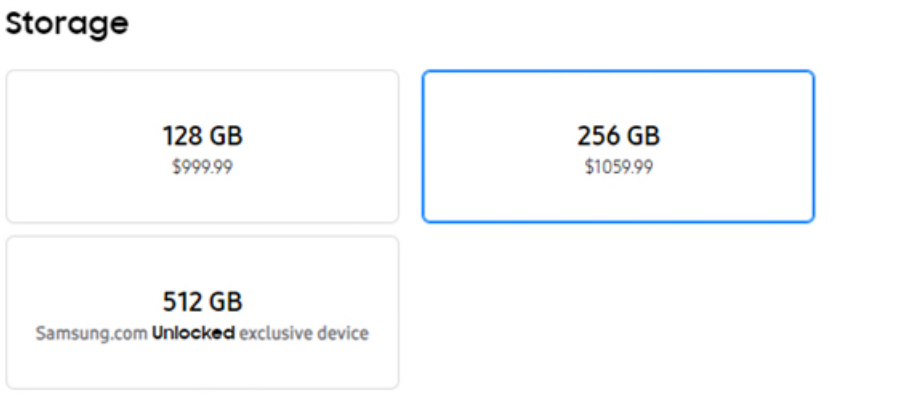
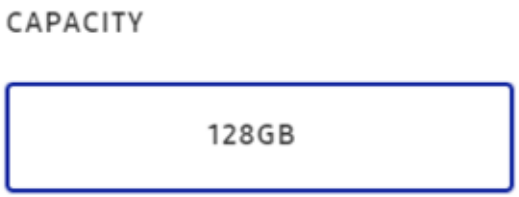
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Galaxy A54 5G 
	As shown above, the exemplary products all include Samsung's Gallery application that includes the same user interfaces and present a first area and second area in the same way. In addition, the remaining Accused Samsung '815 Products also include the same Samsung Gallery application including the same user interfaces. Thus, each of the Accused Samsung '815 Products infringe under the same theories as shown herein with one or more exemplary products. *See also* Appendix 8 showing that the remaining Accused Samsung '815 Products include front and back cameras for recording video, a display for displaying video, and one or more processors (*e.g.*, a CPU) with information processing capability.

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

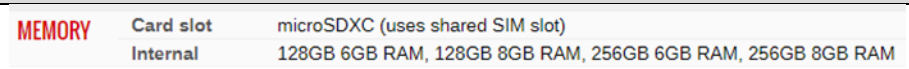
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
[9.a] storing a plurality of video information including first video information received wirelessly by a network interface over a network from another information processing apparatus,	Each of the Accused Samsung '815 Products perform a method of storing a plurality of video information including first video information received wirelessly by the network interface over a network from another information processing apparatus. For example, each of the Accused Samsung '815 Products includes local memory such as ROM alone or in combination with RAM and/or cache memory that is a recording medium on which is stored a plurality of video information. For example, Accused Samsung '815 Products receive video information wirelessly over WiFi, cellular, or Bluetooth via text message, Quick Share, e-mail, downloading over the Internet, and/or via Bluetooth file share.  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.

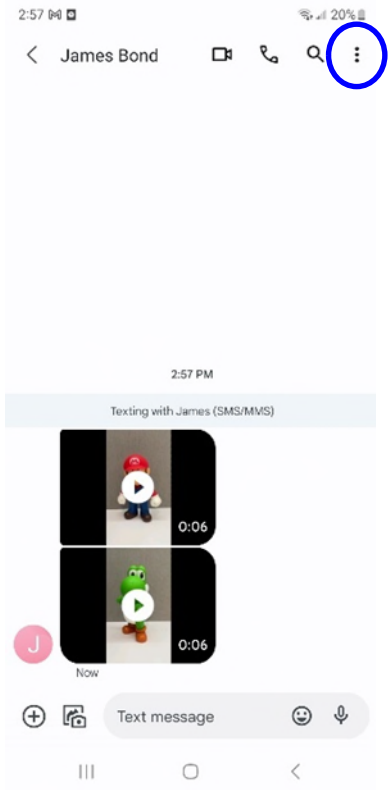
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U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	  Galaxy Z Fold4 technical specifications; https://www.samsung.com/us/smartphones/galaxy-z-fold4/buy/galaxy-z-fold4-512gb-att-sm-f936uzeeatt/; https://www.gsmarena.com/samsung_galaxy_z_fold4-11737.php.

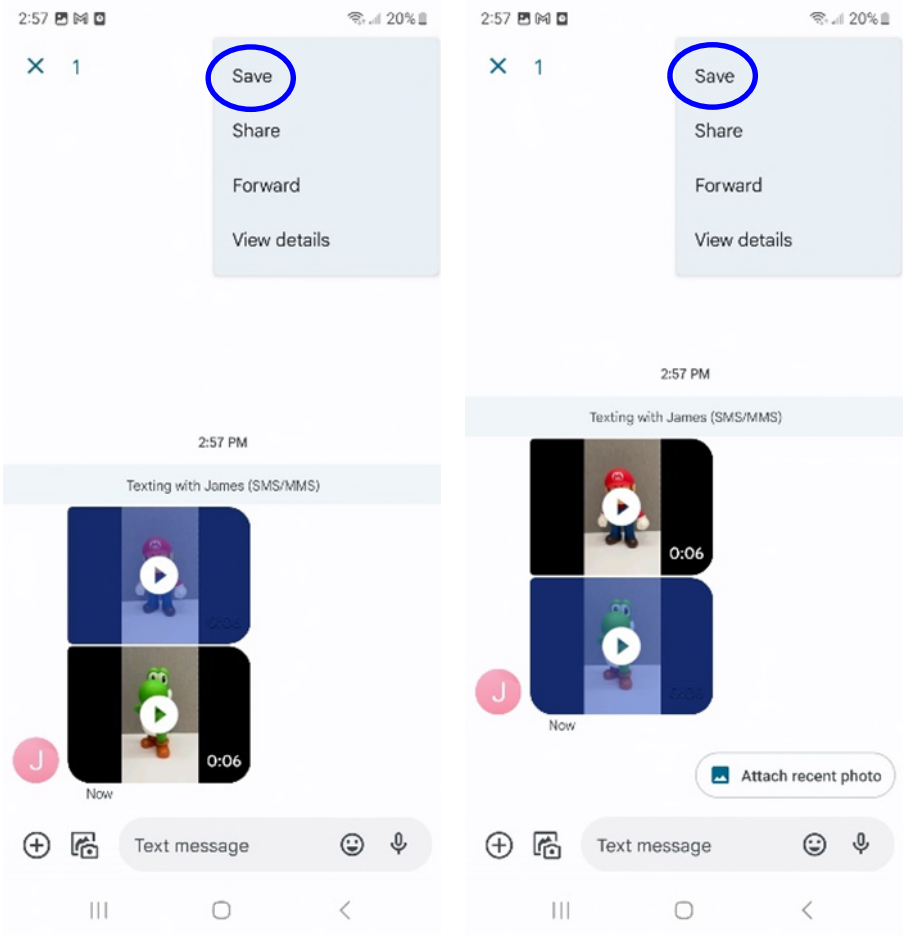
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Galaxy Z Flip4 technical specifications; https://www.samsung.com/us/smartphones/galaxy-z-flip4/buy/galaxy-z-flip4-256gb-t-mobile-sm-f721uzdexau/; https://www.gsmarena.com/samsung_galaxy_z_flip4-11538.php. 

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

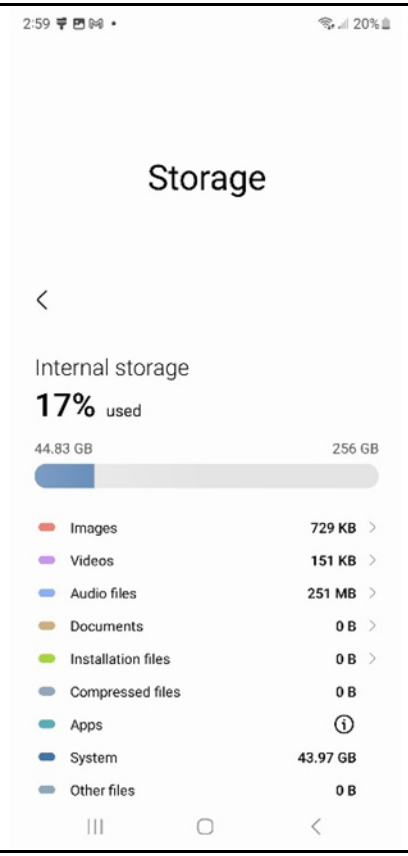
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<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>


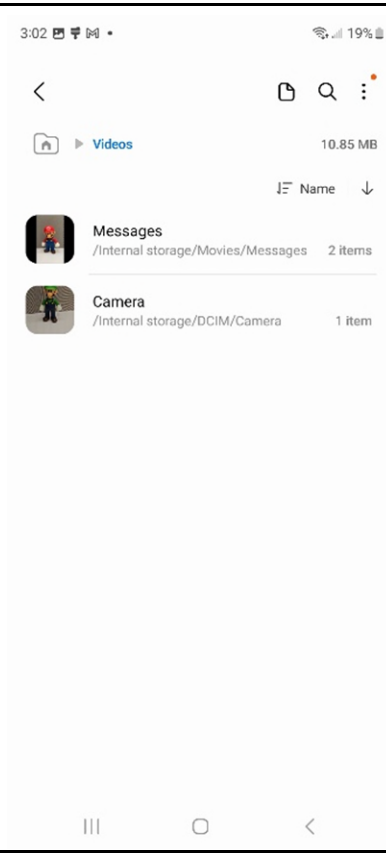
Galaxy A54 5G technical specifications; https://www.samsung.com/us/mobile/phones/galaxy-a/galaxy-a54-5g-128gb-verizon-sm-a546vzkbvzw/; https://www.gsmarena.com/samsung_galaxy_a54-12070.php.
<table>
<tr><th>Product</th><th>Testing showing reception and storage of a video via text message</th></tr>
<tr><td>Samsung Galaxy S23 Ultra</td><td>


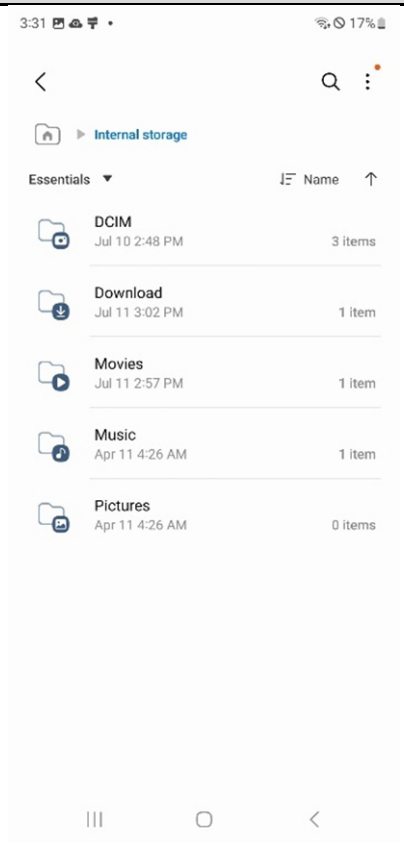
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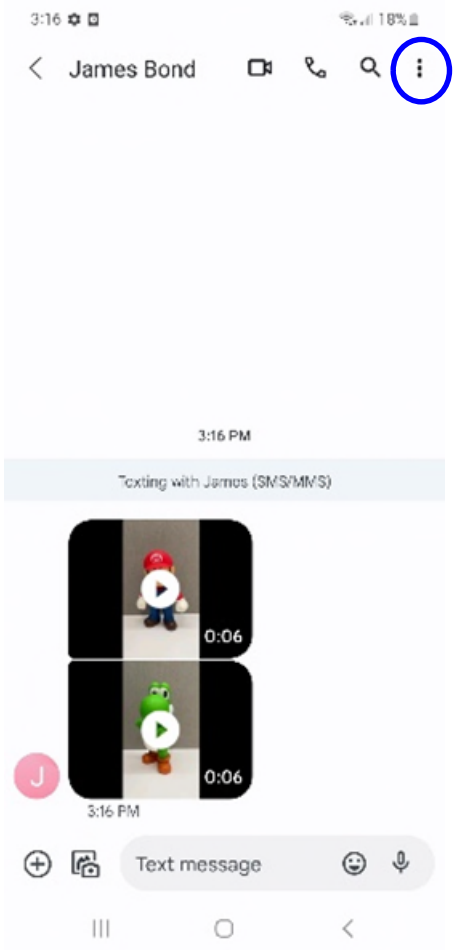
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Screenshot showing wireless reception of videos by text message.  Screenshots showing saving videos to local storage.

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Screenshot showing videos shown within Gallery application demonstrating local storage.

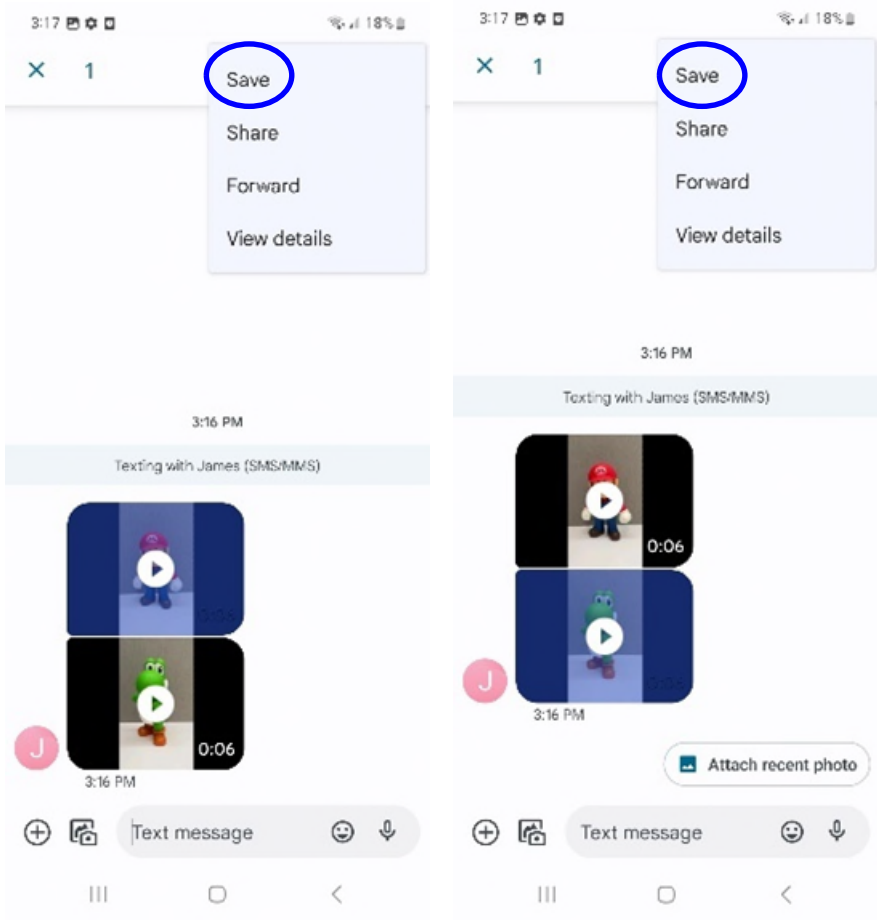

2:59
20%
Storage
Internal storage
17% used
44.83 GB
256 GB
Images 729 KB
Videos 151 KB
Audio files 251 MB
Documents 0 B
Installation files 0 B
Compressed files 0 B
Apps
System 43.97 GB
Other files 0 B


3:02
19%
Videos
10.85 MB
Name
Messages
/Internal storage/Movies/Messages
2 items
Camera
/Internal storage/DCIM/Camera
1 item

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Screenshots showing the internal storage capacity of the device and storing file paths.

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
	Samsung Galaxy A54 5G	 Screenshot showing wireless reception of videos by text message.	

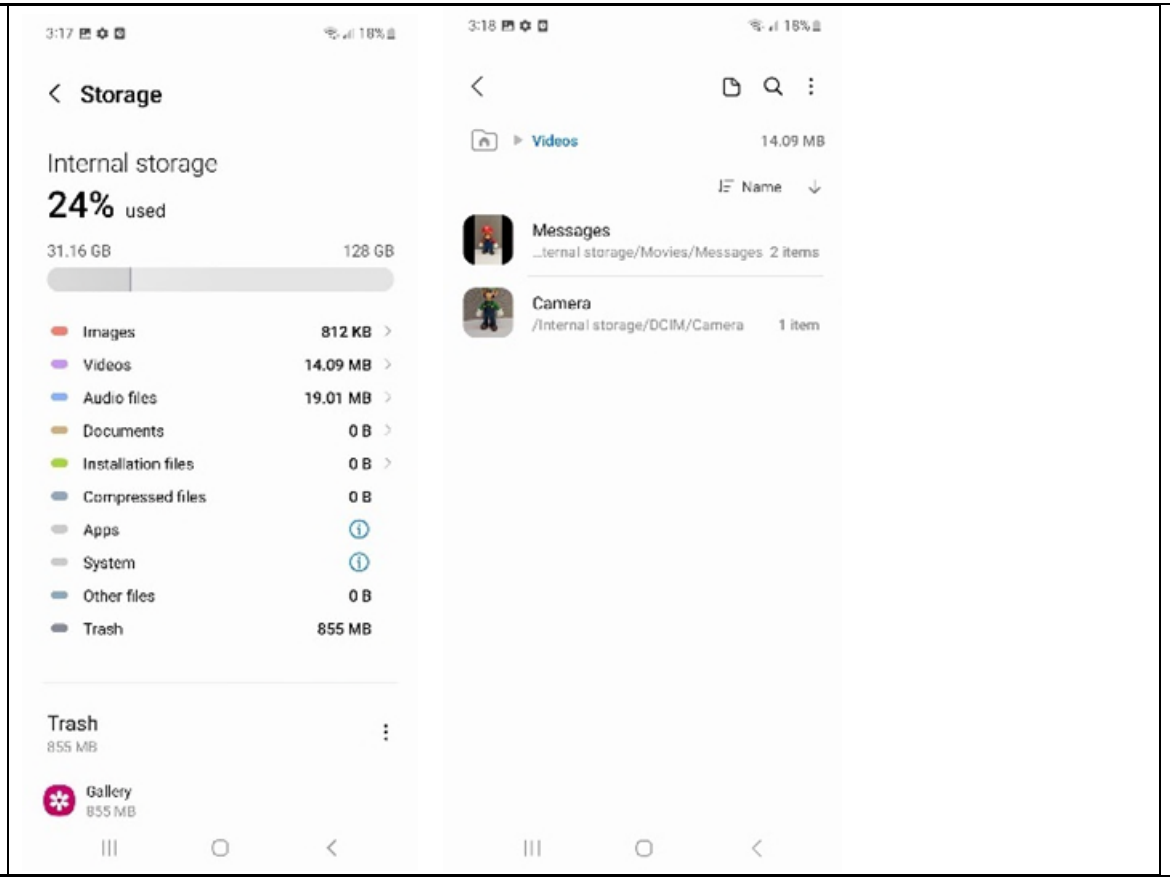
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

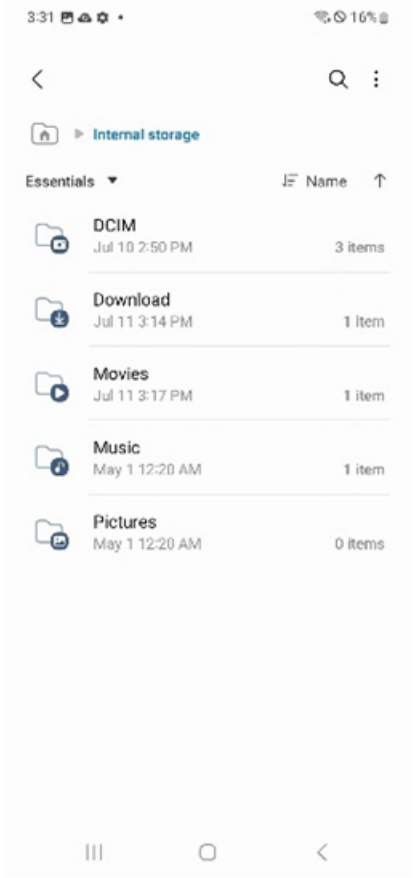


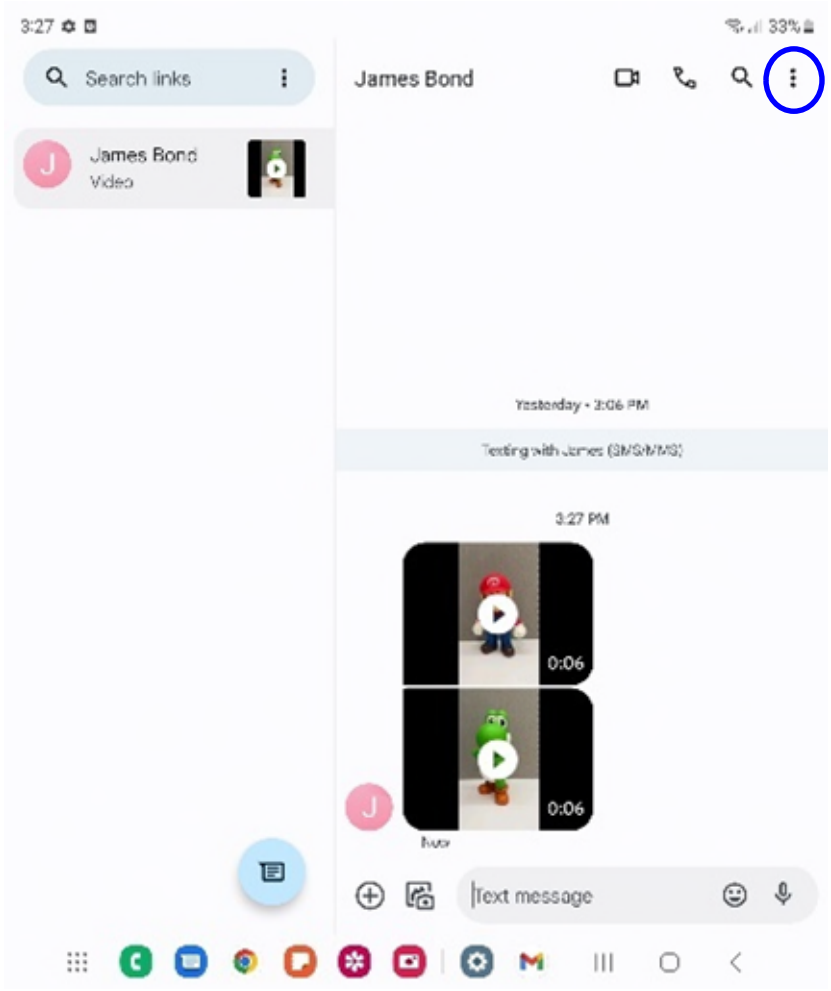
Screenshots showing saving videos to local storage.

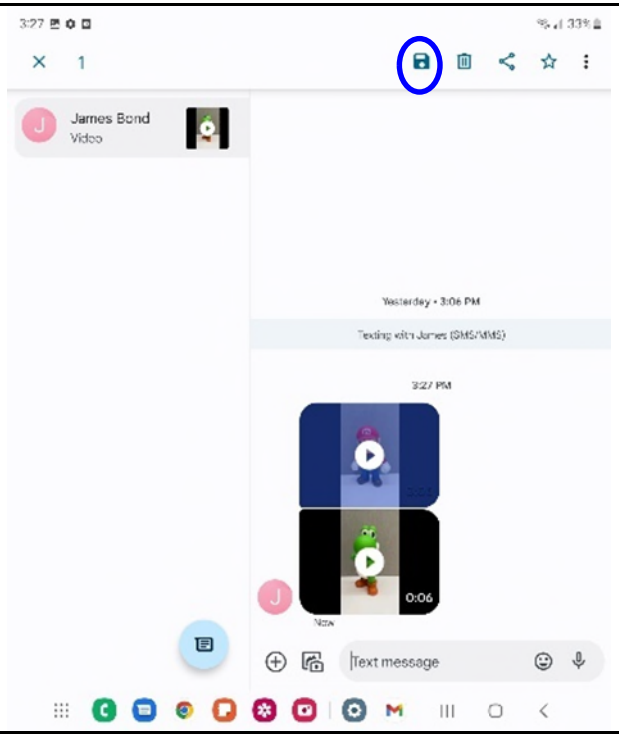
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

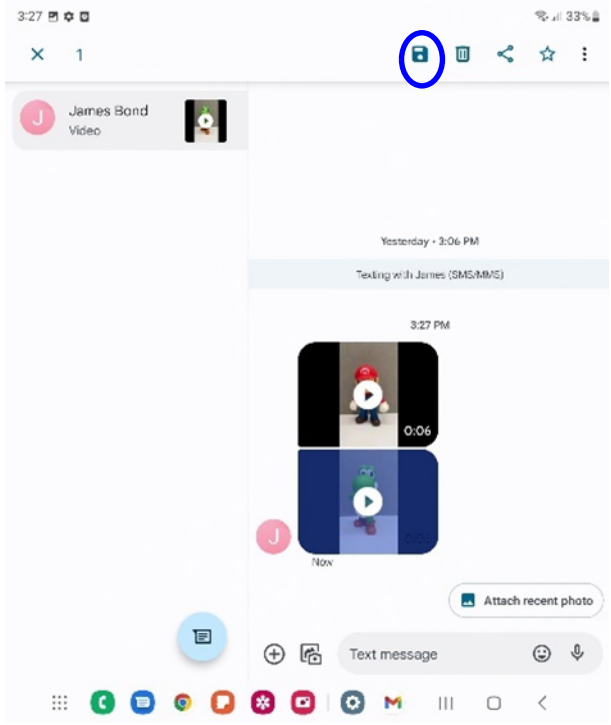
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
		Screenshot showing videos shown within Gallery application demonstrating local storage.	

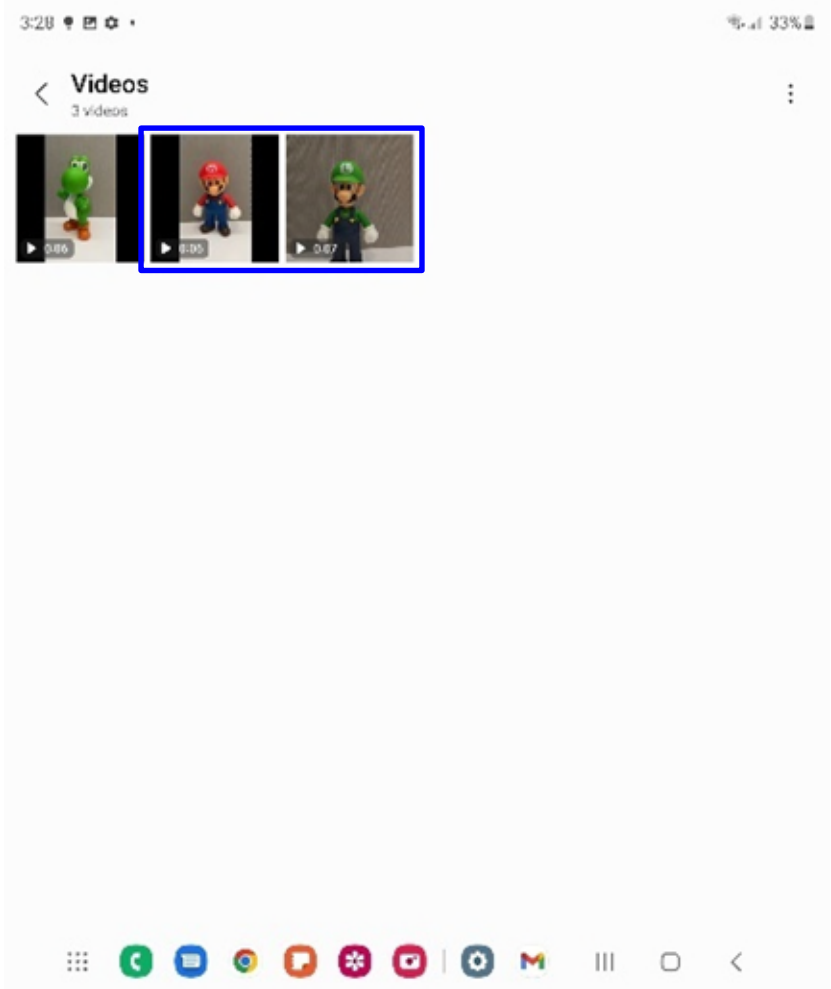

3:17
18%
Storage
Internal storage
24% used
31.16 GB
128 GB
Images 812 KB
Videos 14.09 MB
Audio files 19.01 MB
Documents 0 B
Installation files 0 B
Compressed files 0 B
Apps
System
Other files 0 B
Trash 855 MB
Trash
855 MB
Gallery
855 MB
3:18
18%
Videos
14.09 MB
Name
Messages
...ternal storage/Movies/Messages 2 items
Camera
/Internal storage/DCIM/Camera 1 item

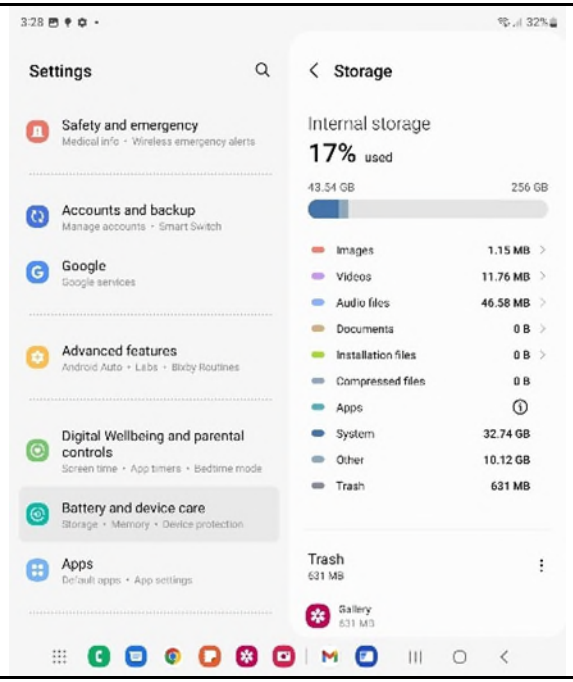
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Screenshots showing the internal storage capacity of the device and storing file paths.

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**		
	Samsung Galaxy ZFold 4	 Screenshot showing wireless reception of videos by text message.	

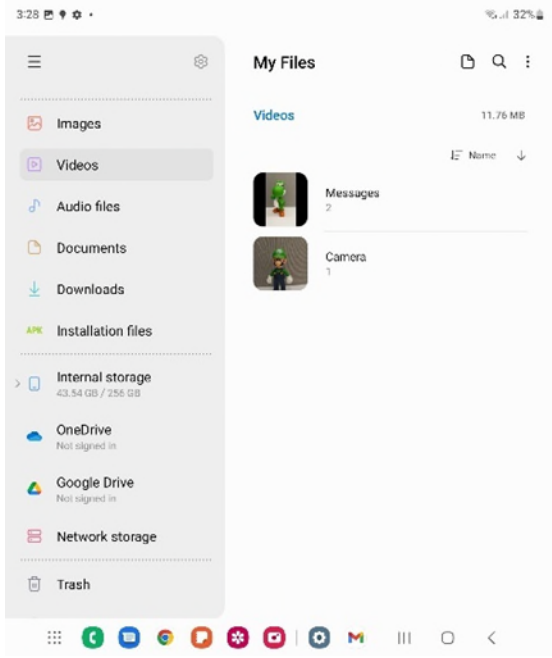
		 James Bond Video Yesterday • 3:06 PM 3:27 PM 0:06 Text message	

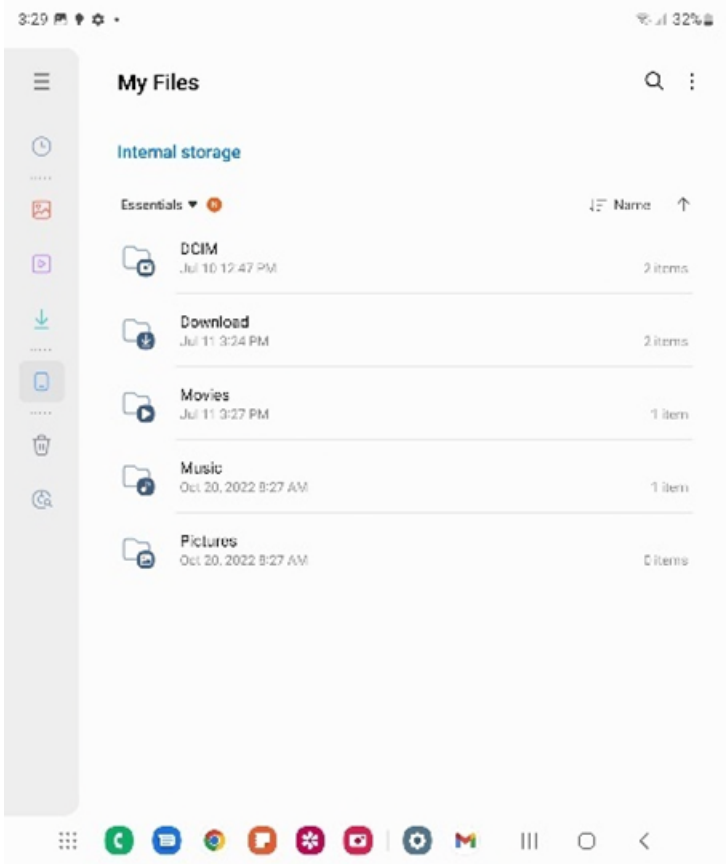
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Screenshots showing saving videos to local storage.

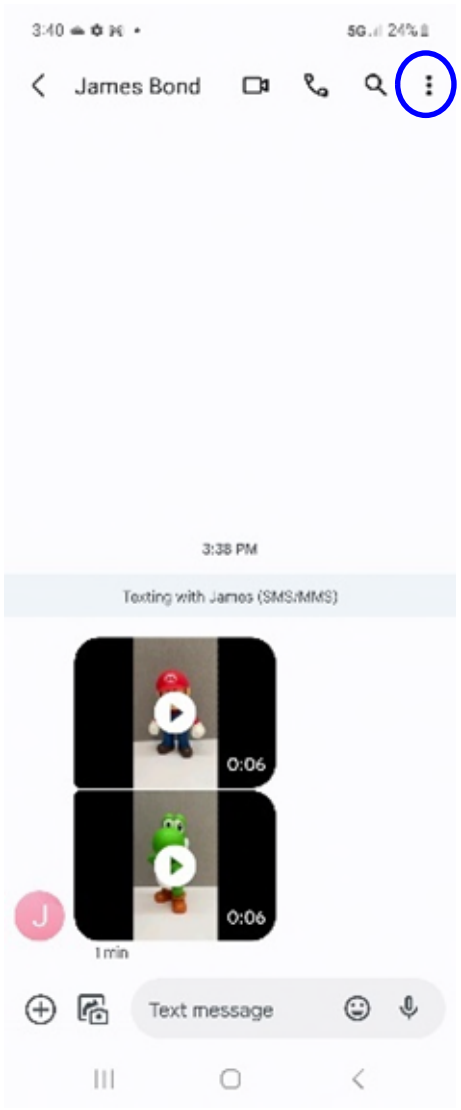
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Screenshot showing videos shown within Gallery application demonstrating local storage.

			 3:28 32% Settings Safety and emergency Medical info • Wireless emergency alerts Accounts and backup Manage accounts • Smart Switch Google Google services Advanced features Android Auto • Labs • Bixby Routines Digital Wellbeing and parental controls Screen time • App timers • Bedtime mode Battery and device care Storage • Memory • Device protection Apps Default apps • App settings Storage Internal storage 17% used 43.54 GB 256 GB Images 1.15 MB Videos 11.76 MB Audio files 46.58 MB Documents 0 B Installation files 0 B Compressed files 0 B Apps System 32.74 GB Other 10.12 GB Trash 631 MB Trash 631 MB Gallery 631 MB	

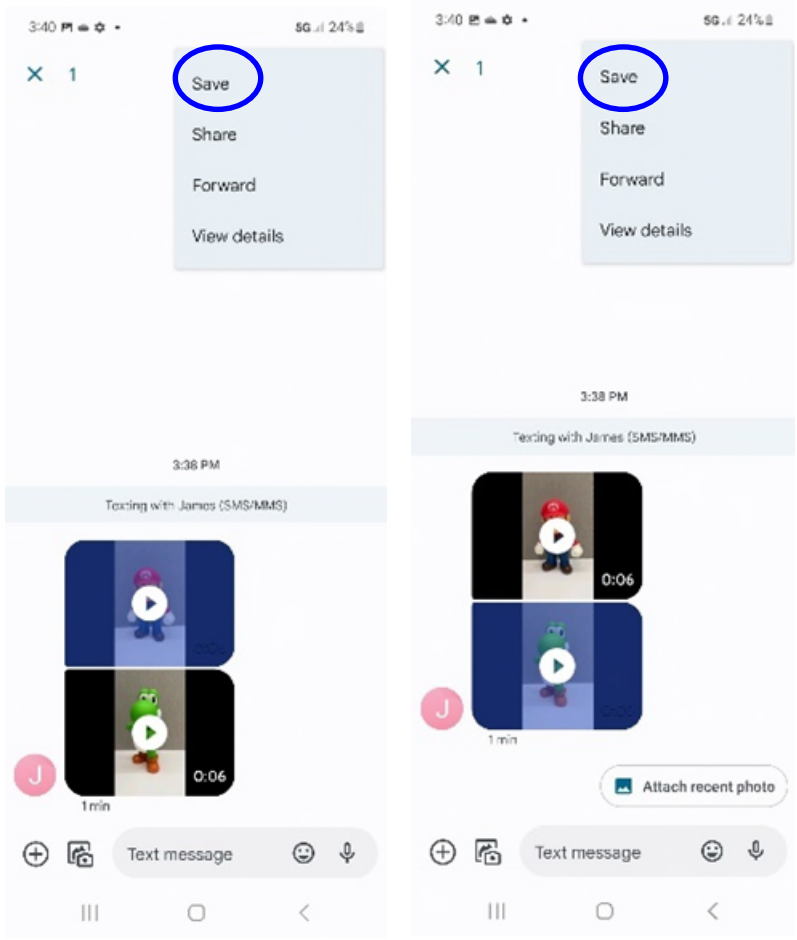
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Screenshots showing the internal storage capacity of the device and storing file paths.

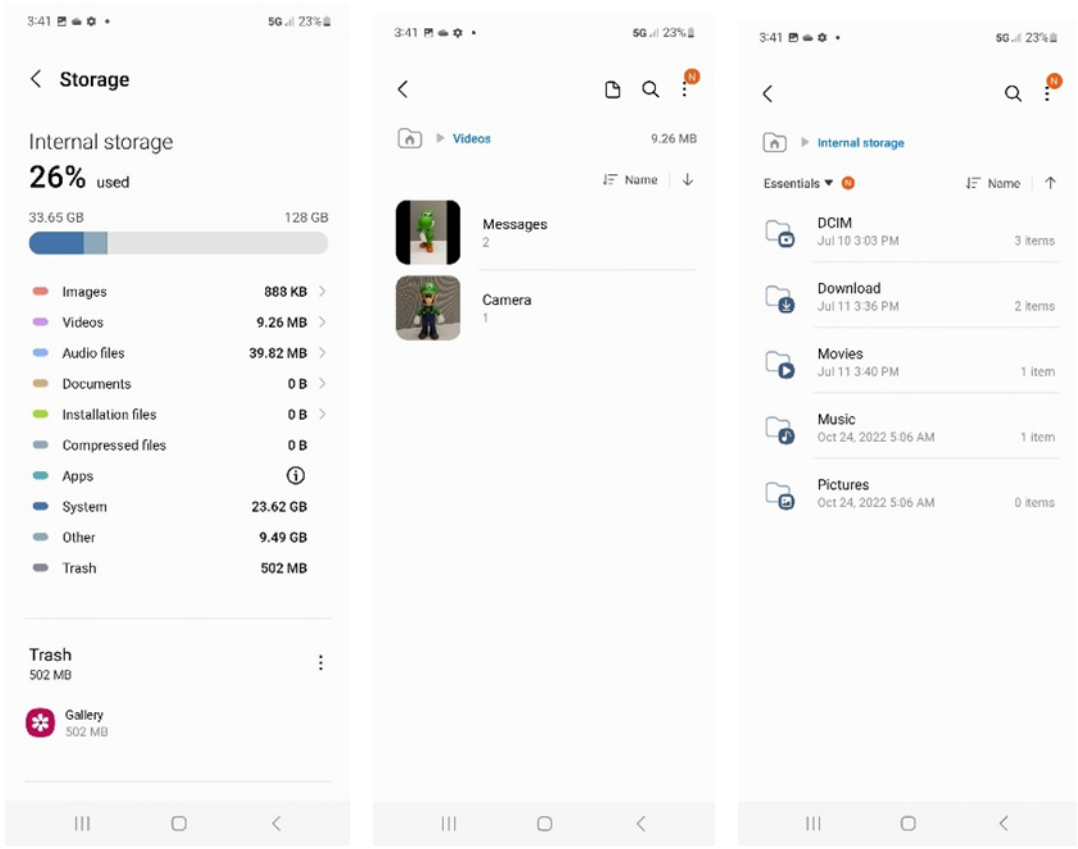
	Samsung Galaxy ZFlip 4:	 Screenshot showing wireless reception of videos by text message.	

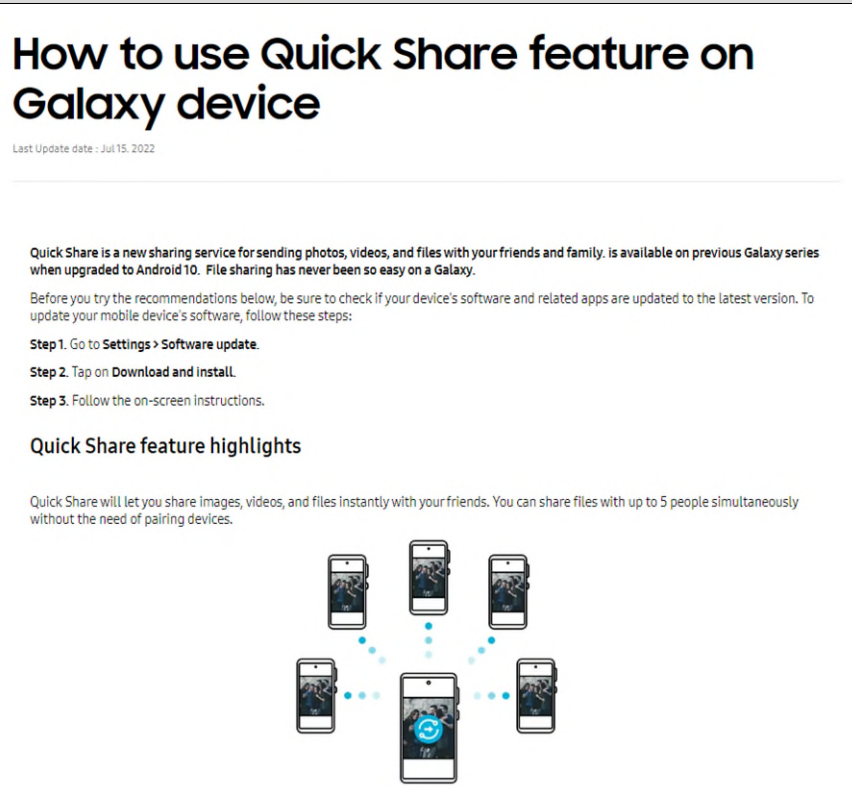
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement



Screenshots showing saving videos to local storage.

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Screenshot showing videos shown within Gallery application demonstrating local storage.  Screenshots showing the internal storage capacity of the device and storing file paths.
	The Accused Samsung '815 Products also store video information after receiving it wirelessly over Quick Share:

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

How to use Quick Share feature on Galaxy device

Last Update date : Jul 15, 2022

Quick Share is a new sharing service for sending photos, videos, and files with your friends and family. is available on previous Galaxy series when upgraded to Android 10. File sharing has never been so easy on a Galaxy.

Before you try the recommendations below, be sure to check if your device's software and related apps are updated to the latest version. To update your mobile device's software, follow these steps:

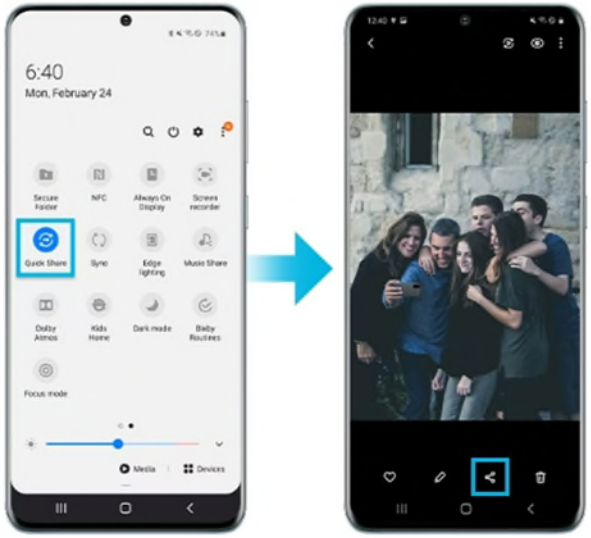
Step 1. Go to **Settings > Software update**.

Step 2. Tap on **Download and install**.

Step 3. Follow the on-screen instructions.

Quick Share feature highlights

Quick Share will let you share images, videos, and files instantly with your friends. You can share files with up to 5 people simultaneously without the need of pairing devices.

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Step 1. First, make sure the Quick Share feature is turned on for both phones. On the other device, open the notification panel, swipe downwards, and then tap **Quick Share** to activate it. It will be blue when it's activated. If the Quick Share icon does not appear in your Quick settings panel, you may need to add it. **Step 2**. Launch the **Gallery** app and select an image. Tap the **Share** button and select a device to transfer the image. Accept the file transfer request on the other device.  **Step 3**. If you're having trouble connecting to another device, swipe down from the top of your screen to open Quick Settings, and then touch and hold the **Quick Share** icon. Tap the **switch** next to "**Show my position to others**" to let nearby devices see your device when they are using Quick Share. This option will only show if Quick Share is enabled. The "Show my position to others" option is only available on select models. https://www.samsung.com/ph/support/mobile-devices/how-to-use-quickshare-feature-on-galaxy-mobile-device/

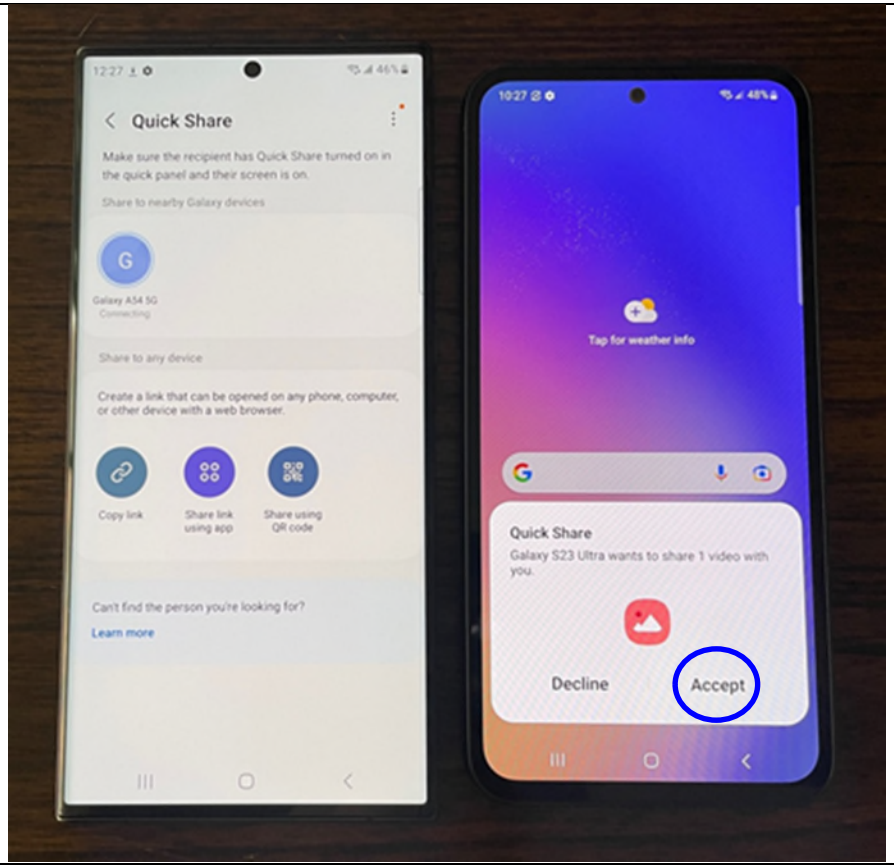
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**

Video Information Transmitting Device (Samsung Galaxy S23 Ultra)	Video Information Receiving Device (Samsung Galaxy A54 5G)

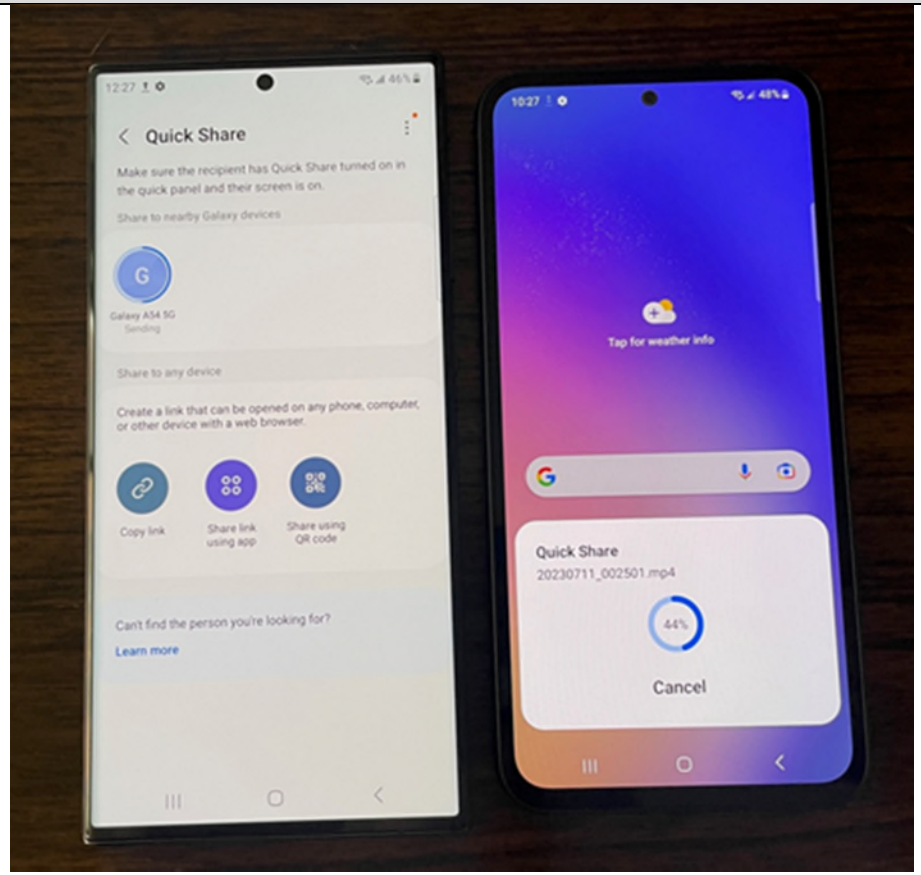



1 item
Nearby Share
No recommended people to share with
Quick Share
Bluetooth
Drive
Gmail
Tap for weather info
Galaxy Store
Gallery
Play Store
Google

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

	 Quick Share Make sure the recipient has Quick Share turned on in the quick panel and their screen is on. Share to nearby Galaxy devices G Galaxy A54 5G Connecting Share to any device Create a link that can be opened on any phone, computer, or other device with a web browser. Copy link Share link using app Share using QR code Can't find the person you're looking for? Learn more Tap for weather info Quick Share Galaxy S23 Ultra wants to share 1 video with you. Decline Accept	

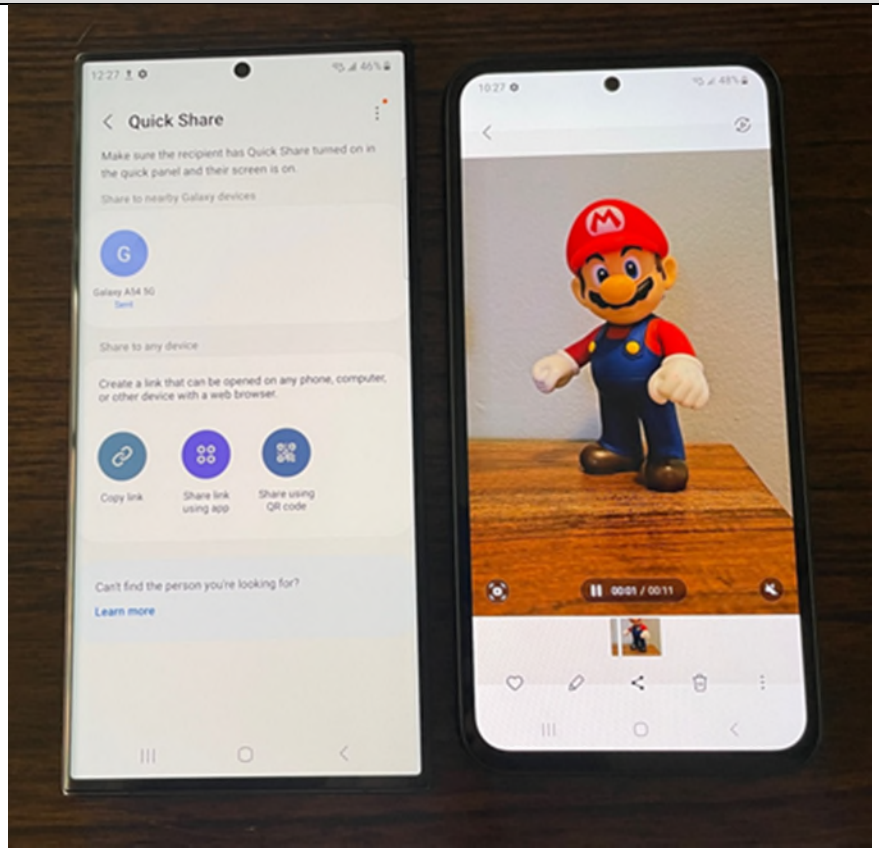
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

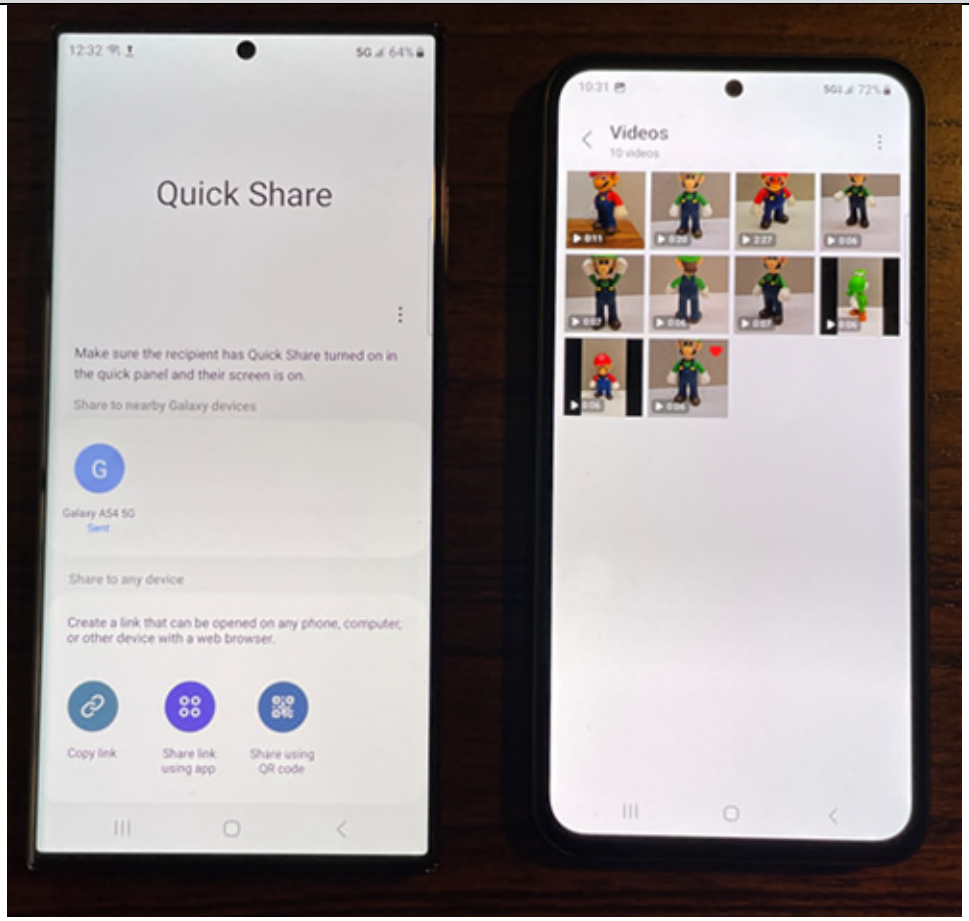
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 The Accused Samsung '815 Products also store video information after receiving it wirelessly over Bluetooth:

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

Video Information Transmitting Device (Samsung Galaxy S23 Ultra)	Video Information Receiving Device (Samsung Galaxy A54 5G)



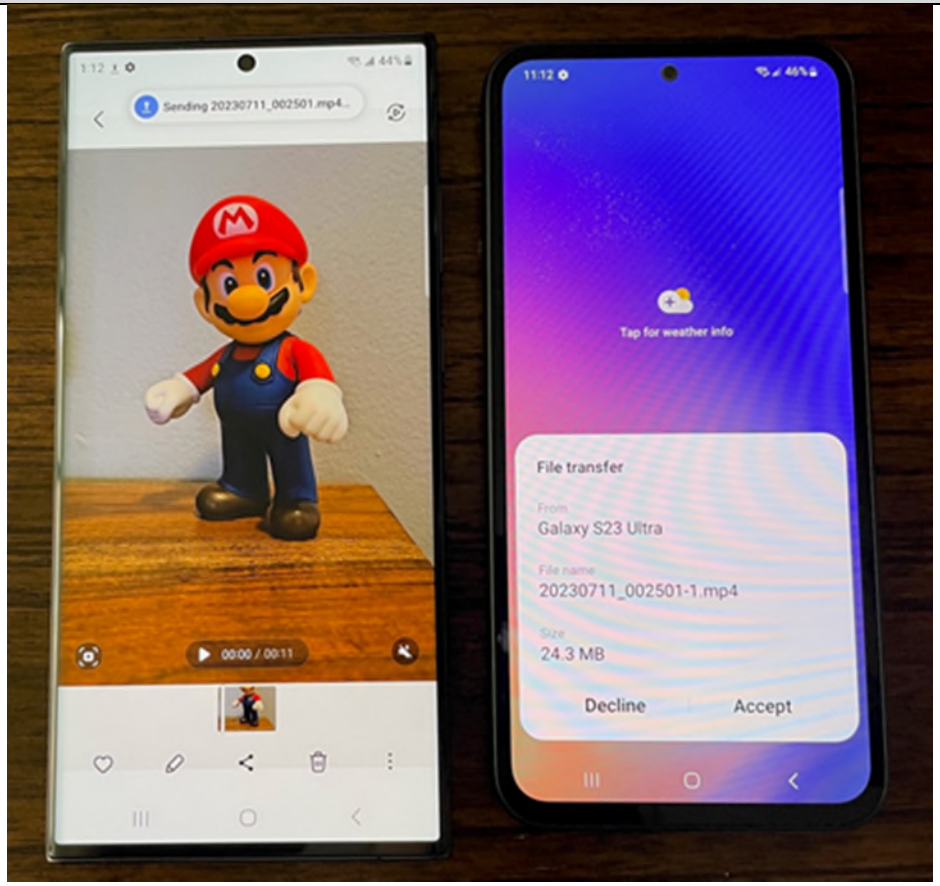
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

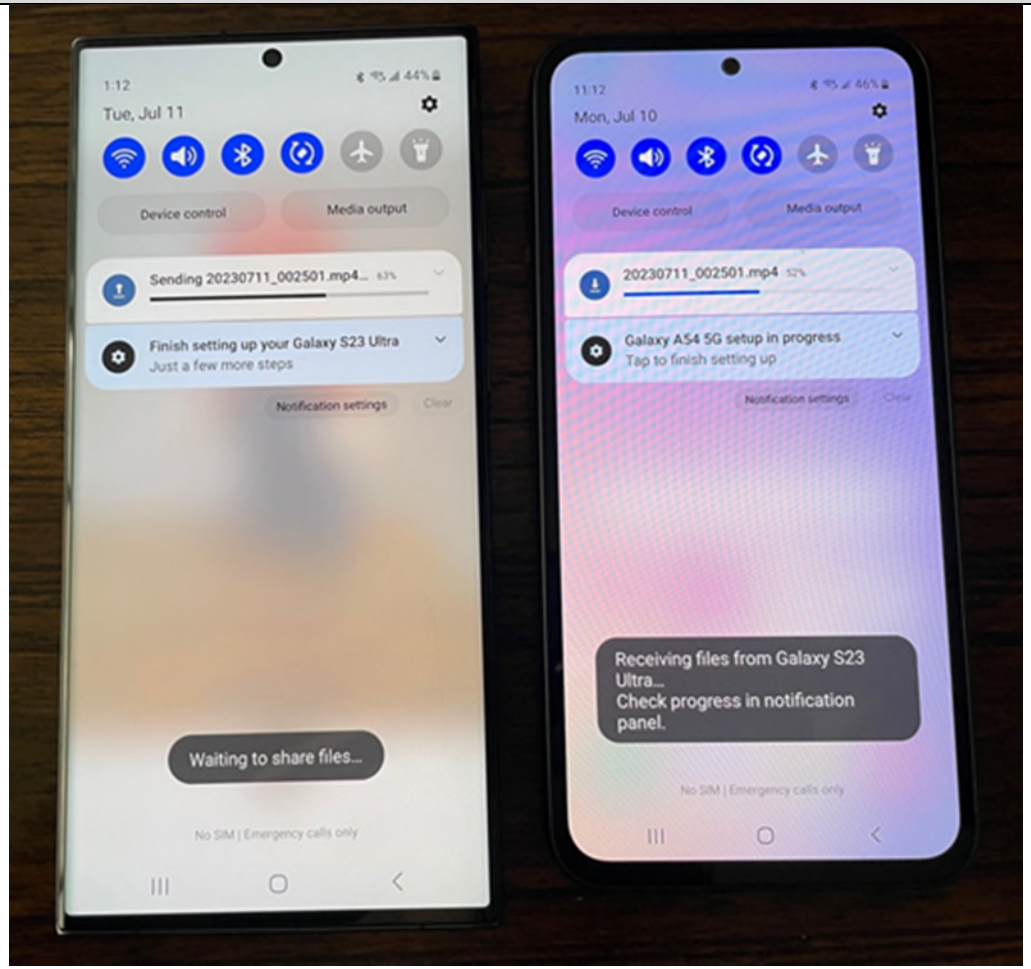
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

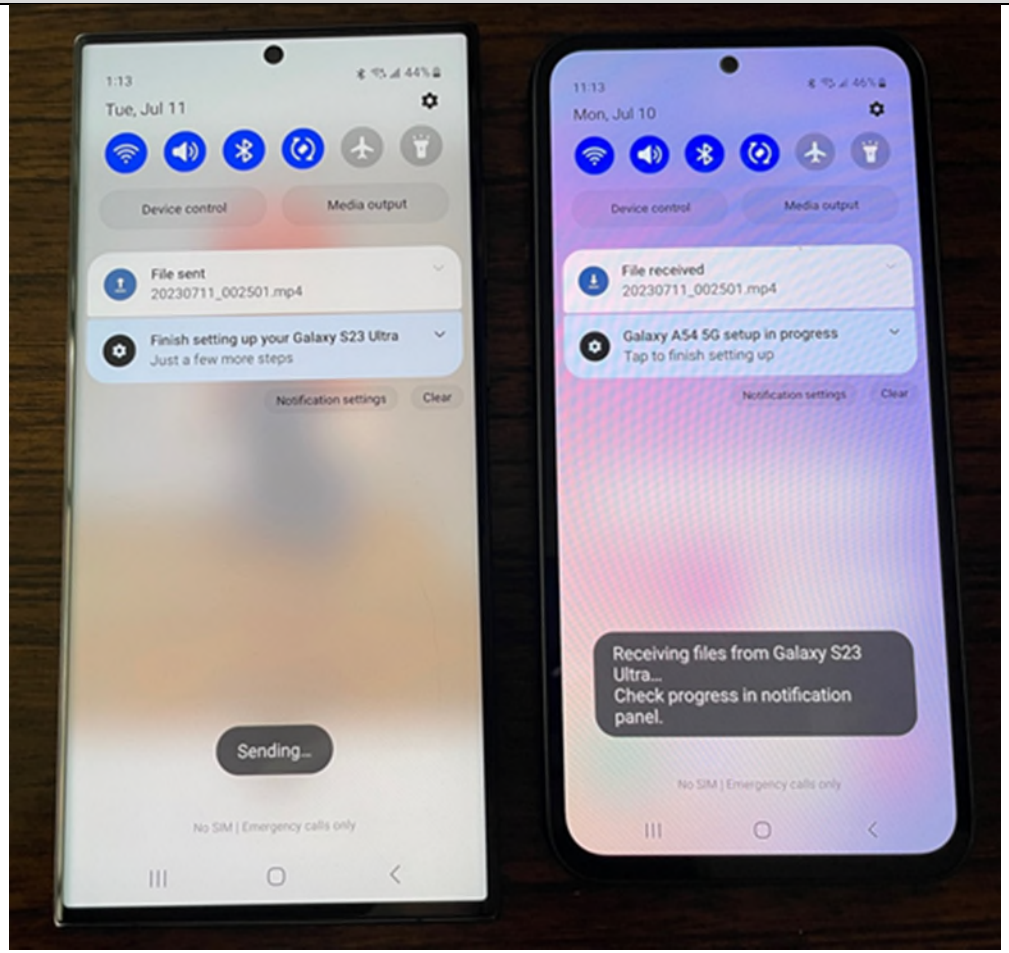
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

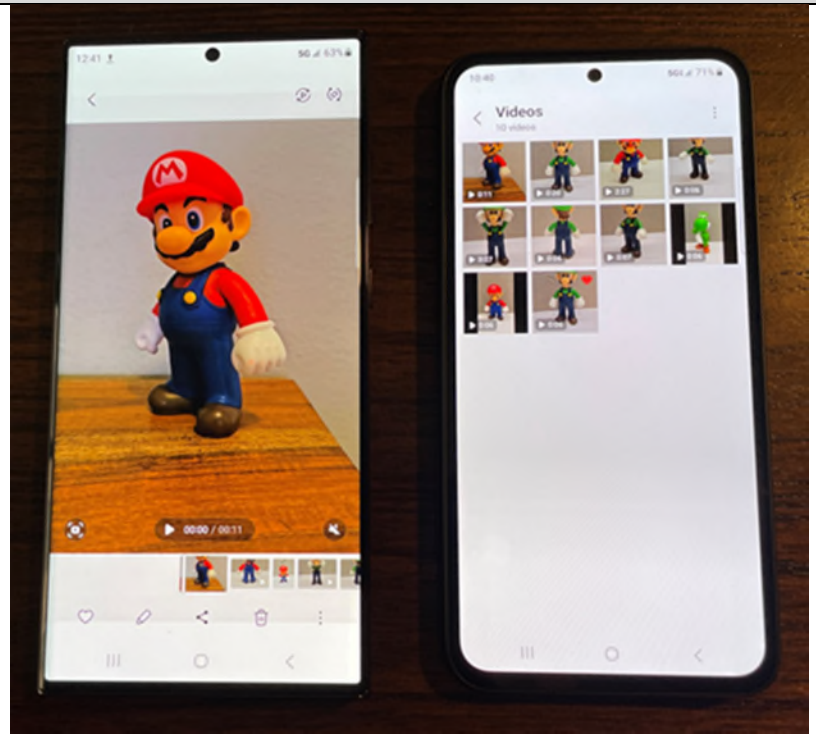
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

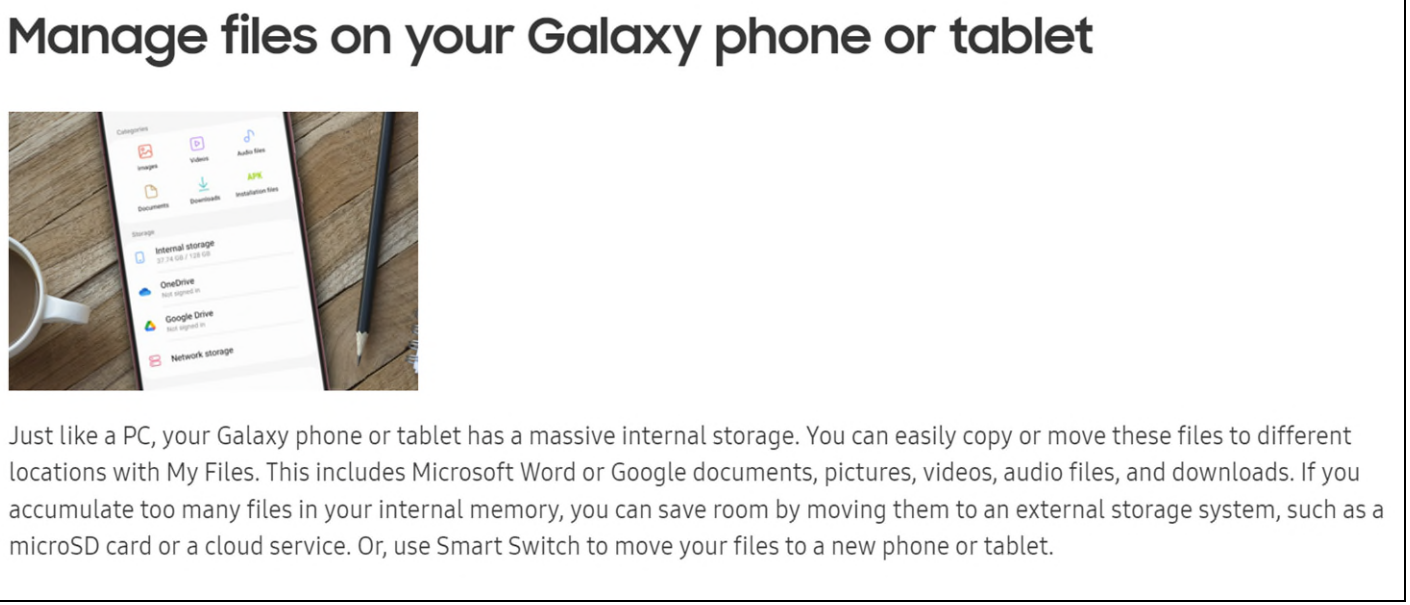
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

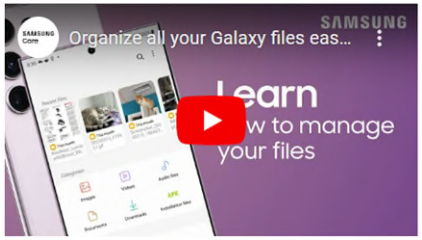
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

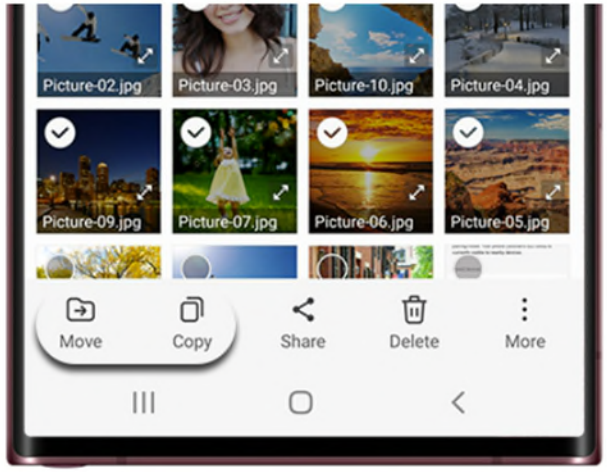
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

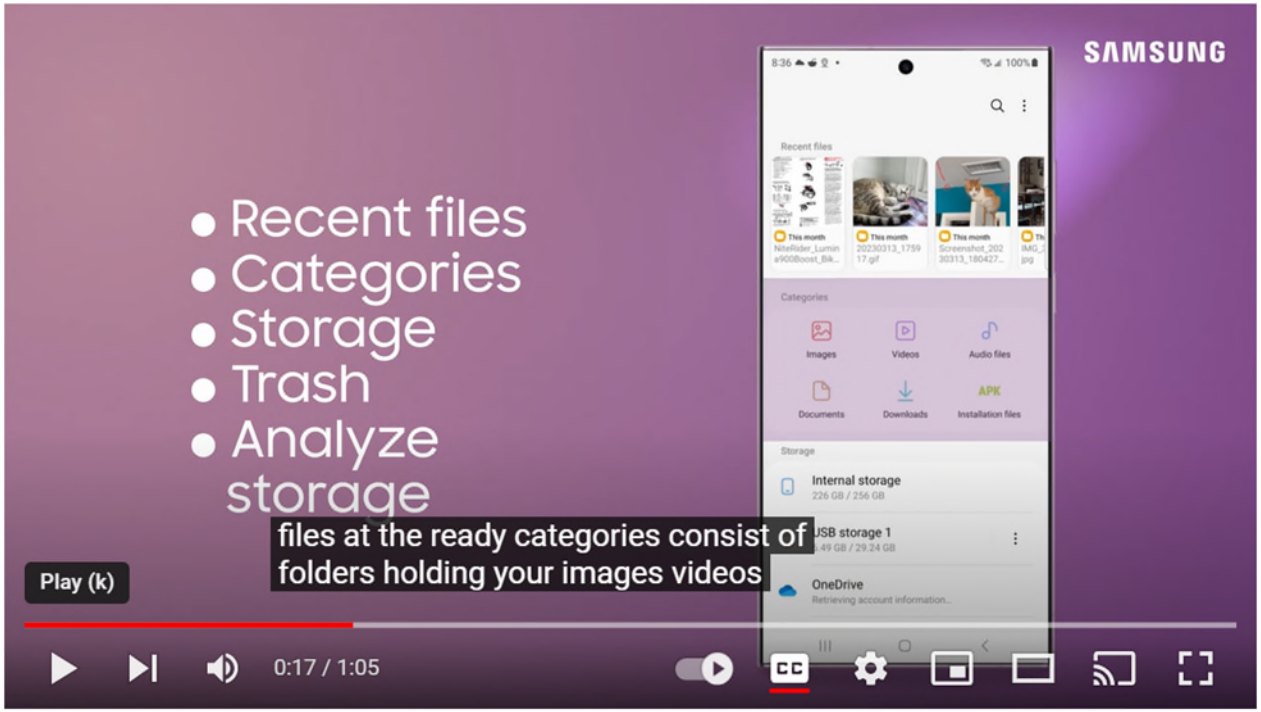
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	

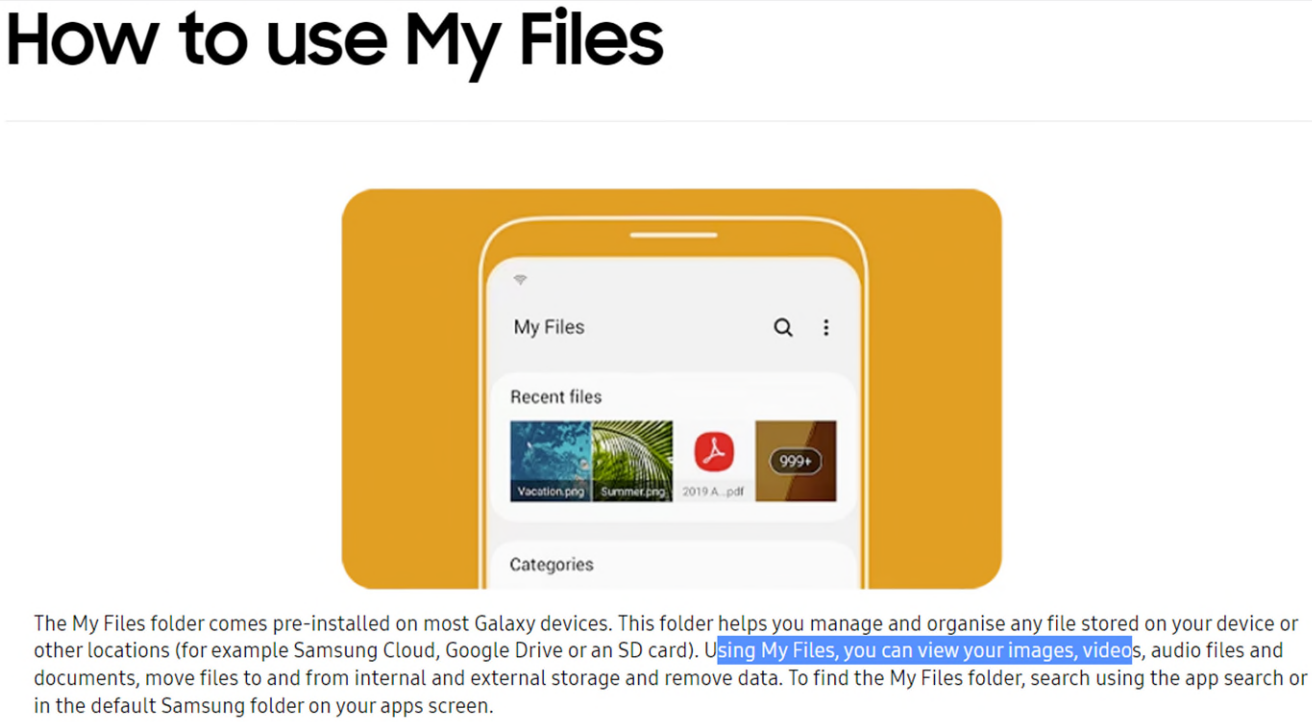
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	 *See also* Appendix 8 showing that the remaining Accused Samsung '815 Products operate in a similar manner and include a storage component (*e.g.*, memory) to store video information as viewed by Gallery or My Files. *See* https://www.samsung.com/us/support/answer/ANS00079026/.
[9.b] wherein at least some of the plurality of video information is	Each of the Accused Samsung '815 Products perform a method wherein at least some of the plurality of video information is associated with a user profile. For example, testing of the Accused Samsung '815 Products shows that at least some of the plurality of video information is associated with a user's profile associated with the Samsung account and is available under "My Files."

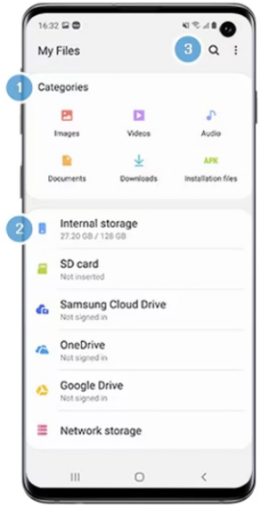
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
associated with a user profile; and	

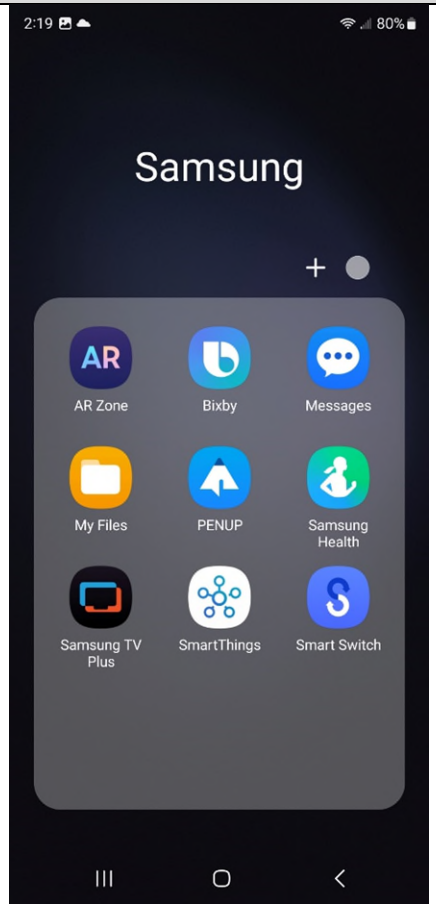
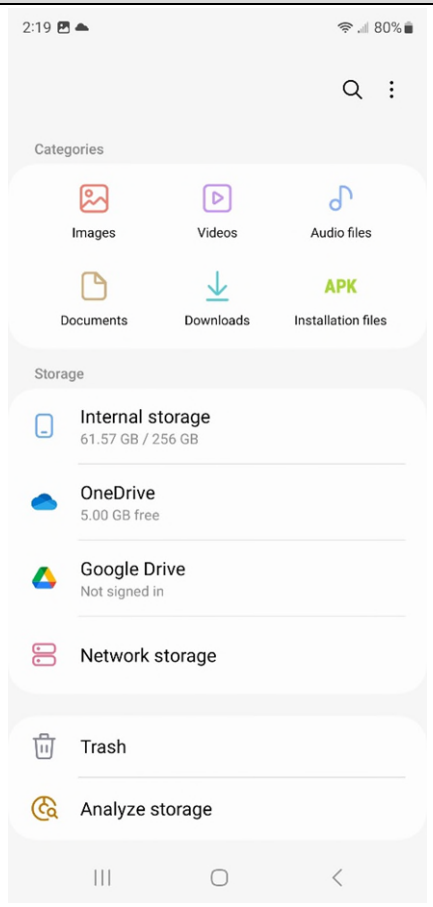
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Use My Files on your device The My Files app stores every file you have on your phone or tablet. It's like the File Explorer on a PC or Finder on Mac, where you can easily view and move photos, videos, music, documents, and more. You can also remove files from the My Files app if you no longer need them. The Trash feature in My Files should be on by default, but you should make sure it's turned on just in case. **Note:** Tablets do not have the Trash feature in My Files, so files can't be restored once they are deleted. 1. Navigate to and open the **My Files** app. It's usually in the Samsung folder. 2. Select your desired file category, such as Images, Videos, Audio files, Documents, Downloads, Installation files, Compressed, and Favorites. 3. If needed, select any additional folders that contain your desired files (i.e. Screenshots, etc.). Touch and hold the file(s) or folder(s) you want to move. 4. Tap **Copy** to create a copy of the files in a different storage area. Or, tap **Move** to completely remove the file and move it to a new location. 

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 5. Next, navigate to and select your desired destination: • **Internal storage:** Move the file(s) or folder(s) to a different location within the same internal storage. https://www.samsung.com/us/support/answer/ANS00076845/

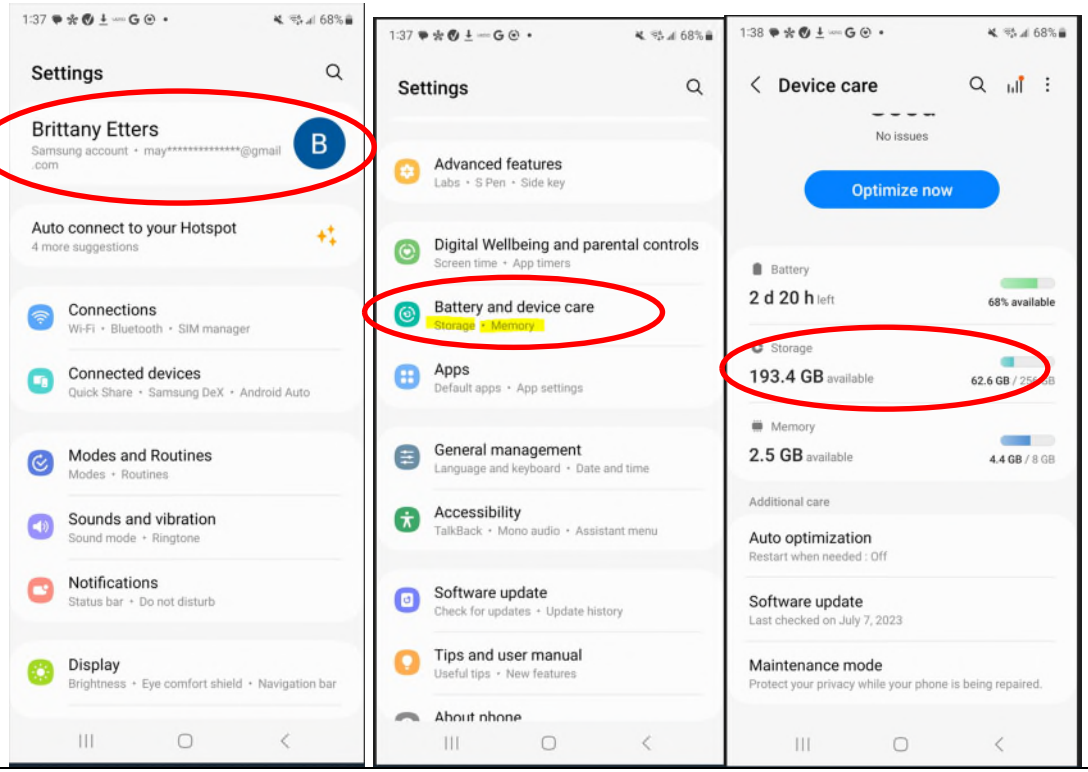
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 https://www.youtube.com/watch?v=bt1QjxjwtWU

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 https://www.samsung.com/uk/support/mobile-devices/how-to-use-my-files/

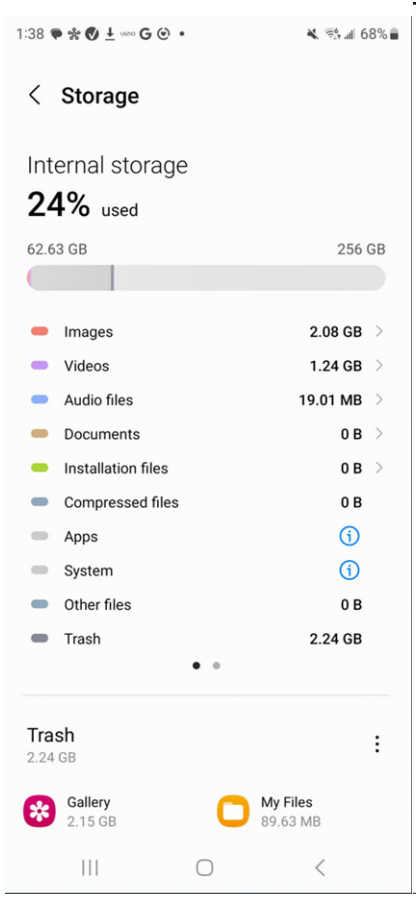
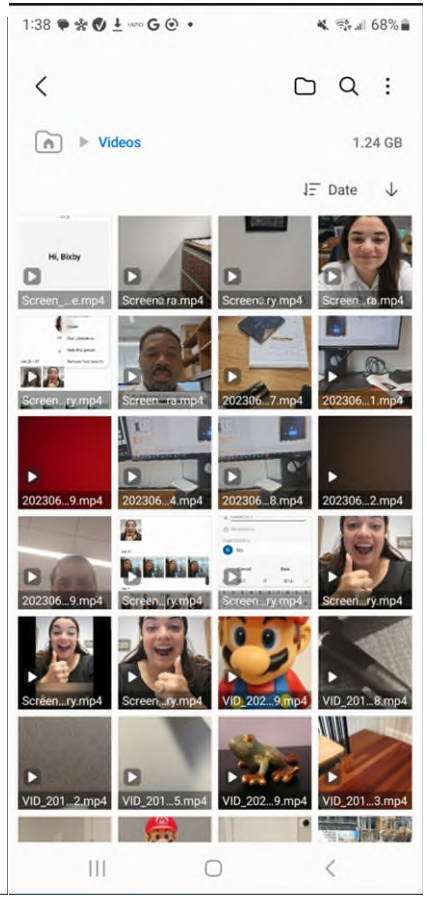
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Locate a file  1 Categories My Files sorts your files into categories, such as Images, Videos, Audio and Downloads. If you have recently downloaded a file and are trying to locate it, tap "Downloads" to access or delete the file. https://www.samsung.com/uk/support/mobile-devices/how-to-use-my-files/ Specifically, the screenshots below show the "My Files" folder associated with the user profile including at least some of the plurality video information in the "Downloads" or "Videos" folder. **Galaxy S23 Ultra:**

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	  As an additional example, the "Settings" screen confirms that the plurality of video information is associated with a user profile linked to "Samsung account" of "Brittany Etters," with a specific email address. Specifically, the Settings screen associated with all the settings and the user profile of said Samsung Account includes the menu option of "Battery & Device Care," which is associated with "Storage," which is associated with "Videos," which when selected navigates the user to the stored video information.

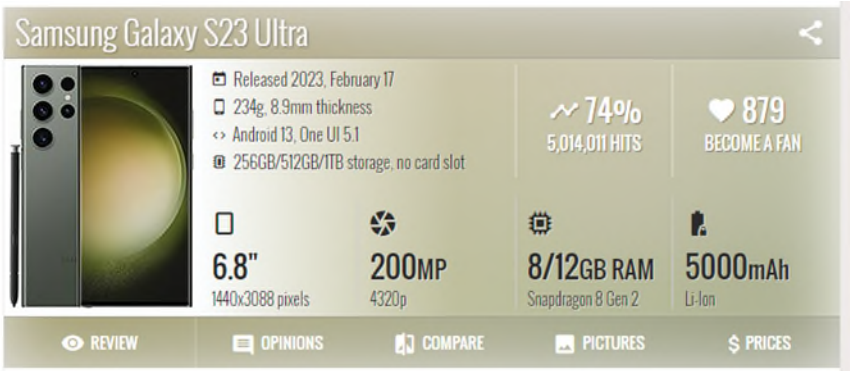
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

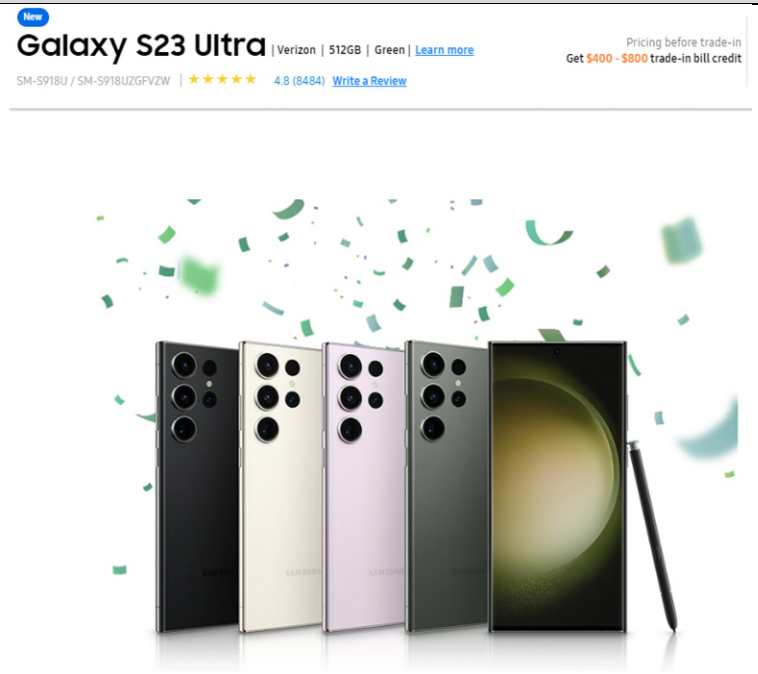
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Galaxy S23 Ultra: 

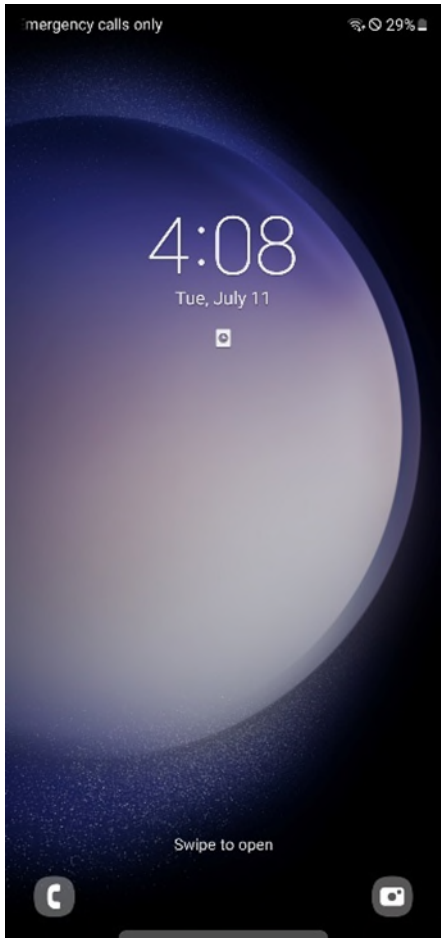
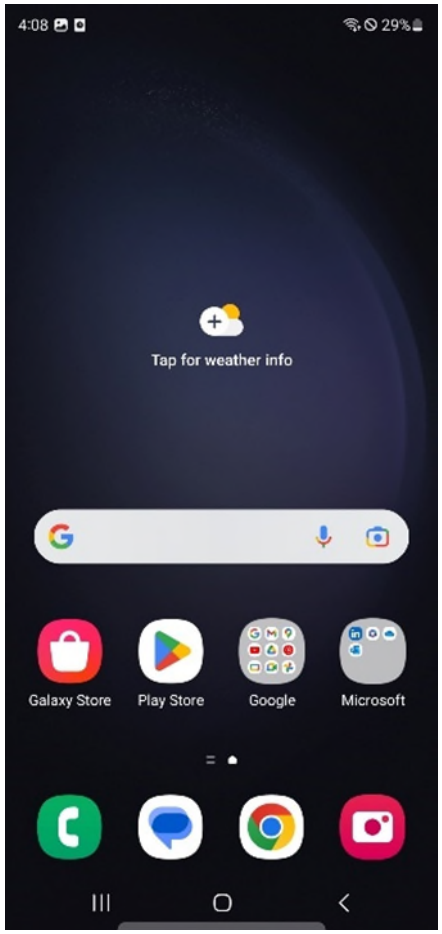
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	  *See also* Appendix 8 showing that the remaining Accused Samsung '815 Products operate in a similar manner (*e.g.*, including Gallery application that associates video with a user profile in storage). *See* https://www.samsung.com/us/support/answer/ANS00079026/.

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

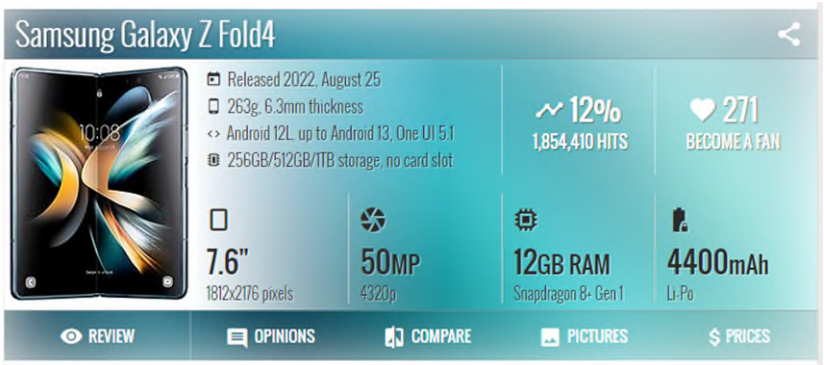
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
[9.c] displaying:	Each of the Accused Samsung '815 Products perform a methof of displaying. For example, each of the Accused Samsung '815 Products includes a display module including a touchscreen. *See*, for example: **Galaxy S23 Ultra:**  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

U.S. Patent No. 11,017,815	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

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	  Screenshots of home screen.

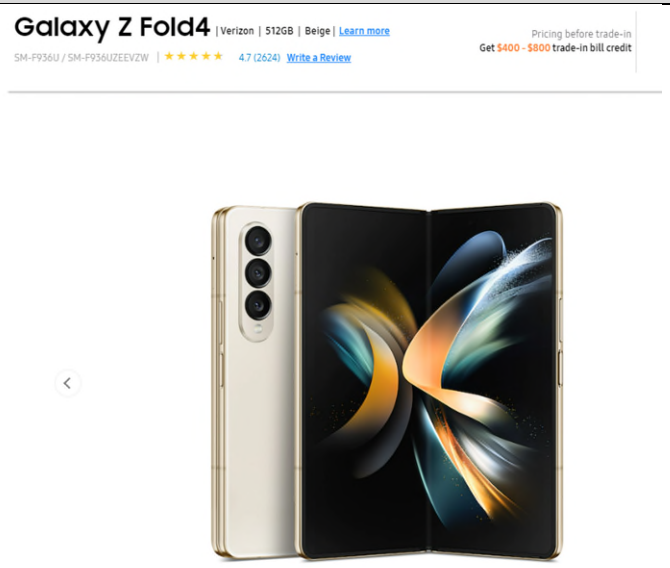
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Galaxy Z Fold4:



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

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

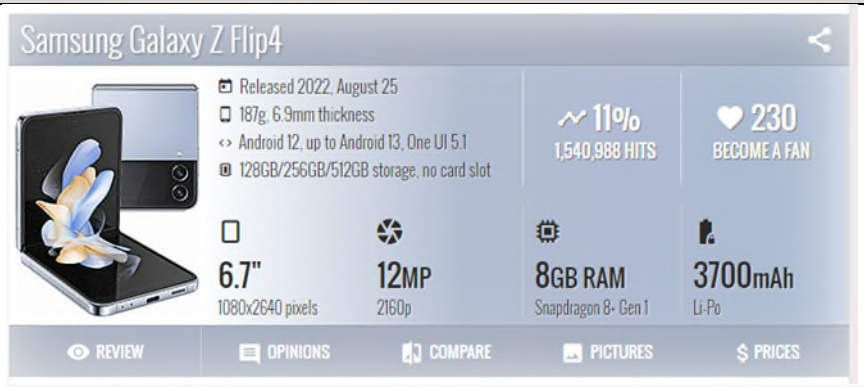
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Galaxy Z Fold4 technical specifications; https://www.samsung.com/us/smartphones/galaxy-z-fold4/buy/galaxy-z-fold4-512gb-att-sm-f936uzeeatt/; https://www.gsmarena.com/samsung_galaxy_z_fold4-11737.php :

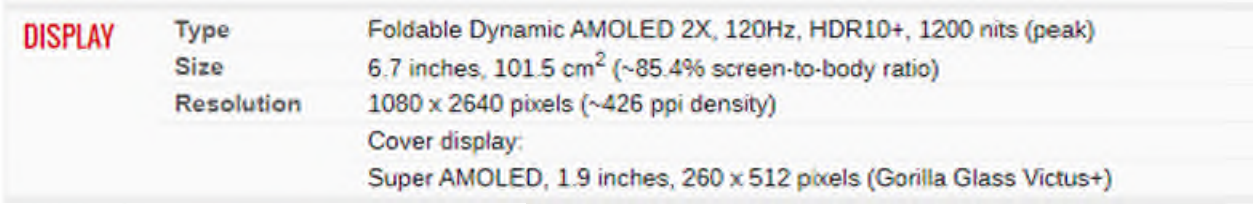
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

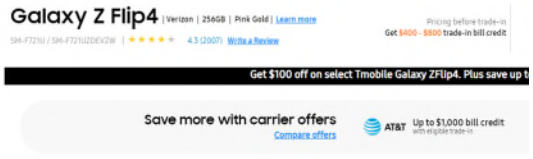
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	  Screenshots of home screen. **Galaxy Z Flip4:**

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement





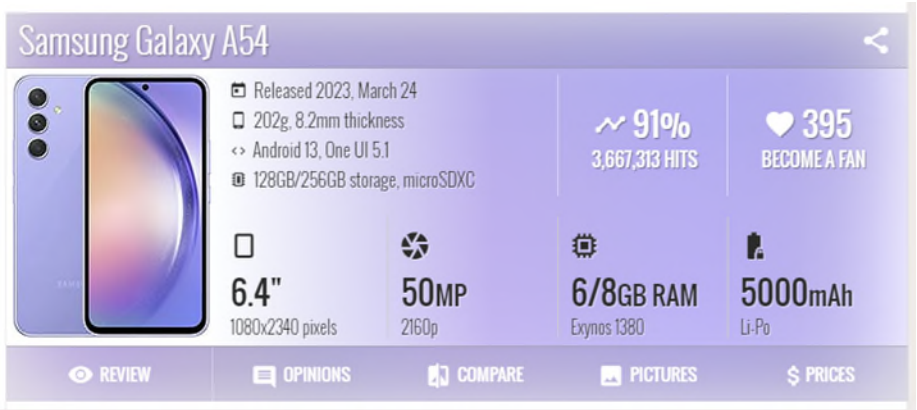




U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	Galaxy Z Flip4 technical specifications; https://www.samsung.com/us/smartphones/galaxy-z-flip4/buy/galaxy-z-flip4-256gb-t-mobile-sm-f721uzdexau/; https://www.gsmarena.com/samsung_galaxy_z_flip4-11538.php  Screenshots of home screen.

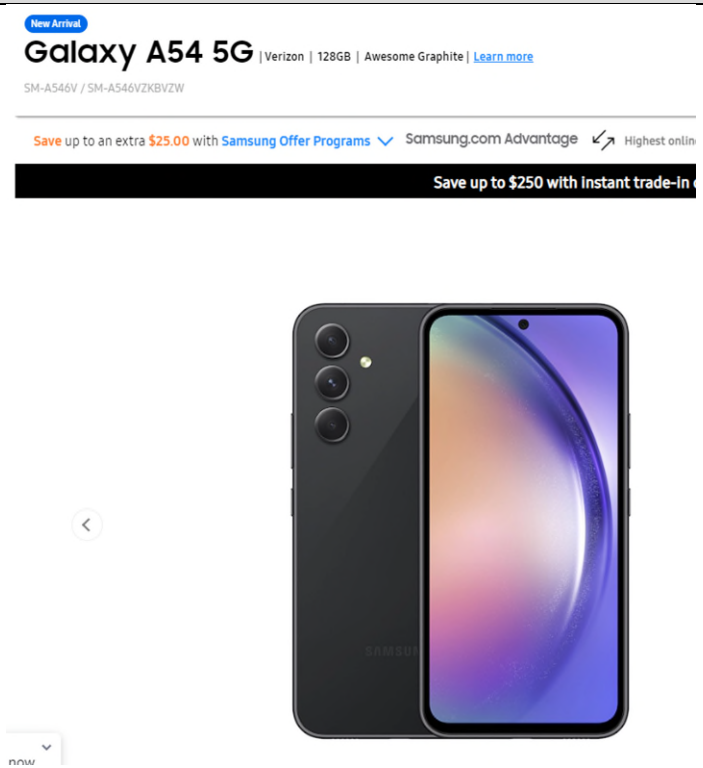
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

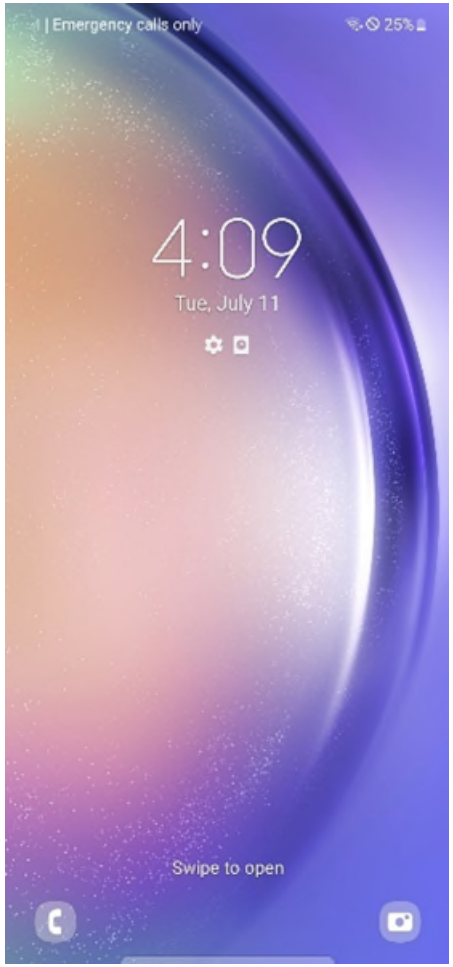
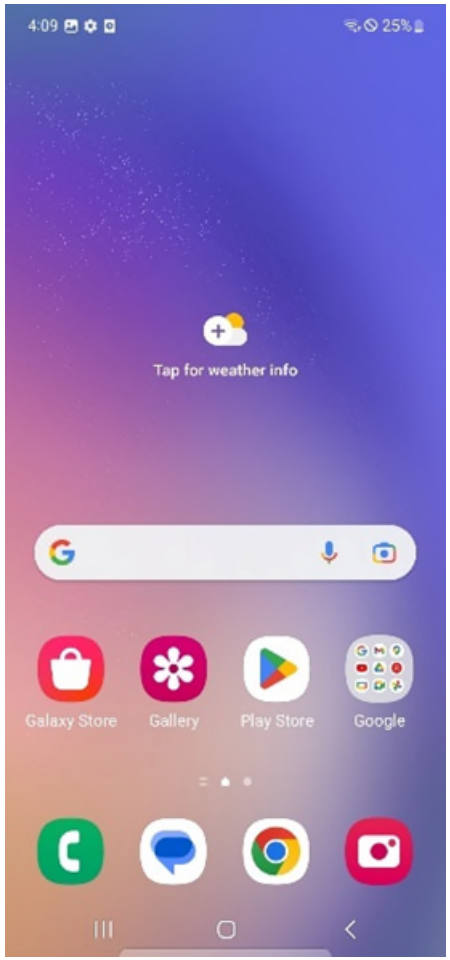
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Galaxy A54:



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

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

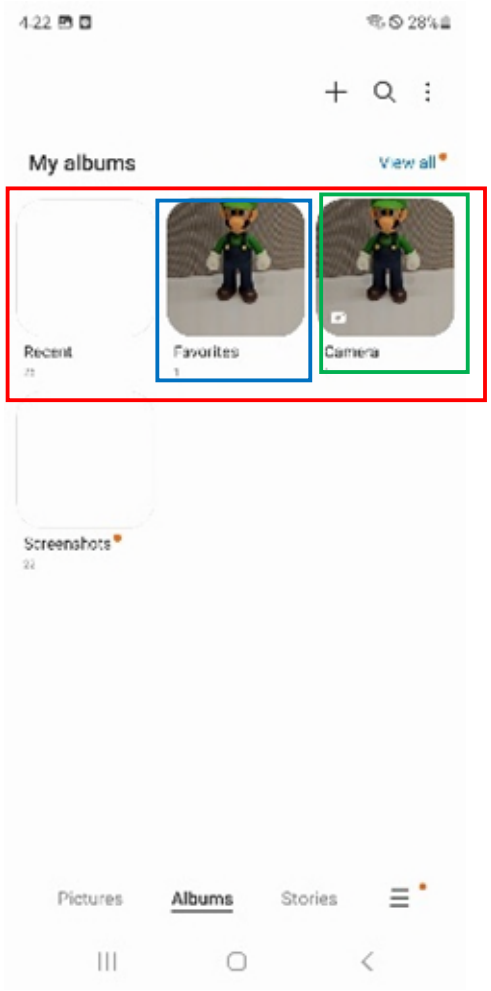
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Galaxy A54 5G technical specifications; https://www.samsung.com/us/mobile/phones/galaxy-a54/buy/; https://www.gsmarena.com/samsung_galaxy_a54-12070.php

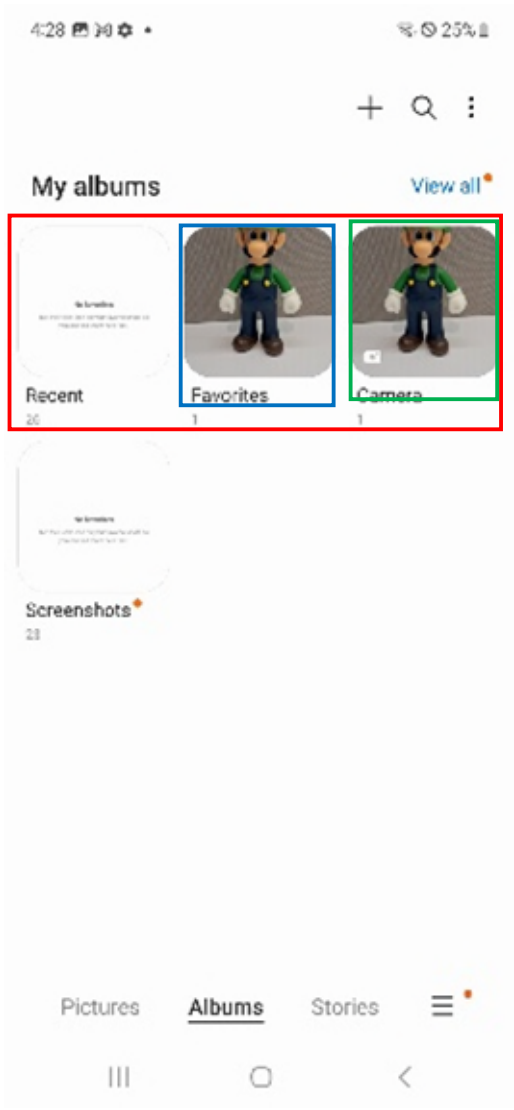
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	  Screenshots of home screen. *See also* Appendix 8 showing that the remaining Accused Samsung '815 Products include a display.

<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td>[9.d] a first area including a first character associated with a first group of video information for a first classification and a second character associated with a second group of video information for a second classification different from the first classification</td><td>Each of the Accused Samsung '815 Products perform a method of display a first area including a first character associated with a first group of video information for a first classification and a second character associated with a second group of video information for a second classification different from the first classification.

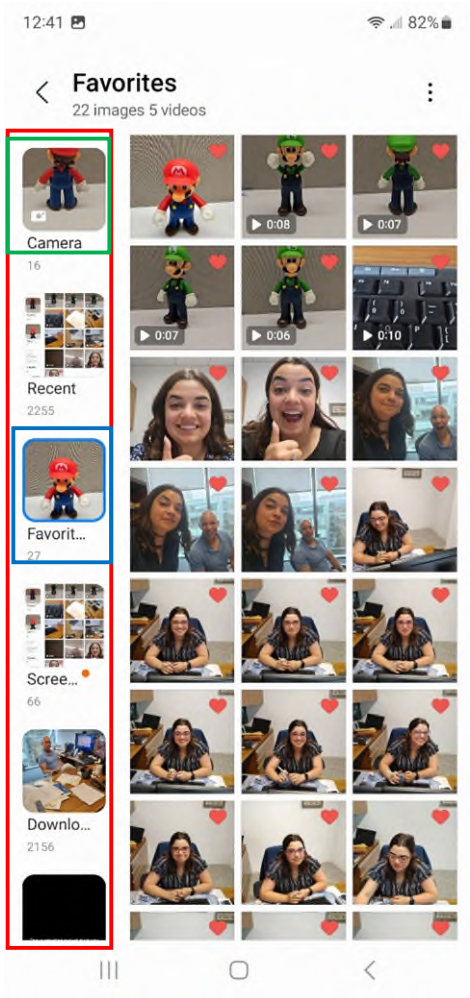
For example, testing of the Accused Samsung '815 Products confirms that each of the Accused Samsung '815 Products includes a Gallery application that shows a first area (the "My albums" tab) that includes a first character (the word "Favorites," which includes at least one character) which corresponds to a first group of video information for a first classification (videos that have been favorited) and a second character (the word "Camera," which includes at least one character) which corresponds to a second group of video information for a second classification different from the first classification (all videos stored locally on the apparatus). The first classification corresponding to "Favorites" and the second classification corresponding to "Camera."

<table><tr><th>Product</th><th>First Area with First Character and Second Character</th></tr></table></td></tr>
</table>

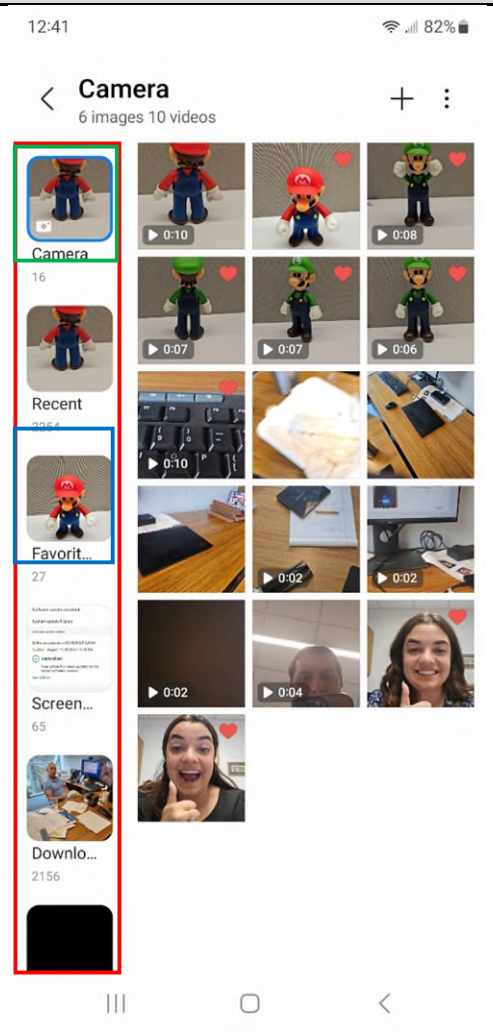
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
	Samsung Galaxy S23 Ultra	 Red rectangle includes "first area", Blue rectangle includes "first character", Green rectangle includes "second character."	

	Samsung Galaxy A54 5G	 Red rectangle includes "first area", Blue rectangle includes "first character", Green rectangle includes "second character."	

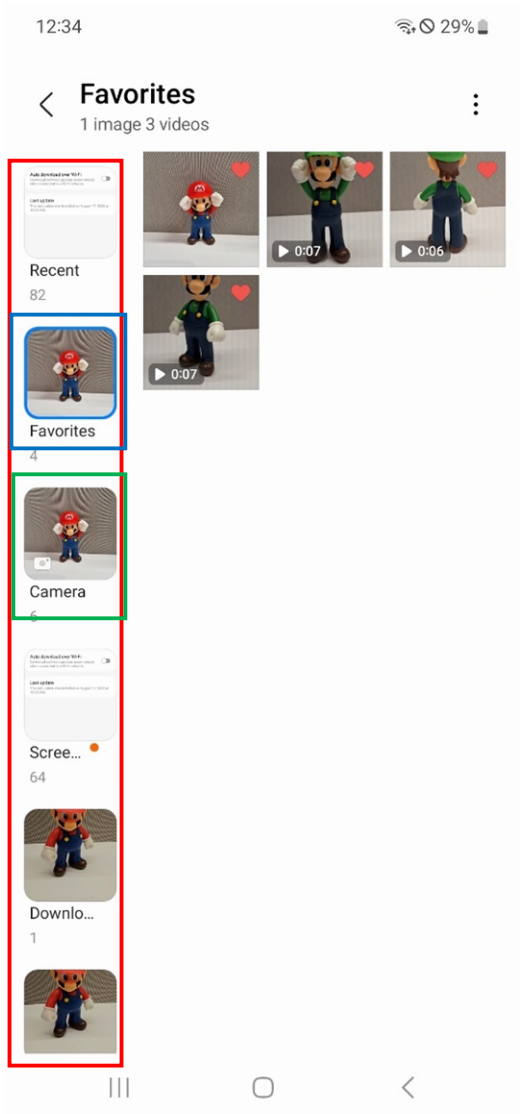
<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>As an additional example, testing of the Accused Samsung '815 Products confirms that each of the Accused Samsung '815 Products includes a UI that shows a first area (the thumbnails in the left column) that includes a first character (the word "Favorites," which includes at least one character) which corresponds to a first group of video information for a first classification (videos that have been favorited) and a second character (the word "Camera," which includes at least one character) which corresponds to a second group of video information for a second classification different from the first classification (all videos stored locally on the apparatus).<table><tr><th>Product</th><th>First Area with First Character and Second Character</th></tr></table></td></tr>
</table>

	Samsung Galaxy S23 Ultra		

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

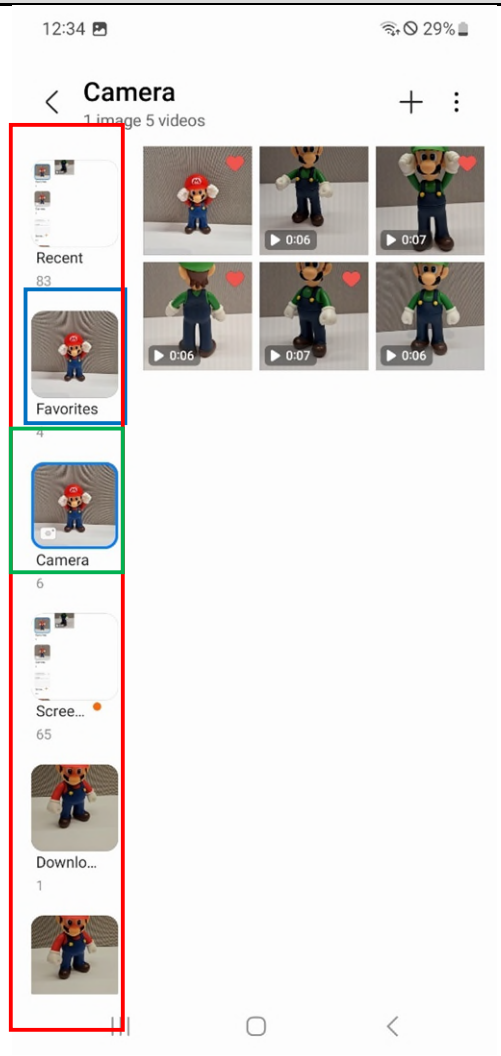


U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
		Red rectangle includes "first area", Blue rectangle includes "first character", Green rectangle includes "second character."	

	Samsung Galaxy A54 5G		

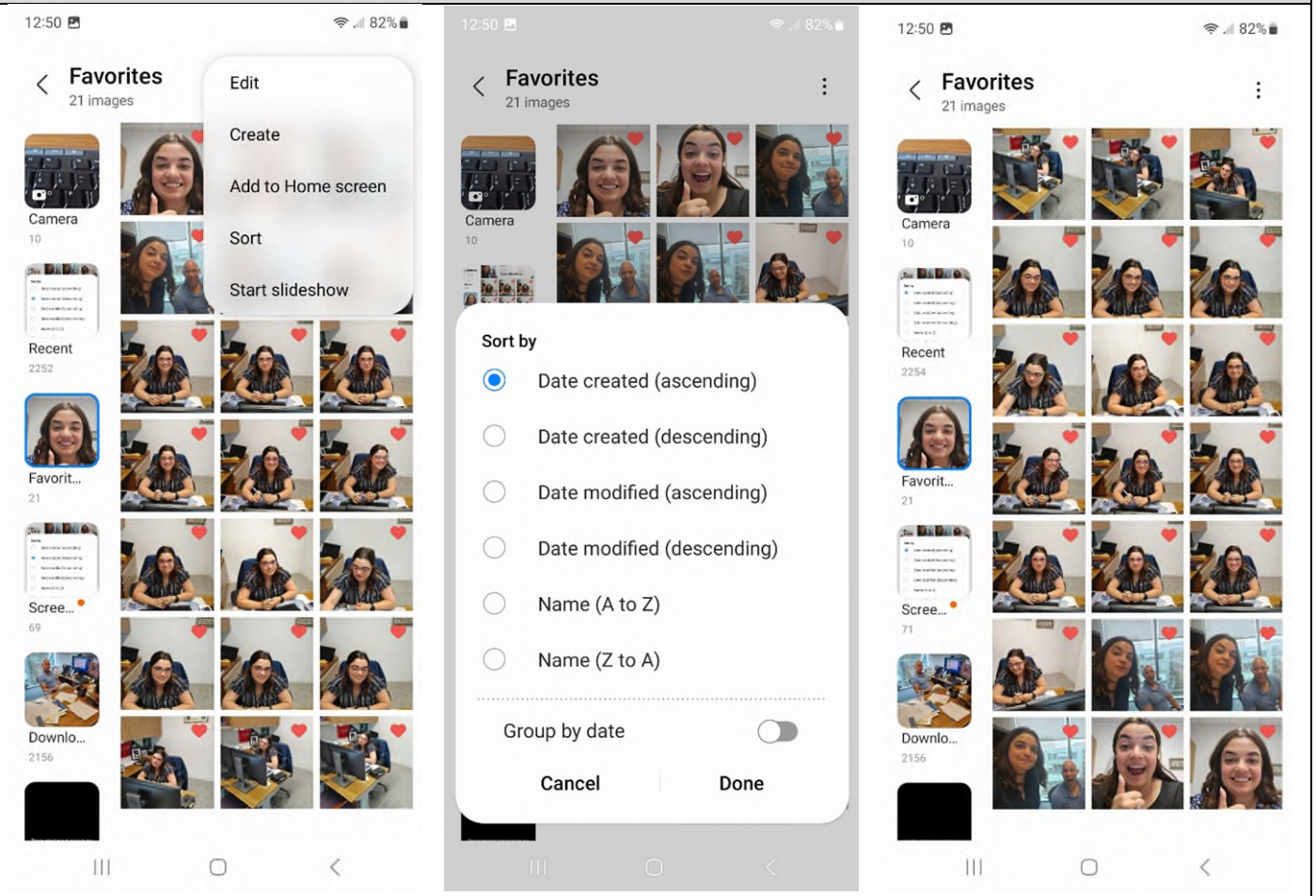
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

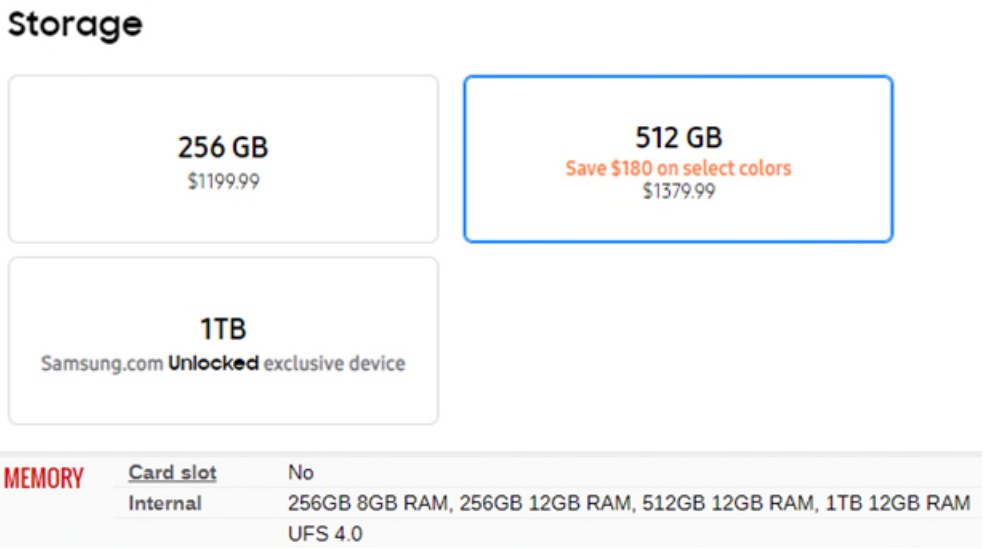
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

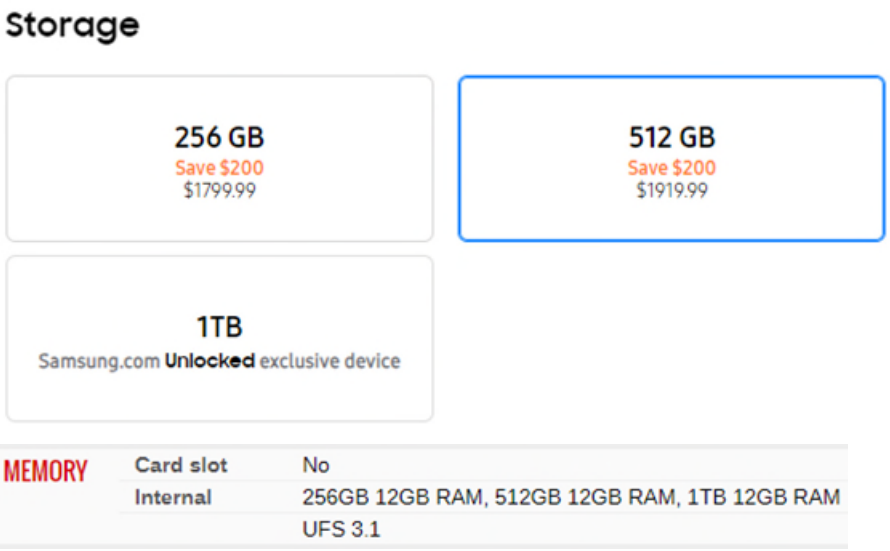


U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	<table><tr><td></td><td>Red rectangle includes "first area", Blue rectangle includes "first character", Green rectangle includes "second character."</td></tr></table> *See also* Appendix 8 showing that the remaining Accused Samsung '815 Products also include a Gallery application. *See* https://www.samsung.com/us/support/answer/ANS00079026/.
[9.e] the first group of video information being configured to allow a user to edit,	Each of the Accused Samsung '815 Products perform a method of displaying where the first group of video information is configured to allow a user to edit. For example, testing of the Accused Samsung '815 Products confirms that the first group of video information (the "favorites" album) is configured to allow a user to edit, for example, by selecting "Edit" or by selecting "Sort" and selecting one or more options for sorting, which would edit the order in which the first group of video information is being configured to allow a user to edit.

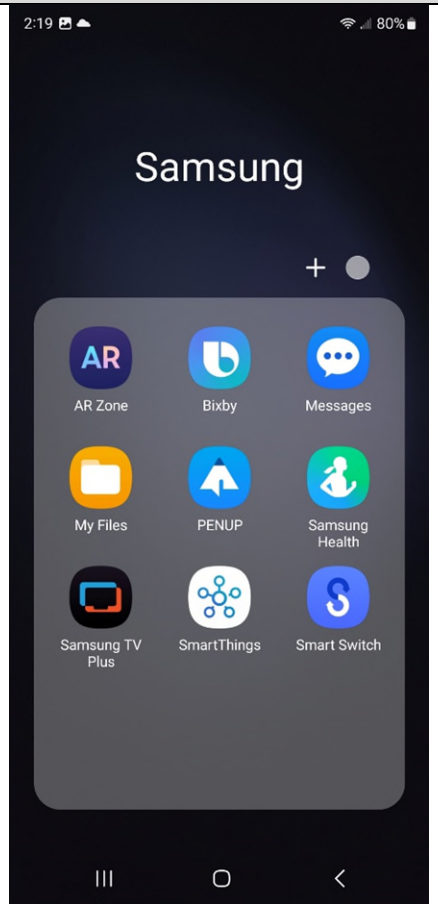
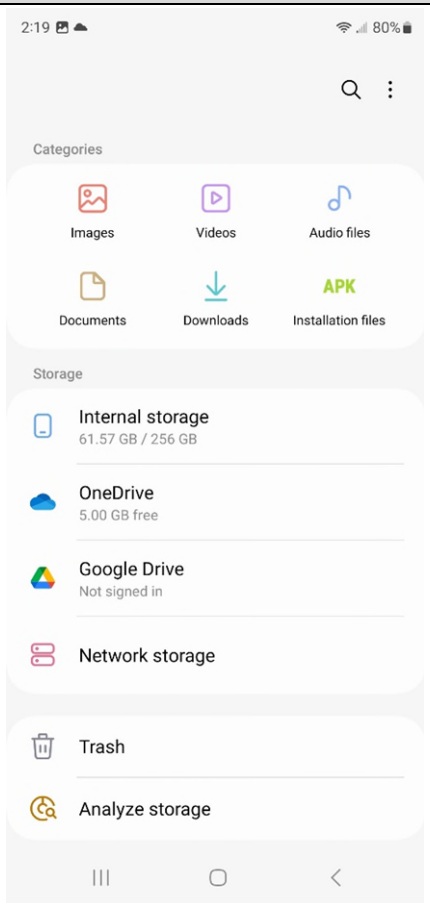
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Samsung Galaxy S23 Ultra

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	See also Appendix 8 showing that the remaining Accused Samsung '815 Products also include a Gallery application. *See* https://www.samsung.com/us/support/answer/ANS00079026/.
[9.f] wherein the first group of video information and the second group of video information are part of the plurality of stored video information, and	Each of the Accused Samsung '815 Products perform a method of displaying wherein the first group of video information and the second group of video information are part of the plurality of stored video information. The technical specifications of each device confirm that local storage may be used for videos:  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.

U.S. Patent No. 11,017,815	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. Further, testing of the Accused Samsung '815 Products confirms that first group of video information and the second group of video information are part of the plurality of stored video information as shown by "My Files" and "Settings" menu where it shows that the videos are stored within "Internal Storage":

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 

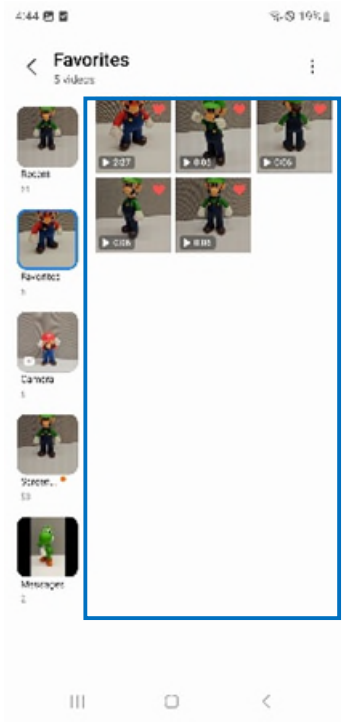
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

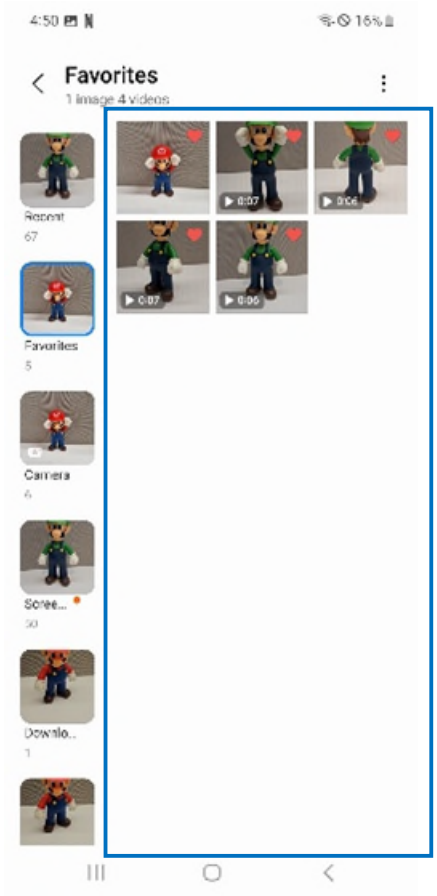
<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>See also Appendix 8 showing that the remaining Accused Samsung '815 Products also include a Gallery application and memory for storing video information. See https://www.samsung.com/us/support/answer/ANS00079026/.</td></tr>
<tr><td>[9.g] a second area displaying thumbnails corresponding to at least a portion of the plurality of stored video information,</td><td>Each of the Accused Samsung '815 Products perform a method of displaying a second area displaying thumbnails corresponding to at least a portion of the plurality of stored video information.

For example, testing of the Accused Samsung '815 Products confirms that each of the Accused Samsung '815 Products includes a Gallery application that shows a second area (for example the "favorites" album) that displays thumbnails corresponding to at least a portion of the plurality of stored video information (i.e. thumbnails of at least some videos within the "favorites" album).

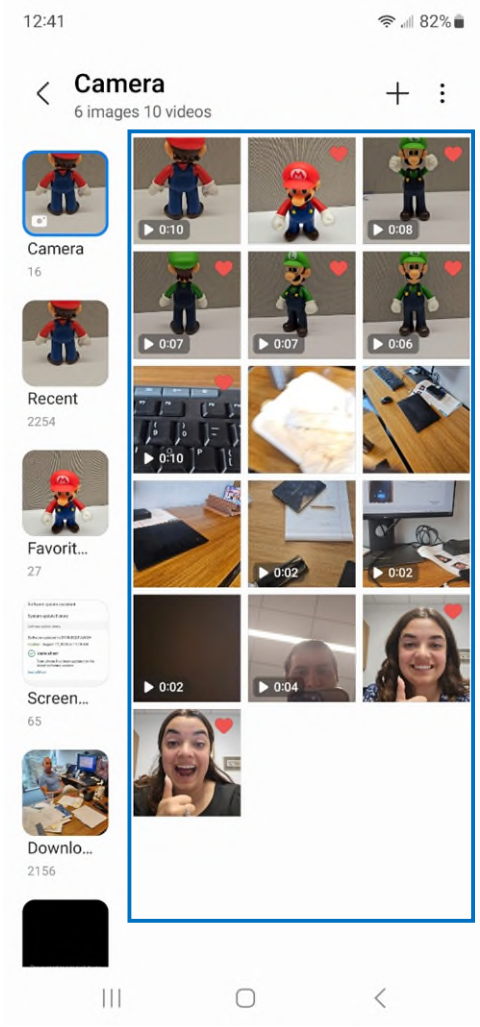
<table>
<tr><th>Product</th><th>Second area</th></tr>
</table>
</td></tr>
</table>

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

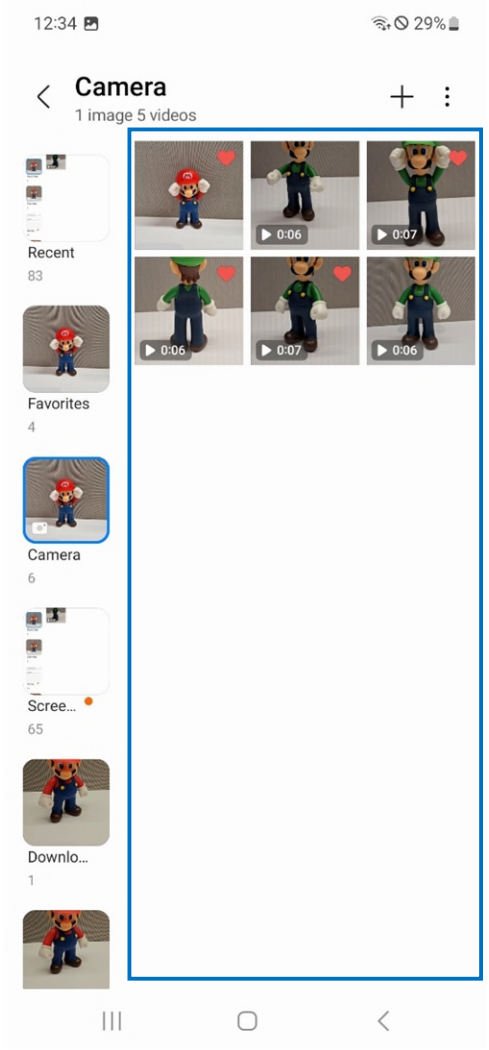
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
	Samsung Galaxy S23 Ultra		

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
	Samsung Galaxy A54 5G:	 (Second area (shown in blue) when showing Favorites album)	

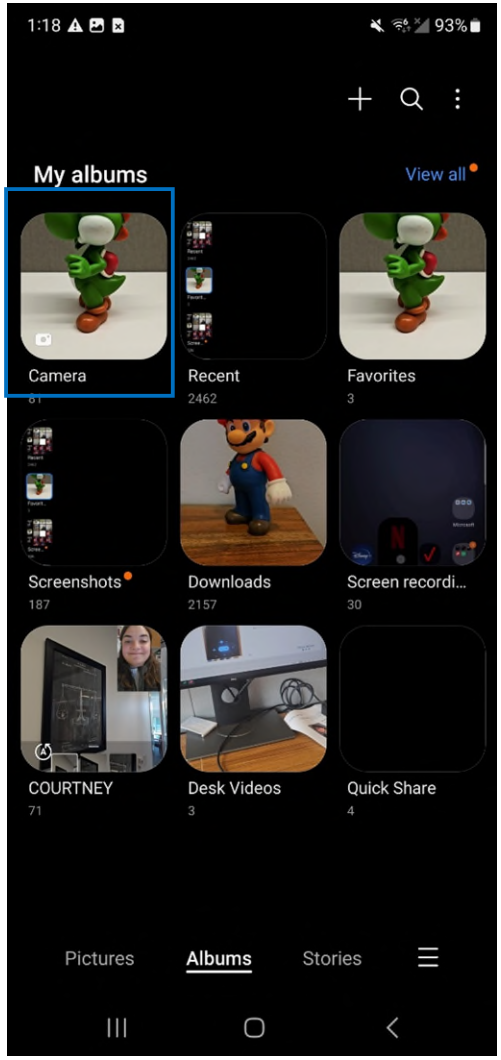
<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>Similarly, selecting “Camera” displays thumbnails corresponding to stored plurality of video information.
<table>
<tr><th>Product</th><th>Second Area</th></tr>
</table>
</td></tr>
</table>

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
	Samsung Galaxy S23 Ultra	 Second area (shown in blue) when showing Camera album	

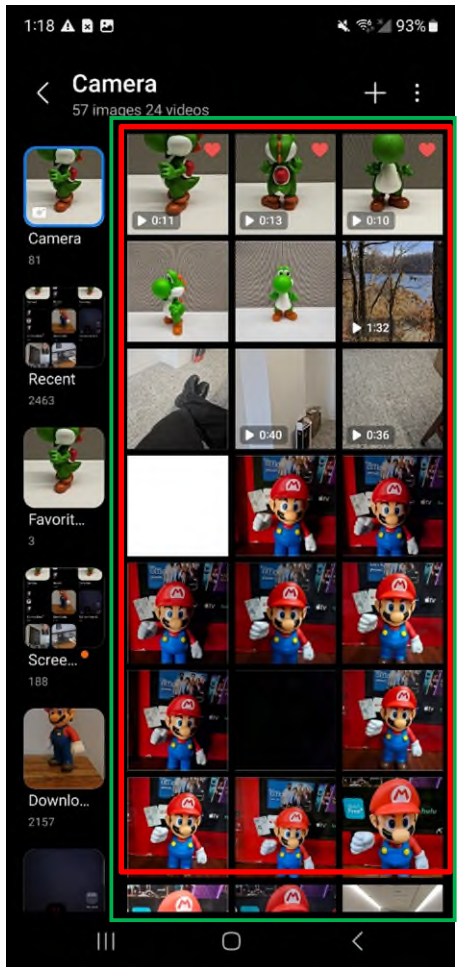
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
	Samsung Galaxy A54 5G		

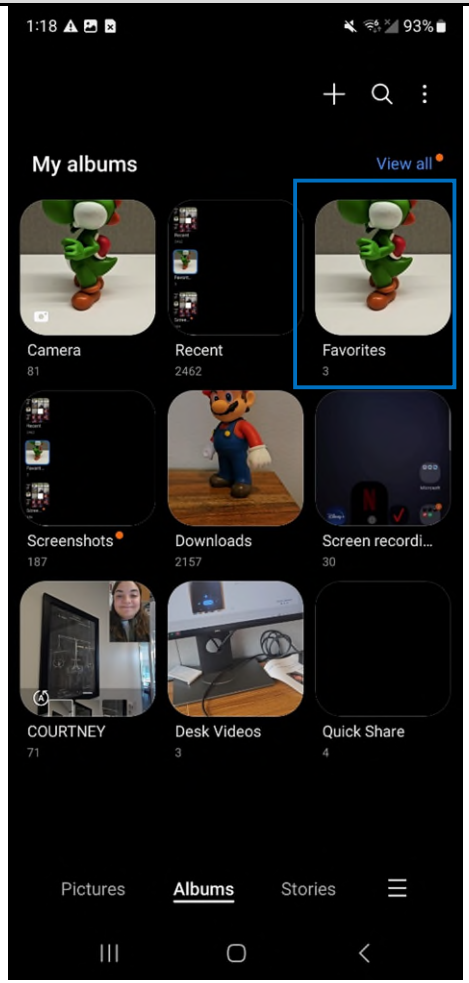
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	<table><tr><td></td><td>Second area (shown in blue) when showing Camera album</td></tr></table> As an additional example, testing of the Accused Samsung '815 Products confirms that each of the Accused Samsung '815 Products includes a UI that shows an additional example of second area when a user selects a thumbnail from the albums tab.

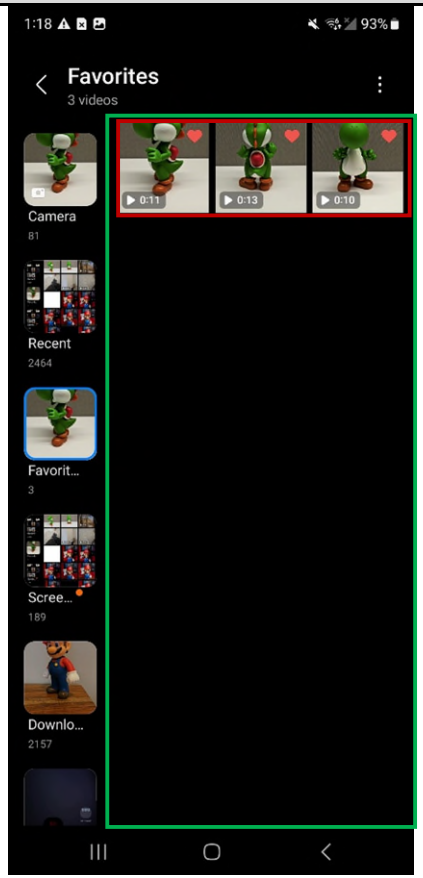
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**		
	Samsung Galaxy S23 Ultra		

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement



U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
		User selecting second character (in blue), prompts device to show the second group of thumbnails (in red) corresponding to the "Camera" album in the second area (in green).	

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 User selecting first character (in blue), prompts device to show thumbnail (in red) corresponding to the "Favorites" album in the second area (in green).

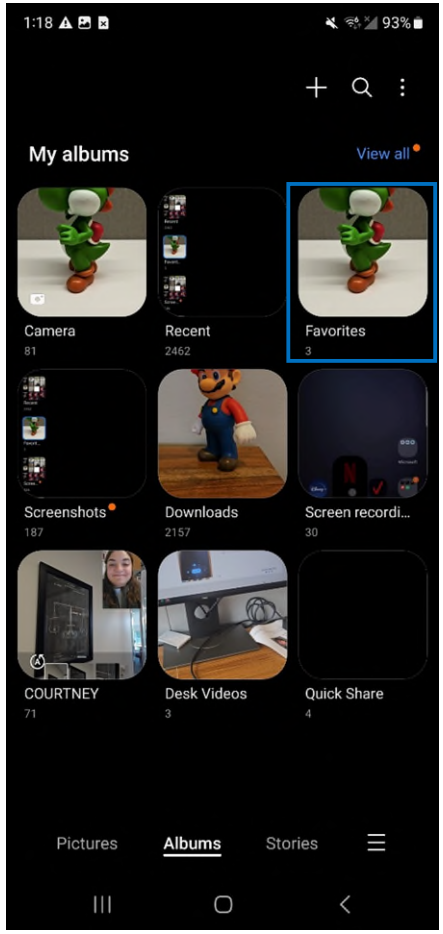
<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>See also Appendix 8 showing that the remaining Accused Samsung '815 Products operate in a similar manner (e.g., by including the Samsung Gallery application). See https://www.samsung.com/us/support/answer/ANS00079026/.

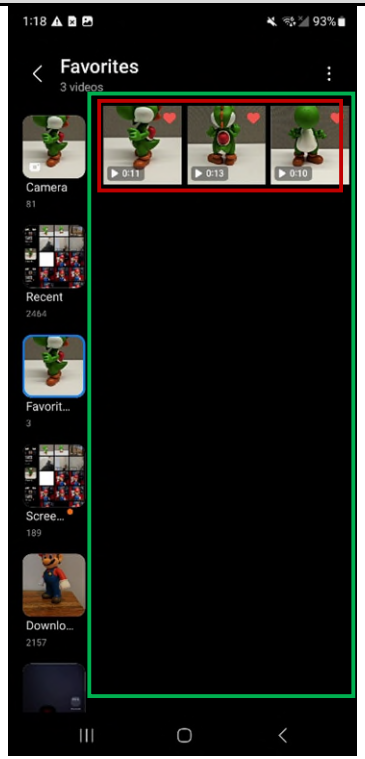
Doctrine of Equivalents:

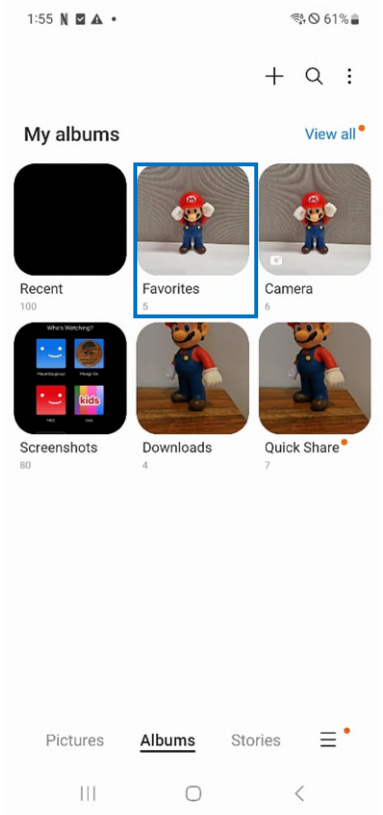
This limitation is also met under the doctrine of equivalents because the display of the "favorites" album (for example) matches the function, way, and result of the second area and, to the extent there is a difference, the difference is insubstantial. Specifically, to the extent that the display of the "favorites" album is not literally a second area, the display of the "favorites" album satisfies the same function as that of a second area, namely a separate area showing a discrete grouping of video thumbnails upon selection of the characters corresponding to the "favorites" album. The claimed "second area" displays information within a "file" when that file is selected, which, for example, is equivalent to the selection of the "favorites" album leading to the display of the thumbnails of the videos within the "favorites" album. See '815 Patent at 5:61-6:18, Figs. 4-5. This specific display organization also achieves substantially the same result as a second area.</td></tr>
<tr><td>[9.h] wherein user selection of the first character enables the display of a first group of thumbnails corresponding to the first group of video information in the second area, and</td><td>Each of the Accused Samsung '815 Products perform a method of displaying wherein user selection of the first character enables the display of a first group of thumbnails corresponding to the first group of video information in the second area.

For example, testing of the Accused Samsung '815 Products confirms that user selection of the first character (i.e. a user selecting the "favorites" album within the first area) enables the display of a first group of thumbnails corresponding to the first group of video information in the second area (i.e. display of the thumbnails within the "favorites" album).

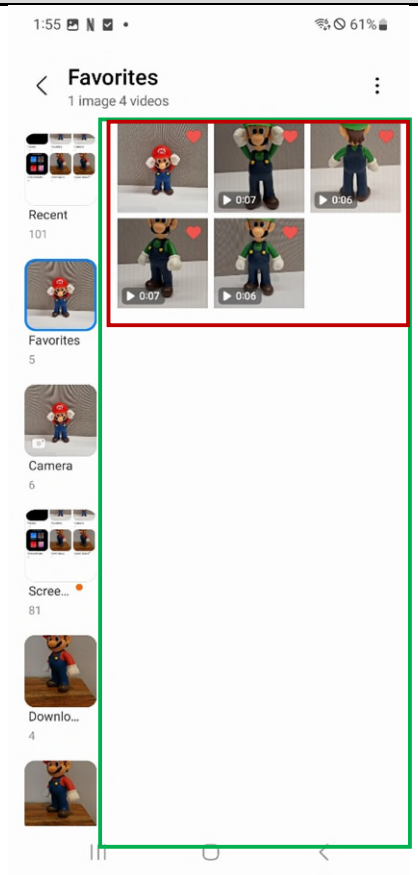
<table>
<tr><th>Product</th><th>Section of first character and display of thumbnails corresponding to the first group of video information in the second area</th></tr>
</table>
</td></tr>
</table>

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**		
	Samsung Galaxy S23 Ultra		

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 User selecting first character (in blue), prompts device to show the first group of thumbnails (in red) corresponding to the "favorites" album in the second area (in green).

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
	Samsung Galaxy A54 5G		

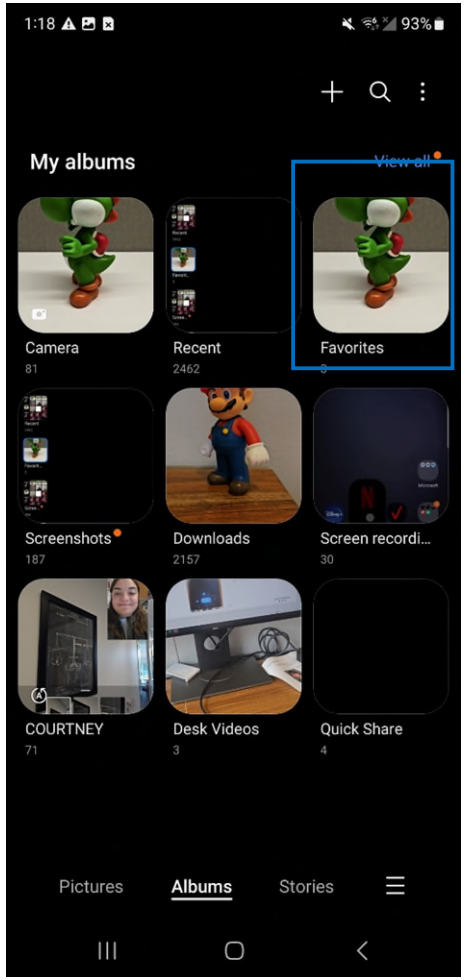
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

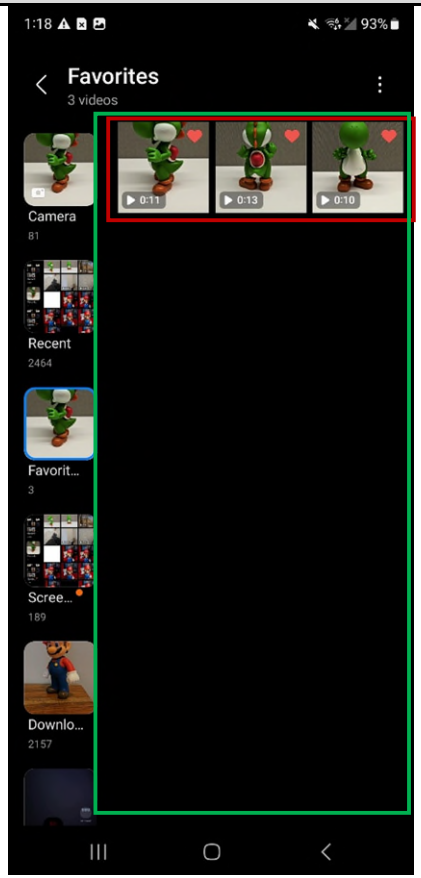


User selecting first character (in blue), prompts device to show the first group of thumbnails (in red) corresponding to the "favorites" album in the second area (in green).

As an additional example, testing of the Accused Samsung '815 Products confirms that user selection of the first character (i.e. a user selecting the "favorites" album within the first area, *i.e.*, top portion of the display)

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	enables the display of a first group of thumbnails corresponding to the first group of video information in the second area (i.e. display of the thumbnails within the "favorites" album).

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**		
	Samsung Galaxy S23 Ultra		

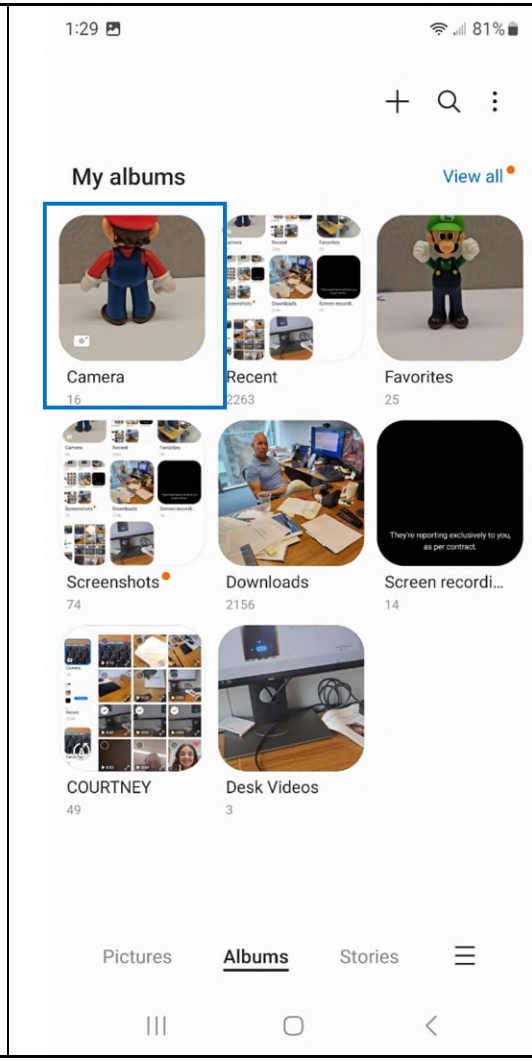
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 User selecting first character (in blue), prompts device to show thumbnail (in red) corresponding to the "Favorites" album in the second area (in green).

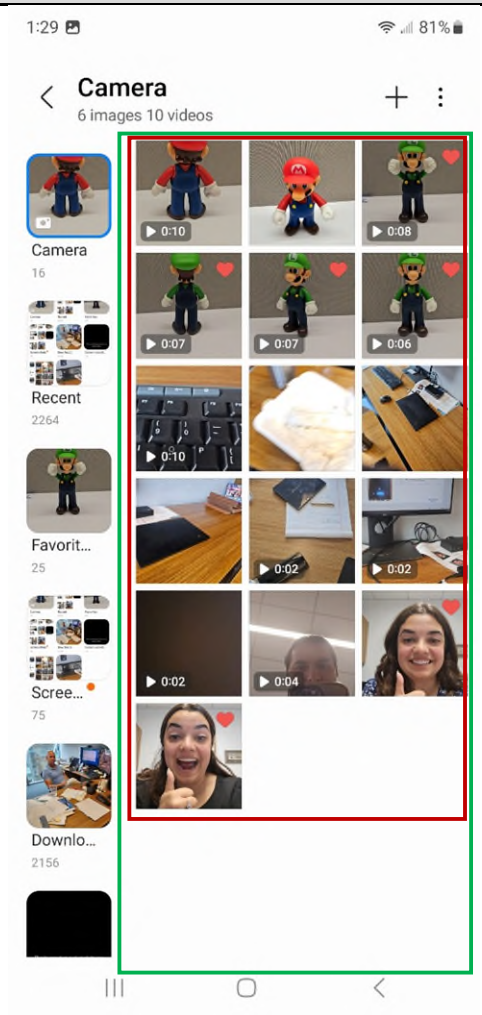
<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>Doctrine of Equivalents:

This limitation is also met under the doctrine of equivalents because the display of the "favorites" album matches the function, way, and result of the second area and, to the extent there is a difference, the difference is insubstantial. Specifically, to the extent that the display of the "favorites" album is not literally a second area, the display of the "favorites" album satisfies the same function as that of a second area, namely a separate area showing a discrete grouping of video thumbnails upon selection of the characters corresponding to the "favorites" album. The claimed "second area" displays information within a "file" when that file is selected, which, for example, is equivalent to the selection of the "favorites" album leading to the display of the thumbnails of the videos within the "favorites" album. See '815 Patent at 5:61-6:18, Figs. 4-5. This specific display organization also achieves substantially the same result as a second area.</td></tr>
<tr><td>[9.i] wherein user selection of the second character enables the display of a second group of thumbnails corresponding to the second group of video information in the second area;</td><td>Each of the Accused Samsung '815 Products perform a method wherein user selection of the second character enables the display of a second group of thumbnails corresponding to the second group of video information in the second area.

For example, testing of the Accused Samsung '815 Products confirms that user selection of the second character (i.e. a user selecting the "Camera" album within the first area) enables the display of a second group of thumbnails corresponding to the second group of video information in the second area (i.e. display of the thumbnails within the "Camera" album).

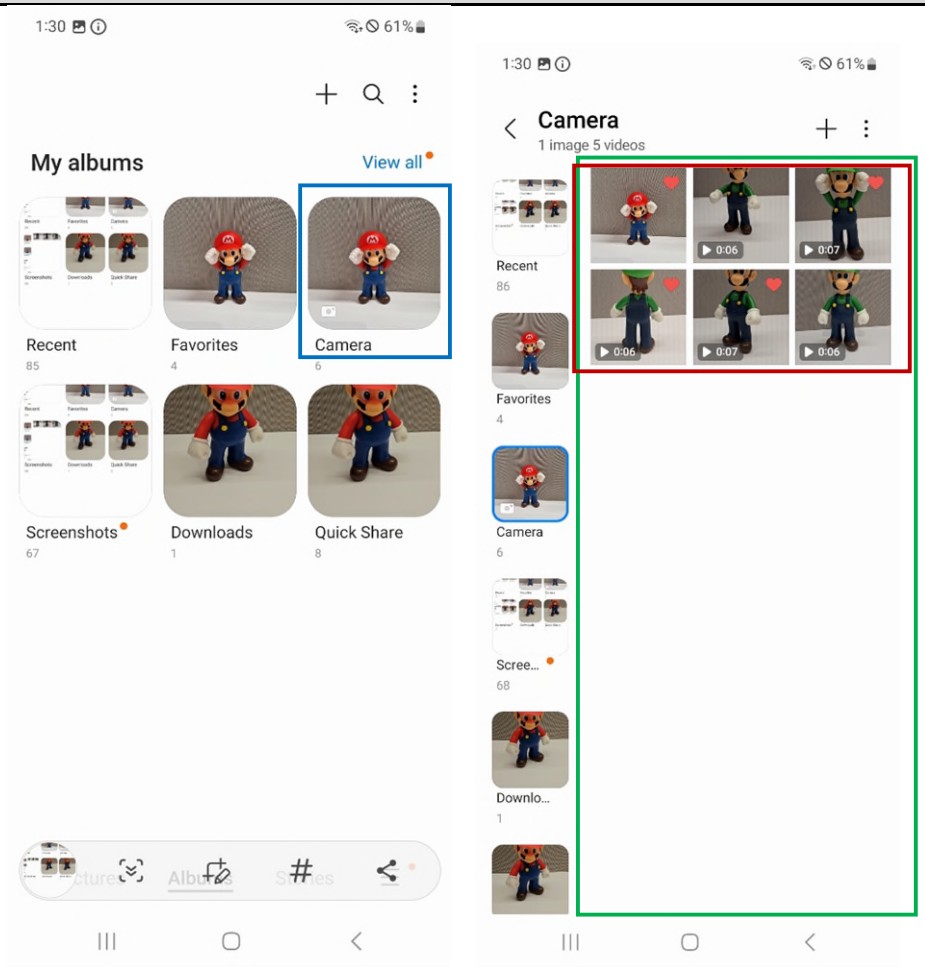
<table>
<tr><th>Product</th><th>Section of second character and display of thumbnails corresponding to the second group of video information in the second area</th></tr>
<tr><td>Samsung Galaxy S23 Ultra</td><td></td></tr>
</table>
</td></tr>
</table>


1:29
81%
My albums
View all
Camera
16
Recent
2263
Favorites
25
Screenshots
74
Downloads
2156
Screen recordi...
14
They're reporting exclusively to you, as per contract.
COURTNEY
49
Desk Videos
3
Pictures
Albums
Stories

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

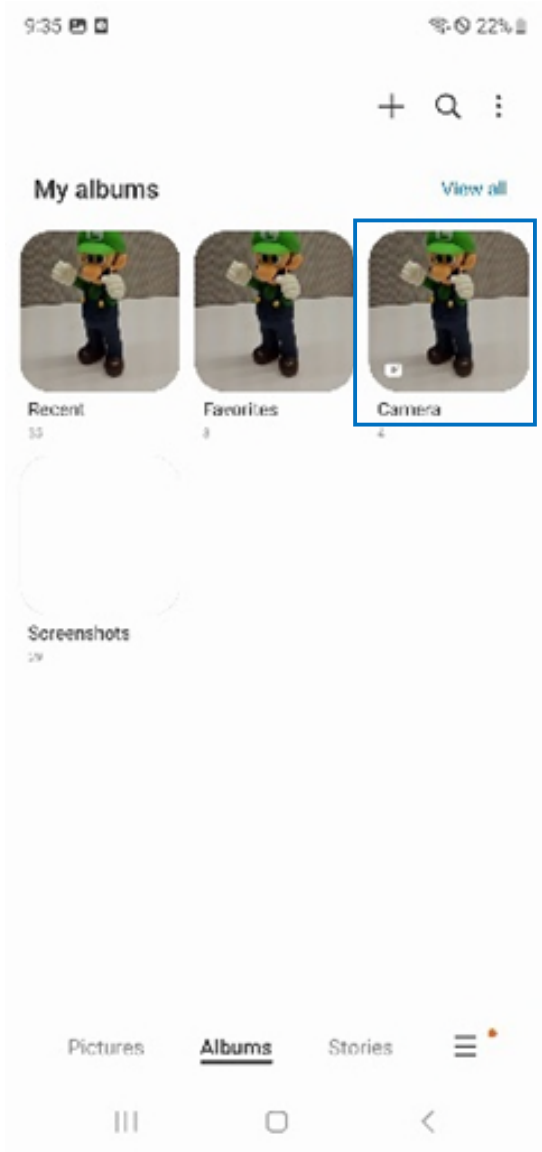
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
		User selecting second character (in blue), prompts device to show the second group of thumbnails (in red) corresponding to the "Camera" album in the second area (in green).	
	Samsung Galaxy A54 5G		

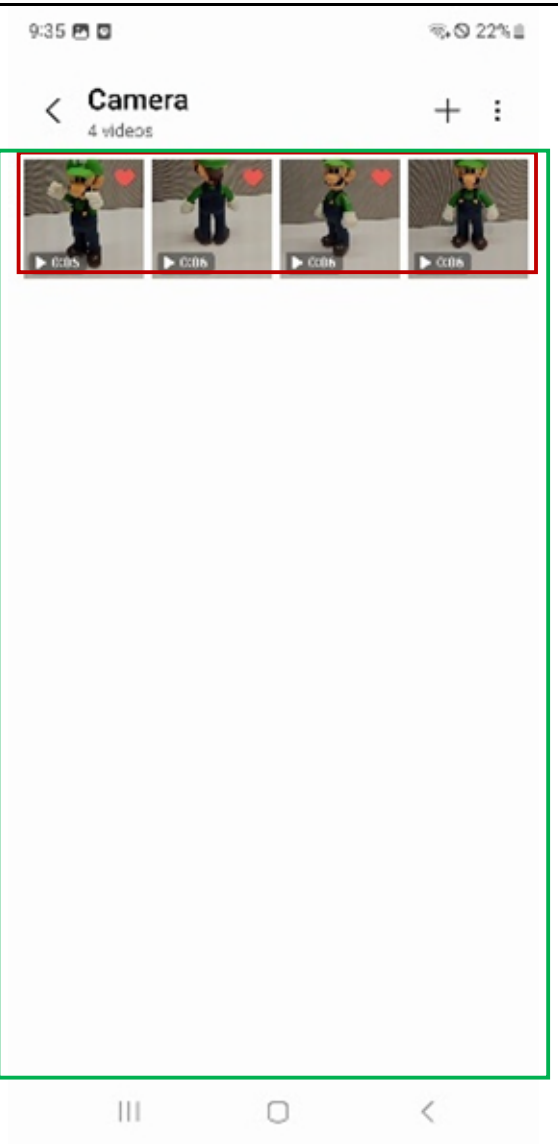
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement



User selecting second character (in blue), prompts device to show the second group of thumbnails (in red) corresponding to the "Camera" album in the second area (in green).

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	As an additional example, testing of the Accused Samsung '815 Products confirms that user selection of the second character (i.e. a user selecting the "Camera" album within the first area, (*i.e.*, under the albums tab) enables the display of a second group of thumbnails corresponding to the second group of video information in the second area (i.e. display of the thumbnails within the "Camera" album).

	Samsung Galaxy S23 Ultra		


9:35
22%
Camera
4 videos

<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>
<table>
<tr><td></td><td>User selecting second character (in blue), prompts device to show the second group of thumbnails (in red) corresponding to the "Camera" album in the second area (in green).</td></tr>
</table>

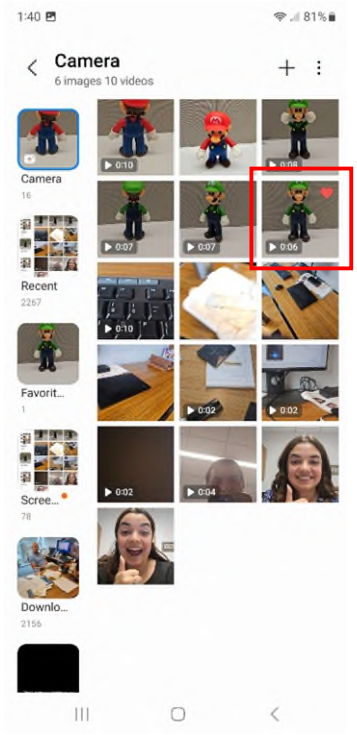
See also Appendix 8 showing that the remaining Accused Samsung '815 Products operate in a similar manner (e.g., they include the Samsung Gallery application). See https://www.samsung.com/us/support/answer/ANS00079026/.

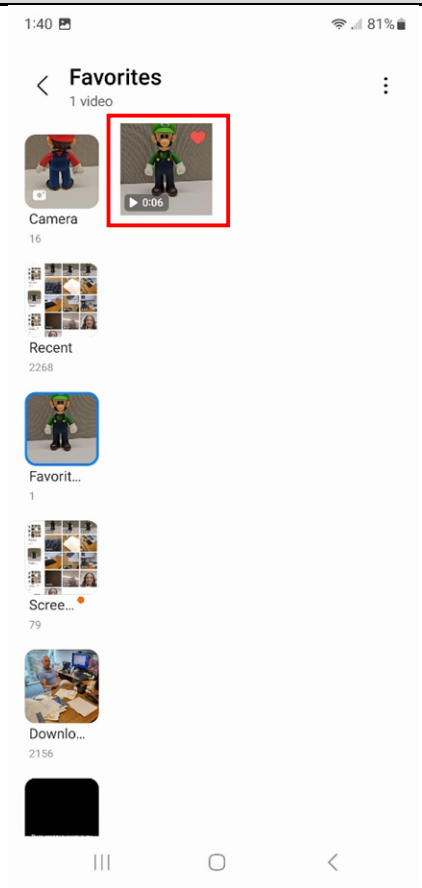
Doctrine of Equivalents:

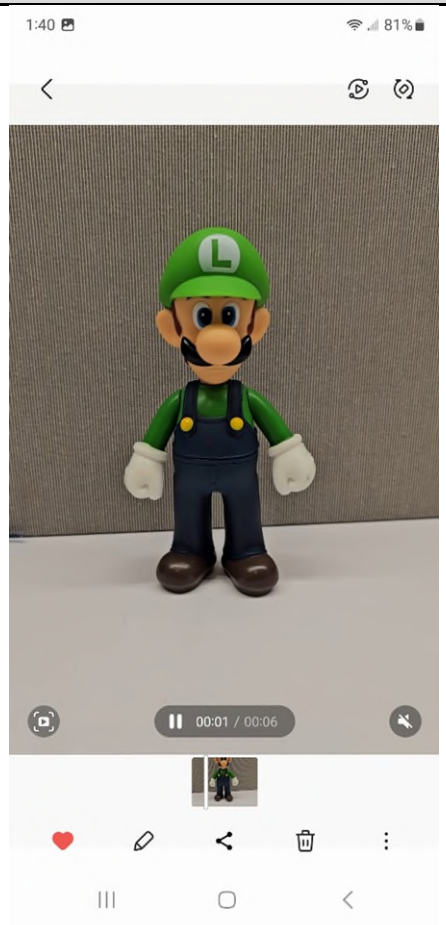
This limitation is also met under the doctrine of equivalents because the display of the "videos" album matches the function, way, and result of the second area and, to the extent there is a difference, the difference is insubstantial. Specifically, to the extent that the display of the "videos" album is not literally a second area, the display of the "videos" album satisfies the same function as that of a second area, namely a separate area showing a discrete grouping of video thumbnails upon selection of the characters corresponding to the "videos" album in the first area. The claimed "second area" displays information within a "file" when that file is selected, which, for example, is equivalent to the selection of the "videos" album leading to the display of the thumbnails of the videos within the "videos" album. See '815 Patent at 5:61-6:18, Figs. 4-5. This specific display organization also achieves substantially the same result as a second area.</td></tr>
<tr><td>[9.j] upon one video information stored on the recording medium included in both the first group of video information and the second group of video information being deleted from the first group of</td><td>Each of the Accused Samsung '815 Products perform a method where upon one video information stored on the recording medium included in both the first group of video information and the second group of video information being deleted from the first group of video information, the one video information continues to be included in the second group of video information.

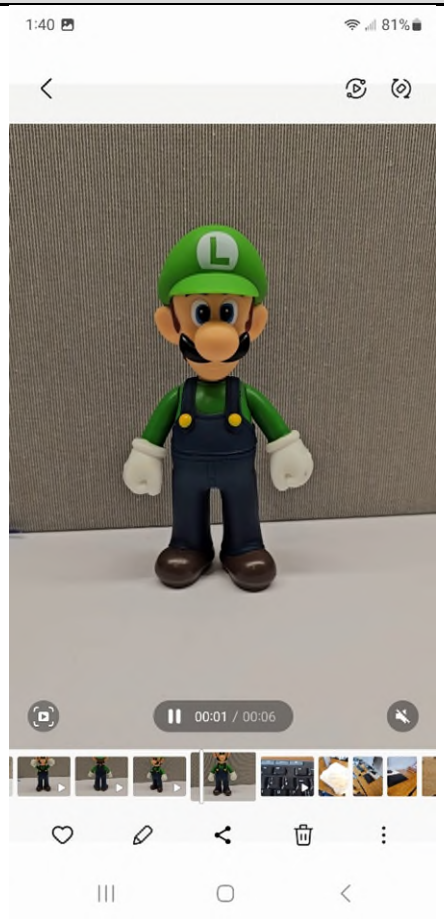
For example, testing of the Accused Samsung '815 Products confirms that when a video that is included in both the "favorites" album and "Camera" album is "unfavorited" (i.e. the favorite designation is removed), the video is deleted from the favorites album but remains included in the Camera album.

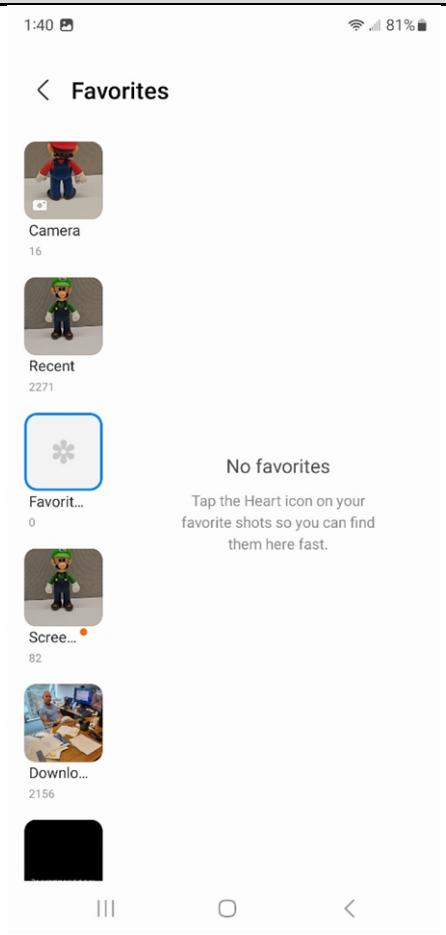
<table>
<tr><th>Product</th><th>Deleting a video from the "favorites" album does not delete it from the "Camera" album</th></tr>
</table>
</td></tr>
</table>

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**		
video information, the one video information continues to be included in the second group of video information,	Samsung Galaxy S23 Ultra		

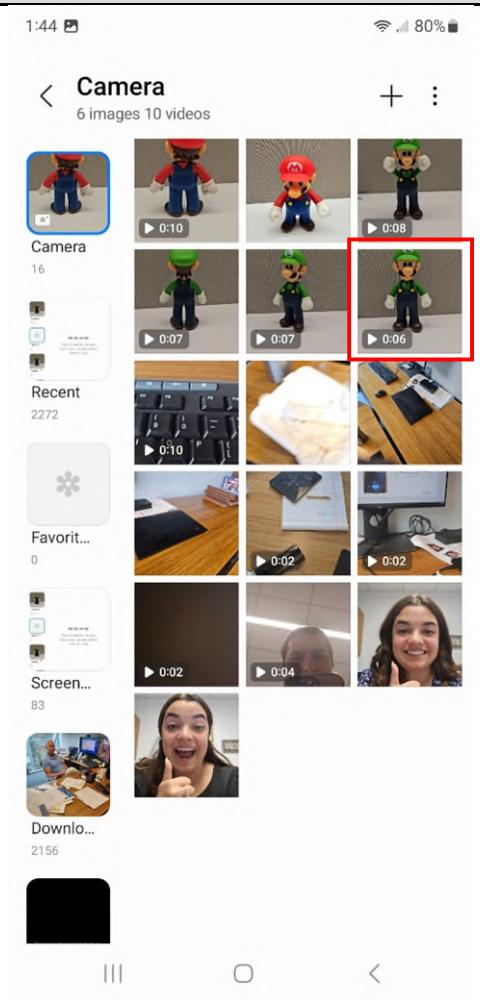
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 (favorites folder includes a video (in red) that is also included in the Camera folder)

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Removing "favorites" designation to remove from favorites folder

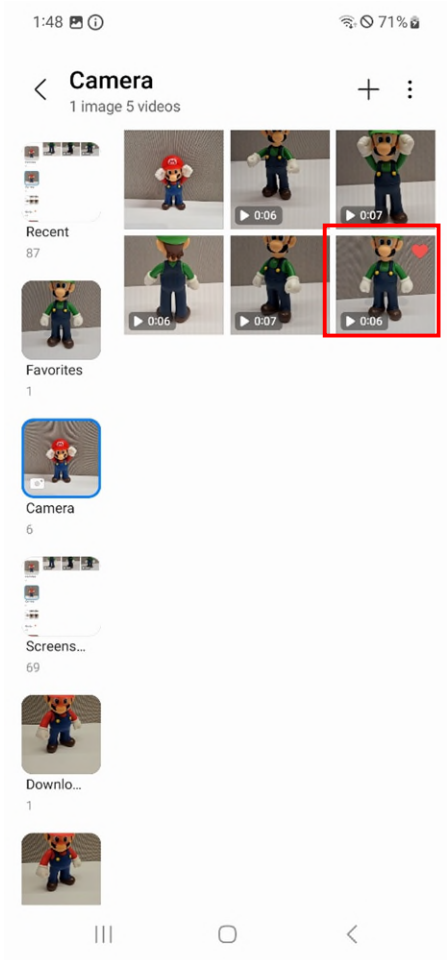
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Favorites album does not include removed video

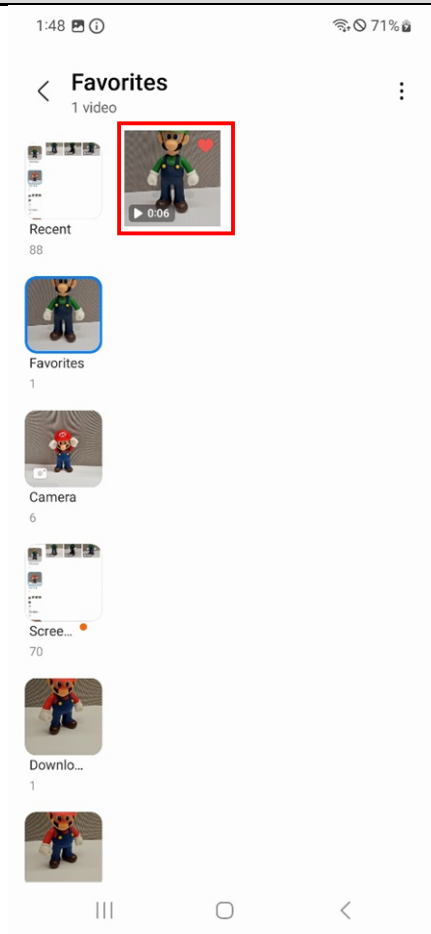
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement



Removed video continues to be included within the Camera album (in red)

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

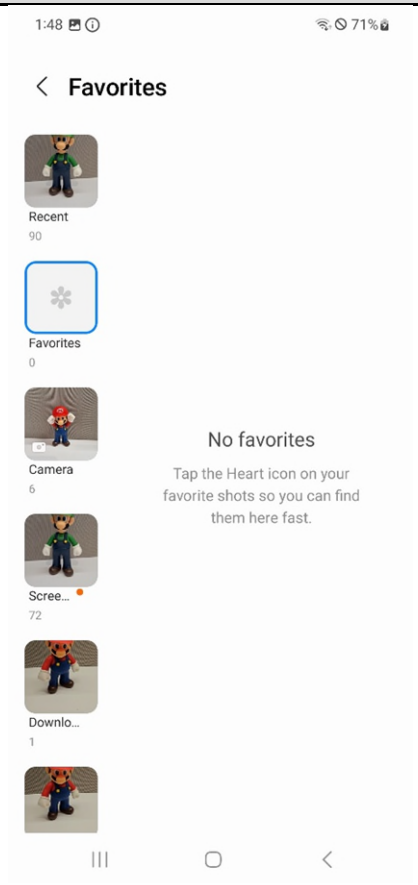
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
	Samsung Galaxy A54 5G		

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Favorites folder includes a video (in red) that is also included in the Camera folder.

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

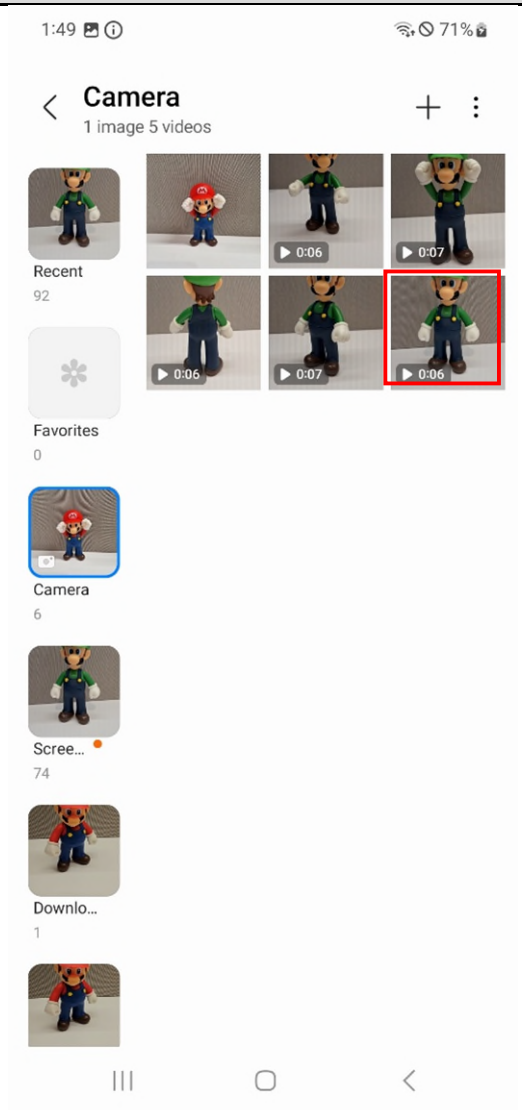
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Removing "favorites" designation to remove from favorites folder

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement



Favorites album does not include removed video

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement



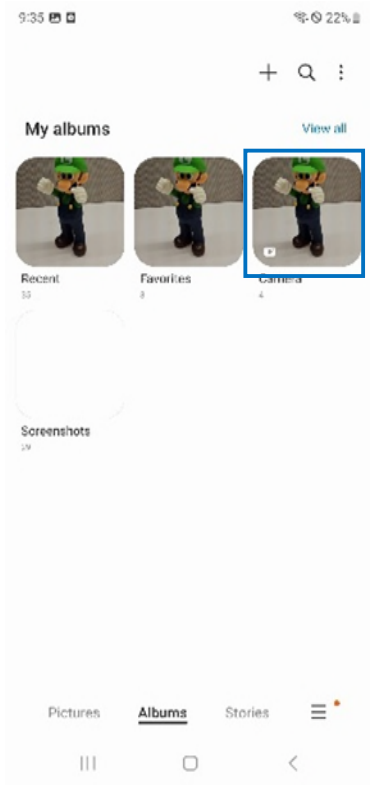
<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>
<table>
<tr><td></td><td>Removed video continues to be included within the Camera album (in red)</td></tr>
</table>

See also Appendix 8 showing that the remaining Accused Samsung '815 Products include a memory and operate in a similar manner (e.g., by including the Gallery application). See https://www.samsung.com/us/support/answer/ANS00079026/.
</td></tr>
<tr><td>[9.k] and displaying a thumbnail corresponding to the one video information as one of the second group of thumbnails when the second character is selected;</td><td>Each of the Accused Samsung '815 Products perform a method of displaying a thumbnail corresponding to the one video information as one of the second group of thumbnails when the second character is selected.

For example, testing of the Accused Samsung '815 Products confirms that the thumbnail of the video deleted from the favorites album is displayed as a part of the "Camera" album when the second character is selected.

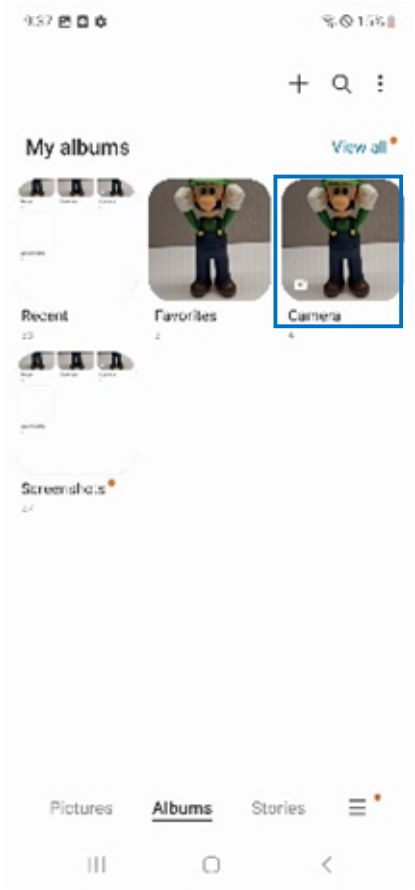
<table>
<tr><th>Product</th><th>Displaying a thumbnail within the "Camera" album of the video deleted from the "favorites" album</th></tr>
</table>
</td></tr>
</table>

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
	Samsung Galaxy S23 Ultra		

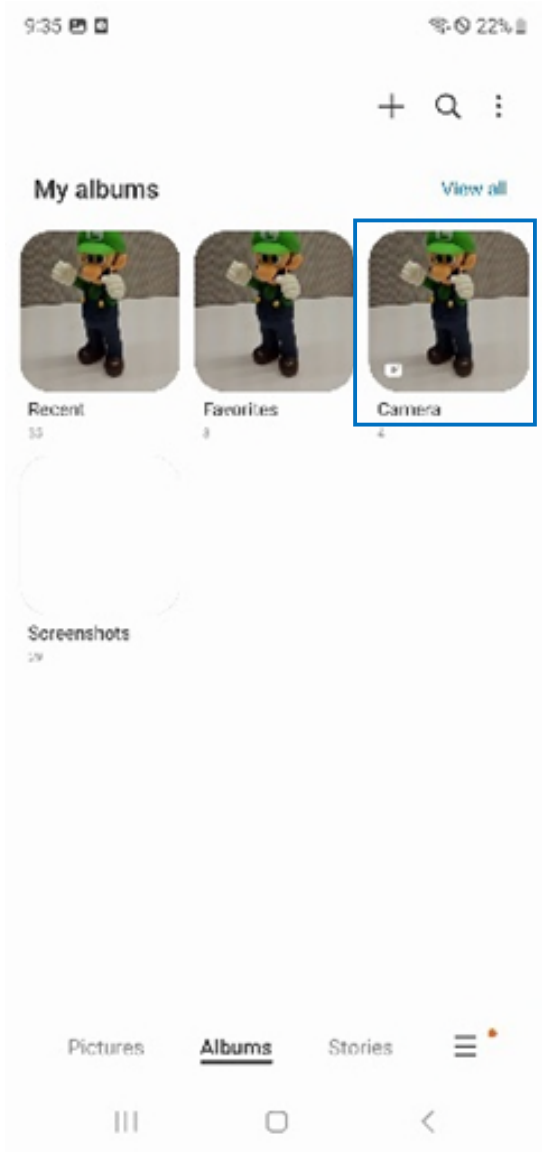
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 When the second character is selected (in blue), the apparatus shows the thumbnail of the removed video (in red).

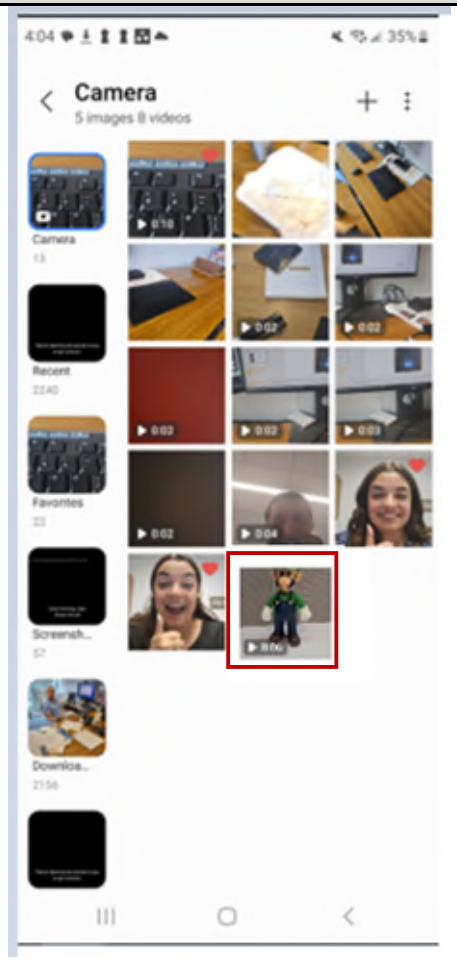
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
	Samsung Galaxy A54 5G		

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 When the second character is selected (in blue), the apparatus shows the thumbnail of the removed video (in red).

<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>As an additional example, the processor controls the display to display a thumbnail corresponding to the one video information as one of the second group of thumbnails when the second character is selected in the bottom half of the screen when there are additional videos.
<table>
<tr><th>Product</th><th>Section of second character and display of thumbnails corresponding to the second group of video information in the second area</th></tr>
</table>
</td></tr>
</table>

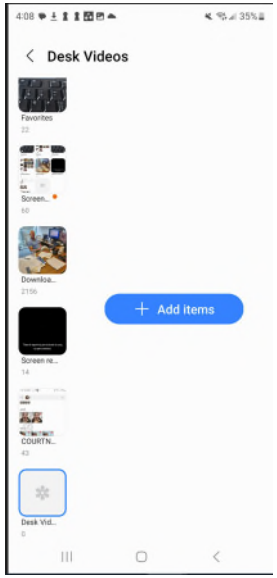
	Samsung Galaxy S23 Ultra		

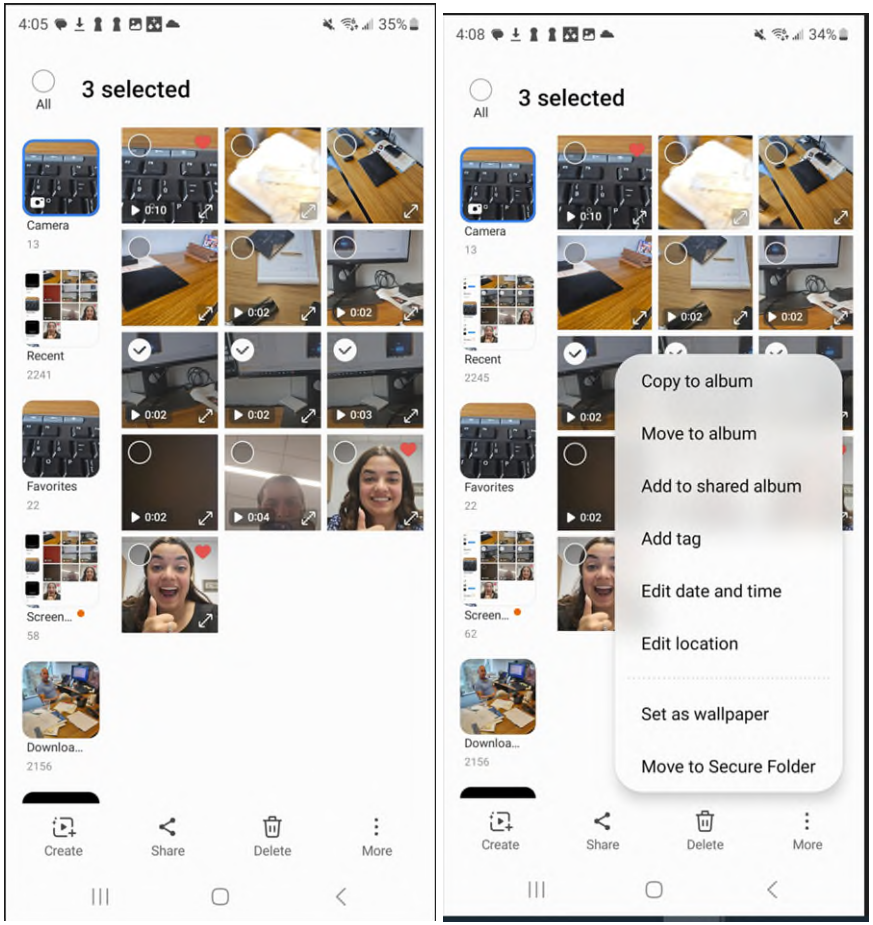
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 When the second character is selected (in blue), the apparatus shows the thumbnail of the removed video (in red).

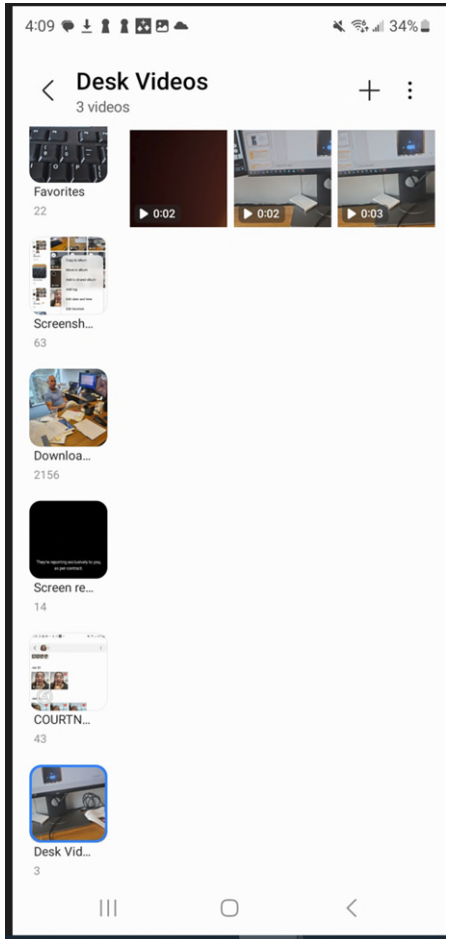
<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>See also Appendix 8 showing that the remaining Accused Samsung '815 Products include a display and chipset with one or more processors and operate in a similar manner (e.g., by including a Gallery application). See https://www.samsung.com/us/support/answer/ANS00079026/.</td></tr>
<tr><td>[9.l] wherein the processor generating a group of video information based on user preferences determined by the user selections of the video information, and</td><td>See claim 2. For example:

Each of the Accused Samsung '815 Products comprises a processor that generates a group of video information based on user preferences determined by the user selections of the video information, and upon user selection of the group, the processor controls the display to display thumbnails that correspond to the video information and no other thumbnails associated with video information of other users (e.g., user provides its preferences by selecting pictures to be included in a new album. Then the display displays thumbnails that correspond to the video information and no other thumbnails are shown other than those that are included based on the preferences of a user.

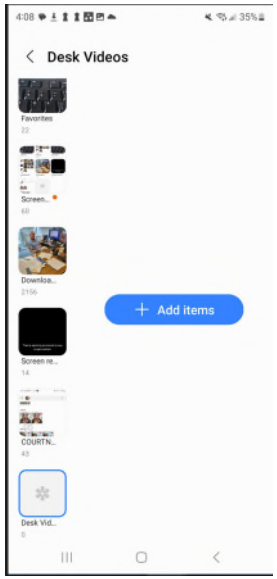
<table><tr><th>Product</th><th>Album "Desk Videos" Does Not include Any Thumbnails Prior to User Selections</th></tr></table></td></tr>
</table>

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**		
	Samsung Galaxy S23 Ultra		
	Product	**User's Preferences are indicated based on user selections of three videos and selecting "Copy" or "Move" to album**	

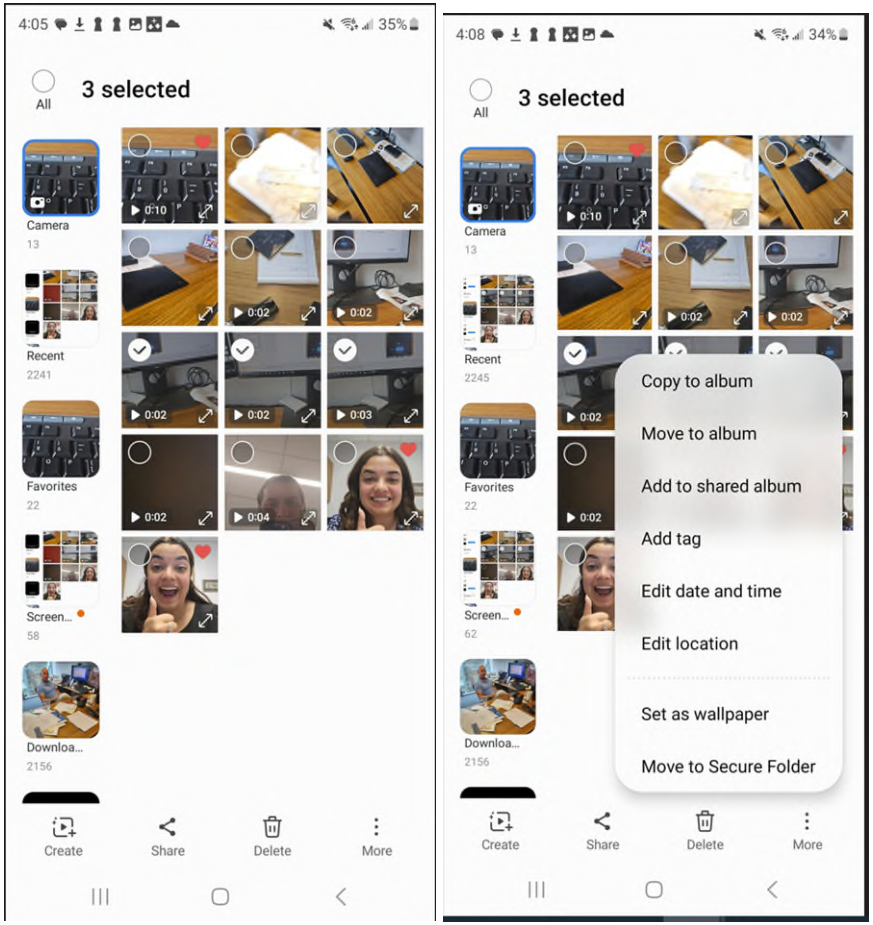
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	Samsung Galaxy S23 Ultra 

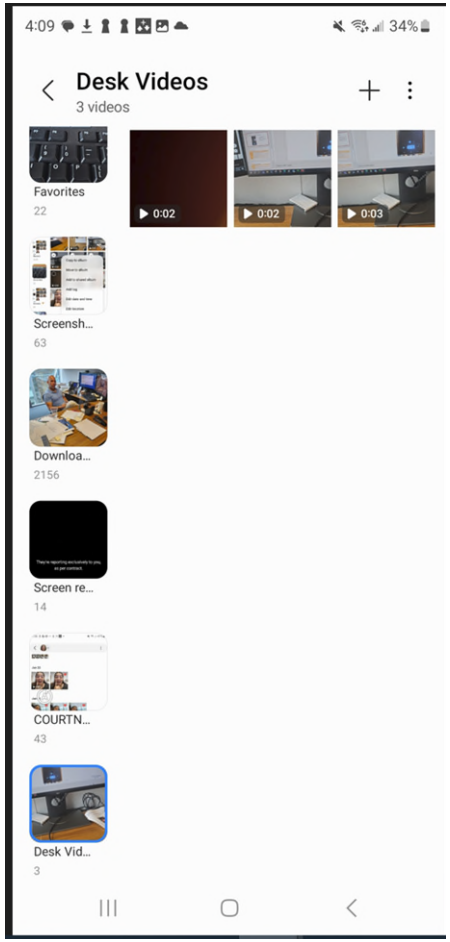
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**		
	Product	**Upon user selection of "Desk Videos" thumbnails of the videos based on user preferences are displayed and no other thumbnails associated with video information of other users are displayed**	
	Samsung Galaxy S23 Ultra		

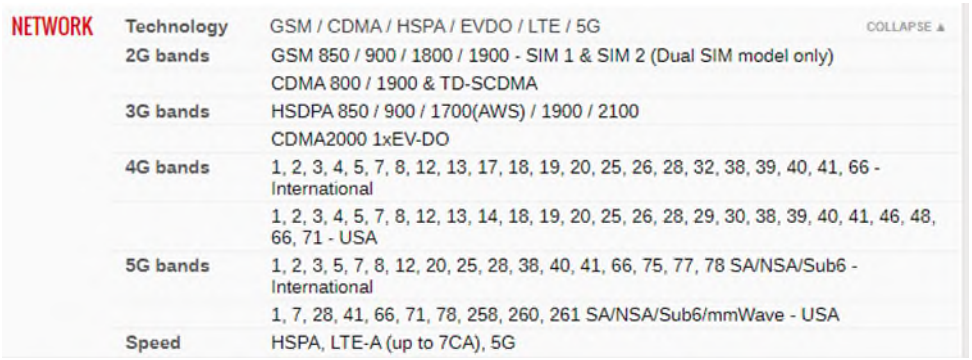
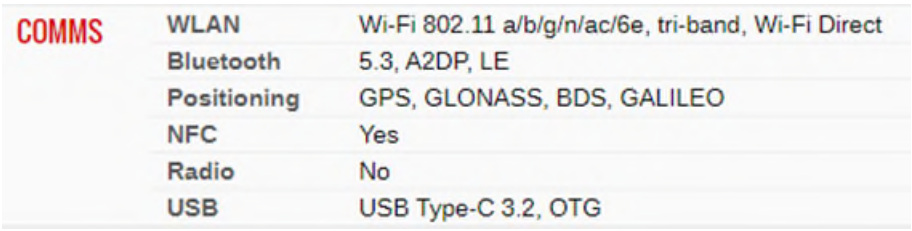
<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td>[9.m] upon user selection of the group, displaying thumbnails that correspond to the video information and no other thumbnails associated with video information of other users.</td><td>
See claim 2. For example:

Each of the Accused Samsung '815 Products comprises a processor that generates a group of video information based on user preferences determined by the user selections of the video information, and upon user selection of the group, the processor controls the display to display thumbnails that correspond to the video information and no other thumbnails associated with video information of other users (e.g., user provides its preferences by selecting pictures to be included in a new album. Then the display displays thumbnails that correspond to the video information and no other thumbnails are shown other than those that are included based on the preferences of a user.
<table>
<tr><th>Product</th><th>Album "Desk Videos" Does Not include Any Thumbnails Prior to User Selections</th></tr>
<tr><td>Samsung Galaxy S23 Ultra</td><td> 
</td></tr>
<tr><td>Product</td><td>User's Preferences are indicated based on user selections of three videos and selecting "Copy" or "Move" to album</td></tr>
</table>
</td></tr>
</table>

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Samsung Galaxy S23 Ultra 

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**		
	Product	**Upon user selection of "Desk Videos" thumbnails of the videos based on user preferences are displayed and no other thumbnails associated with video information of other users are displayed**	
	Samsung Galaxy S23 Ultra		

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
10. The information processing method of claim 9, further comprising: wirelessly receiving the first video information from the other information processing apparatus via an antenna of the information processing apparatus.	Each of the Accused Samsung '815 Products performs a method of wirelessly receiving the first video information from the other information processing apparatus via an antenna of the information processing apparatus. For example, each of the Accused Samsung '815 Products can receive a video via cellular antenna (e.g., MMS or downloading from Internet), via a WiFi antenna (e.g., MMS or downloading from Internet or Quick Share), or via a Bluetooth antenna (e.g., Bluetooth file transfer). **Galaxy S23 Ultra:**  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:**

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

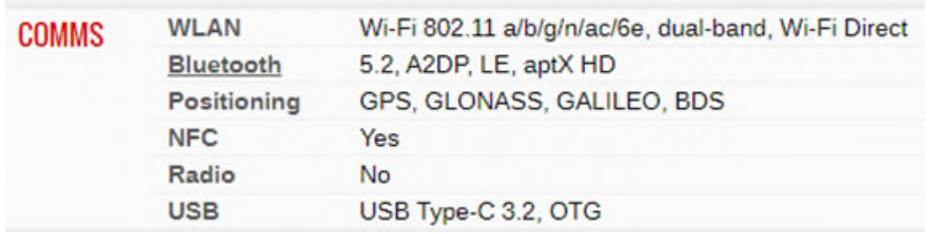
NETWORK	Technology	GSM / CDMA / HSPA / EVDO / LTE / 5G	COLLAPSE ▲
	2G bands	GSM 850 / 900 / 1800 / 1900	
		CDMA 800 / 1900	
	3G bands	HSDPA 850 / 900 / 1700(AWS) / 1900 / 2100	
		HSDPA 850 / 900 / 1900 / 2100	
		CDMA2000 1xEV-DO	
	4G bands	1, 2, 3, 4, 5, 7, 8, 12, 13, 17, 18, 19, 20, 25, 26, 28, 32, 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	
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	

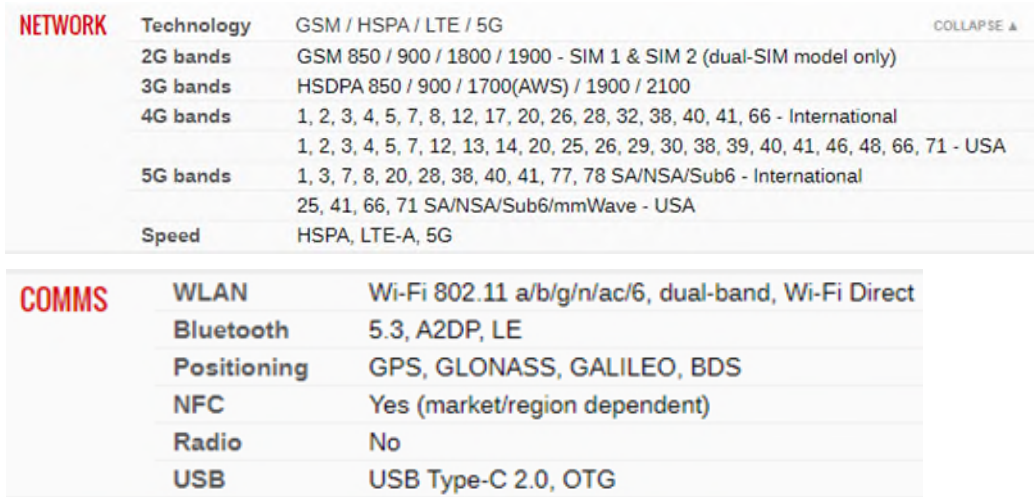
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement



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			COLLAPSE ▲
	Technology	GSM / HSPA / LTE / 5G	
	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	

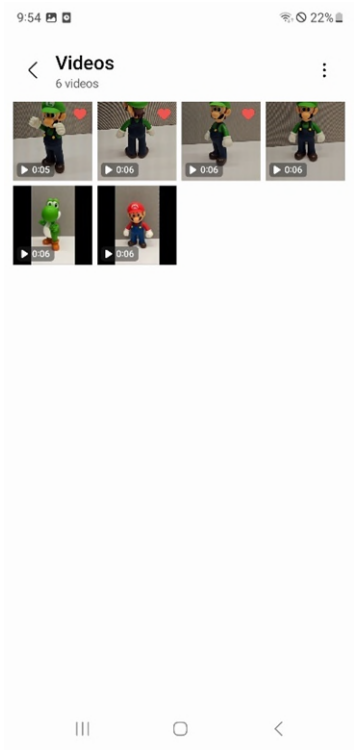
COMMS		
	WLAN	Wi-Fi 802.11 a/b/g/n/ac/6, dual-band, Wi-Fi Direct
	Bluetooth	5.3, A2DP, LE
	Positioning	GPS, GLONASS, GALILEO, BDS
	NFC	Yes (market/region dependent)
	Radio	No
	USB	USB Type-C 2.0, OTG

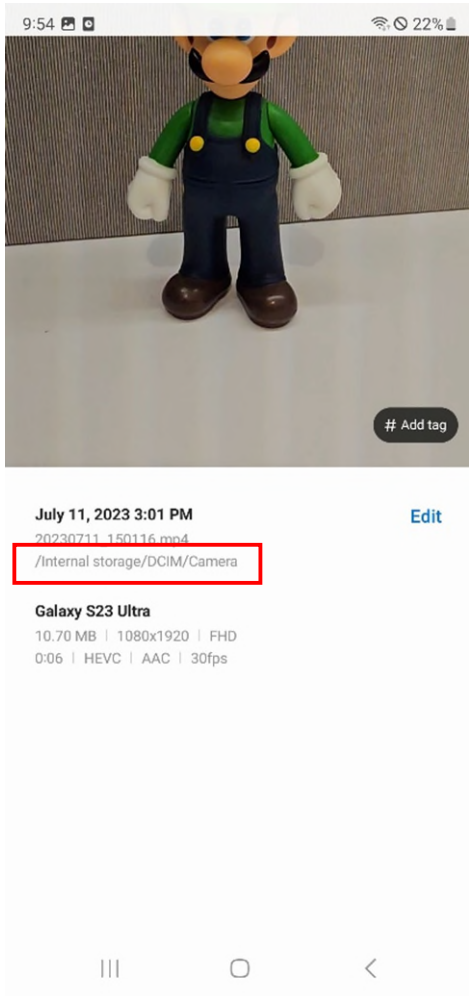
Samsung Galaxy A54 5G technical specifications; Galaxy A54 5G, 128GB (Unlocked) Phones - SM-A546UZKBXAA | Samsung US; https://www.gsmarena.com/samsung_galaxy_a54-12070.php.

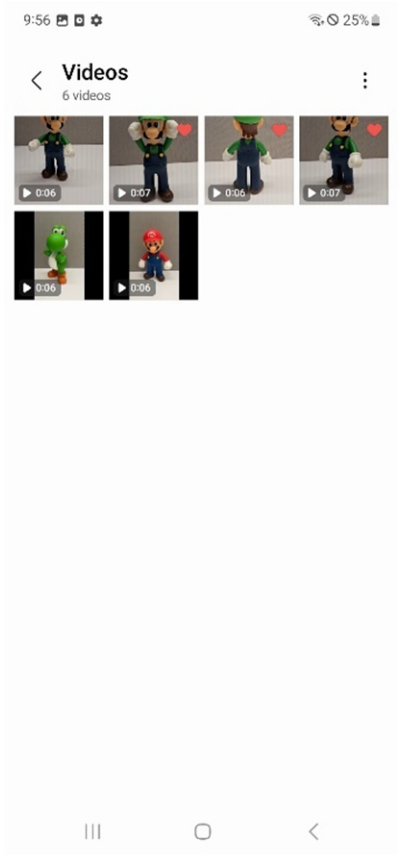
See also Appendix 8 showing that the remaining Accused Samsung '815 Products include one or more of a WiFi chipset, cellular chipset, or Bluetooth chipset that will include an antenna.

<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td>[11.a] The information processing method of claim 9, wherein the plurality of stored video information includes third video information recorded by the information processing apparatus, fourth video information, and fifth video information,</td><td>Each of the Accused Samsung '815 Products performs a method wherein the plurality of stored video information includes third video information recorded by the information processing apparatus, fourth video information, and fifth video information.

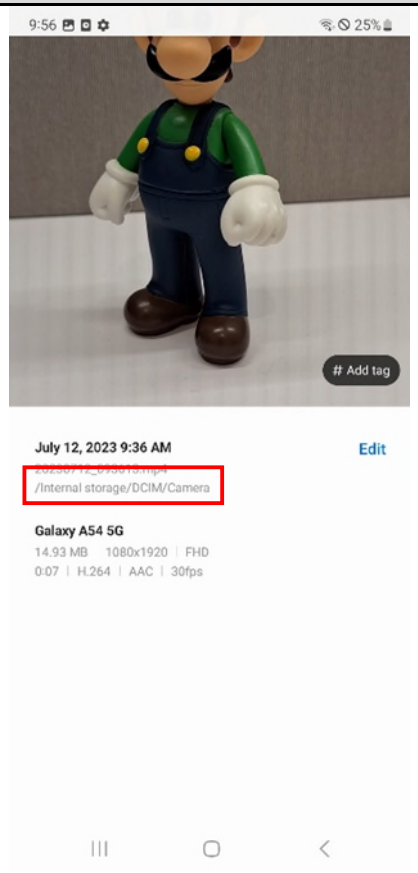
For example, testing of the Accused Samsung '815 Products confirms that the Accused Samsung '815 Products includes more than five videos, wherein the third has been recorded by the apparatus.

<table>
<tr><th>Product</th><th>Demonstrating five or more stored videos, and that the third was recorded by the camera application of the device</th></tr>
<tr><td>Samsung Galaxy S23 Ultra</td><td> 
</td></tr>
</table>
</td></tr>
</table>

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement			
			Videos stored by the device 	

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
		"Camera" designation on exemplary third video indicating that the video was taken with the apparatus	
	Samsung Galaxy A54 5G	 Videos stored by the device	

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement



"Camera" designation on exemplary third video indicating that the video was taken with the apparatus

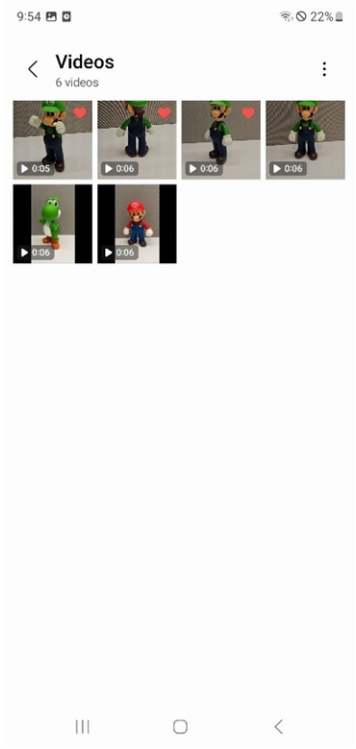
See also Appendix 8 showing that the remaining Accused Samsung '815 Products include a memory for recording additional video information and operates in a similar manner (e.g., by including a Gallery application). *See* https://www.samsung.com/us/support/answer/ANS00079026/.

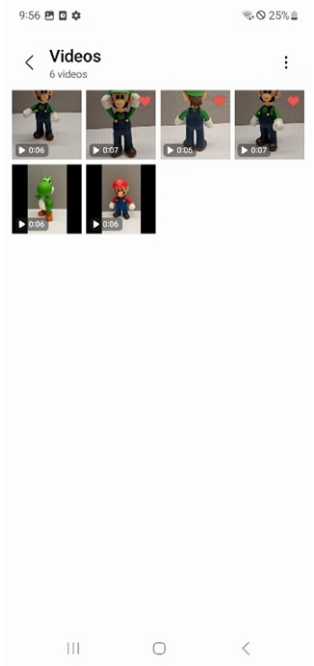
<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td>[11.b] wherein the information processing apparatus displays a user interface having thumbnails corresponding to each of the third, fourth, and fifth video information.</td><td>Each of the Accused Samsung '815 Products performs a method wherein the information processing apparatus displays a user interface having thumbnails corresponding to each of the third, fourth, and fifth video information.

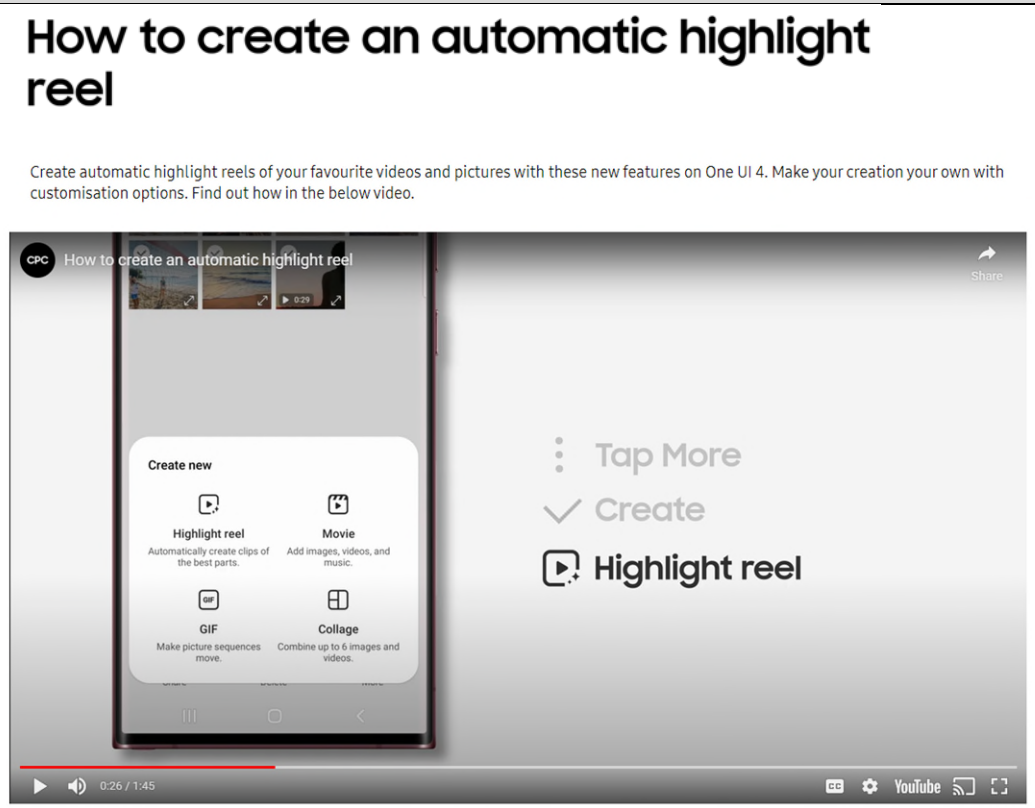
For example, testing of the Accused Samsung '815 Products confirms that the Accused Samsung '815 Products includes a user interface wherein thumbnails are shown corresponding to at least the third, fourth, and fifth video information.

<table><tr><th>Product</th><th>Thumbnails corresponding to exemplary third, fourth, and fifth videos</th></tr></table></td></tr>
</table>

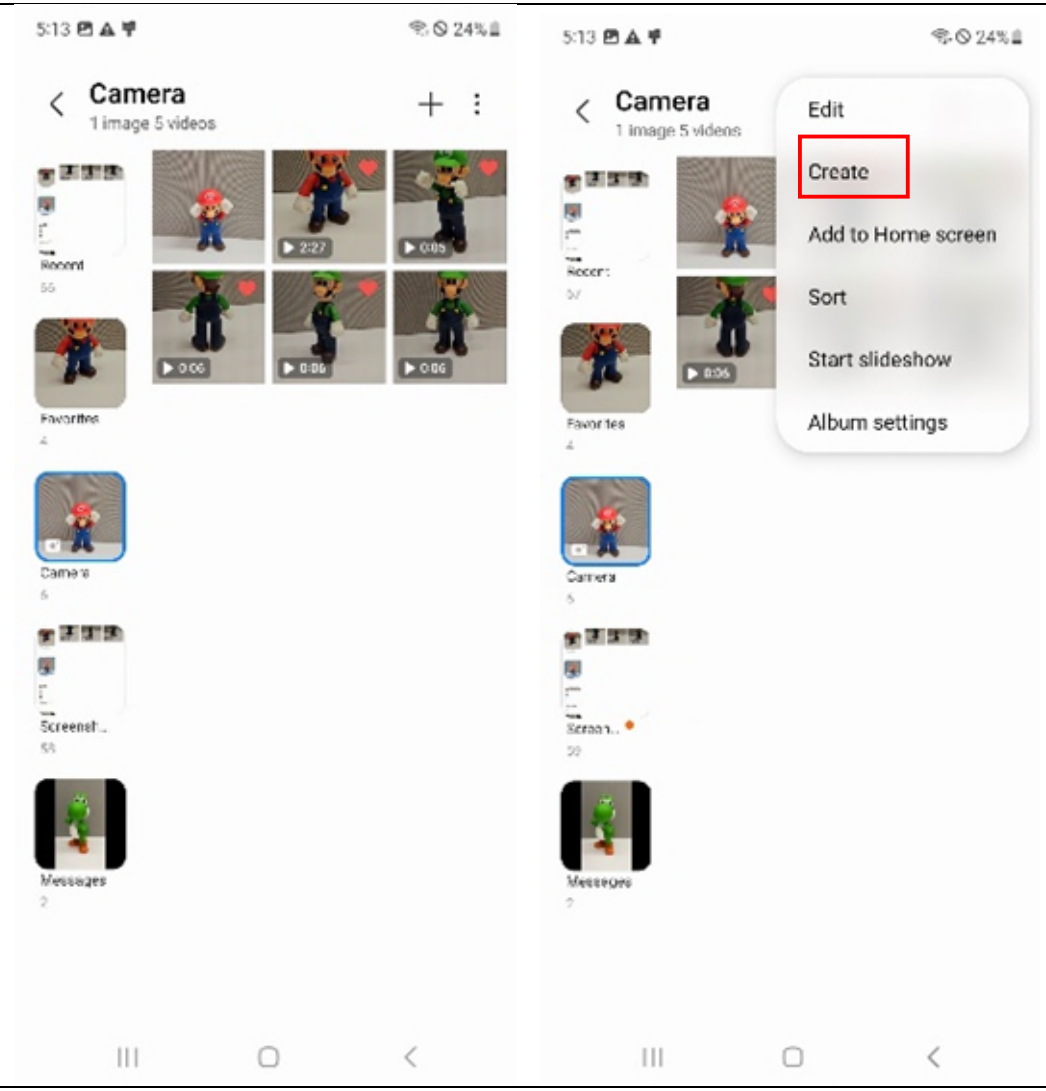
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

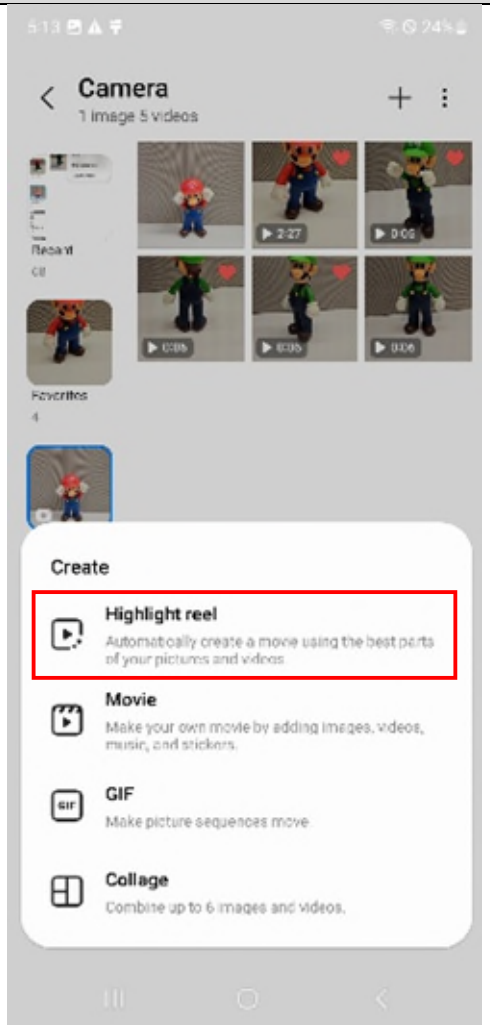
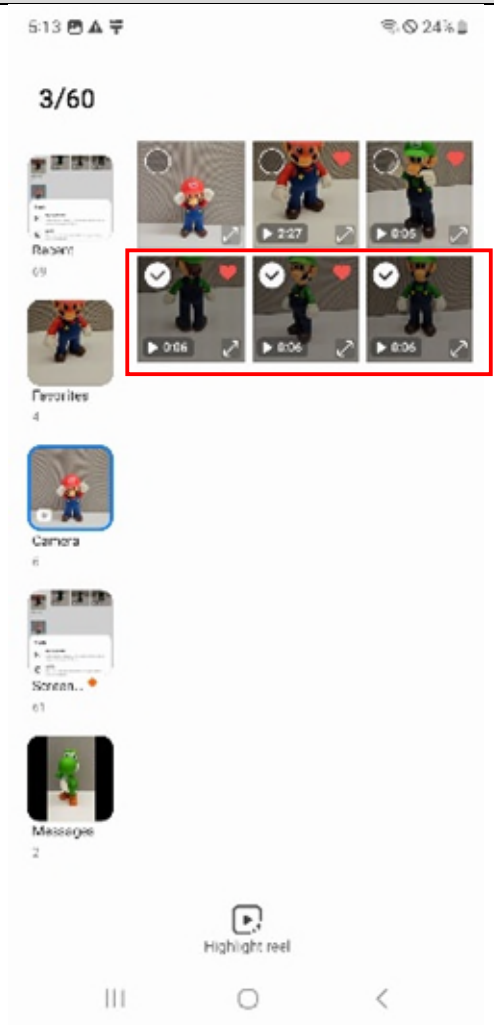
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
	Samsung Galaxy S23 Ultra		

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	Samsung Galaxy A54 5G  *See also* Appendix 8 showing that the remaining Accused Samsung '815 Products include a display and operate in a similar manner (e.g., by including the Samsung Gallery application). *See* https://www.samsung.com/us/support/answer/ANS00079026/.
12. The information processing method of claim 11, wherein the information processing	Each of the Accused Samsung '815 Products performs a method wherein the information processing apparatus displays the third, fourth, and fifth video information according to predetermined playback sequence. For example, the Accused Samsung '815 Products display displays the third, fourth, and fifth video information according to predetermined playback sequence using the "Highlight reel" or "Movie" functionality provided in the album.

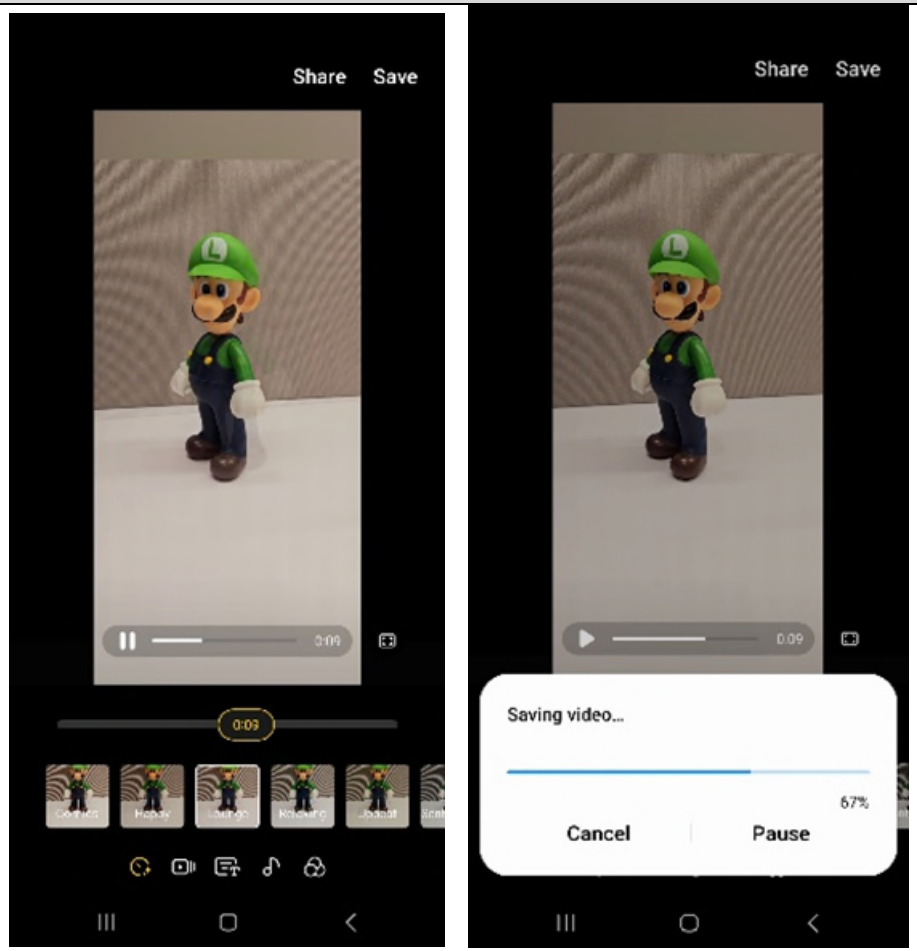
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
apparatus displays the third, fourth, and fifth video information according to predetermined playback sequence.	

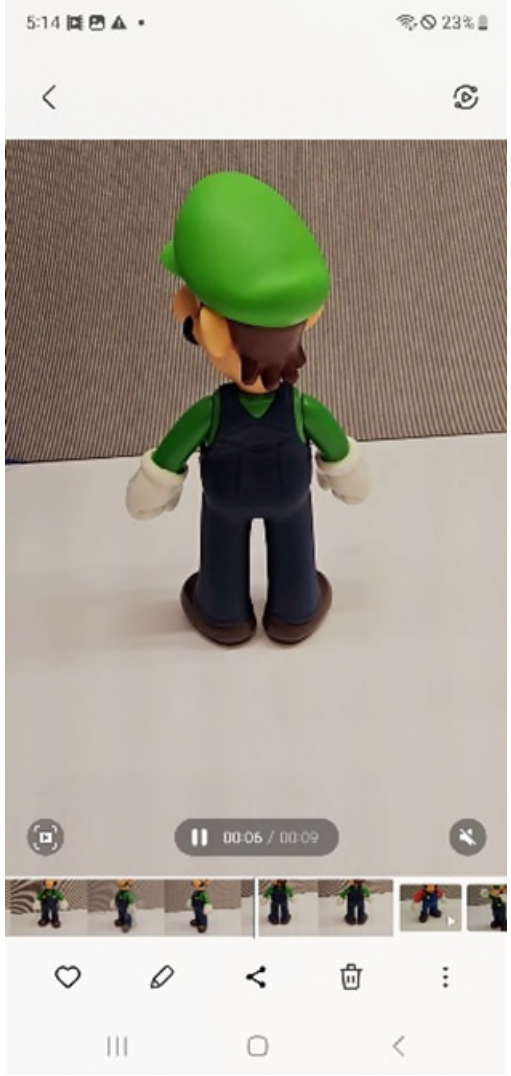
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Transcript: How to create an automatic highlight reel Open Gallery Select your favourite photos and videos Tap More Create Highlight reel An automatic reel will be created https://www.samsung.com/uk/support/mobile-devices/how-to-create-an-automatic-highlight-reel/ **Samsung Galaxy S23 Ultra:**


5:13
24%
Camera
1 image 5 videos
Edit
Create
Add to Home screen
Sort
Start slideshow
Album settings

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	  Third, fourth, and fifth video information is selected.

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

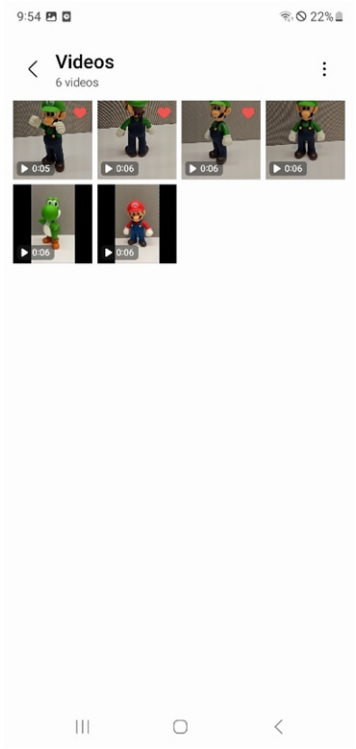
<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>Screenshot showing third, fourth, and fifth video information played according to predetermined playback sequence within a highlight reel.

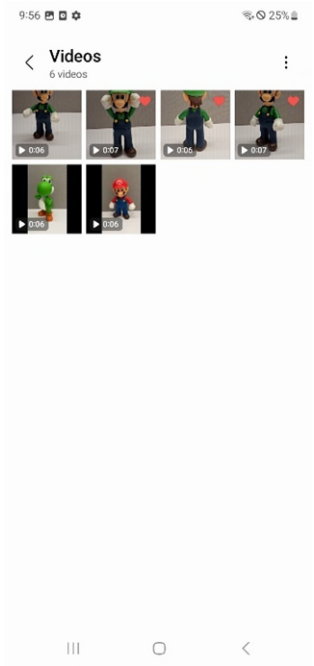
See also Appendix 8 showing that the remaining Accused Samsung '815 Products include a display and operate in a similar manner (e.g., by including the Samsung Gallery application). See https://www.samsung.com/us/support/answer/ANS00079026/.</td></tr>
<tr><td>[13. pre] The information processing method of claim 9,

[13.a] wherein the plurality of stored video information includes third video information, fourth video information, and fifth video information,</td><td>Each of the Accused Samsung '815 Products performs a method wherein the plurality of stored video information includes third video information, fourth video information, and fifth video information.

For example, testing of the Accused Samsung '815 Products confirms that the Accused Samsung '815 Products includes at least third, fourth, and fifth video information.

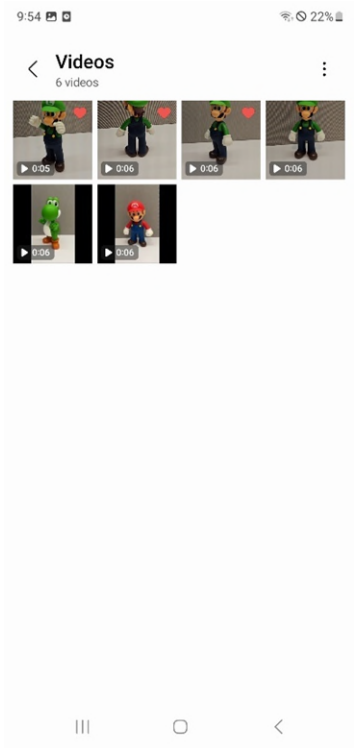
<table><tr><th>Product</th><th>Thumbnails showing exemplary third, fourth, and fifth videos</th></tr></table></td></tr>
</table>

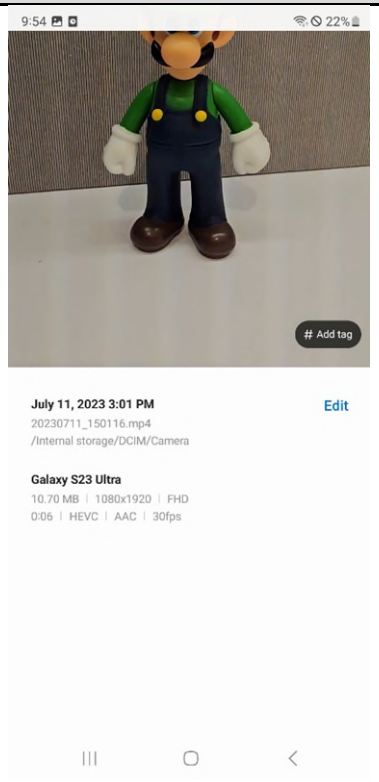
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**		
	Samsung Galaxy S23 Ultra		

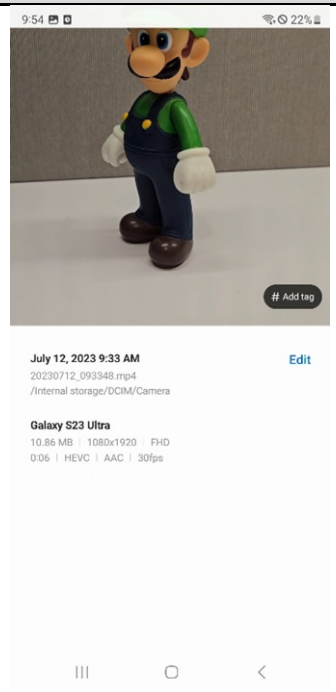
<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>
<table>
<tr><td>Samsung Galaxy A54 5G</td><td> 
</td></tr>
</table>
See also Appendix 8 showing that the remaining Accused Samsung '815 Products include a memory and operate in a similar manner (e.g., by including the Samsung Gallery application). See https://www.samsung.com/us/support/answer/ANS00079026/.</td></tr>
<tr><td>[13.b] wherein the plurality of stored video information includes management information corresponding to</td><td>Each of the Accused Samsung '815 Products performs a method wherein the plurality of stored video information includes management information corresponding to the third, fourth, and fifth video information.

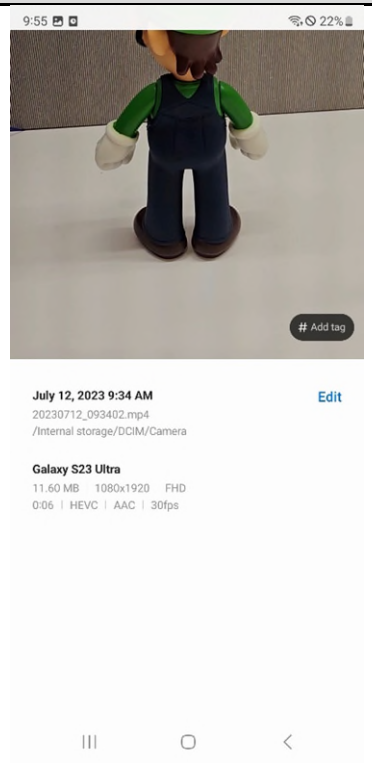
For example, testing of the Accused Samsung '815 Products confirms that the Accused Samsung '815 Products display management information corresponding to the third, fourth, and fifth video information.

<table>
<tr><th>Product</th><th>Management information for third, fourth, and fifth videos</th></tr>
</table></td></tr>
</table>

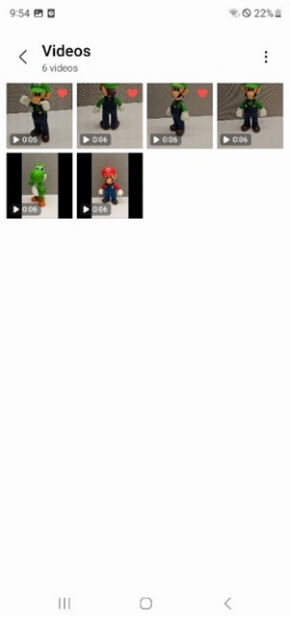
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**		
the third, fourth, and fifth video information,	Samsung Galaxy S23 Ultra		

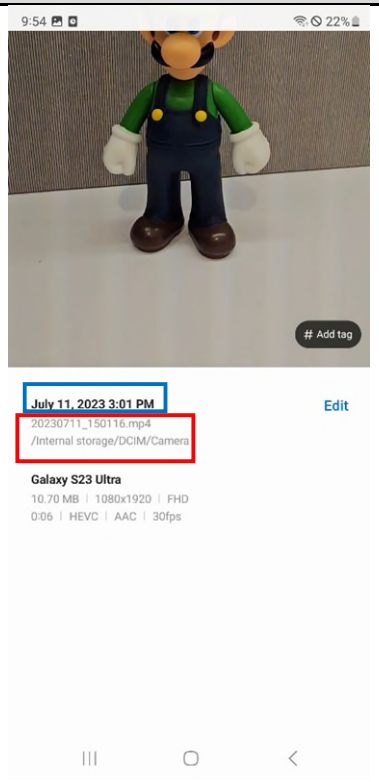
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Management information for third video

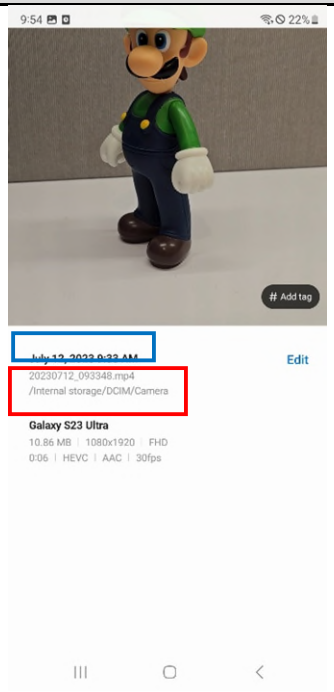
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Management information for fourth video

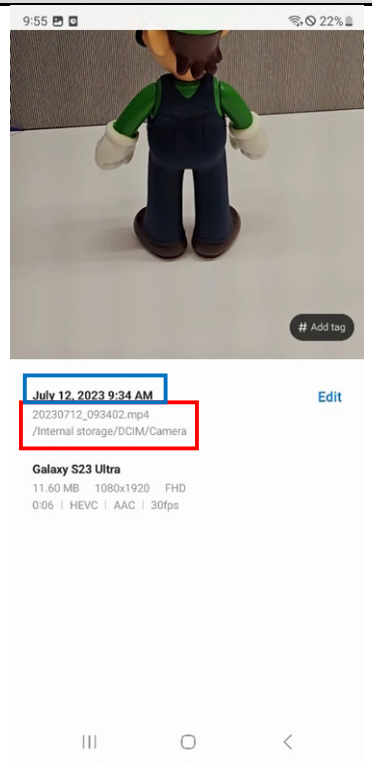
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Management information for fifth video *See also* Appendix 8 showing that the remaining Accused Samsung '815 Products include a memory and operate in a similar manner (*e.g.*, by including the Samsung Gallery application). *See* https://www.samsung.com/us/support/answer/ANS00079026/.
[13.c] wherein the management	Each of the Accused Samsung '815 Products performs a method wherein the management information includes filename information and timing information for each of the third, fourth, and fifth video information

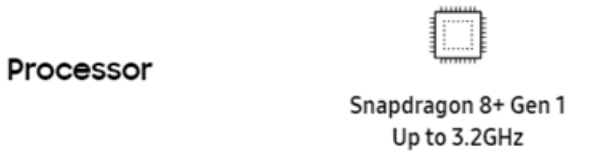
<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td>information includes filename information and timing information for each of the third, fourth, and fifth video information such that when the third, fourth, and fifth video information is stored in the recording medium the filename information is updated according to a predetermined sequence.</td><td>
such that when the third, fourth, and fifth video information is stored in the recording medium the filename information is updated according to a predetermined sequence.

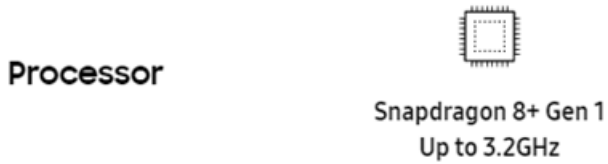
For example, testing of the Accused Samsung '815 Products confirms that the Accused Samsung '815 Products display management information that includes filename information and timing information for each of the third, fourth, and fifth video information such that when the third, fourth, and fifth video information is stored in the recording medium the filename information is updated according to a predetermined sequence. For example, the filename provided includes certain numbers that upon information and belief are generated based on a predetermined sequence based on the sequence of storing of the video information.
<table>
<tr><th>Product</th><th>Management information for third, fourth, and fifth videos</th></tr>
<tr><td>Samsung Galaxy S23 Ultra</td><td> 
</td></tr>
</table>
</td></tr>
</table>

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 File name information (red) and date/time captured (blue) for third video.

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 File name information (red) and date/time captured (blue) for fourth video.

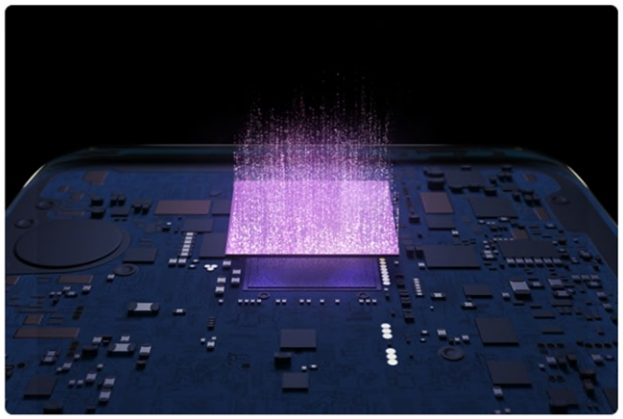
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 File name information (red) and date/time captured (blue) for fifth video. *See also* Appendix 8 showing that the remaining Accused Samsung '815 Products include a memory and operate in a similar manner (*e.g.*, by including the Samsung Gallery application). *See* https://www.samsung.com/us/support/answer/ANS00079026/.
[14.a] The information processing method	Each of the Accused Samsung '815 Products perform a method of converting, by an analog to digital converter of the informaiton processsing apparatus, analog audio information being recorded into digital audio information.

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
of claim 9, further comprising: converting, by an analog to digital converter of the information processing apparatus, analog audio information being recorded into digital audio information;	For example, upon information and belief, each of the Accused Samsung '815 Products include one or more microphones that either alone or in combination with the system on a chip (SoC) of each Accused Samsung '815 Products convert analog audio information being recorded (i.e. voice or ambient sound accompanying a video) into digital audio information (i.e. the audio information stored in digital format as a part of the video mp4 file).  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.  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

U.S. Patent No. 11,017,815	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.  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: Octa-Core CPU Speed: 2.4GHz,2GHz

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

Performance



Impressive speed. Powerful processor

The powerful Octa-core processor opens up a new range of possibilities with heightened performance and capacity.

PLATFORM	OS	Android 13, One UI 5.1
	Chipset	Exynos 1380 (5 nm)
	CPU	Octa-core (4x2.4 GHz Cortex-A78 & 4x2.0 GHz Cortex-A55)
	GPU	Mali-G68 MP5

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.

The AIDA64 Reports and tech specs show that the Accused Samsung '815 Products contain one or more processors.

Product	AIDA 64 Report- Processor

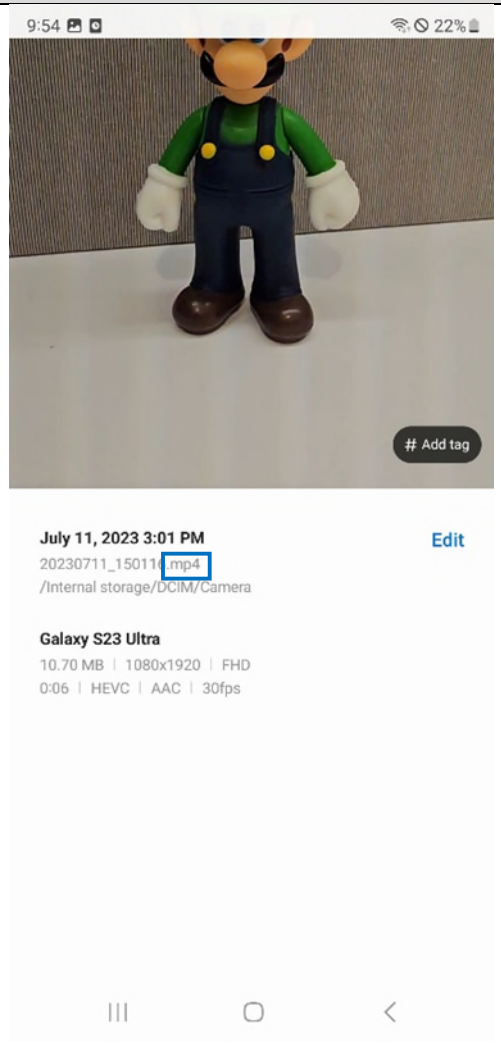
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement	
	Galaxy S23 Ultra	SoC Model: Qualcomm Snapdragon 8 Gen 2 (SM8550) Core Architecture: 3x ARM Cortex-A510 @ 2016 MHz 2x ARM Cortex-A715 @ 2803 MHz 2x ARM Cortex-A710 @ 2803 MHz ARM Cortex-X3 @ 3360 MHz Manufacturing Process: 4 nm Instruction Set: 64-bit ARMv9-A CPU Revision: r1p0 CPU Cores: 8 CPU Clock Range: 307 - 3360 MHz
	Galaxy Z Fold4	SoC Model: Qualcomm Snapdragon 8+ Gen 1 (SM8475) Core Architecture: 4x ARM Cortex-A510 @ 2016 MHz 3x ARM Cortex-A710 @ 2745 MHz ARM Cortex-X2 @ 3187 MHz Manufacturing Process: 4 nm Instruction Set: 64-bit ARMv9-A CPU Revision: r2p0 CPU Cores: 8 CPU Clock Range: 300 - 3187 MHz
	Galaxy Z Flip4	SoC Model: Qualcomm Snapdragon 8+ Gen 1 (SM8475) Core Architecture: 4x ARM Cortex-A510 @ 2016 MHz 3x ARM Cortex-A710 @ 2745 MHz ARM Cortex-X2 @ 3187 MHz Manufacturing Process: 4 nm Instruction Set: 64-bit ARMv9-A CPU Revision: r2p0 CPU Cores: 8 CPU Clock Range: 300 - 3187 MHz

<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>
<table>
<tr><td>Galaxy A54 5G</td><td>Core Architecture: 4x ARM Cortex-A55 @ 2002 MHz
4x ARM Cortex-A78 @ 2400 MHz
Instruction Set: 64-bit ARMv8-A
CPU Revision: r1p1
CPU Cores: 8
CPU Clock Range: 533 - 2400 MHz</td></tr>
</table>
See also Appendix 8 showing that the remaining Accused Samsung '815 Products include cameras that record videos providing evidence that the remaining Accused Samsung '815 Products include an analog to digital converter for operating in a similar manner.</td></tr>
<tr><td>[14.b] compressing, by a compressor of the information processing apparatus, the plurality of video information including digital video information and the digital audio information;</td><td>Each of the Accused Samsung '815 Products performs a method of compressing, by a compressor of the information processing apparatus, the plurality of video information including digital video information and the digital audio information.

For example, upon information and belief, the system on a chip (SoC) with processor of each Accused Samsung '815 Products acts to compress the plurality of video information including digital video information and the digital audio information, for example into an mp4 file format.

See, for example:

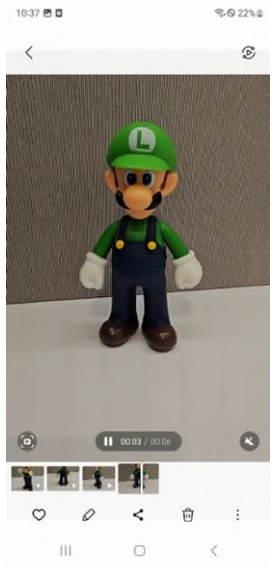
Samsung Galaxy S23:</td></tr>
</table>

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Recorded video is in mp4 format.

<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>See also Appendix 8 providing evidence that the remaining Accused Samsung '815 Products include a memory and a compressor to compress video information in a similar manner as evidenced by the Samsung Gallery application. See https://www.samsung.com/us/support/answer/ANS00079026/.</td></tr>
<tr><td>[14.c] decoding, during playback and by a decoder of the information processing apparatus, the compressed digital video information and the compressed digital audio information included in the plurality of stored video information and selected for reproduction by the user; and</td><td>Each of the Accused Samsung '815 Products performs a method of decoding, during playback and by a decoder of the infromation processing apparatus, the compressed digital video information and the compressed digital audio information included in the plurality of stored video information and selected for reproduction by the user.

For example, upon information and belief, the system on a chip (SoC) with processor and/or additional circuity such as a digital signal processor of each Accused Samsung '815 Products acts to decode, during playback, the mp4 digital video information and audio information stored on the device to be able to render it for playback.

<table><tr><th>Product</th><th>Playback of mp4 videos</th></tr></table></td></tr>
</table>

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**		
	Samsung Galaxy S23 Ultra		

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	Samsung A54 5G  *See also* Appendix 8 providing evidence that the remaining Accused Samsung '815 Products include a decoder to decode video information in a similar manner as evidenced by the Samsung Gallery application that playbacks video information. *See* https://www.samsung.com/us/support/answer/ANS00079026/.
[14.d] converting, by a digital to analog converter of the information processing apparatus, at least the decoded digital	Each of the Accused Samsung '815 Products performs a method of converting, by a digital to analog converter of the information processing apparatus, at least the decoded digital audio information into analog audio information during playback. For example, upon information and belief, the system on a chip (SoC) with processor and/or additional circuity such as a digital signal processor of each Accused Samsung '815 Products acts to convert the decoded digital audio information into analog audio information during playback of mp4 videos.

<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td>audio information into analog audio information during playback.</td><td>
<table>
<tr><th>Product</th><th>Playback of mp4 videos</th></tr>
<tr><td>Samsung Galaxy S23 Ultra</td><td> 
</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>
<table>
<tr><td>Samsung A54 5G</td><td>  </td></tr>
</table>
See also Appendix 8 providing evidence that the remaining Accused Samsung '815 Products include a digital to analog converter for converting decoded digital audio information in a similar manner as evidenced by the Samsung Gallery application that playbacks audio information. See https://www.samsung.com/us/support/answer/ANS00079026/.
</td></tr>
<tr><td>[15.a] The information processing method of claim 9, further comprising: generating, by the</td><td>Each of the Accused Samsung '815 Products performs a method of generating, by the information processing apparatus, on screen display information.

For example, upon information and belief, the system on a chip (SoC) with processor (including GPU) of each Accused Samsung '815 Products acts to generate on screen display information that is displayed during playback of video information including the total time of the video and time elapsed.</td></tr>
</table>

<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td>information processing apparatus, on screen display information,</td><td>
<table>
<tr><th>Product</th><th>Playback mp4 videos with screen display information</th></tr>
<tr><td>Samsung Galaxy S23 Ultra</td><td> 
</td></tr>
</table>
</td></tr>
</table>

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	Samsung A54 5G  *See also* Appendix 8 showing that the remaining Accused Samsung '815 Products operate in a similar manner (*e.g.*, by incluidng a Samsung Gallery application).
[15.b] wherein the plurality of stored video information includes third video information such that, upon selection for playback, the third video	Each of the Accused Samsung '815 Products perform a method wherein the plurality of stored video information includes third video information such that, upon selection for playback, the third video information is outputted with the on screen display information for display of the third video information and the on screen display information. For example, testing of the Accused Samsung '815 Products confirms that the Accused Samsung '815 Products display on screen display information and the third video together as a part of playback.

<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td>information is outputted with the on screen display information for display of the third video information and the on screen display information.</td><td>Testing of the Accused Samsung '815 Products confirms that each plays mp4 videos (including a third video information) with display information that is at least the length of video and progress of playback.
<table>
<tr><th>Product</th><th>Playback mp4 videos with screen display information</th></tr>
<tr><td>Samsung Galaxy S23 Ultra</td><td> 
</td></tr>
</table></td></tr>
</table>

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	Samsung A54 5G  *See also* Appendix 8 showing that the remaining Accused Samsung '815 Products operate in a similar manner (*e.g.*, by incluidng a Samsung Gallery application).
[16.pre] A method for reproducing video content associated with user profiles being implemented on an information processing	*See* below claim limitations [21.pre] and [21.b].

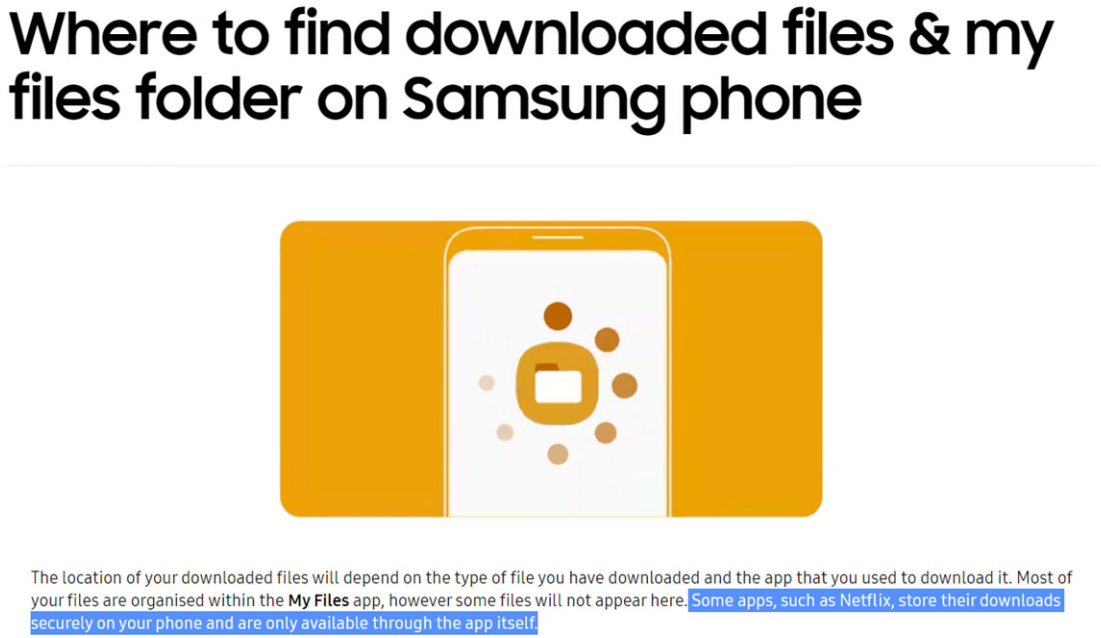
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
apparatus, comprising:	
[16.a] receiving, via a network, first video information wirelessly from a device external to the information processing apparatus, the first video information being received including second video information that is encrypted;	Each of the Accused Samsung '815 Products perform a method of receiving, via a network, first video information wirelessly from a device external to the information processing apparatus, the first video information being received including second video information that is encrypted. *See* [1.a] and [1.b] incorporated here by reference. In addition, for each of the Accused Samsung '815 Products, the first video information being received includes second video information that is encrypted. *See, e.g.*, User Manuals and Technical Specifications for the Accused Samsung '815 Products (showing that the Accused Samsung '815 Products are smart phones with a decoder and other hardware and/or software that decode encrypted video content received from its video apps such as, for example, the pre-installed Netflix app). Upon information and belief, the Accused Samsung '815 Products are sold with Netflix application preinstalled. Accordingly, each of the Accused Samsung '815 Products infringe under the same theories based on the preinstalled Netflix application as shown herein with exemplary screenshot of the Netflix application being executed on Samsung S23 Ultra. As the streaming battles heat up, Netflix is hoping a new partnership with Samsung will help it fend off rivals. At Samsung's Unpacked event this week, the mobile device maker announced a deal with Netflix that will bring to its Galaxy smartphones special bonus content associated with several Netflix original shows. The partnership also allows Netflix to more deeply integrate its streaming service with Samsung devices. The latter part of the partnership involving device integration is fairly standard. In Netflix's case, Samsung will allow users to launch Netflix content by way of its voice assistant Bixby. Netflix will also deliver recommendations to Samsung users, and will be better integrated into specific Samsung mobile features, like search and its discovery platform, Samsung Daily. *See* https://techcrunch.com/2020/02/13/netflix-fends-off-new-streaming-rivals-by-way-of-samsung-

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	partnership/#:~:text=At%20Samsung's%20Unpacked%20event%20this,streaming%20service%20with%20Samsung%20devices. Testing of the Accused Samsung '815 Products shows that they use their cellular and/or Wi-Fi interface to connect wirelessly to a network and receive video information from another information processing apparatus (*e.g.*, third party server). Specifically, the pictures of testing below demonstrate that the information processing apparatus, the Accused Samsung '815 Products, wirelessly receives a stream of digital data or signal from another information processing apparatus (e.g., a third-party server) and, store the video information on recording medium by using "Download" option shown in the Netflix application after which the video information is stored in the Accused Samsung '815 Product's memory. **How to download titles to watch offline** To watch TV shows and movies offline at any time, download them from the Netflix app. Learn more about finding, downloading, and watching downloaded TV shows and movies below.

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Find and download a TV show or movie Tap on any TV show or movie and look for the **Downloads** icon ⬇ to see whether it can be downloaded, or filter by what is available for download. Not all titles are available for download. 1. Open the Netflix app and tap **Downloads** ⬇. ◦ On a device running Windows 10 or Windows 11, open the Netflix app and select **Menu** ☰. 2. Select **See What You Can Download**, **Find Something to Download**, **Find More to Download**, or **Available for Download**, depending on your device. 3. Select a TV show or movie. 4. From the description page, tap **Download** ⬇. ◦ For TV shows, **Download** ⬇ will appear next to each available episode. Android users will also see a **Download Season** option ⬇ to download all episodes in the selected season. ◦ To save on data usage, download over Wi-Fi. You can have up to 100 active downloads at a time per device on as many devices included in your membership plan. If you cancel your account, TV shows and movies you've downloaded will be deleted from your device. You will need to download them again if you rejoin in the future.

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Watch downloaded TV shows and movies To make sure you always have access to your downloads, we recommend remaining signed in to the Netflix app. 1. Sign in to the Netflix app and select **Downloads**. ◦ On a device running Windows 10 or Windows 11, open the Netflix app and select **Menu**, then **My Downloads**. 2. Find the title you want to watch and select **Play**. ◦ For TV shows, select a show, then tap **Play** next to the episode you want to watch. **NOTE:** Kids profiles may not be able to watch all downloaded TV shows and movies based on the maturity rating of the title. Downloaded TV shows and movies are available on the device that was used to download them and can be viewed from any profile in your account. Downloads will expire after a period of time, and some have a limit on how many times they can be downloaded per year. Once you're done watching, delete downloads from your device. https://help.netflix.com/en/node/54816

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 https://www.samsung.com/uk/support/mobile-devices/where-can-i-find-downloaded-files-on-my-samsung-galaxy-smartphone/ For example, Accused Samsung '815 Products support receiving and playing Netflix video streams that are encrypted using various encryption methods, such as DRM (Digital Right Management) and/or TLS (Transport Layer Security).

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

***Abstract*—In our 2015 paper, "Optimizing TLS for High–Bandwidth Applications in FreeBSD", we demonstrated the cost of TLS encryption on high–bandwidth video serving on Netflix's OpenConnect Appliance (OCA [1]) and explored methods for reducing that cost via in–kernel encryption. The results showed that such a concept is feasible, but only a small performance gain was achieved. In this paper we describe the improvements made since then to reduce the cost of encryption. We also compare the performance of several different bulk encryption implementations.**

I. Introduction

The importance of Transport Layer Security [2] (TLS) continues to grow as businesses and their customers come to appreciate the value of communication privacy. Netflix announced in 2015 that it would start on the path to encrypting the video and audio playback sessions of its streaming service in an attempt to help users protect their viewing privacy [3]. Enabling this comes with a significant computational cost to the OpenConnect serving platform, so work continues in exploring and implementing new ways to optimize TLS bulk encryption and thus lower capital and operational costs.

An OCA is a FreeBSD-based appliance that serves movies and television programming to Netflix subscribers. Confidential customer data like payment information, account authentication, and search queries are exchanged via an encrypted TLS session between the client and the various application servers that make up the Netflix infrastructure. The audio and video objects are statically encrypted by Digital Rights Management (DRM) that is pre-encoded into the objects prior to them being distributed to the OCA network for serving.

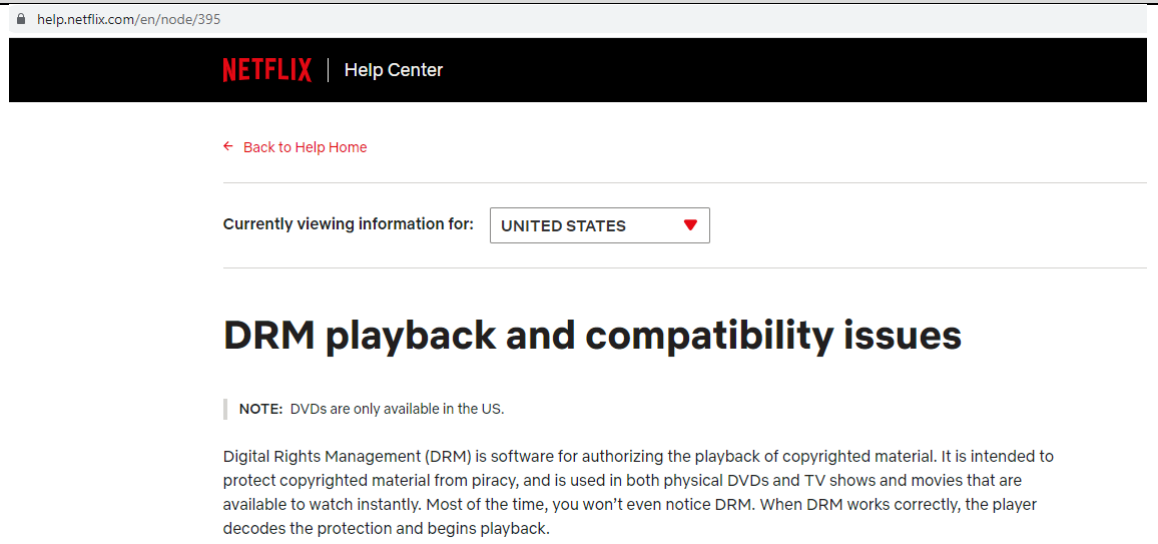
(Netflix, Improving High–Bandwidth TLS in the FreeBSD kernel, available at https://openconnect.netflix.com/publications/asiabsd_tls_improved.pdf (2015)

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Netflix Adopts Efficient HTTPS Encryption For Its Video Streams By Lucian Armasu published August 08, 2016 Comments (9)  Netflix announced that it has implemented efficient HTTPS encryption for its video streams. To this point, the company has used only HTTPS to protect user information. Netflix has been reluctant to adopt HTTPS for its video streams so far because delivering video is already a bandwidth-heavy task, and adding encryption on top of that risked adding too much overhead. To solve this problem, the company searched for the ideal cipher and its fastest implementation.

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Cipher Evaluation Netflix eventually chose the the Advanced Encryption Standard (AES) cipher in Galois/Counter Mode (GCM), which is available only in TLS 1.2 and later. The company chose GCM over the Cipher Block Chaining (CBC) method because it can encrypt and authenticate the message simultaneously, whereas AES-CBC requires an additional pass over the data to generate keyed-hash message authentication code (HMAC). The latter can still be used as fallback for older browsers and client software that don't support TLS 1.2. However, it shouldn't be too long until virtually all Netflix users can play video streams over TLS 1.2 or later. (See https://www.tomshardware.com/news/netflix-efficient-https-video-streams,32420.html (2016))

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	How Netflix brings safer and faster streaming experiences to the living room on crowded networks using TLS 1.3 By Sekwon Choi At Netflix, we are obsessed with the best streaming experiences. We want playback to start instantly and to never stop unexpectedly in any network environment. We are also committed to protecting users' privacy and service security without sacrificing any part of the playback experience. To achieve that, we are efficiently using ABR (adaptive bitrate streaming) for a better playback experience, DRM (Digital Right Management) to protect our service and TLS (Transport Layer Security) to protect customer privacy and to create a safer streaming experience. Netflix on consumer electronics devices such as TVs, set-top boxes and streaming sticks was until recently using TLS 1.2 for streaming traffic. Now we support TLS 1.3 for safer and faster experiences. (https://netflixtechblog.com/how-netflix-brings-safer-and-faster-streaming-experience-to-the-living-room-on-crowded-networks-78b8de7f758c (2020))

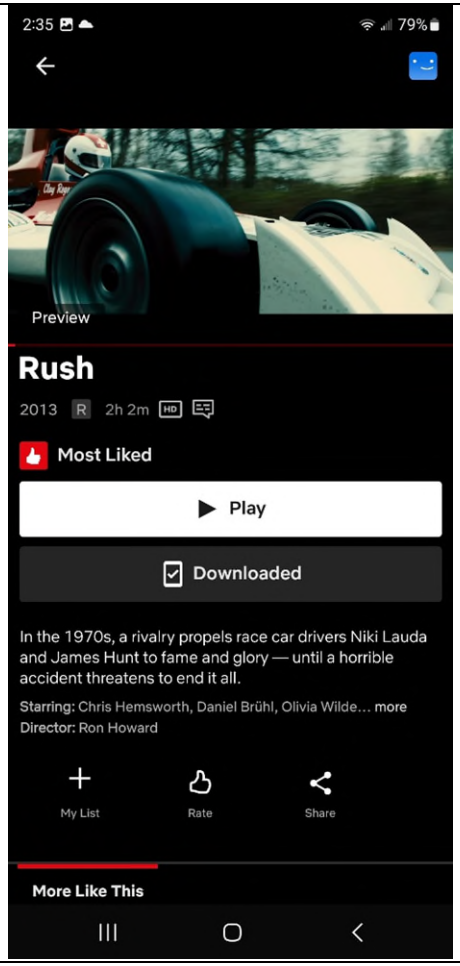
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement



https://help.netflix.com/en/node/395

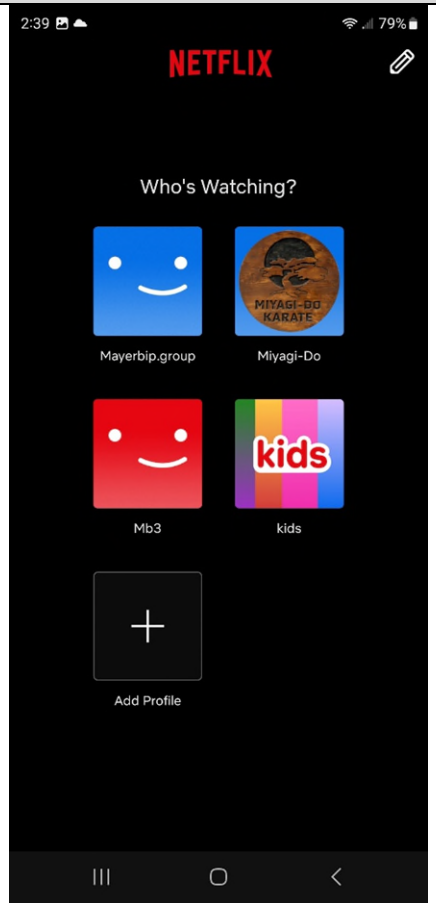
Actual testing of the Accused Samsung '815 Products show that they support playing encrypted video (second video information that is encrypted) of a TV show or movie (first video information being received) using the Netflix application.

Samsung Galaxy S23 Ultra:

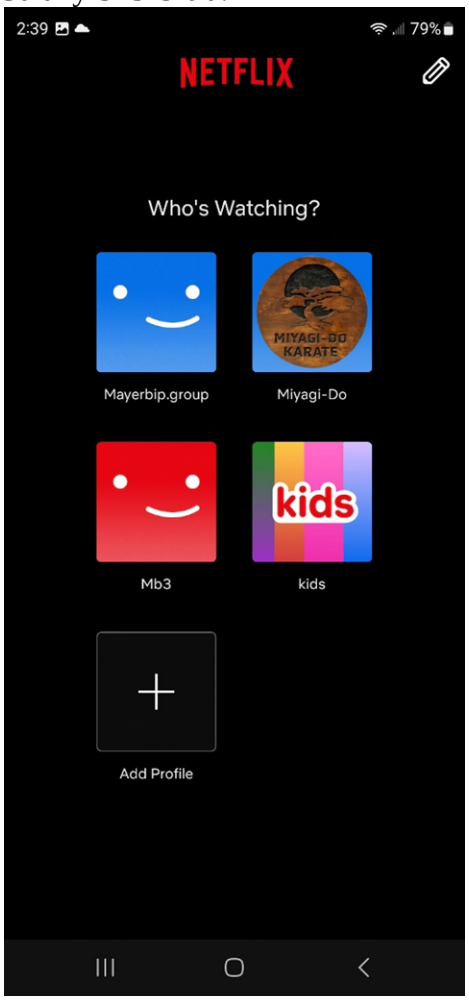

2:35
79%
Preview
Rush
2013 R 2h 2m HD
Most Liked
Play
Downloaded
In the 1970s, a rivalry propels race car drivers Niki Lauda and James Hunt to fame and glory — until a horrible accident threatens to end it all.
Starring: Chris Hemsworth, Daniel Brühl, Olivia Wilde... more
Director: Ron Howard
My List
Rate
Share
More Like This

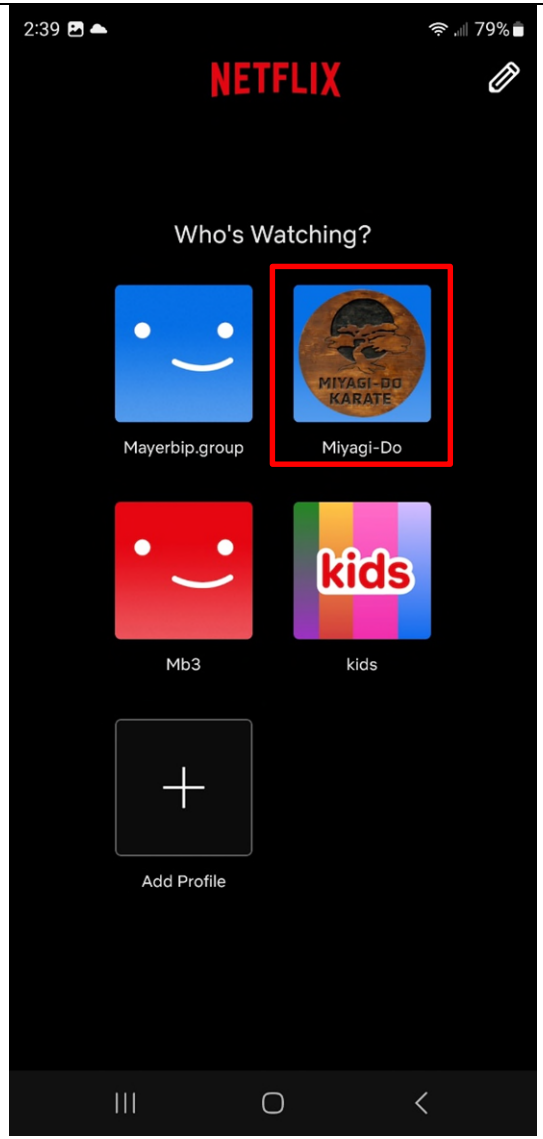
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Netflix app selects playing of the encrypted video information *See also* Appendix 8 showing that the remaining Accused Samsung '815 Products include a similar network interface for wireless communication (*e.g.*, WiFi or cellular chipset). **Doctrine of Equivalents:** This limitation is also met under the doctrine of equivalents because the "TV" or "Movie" video wirelessly received from a Netflix or a third party content sever matches the function, way, and result of the first video information, for example genre of the video content, that includes encrypted second video information, for example the tv or movie stream encrypted using TLS, DRM, or similar encryption technologies. This specific received video data from Netflix or third party servers by the Accused Samsung '815 Products achieve substantially the same result as a network interface receiving first video information wirelessly from a device external to the information processing apparatus and the first video information being received including second video information that is encrypted.

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
[16.b] displaying, on a display device, a first user interface for a user to select a user profile from among a plurality of user profiles including a first user profile associated with a first character and a second user profile associated with a second character	*See* [1.d] incorporated here by reference. Each of the Accused Samsung '815 Products perform a method of displaying, on a display device, a first user interface for a user to select a user profile from among a plurality of user profiles including a first user profile associated with a first character and a second user profile associated with a second character. *See, e.g.,* User Manuals and Technical Specifications for the Accused Samsung '815 Products (showing that the Accused Samsung '815 Products are smart phones with a display that displays a user interface for user profile selection from user video apps, such as Netflix). For example, testing of the Accused Samsung '815 Products pre-installed Netflix app confirms that a first user interface for a user to select a user profile from among a plurality of user profiles is displayed (i.e. the "Who's watching Netflix" interface) including a first user profile (e.g. the "Miyagi-Do" user) associated with a first character (i.e. "Miyagi-Do" which includes at least one character) and a second user profile (e.g. the "kids" user) associated with a second character ("kids" which includes at least one character). **Galaxy S23 Ultra**:

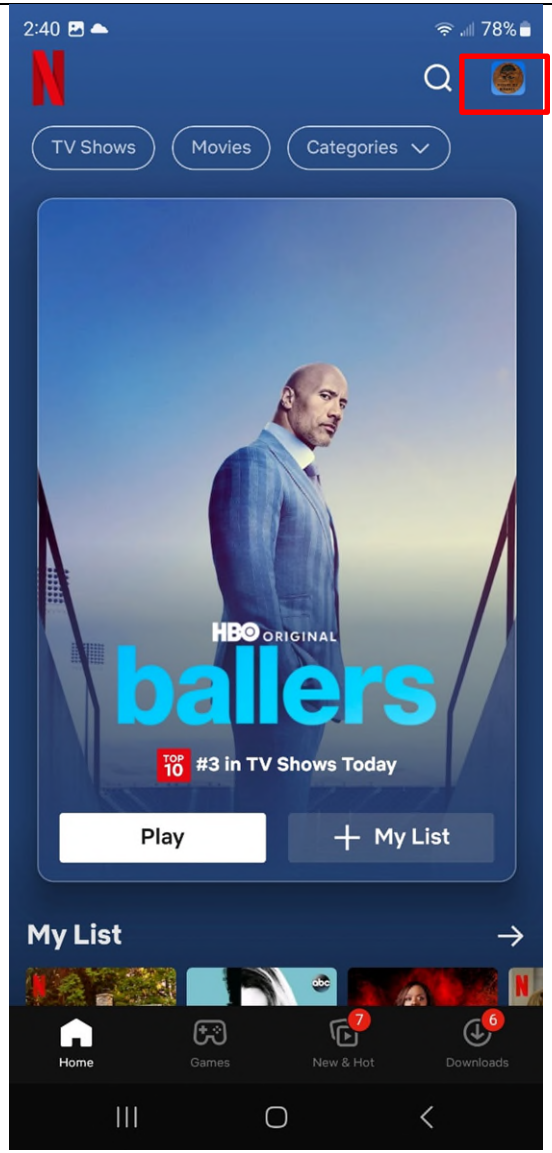
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 The remaining Accused Samsung '815 Products operate in a similar manner based on the preinstalled Netflix application. *See* https://techcrunch.com/2020/02/13/netflix-fends-off-new-streaming-rivals-by-way-of-samsung-

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	partnership/#:~:text=At%20Samsung's%20Unpacked%20event%20this,streaming%20service%20with%20Samsung%20devices; *see also* https://help.netflix.com/en/node/54816. **Doctrine of Equivalents:** To the extent Samsung argues that this limitation is not literally met in any Accused Samsung '815 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 pre-installed Netflix application in Accused Samsung '815 Products do not display a first user interface for a user to select a user profile from among a plurality of user profiles including a first user profile associated with a first character and a second user profile associated with a second character, testing of the Accused Samsung '815 Products' pre-installed Netflix app confirms that a first user interface for a user to select a user profile from among a plurality of user profiles is displayed (i.e. the "Who's watching Netflix" interface) including a first user profile (e.g. the "Miyagi-Do" user) associated with a first character (i.e. "Miyagi-Do" which includes at least one character) and a second user profile (e.g. the "kids" user) associated with a second character ("kids" which includes at least one character).Using this pre-installed Netflix app, hardware, or combination of the two, these products perform substantially the same function in substantially the same way as claimed. The performance of this function achieves substantially the same result.
[16.c] the plurality of user profiles being associated with video information and the first user interface including an option for a user to select the first user profile from the plurality of user profiles by	Each of the Accused Samsung '815 Product perform a method where the plurality of user profiles being associated with video information and the first user interface including an option for a user to select the first user profile from the plurality of user profiles by selecting the first character. *See, e.g.*, User Manuals and Technical Specifications for the Accused Samsung '815 Products (showing that the Accused Samsung '815 Products are smart phones with pre-installed video apps containing user interfaces that operate in this manner, such as Netflix). For example, testing of the Accused Samsung '815 Products pre-installed Netflix app confirms that when a user selects a first user profile (e.g. the "Miyagi-Do" user profile) from the plurality of user profiles on the first user interface (i.e. the "Who's watching Netflix" interface) by selecting a first character ("Miyagi-Do" which includes at least one character), video information associated with that profile is displayed.

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
selecting the first character;	Galaxy S23 Ultra:  Netflix showing the first user interface (i.e. the "Who's watching Netflix" interface)

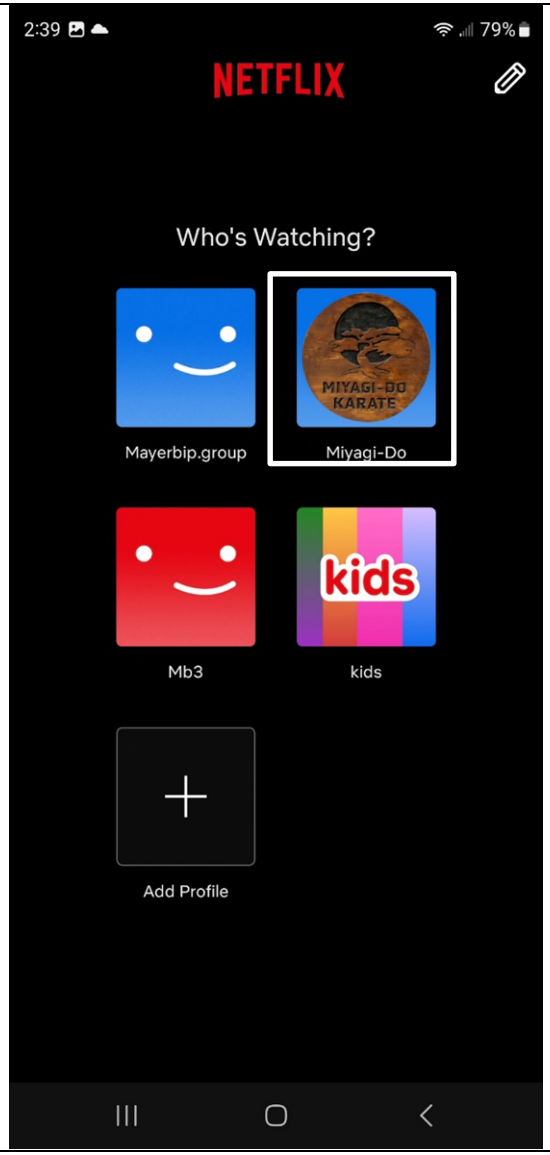


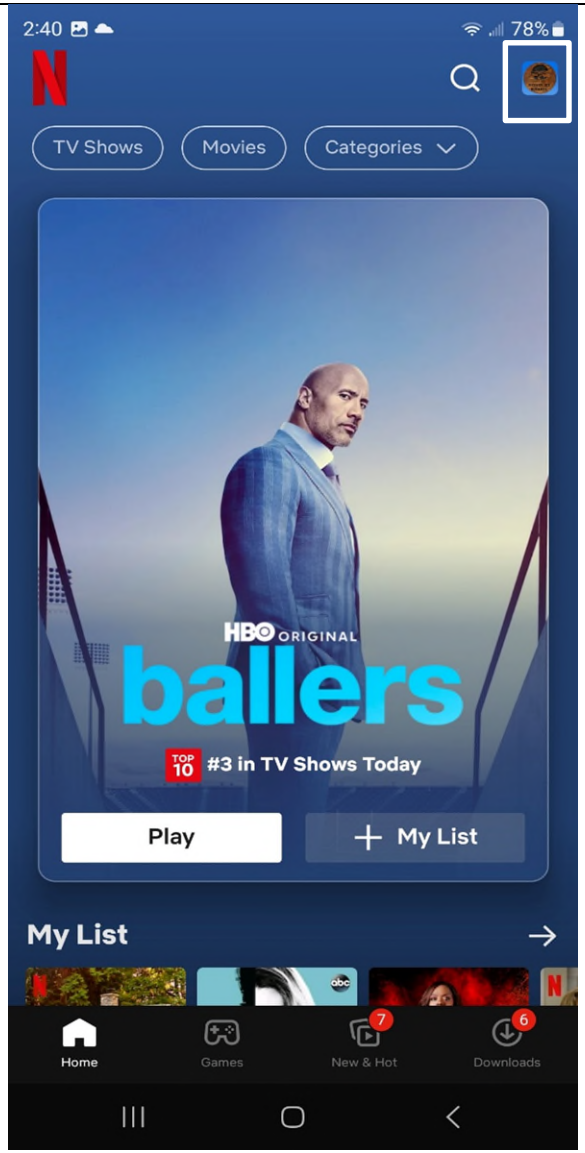
User selects a first user profile (e.g. the "Miyagi-Do" user profile) from the plurality of user profiles



Video information associated with the Miyagi-Do user profile is displayed.

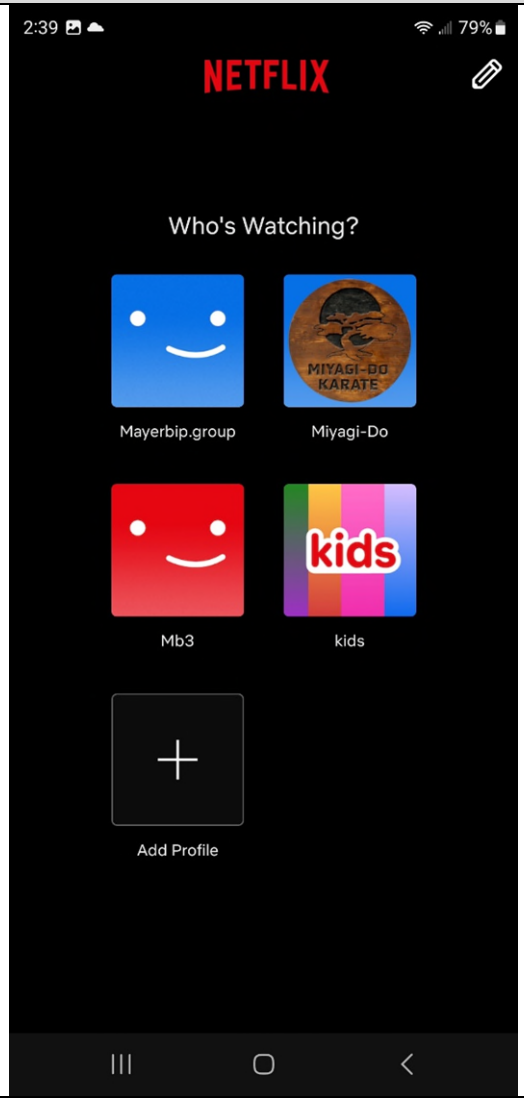
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	The remaining Accused Samsung '815 Products operate in a similar manner based on the preinstalled Netflix application. *See* https://techcrunch.com/2020/02/13/netflix-fends-off-new-streaming-rivals-by-way-of-samsung-partnership/#:~:text=At%20Samsung's%20Unpacked%20event%20this,streaming%20service%20with%20Samsung%20devices; *see also* https://help.netflix.com/en/node/54816. **Doctrine of Equivalents:** To the extent Samsung argues that this limitation is not literally met in any Accused Samsung '815 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 pre-installed Netflix application in Accused Samsung '815 Products do not have a first user interface including an option for a user to select the first user profile from the plurality of user profiles by selecting the first character, testing of the Accused Samsung '815 Products' pre-installed Netflix app confirms that a when a user selects a first user profile (e.g. the "Miyagi-Do" user profile) from the plurality of user profiles on the first user interface (i.e. the "Who's watching Netflix" interface) by selecting a first character ("Miyagi-Do" which includes at least one character).Using this pre-installed Netflix app, hardware, or combination of the two, these products perform substantially the same function in substantially the same way as claimed. The performance of this function achieves substantially the same result.
[16.d] receiving a selection of the first user profile;	Each of the Accused Samsung '815 Product performs a method of receiving a selection of the first user profile. *See, e.g.*, User Manuals and Technical Specifications for the Accused Samsung '815 Products (showing that the Accused Samsung '815 Products are smart phones with a display that displays a user interface for user profile selection from user video apps, such as Netflix). For example, testing of the Accused Samsung '815 Products pre-installed Netflix app confirms that the phone receives a selection of the first user profile (e.g. the "Miyagi-Do" user profile). Galaxy S23 Ultra:

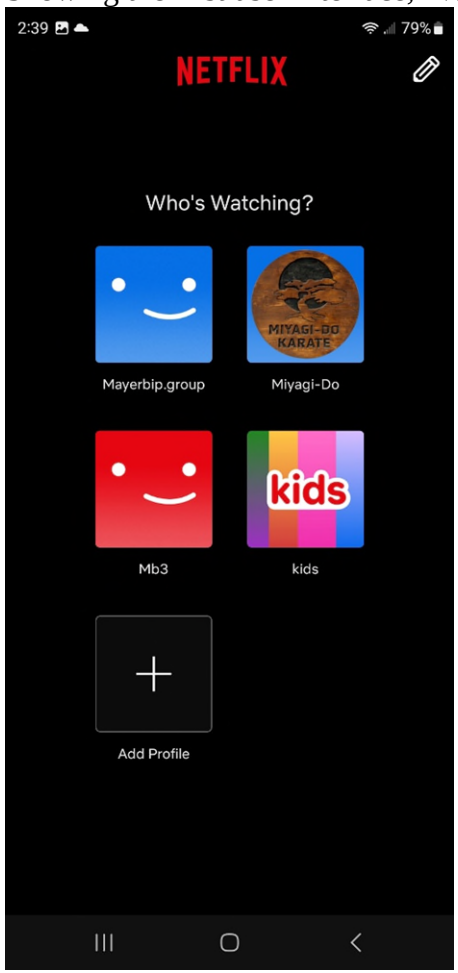

2:39
79%
NETFLIX
Who's Watching?
Mayerbip.group
MIYAGI-DO KARATE
Miyagi-Do
Mb3
kids
kids
Add Profile

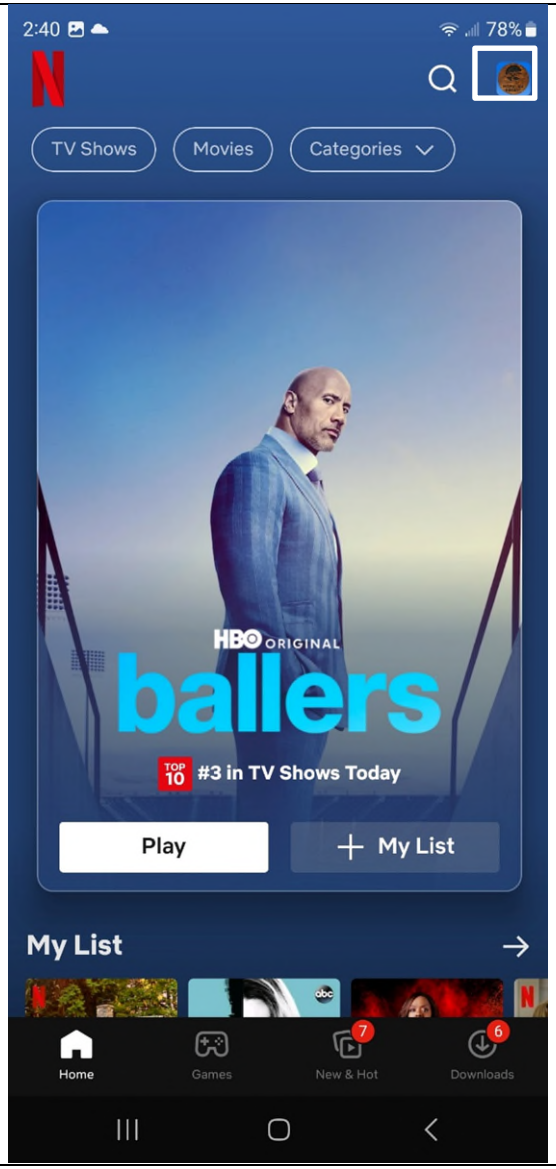


Showing the "Miyagi-Do" user profile being selected and video information shown for the Miyagi-Do user.

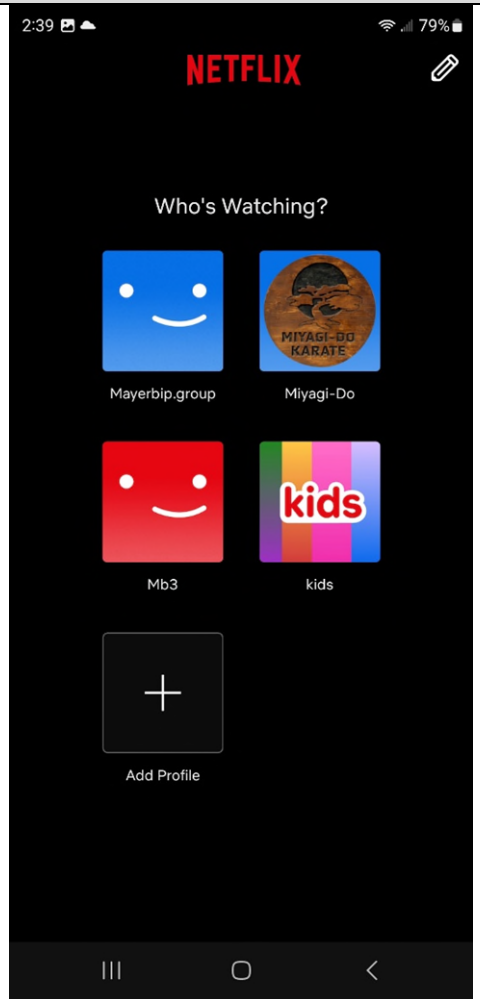
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	See also Appendix 8 showing that the remaining Accused Samsung '815 Products include a display with an input interface. Further, the remaining Accused Samsung '815 Products operate in a similar manner based on the preinstalled Netflix 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.
[16.e] displaying, in response to the selection, a second user interface for a user to select desired video information to be reproduced from among the first video information	Each of the Accused Samsung '815 Product perform a method of displaying, in response to the selection of the first user profile, a second user interface for a user to select desired video information to be reproduced from among the first video information. *See, e.g.*, User Manuals and Technical Specifications for the Accused Samsung '815 Products (showing that the Accused Samsung '815 Products are smart phones with pre-installed video apps containing user interfaces that operate in this manner, such as Netflix). For example, testing of the Accused Samsung '815 Products pre-installed Netflix app confirms that when a user selects a first user profile (e.g. the "Miyagi-Do" user profile) from the plurality of user profiles on the first user interface (i.e. the "Who's watching Netflix" interface) by selecting a first character (i.e. "Miyagi-Do" which includes at least one character), a second user interface is displayed (e.g. the user Home user interface) for the user to select desired video information to be reproduced from among the first video information (e.g. the videos available to the user on their Home screen). Galaxy S23 Ultra:

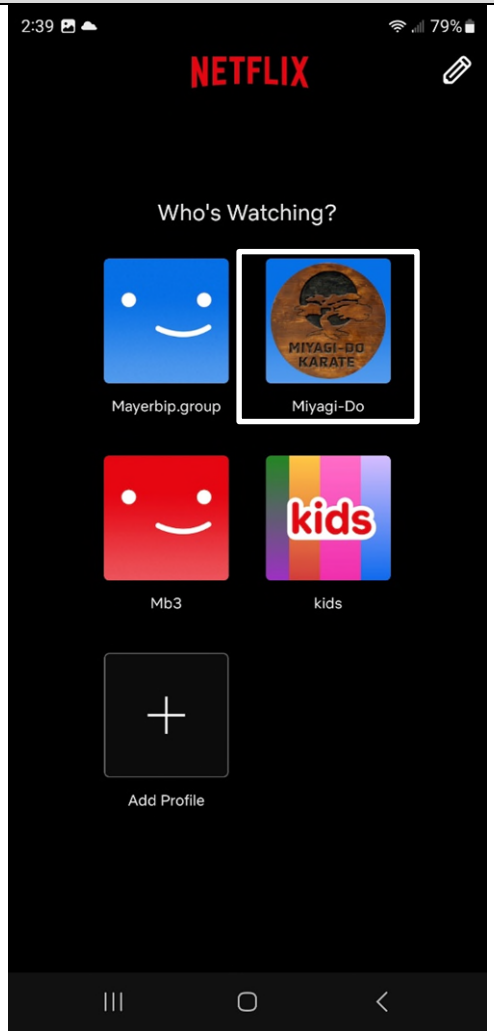
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

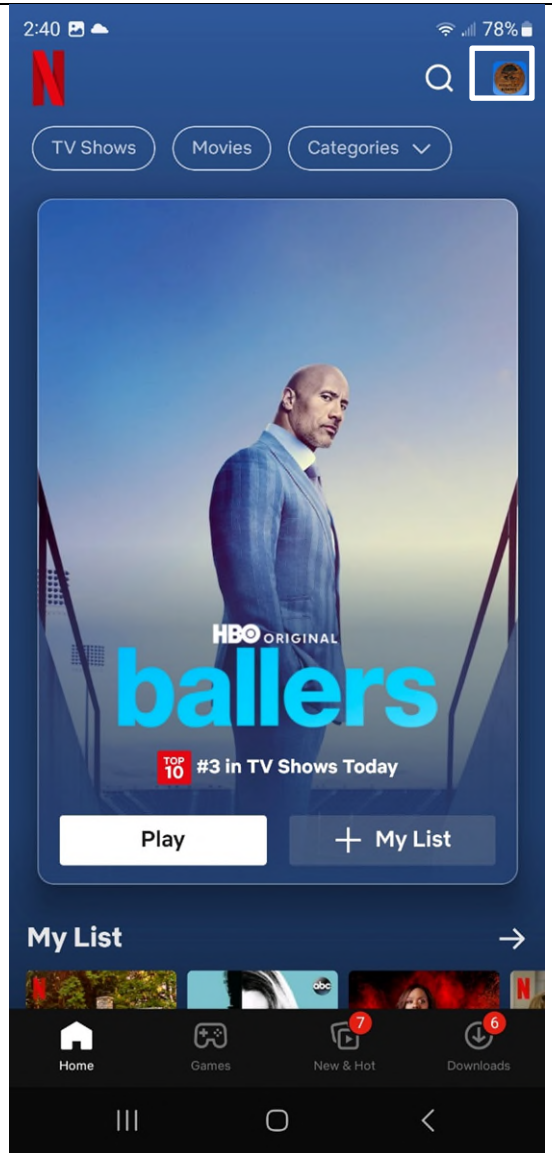
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Showing the first user interface, "Who's watching Netflix"  Select the first user profile, "Miyagi-Do"


2:40
78%
TV Shows
Movies
Categories
HBO ORIGINAL
ballers
TOP 10 #3 in TV Shows Today
Play
My List
My List
Home
Games
New & Hot
Downloads

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	Showing the second user interface, user Home from which desired video information can be selected to be reproduced (*e.g.*, "Ballers"). The remaining Accused Samsung '815 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.
[16.f] the second user interface being associated with the first user profile and displaying the first character, the first character associated with a first group of video information and indicating an identity of the user of the first user profile	Each of the Accused Samsung '815 Product perform a method where the second user interface being associated with the first user profile and displaying the first character, the first character associated with a first group of video information and indicating an identity of the user of the first user profile. *See, e.g.*, User Manuals and Technical Specifications for the Accused Samsung '815 Products (showing that the Accused Samsung '815 Products are smart phones with pre-installed video apps containing user interfaces that operate in this manner, such as Netflix). For example, testing of the Accused Samsung '815 Products pre-installed Netflix app confirms that the second user interface (i.e. the user Home screen) is associated with the first user profile (e.g. the "Miyagi-Do" user profile) and displaying the first character (i.e. Miyagi-Do), the first character associated with a first group of video information (i.e. the videos available to the user on Home screen) and indicating an identity of the user of the first user profile (i.e. "Miyagi-Do" which identifies the user of the first user profile) Galaxy S23 Ultra:

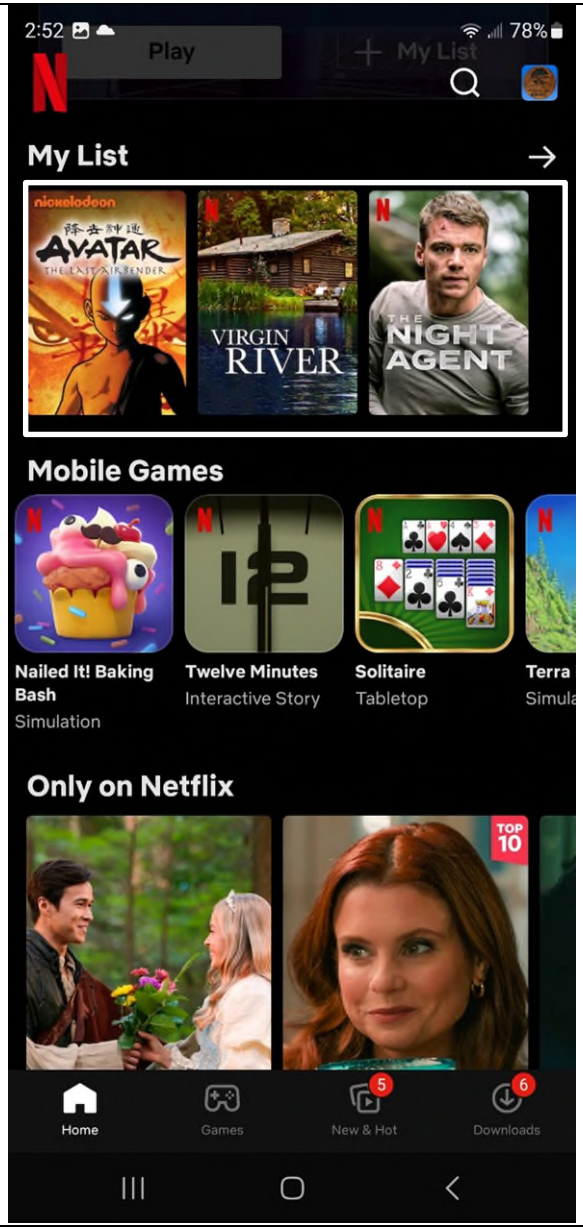
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Showing the first user interface, "Who's watching Netflix"

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Select the first user profile, "Miyagi-Do"

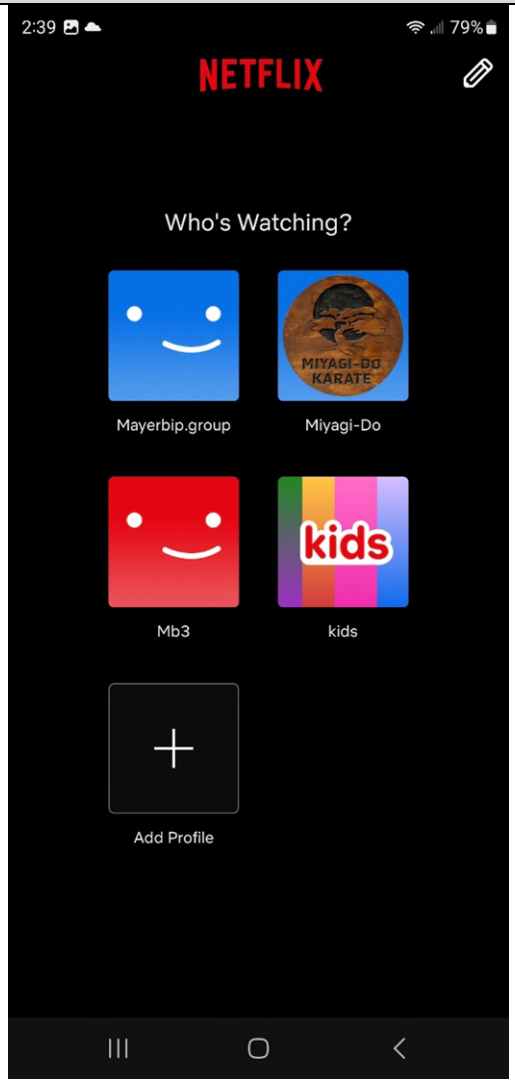

2:40
78%
TV Shows
Movies
Categories
HBO ORIGINAL
ballers
TOP 10 #3 in TV Shows Today
Play
My List
My List
Home
Games
New & Hot
Downloads

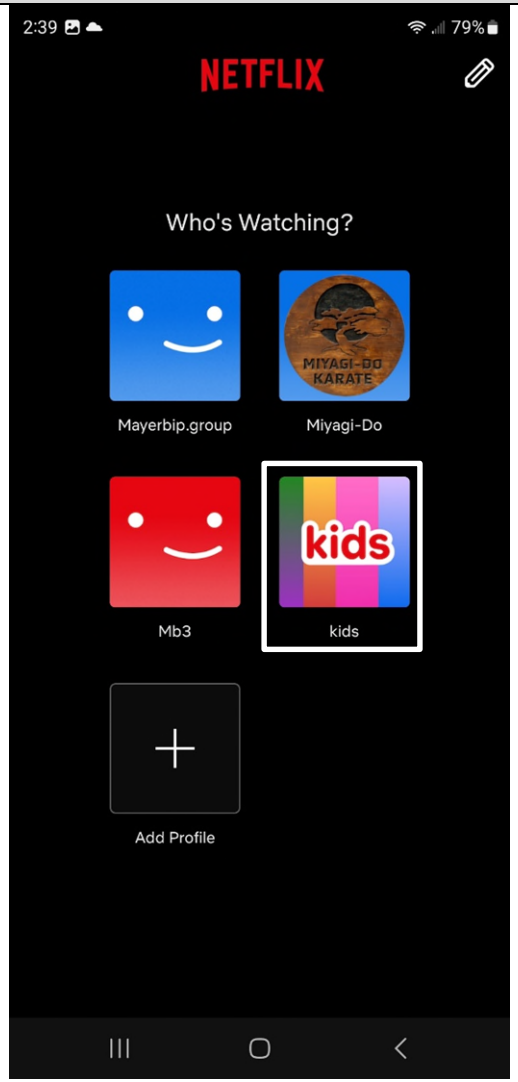
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	Showing the second user interface, user Home, being associated with the first user profile, "Miyagi-Do", and displaying the first character "Miyagi-Do." The first character is associated with a first group of video information, the videos available to the user, and indicating an identity of the user which the first user profile is associated with based on displaying an indication of a first user profile. The remaining Accused Samsung '815 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. **Doctrine of Equivalents:** To the extent Samsung argues that this limitation is not literally met in any Accused Samsung '815 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 pre-installed Netflix application in Accused Samsung '815 Products do not have a second user interface being associated with the first user profile and displaying the first character and the first character associated with a first group of video information and indicating an identity of the user which the first user profile is associated with, testing of the Accused Samsung '815 Products' pre-installed Netflix app confirms that the second user interface (i.e. the user Home screen) is associated with the first user profile (e.g. the "Miyagi-Do" user profile) and displaying the first character (i.e. Miyagi-Do), the first character associated with a first group of video information (i.e. the videos available to the user on Home screen) and indicating an identity of the user of the first user profile (i.e. "Miyagi-Do" which identifies the user of the first user profile). Using this pre-installed Netflix app, hardware, or combination of the two, these products perform substantially the same function in substantially the same way as claimed. The performance of this function achieves substantially the same result.
[16.g] the second user interface further displaying	Each of the Accused Samsung '815 Products perform a method of the second user interface further displaying thumbnails corresponding to the first group of video information. *See, e.g.*, User Manuals and Technical Specifications for the Accused Samsung '815 Products (showing that the Accused Samsung '815 Products

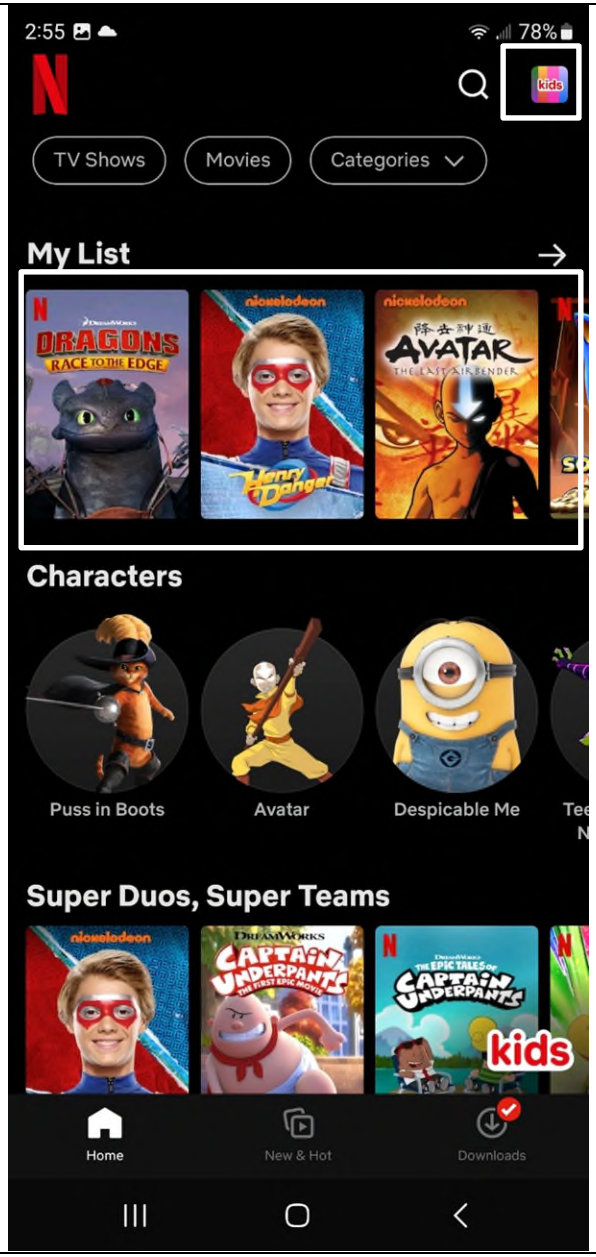
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
thumbnails corresponding to the first group of video information;	are smart phones with pre-installed video apps containing user interfaces that operate in this manner, such as Netflix). For example, testing of the Accused Samsung '815 Products pre-installed Netflix app confirms that the second user interface (i.e. the user home user interface) displays thumbnails corresponding to the first group of video information (i.e. the videos available to the user). Galaxy S23 Ultra:


2:52
78%
Play
My List
My List
nickelodeon
AVATAR
THE LAST AIRBENDER
VIRGIN RIVER
THE NIGHT AGENT
Mobile Games
Nailed It! Baking Bash
Simulation
Twelve Minutes
Interactive Story
Solitaire
Tabletop
Terra
Only on Netflix
TOP 10
Home
Games
New & Hot
Downloads

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	Showing the second user interface, user Home, with thumbnails of videos. The remaining Accused Samsung '815 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.
[16.h] displaying the second character and a second group of thumbnails corresponding to a second group of video information associated with the second user profile when the second character is selected	Each of the Accused Samsung '815 Products perform a method of displaying the second character and a second group of thumbnails corresponding to a second group of video information associated with the second user profile when the second character is selected. *See, e.g.*, User Manuals and Technical Specifications for the Accused Samsung '815 Products (showing that the Accused Samsung '815 Products are smart phones with pre-installed video apps containing user interfaces that operate in this manner, such as Netflix). For example, testing of the Accused Samsung '815 Products pre-installed Netflix app confirms that the phone displays the second character ("kids" which includes at least one character) and a second group of thumbnails corresponding to a second group of video information (i.e. the videos available to the user) associated with the second user profile (i.e. the "kids" user) when the second character is selected (e.g. the kids user profile is selected by the user). Galaxy S23 Ultra:

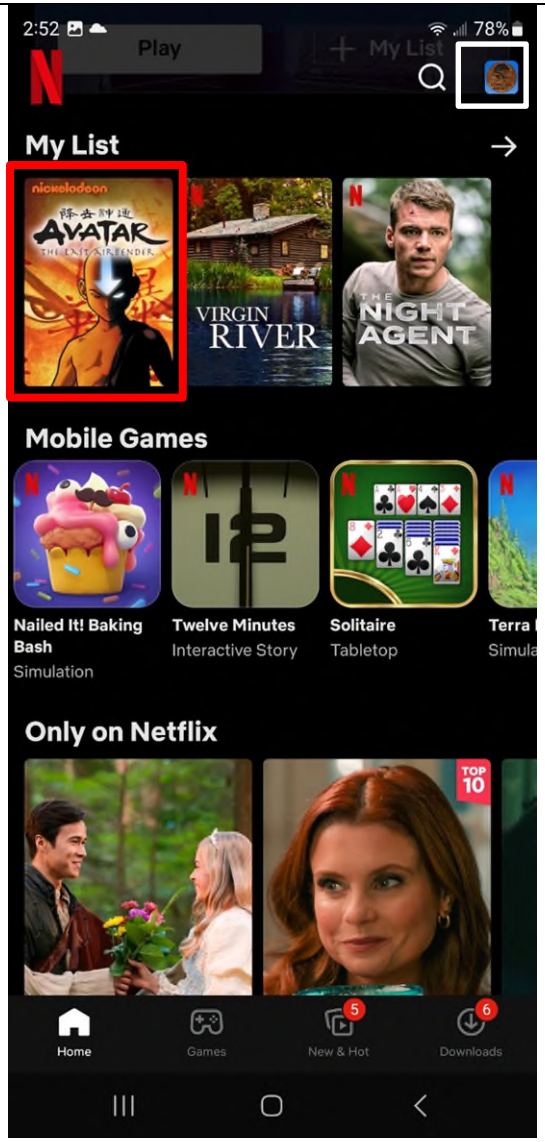
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Showing the first user interface, "Who's watching Netflix"

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Select the second user profile, "Kids"

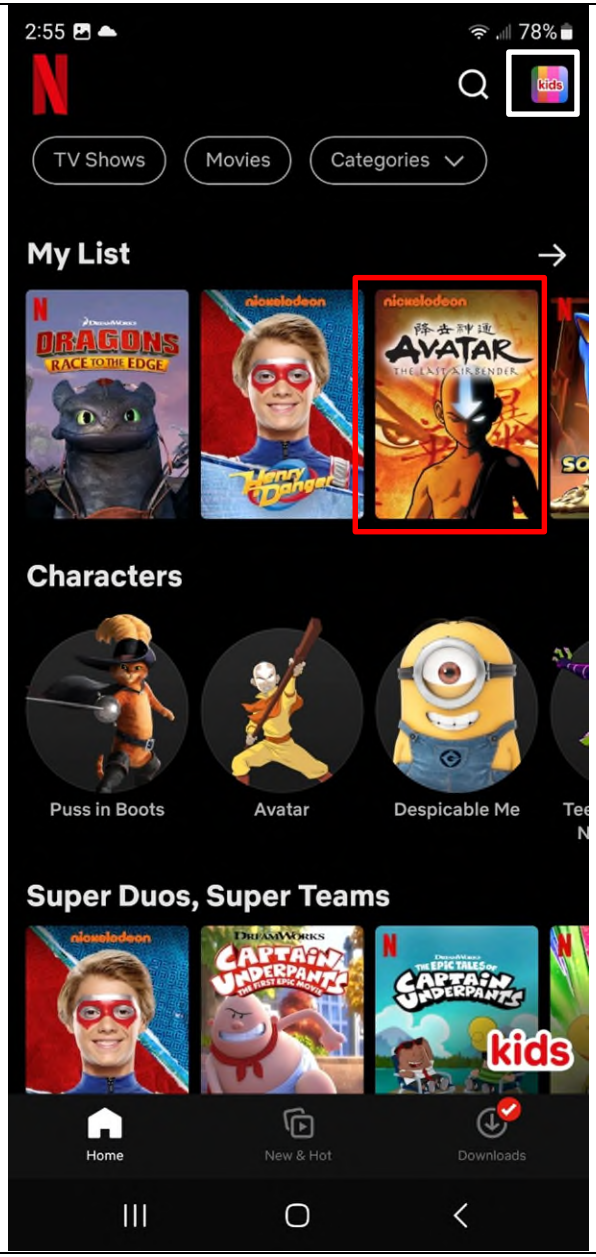

2:55
78%
kids
TV Shows
Movies
Categories
My List
DRAGONS
RACE TO THE EDGE
nickelodeon
AVATAR
Characters
Puss in Boots
Avatar
Despicable Me
Super Duos, Super Teams
CAPTAIN UNDERPANTS
THE EPIC TALES OF CAPTAIN UNDERPANTS
kids
Home
New & Hot
Downloads

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	Showing the second user interface, user Home, with thumbnails of videos associated with the kids user profile. The remaining Accused Samsung '815 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. **Doctrine of Equivalents:** To the extent Samsung argues that this limitation is not literally met in any Accused Samsung '815 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 pre-installed Netflix application in Accused Samsung '815 Products do not display the second character and a second group of thumbnails corresponding to a second group of video information associated with the second user profile when the second character is selected, testing of the Accused Samsung '815 Products' pre-installed Netflix app confirms that the phone displays the second character ("kids" which includes at least one character) and a second group of thumbnails corresponding to a second group of video information (i.e. the videos available to the user) associated with the second user profile (i.e. the "kids" user) when the second character is selected (e.g. the kids user profile is selected by the user). Using this pre-installed Netflix app, hardware, or combination of the two, these products perform substantially the same function in substantially the same way as claimed. The performance of this function achieves substantially the same result.
[16.i] the first group of video information and the second group of video information including one video	Each of the Accused Samsung '815 Products perform a method where the first group of video information and the second group of video information including one video information that is the same. *See, e.g.*, User Manuals and Technical Specifications for the Accused Samsung '815 Products (showing that the Accused Samsung '815 Products are smart phones with pre-installed video apps containing user interfaces that operate in this manner, such as Netflix).

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
information that is the same;	For example, testing of the Accused Samsung '815 Products pre-installed Netflix app confirms that the first group of video information (i.e. the videos available to the user Miyagi-Do) and second group of video information (i.e. the videos available to the user Kids) include one video information that is the same (e.g. "Avatar" video). Galaxy S23 Ultra:



Showing the second user interface, Home screen of the user "Miyagi-Do", and showing the first group of video information associated with the first user profile, "Miyagi-Do" and "Avatar" movie thumbnail.

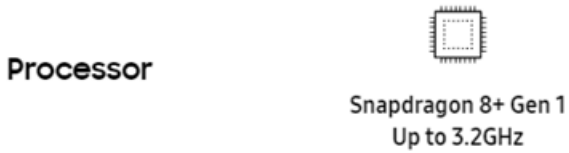

2:55
78%
kids
TV Shows
Movies
Categories
My List
DRAGONS
RACE TO THE EDGE
nickelodeon
AVATAR
Characters
Puss in Boots
Avatar
Despicable Me
Super Duos, Super Teams
CAPTAIN UNDERPANTS
THE EPIC TALES OF CAPTAIN UNDERPANTS
kids
Home
New & Hot
Downloads

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	Showing the second user interface, Home screen of the user "kids", and showing the second group of video information associated with the second user profile, "Kids" and "Avatar" movie thumbnail. Here, Miyagi-Do's first group of video information and kids's second group of video information has the same video information of "Avatar." The remaining Accused Samsung '815 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.
[16.j] receiving a selection to remove the one video information from the first group of video information associated with the first user profile;	Each of the Accused Samsung '815 Products perform a method of receiving a selection to remove the one video information from the first group of video information associated with the first user profile. *See, e.g.*, User Manuals and Technical Specifications for the Accused Samsung '815 Products (showing that the Accused Samsung '815 Products are smart phones that have a processor including, for example, a CPU/DSP/ISP/GPU, for controlling its display to reproduce content from, for example, pre-installed video apps containing user interfaces that operate in this manner, such as Netflix). For example, the Accused Samsung '815 Products include a processor, system on chip (SoC), which includes subcomponents including but not limited to an ISP, a decoder, a DSP and/or GPU for controlling its LED display. 

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

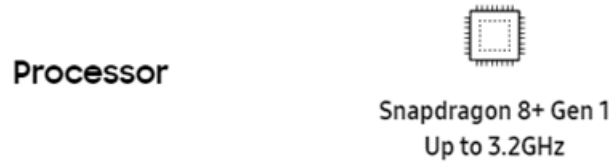
PLATFORM		
	OS	Android 13, One UI 5.1
	Chipset	Qualcomm SM8550-AC Snapdragon 8 Gen 2 (4 nm)
	CPU	Octa-core (1x3.36 GHz Cortex-X3 & 2x2.8 GHz Cortex-A715 & 2x2.8 GHz Cortex-A710 & 3x2.0 GHz Cortex-A510)
	GPU	Adreno 740

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.

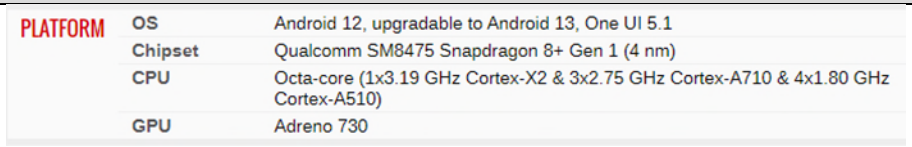
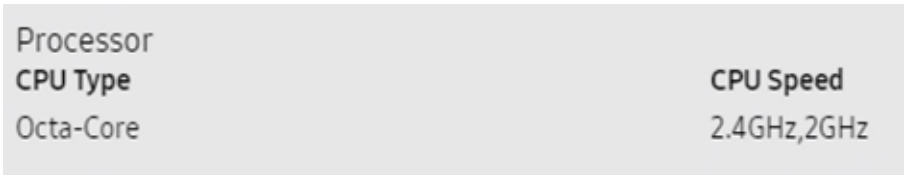


PLATFORM		
	OS	Android 12L, upgradable to Android 13, One UI 5.1
	Chipset	Qualcomm SM8475 Snapdragon 8+ Gen 1 (4 nm)
	CPU	Octa-core (1x3.19 GHz Cortex-X2 & 3x2.75 GHz Cortex-A710 & 4x1.80 GHz Cortex-A510)
	GPU	Adreno 730

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.

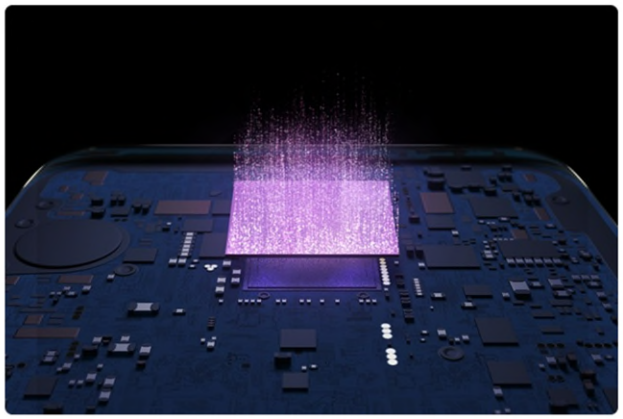


APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	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. 

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

Performance



Impressive speed. Powerful processor

The powerful Octa-core processor opens up a new range of possibilities with heightened performance and capacity.

PLATFORM	OS	Android 13, One UI 5.1
	Chipset	Exynos 1380 (5 nm)
	CPU	Octa-core (4x2.4 GHz Cortex-A78 & 4x2.0 GHz Cortex-A55)
	GPU	Mali-G68 MP5

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.

In addition, the AIDA64 Reports and tech specs show that the Accused Samsung '815 Products contain one or more processors.

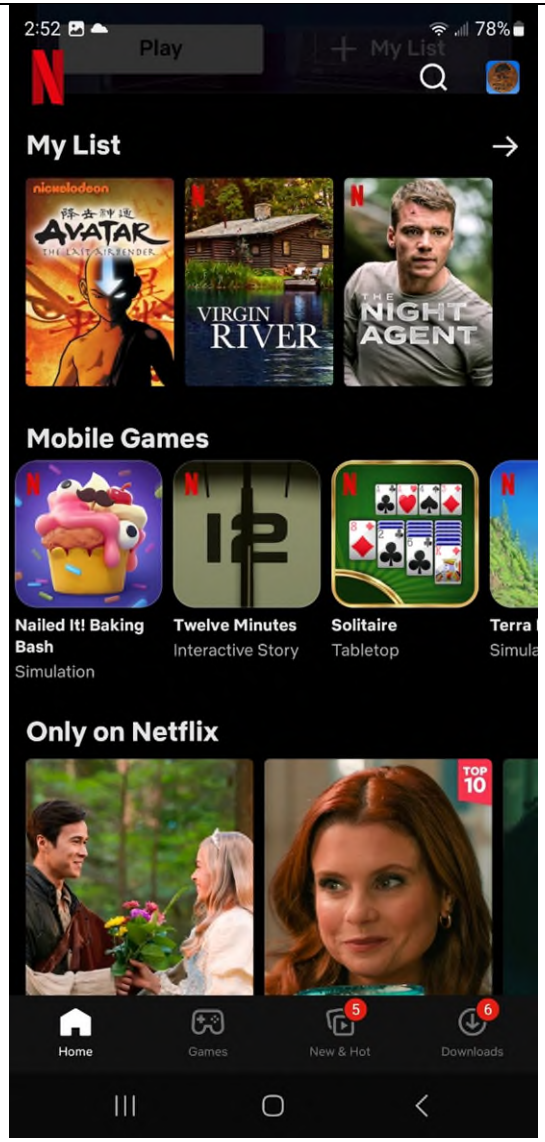
Product	AIDA 64 Report- Processor

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement	
	Galaxy S23 Ultra	SoC Model: Qualcomm Snapdragon 8 Gen 2 (SM8550) Core Architecture: 3x ARM Cortex-A510 @ 2016 MHz 2x ARM Cortex-A715 @ 2803 MHz 2x ARM Cortex-A710 @ 2803 MHz ARM Cortex-X3 @ 3360 MHz Manufacturing Process: 4 nm Instruction Set: 64-bit ARMv9-A CPU Revision: r1p0 CPU Cores: 8 CPU Clock Range: 307 - 3360 MHz
	Galaxy Z Fold4	SoC Model: Qualcomm Snapdragon 8+ Gen 1 (SM8475) Core Architecture: 4x ARM Cortex-A510 @ 2016 MHz 3x ARM Cortex-A710 @ 2745 MHz ARM Cortex-X2 @ 3187 MHz Manufacturing Process: 4 nm Instruction Set: 64-bit ARMv9-A CPU Revision: r2p0 CPU Cores: 8 CPU Clock Range: 300 - 3187 MHz
	Galaxy Z Flip4	SoC Model: Qualcomm Snapdragon 8+ Gen 1 (SM8475) Core Architecture: 4x ARM Cortex-A510 @ 2016 MHz 3x ARM Cortex-A710 @ 2745 MHz ARM Cortex-X2 @ 3187 MHz Manufacturing Process: 4 nm Instruction Set: 64-bit ARMv9-A CPU Revision: r2p0 CPU Cores: 8 CPU Clock Range: 300 - 3187 MHz

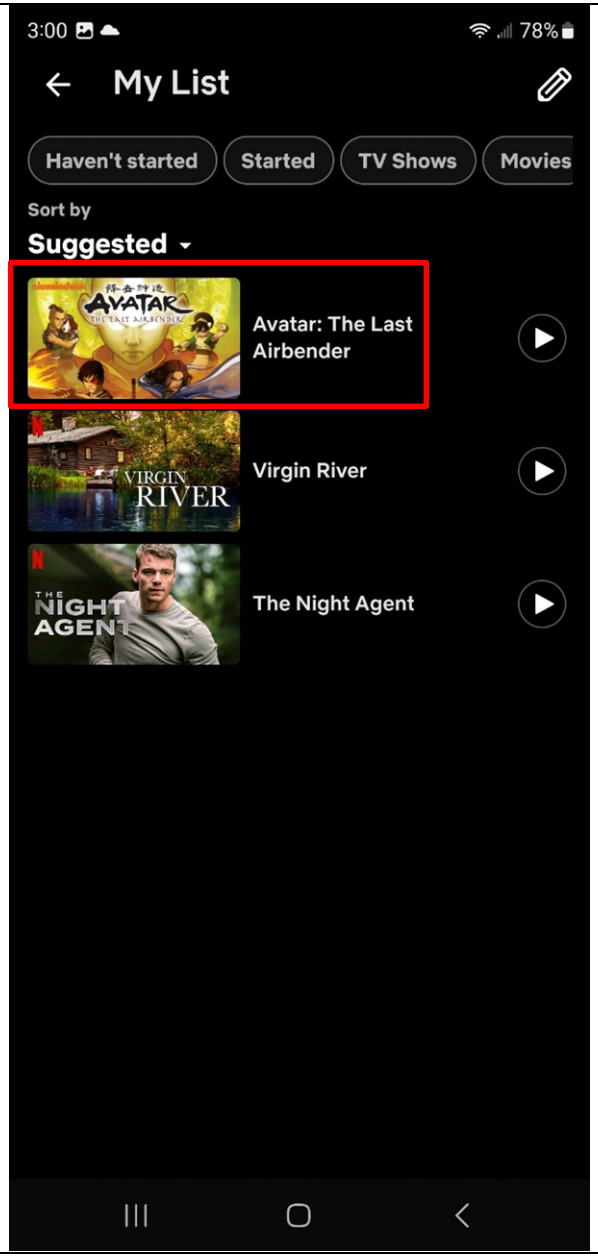
<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>
<table>
<tr><td>Galaxy A54 5G</td><td>Core Architecture: 4x ARM Cortex-A55 @ 2002 MHz
4x ARM Cortex-A78 @ 2400 MHz
Instruction Set: 64-bit ARMv8-A
CPU Revision: r1p1
CPU Cores: 8
CPU Clock Range: 533 - 2400 MHz</td></tr>
</table>

In addition, testing of the Accused Samsung '815 Products pre-installed Netflix app confirms that it receives a selection to remove one video information (e.g. one added to My List video such as "Avatar") from the first group of video information (i.e. the videos added to My List by the "Miyagi-Do" user) associated with the first user profile (i.e. "Miyagi-Do" user profile).

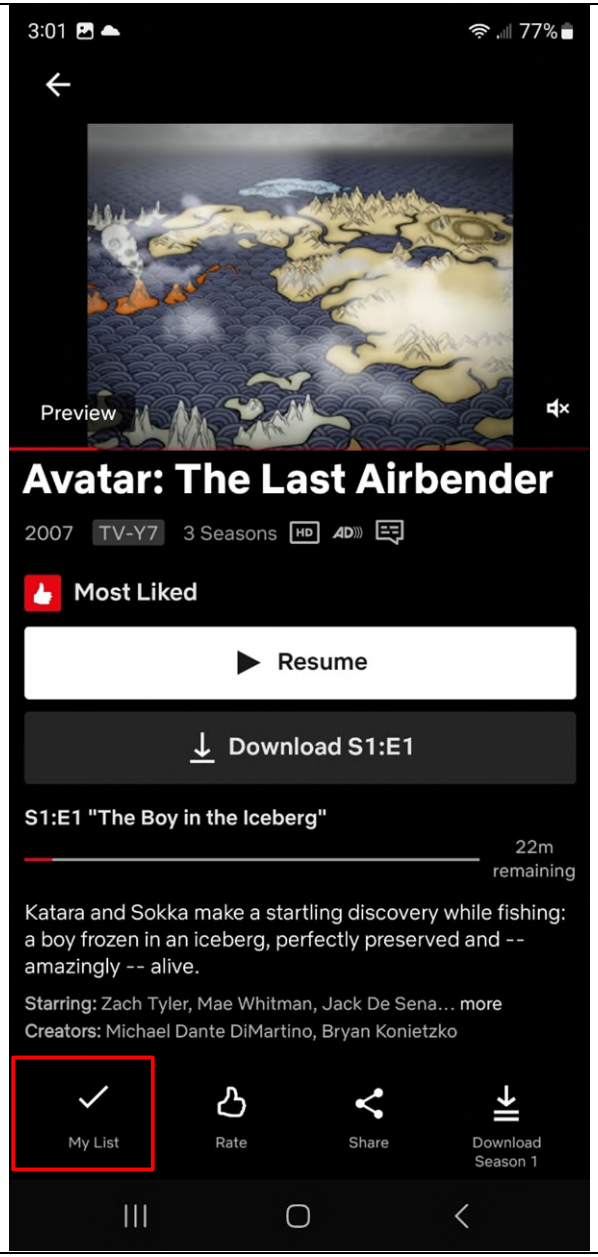
Galaxy S23 Ultra:</td></tr>
</table>



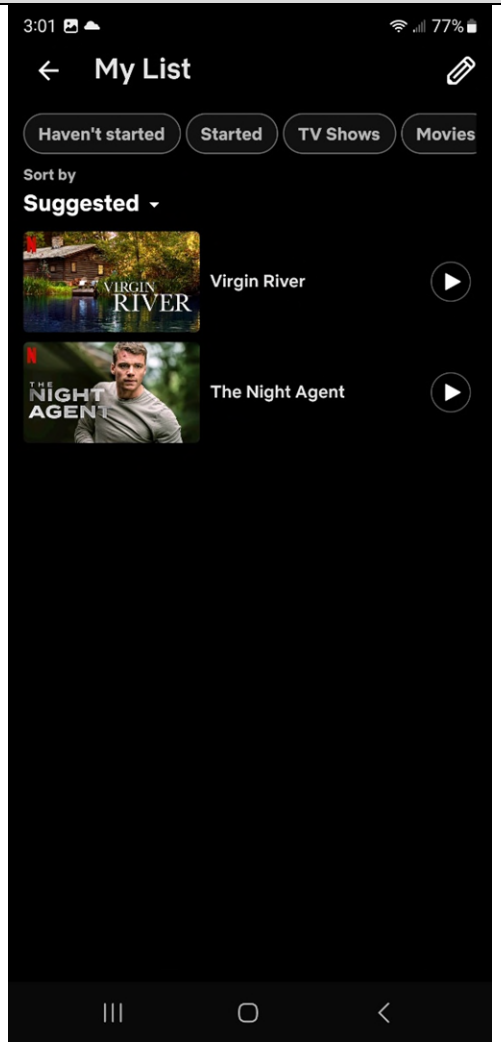
User selects the first group of video information, "My List"


3:00
78%
My List
Haven't started
Started
TV Shows
Movies
Sort by
Suggested
Avatar: The Last Airbender
Virgin River
The Night Agent

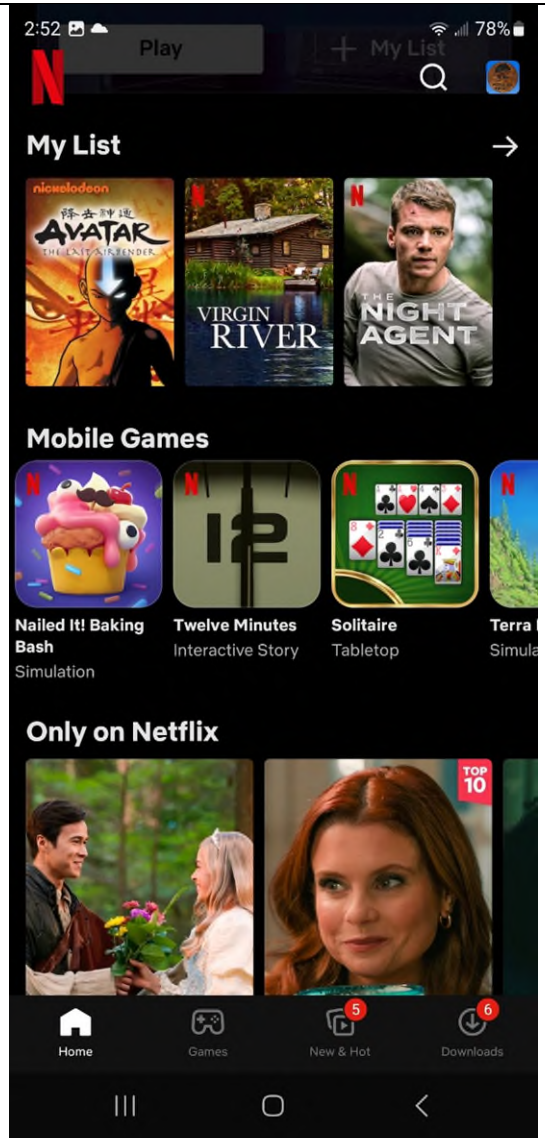
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	Netflix shows the first group of video information ("My List") containing video information for movie/tv shows for the Miyagi-Do user that were added to the "My List" group by the user, where the thumbnails correspond to first video information, and user can remove a movie/tv show from three movie/tv shows in the "My List" group.

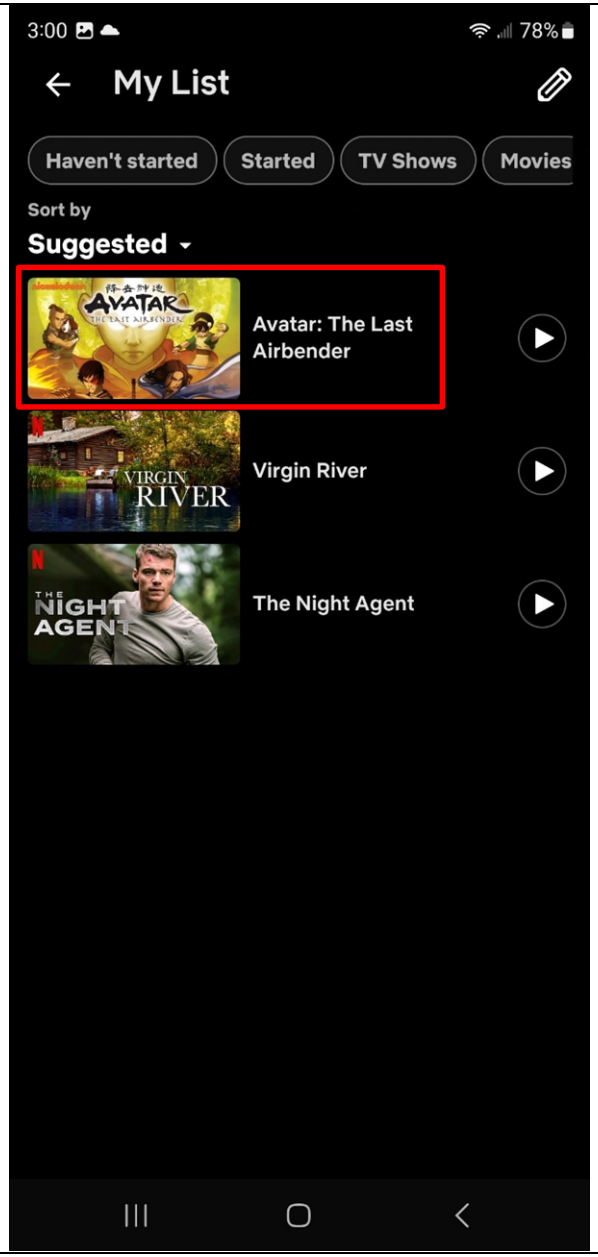

3:01
77%
Preview
Avatar: The Last Airbender
2007 TV-Y7 3 Seasons HD AD
Most Liked
Resume
Download S1:E1
S1:E1 "The Boy in the Iceberg"
22m remaining
Katara and Sokka make a startling discovery while fishing: a boy frozen in an iceberg, perfectly preserved and -- amazingly -- alive.
Starring: Zach Tyler, Mae Whitman, Jack De Sena... more
Creators: Michael Dante DiMartino, Bryan Konietzko
My List
Rate
Share
Download Season 1

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	User removes movie/tv show, here "Avatar," from the Miyagi-Do "My List" group by selecting or clicking the "My List" icon highlighted in the red box above.

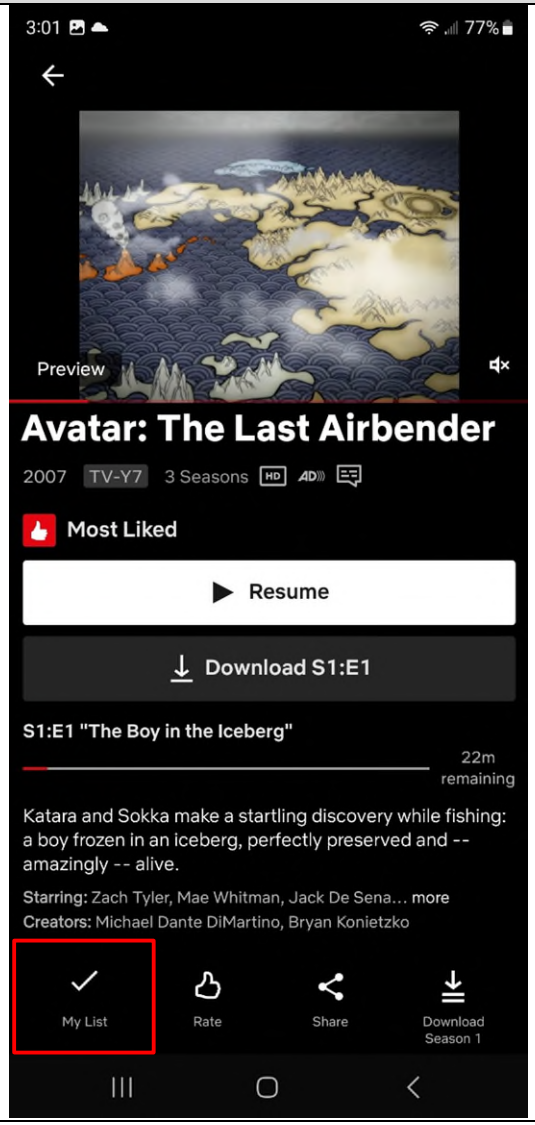
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Netflix now shows the updated "My List" group for the "Miyagi-Do" user containing the updated list without the movies/tv show whose thumbnail was removed by the user, here "Avatar" is no longer visible.

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	See also Appendix 8 showing that the remaining Accused Samsung '815 Products include a chipset with one or more processoer. Further, the remaining Accused Samsung '815 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.
[16.k] removing the one video information from the first group of video information, wherein, upon the one video information being removed from the first group of video information, the one video information continues to be included in the second group of video information for the second user profile and the second group of thumbnails continues to display	Each of the Accused Samsung '815 Products perform a method of removing the one video information from the first group of video information, wherein, upon the one video information being removed from the first group of video information, the one video information continues to be included in the second group of video information for the second user profile and the second group of thumbnails continues to display a thumbnail corresponding to the one video information when the second character is selected. *See, e.g.,* User Manuals and Technical Specifications for the Accused Samsung '815 Products (showing that the Accused Samsung '815 Products are smart phones with pre-installed video apps containing user interfaces that operate in this manner, such as Netflix). For example, testing of the Accused Samsung '815 Products pre-installed Netflix app confirms that it receives a selection to remove one video information (e.g. one added to My List video such as "Avatar") from the first group of video information (i.e. the videos added to My List by the "Miyagi-Do" user) associated with the first user profile (i.e. "Miyagi-Do" user profile). Galaxy S23 Ultra:

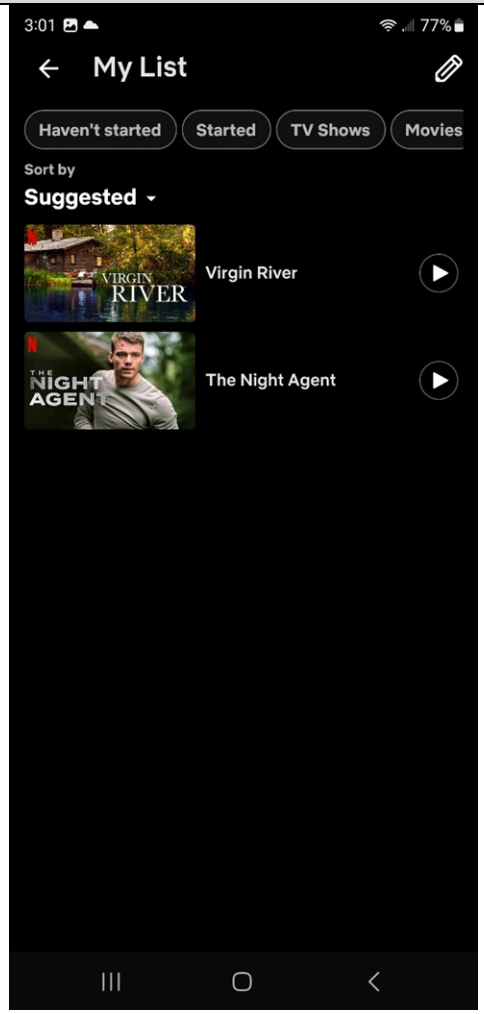
a thumbnail corresponding to the one video information when the second character is selected;	 User selects the first group of video information, "My List"


3:00
78%
My List
Haven't started
Started
TV Shows
Movies
Sort by
Suggested
Avatar: The Last Airbender
Virgin River
The Night Agent

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	Netflix shows the first group of video information ("My List") containing video information for movie/tv shows for the Miyagi-Do user that were added to the "My List" group by the user, where the thumbnails correspond to first video information, and user can remove a movie/tv show from three movie/tv shows in the "My List" group.

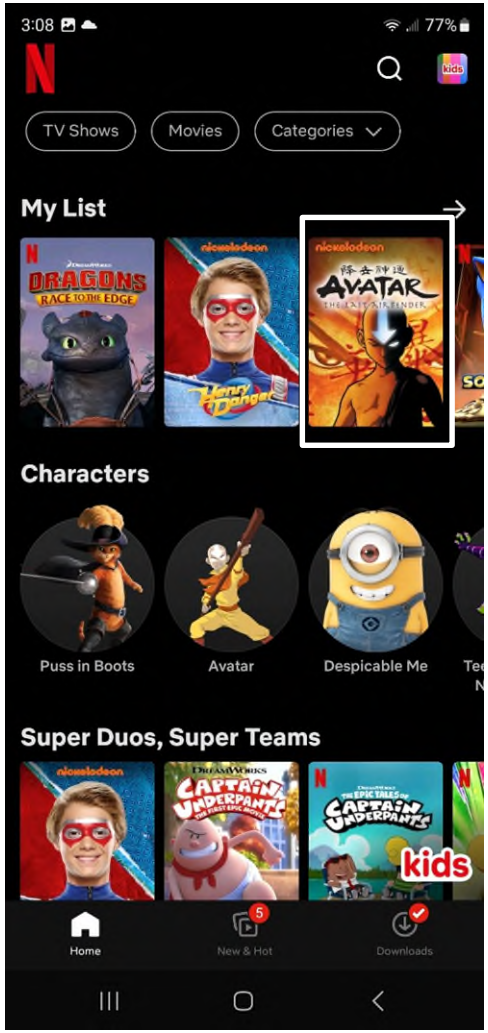
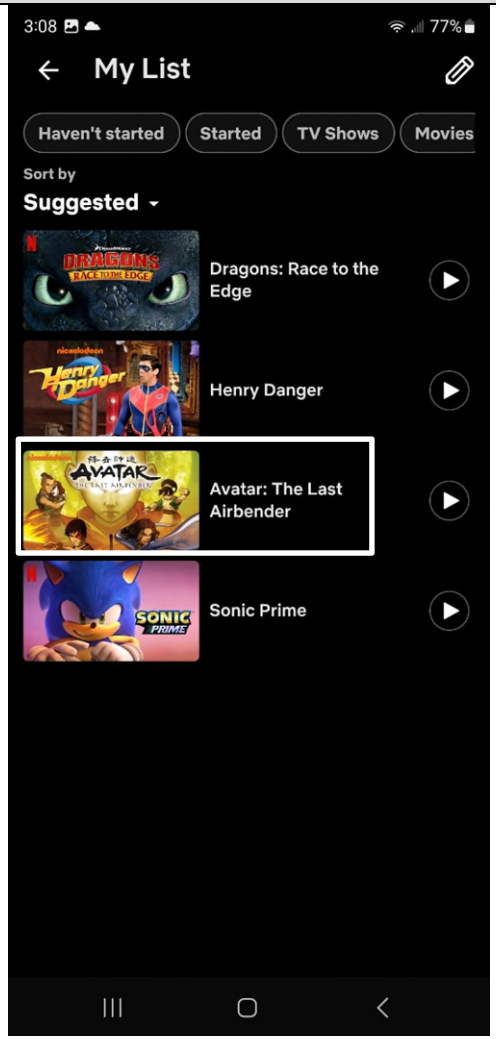
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	User removes movie/tv show, here "Avatar," from the Miyagi-Do "My List" group by selecting or clicking the "My List" icon highlighted in the red box above.

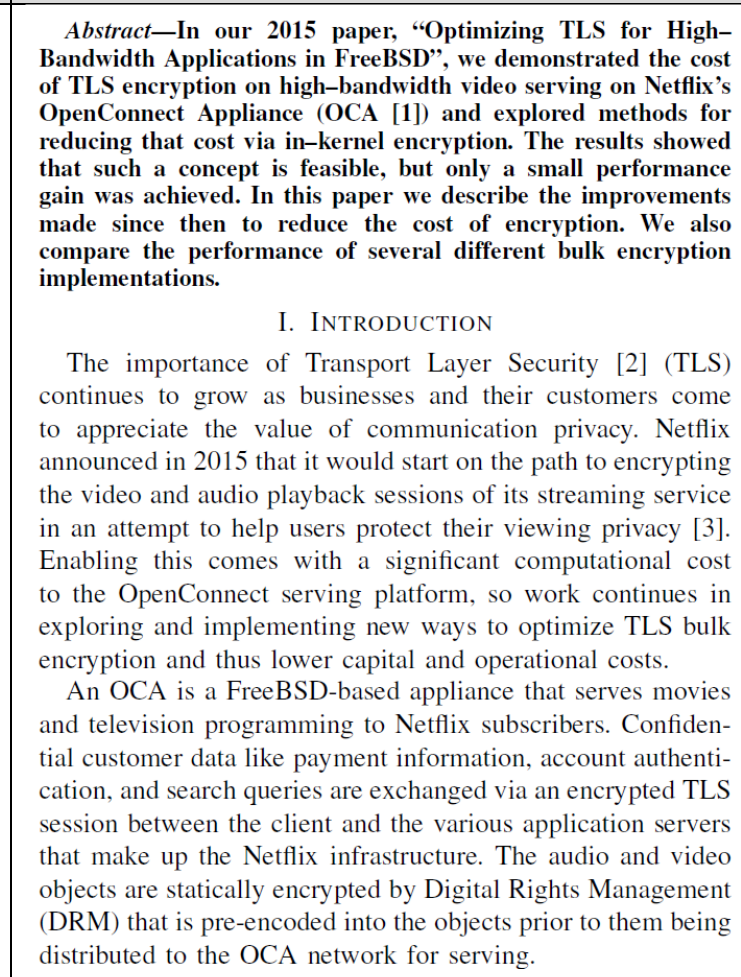
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Netflix now shows the updated "My List" group for the "Miyagi-Do" user containing the updated list without the movies/tv show whose thumbnail was removed by the user, here "Avatar" is no longer visible.

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	The one video information (e.g. the video "Avatar") continues to be included in the second group of video information for the second user profile (i.e. the videos added to My List by the "kids" user) and the second group of thumbnails (i.e. the thumbnails for the videos added to My List by the "kids" user) continues to display a thumbnail corresponding to the one video information (i.e. the thumbnail corresponding to the video "Avatar") when the second character ("Kids" which includes at least one character) is selected. Going back to first user interface, a user can switch from the first user profile to the second user profile by selecting the second character "kids." The below shows the "My List" of user Kids.

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 

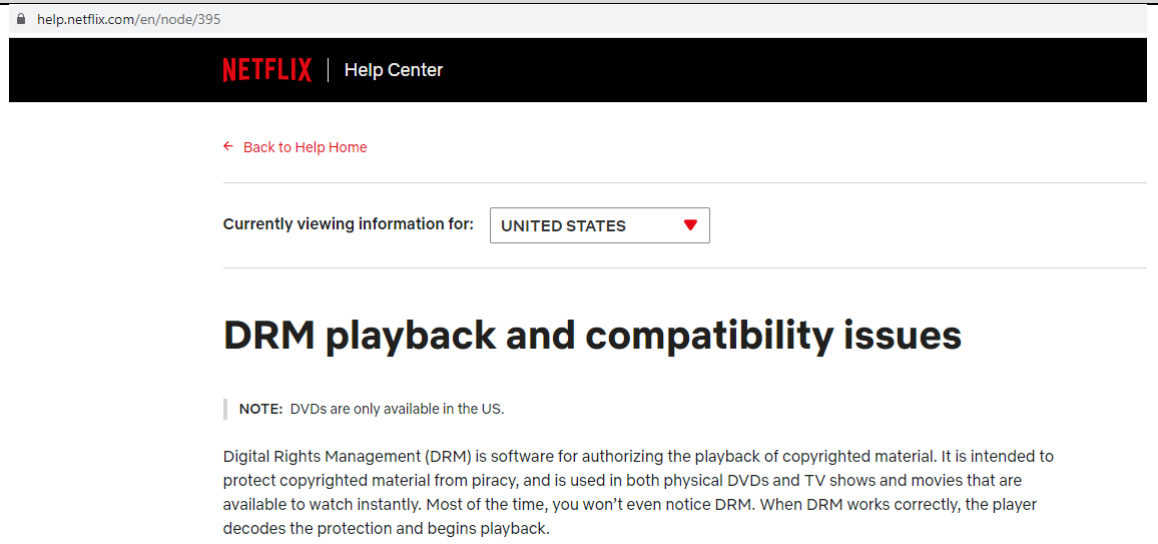
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	User with the second user profile ("kids") continues to see the deleted movie/tv show "Avatar" on their Home screen under "My List," also when the user selects "My List," Netflix shows the second group of video information where a thumbnail corresponding to the deleted movie/tv show continues to be displayed, here Avatar is visible, and the one video information – i.e., streamed digital data or signal relating to Avatar - continues to be included in the second group of video information even though such first information is no longer present in the first group of video information. The remaining Accused Samsung '815 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.
[16.l] receiving a selection of desired video information based on a selection of a thumbnail from the first group of thumbnails, the desired video information included in the second video information; [16.m] decrypting video information corresponding to the selected	Each of the Accused Samsung '815 Products performs a method of decrypting video information corresponding to the selected thumbnail; and displaying the decrypted video information. *See, e.g.*, User Manuals and Technical Specifications for the Accused Samsung '815 Products (showing that the Accused Samsung '815 Products are smart phones with a processor and pre-installed video apps containing user interfaces that operate in this manner, such as Netflix). For example, Accused Samsung '815 Products support receiving and playing Netflix video streams that are encrypted using various encryption methods, such as DRM (Digital Right Management) and/or TLS (Transport Layer Security). Thus, in order to playback and display the video, they must perform a decryption process.

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
thumbnail; and displaying the decrypted video information.	 ***Abstract*—In our 2015 paper, "Optimizing TLS for High–Bandwidth Applications in FreeBSD", we demonstrated the cost of TLS encryption on high–bandwidth video serving on Netflix's OpenConnect Appliance (OCA [1]) and explored methods for reducing that cost via in–kernel encryption. The results showed that such a concept is feasible, but only a small performance gain was achieved. In this paper we describe the improvements made since then to reduce the cost of encryption. We also compare the performance of several different bulk encryption implementations.** I. Introduction The importance of Transport Layer Security [2] (TLS) continues to grow as businesses and their customers come to appreciate the value of communication privacy. Netflix announced in 2015 that it would start on the path to encrypting the video and audio playback sessions of its streaming service in an attempt to help users protect their viewing privacy [3]. Enabling this comes with a significant computational cost to the OpenConnect serving platform, so work continues in exploring and implementing new ways to optimize TLS bulk encryption and thus lower capital and operational costs. An OCA is a FreeBSD-based appliance that serves movies and television programming to Netflix subscribers. Confidential customer data like payment information, account authentication, and search queries are exchanged via an encrypted TLS session between the client and the various application servers that make up the Netflix infrastructure. The audio and video objects are statically encrypted by Digital Rights Management (DRM) that is pre-encoded into the objects prior to them being distributed to the OCA network for serving. (Netflix, Improving High–Bandwidth TLS in the FreeBSD kernel, available at https://openconnect.netflix.com/publications/asiabsd_tls_improved.pdf (2015)

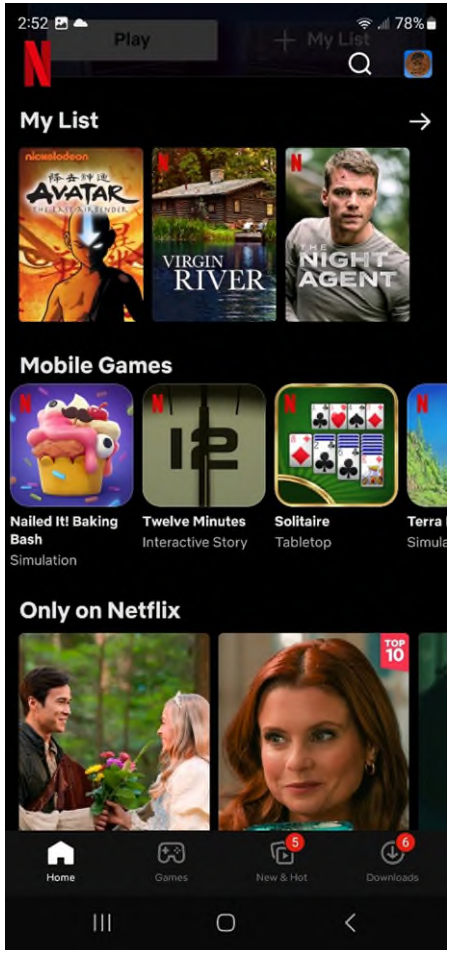
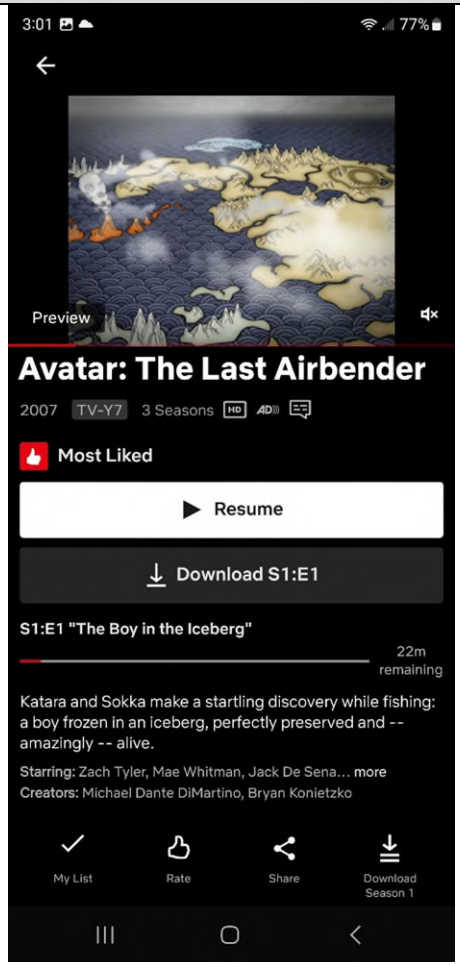
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Netflix Adopts Efficient HTTPS Encryption For Its Video Streams By Lucian Armasu published August 08, 2016 Comments (9)  Netflix announced that it has implemented efficient HTTPS encryption for its video streams. To this point, the company has used only HTTPS to protect user information. Netflix has been reluctant to adopt HTTPS for its video streams so far because delivering video is already a bandwidth-heavy task, and adding encryption on top of that risked adding too much overhead. To solve this problem, the company searched for the ideal cipher and its fastest implementation.

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Cipher Evaluation Netflix eventually chose the the Advanced Encryption Standard (AES) cipher in Galois/Counter Mode (GCM), which is available only in TLS 1.2 and later. The company chose GCM over the Cipher Block Chaining (CBC) method because it can encrypt and authenticate the message simultaneously, whereas AES-CBC requires an additional pass over the data to generate keyed-hash message authentication code (HMAC). The latter can still be used as fallback for older browsers and client software that don't support TLS 1.2. However, it shouldn't be too long until virtually all Netflix users can play video streams over TLS 1.2 or later. (See https://www.tomshardware.com/news/netflix-efficient-https-video-streams,32420.html (2016))

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	How Netflix brings safer and faster streaming experiences to the living room on crowded networks using TLS 1.3 By Sekwon Choi At Netflix, we are obsessed with the best streaming experiences. We want playback to start instantly and to never stop unexpectedly in any network environment. We are also committed to protecting users' privacy and service security without sacrificing any part of the playback experience. To achieve that, we are efficiently using ABR (adaptive bitrate streaming) for a better playback experience, DRM (Digital Right Management) to protect our service and TLS (Transport Layer Security) to protect customer privacy and to create a safer streaming experience. Netflix on consumer electronics devices such as TVs, set-top boxes and streaming sticks was until recently using TLS 1.2 for streaming traffic. Now we support TLS 1.3 for safer and faster experiences. (https://netflixtechblog.com/how-netflix-brings-safer-and-faster-streaming-experience-to-the-living-room-on-crowded-networks-78b8de7f758c (2020))

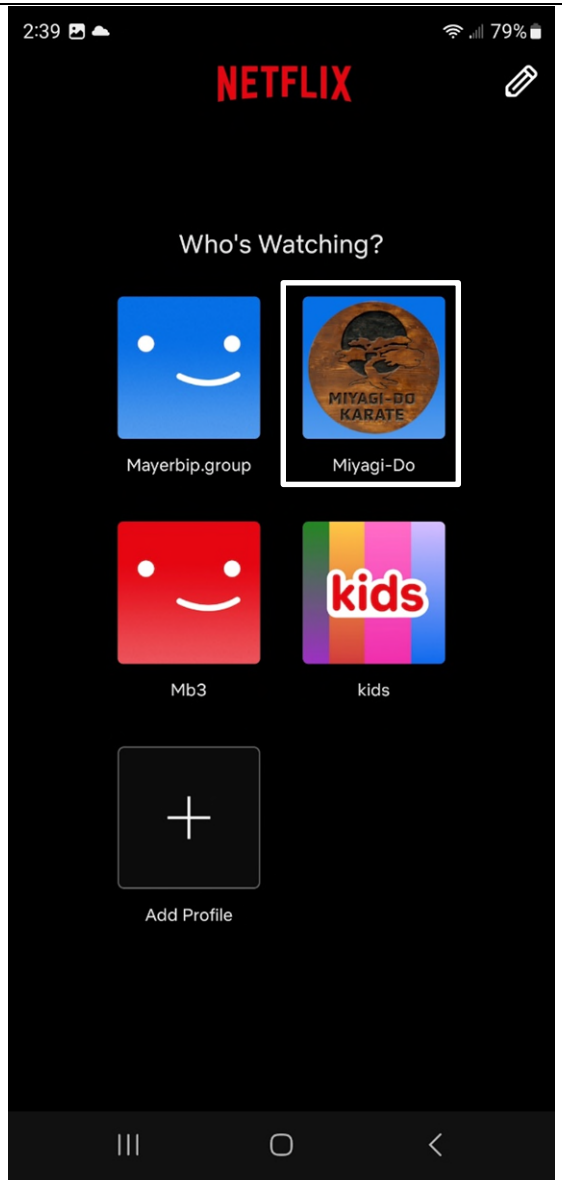
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 https://help.netflix.com/en/node/395 For example, actual testing of the Accused Samsung '815 Products shows that the pre-installed Netflix app receives desired video information (e.g. the video "Avatar") and displays the decrypted video information. Galaxy S23 Ultra:

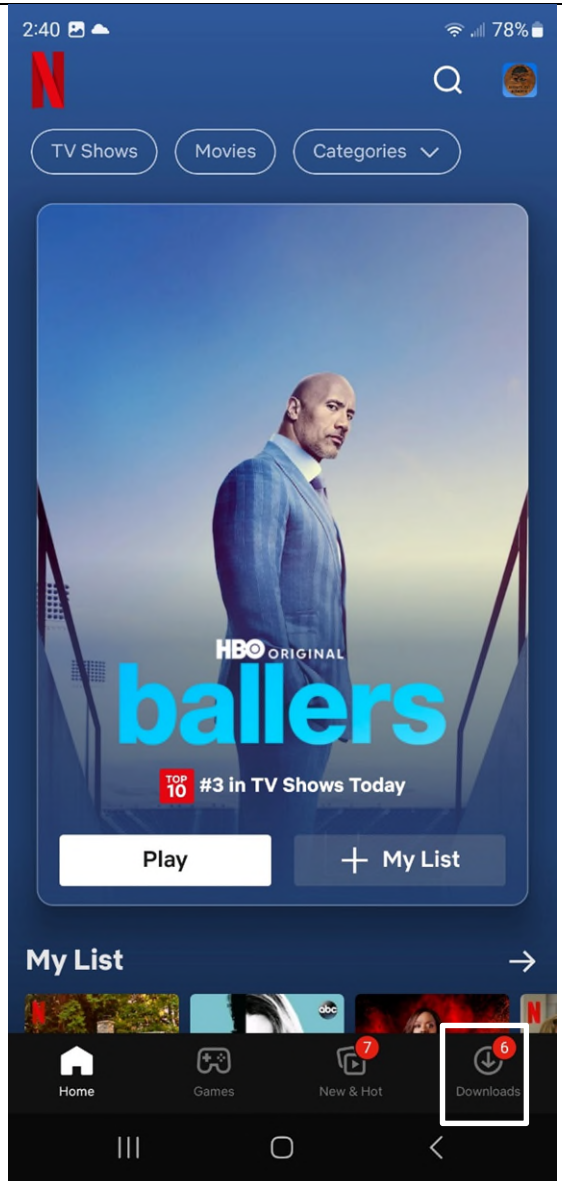
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

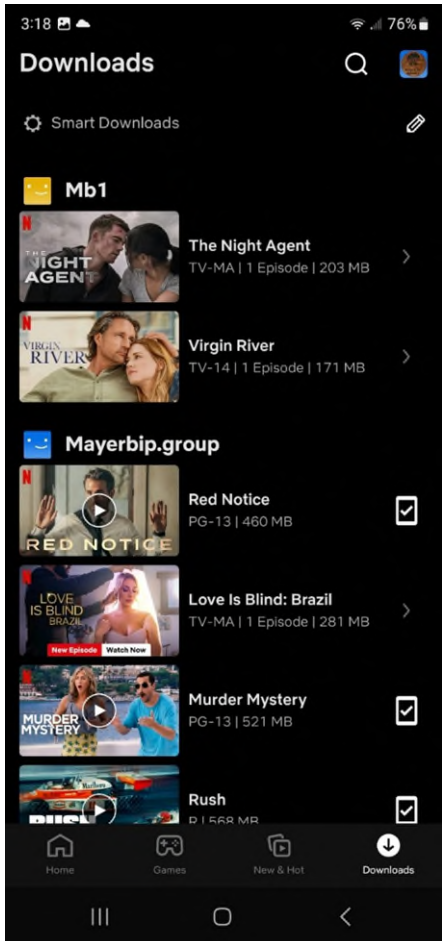
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 

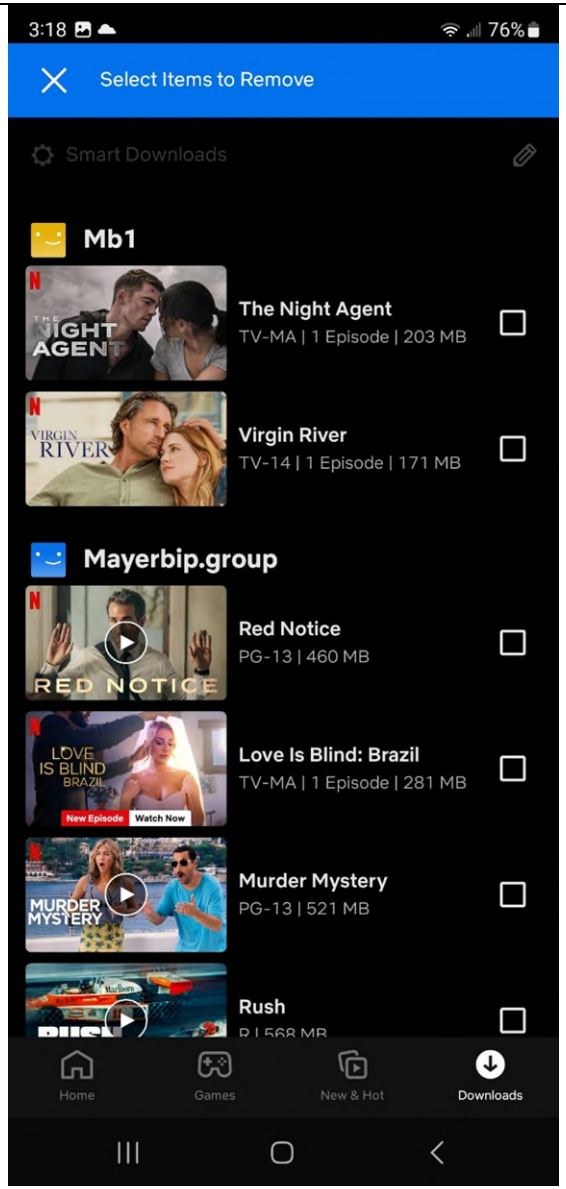
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Receiving a user selection to play and display "Avatar" video by the user and playing the video after decryption). The remaining Accused Samsung '815 Products operate in a similar manner based on the preinstalled Netflix application. *See* 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. **Doctrine of Equivalents:** To the extent Samsung argues that this limitation is not literally met in any Accused Samsung '815 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 pre-installed Netflix

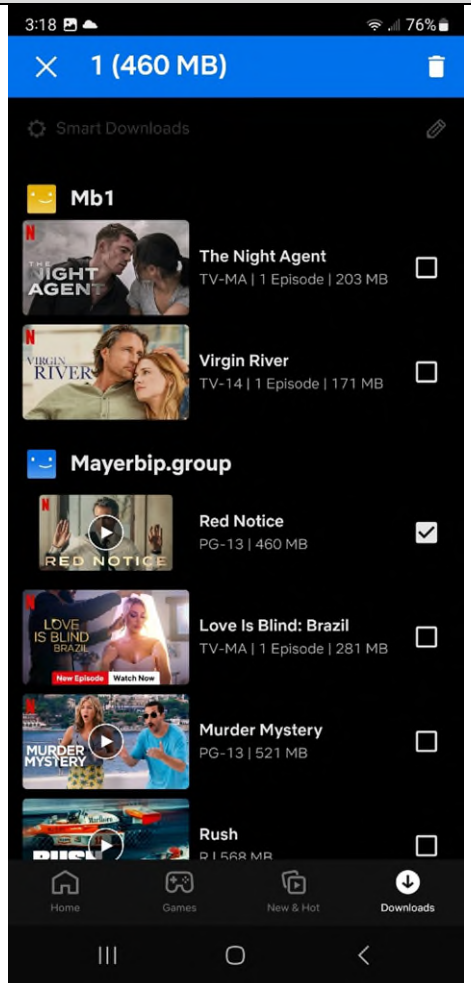
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	application in Accused Samsung '815 Products do not decrypt video information corresponding to the selected thumbnail and display the decrypted video information, testing of the Accused Samsung '815 Products' processor running pre-installed Netflix app confirms that they support receiving and playing Netflix video streams that are encrypted using various encryption methods, such as DRM (Digital Right Management) and/or TLS (Transport Layer Security) and in order to playback and display the video, they must perform a decryption process by a processor or a similar hardware component. Using this pre-installed Netflix app, hardware, or combination of the two, these products perform substantially the same function in substantially the same way as claimed. The performance of this function achieves substantially the same result.
17. The method of claim 16, wherein any user can delete stored video information regardless of a user profile from the plurality of user profiles that was used to record the stored video information.	Each of the Accused Samsung '815 Products perform a method wherein any user can delete stored video information regardless of a user profile from the plurality of user profiles that was used to record the stored video information. For example, actual testing of the Accused Samsung '815 Products shows that in the pre-installed Netflix app any user can delete stored video information (in the "Downloads") regardless of a user profile from the plurality of user profiles that was used to record the stored video information. Galaxy S23 Ultra:

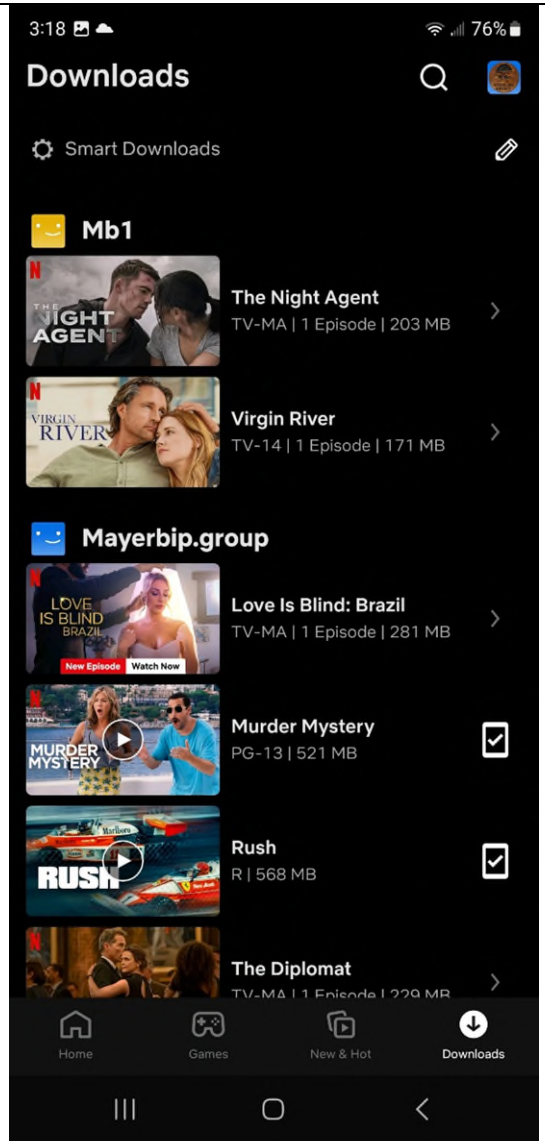

2:39
79%
NETFLIX
Who's Watching?
Mayerbip.group
Miyagi-Do
MIYAGI-DO KARATE
Mb3
kids
Add Profile


2:40
78%
TV Shows
Movies
Categories
HBO ORIGINAL
ballers
TOP 10 #3 in TV Shows Today
Play
My List
My List
Home
Games
New & Hot
Downloads

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	The user "Miyagi-Do" selects "Downloads" to remove the downloaded videos.  The "Downloads" screen shows plurality of profiles (e.g., Mayerbip.group and Mb1) with their associated downloaded videos lists.


3:18
76%
Select Items to Remove
Smart Downloads
Mb1
The Night Agent
TV-MA | 1 Episode | 203 MB
Virgin River
TV-14 | 1 Episode | 171 MB
Mayerbip.group
Red Notice
PG-13 | 460 MB
Love Is Blind: Brazil
TV-MA | 1 Episode | 281 MB
Murder Mystery
PG-13 | 521 MB
Rush
Home
Games
New & Hot
Downloads

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 "Miaygi-Do" clicks the edit icon to remove the videos from the "Mayerbip.group" user's list. Here, Miyagi-Do selects "Red Notice" to be removed.



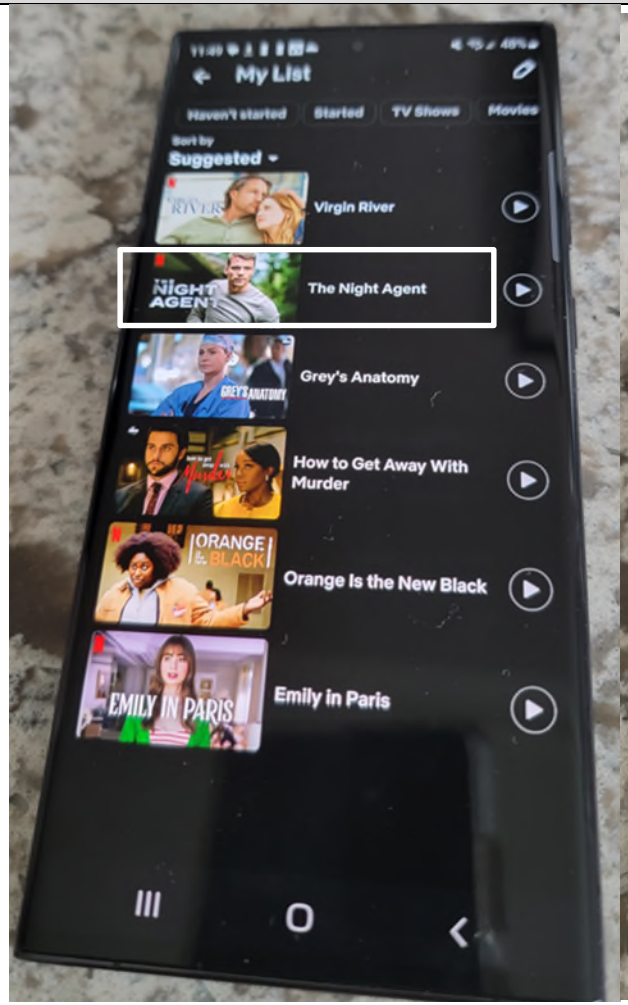
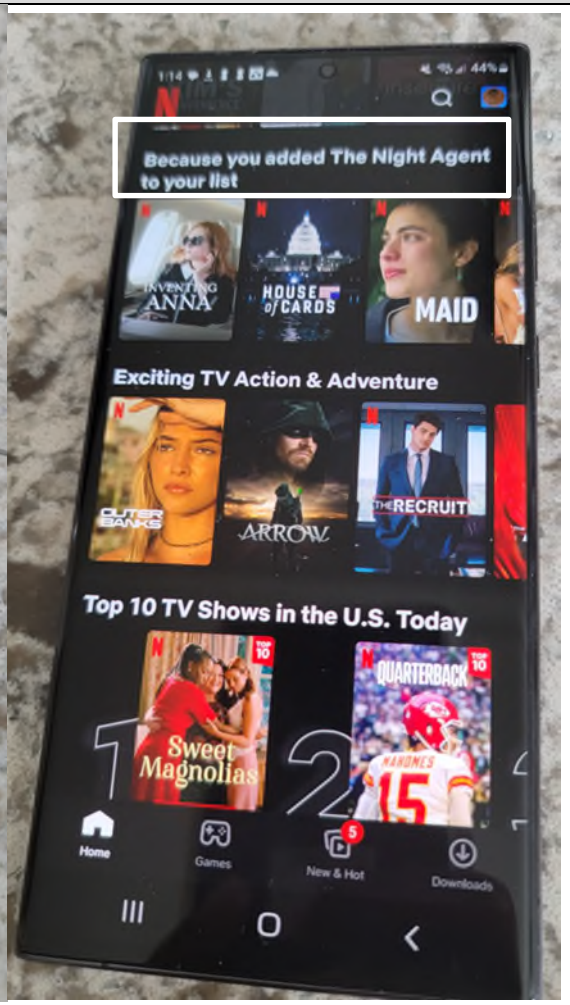
Red Notice is removed form Mayerbip.group's list and its thumbnail also disppears.

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	Thus, a user of any provide may remove downloads that have been downloaded by different users sharing the same Netflix account. The remaining Accused Samsung '815 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.
18. The method of claim 16, further comprising: generating a list of video information based on preferences of a user determined by a user selections of thumbnails from the first or second group of thumbnails.	Each of the Accused Samsung '815 Products performs a method of generating a list of video information based on preferences of a user determined by a user selections of thumbnails from the first or second group of thumbnails. For example, actual testing of the Accused Samsung '815 Products shows that in the pre-installed Netflix app the processor generates a list of video information based on preferences of a user determined by a user selections of thumbnails from the first or second group of thumbnails (i.e. My List). Netflix provides recommendations with a list based on a user's watch history that corresponds to user selections.

U.S. Patent No. 11,017,815	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 and movies of interest to you. To do this we have created a proprietary, complex 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 or movie to enjoy with minimal effort. We estimate the likelihood that you will watch 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. 11,017,815	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 watching titles on the service, this will "supercede" any initial preferences you provided us, and as you continue to watch over time, the titles you watched more recently will outweigh titles you watched in the past in terms of driving our recommendations system.

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Rows, rankings and title representation In addition to choosing which titles to include in the rows on your Netflix homepage, our system also ranks each title within the row, and then ranks the rows themselves, using algorithms and complex systems to provide a personalized experience. To put this another way, when you look at your Netflix homepage, our systems have ranked titles in a way that is designed to present the best possible ordering of titles that you may enjoy. In each row there are three layers of personalization: • the choice of row (e.g. Continue Watching, Trending Now, Award-Winning Comedies, etc.) • which titles appear in the row, and • the ranking of those titles. The most strongly recommended rows go to the top. The most strongly recommended titles start on the left of each row and go right -- unless you have selected Arabic or Hebrew as your language in our systems, in which case these will go right to left. https://help.netflix.com/en/node/100639 Galaxy S23 Ultra:

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	  A list of movie/tv show are listed under "Because you added The Night Agent to your list" based on user's preferences in their "My List."

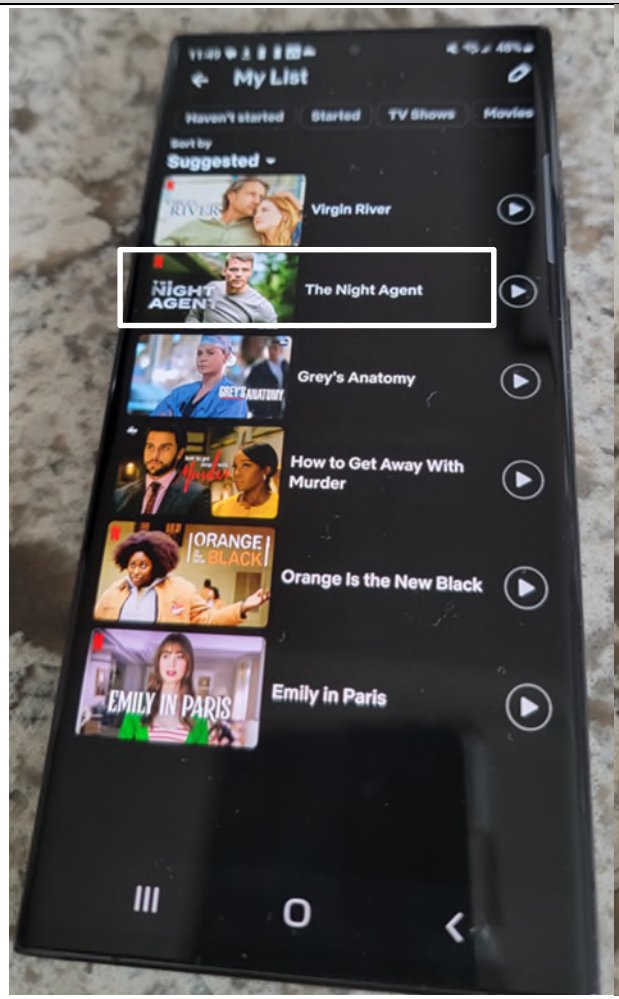
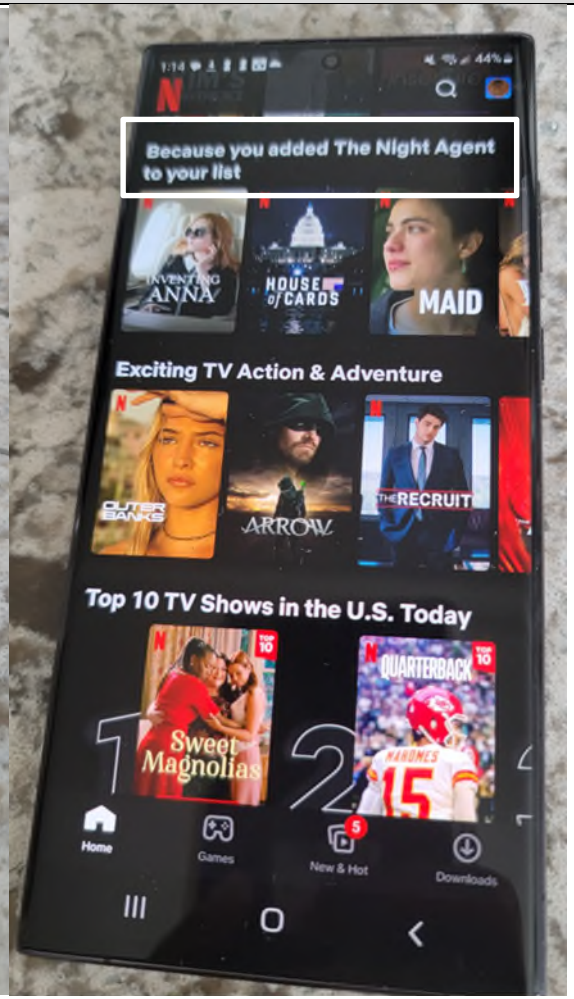
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	The remaining Accused Samsung '815 Products operate in a similar manner based on the preinstalled Netflix application. *See* https://techcrunch.com/2020/02/13/netflix-fends-off-new-streaming-rivals-by-way-of-samsung-partnership/#:~:text=At%20Samsung's%20Unpacked%20event%20this,streaming%20service%20with%20Samsung%20devices; *see also* https://help.netflix.com/en/node/54816.
[19.a] The method of claim 16, further comprising: generating a list of video information based on preferences of a user determined by a user selections of thumbnails associated with the first video information, the list including third video information; [19.b] receiving a selection of the list by the user; and in response to the selection of the list, displaying the	Each of the Accused Samsung '815 Products perform a method of generating a list of video information based on preferences of a user determined by a user selections of thumbnails associated with the first video information, the list including third and fourth video information; receiving a selection of the list by the user; and in response to the selection of the list, displaying the thumbnails that correspond to the third video information and no other thumbnails associated with video information of other users. For example, actual testing of the Accused Samsung '815 Products shows that in the pre-installed Netflix app the processor generates a list of video information based on preferences of a user determined by a user selections of thumbnails from the first or second group of thumbnails (i.e. My List). Netflix provides recommendations with a list based on a user's watch history that corresponds to user selections.

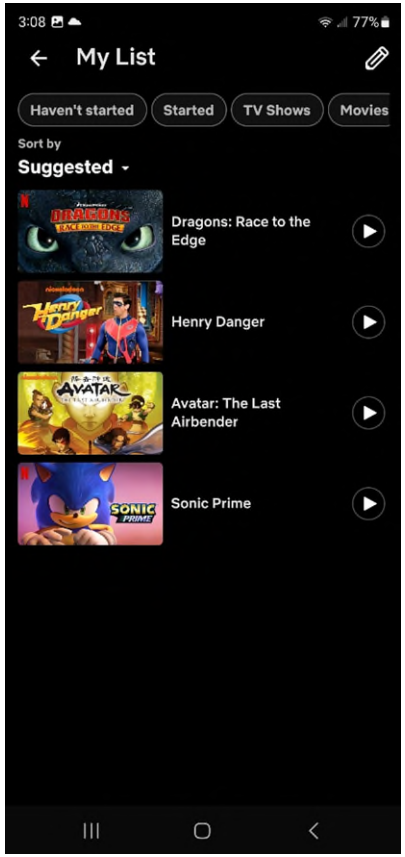
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
thumbnails that correspond to the third video information and no other thumbnails associated with video information of other users.	**How Netflix's Recommendations System Works** Our business is a subscription service model that offers personalized recommendations, to help you find shows and movies of interest to you. To do this we have created a proprietary, complex 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 or movie to enjoy with minimal effort. We estimate the likelihood that you will watch 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. 11,017,815	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 watching titles on the service, this will "supercede" any initial preferences you provided us, and as you continue to watch over time, the titles you watched more recently will outweigh titles you watched in the past in terms of driving our recommendations system.

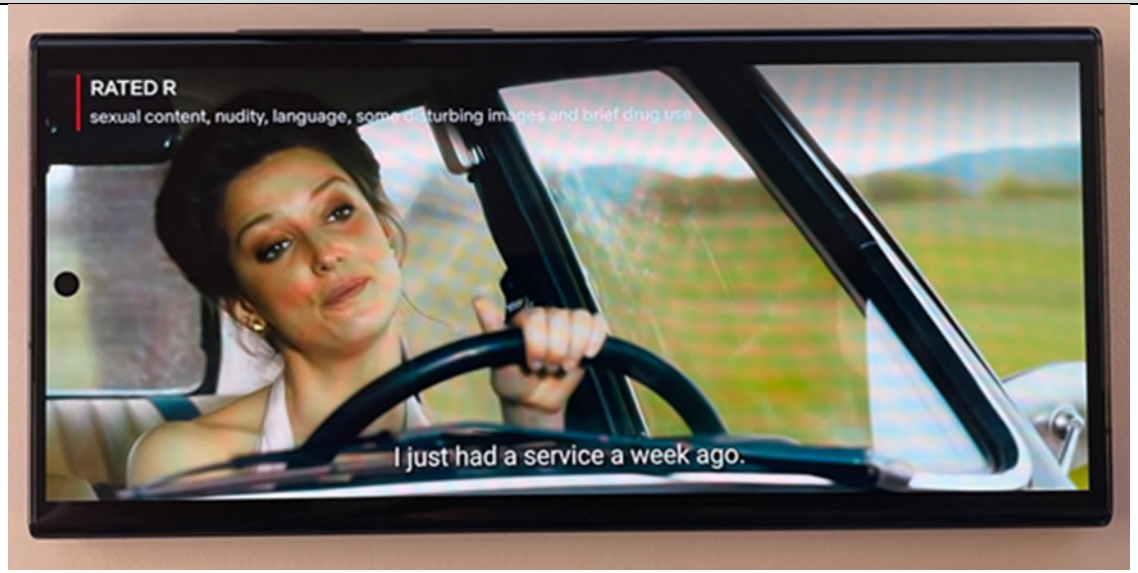
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Rows, rankings and title representation In addition to choosing which titles to include in the rows on your Netflix homepage, our system also ranks each title within the row, and then ranks the rows themselves, using algorithms and complex systems to provide a personalized experience. To put this another way, when you look at your Netflix homepage, our systems have ranked titles in a way that is designed to present the best possible ordering of titles that you may enjoy. In each row there are three layers of personalization: • the choice of row (e.g. Continue Watching, Trending Now, Award-Winning Comedies, etc.) • which titles appear in the row, and • the ranking of those titles. The most strongly recommended rows go to the top. The most strongly recommended titles start on the left of each row and go right -- unless you have selected Arabic or Hebrew as your language in our systems, in which case these will go right to left. https://help.netflix.com/en/node/100639 For example, actual testing of the Accused Samsung '815 Products shows that in the pre-installed Netflix app processor generates a list of video information based on preferences of a user determined by a user selections of thumbnails associated with the first video information, the list including third and fourth video information (i.e. My List) specific to the user profile and does not include videos corresponding to the user profile of, for example, "kids" but only includes thumbnails corresponding to this user's preferences. Galaxy S23 Ultra:

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

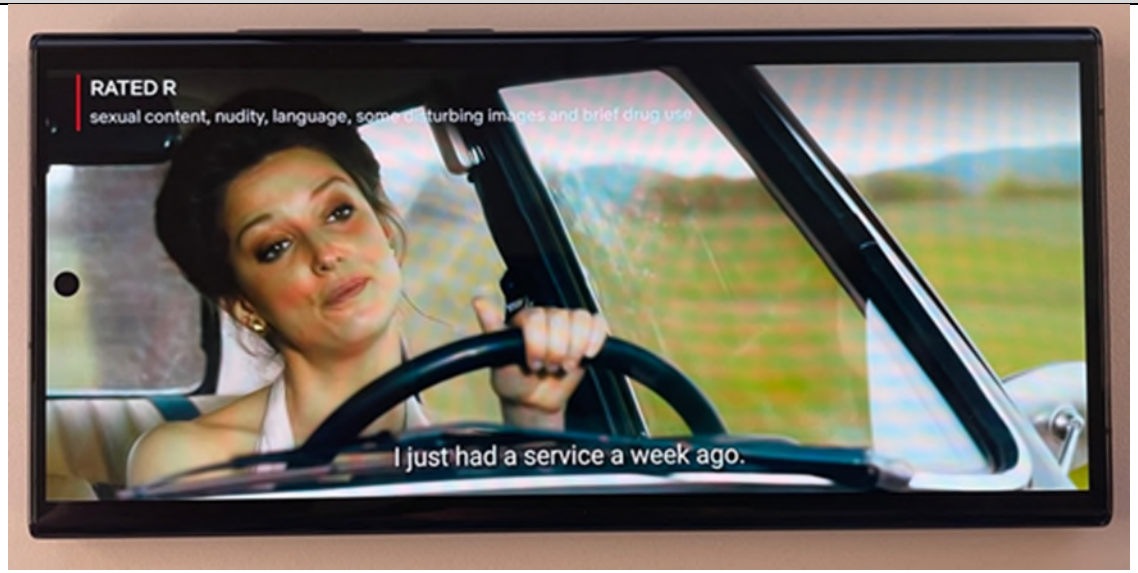
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	A list of movie/tv show are listed under "Because you added The Night Agent to your list" based on user's preferences in their "My List." It does not show the video information included in the "My List" of kids user profile:  The remaining Accused Samsung '815 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-

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	samsung-partnership/#:~:text=At%20Samsung's%20Unpacked%20event%20this,streaming%20service%20with%20Samsung%20devices; *see also* https://help.netflix.com/en/node/54816.
[20.a] The method of claim 16, further comprising: generating on screen display information,	Each of the Accused Samsung '815 Products performs a mehtod of generating on screen display information. For example, upon information and belief, the system on a chip (SoC) with processor (including GPU) of each Accused Samsung '815 Products acts to generate on screen display information that is displayed during playback of video information on Netflix application. **Galaxy S23 Ultra:** 

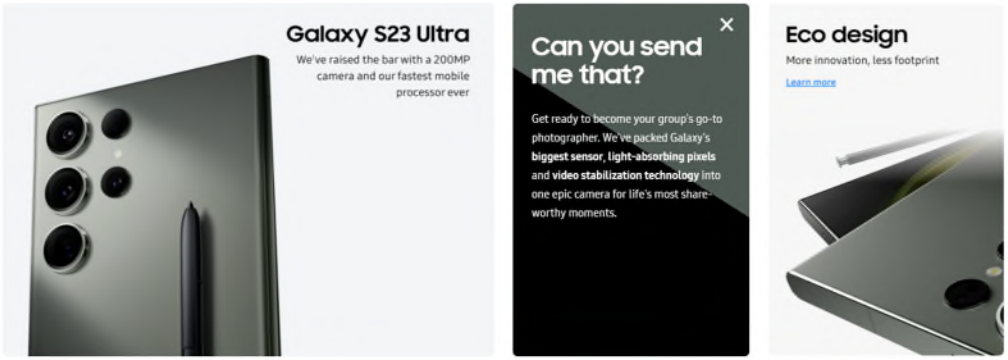
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	 Screenshot showing playback of a downloaded video on Netflix with on screen display including menu options at bottom and/or subtitles. The remaining Accused Samsung '815 Products operate in a similar manner based on the preinstalled 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.
[20.b] wherein the first video information includes third video information such that, upon selection	Each of the Accused Samsung '815 Products perform a method wherein the first video information includes third video information such that, upon selection for playback, the third video information is outputted with the on screen display information for display of the third video information and the on screen display information.

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
for playback, the third video information is outputted with the on screen display information for display of the third video information and the on screen display information.	For example, testing of the Accused Samsung '815 Products confirms that the Accused Samsung '815 Products display on screen display information (e.g., subtitles) and the third video information together as a part of playback on the Netflix application. 

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	 Screenshot showing playback of a downloaded video on Netflix with on screen display *e.g.*, subtitles. The remaining Accused Samsung '815 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.
[21.pre] An information processing apparatus comprising:	Each of the Accused Samsung '815 Products is an information processing apparatus. *See e.g.*, Technical Specifications of each of the Accused Samsung '815 Products available at Samsung's website show that each of the devices is an information processing apparatus that includes a processor to perform various functions. (https://www.samsung.com/us/mobile/). For example, the Accused Samsung '815 Products process information to display a user interface.

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	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

U.S. Patent No. 11,017,815	**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

U.S. Patent No. 11,017,815	**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.

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.



U.S. Patent No. 11,017,815	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.



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.



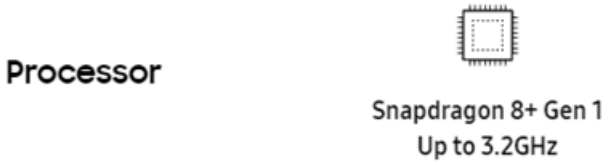
Processor

Snapdragon 8+ Gen 1
Up to 3.2GHz

U.S. Patent No. 11,017,815	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.



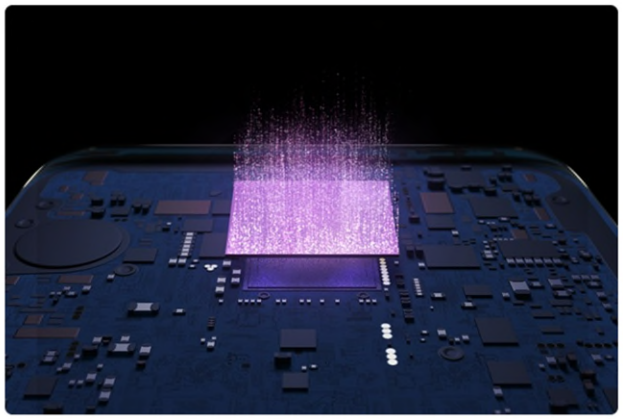
PLATFORM	OS	Android 12, upgradable to Android 13, One UI 5.1
	Chipset	Qualcomm SM8475 Snapdragon 8+ Gen 1 (4 nm)
	CPU	Octa-core (1x3.19 GHz Cortex-X2 & 3x2.75 GHz Cortex-A710 & 4x1.80 GHz Cortex-A510)
	GPU	Adreno 730

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.



U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

Performance



Impressive speed. Powerful processor

The powerful Octa-core processor opens up a new range of possibilities with heightened performance and capacity.

PLATFORM	OS	Android 13, One UI 5.1
	Chipset	Exynos 1380 (5 nm)
	CPU	Octa-core (4x2.4 GHz Cortex-A78 & 4x2.0 GHz Cortex-A55)
	GPU	Mali-G68 MP5

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.

In addition, the AIDA64 Reports show that each of the Accused Samsung '815 Products contains a front-facing and rear-facing camera for recording video, and associated software, which in conjunction with one or more processors (*e.g.*, CPU, ISP, or DSP) processes video.

Product	**AIDA 64 Report- Camera**

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
	Galaxy S23 Ultra	<< Rear-Facing Camera >> Resolution: 12 MP (4080 × 3060) Focal Length: 6.30 mm Focus Modes: infinity, auto, macro, continuous-video, continuous-picture Video Stabilization: Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Supported << Front-Facing Camera >> Resolution: 12 MP (4000 × 3000) Focal Length: 3.30 mm Focus Modes: infinity, auto, macro, continuous-video, continuous-picture Video Stabilization: Not Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Not Supported << Rear-Facing Camera >> Resolution: 12 MP (4000 × 3000) Focal Length: 2.20 mm Focus Modes: infinity, auto, macro, continuous-video, continuous-picture Video Stabilization: Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Not Supported	
	Galaxy Z Fold4	<< Rear-Facing Camera >> Resolution: 12 MP (4080 × 3060) Focal Length: 5.40 mm Focus Modes: infinity, auto, macro, continuous-video, continuous-picture Video Stabilization: Supported	

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
		Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Supported << Front-Facing Camera >> Resolution: 10.0 MP (3648 × 2736) Focal Length: 3.30 mm Focus Modes: fixed, infinity Video Stabilization: Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Not Supported << Rear-Facing Camera >> Resolution: 12 MP (4000 × 3000) Focal Length: 1.74 mm Focus Modes: fixed, infinity Video Stabilization: Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Not Supported	

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement		
	Galaxy Z Flip4	<< Rear-Facing Camera >> Resolution: 12 MP (4000 × 3000) Focal Length: 5.00 mm Focus Modes: infinity, auto, macro, continuous-video, continuous-picture Video Stabilization: Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Supported << Front-Facing Camera >> Resolution: 10.0 MP (3648 × 2736) Focal Length: 3.17 mm Focus Modes: fixed, infinity Video Stabilization: Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Not Supported << Rear-Facing Camera >> Resolution: 12 MP (4000 × 3000) Focal Length: 1.70 mm Focus Modes: fixed, infinity Video Stabilization: Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Not Supported	
	Galaxy A54 5G	<< Rear-Facing Camera >> Resolution: 12 MP (4080 × 3060) Focal Length: 5.54 mm Focus Modes: infinity, auto, continuous-video, continuous-picture Video Stabilization: Not Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Supported << Front-Facing Camera >> Resolution: 8.0 MP (3264 × 2448) Focal Length: 3.72 mm	

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

	Focus Modes: fixed, infinity Video Stabilization: Not Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Not Supported << Rear-Facing Camera >> Resolution: 12 MP (4000 × 3000) Focal Length: 1.74 mm Focus Modes: fixed, infinity Video Stabilization: Not Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Not Supported << Front-Facing Camera >> Resolution: 5.7 MP (2880 × 1980) Focal Length: 3.72 mm Focus Modes: fixed, infinity Video Stabilization: Not Supported Zoom: Supported Auto Exposure Locking: Supported Auto White Balance Locking: Supported Flash: Not Supported

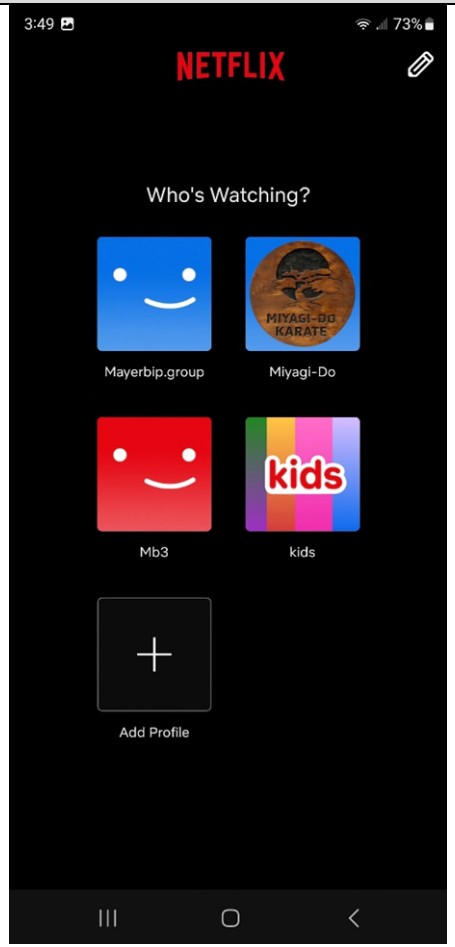
The AIDA64 Reports and tech specs show that the Accused Samsung '815 Products contain one or more processors.

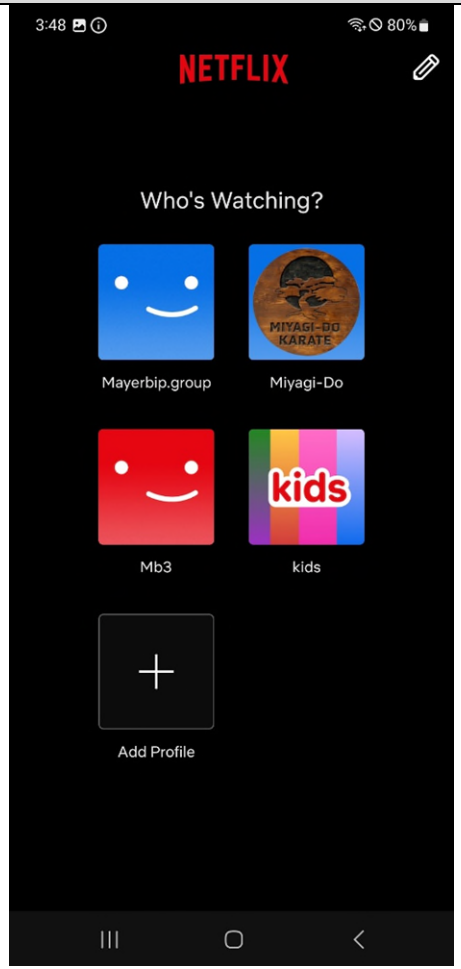
Product	AIDA 64 Report- Processor
Galaxy S23 Ultra	SoC Model: Qualcomm Snapdragon 8 Gen 2 (SM8550) Core Architecture: 3x ARM Cortex-A510 @ 2016 MHz

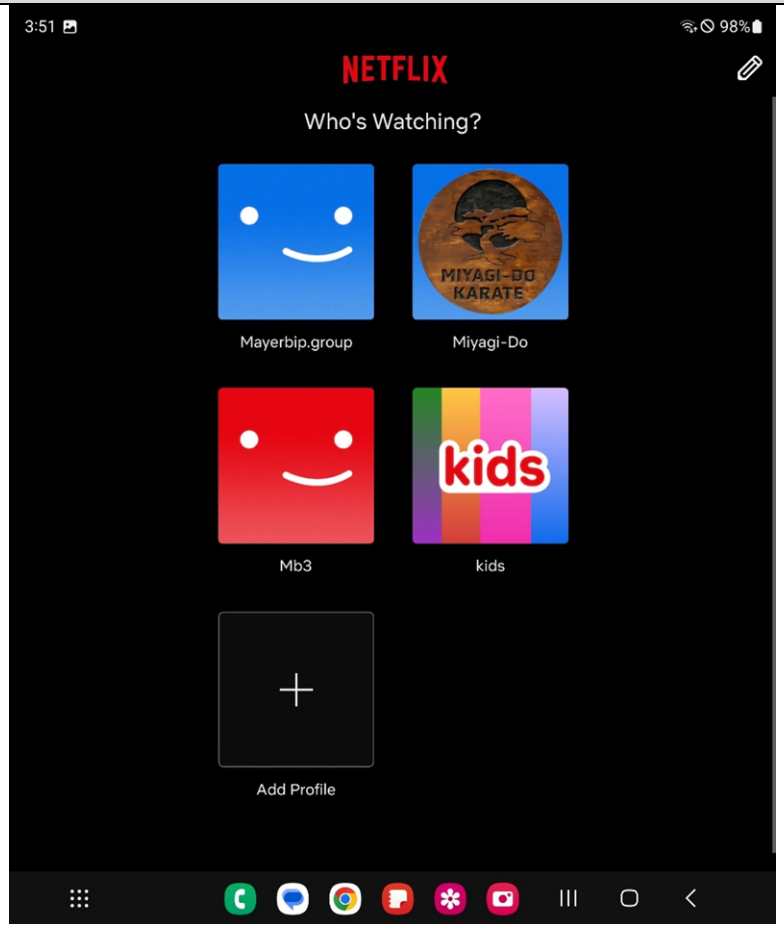
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement	
		2x ARM Cortex-A715 @ 2803 MHz 2x ARM Cortex-A710 @ 2803 MHz ARM Cortex-X3 @ 3360 MHz Manufacturing Process: 4 nm Instruction Set: 64-bit ARMv9-A CPU Revision: r1p0 CPU Cores: 8 CPU Clock Range: 307 - 3360 MHz
	Galaxy Z Fold4	SoC Model: Qualcomm Snapdragon 8+ Gen 1 (SM8475) Core Architecture: 4x ARM Cortex-A510 @ 2016 MHz 3x ARM Cortex-A710 @ 2745 MHz ARM Cortex-X2 @ 3187 MHz Manufacturing Process: 4 nm Instruction Set: 64-bit ARMv9-A CPU Revision: r2p0 CPU Cores: 8 CPU Clock Range: 300 - 3187 MHz
	Galaxy Z Flip4	SoC Model: Qualcomm Snapdragon 8+ Gen 1 (SM8475) Core Architecture: 4x ARM Cortex-A510 @ 2016 MHz 3x ARM Cortex-A710 @ 2745 MHz ARM Cortex-X2 @ 3187 MHz Manufacturing Process: 4 nm Instruction Set: 64-bit ARMv9-A CPU Revision: r2p0 CPU Cores: 8 CPU Clock Range: 300 - 3187 MHz
	Galaxy A54 5G	Core Architecture: 4x ARM Cortex-A55 @ 2002 MHz 4x ARM Cortex-A78 @ 2400 MHz Instruction Set: 64-bit ARMv8-A CPU Revision: r1p1 CPU Cores: 8 CPU Clock Range: 533 - 2400 MHz

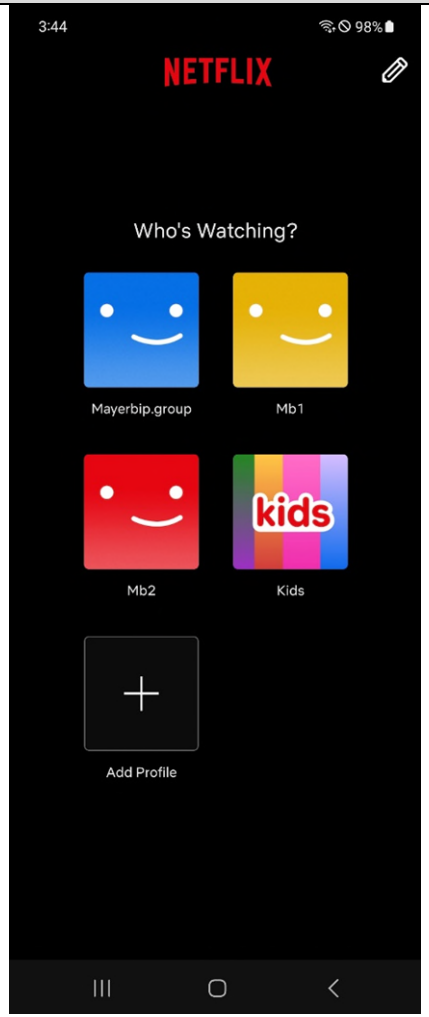
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

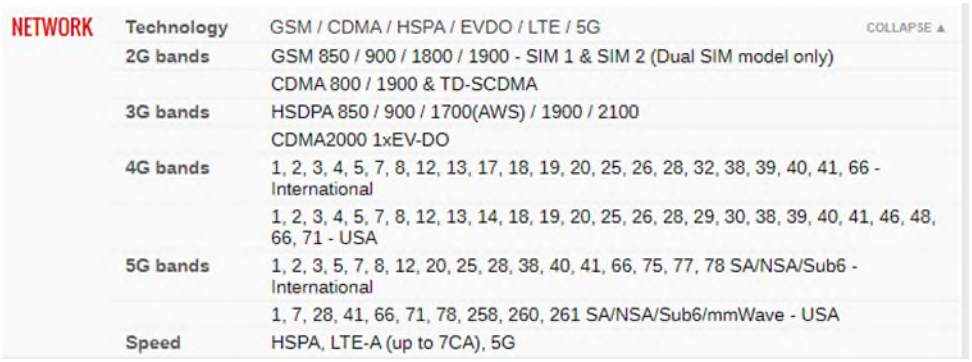
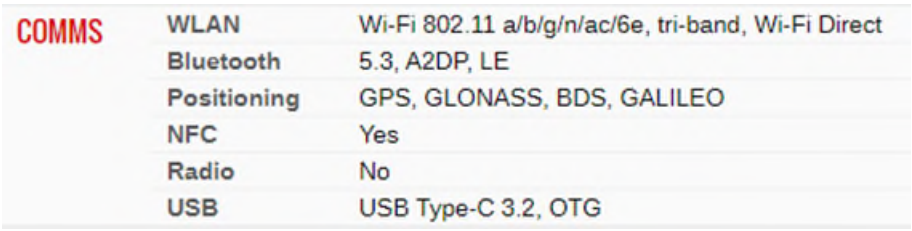
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	For example, upon information and belief, the Accused Samsung '815 Products are sold with Netflix application preinstalled. Accordingly, each of the Accused Samsung '815 Products infringe under the same theories as all phones have the pre-installed Netflix application that works the same way: Samsung Galaxy S23 Ultra:

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Samsung Galaxy A54 5G:

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Samsung Galaxy Zfold 4:

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Samsung Galaxy Zflip 4:

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
[21.a] a network interface receiving first video information wirelessly from a device external to the information processing apparatus, the first video information being received including second video information that is encrypted;	Each of the Accused Samsung '815 Products include a network interface that receives first video information wirelessly from a device external to the information processing apparatus, the first video information being received including second video information that is encrypted. For example, each of the Accused Samsung '815 Products includes one or more wireless circuits comprising one or more modems that are a network interface, for example for cellular or WiFi communication to receiving encrypted content by the Netflix application. **Galaxy S23 Ultra:**  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:**

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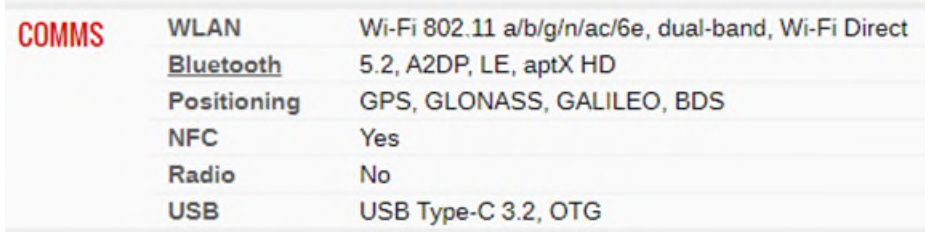
NETWORK	Technology	GSM / CDMA / HSPA / EVDO / LTE / 5G	COLLAPSE ▲
	2G bands	GSM 850 / 900 / 1800 / 1900	
		CDMA 800 / 1900	
	3G bands	HSDPA 850 / 900 / 1700(AWS) / 1900 / 2100	
		HSDPA 850 / 900 / 1900 / 2100	
		CDMA2000 1xEV-DO	
	4G bands	1, 2, 3, 4, 5, 7, 8, 12, 13, 17, 18, 19, 20, 25, 26, 28, 32, 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	
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	

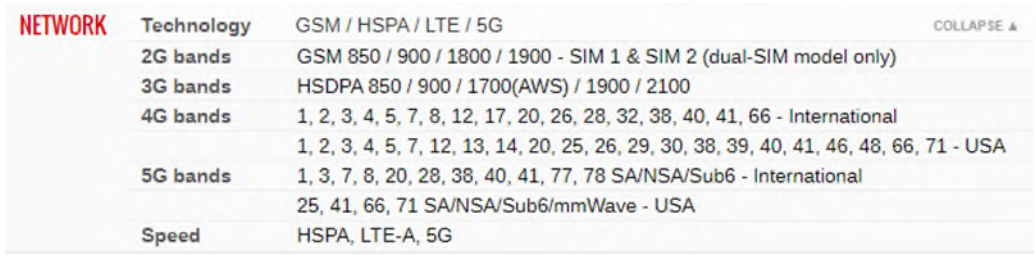
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement



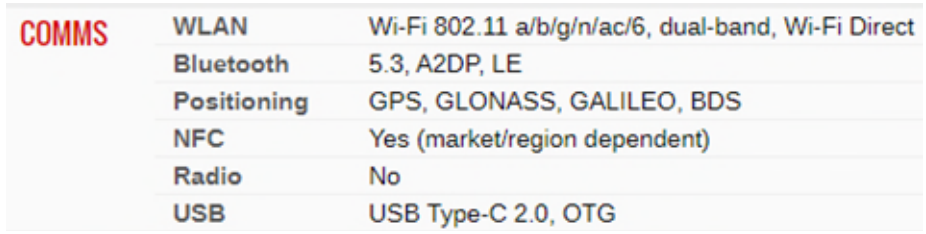
COMMS		
	WLAN	Wi-Fi 802.11 a/b/g/n/ac/6e, dual-band, Wi-Fi Direct
	Bluetooth	5.2, A2DP, LE, aptX HD
	Positioning	GPS, GLONASS, GALILEO, BDS
	NFC	Yes
	Radio	No
	USB	USB Type-C 3.2, OTG

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

Galaxy A54 5G:



NETWORK			COLLAPSE ▲
	Technology	GSM / HSPA / LTE / 5G	
	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	



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.

See also Appendix 8 showing that the remaining Accused Samsung '815 Products include a similar network interface for wireless communication (*e.g.*, WiFi, Bluetooth, and/or cellular chipset). *See* https://www.samsung.com/us/support/answer/ANS00087283/; *see also* https://www.samsung.com/us/support/answer/ANS00083184/.

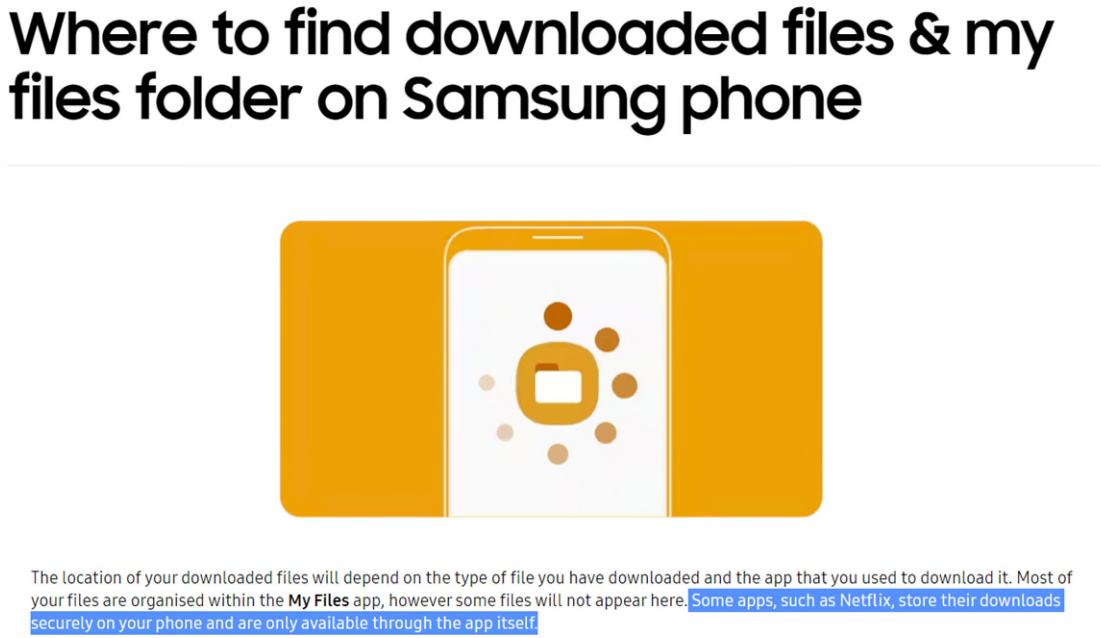
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	In addition, for each of the Accused Samsung '815 Products, the first video information being received includes second video information that is encrypted. *See, e.g.*, User Manuals and Technical Specifications for the Accused Samsung '815 Products (showing that the Accused Samsung '815 Products are smart phones with a decoder and other hardware and/or software that decode encrypted video content received from its video apps such as, for example, the pre-installed Netflix app). Upon information and belief, the Accused Samsung '815 Products are sold with Netflix application preinstalled. Accordingly, each of the Accused Samsung '815 Products infringe under the same theories based on the preinstalled Netflix application as shown herein with exemplary screenshot of the Netflix application being executed on Samsung S23 Ultra. As the streaming battles heat up, Netflix is hoping a new partnership with Samsung will help it fend off rivals. At Samsung's Unpacked event this week, the mobile device maker announced a deal with Netflix that will bring to its Galaxy smartphones special bonus content associated with several Netflix original shows. The partnership also allows Netflix to more deeply integrate its streaming service with Samsung devices. The latter part of the partnership involving device integration is fairly standard. In Netflix's case, Samsung will allow users to launch Netflix content by way of its voice assistant Bixby. Netflix will also deliver recommendations to Samsung users, and will be better integrated into specific Samsung mobile features, like search and its discovery platform, Samsung Daily. *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. Testing of the Accused Samsung '815 Products shows that they use their cellular and/or Wi-Fi interface to connect wirelessly to a network and receive video information from another information processing apparatus (*e.g.*, third party server). Specifically, the pictures of testing below demonstrate that the information processing apparatus, the Accused Samsung '815 Products, wirelessly receives a stream of digital data or signal from another information processing apparatus (e.g., a third-party server) and, store the video information on recording medium by

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	using "Download" option shown in the Netflix application after which the video information is stored in the Accused Samsung '815 Product's memory. **How to download titles to watch offline** To watch TV shows and movies offline at any time, download them from the Netflix app. Learn more about finding, downloading, and watching downloaded TV shows and movies below.

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Find and download a TV show or movie Tap on any TV show or movie and look for the **Downloads** icon ⬇ to see whether it can be downloaded, or filter by what is available for download. Not all titles are available for download. 1. Open the Netflix app and tap **Downloads** ⬇. ◦ On a device running Windows 10 or Windows 11, open the Netflix app and select **Menu** ☰. 2. Select **See What You Can Download**, **Find Something to Download**, **Find More to Download**, or **Available for Download**, depending on your device. 3. Select a TV show or movie. 4. From the description page, tap **Download** ⬇. ◦ For TV shows, **Download** ⬇ will appear next to each available episode. Android users will also see a **Download Season** option ⬇ to download all episodes in the selected season. ◦ To save on data usage, download over Wi-Fi. You can have up to 100 active downloads at a time per device on as many devices included in your membership plan. If you cancel your account, TV shows and movies you've downloaded will be deleted from your device. You will need to download them again if you rejoin in the future.

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Watch downloaded TV shows and movies To make sure you always have access to your downloads, we recommend remaining signed in to the Netflix app. 1. Sign in to the Netflix app and select **Downloads**. ◦ On a device running Windows 10 or Windows 11, open the Netflix app and select **Menu**, then **My Downloads**. 2. Find the title you want to watch and select **Play**. ◦ For TV shows, select a show, then tap **Play** next to the episode you want to watch. **NOTE:** Kids profiles may not be able to watch all downloaded TV shows and movies based on the maturity rating of the title. Downloaded TV shows and movies are available on the device that was used to download them and can be viewed from any profile in your account. Downloads will expire after a period of time, and some have a limit on how many times they can be downloaded per year. Once you're done watching, delete downloads from your device. https://help.netflix.com/en/node/54816

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	 https://www.samsung.com/uk/support/mobile-devices/where-can-i-find-downloaded-files-on-my-samsung-galaxy-smartphone/ For example, Accused Samsung '815 Products support receiving and playing Netflix video streams that are encrypted using various encryption methods, such as DRM (Digital Right Management) and/or TLS (Transport Layer Security).

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

***Abstract*—In our 2015 paper, "Optimizing TLS for High–Bandwidth Applications in FreeBSD", we demonstrated the cost of TLS encryption on high–bandwidth video serving on Netflix's OpenConnect Appliance (OCA [1]) and explored methods for reducing that cost via in–kernel encryption. The results showed that such a concept is feasible, but only a small performance gain was achieved. In this paper we describe the improvements made since then to reduce the cost of encryption. We also compare the performance of several different bulk encryption implementations.**

I. Introduction

The importance of Transport Layer Security [2] (TLS) continues to grow as businesses and their customers come to appreciate the value of communication privacy. Netflix announced in 2015 that it would start on the path to encrypting the video and audio playback sessions of its streaming service in an attempt to help users protect their viewing privacy [3]. Enabling this comes with a significant computational cost to the OpenConnect serving platform, so work continues in exploring and implementing new ways to optimize TLS bulk encryption and thus lower capital and operational costs.

An OCA is a FreeBSD-based appliance that serves movies and television programming to Netflix subscribers. Confidential customer data like payment information, account authentication, and search queries are exchanged via an encrypted TLS session between the client and the various application servers that make up the Netflix infrastructure. The audio and video objects are statically encrypted by Digital Rights Management (DRM) that is pre-encoded into the objects prior to them being distributed to the OCA network for serving.

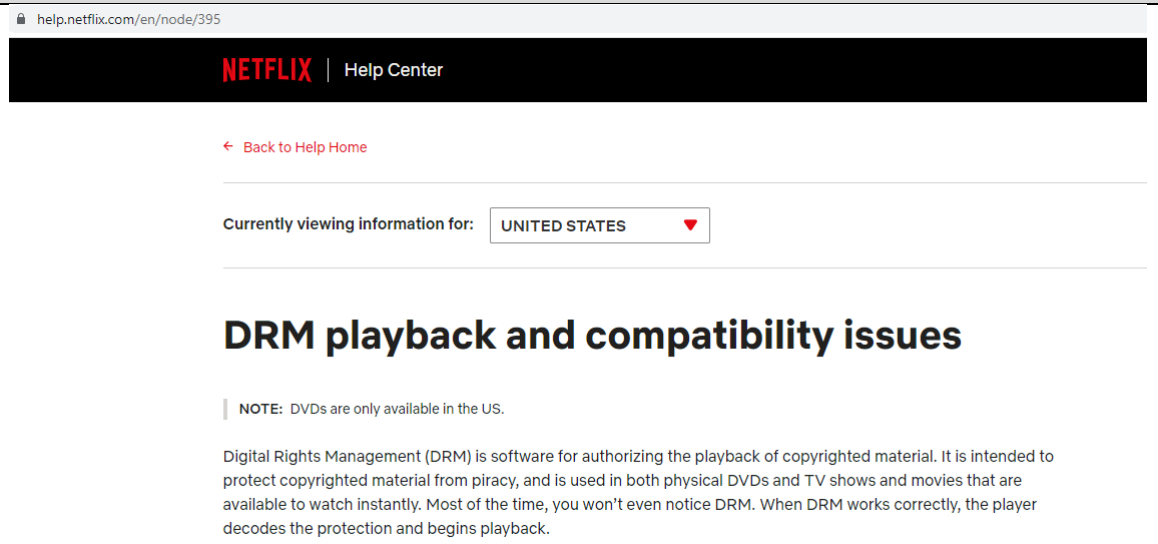
(Netflix, Improving High–Bandwidth TLS in the FreeBSD kernel, available at https://openconnect.netflix.com/publications/asiabsd_tls_improved.pdf (2015)

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Netflix Adopts Efficient HTTPS Encryption For Its Video Streams By Lucian Armasu published August 08, 2016 Comments (9)  Netflix announced that it has implemented efficient HTTPS encryption for its video streams. To this point, the company has used only HTTPS to protect user information. Netflix has been reluctant to adopt HTTPS for its video streams so far because delivering video is already a bandwidth-heavy task, and adding encryption on top of that risked adding too much overhead. To solve this problem, the company searched for the ideal cipher and its fastest implementation.

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Cipher Evaluation Netflix eventually chose the the Advanced Encryption Standard (AES) cipher in Galois/Counter Mode (GCM), which is available only in TLS 1.2 and later. The company chose GCM over the Cipher Block Chaining (CBC) method because it can encrypt and authenticate the message simultaneously, whereas AES-CBC requires an additional pass over the data to generate keyed-hash message authentication code (HMAC). The latter can still be used as fallback for older browsers and client software that don't support TLS 1.2. However, it shouldn't be too long until virtually all Netflix users can play video streams over TLS 1.2 or later. (See https://www.tomshardware.com/news/netflix-efficient-https-video-streams,32420.html (2016))

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	How Netflix brings safer and faster streaming experiences to the living room on crowded networks using TLS 1.3 By Sekwon Choi At Netflix, we are obsessed with the best streaming experiences. We want playback to start instantly and to never stop unexpectedly in any network environment. We are also committed to protecting users' privacy and service security without sacrificing any part of the playback experience. To achieve that, we are efficiently using ABR (adaptive bitrate streaming) for a better playback experience, DRM (Digital Right Management) to protect our service and TLS (Transport Layer Security) to protect customer privacy and to create a safer streaming experience. Netflix on consumer electronics devices such as TVs, set-top boxes and streaming sticks was until recently using TLS 1.2 for streaming traffic. Now we support TLS 1.3 for safer and faster experiences. (https://netflixtechblog.com/how-netflix-brings-safer-and-faster-streaming-experience-to-the-living-room-on-crowded-networks-78b8de7f758c (2020))

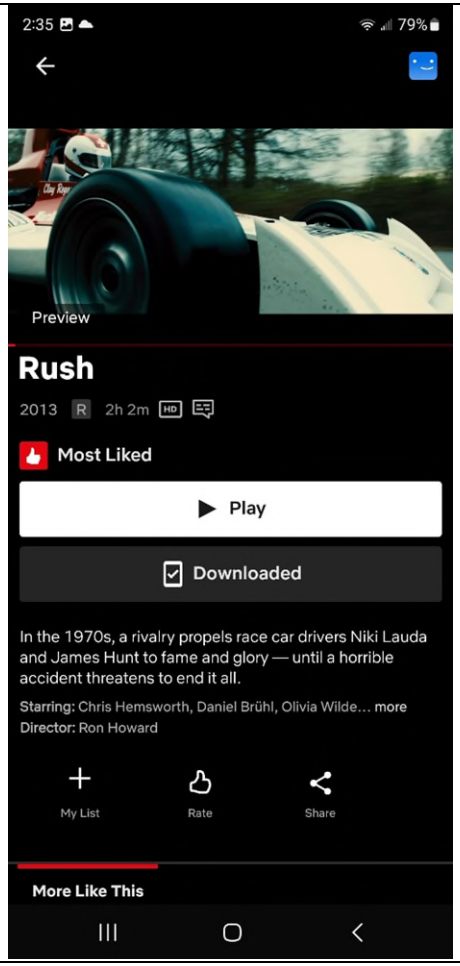
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement



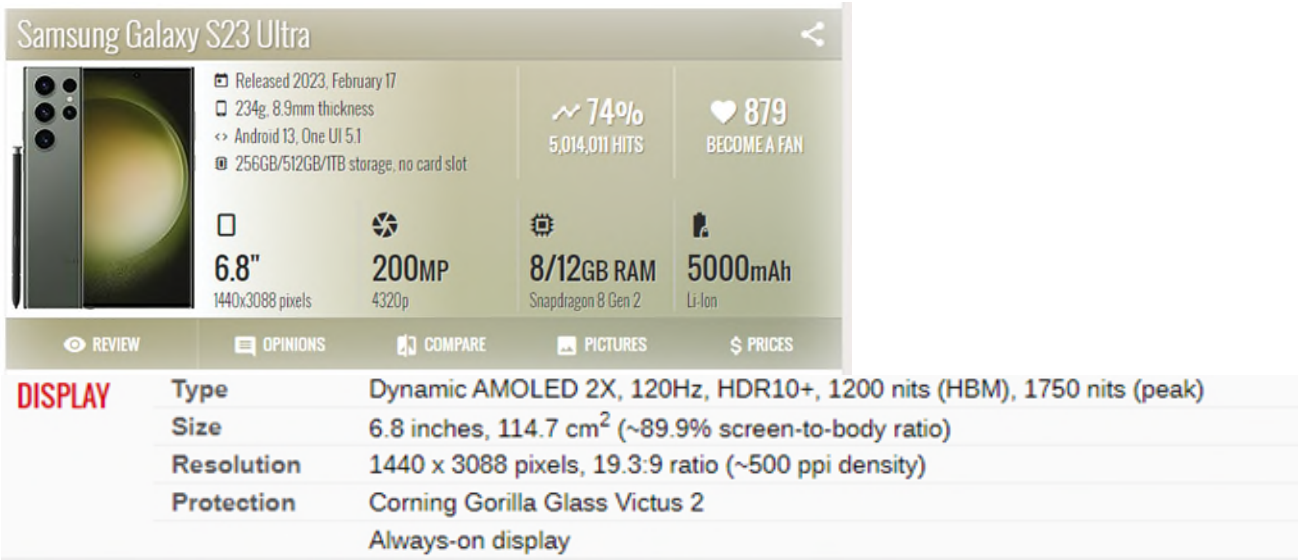
https://help.netflix.com/en/node/395

Actual testing of the Accused Samsung '815 Products show that they support playing encrypted video (second video information that is encrypted) of a TV show or movie (first video information being received) using the Netflix application.

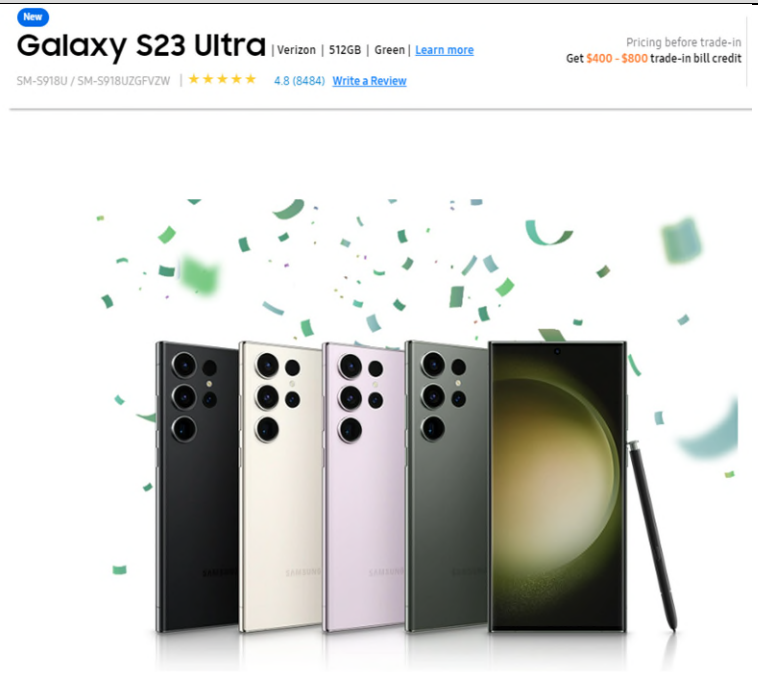
Samsung Galaxy S23 Ultra:

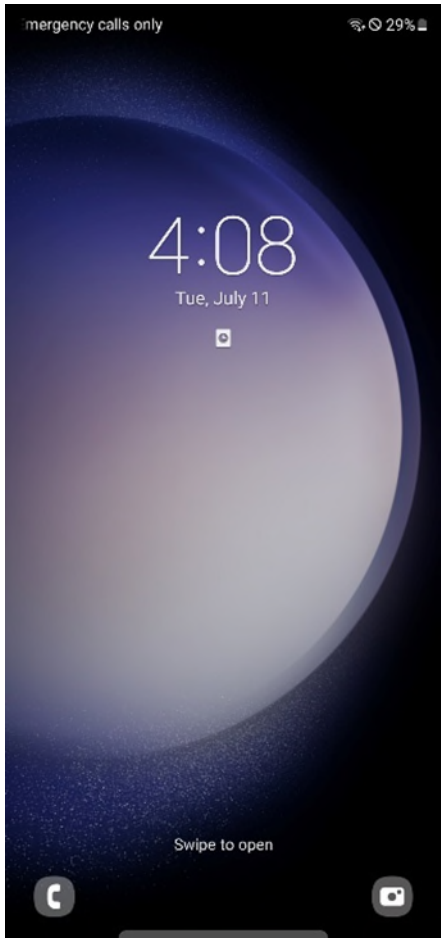
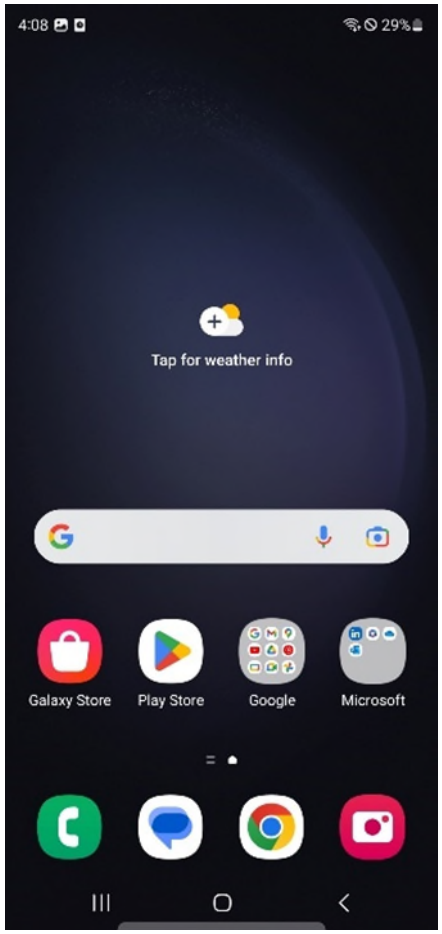

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79%
Preview
Rush
2013 R 2h 2m HD
Most Liked
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In the 1970s, a rivalry propels race car drivers Niki Lauda and James Hunt to fame and glory — until a horrible accident threatens to end it all.
Starring: Chris Hemsworth, Daniel Brühl, Olivia Wilde... more
Director: Ron Howard
My List
Rate
Share
More Like This

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Netflix app selects playing of the encrypted video information *See also* Appendix 8 showing that the remaining Accused Samsung '815 Products include a similar network interface for wireless communication (*e.g.*, WiFi or cellular chipset). **Doctrine of Equivalents:** This limitation is also met under the doctrine of equivalents because the "TV" or "Movie" video wirelessly received from a Netflix or a third party content sever matches the function, way, and result of the first video information, for example genre of the video content, that includes encrypted second video information, for example the tv or movie stream encrypted using TLS, DRM, or similar encryption technologies. This specific received video data from Netflix or third party servers by the Accused Samsung '815 Products achieve substantially the same result as a network interface receiving first video information wirelessly from a device external to the information processing apparatus and the first video information being received including second video information that is encrypted.

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
[21.b] a display displaying a first user interface for a user to select a user profile from among a plurality of user profiles including a first user profile associated with a first character and a second user profile associated with a second character,	Each of the Accused Samsung '815 Products include a display that displays a first user interface for a user to select a user profile from among a plurality of user profiles including a first user profile associated with a first character and a second user profile associated with a second character. *See, e.g.*, User Manuals and Technical Specifications for the Accused Samsung '815 Products (showing that the Accused Samsung '815 Products are smart phones with a display that displays a user interface for user profile selection from user video apps, such as Netflix). *See*, for example: **Galaxy S23 Ultra:** 

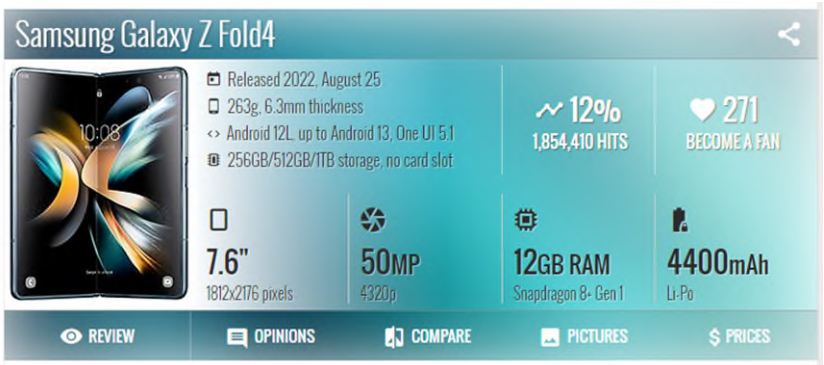
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	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

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	  Screenshots of home screen.

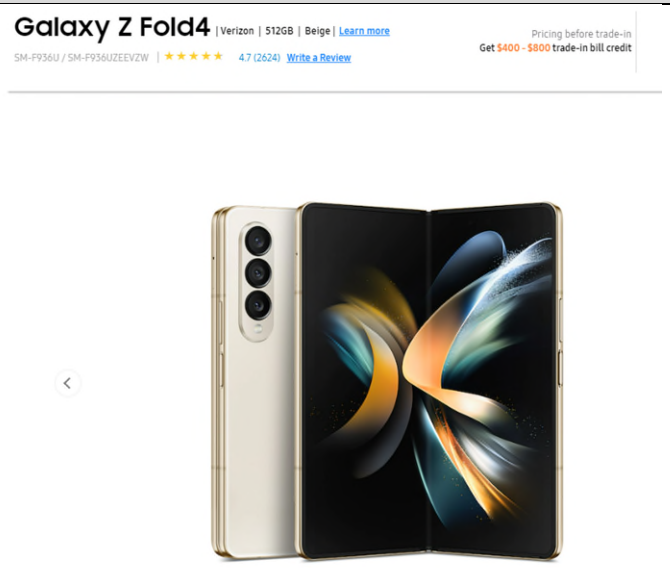
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Galaxy Z Fold4:

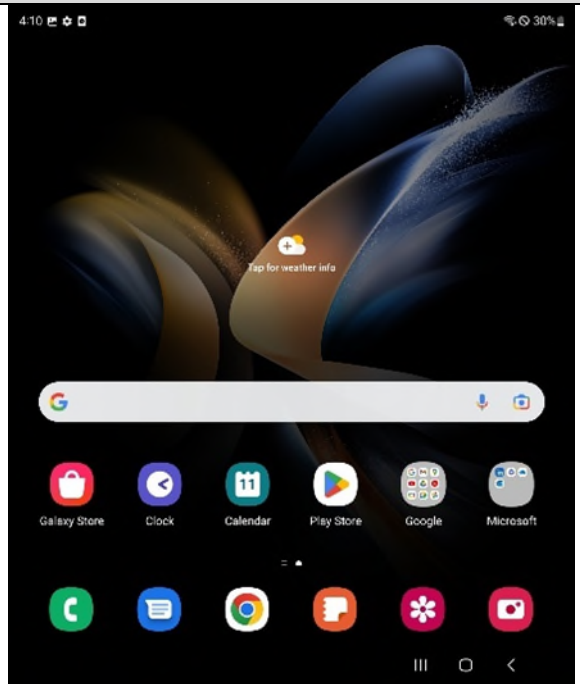


DISPLAY	Type	Foldable Dynamic AMOLED 2X, 120Hz, HDR10+, 1200 nits (peak)
	Size	7.6 inches, 183.2 cm^2 (~90.9% screen-to-body ratio)
	Resolution	1812 x 2176 pixels (~373 ppi density)
		Cover display:
		Dynamic AMOLED 2X, 120Hz, Corning Gorilla Glass Victus+
		6.2 inches, 904 x 2316 pixels, 23.1:9 ratio

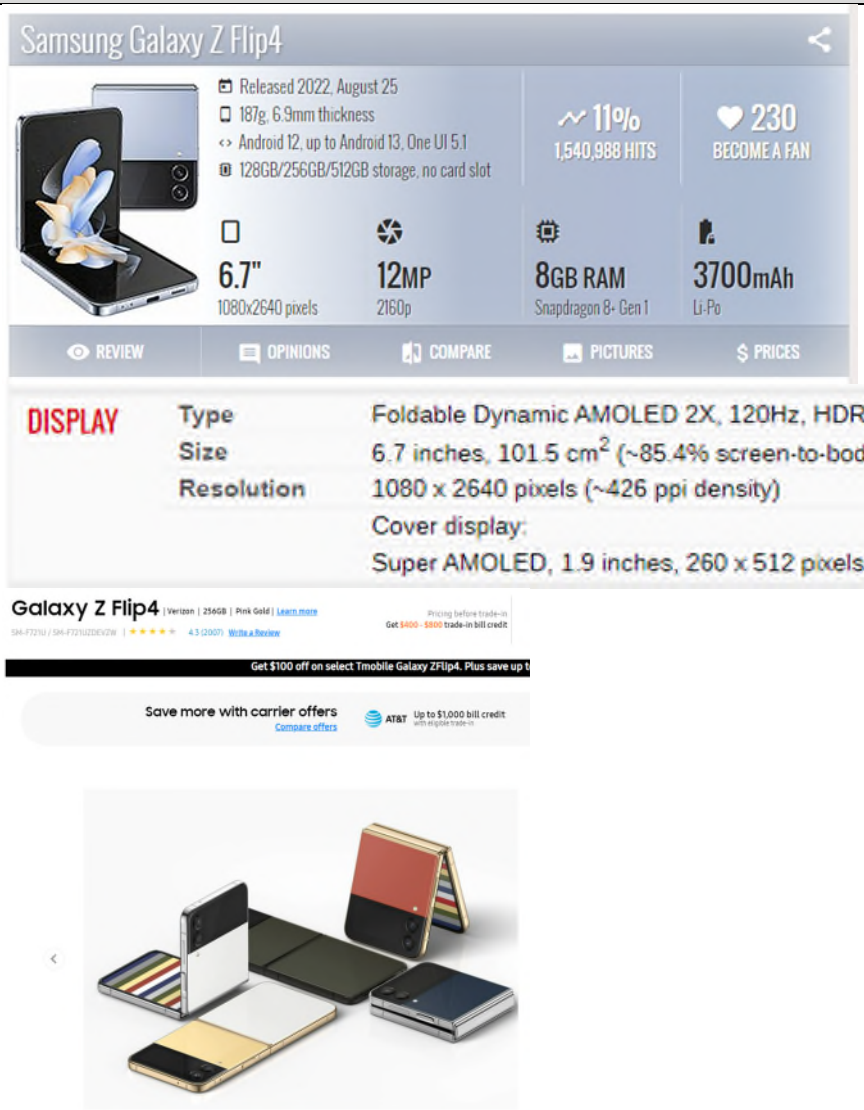
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U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Galaxy Z Fold4 technical specifications; https://www.samsung.com/us/smartphones/galaxy-z-fold4/buy/galaxy-z-fold4-512gb-att-sm-f936uzeeatt/; https://www.gsmarena.com/samsung_galaxy_z_fold4-11737.php :

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

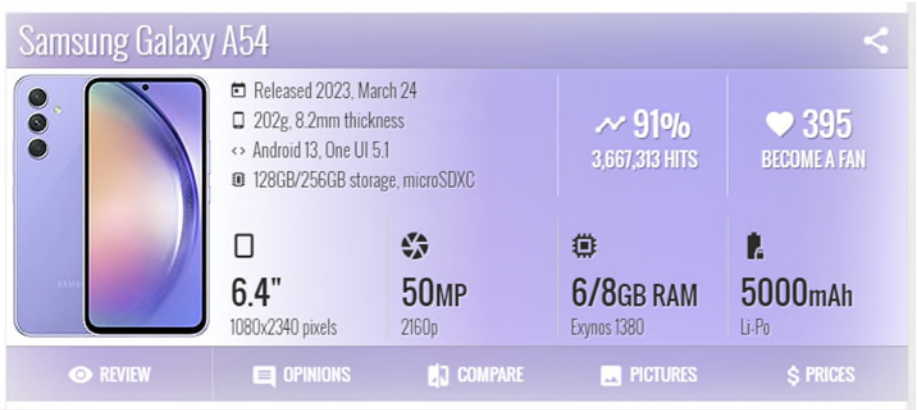
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	  Screenshots of home screen. **Galaxy Z Flip4:**

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

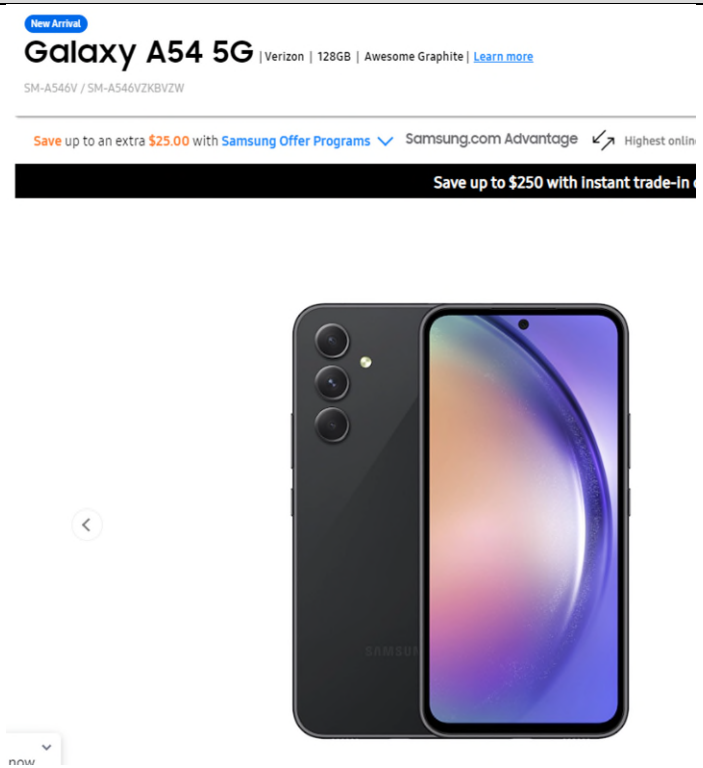
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	Galaxy Z Flip4 technical specifications; https://www.samsung.com/us/smartphones/galaxy-z-flip4/buy/galaxy-z-flip4-256gb-t-mobile-sm-f721uzdexau/; https://www.gsmarena.com/samsung_galaxy_z_flip4-11538.php  Screenshots of home screen.

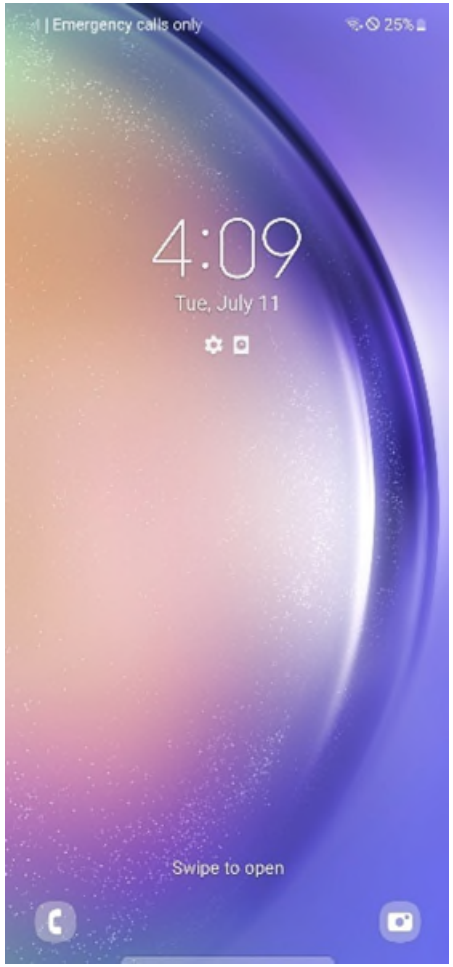
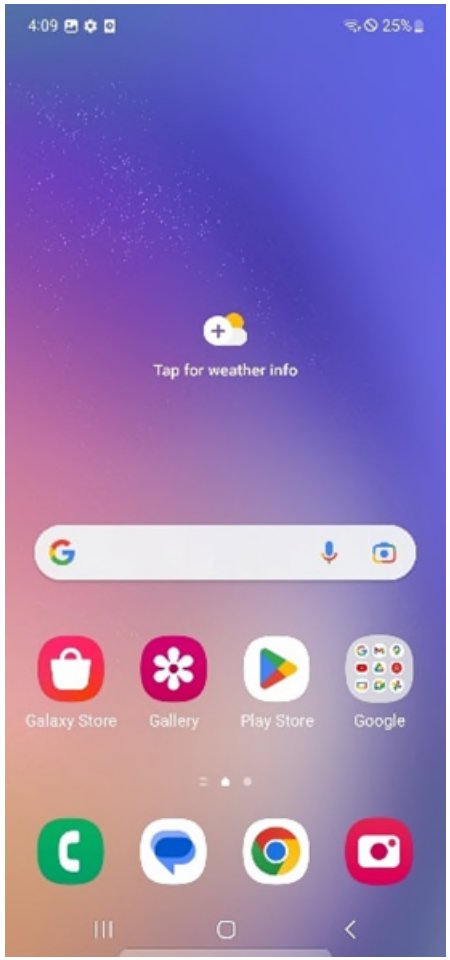
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Galaxy A54:



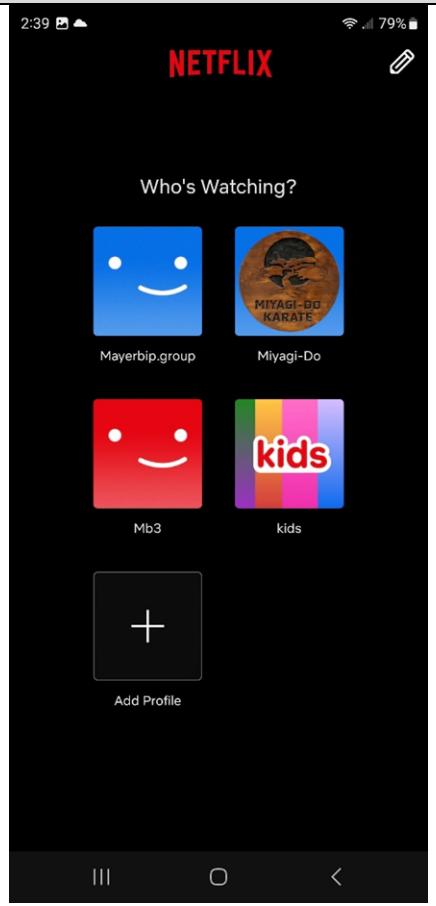
DISPLAY		
	Type	Foldable Dynamic AMOLED 2X, 120Hz, HDR10+, 1200 nits (peak)
	Size	7.6 inches, 183.2 cm^2 (~90.9% screen-to-body ratio)
	Resolution	1812 x 2176 pixels (~373 ppi density)
		Cover display:
		Dynamic AMOLED 2X, 120Hz, Corning Gorilla Glass Victus+
		6.2 inches, 904 x 2316 pixels, 23.1:9 ratio

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

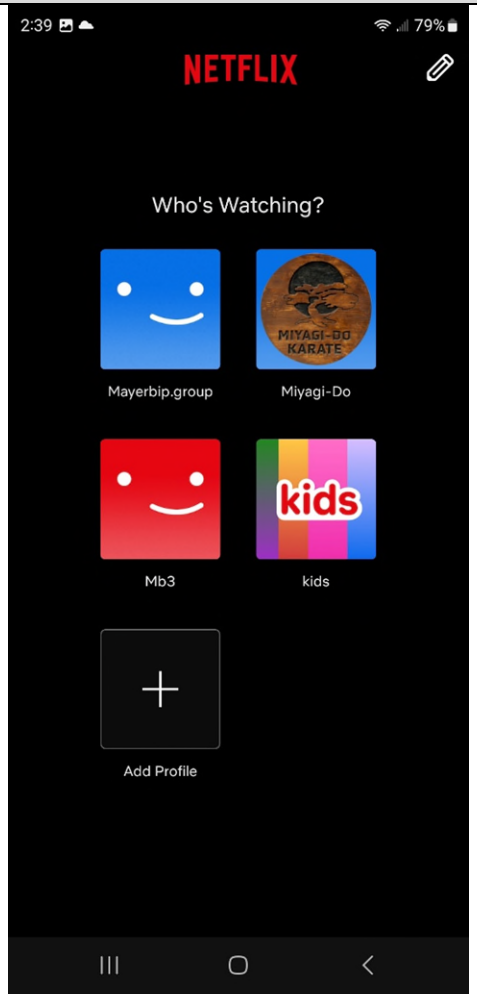
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Galaxy A54 5G technical specifications; https://www.samsung.com/us/mobile/phones/galaxy-a54/buy/; https://www.gsmarena.com/samsung_galaxy_a54-12070.php

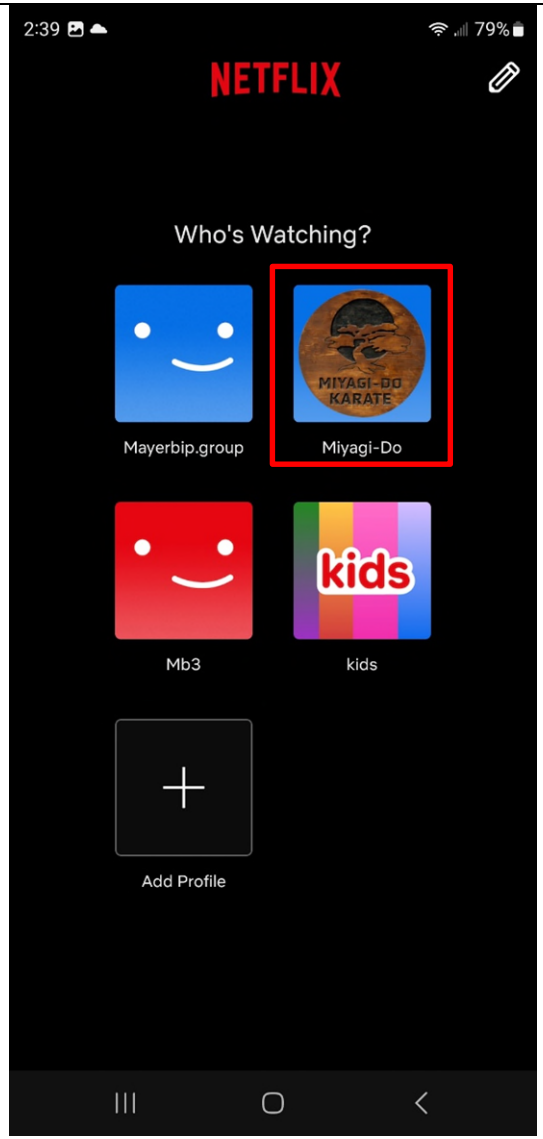
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	  Screenshots of home screen. *See also* Appendix 8 showing that the remaining Accused Samsung '815 Products include a display.

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	For example, testing of the Accused Samsung '815 Products pre-installed Netflix app confirms that a first user interface for a user to select a user profile from among a plurality of user profiles is displayed (i.e. the "Who's watching Netflix" interface) including a first user profile (e.g. the "Miyagi-Do" user) associated with a first character (i.e. "Miyagi-Do" which includes at least one character) and a second user profile (e.g. the "kids" user) associated with a second character ("kids" which includes at least one character). **Galaxy S23 Ultra**:

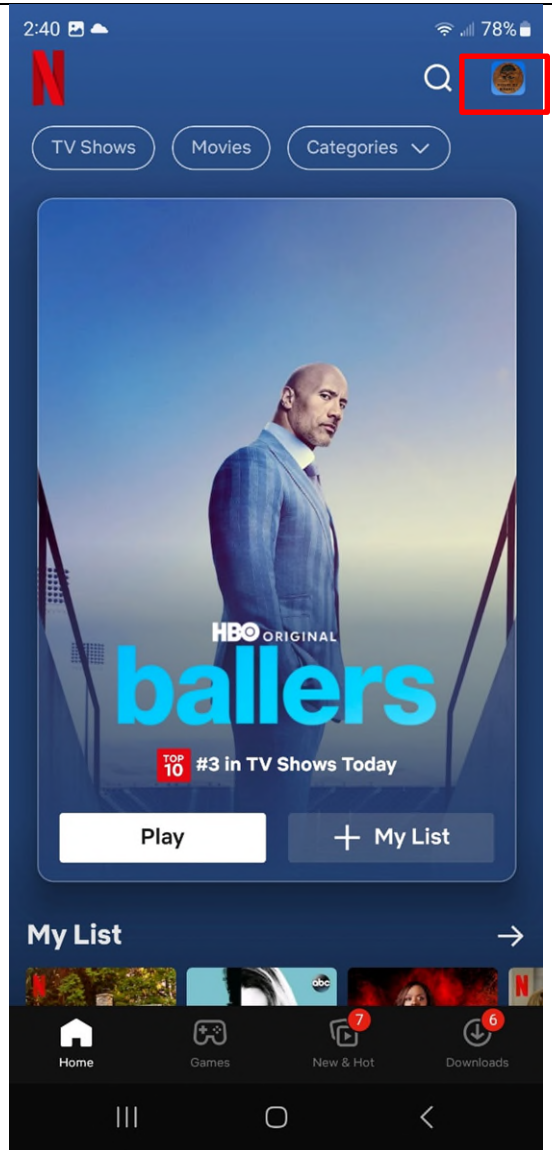
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 The remaining Accused Samsung '815 Products operate in a similar manner based on the preinstalled Netflix application. *See* https://techcrunch.com/2020/02/13/netflix-fends-off-new-streaming-rivals-by-way-of-samsung-partnership/#:~:text=At%20Samsung's%20Unpacked%20event%20this,streaming%20service%20with%20Samsung%20devices; *see also* https://help.netflix.com/en/node/54816.

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Doctrine of Equivalents: To the extent Samsung argues that this limitation is not literally met in any Accused Samsung '815 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 pre-installed Netflix application in Accused Samsung '815 Products do not display a first user interface for a user to select a user profile from among a plurality of user profiles including a first user profile associated with a first character and a second user profile associated with a second character, testing of the Accused Samsung '815 Products' pre-installed Netflix app confirms that a first user interface for a user to select a user profile from among a plurality of user profiles is displayed (i.e. the "Who's watching Netflix" interface) including a first user profile (e.g. the "Miyagi-Do" user) associated with a first character (i.e. "Miyagi-Do" which includes at least one character) and a second user profile (e.g. the "kids" user) associated with a second character ("kids" which includes at least one character).Using this pre-installed Netflix app, hardware, or combination of the two, these products perform substantially the same function in substantially the same way as claimed. The performance of this function achieves substantially the same result.
[21.c] the plurality of user profiles being associated with video information and the first user interface including an option for a user to select the first user profile from the plurality of user profiles by selecting the first character;	For each of the Accused Samsung '815 Product, the plurality of user profiles is associated with video information and the first user interface including an option for a user to select the first user profile from the plurality of user profiles by selecting the first character. *See, e.g.,* User Manuals and Technical Specifications for the Accused Samsung '815 Products (showing that the Accused Samsung '815 Products are smart phones with pre-installed video apps containing user interfaces that operate in this manner, such as Netflix). For example, testing of the Accused Samsung '815 Products pre-installed Netflix app confirms that when a user selects a first user profile (e.g. the "Miyagi-Do" user profile) from the plurality of user profiles on the first user interface (i.e. the "Who's watching Netflix" interface) by selecting a first character ("Miyagi-Do" which includes at least one character), video information associated with that profile is displayed. Galaxy S23 Ultra:

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Netflix showing the first user interface (i.e. the "Who's watching Netflix" interface)



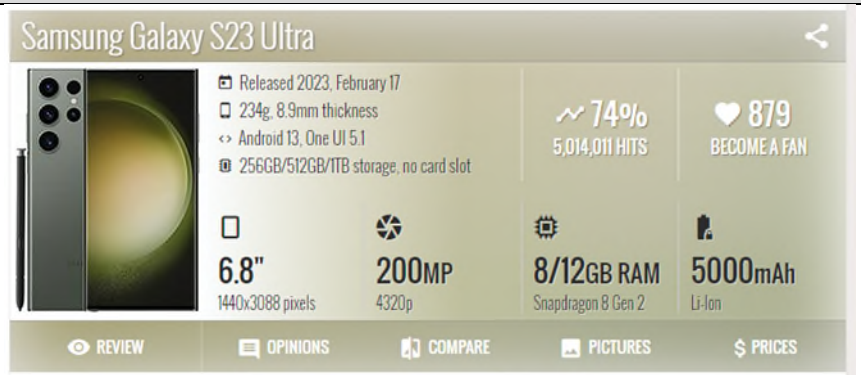
User selects a first user profile (e.g. the "Miyagi-Do" user profile) from the plurality of user profiles



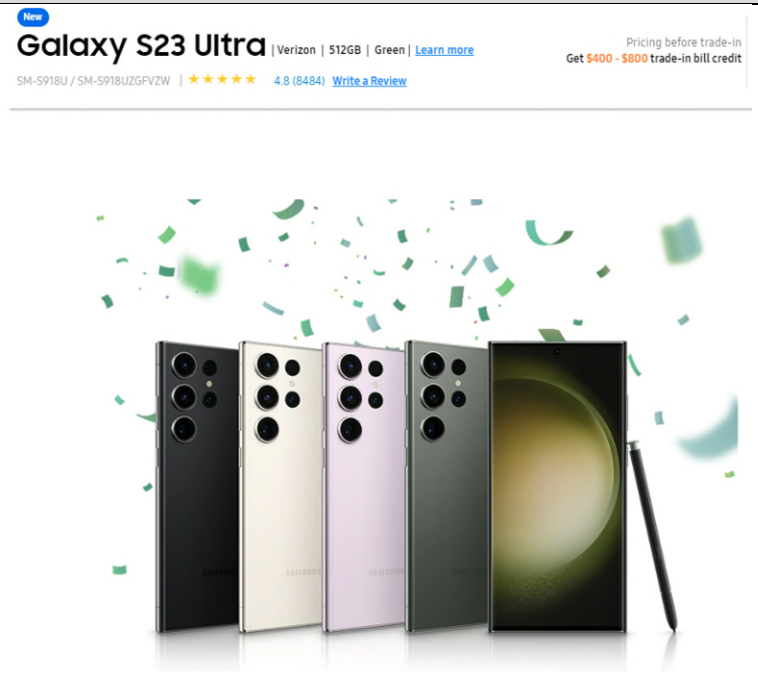
Video information associated with the Miyagi-Do user profile is displayed.

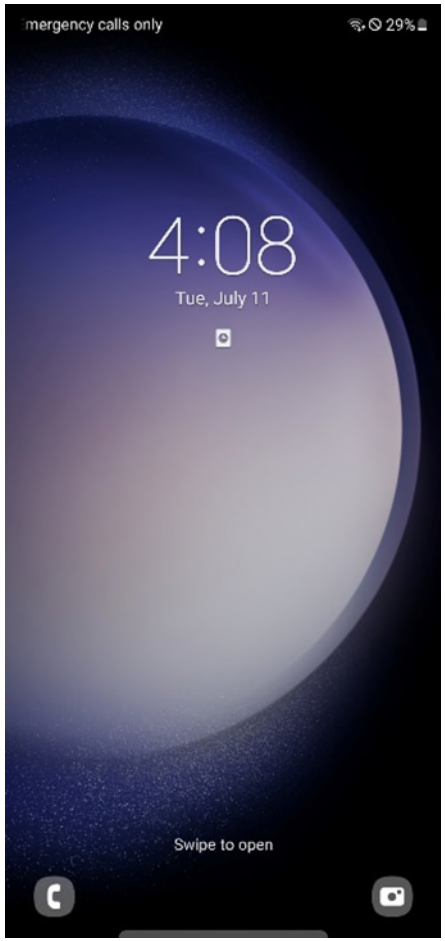
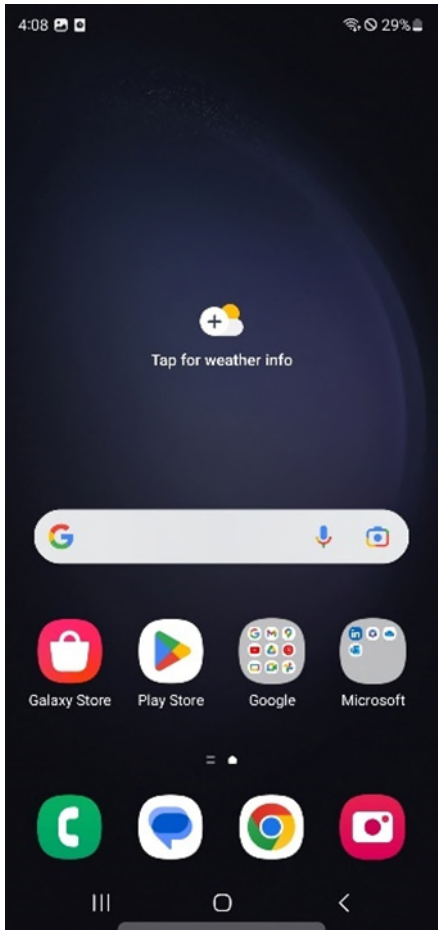
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	The remaining Accused Samsung '815 Products operate in a similar manner based on the preinstalled Netflix application. *See* https://techcrunch.com/2020/02/13/netflix-fends-off-new-streaming-rivals-by-way-of-samsung-partnership/#:~:text=At%20Samsung's%20Unpacked%20event%20this,streaming%20service%20with%20Samsung%20devices; *see also* https://help.netflix.com/en/node/54816. **Doctrine of Equivalents:** To the extent Samsung argues that this limitation is not literally met in any Accused Samsung '815 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 pre-installed Netflix application in Accused Samsung '815 Products do not have a first user interface including an option for a user to select the first user profile from the plurality of user profiles by selecting the first character, testing of the Accused Samsung '815 Products' pre-installed Netflix app confirms that a when a user selects a first user profile (e.g. the "Miyagi-Do" user profile) from the plurality of user profiles on the first user interface (i.e. the "Who's watching Netflix" interface) by selecting a first character ("Miyagi-Do" which includes at least one character).Using this pre-installed Netflix app, hardware, or combination of the two, these products perform substantially the same function in substantially the same way as claimed. The performance of this function achieves substantially the same result.
[21.d] an input interface receiving a selection of the first user profile at a first time and a selection of the second character at a second time,	Each of the Accused Samsung '815 Product includes an input interface that receives a selection of the first user profile at a first time and a selection of the second character at a second time. *See, e.g.*, User Manuals and Technical Specifications for the Accused Samsung '815 Products (showing that the Accused Samsung '815 Products are smart phones with a display that include an input interface (e.g., touchscreen) for user profile selection from user video apps, such as Netflix. **Galaxy S23 Ultra:**

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 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

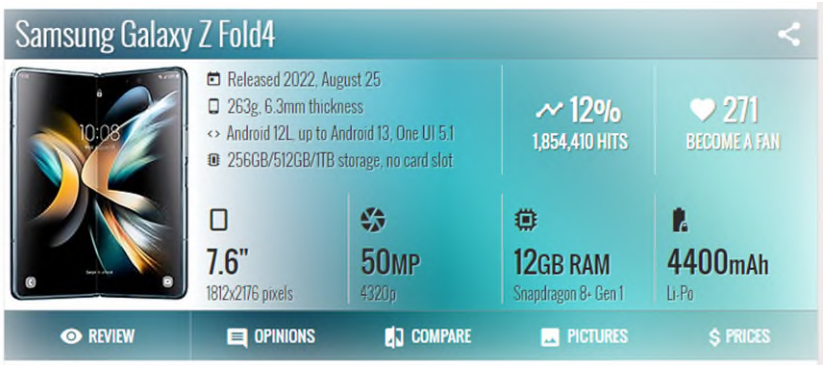
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	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

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	  Screenshots showing input interface.

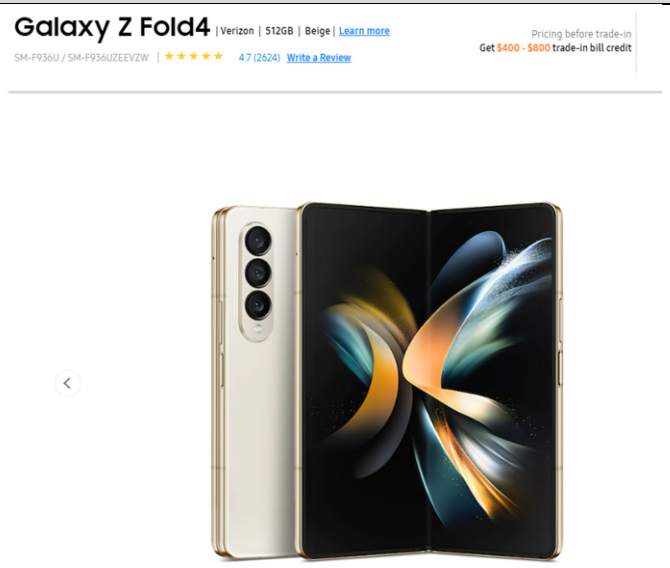
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

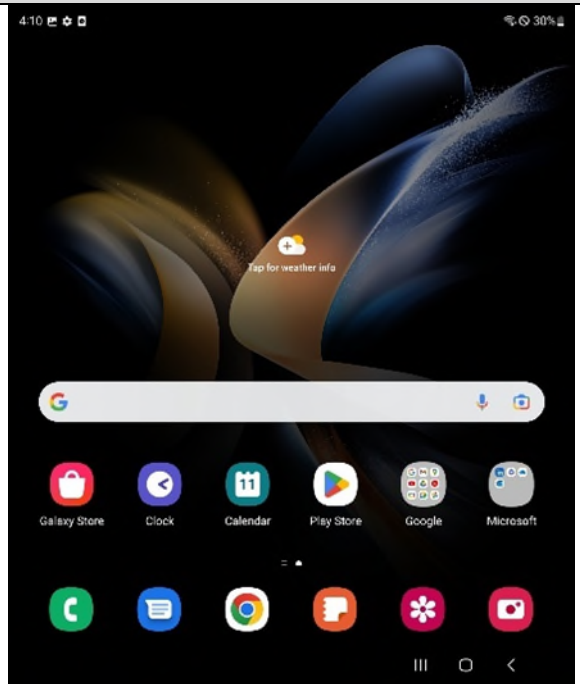
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Galaxy Z Fold4:



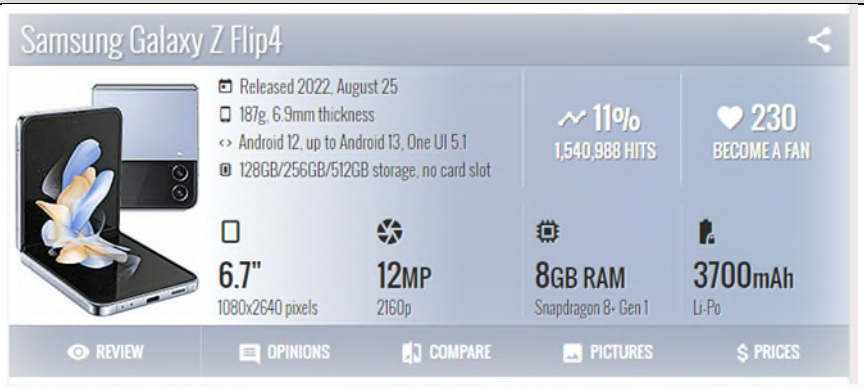
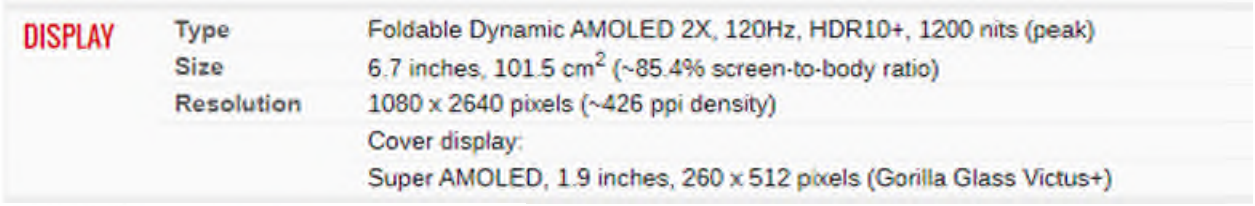
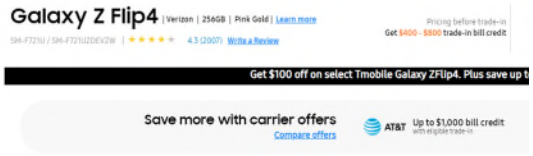
DISPLAY	Type	Foldable Dynamic AMOLED 2X, 120Hz, HDR10+, 1200 nits (peak)
	Size	7.6 inches, 183.2 cm^2 (~90.9% screen-to-body ratio)
	Resolution	1812 x 2176 pixels (~373 ppi density)
		Cover display:
		Dynamic AMOLED 2X, 120Hz, Corning Gorilla Glass Victus+
		6.2 inches, 904 x 2316 pixels, 23.1:9 ratio

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	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 :

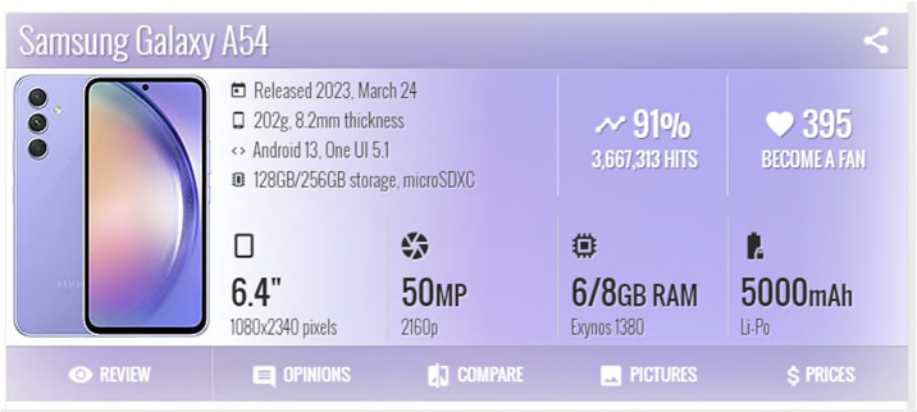
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	  Screenshots showing input interface. **Galaxy Z Flip4:**

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	   

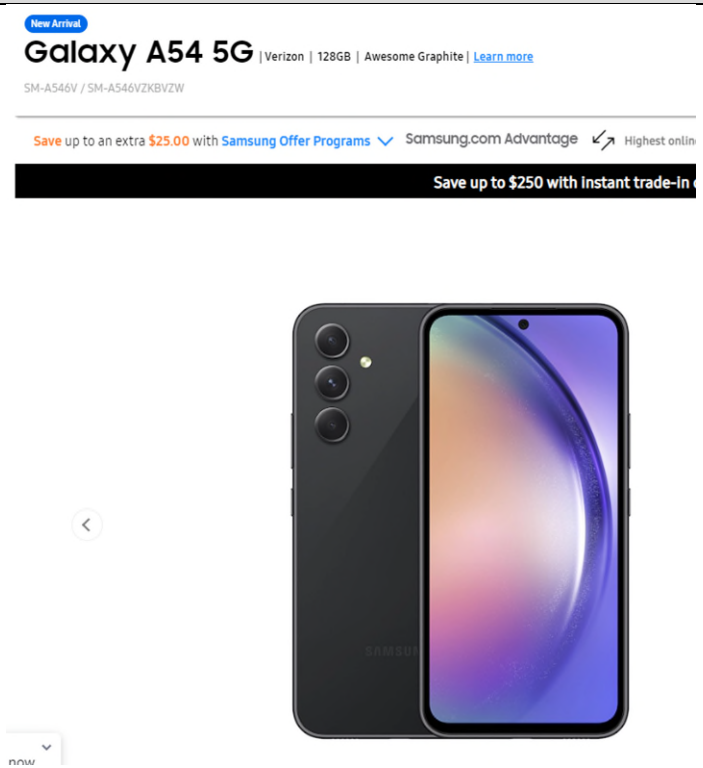
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	Galaxy Z Flip4 technical specifications; https://www.samsung.com/us/smartphones/galaxy-z-flip4/buy/galaxy-z-flip4-256gb-t-mobile-sm-f721uzdexau/; https://www.gsmarena.com/samsung_galaxy_z_flip4-11538.php  Screenshots showing input interface.

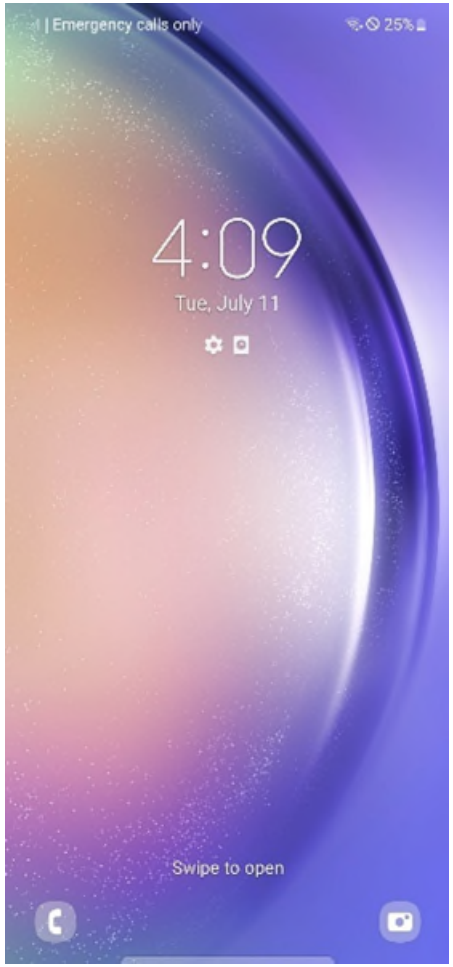
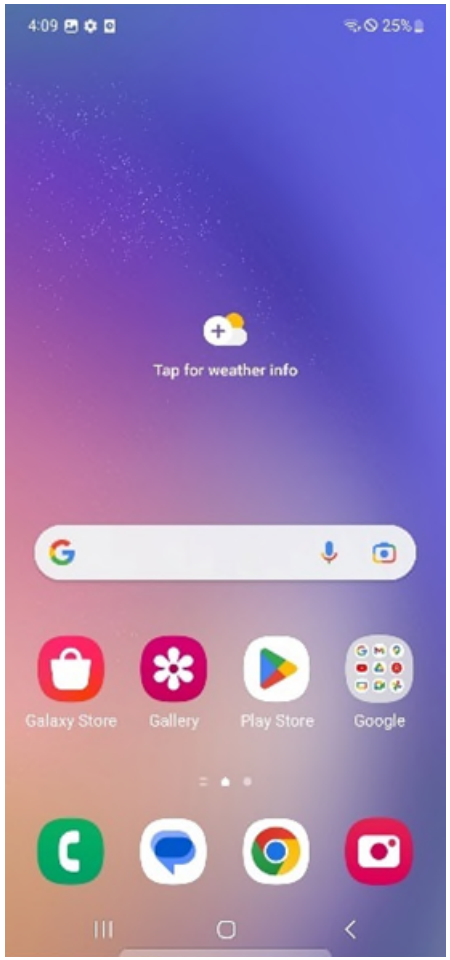
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Galaxy A54:



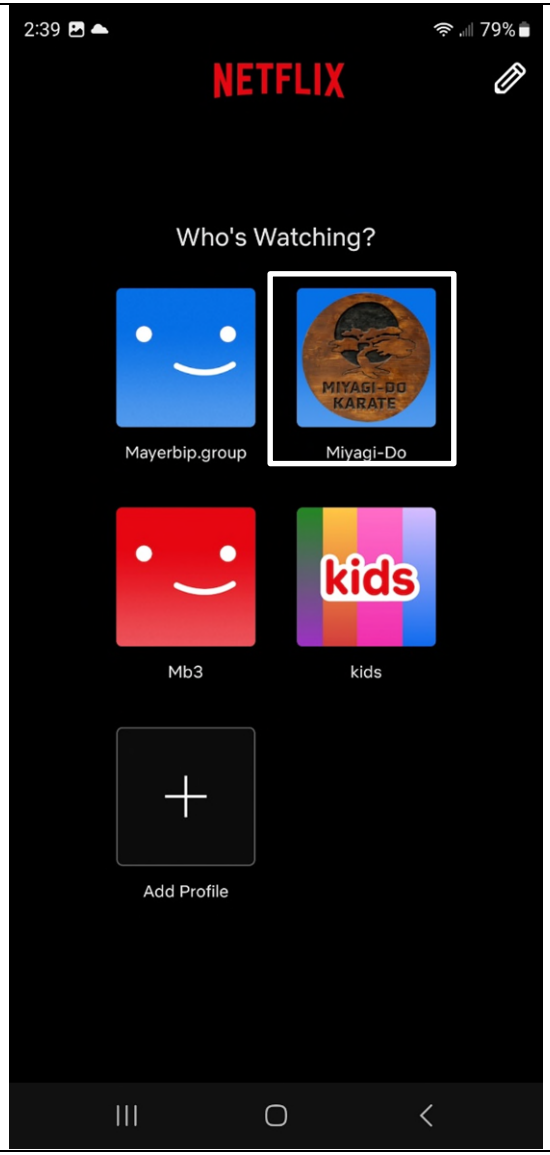
DISPLAY		
	Type	Foldable Dynamic AMOLED 2X, 120Hz, HDR10+, 1200 nits (peak)
	Size	7.6 inches, 183.2 cm^2 (~90.9% screen-to-body ratio)
	Resolution	1812 x 2176 pixels (~373 ppi density)
		Cover display:
		Dynamic AMOLED 2X, 120Hz, Corning Gorilla Glass Victus+
		6.2 inches, 904 x 2316 pixels, 23.1:9 ratio

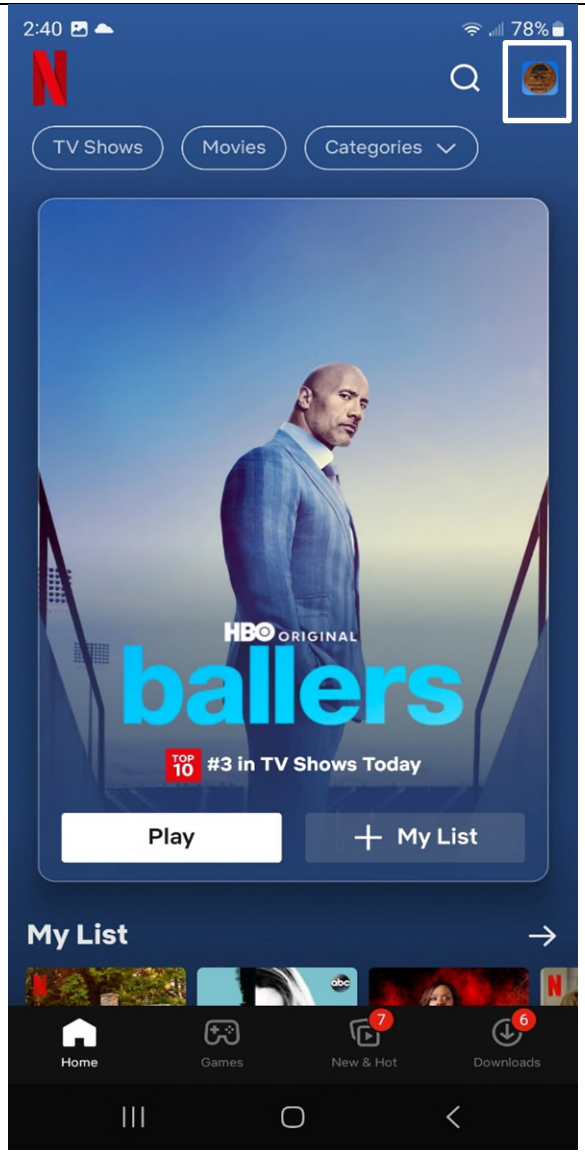
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	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

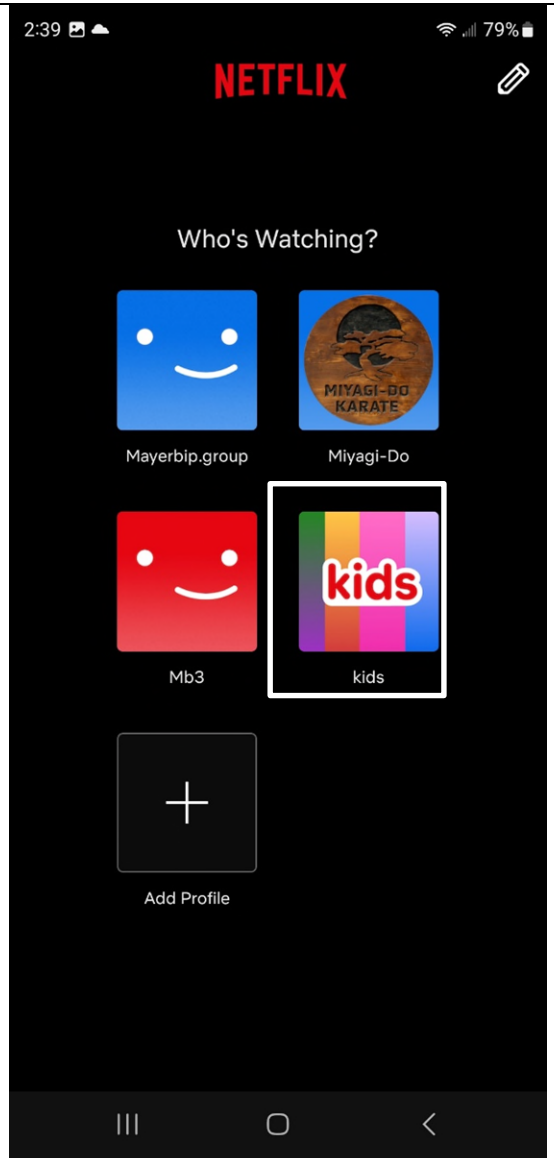
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	  Screenshots showing input interface.

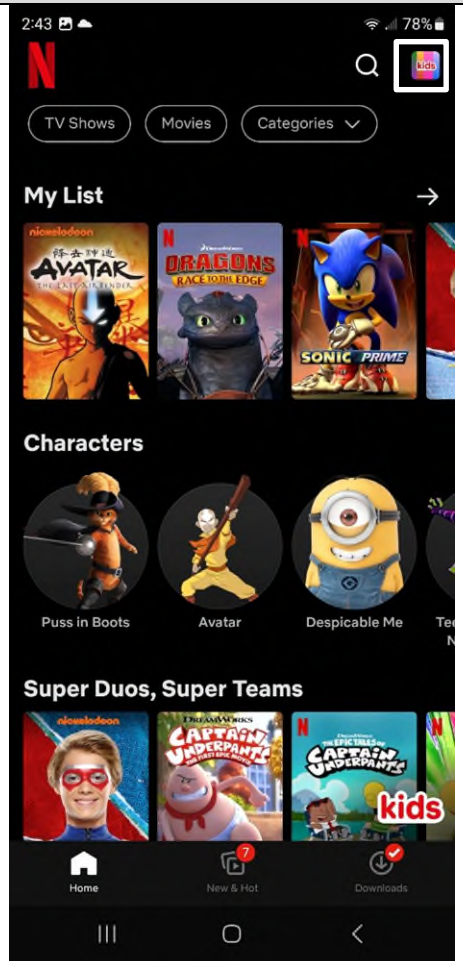
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	For example, testing of the Accused Samsung '815 Products pre-installed Netflix app confirms that the phone receives a selection of the first user profile (e.g. the "Miyagi-Do" user profile) and a selection of the second character at a second time (e.g. the "Kids" user profile) from the user via touch screen an input interface. Galaxy S23 Ultra:


2:39
79%
NETFLIX
Who's Watching?
Mayerbip.group
MIYAGI-DO KARATE
Miyagi-Do
Mb3
kids
kids
Add Profile



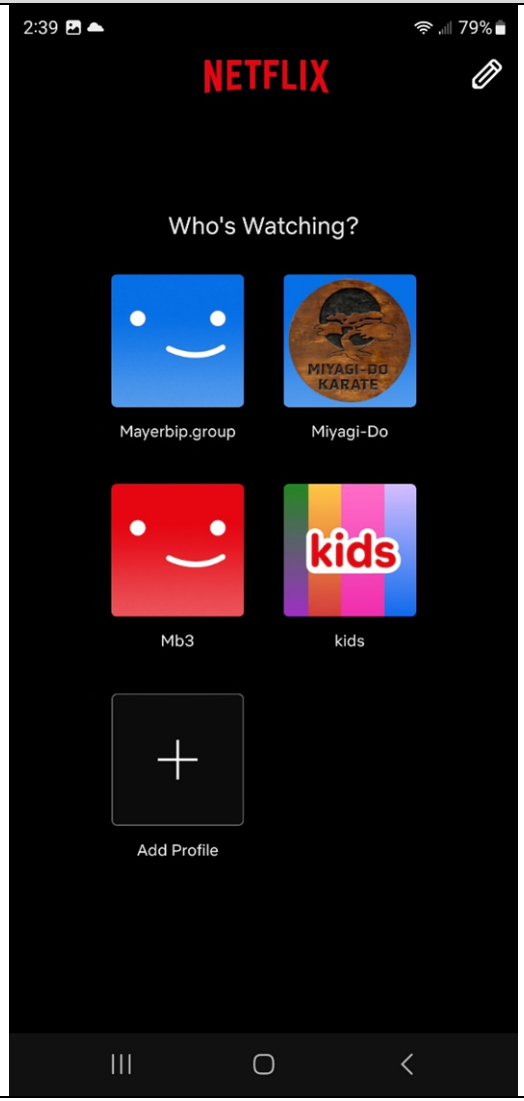
Showing the "Miyagi-Do" user profile being selected and video information shown for the Miyagi-Do user.

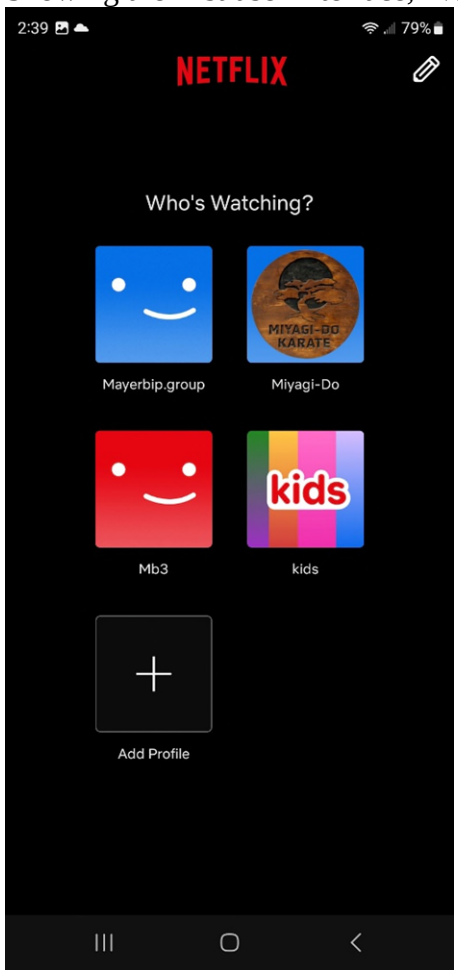

2:39
79%
NETFLIX
Who's Watching?
Mayerbip.group
Miyagi-Do
MIYAGI-DO KARATE
Mb3
kids
kids
Add Profile

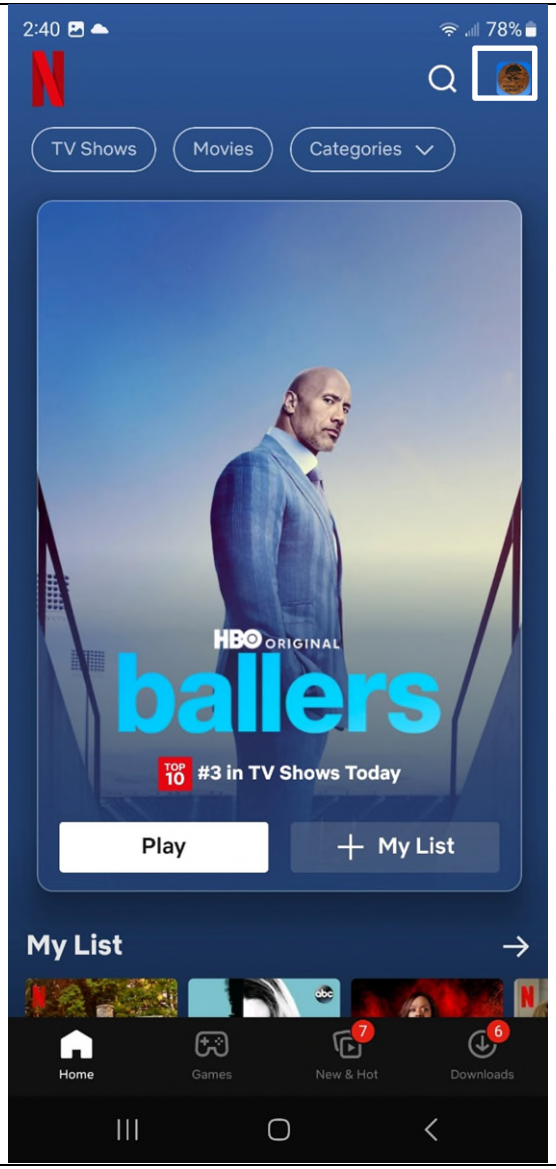
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Showing the "Kids"character being selected and video information shown for the kids user. *See also* Appendix 8 showing that the remaining Accused Samsung '815 Products include a display with an input interface. Further, the remaining Accused Samsung '815 Products operate in a similar manner based on

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	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. **Doctrine of Equivalents:** To the extent Samsung argues that this limitation is not literally met in any Accused Samsung '815 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 pre-installed Netflix application in Accused Samsung '815 Products do not have an input interface receiving a selection of the first user profile at a first time and a selection of the second character at a second time, testing of the Accused Samsung '815 Products' pre-installed Netflix app confirms that the phone receives a selection of the first user profile (e.g. the "Miyagi-Do" user profile) and a selection of the second character at a second time (e.g. the "Kids" user profile) from the user via touch screen an input interface. Using this pre-installed Netflix app, hardware, or combination of the two, these products perform substantially the same function in substantially the same way as claimed. The performance of this function achieves substantially the same result.
[21.e] wherein, in response to the selection of the first user profile, the display displays a second user interface for a user to select desired video information to be reproduced from among the	Each of the Accused Samsung '815 Product display, in response to the selection of the first user profile, the display displays a second user interface for a user to select desired video information to be reproduced from among the first video information. *See, e.g.,* User Manuals and Technical Specifications for the Accused Samsung '815 Products (showing that the Accused Samsung '815 Products are smart phones with pre-installed video apps containing user interfaces that operate in this manner, such as Netflix). For example, testing of the Accused Samsung '815 Products pre-installed Netflix app confirms that when a user selects a first user profile (e.g. the "Miyagi-Do" user profile) from the plurality of user profiles on the first user interface (i.e. the "Who's watching Netflix" interface) by selecting a first character (i.e. "Miyagi-Do" which includes at least one character), a second user interface is displayed (e.g. the user Home user interface) for the user to select desired video information to be reproduced from among the first video information (e.g. the videos available to the user on their Home screen).

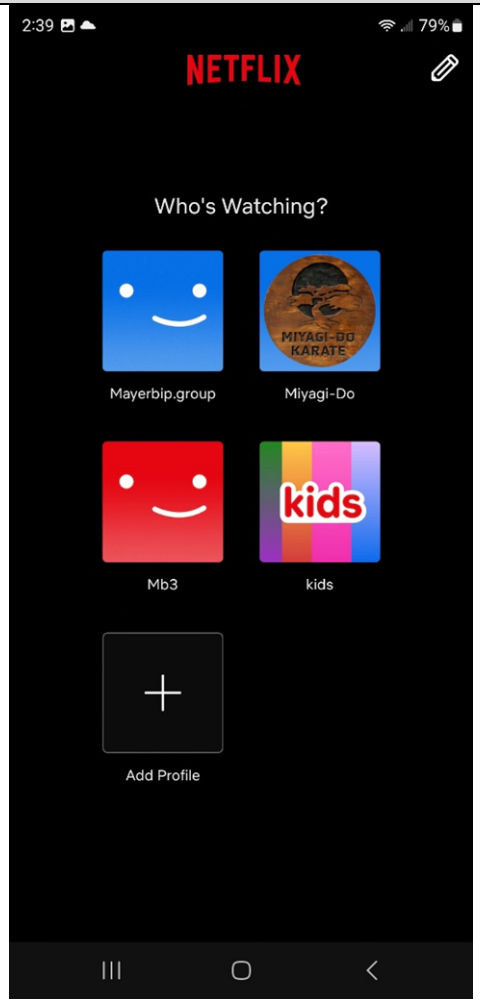
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
first video information,	Galaxy S23 Ultra:

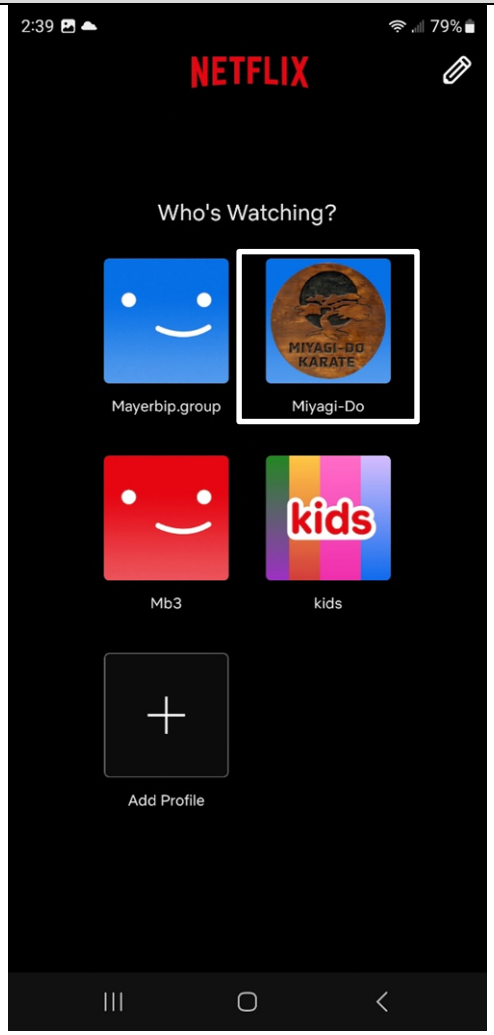
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

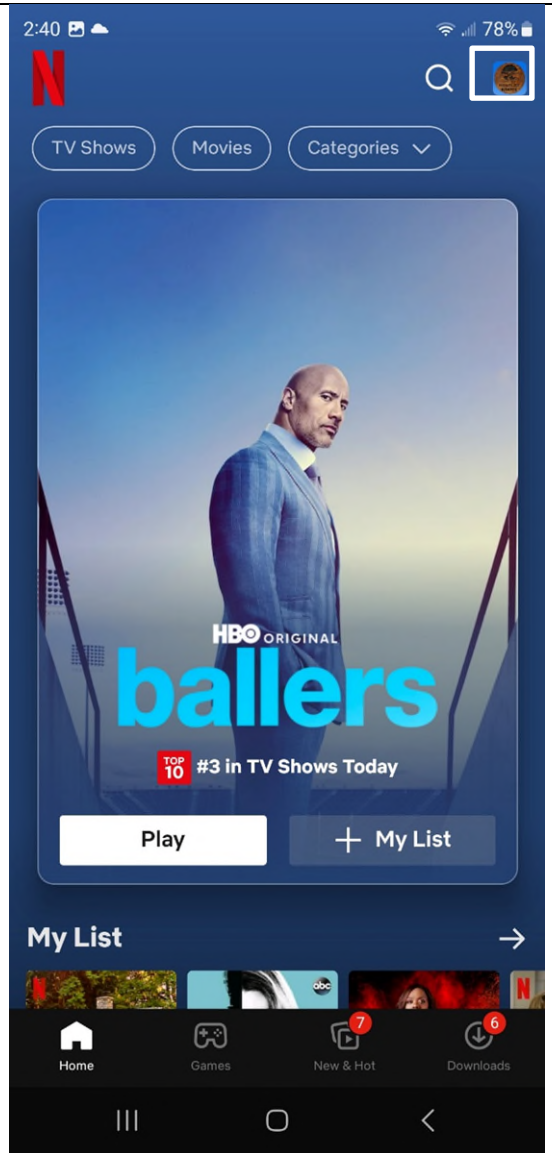
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Showing the first user interface, "Who's watching Netflix"  Select the first user profile, "Miyagi-Do"


2:40
78%
TV Shows
Movies
Categories
HBO ORIGINAL
ballers
TOP 10 #3 in TV Shows Today
Play
My List
My List
Home
Games
New & Hot
Downloads

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	Showing the second user interface, user Home from which desired video information can be selected to be reproduced (*e.g.*, "ballers"). The remaining Accused Samsung '815 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.
[21.f] the second user interface being associated with the first user profile and displaying the first character, the first character associated with a first group of video information and indicating an identity of the user which the first user profile is associated with,	Each of the Accused Samsung '815 Product includes a second user interface being associated with the first user profile and displaying the first character, the first character associated with a first group of video information and indicating an identity of the user which the first user profile is associated with. *See, e.g.*, User Manuals and Technical Specifications for the Accused Samsung '815 Products (showing that the Accused Samsung '815 Products are smart phones with pre-installed video apps containing user interfaces that operate in this manner, such as Netflix). For example, testing of the Accused Samsung '815 Products pre-installed Netflix app confirms that the second user interface (i.e. the user Home screen) is associated with the first user profile (e.g. the "Miyagi-Do" user profile) and displaying the first character (i.e. Miyagi-Do), the first character associated with a first group of video information (i.e. the videos available to the user on Home screen) and indicating an identity of the user of the first user profile (i.e. "Miyagi-Do" which identifies the user of the first user profile) Galaxy S23 Ultra:

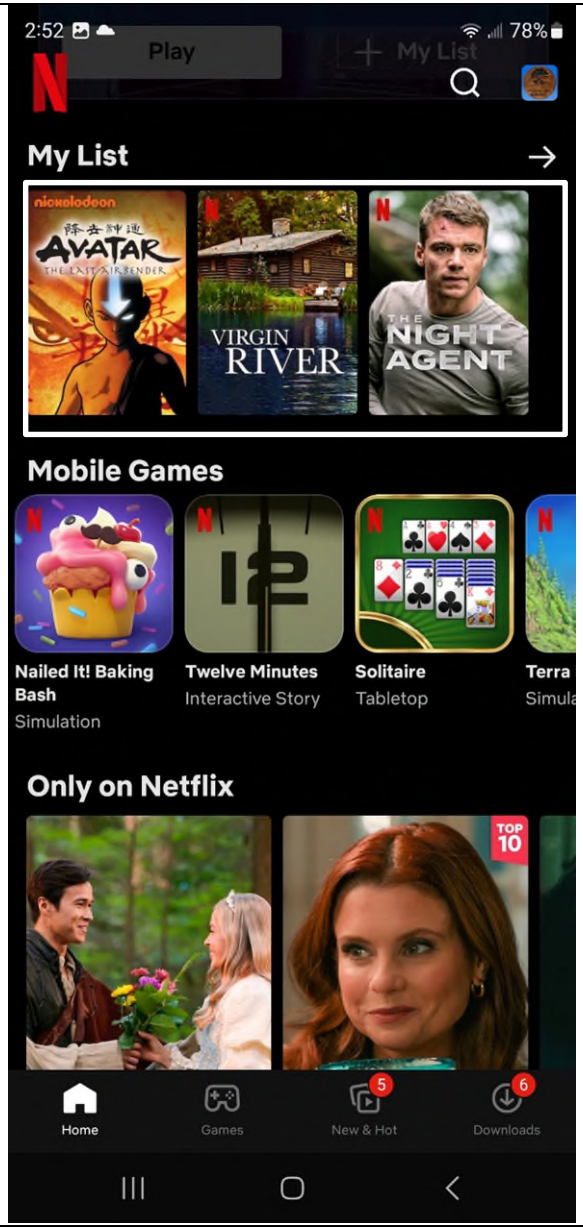
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Showing the first user interface, "Who's watching Netflix"

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Select the first user profile, "Miyagi-Do"

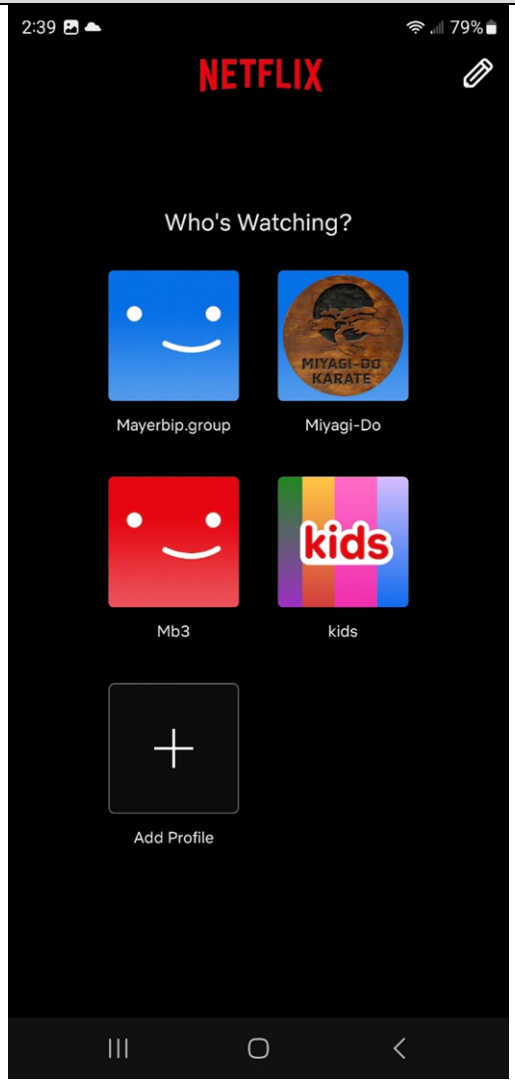

2:40
78%
TV Shows
Movies
Categories
HBO ORIGINAL
ballers
TOP 10 #3 in TV Shows Today
Play
My List
My List
Home
Games
New & Hot
Downloads

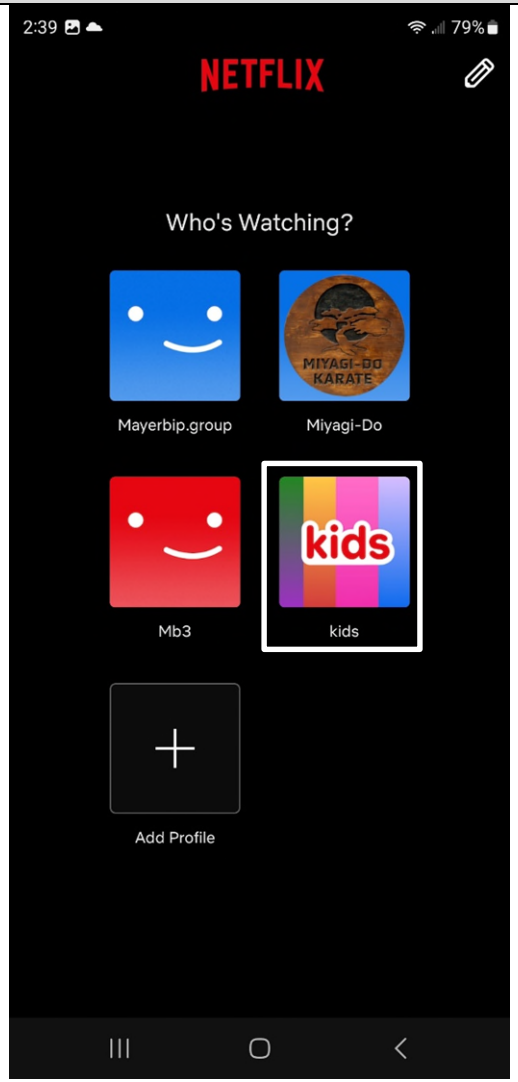
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	Showing the second user interface, user Home, being associated with the first user profile, "Miyagi-Do", and displaying the first character "Miyagi-Do." The first character is associated with a first group of video information, the videos available to the user, and indicating an identity of the user which the first user profile is associated with based on displaying an indication of a first user profile. The remaining Accused Samsung '815 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. **Doctrine of Equivalents:** To the extent Samsung argues that this limitation is not literally met in any Accused Samsung '815 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 pre-installed Netflix application in Accused Samsung '815 Products do not have a second user interface being associated with the first user profile and displaying the first character and the first character associated with a first group of video information and indicating an identity of the user which the first user profile is associated with, testing of the Accused Samsung '815 Products' pre-installed Netflix app confirms that the second user interface (i.e. the user Home screen) is associated with the first user profile (e.g. the "Miyagi-Do" user profile) and displaying the first character (i.e. Miyagi-Do), the first character associated with a first group of video information (i.e. the videos available to the user on Home screen) and indicating an identity of the user of the first user profile (i.e. "Miyagi-Do" which identifies the user of the first user profile). Using this pre-installed Netflix app, hardware, or combination of the two, these products perform substantially the same function in substantially the same way as claimed. The performance of this function achieves substantially the same result.
[21.g] the second user interface	Each of the Accused Samsung '815 Product included second user interface further displays thumbnails corresponding to the first group of video information. *See, e.g.,* User Manuals and Technical Specifications

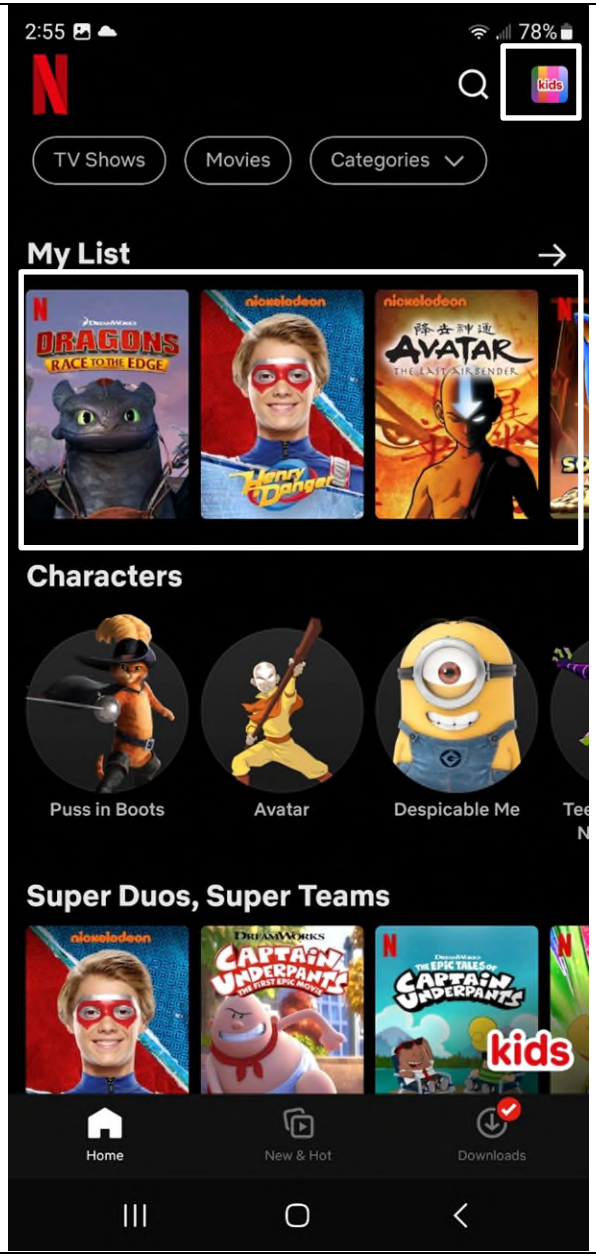
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
further displaying thumbnails corresponding to the first group of video information, and	for the Accused Samsung '815 Products (showing that the Accused Samsung '815 Products are smart phones with pre-installed video apps containing user interfaces that operate in this manner, such as Netflix). For example, testing of the Accused Samsung '815 Products pre-installed Netflix app confirms that the second user interface (i.e. the user home user interface) displays thumbnails corresponding to the first group of video information (i.e. the videos available to the user). Galaxy S23 Ultra:


2:52
78%
Play
My List
My List
nickelodeon
AVATAR
THE LAST AIRBENDER
VIRGIN RIVER
THE NIGHT AGENT
Mobile Games
Nailed It! Baking Bash
Simulation
Twelve Minutes
Interactive Story
Solitaire
Tabletop
Terra
Only on Netflix
TOP 10
Home
Games
New & Hot
Downloads

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	Showing the second user interface, user Home, with thumbnails of videos. The remaining Accused Samsung '815 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.
[21.h] wherein, in response to the selection of the second user profile, the display displays the second character and a second group of thumbnails corresponding to a second group of video information associated with the second user profile when the second character is selected,	Each of the Accused Samsung '815 Products, in response to the selection of the second user profile, display the second character and a second group of thumbnails corresponding to a second group of video information associated with the second user profile when the second character is selected. *See, e.g.*, User Manuals and Technical Specifications for the Accused Samsung '815 Products (showing that the Accused Samsung '815 Products are smart phones with pre-installed video apps containing user interfaces that operate in this manner, such as Netflix). For example, testing of the Accused Samsung '815 Products pre-installed Netflix app confirms that the phone displays the second character ("kids" which includes at least one character) and a second group of thumbnails corresponding to a second group of video information (i.e. the videos available to the user) associated with the second user profile (i.e. the "kids" user) when the second character is selected (e.g. the kids user profile is selected by the user). Galaxy S23 Ultra:

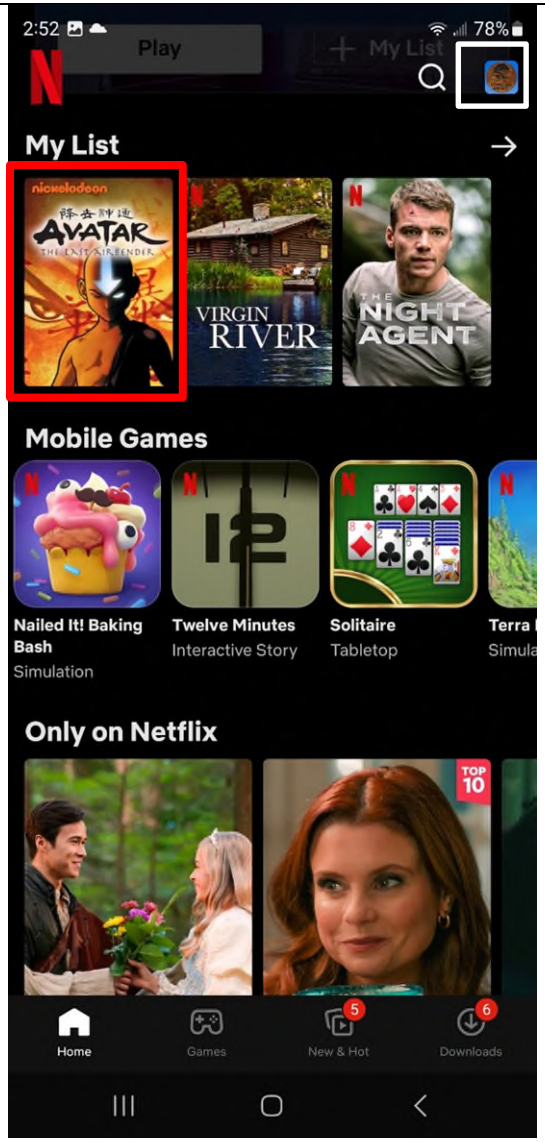
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Showing the first user interface, "Who's watching Netflix"

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Select the second user profile, "Kids"

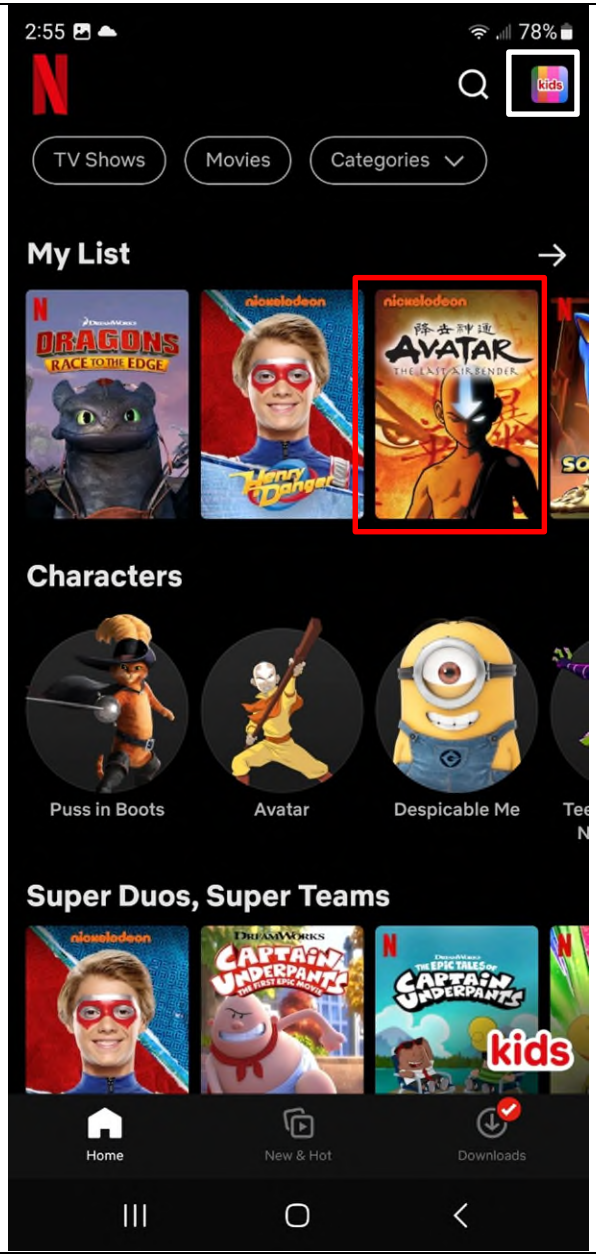

2:55
78%
kids
TV Shows
Movies
Categories
My List
DRAGONS
RACE TO THE EDGE
nickelodeon
AVATAR
Characters
Puss in Boots
Avatar
Despicable Me
Super Duos, Super Teams
CAPTAIN UNDERPANTS
THE EPIC TALES OF CAPTAIN UNDERPANTS
kids
Home
New & Hot
Downloads

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Showing the second user interface, user Home, with thumbnails of videos associated with the kids user profile. The remaining Accused Samsung '815 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. **Doctrine of Equivalents:** To the extent Samsung argues that this limitation is not literally met in any Accused Samsung '815 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 pre-installed Netflix application in Accused Samsung '815 Products do not display the second character and a second group of thumbnails corresponding to a second group of video information associated with the second user profile when the second character is selected, testing of the Accused Samsung '815 Products' pre-installed Netflix app confirms that the phone displays the second character ("kids" which includes at least one character) and a second group of thumbnails corresponding to a second group of video information (i.e. the videos available to the user) associated with the second user profile (i.e. the "kids" user) when the second character is selected (e.g. the kids user profile is selected by the user). Using this pre-installed Netflix app, hardware, or combination of the two, these products perform substantially the same function in substantially the same way as claimed. The performance of this function achieves substantially the same result.
[21.i] the first group of video information and the second group of video information	Each of the Accused Samsung '815 Products display the first group of video information and the second group of video information including one video information that is the same. *See, e.g.,* User Manuals and Technical Specifications for the Accused Samsung '815 Products (showing that the Accused Samsung '815 Products are smart phones with pre-installed video apps containing user interfaces that operate in this manner, such as Netflix).

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
including one video information that is the same; and	For example, testing of the Accused Samsung '815 Products pre-installed Netflix app confirms that the first group of video information (i.e. the videos available to the user Miyagi-Do) and second group of video information (i.e. the videos available to the user Kids) include one video information that is the same (e.g. "Avatar" video). Galaxy S23 Ultra:



Showing the second user interface, Home screen of the user "Miyagi-Do", and showing the first group of video information associated with the first user profile, "Miyagi-Do" and "Avatar" movie thumbnail.

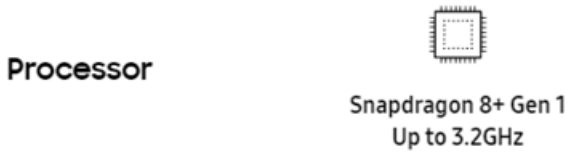

2:55
78%
kids
TV Shows
Movies
Categories
My List
DRAGONS
RACE TO THE EDGE
nickelodeon
AVATAR
Characters
Puss in Boots
Avatar
Despicable Me
Super Duos, Super Teams
CAPTAIN UNDERPANTS
THE EPIC TALES OF CAPTAIN UNDERPANTS
kids
Home
New & Hot
Downloads

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	Showing the second user interface, Home screen of the user "kids", and showing the second group of video information associated with the second user profile, "Kids" and "Avatar" movie thumbnail. Here, Miyagi-Do's first group of video information and kids's second group of video information has the same video information of "Avatar." The remaining Accused Samsung '815 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.
[21.j] a processor for removing one video information from the first group of video information after the input interface receives a selection to remove the one video information from the first group of video information associated with the first user profile,	Each of the Accused Samsung '815 Products includes a processor for removing one video information from the first group of video information after the input interface receives a selection to remove the one video information from the first group of video information associated with the first user profile. *See, e.g.*, User Manuals and Technical Specifications for the Accused Samsung '815 Products (showing that the Accused Samsung '815 Products are smart phones that have a processor including, for example, a CPU/DSP/ISP/GPU, for controlling its display to reproduce content from, for example, pre-installed video apps containing user interfaces that operate in this manner, such as Netflix). For example, the Accused Samsung '815 Products include a processor, system on chip (SoC), which includes subcomponents including but not limited to an ISP, a decoder, a DSP and/or GPU for controlling its LED display. Processor  Qualcomm Snapdragon 8 Gen2 Mobile Platform for Galaxy

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

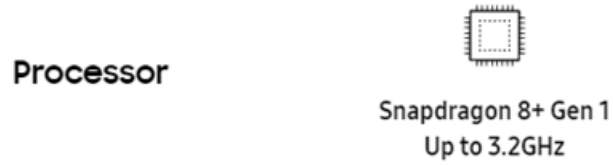
PLATFORM	OS	Android 13, One UI 5.1
	Chipset	Qualcomm SM8550-AC Snapdragon 8 Gen 2 (4 nm)
	CPU	Octa-core (1x3.36 GHz Cortex-X3 & 2x2.8 GHz Cortex-A715 & 2x2.8 GHz Cortex-A710 & 3x2.0 GHz Cortex-A510)
	GPU	Adreno 740

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.

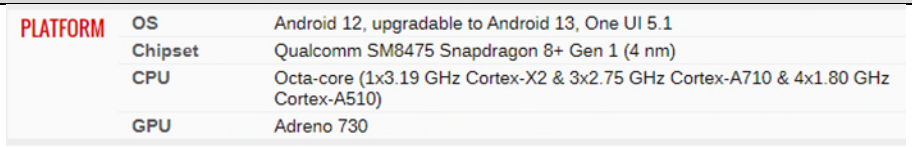
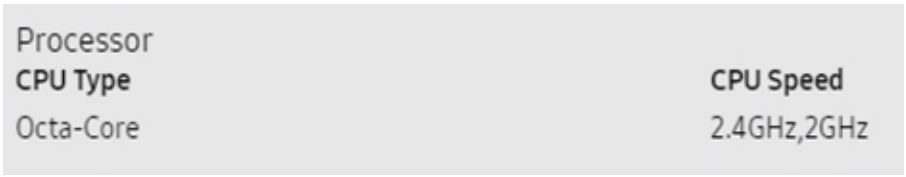


PLATFORM	OS	Android 12L, upgradable to Android 13, One UI 5.1
	Chipset	Qualcomm SM8475 Snapdragon 8+ Gen 1 (4 nm)
	CPU	Octa-core (1x3.19 GHz Cortex-X2 & 3x2.75 GHz Cortex-A710 & 4x1.80 GHz Cortex-A510)
	GPU	Adreno 730

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.

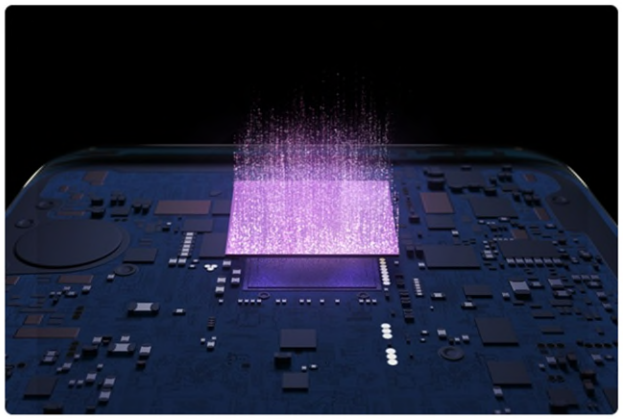


APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	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. 

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

Performance



Impressive speed. Powerful processor

The powerful Octa-core processor opens up a new range of possibilities with heightened performance and capacity.

PLATFORM	OS	Android 13, One UI 5.1
	Chipset	Exynos 1380 (5 nm)
	CPU	Octa-core (4x2.4 GHz Cortex-A78 & 4x2.0 GHz Cortex-A55)
	GPU	Mali-G68 MP5

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.

In addition, the AIDA64 Reports and tech specs show that the Accused Samsung '815 Products contain one or more processors.

Product	AIDA 64 Report- Processor

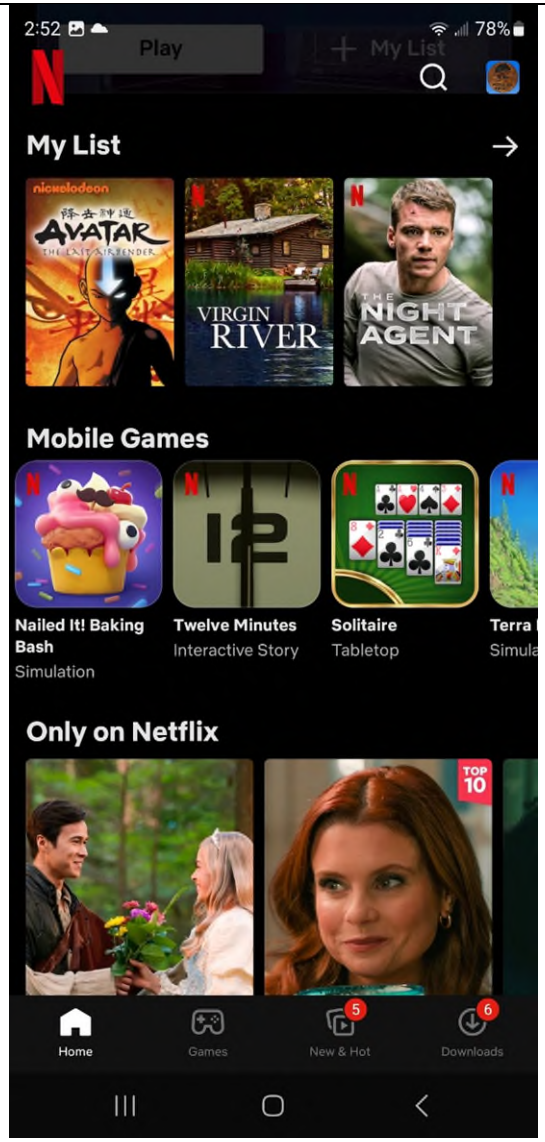
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement	
	Galaxy S23 Ultra	SoC Model: Qualcomm Snapdragon 8 Gen 2 (SM8550) Core Architecture: 3x ARM Cortex-A510 @ 2016 MHz 2x ARM Cortex-A715 @ 2803 MHz 2x ARM Cortex-A710 @ 2803 MHz ARM Cortex-X3 @ 3360 MHz Manufacturing Process: 4 nm Instruction Set: 64-bit ARMv9-A CPU Revision: r1p0 CPU Cores: 8 CPU Clock Range: 307 - 3360 MHz
	Galaxy Z Fold4	SoC Model: Qualcomm Snapdragon 8+ Gen 1 (SM8475) Core Architecture: 4x ARM Cortex-A510 @ 2016 MHz 3x ARM Cortex-A710 @ 2745 MHz ARM Cortex-X2 @ 3187 MHz Manufacturing Process: 4 nm Instruction Set: 64-bit ARMv9-A CPU Revision: r2p0 CPU Cores: 8 CPU Clock Range: 300 - 3187 MHz
	Galaxy Z Flip4	SoC Model: Qualcomm Snapdragon 8+ Gen 1 (SM8475) Core Architecture: 4x ARM Cortex-A510 @ 2016 MHz 3x ARM Cortex-A710 @ 2745 MHz ARM Cortex-X2 @ 3187 MHz Manufacturing Process: 4 nm Instruction Set: 64-bit ARMv9-A CPU Revision: r2p0 CPU Cores: 8 CPU Clock Range: 300 - 3187 MHz

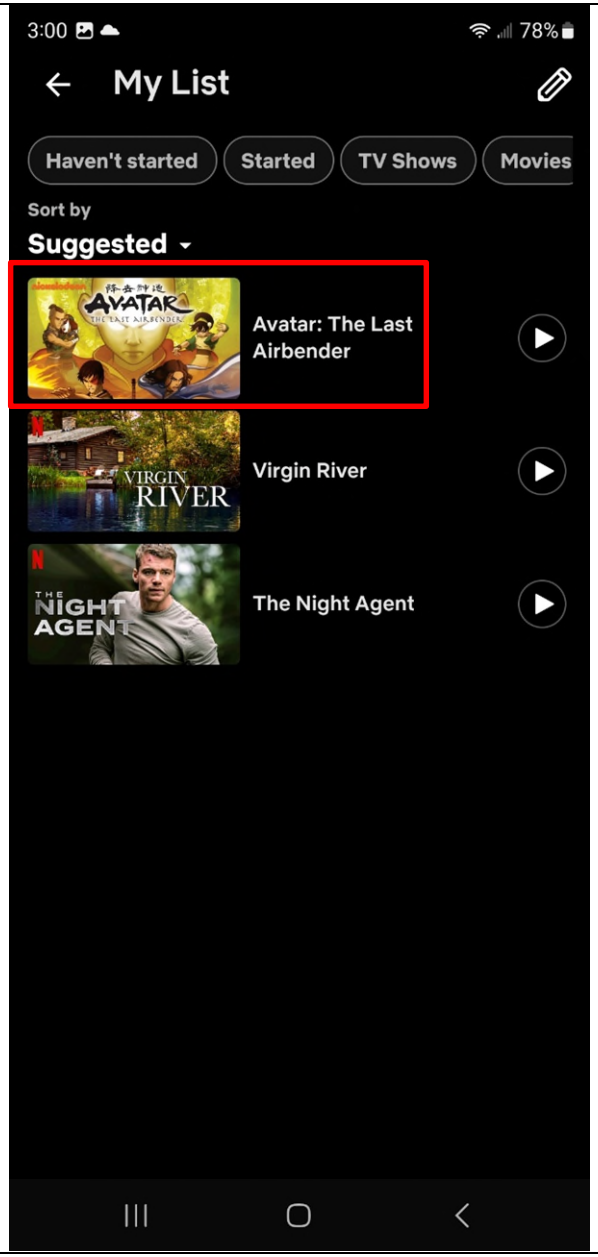
<table>
<tr><th>U.S. Patent No. 11,017,815</th><th>Exemplary Evidence of Infringement</th></tr>
<tr><td></td><td>
<table>
<tr><td>Galaxy A54 5G</td><td>Core Architecture: 4x ARM Cortex-A55 @ 2002 MHz
4x ARM Cortex-A78 @ 2400 MHz
Instruction Set: 64-bit ARMv8-A
CPU Revision: r1p1
CPU Cores: 8
CPU Clock Range: 533 - 2400 MHz</td></tr>
</table>

In addition, testing of the Accused Samsung '815 Products pre-installed Netflix app confirms that it receives a selection to remove one video information (e.g. one added to My List video such as "Avatar") from the first group of video information (i.e. the videos added to My List by the "Miyagi-Do" user) associated with the first user profile (i.e. "Miyagi-Do" user profile).

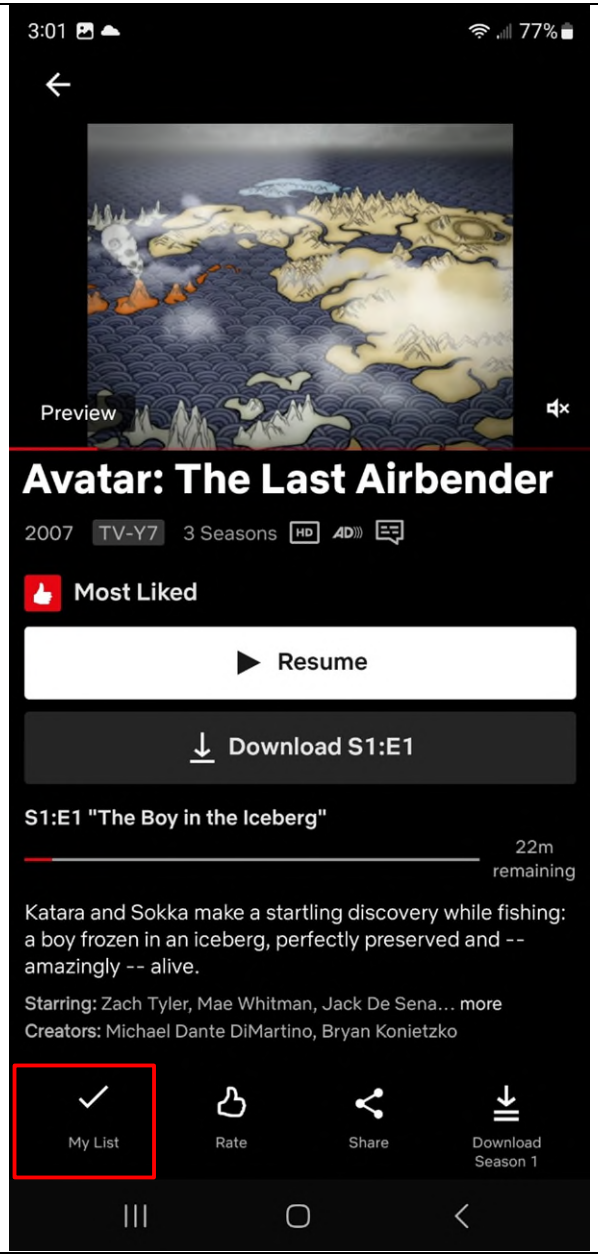
Galaxy S23 Ultra:</td></tr>
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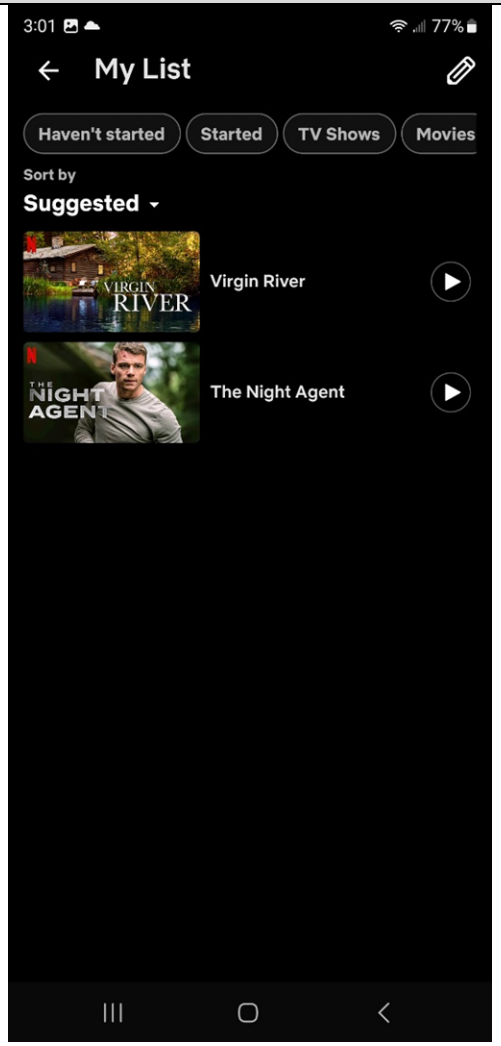
User selects the first group of video information, "My List"


3:00
78%
My List
Haven't started
Started
TV Shows
Movies
Sort by
Suggested
Avatar: The Last Airbender
Virgin River
The Night Agent

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	Netflix shows the first group of video information ("My List") containing video information for movie/tv shows for the Miyagi-Do user that were added to the "My List" group by the user, where the thumbnails correspond to first video information, and user can remove a movie/tv show from three movie/tv shows in the "My List" group.

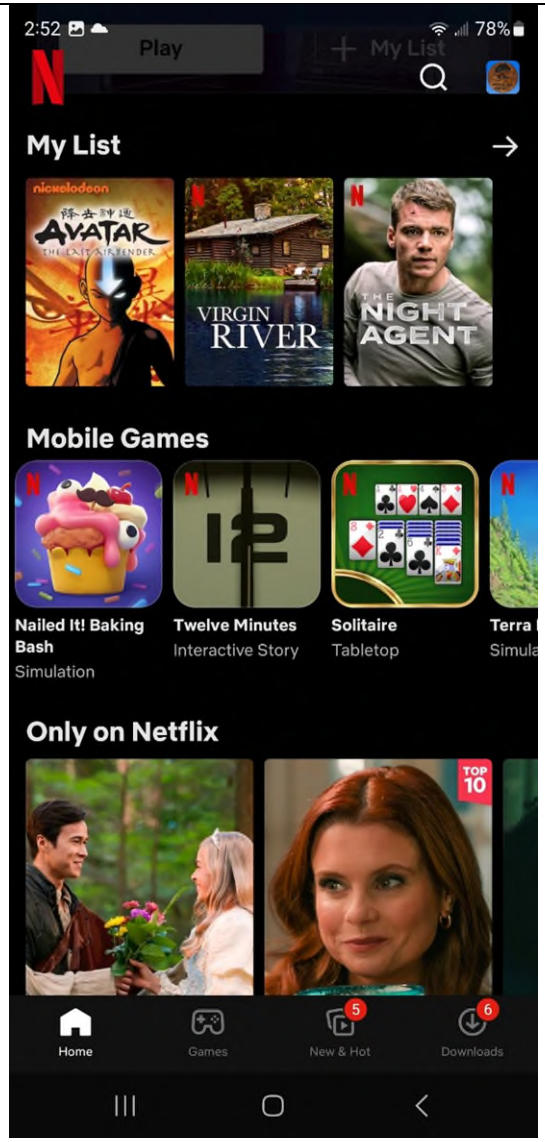

3:01
77%
Preview
Avatar: The Last Airbender
2007 TV-Y7 3 Seasons HD AD
Most Liked
Resume
Download S1:E1
S1:E1 "The Boy in the Iceberg"
22m remaining
Katara and Sokka make a startling discovery while fishing: a boy frozen in an iceberg, perfectly preserved and -- amazingly -- alive.
Starring: Zach Tyler, Mae Whitman, Jack De Sena... more
Creators: Michael Dante DiMartino, Bryan Konietzko
My List
Rate
Share
Download Season 1

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	User removes movie/tv show, here "Avatar," from the Miyagi-Do "My List" group by selecting or clicking the "My List" icon highlighted in the red box above.

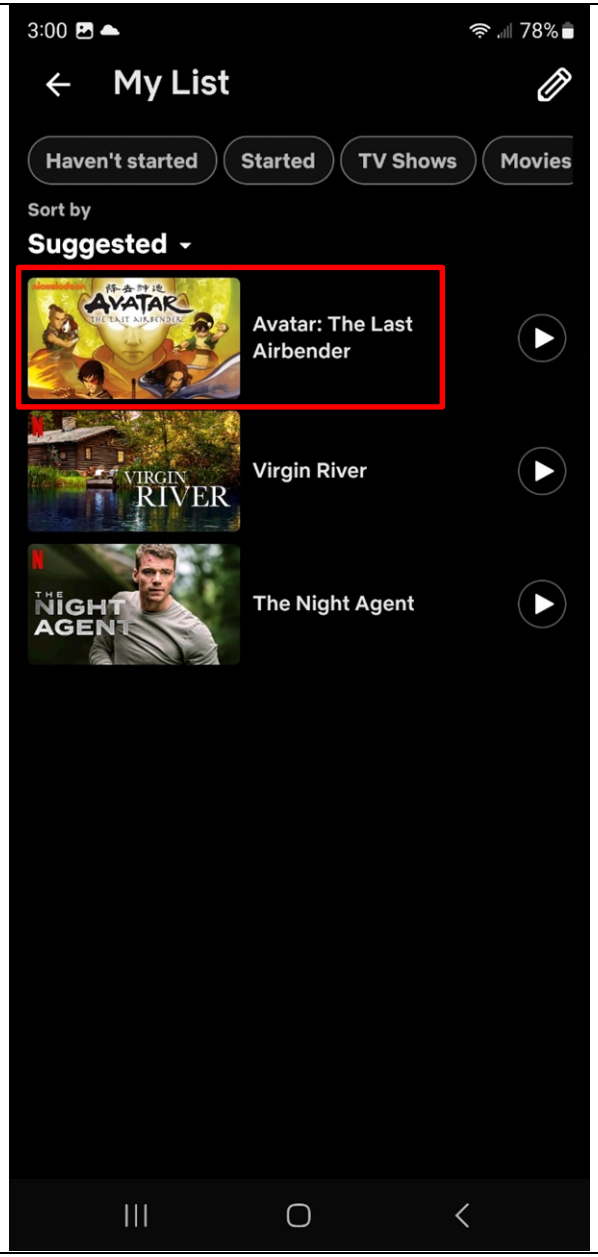
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Netflix now shows the updated "My List" group for the "Miyagi-Do" user containing the updated list without the movies/tv show whose thumbnail was removed by the user, here "Avatar" is no longer visible.

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	See also Appendix 8 showing that the remaining Accused Samsung '815 Products include a chipset with one or more processoer. Further, the remaining Accused Samsung '815 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. **Doctrine of Equivalents:** To the extent Samsung argues that this limitation is not literally met in any Accused Samsung '815 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 pre-installed Netflix application in Accused Samsung '815 Products do not have a processor for removing one video information from the first group of video information after the input interface receives a selection to remove the one video information from the first group of video information associated with the first user profile, testing of the Accused Samsung '815 Products' processor running the pre-installed Netflix app confirms that it receives a selection to remove one video information (e.g. one added to My List video such as "Avatar") from the first group of video information (i.e. the videos added to My List by the "Miyagi-Do" user) associated with the first user profile (i.e. "Miyagi-Do" user profile). Using this pre-installed Netflix app, hardware, or combination of the two, these products perform substantially the same function in substantially the same way as claimed. The performance of this function achieves substantially the same result.
[21.k] wherein, upon the one video information being removed from the first group of video information, the one video	Each of the Accused Samsung '815 Products wherein upon the one video information being removed from the first group of video information, the one video information continues to be included in the second group of video information for the second user profile and the second group of thumbnails continues to display a thumbnail corresponding to the one video information when the second character is selected. *See, e.g.,* User Manuals and Technical Specifications for the Accused Samsung '815 Products (showing that the Accused Samsung '815 Products are smart phones with pre-installed video apps containing user interfaces that operate in this manner, such as Netflix).

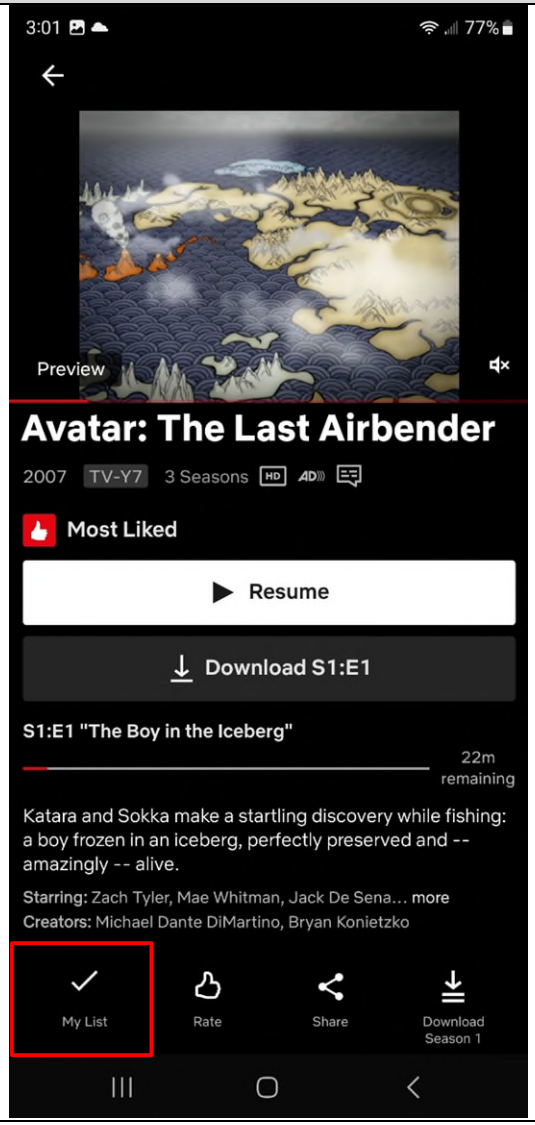
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
information continues to be included in the second group of video information for the second user profile and the second group of thumbnails continues to display a thumbnail corresponding to the one video information when the second character is selected,	For example, testing of the Accused Samsung '815 Products pre-installed Netflix app confirms that it receives a selection to remove one video information (e.g. one added to My List video such as "Avatar") from the first group of video information (i.e. the videos added to My List by the "Miyagi-Do" user) associated with the first user profile (i.e. "Miyagi-Do" user profile). Galaxy S23 Ultra:



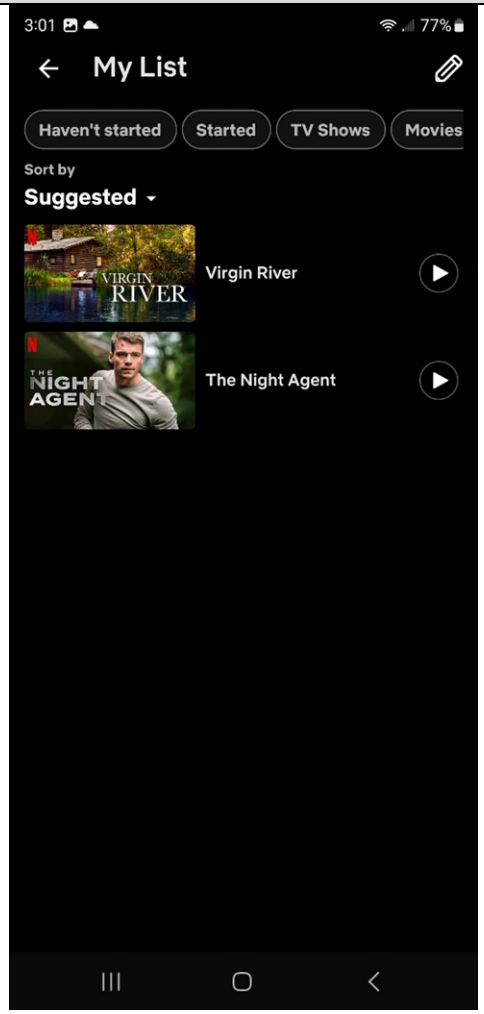
User selects the first group of video information, "My List"


3:00
78%
My List
Haven't started
Started
TV Shows
Movies
Sort by
Suggested
Avatar: The Last Airbender
Virgin River
The Night Agent

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	Netflix shows the first group of video information ("My List") containing video information for movie/tv shows for the Miyagi-Do user that were added to the "My List" group by the user, where the thumbnails correspond to first video information, and user can remove a movie/tv show from three movie/tv shows in the "My List" group.

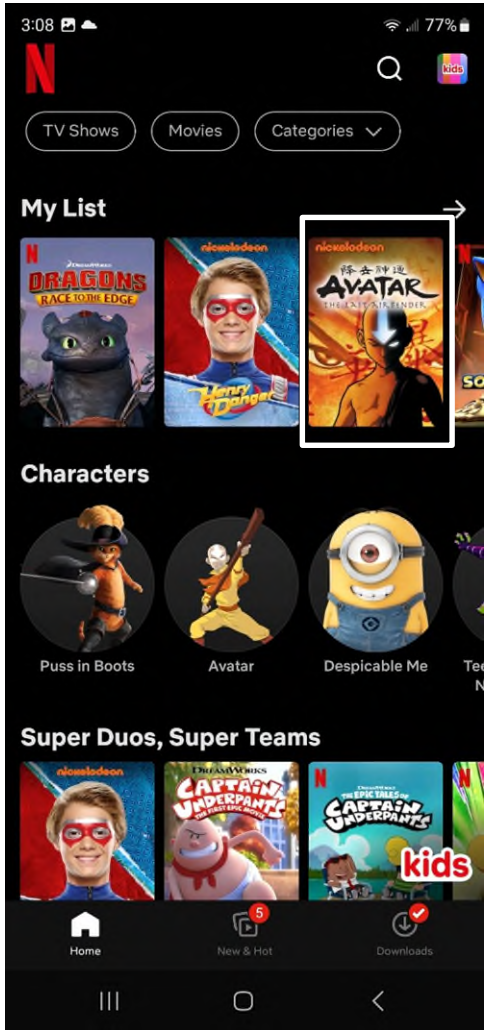
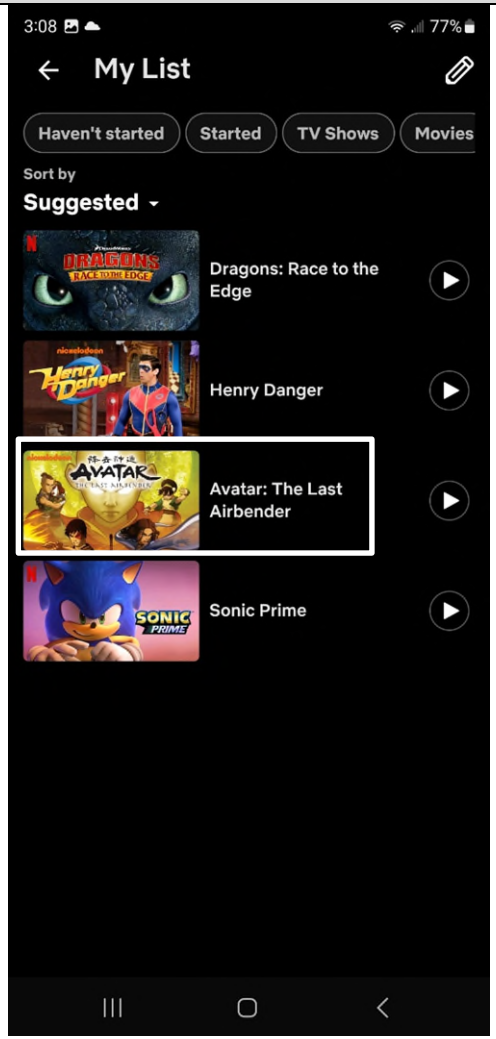
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	User removes movie/tv show, here "Avatar," from the Miyagi-Do "My List" group by selecting or clicking the "My List" icon highlighted in the red box above.

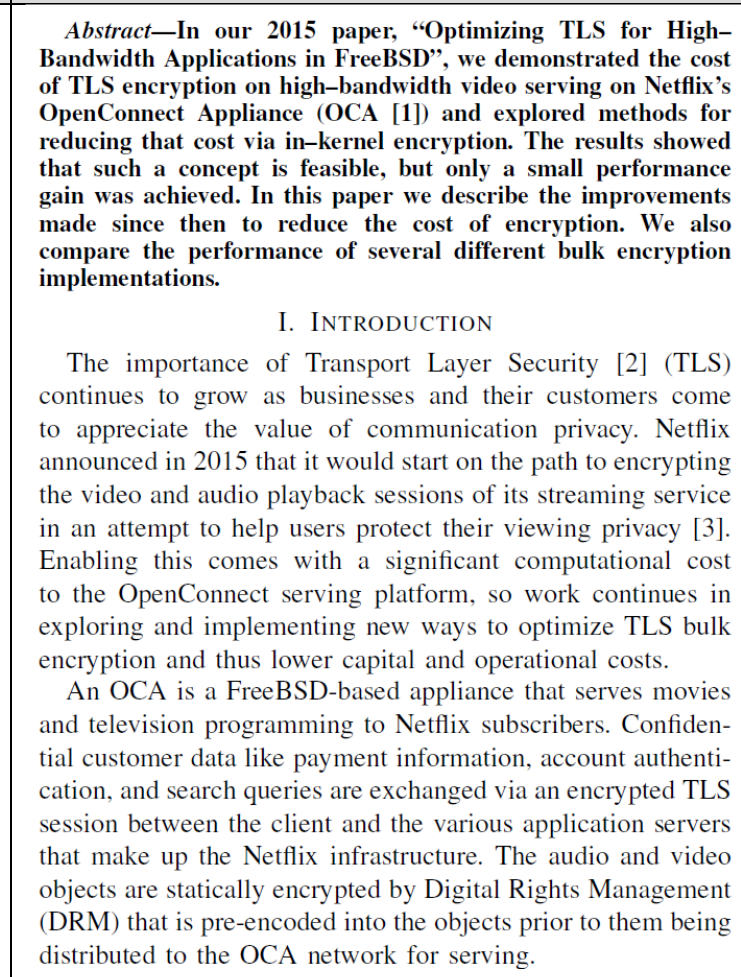
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Netflix now shows the updated "My List" group for the "Miyagi-Do" user containing the updated list without the movies/tv show whose thumbnail was removed by the user, here "Avatar" is no longer visible.

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	The one video information (e.g. the video "Avatar") continues to be included in the second group of video information for the second user profile (i.e. the videos added to My List by the "kids" user) and the second group of thumbnails (i.e. the thumbnails for the videos added to My List by the "kids" user) continues to display a thumbnail corresponding to the one video information (i.e. the thumbnail corresponding to the video "Avatar") when the second character ("Kids" which includes at least one character) is selected. Going back to first user interface, a user can switch from the first user profile to the second user profile by selecting the second character "kids." The below shows the "My List" of user Kids.

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	User with the second user profile ("kids") continues to see the deleted movie/tv show "Avatar" on their Home screen under "My List," also when the user selects "My List," Netflix shows the second group of video information where a thumbnail corresponding to the deleted movie/tv show continues to be displayed, here Avatar is visible, and the one video information – i.e., streamed digital data or signal relating to Avatar - continues to be included in the second group of video information even though such first information is no longer present in the first group of video information. The remaining Accused Samsung '815 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.
[21.l] wherein the processor decrypts second video information corresponding to a selected thumbnail when the input interface receives a selection of desired video information based on a selection of a thumbnail from the first group of thumbnails, and [21.m] wherein the display displays the	The processor in each of the Accused Samsung '815 Products decrypts second video information corresponding to a selected thumbnail when the input interface receives a selection of desired video information based on a selection of a thumbnail from the first group of thumbnails and displays the decrypted video information. *See, e.g.,* User Manuals and Technical Specifications for the Accused Samsung '815 Products (showing that the Accused Samsung '815 Products are smart phones with a processor and pre-installed video apps containing user interfaces that operate in this manner, such as Netflix). For example, Accused Samsung '815 Products support receiving and playing Netflix video streams that are encrypted using various encryption methods, such as DRM (Digital Right Management) and/or TLS (Transport Layer Security). Thus, in order to playback and display the video, they must perform a decryption process.

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
decrypted video information.	 ***Abstract*—In our 2015 paper, "Optimizing TLS for High–Bandwidth Applications in FreeBSD", we demonstrated the cost of TLS encryption on high–bandwidth video serving on Netflix's OpenConnect Appliance (OCA [1]) and explored methods for reducing that cost via in–kernel encryption. The results showed that such a concept is feasible, but only a small performance gain was achieved. In this paper we describe the improvements made since then to reduce the cost of encryption. We also compare the performance of several different bulk encryption implementations.** I. INTRODUCTION The importance of Transport Layer Security [2] (TLS) continues to grow as businesses and their customers come to appreciate the value of communication privacy. Netflix announced in 2015 that it would start on the path to encrypting the video and audio playback sessions of its streaming service in an attempt to help users protect their viewing privacy [3]. Enabling this comes with a significant computational cost to the OpenConnect serving platform, so work continues in exploring and implementing new ways to optimize TLS bulk encryption and thus lower capital and operational costs. An OCA is a FreeBSD-based appliance that serves movies and television programming to Netflix subscribers. Confidential customer data like payment information, account authentication, and search queries are exchanged via an encrypted TLS session between the client and the various application servers that make up the Netflix infrastructure. The audio and video objects are statically encrypted by Digital Rights Management (DRM) that is pre-encoded into the objects prior to them being distributed to the OCA network for serving. (Netflix, Improving High–Bandwidth TLS in the FreeBSD kernel, available at https://openconnect.netflix.com/publications/asiabsd_tls_improved.pdf (2015)

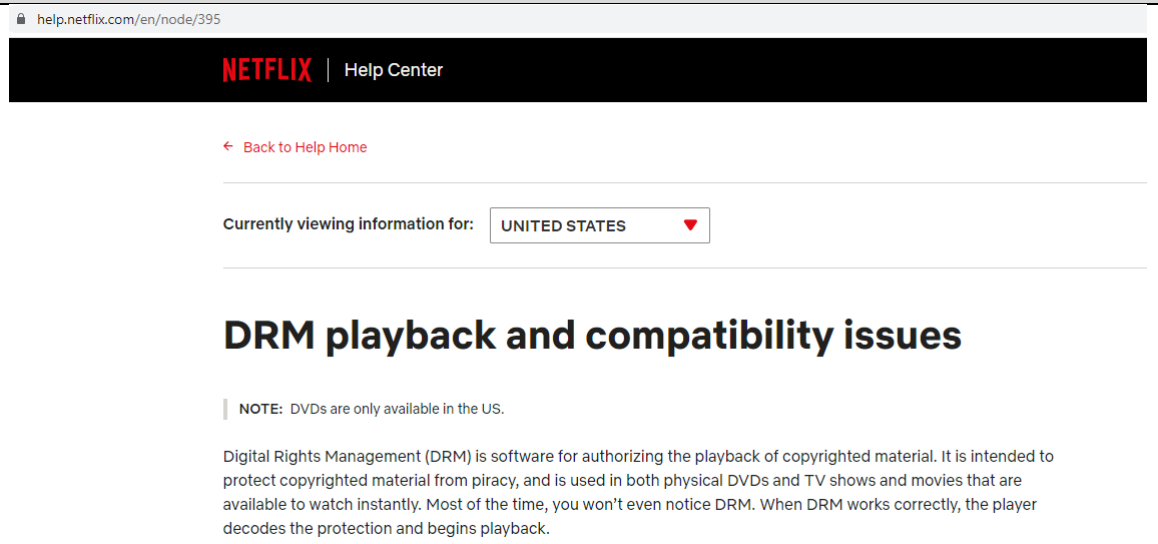
APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Netflix Adopts Efficient HTTPS Encryption For Its Video Streams By Lucian Armasu published August 08, 2016 Comments (9)  Netflix announced that it has implemented efficient HTTPS encryption for its video streams. To this point, the company has used only HTTPS to protect user information. Netflix has been reluctant to adopt HTTPS for its video streams so far because delivering video is already a bandwidth-heavy task, and adding encryption on top of that risked adding too much overhead. To solve this problem, the company searched for the ideal cipher and its fastest implementation.

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Cipher Evaluation Netflix eventually chose the the Advanced Encryption Standard (AES) cipher in Galois/Counter Mode (GCM), which is available only in TLS 1.2 and later. The company chose GCM over the Cipher Block Chaining (CBC) method because it can encrypt and authenticate the message simultaneously, whereas AES-CBC requires an additional pass over the data to generate keyed-hash message authentication code (HMAC). The latter can still be used as fallback for older browsers and client software that don't support TLS 1.2. However, it shouldn't be too long until virtually all Netflix users can play video streams over TLS 1.2 or later. (See https://www.tomshardware.com/news/netflix-efficient-https-video-streams,32420.html (2016))

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	How Netflix brings safer and faster streaming experiences to the living room on crowded networks using TLS 1.3 By Sekwon Choi At Netflix, we are obsessed with the best streaming experiences. We want playback to start instantly and to never stop unexpectedly in any network environment. We are also committed to protecting users' privacy and service security without sacrificing any part of the playback experience. To achieve that, we are efficiently using ABR (adaptive bitrate streaming) for a better playback experience, DRM (Digital Right Management) to protect our service and TLS (Transport Layer Security) to protect customer privacy and to create a safer streaming experience. Netflix on consumer electronics devices such as TVs, set-top boxes and streaming sticks was until recently using TLS 1.2 for streaming traffic. Now we support TLS 1.3 for safer and faster experiences. (https://netflixtechblog.com/how-netflix-brings-safer-and-faster-streaming-experience-to-the-living-room-on-crowded-networks-78b8de7f758c (2020))

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

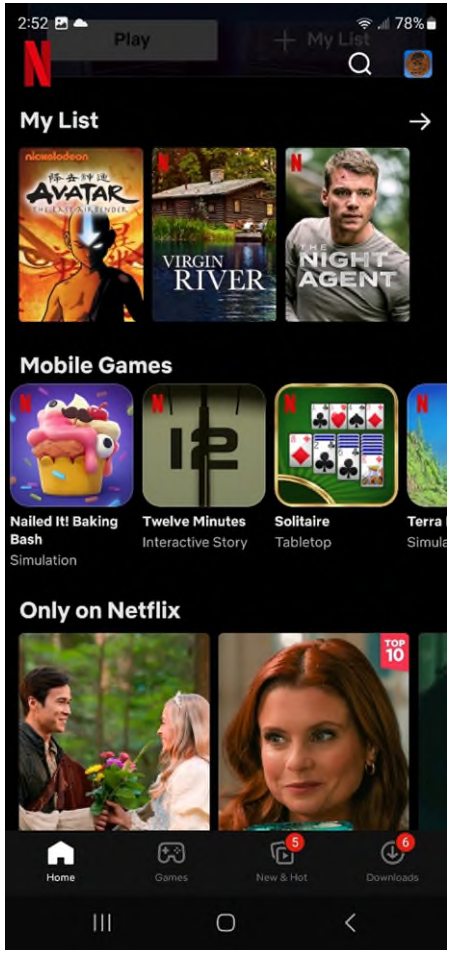
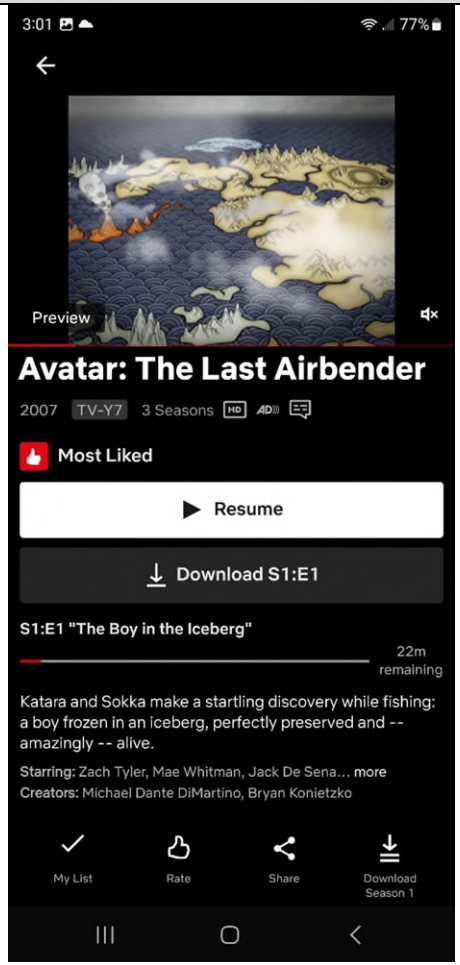


https://help.netflix.com/en/node/395

For example, actual testing of the Accused Samsung '815 Products shows that the pre-installed Netflix app receives desired video information (e.g. the video "Avatar") based on a selection by the user of a thumbnail associated with the video and displays the decrypted video information.

Galaxy S23 Ultra:

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement

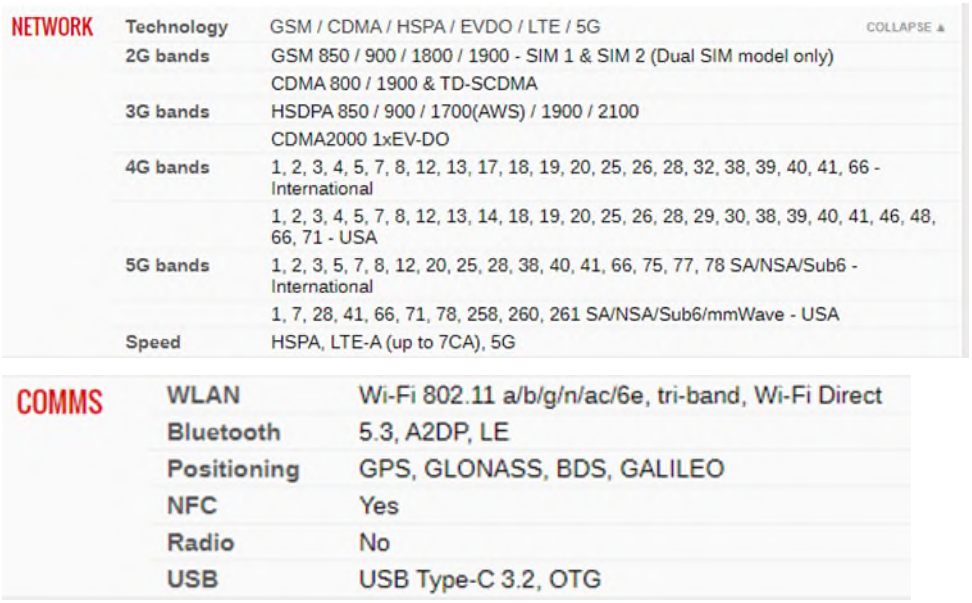


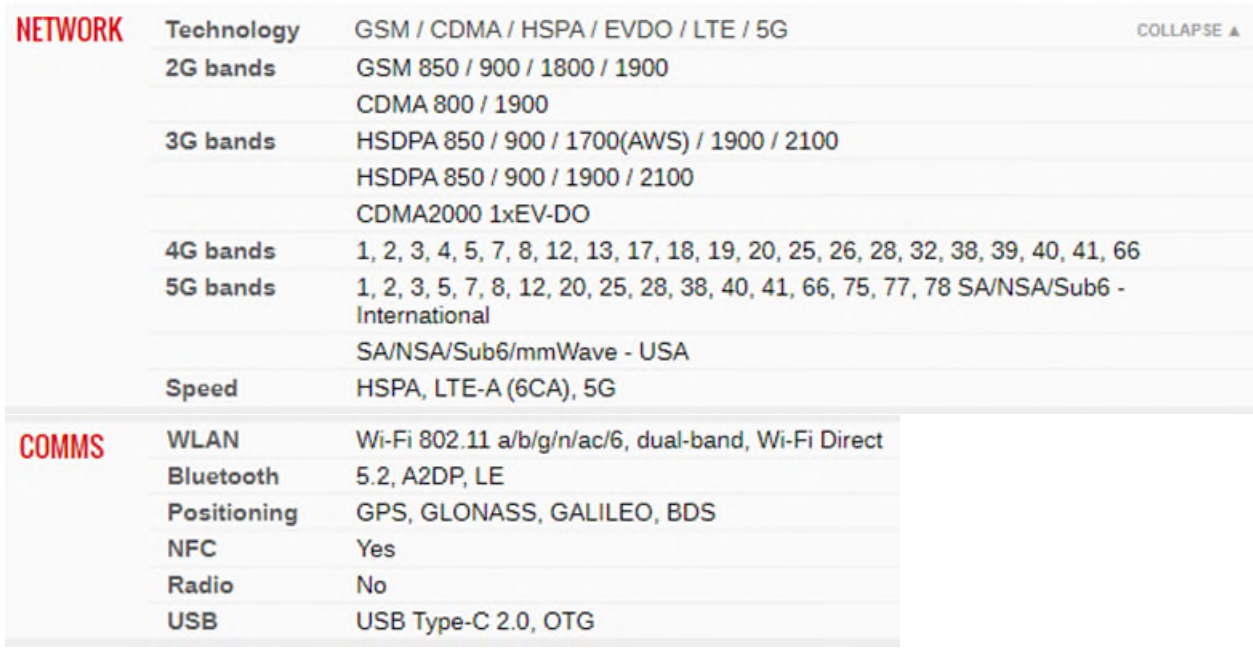
Receiving a user selection to play and display "Avatar" video by the user and playing the video after decryption).

The remaining Accused Samsung '815 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.

Doctrine of Equivalents:

To the extent Samsung argues that this limitation is not literally met in any Accused Samsung '815 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 pre-installed Netflix application in Accused Samsung '815 Products do not have a processor that decrypts second video

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	information corresponding to a selected thumbnail, testing of the Accused Samsung '815 Products' processor running pre-installed Netflix app confirms that they support receiving and playing Netflix video streams that are encrypted using various encryption methods, such as DRM (Digital Right Management) and/or TLS (Transport Layer Security) and in order to playback and display the video, they must perform a decryption process by a processor or a similar hardware component. Using this pre-installed Netflix app, hardware, or combination of the two, these products perform substantially the same function in substantially the same way as claimed. The performance of this function achieves substantially the same result.
22. The information processing apparatus of claim 21, further comprising: an antenna for wirelessly receiving the first video information.	Each of the Accused Samsung '815 Products comprises an antenna for wirelessly receiving the first video information. For example, each of the Accused Samsung '815 Products can receive a video via cellular antenna (e.g., MMS or downloading from Internet), via a WiFi antenna (e.g., MMS or downloading from Internet or Quick Share), or via a Bluetooth antenna (e.g., Bluetooth file transfer). **Galaxy S23 Ultra:** 

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Galaxy S23 Ultra technical specifications; https://www.gsmarena.com/samsung_galaxy_s23_ultra-12024.php **Galaxy Z Flip4:**  Galaxy Z Flip4 technical specifications; https://www.gsmarena.com/samsung_galaxy_z_flip4-11538.php. **Galaxy Z Fold4:**

U.S. Patent No. 11,017,815	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	
	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

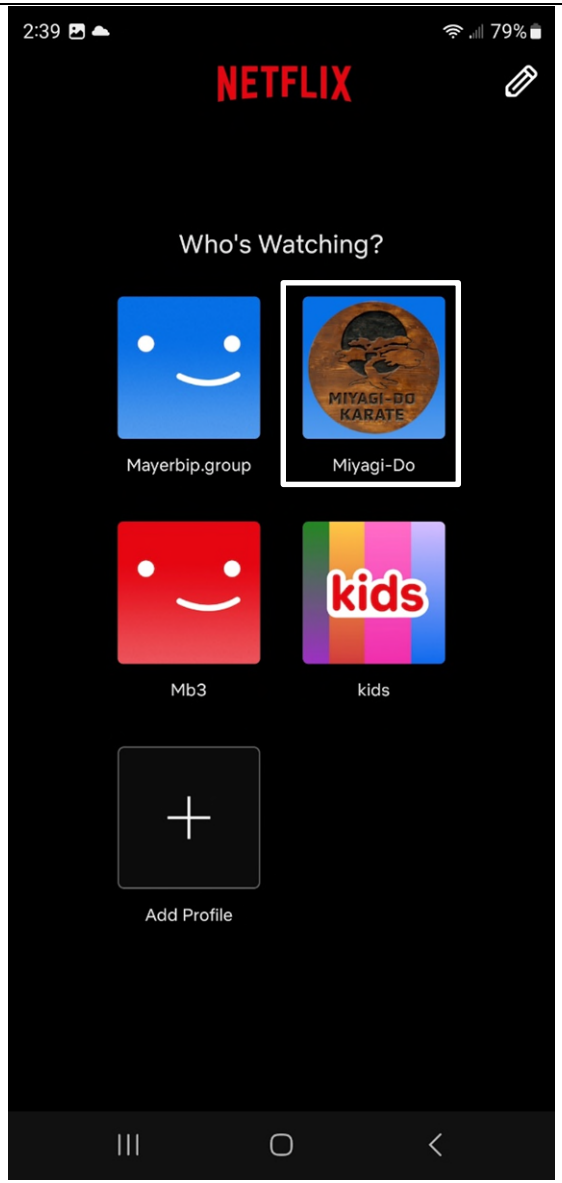
Galaxy Z Fold4 technical specifications; https://www.gsmarena.com/samsung_galaxy_z_fold4-11737.php.

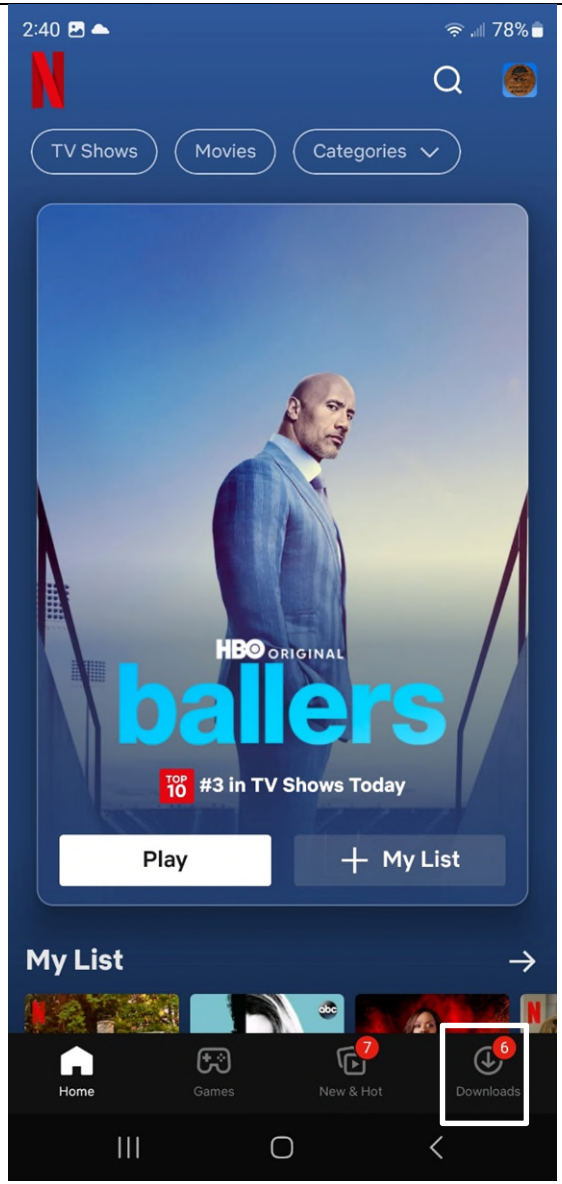
Galaxy A54 5G:

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	

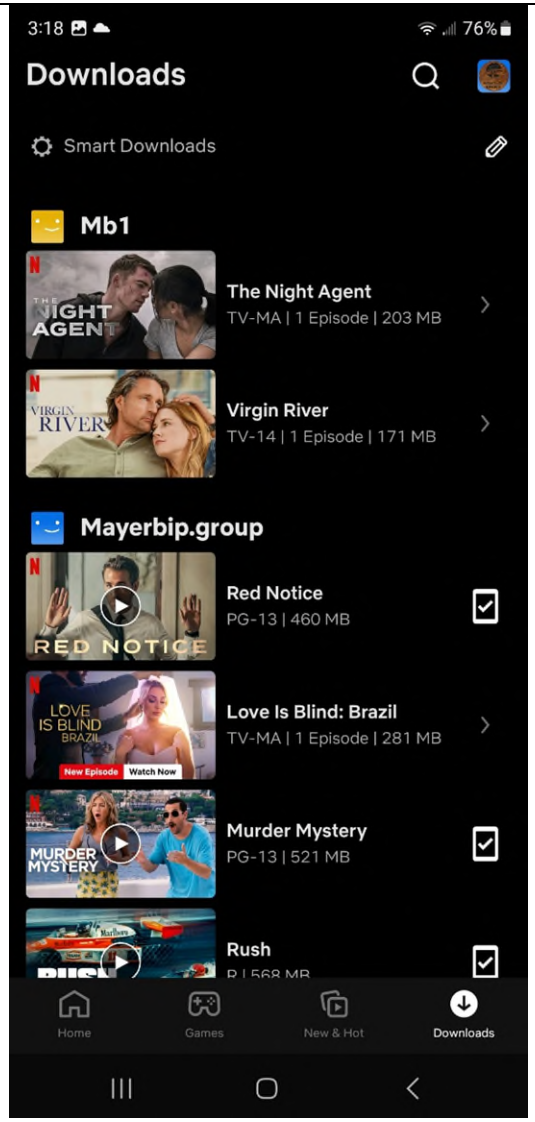
COMMS	WLAN	Wi-Fi 802.11 a/b/g/n/ac/6, dual-band, Wi-Fi Direct
	Bluetooth	5.3, A2DP, LE
	Positioning	GPS, GLONASS, GALILEO, BDS
	NFC	Yes (market/region dependent)
	Radio	No
	USB	USB Type-C 2.0, OTG

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	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. *See also* Appendix 8 showing that the remaining Accused Samsung '815 Products include one or more of a WiFi chipset, cellular chipset, or Bluetooth chipset that will include an antenna.
23. The information processing apparatus of claim 21, wherein any user can delete stored video information regardless of a user profile from the plurality of user profiles that was used to record the stored video information.	In each of the Accused Samsung '815 Products any user can delete stored video information regardless of a user profile from the plurality of user profiles that was used to record the stored video information. For example, actual testing of the Accused Samsung '815 Products shows that in the pre-installed Netflix app any user can delete stored video information (in the "Downloads") regardless of a user profile from the plurality of user profiles that was used to record the stored video information. Galaxy S23 Ultra:

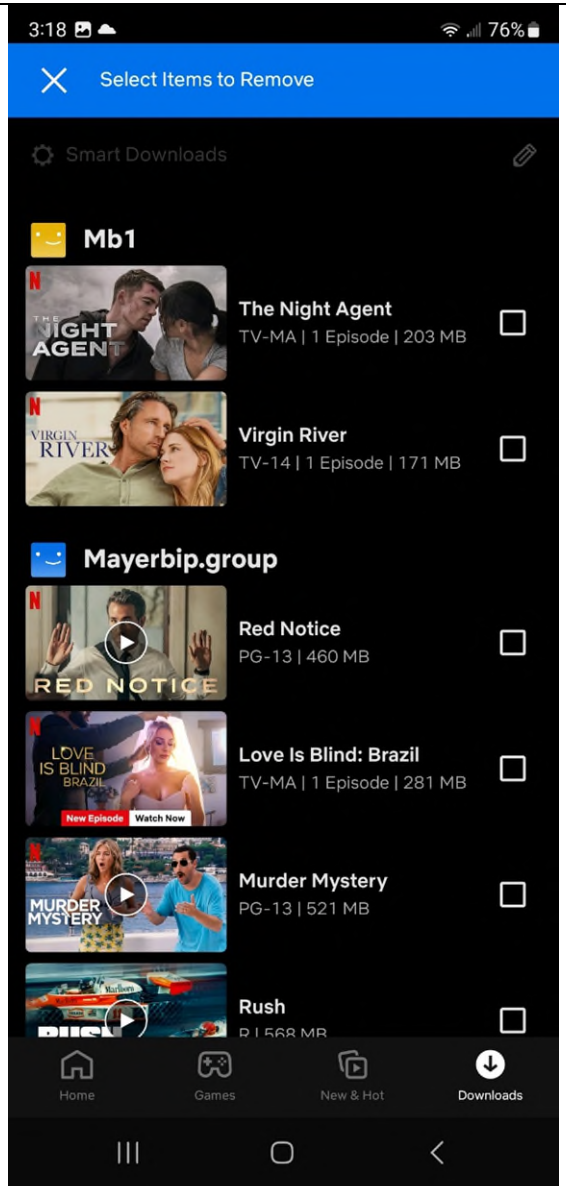

2:39
79%
NETFLIX
Who's Watching?
Mayerbip.group
Miyagi-Do
MIYAGI-DO KARATE
Mb3
kids
Add Profile

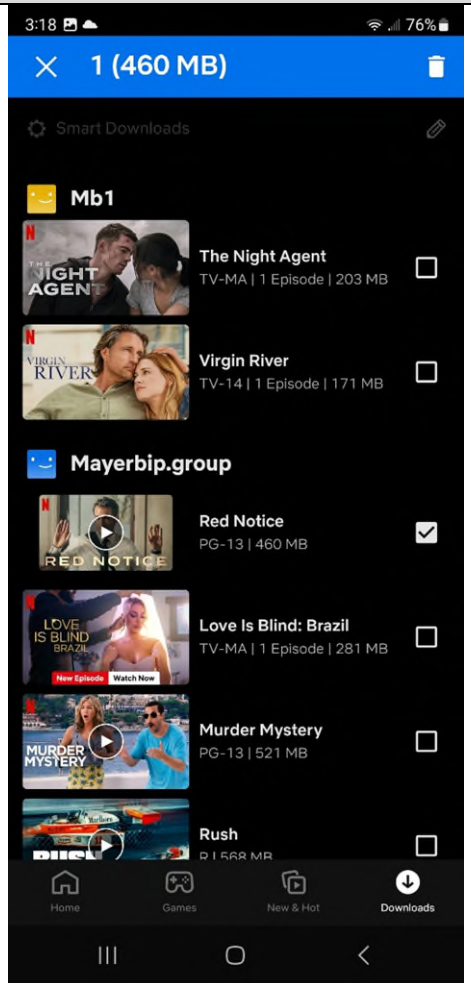

2:40
78%
TV Shows
Movies
Categories
HBO ORIGINAL
ballers
TOP 10 #3 in TV Shows Today
Play
My List
My List
Home
Games
New & Hot
Downloads

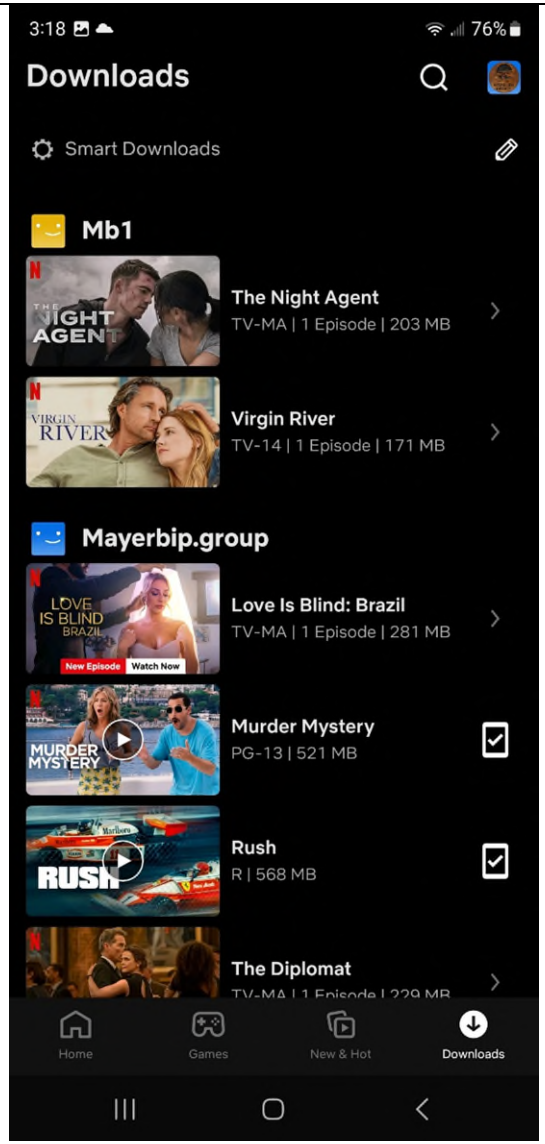
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	The user "Miyagi-Do" selects "Downloads" to remove the downloaded videos.



The "Downloads" screen shows plurality of profiles (e.g., Mayerbip.group and Mb1) with their associated downloaded videos lists.


3:18
76%
Select Items to Remove
Smart Downloads
Mb1
The Night Agent
TV-MA | 1 Episode | 203 MB
Virgin River
TV-14 | 1 Episode | 171 MB
Mayerbip.group
Red Notice
PG-13 | 460 MB
Love Is Blind: Brazil
TV-MA | 1 Episode | 281 MB
Murder Mystery
PG-13 | 521 MB
Rush
Home
Games
New & Hot
Downloads

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 "Miaygi-Do" clicks the edit icon to remove the videos from the "Mayerbip.group" user's list. Here, Miyagi-Do selects "Red Notice" to be removed.



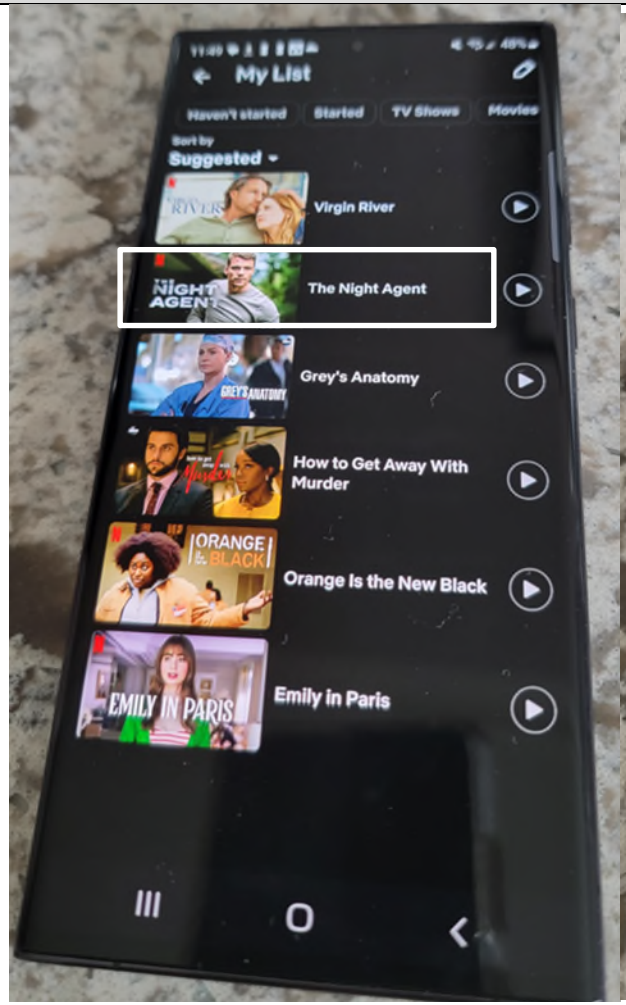
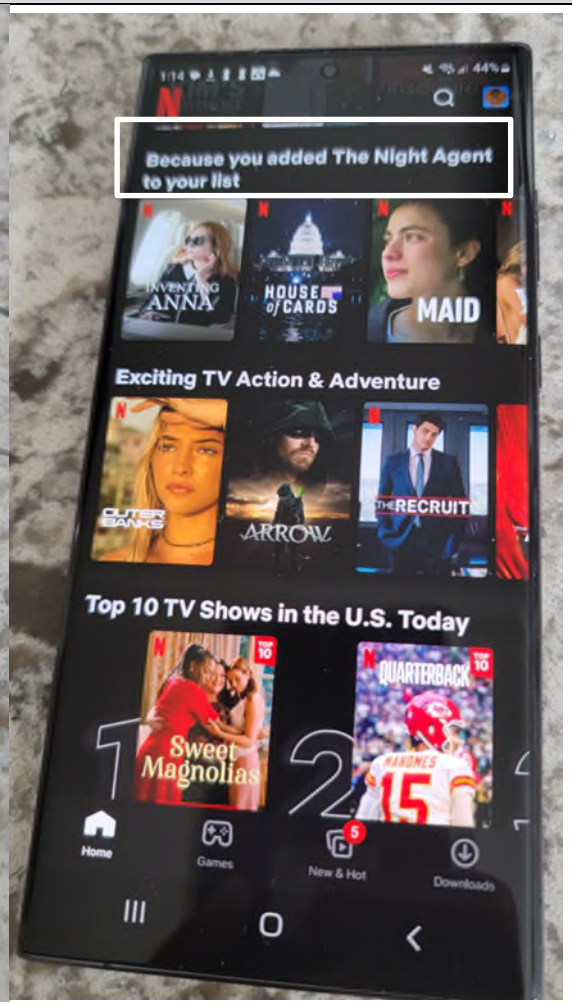
Red Notice is removed from Mayerbip.group's list and its thumbnail also disppears.

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	Thus, a user of any provide may remove downloads that have been downloaded by different users sharing the same Netflix account. The remaining Accused Samsung '815 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.
24. The information processing apparatus of claim 21, wherein the processor generates a list of video information based on preferences of a user determined by a user selections of thumbnails from the first or second group of thumbnails.	Each of the Accused Samsung '815 Products has a processor that generates a list of video information based on preferences of a user determined by a user selections of thumbnails from the first or second group of thumbnails. For example, actual testing of the Accused Samsung '815 Products shows that in the pre-installed Netflix app the processor generates a list of video information based on preferences of a user determined by a user selections of thumbnails from the first or second group of thumbnails (i.e. My List). Netflix provides recommendations with a list based on a user's watch history that corresponds to user selections.

U.S. Patent No. 11,017,815	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 and movies of interest to you. To do this we have created a proprietary, complex 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 or movie to enjoy with minimal effort. We estimate the likelihood that you will watch 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. 11,017,815	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 watching titles on the service, this will "supercede" any initial preferences you provided us, and as you continue to watch over time, the titles you watched more recently will outweigh titles you watched in the past in terms of driving our recommendations system.

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Rows, rankings and title representation In addition to choosing which titles to include in the rows on your Netflix homepage, our system also ranks each title within the row, and then ranks the rows themselves, using algorithms and complex systems to provide a personalized experience. To put this another way, when you look at your Netflix homepage, our systems have ranked titles in a way that is designed to present the best possible ordering of titles that you may enjoy. In each row there are three layers of personalization: • the choice of row (e.g. Continue Watching, Trending Now, Award-Winning Comedies, etc.) • which titles appear in the row, and • the ranking of those titles. The most strongly recommended rows go to the top. The most strongly recommended titles start on the left of each row and go right -- unless you have selected Arabic or Hebrew as your language in our systems, in which case these will go right to left. https://help.netflix.com/en/node/100639 Galaxy S23 Ultra:

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	  A list of movie/tv show are listed under "Because you added The Night Agent to your list" based on user's preferences in their "My List."

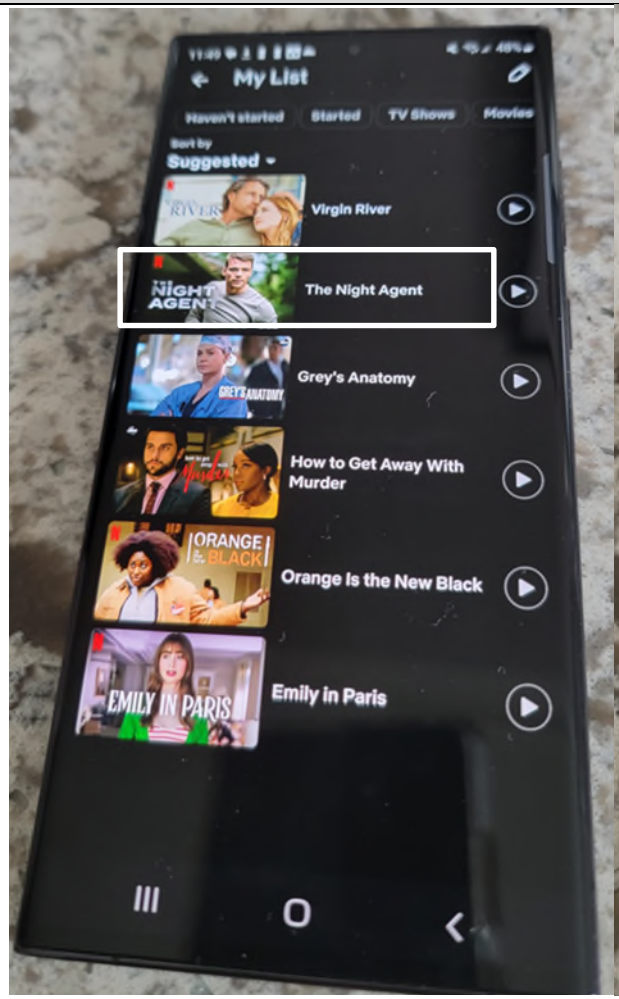
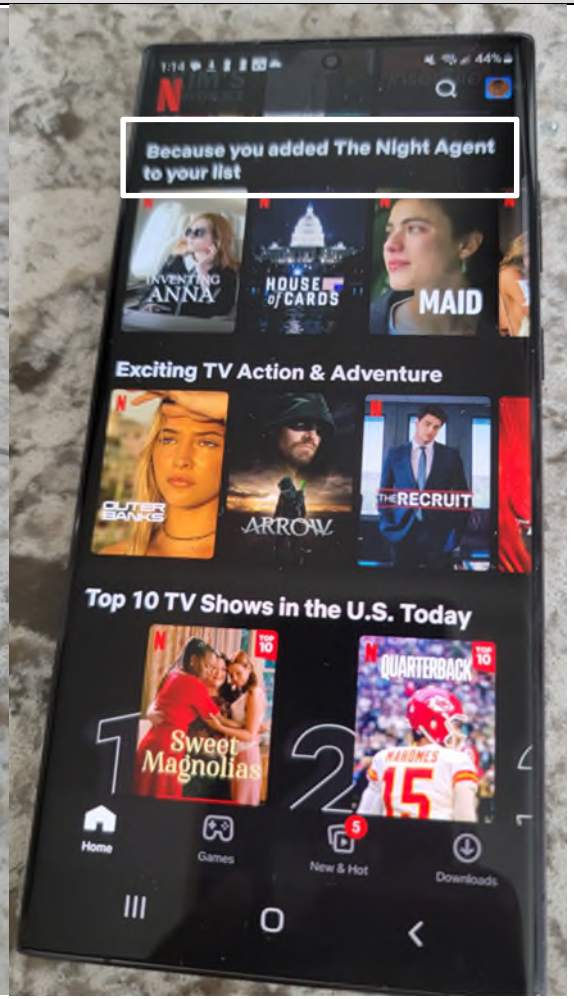
U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	The remaining Accused Samsung '815 Products operate in a similar manner based on the preinstalled Netflix application. *See* https://techcrunch.com/2020/02/13/netflix-fends-off-new-streaming-rivals-by-way-of-samsung-partnership/#:~:text=At%20Samsung's%20Unpacked%20event%20this,streaming%20service%20with%20Samsung%20devices; *see also* https://help.netflix.com/en/node/54816.
[25.a] The information processing apparatus of claim 21, wherein the processor generates a list of video information based on preferences of a user determined by a user selections of thumbnails associated with the first video information, the list including third and fourth video information, and [25.b] in response to the input interface receiving a selection of the list by the user, the	Each of the Accused Samsung '815 Products has a processor that generates a list of video information based on preferences of a user determined by a user selections of thumbnails associated with the first video information, the list including third and fourth video information For example, actual testing of the Accused Samsung '815 Products shows that in the pre-installed Netflix app the processor generates a list of video information based on preferences of a user determined by a user selections of thumbnails from the first or second group of thumbnails (i.e. My List). Netflix provides recommendations with a list based on a user's watch history that corresponds to user selections.

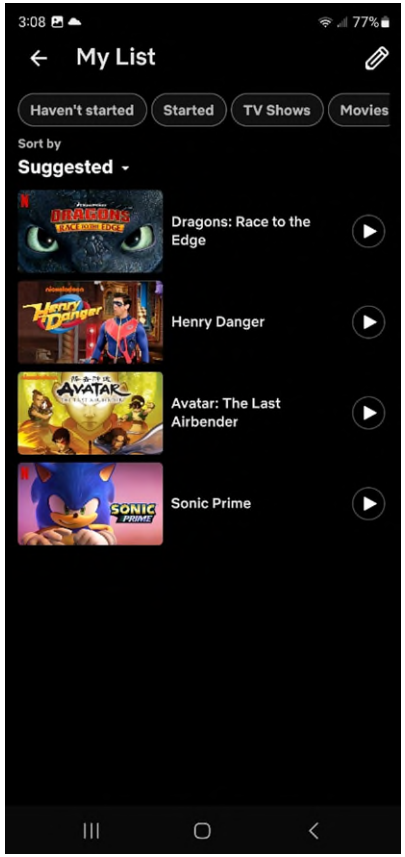
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
display displays only those thumbnails that correspond to the third and fourth video information and no other thumbnails associated with video information of other users.	**How Netflix's Recommendations System Works** Our business is a subscription service model that offers personalized recommendations, to help you find shows and movies of interest to you. To do this we have created a proprietary, complex 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 or movie to enjoy with minimal effort. We estimate the likelihood that you will watch 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. 11,017,815	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 watching titles on the service, this will "supercede" any initial preferences you provided us, and as you continue to watch over time, the titles you watched more recently will outweigh titles you watched in the past in terms of driving our recommendations system.

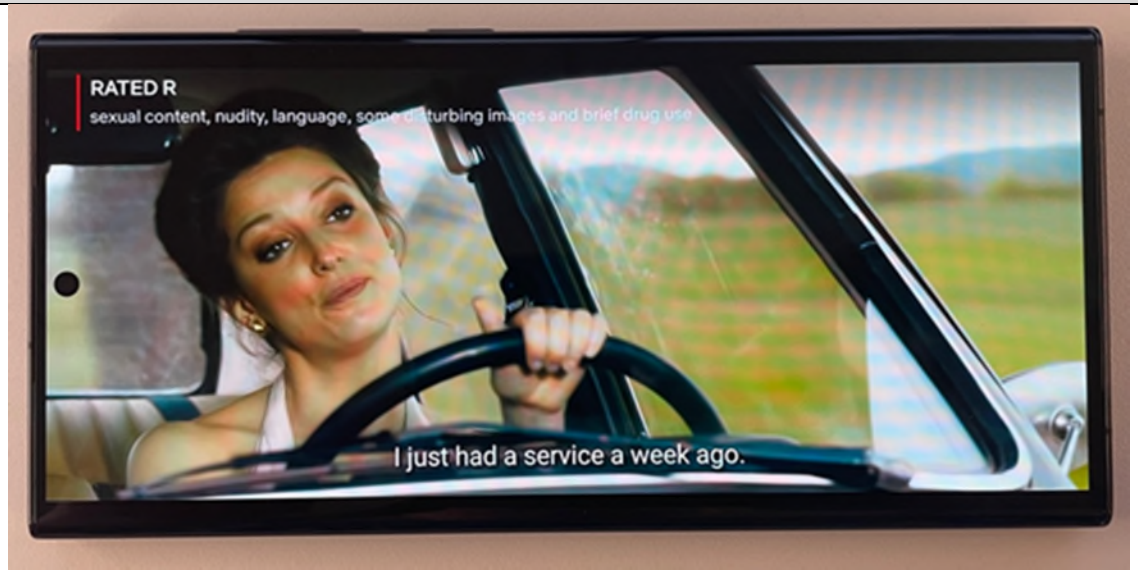
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	Rows, rankings and title representation In addition to choosing which titles to include in the rows on your Netflix homepage, our system also ranks each title within the row, and then ranks the rows themselves, using algorithms and complex systems to provide a personalized experience. To put this another way, when you look at your Netflix homepage, our systems have ranked titles in a way that is designed to present the best possible ordering of titles that you may enjoy. In each row there are three layers of personalization: • the choice of row (e.g. Continue Watching, Trending Now, Award-Winning Comedies, etc.) • which titles appear in the row, and • the ranking of those titles. The most strongly recommended rows go to the top. The most strongly recommended titles start on the left of each row and go right -- unless you have selected Arabic or Hebrew as your language in our systems, in which case these will go right to left. https://help.netflix.com/en/node/100639 For example, actual testing of the Accused Samsung '815 Products shows that in the pre-installed Netflix app processor generates a list of video information based on preferences of a user determined by a user selections of thumbnails associated with the first video information, the list including third and fourth video information (i.e. My List) specific to the user profile and does not include videos corresponding to the user profile of, for example, "kids" but only includes thumbnails corresponding to this user's preferences. Galaxy S23 Ultra:

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 

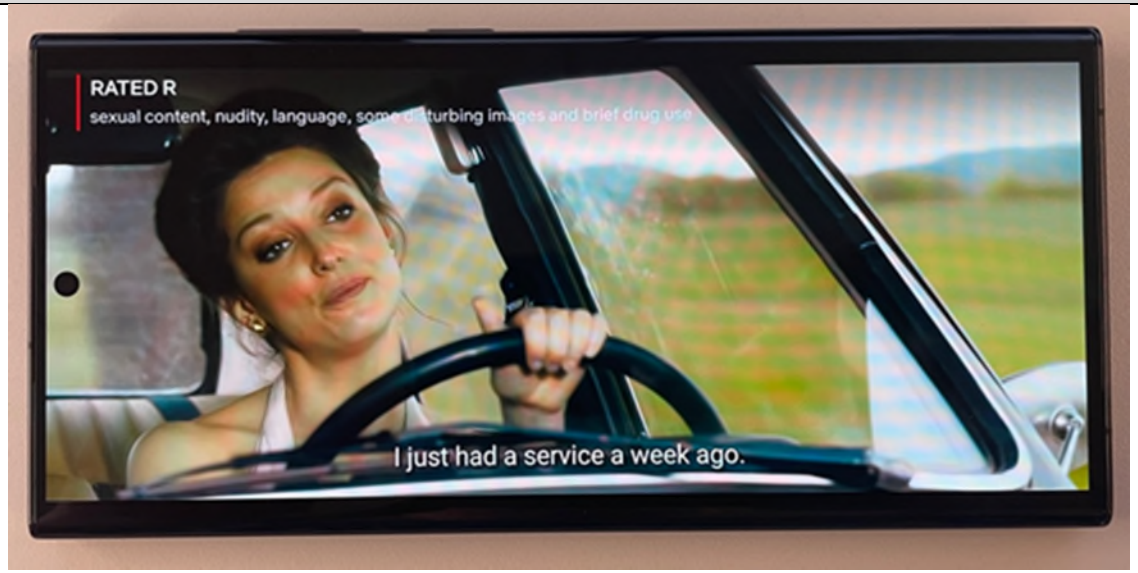
U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	A list of movie/tv show are listed under "Because you added The Night Agent to your list" based on user's preferences in their "My List." It does not show the video information included in the "My List" of kids user profile:  The remaining Accused Samsung '815 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-

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	samsung-partnership/#:~:text=At%20Samsung's%20Unpacked%20event%20this,streaming%20service%20with%20Samsung%20devices; *see also* https://help.netflix.com/en/node/54816.
[27.a] The information processing apparatus of claim 21, further comprising: an on screen display generator generating on screen display information,	Each of the Accused Samsung '815 Products includes an on screen display generator generating on screen display information. For example, upon information and belief, the system on a chip (SoC) with processor (including GPU) of each Accused Samsung '815 Products acts to generate on screen display information that is displayed during playback of video information on Netflix application. **Galaxy S23 Ultra:** 

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
	 Screenshot showing playback of a downloaded video on Netflix with on screen display including menu options at bottom and/or subtitles. The remaining Accused Samsung '815 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.
[27.b] wherein the first video information includes third video information such	For each of the Accused Samsung '815 Products, the first video information includes third video information such that, upon selection for playback, the third video information is outputted with the on screen display information for display of the third video information and the on screen display information.

U.S. Patent No. 11,017,815	**Exemplary Evidence of Infringement**
that, upon selection for playback, the third video information is outputted with the on screen display information for display of the third video information and the on screen display information.	For example, testing of the Accused Samsung '815 Products confirms that the Accused Samsung '815 Products display on screen display information (e.g., subtitles) and the third video information together as a part of playback on the Netflix application. 

APPENDIX 5: JANUARY 11, 2024 INFRINGEMENT CONTENTIONS APPLYING CLAIMS 1-25 AND 27 OF U.S. PATENT NO. 11,017,815 TO ACCUSED SAMSUNG '815 PRODUCTS

U.S. Patent No. 11,017,815	Exemplary Evidence of Infringement
	 Screenshot showing playback of a downloaded video on Netflix with on screen display *e.g.*, subtitles. The remaining Accused Samsung '815 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.