

US0D1029814S

(12)

United States Design Patent

Lyu et al.

(10)

Patent No.:

US D1,029,814 S

(45)

Date of Patent:

** Jun. 4, 2024

(54) DISPLAY MODULE

(71) Applicant: Samsung Display Co., LTD., Yongin-si (KR)

(72) Inventors: Jun-Sang Lyu, Seoul (KR); Jun Yong Park, Seoul (KR); Ho-Seok Han, Cheonan-si (KR)

(73) Assignee: Samsung Display Co., Ltd., Yongin-si (KR)

(**) Term: 15 Years

(21) Appl. No.: 29/869,900

(22) Filed: Jan. 11, 2023

Related U.S. Application Data

(62) Division of application No. 29/647,767, filed on May 15, 2018, now Pat. No. Des. 978,846.

Foreign Application Priority Data

Feb. 2, 2018 (KR) 30-2018-0005968

(51) LOC (14) Cl. 14-03

(52) U.S. Cl.
USPC D14/248; D14/250; D14/432

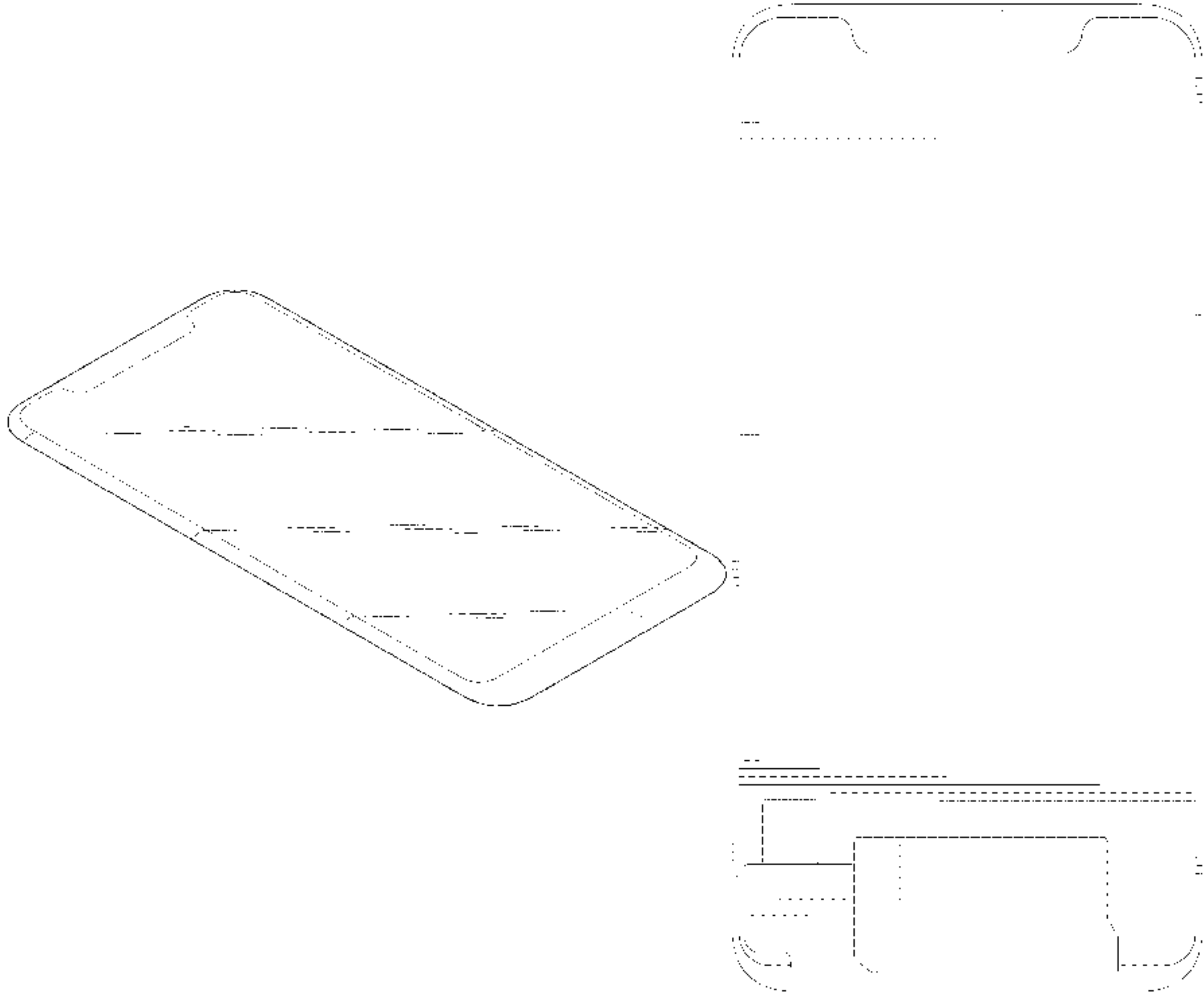
(58) Field of Classification Search
USPC D14/138 R, 138 AA, 138 C, 138 G, D14/140.11, 203.1, 203.3, 203.7, 214, D14/217, 248, 250, 289, 348, 371, 374, D14/405, 424, 432, 439, 464, 501-502, D14/505; D21/324-325, 329, 332; D13/162, 184
CPC C09J 7/00; C09J 7/29; C09J 2201/122; G06F 1/1626; H04B 1/3888; G02F

1/133308; G02F 2001/133314; G02F 1/133512; H04N 5/2257
See application file for complete search history.

(56) References Cited

U.S. PATENT DOCUMENTS

3,943,649 A	3/1976	Foley	
D249,766 S	10/1978	Munn	
D447,517 S	9/2001	Flores, Jr. et al.	
D502,031 S	2/2005	Cassidy et al.	
D505,809 S	6/2005	Cassidy et al.	
D629,771 S	12/2010	Haspil et al.	
7,983,037 B2	7/2011	Zhang et al.	
8,116,073 B2	2/2012	Hung et al.	
D665,808 S	8/2012	Wang	
D693,785 S	11/2013	Sutherland et al.	
D707,214 S *	6/2014	Reivo	D14/248
D716,780 S *	11/2014	Park	D14/248
D728,469 S	5/2015	Castelli	
D732,540 S	6/2015	Kang et al.	
D735,175 S	7/2015	Liu et al.	
D735,176 S	7/2015	Liu et al.	
D749,053 S	2/2016	Paihonen et al.	
D772,199 S	11/2016	Igarashi	
D777,714 S *	1/2017	Akana	D14/250
9,542,866 B1	1/2017	Cowan	
D786,246 S	5/2017	Park et al.	
D793,376 S	8/2017	Kwon et al.	
D794,005 S	8/2017	Kwon et al.	
D794,636 S	8/2017	Park et al.	
D796,496 S	9/2017	Lee	
D800,129 S	10/2017	Wadsworth et al.	
D800,131 S	10/2017	Wadsworth et al.	
D804,462 S	12/2017	Lamb	
D804,463 S	12/2017	Lamb	
D804,464 S	12/2017	Lamb	
D806,705 S	1/2018	Akana et al.	
D811,407 S	2/2018	Wadsworth et al.	
D814,452 S	4/2018	Kwon et al.	
D815,632 S	4/2018	Akana et al.	
D815,633 S	4/2018	Akana et al.	
D817,314 S	5/2018	Kwon et al.	
D817,945 S	5/2018	Wadsworth et al.	
9,979,425 B2	5/2018	Wolf, II	
D820,833 S	6/2018	Kim et al.	
D820,835 S	6/2018	Kim et al.	
D828,335 S	9/2018	Lin	
D828,828 S	9/2018	Kim et al.	
D829,205 S	9/2018	Akana et al.	
D829,206 S *	9/2018	Akana	D14/341
D832,266 S	10/2018	Akana et al.	



US D1,029,814 S

Page 2

D832,267 S	10/2018	Akana et al.		D904,330 S *	12/2020	Cha	D14/138 G
D832,829 S	11/2018	Kwon et al.		D904,380 S	12/2020	Seo et al.	
D832,846 S	11/2018	Wadsworth et al.		D904,994 S	12/2020	Lee et al.	
D832,847 S	11/2018	Wadsworth et al.		D904,995 S	12/2020	Baek et al.	
D832,850 S	11/2018	Oh		D905,030 S	12/2020	Seo et al.	
D833,439 S	11/2018	MacDonald et al.		D905,653 S	12/2020	Park et al.	
D833,440 S	11/2018	Beaupre et al.		D905,669 S	12/2020	Park et al.	
D833,441 S	11/2018	Beaupre et al.		D905,670 S	12/2020	Seo et al.	
D833,442 S	11/2018	Wadsworth et al.		D905,695 S	12/2020	Akana et al.	
D833,443 S	11/2018	Wadsworth et al.		D906,306 S	12/2020	Akana et al.	
D834,024 S	11/2018	Beaupre et al.		D908,655 S *	1/2021	Kim	D14/138 G
D834,550 S	11/2018	Ryu et al.		D908,671 S *	1/2021	Zhang	D14/248
D834,552 S	11/2018	Ryu et al.		D908,706 S	1/2021	Ahn et al.	
D835,623 S	12/2018	Wadsworth et al.		10,882,285 B2	1/2021	Kim et al.	
D836,115 S	12/2018	Beaupre et al.		D912,057 S	3/2021	Chang	
D840,382 S	2/2019	Ryu et al.		D912,652 S *	3/2021	Nam	D14/248
D840,383 S	2/2019	Ryu et al.		D914,024 S	3/2021	Kim et al.	
D840,987 S	2/2019	Ryu et al.		D915,409 S	4/2021	Koo et al.	
D841,634 S	2/2019	Ryu et al.		D917,490 S	4/2021	Lee et al.	
D844,011 S	3/2019	Lin		D920,306 S *	5/2021	Seo	D14/248
D849,010 S	5/2019	Akana et al.		D920,307 S *	5/2021	Seo	D14/248
D854,528 S	7/2019	Ryu et al.		D920,313 S	5/2021	Seo et al.	
D855,042 S	7/2019	Ryu et al.		11,009,911 B2	5/2021	Lin et al.	
D855,043 S	7/2019	Ryu et al.		D922,999 S	6/2021	Andre et al.	
D855,044 S	7/2019	Cho et al.		11,036,259 B2	6/2021	Chou et al.	
D855,599 S	8/2019	Ryu et al.		11,050,911 B1	6/2021	Ondracek	
D855,600 S	8/2019	Ryu et al.		D925,531 S	7/2021	Kim et al.	
D856,337 S	8/2019	Akana et al.		D925,541 S	7/2021	Ahn et al.	
D856,338 S	8/2019	Akana et al.		D926,176 S	7/2021	Seo	
D863,245 S	10/2019	Yuan et al.		D926,192 S *	7/2021	Chang	D14/439
D863,274 S *	10/2019	Ryu	D14/248	D926,765 S	8/2021	Akana et al.	
D863,307 S	10/2019	Yi et al.		D926,770 S	8/2021	Akana et al.	
D863,308 S	10/2019	Yi et al.		D928,144 S	8/2021	Satzger et al.	
D865,737 S *	11/2019	Park	D14/248	11,093,006 B2	8/2021	Yu et al.	
D867,350 S	11/2019	Park et al.		11,106,076 B2	8/2021	Lee	
D867,351 S *	11/2019	Park	D14/248	11,111,418 B2	9/2021	Colby et al.	
D868,057 S	11/2019	Kim et al.		D933,655 S	10/2021	Lyu et al.	
D870,706 S	12/2019	Lin		D934,216 S	10/2021	Seo	
D872,076 S	1/2020	Kim et al.		D937,249 S *	11/2021	Park	D14/248
D873,257 S	1/2020	Park et al.		D938,428 S	12/2021	Akana et al.	
D873,258 S	1/2020	Park et al.		D938,429 S	12/2021	Akana et al.	
D873,266 S	1/2020	Kim et al.		D938,955 S *	12/2021	Akana	D14/432
D874,417 S	2/2020	Chong et al.		D939,484 S *	12/2021	Son	D14/248
D874,450 S	2/2020	Cha et al.		D940,721 S *	1/2022	Koo	D14/439
D875,061 S	2/2020	Cho et al.		11,237,661 B2 *	2/2022	Bok	G06F 3/04146
D875,702 S	2/2020	Kim et al.		11,240,927 B2 *	2/2022	Lee	H05K 5/0017
D875,703 S	2/2020	Kim et al.		D947,852 S	4/2022	Lee et al.	
D876,415 S	2/2020	Yi et al.		D951,957 S *	5/2022	Akana	D14/432
D876,438 S	2/2020	Lin		D951,958 S *	5/2022	Akana	D14/432
D877,110 S	3/2020	Cho et al.		D952,591 S *	5/2022	Zhu	D14/138 G
D877,710 S	3/2020	Wu et al.		D955,393 S *	6/2022	Koo	D14/439
D879,064 S	3/2020	Park et al.		D955,394 S *	6/2022	Koo	D14/439
D879,081 S	3/2020	Kim et al.		D957,377 S *	7/2022	Seo	D14/248
D879,736 S	3/2020	Park et al.		D957,400 S *	7/2022	Akana	D14/432
D883,942 S	5/2020	Cha et al.		D957,401 S *	7/2022	Akana	D14/432
D883,945 S	5/2020	Park et al.		D967,826 S *	10/2022	Lee	D14/439
D883,946 S	5/2020	Xu et al.		D978,845 S *	2/2023	Lyu	D14/248
D884,688 S	5/2020	Cha et al.		D978,846 S *	2/2023	Lyu	D14/248
D886,090 S	6/2020	Cha et al.		D978,847 S *	2/2023	Lyu	D14/248
D886,091 S	6/2020	Cha et al.		D981,980 S *	3/2023	Tsai	D14/138 G
D886,756 S	6/2020	Li et al.		D986,894 S *	5/2023	Akana	D14/439
D886,757 S	6/2020	Cho et al.		D988,327 S *	6/2023	Akana	D14/440
D886,813 S	6/2020	Cha et al.		D993,963 S *	8/2023	Koo	D14/439
D888,030 S	6/2020	Kim et al.		D994,673 S *	8/2023	Lee	D14/439
D888,701 S	6/2020	Nam et al.		D996,416 S *	8/2023	Akana	D14/432
D890,152 S	7/2020	Yi et al.		2012/0309469 A1	12/2012	Fornara	
D890,713 S *	7/2020	Xu	D14/138 G	2014/0077690 A1	3/2014	Lee	
D893,490 S	8/2020	Akana et al.		2015/0246514 A1	9/2015	LaColla et al.	
10,754,463 B2	8/2020	Kim		2015/0291854 A1	10/2015	Colby et al.	
D894,857 S	9/2020	Cha et al.		2016/0286920 A1	10/2016	Lean et al.	
D894,883 S	9/2020	Park et al.		2017/0297268 A1	10/2017	Witham et al.	
D895,627 S	9/2020	Akana et al.		2017/0339261 A1	11/2017	Chiang	
D897,979 S	10/2020	Choi et al.		2018/0196475 A1	7/2018	Bao et al.	
D899,410 S *	10/2020	Xu	D14/248	2018/0272669 A1	9/2018	Kim et al.	
D900,112 S	10/2020	Cho		2018/0307278 A1	10/2018	Mody et al.	
D900,778 S	11/2020	Cheng et al.		2019/0033922 A1	1/2019	Chou et al.	
D900,799 S	11/2020	Cho et al.		2019/0047815 A1	2/2019	Kim	
D901,508 S	11/2020	Akana et al.		2019/0098120 A1	3/2019	Deng	
D902,900 S *	11/2020	Seo	D14/248	2019/0215390 A1	7/2019	Liu et al.	

2019/0235574	A1	8/2019	Groves et al.	
2019/0339746	A1	11/2019	Kim et al.	
2019/0394373	A1 *	12/2019	Zhang	H04M 1/0264
2020/0050047	A1	2/2020	Son et al.	
2020/0068057	A1 *	2/2020	Lei	H04M 1/0274
2020/0094467	A1	3/2020	Cho et al.	
2020/0117041	A1	4/2020	Nakamori et al.	
2020/0183523	A1	6/2020	Luo et al.	
2020/0198223	A1	6/2020	Sorensen et al.	
2020/0214154	A1	7/2020	Liang	
2020/0220958	A1	7/2020	Bian	
2020/0303664	A1	9/2020	Choi et al.	
2020/0305298	A1	9/2020	Lee et al.	
2020/0319677	A1	10/2020	Canning	
2020/0348722	A1	11/2020	Lee	
2020/0355851	A1	11/2020	Yee et al.	
2020/0401227	A1	12/2020	Kim et al.	
2021/0183985	A1	6/2021	Lim et al.	
2021/0204434	A1	7/2021	Hooton et al.	
2021/0204435	A1	7/2021	Choi et al.	
2021/0241984	A1	8/2021	Moon et al.	
2021/0252770	A1	8/2021	Lee et al.	
2021/0409059	A1 *	12/2021	Mu	A45C 13/002
2022/0197581	A1 *	6/2022	Lee	H04N 23/632

FOREIGN PATENT DOCUMENTS

CN	302010258	*	7/2012
CN	302110586	*	10/2012
CN	303805685		2/2016
CN	304980691		3/2018
CN	304725453		7/2018
CN	304894674	*	11/2018
CN	305119956	*	4/2019
CN	305385342		10/2019
CN	305482127		12/2019
CN	305808532	*	5/2020
CN	305924944		7/2020
CN	305970076		8/2020
CN	305996647		8/2020
JP	D1585966		9/2016
KR	301025955.000		10/2019
KR	300974404.0000	*	10/2020
KR	300974405.0000	*	10/2020
KR	300974407.0000	*	10/2020

OTHER PUBLICATIONS

LCD Huawei Nova 3i, Huawei, amazon.sa, published by Huawei, first available on Nov. 21, 2019 @ 2006-2023 Amazon.com, Inc., online, site visited Sep. 7, 2023. Available at URL: <https://www.amazon.sa/-/en/HUAWEI-LCD-Huawei-nova-3i/dp/B081TM3H85> (Year: 2019).*

IPhone X OLEO Screen, Apple, rewatechnology.com, published by Phryne on Nov. 23, 2017 © 2008-2018, online, site visited Nov. 13, 2020. Available at URL: <https://blog.rewatechnology.com/iphone-x-oled-screen-total-teardown/> (Year: 2017).

IPhone X Screen Protector, Olixar, youtube.com, published by MobileFun on Nov. 3, 2017 © not listed, online, site visited Feb. 24, 2020. Available from Internet, URL: <https://www.youtube.com/watch?v=gpSlrfYDbal> (Year: 2017).

IPhone X Screen Protector, various manufactures, dgit.com, published by John Callaham on Oct. 27, 2017 © 2020 DGIT, online site visited Feb. 21, 2020. Available from Internet, URL <https://dgit.com/iphone-x-screen-protectors-52439/> (Year: 2017).

IPhone X Screen Protector, Zagg, amazon.com, published by Zagg, customer review with images from on Dec. 17, 2017 © 1996-2020, online, site visited Feb. 21, 2020. Available at URL: <https://www.amazon.com/ZAGG-InvisibleShield-Definition-Tempered-Protector/dp/B074SCLR2S/?tag=at88-20&th=1> (Year: 2017).

Mate 20, Huawei, amazon.com, published by Huawei, first available on Aug. 10, 2018 © 1996-2020 Amazon.com, Inc., online, site visited May 16, 2022. Available at URL: <https://www.amazon.com/Huawei-Display-Battery-Unlocked-HMA-L29/dp/B07KMFRPR1> (Year: 2018).

Module for Samsung Galaxy, Samsung, hotcomputers.ru, author unlisted, published on Mar. 20, 2015 @ Online store “HotComputers”, online, site visited Jun. 29, 2020. Available URL: <https://www.hotcomputers.ru/product/874417zhk-matrica-tachskrin-ams499qp01-5-samsung-galaxy-s4-i9500-belyj-1920x1080-full-hd/> (Year: 2015).

OEM Back LCD Screen Sticker Part for Samsung Galaxy, brand not listed, oan.cl, author and date not listed © 2020 Shopping Online, online, site visited Sep. 4, 2020. Available at URL: <https://www.oan.cl/oem-back-lcd-screen-sticker-part-for-samsung-galaxy-a30-galaxy-a30s/> (Year: 2020).

Replacement Parts for Samsung Galaxy, MEI HE-Parts, amazon.com, posted by MEI HE-Parts on Mar. 7, 2019 © 1996-2020 Amazon.com, Inc., online, site visited Sep. 1, 2020. Available at URL: <https://www.amazon.com/Replacement-Samsung-Original-Display-Cellphone/dp/B07P HX3 R7 M?th=1> (Year: 2019).

Screen Protector for Apple iphone 11 Pro, amazon.com, published by JTech on Aug. 23, 2017 © 1996-2020 Amazon.com, Inc., online, site visited Jun. 26, 2020. Available at URL: <https://www.amazon.co.uk/JETech-Screen-Protector-Friendly-Tempered/dp/B075175151> (Year: 2017).

Screen Protector for Huawei Mate 20, Mr. Shield, amazon.com, published by Mr. Shield, first available on Jan. 24, 2018 © 1996-2020 Amazon.com, Inc., online, site visited May 16, 2022. Available at URL: <https://www.amazon.com/Mr-Shield-Tempered-Protector-Lifetime-Replacement/dp/B07PJX9JWR> (Year: 2018).

Tempered Glass for Samsung Galaxy, Islandse_Mobile, amazon.com, published by Islandse_Mobile on Aug. 30, 2019 © 1996-2020 Amazon.com, Inc., online, site visited Sep. 4, 2020. Available at URL: <https://www.amazon.com/Islandse%F0%9F%92%96%F0%9F%92%96-Samsung-Tempered-Protector-Without/dp/B07TRK> . . (Year: 2019).

U.S. Advisory Action dated Jun. 20, 2022, issued in U.S. Appl. No. 29/691,104 (4 pages).

U.S. Ex Parte Quayle Action dated Nov. 30, 2022, issued in U.S. Appl. No. 29/691,104, 6 pages.

U.S. Final Office action dated Jan. 18, 2022, issued in U.S. Appl. No. 29/691,104 (8 pages).

U.S. Notice of Allowance dated Jun. 17, 2021, issued in U.S. Appl. No. 29/647,774 (8 pages).

U.S. Notice of Allowance dated Sep. 28, 2022, issued in U.S. Appl. No. 29/647,763, 8 pages.

U.S. Notice of Allowance dated Sep. 28, 2022, issued in U.S. Appl. No. 29/647,773, 8 pages.

U.S. Notice of Allowance for U.S. Appl. No. 29/647,763 dated May 24, 2022, 10pp.

U.S. Notice of Allowance for U.S. Appl. No. 29/647,773 dated May 24, 2022, 10pp.

U.S. Office action dated Jan. 1, 2021, issued in U.S. Appl. No. 29/647,763 (16 pages).

U.S. Office action dated Jan. 11, 2021, issued in U.S. Appl. No. 29/647,773 (14 pages).

U.S. Office Action dated Oct. 1, 2021, issued in U.S. Appl. No. 29/647,773 (12 pages).

U.S. Office Action dated Sep. 23, 2020, issued in U.S. Appl. No. 29/647,774, 14 pages.

U.S. Office Action dated Sep. 23, 2020, issued in U.S. Appl. No. 29/691,104, 14 pages.

U.S. Restriction Requirement dated Aug. 11, 2020, issued in U.S. Appl. No. 29/647,763, 7 pages.

U.S. Restriction Requirement dated Aug. 11, 2020, issued in U.S. Appl. No. 29/647,773, 7 pages.

U.S. Restriction/Election Office Action issued in Design U.S. Appl. No. 29/647,774 by the USPTO, dated Jul. 7, 2020, 8 pages.

X30 Front Panel Leaks, Vivo, gizchina.com, posted by Qayyum Ajneri on Jan. 26, 2018 © 2012-2020 GizChina.com, Inc., online, site visited Sep. 1, 2020. Available at URL: <https://www.gizchina.com/2018/01/26/alleged-vivo-x30-front-panel-leaks-another-notch-design-appears/> (Year: 2018).

U.S. Notice of Allowance dated Jun. 7, 2023, issued in U.S. Appl. No. 29/691,104 (6 pages).

* cited by examiner

Primary Examiner — Joshua Kading

Assistant Examiner — Altaira J Swangin

(74) *Attorney, Agent, or Firm* — Lewis Roca Rothgerber
Christie LLP

(57) **CLAIM**

The ornamental design for a display module, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of the display module according to the present design;

FIG. 2 is a front view thereof;

FIG. 3 is a rear view thereof;

FIG. 4 is a left side view thereof;

FIG. 5 is a right side view thereof;

FIG. 6 is a top view thereof; and,

FIG. 7 is a bottom view thereof.

1 Claim, 7 Drawing Sheets

FIG. 1

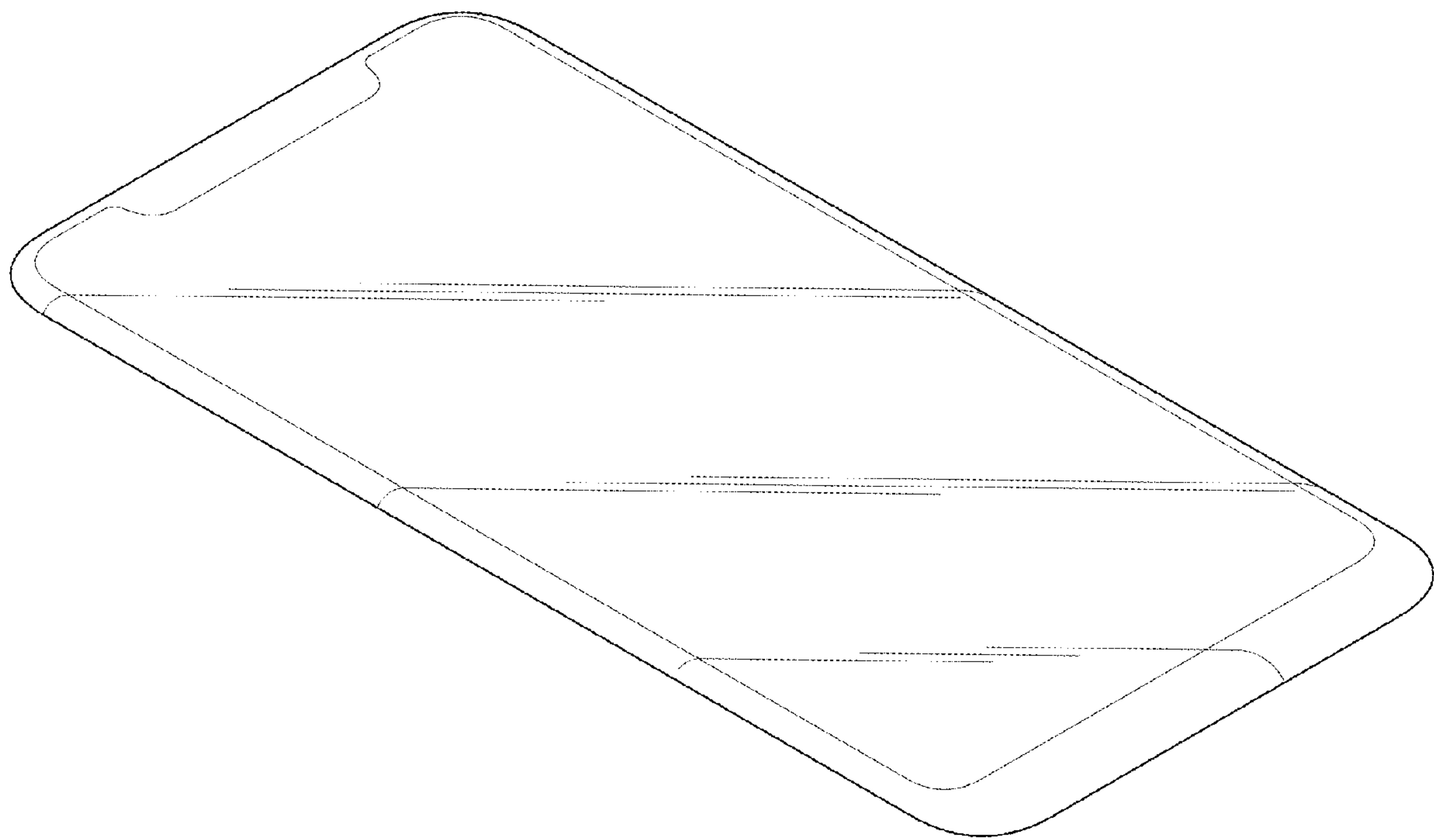


FIG. 2

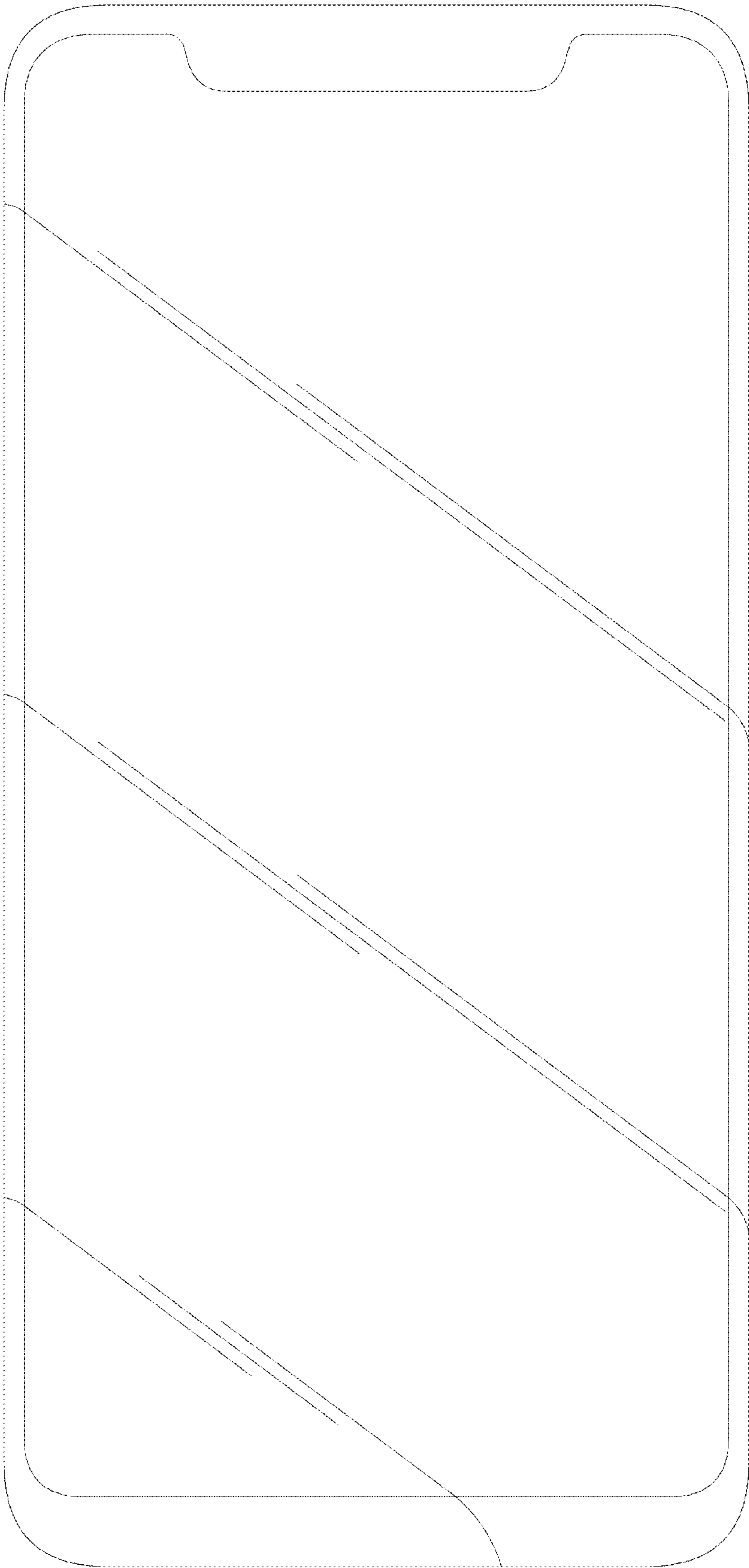


FIG. 3

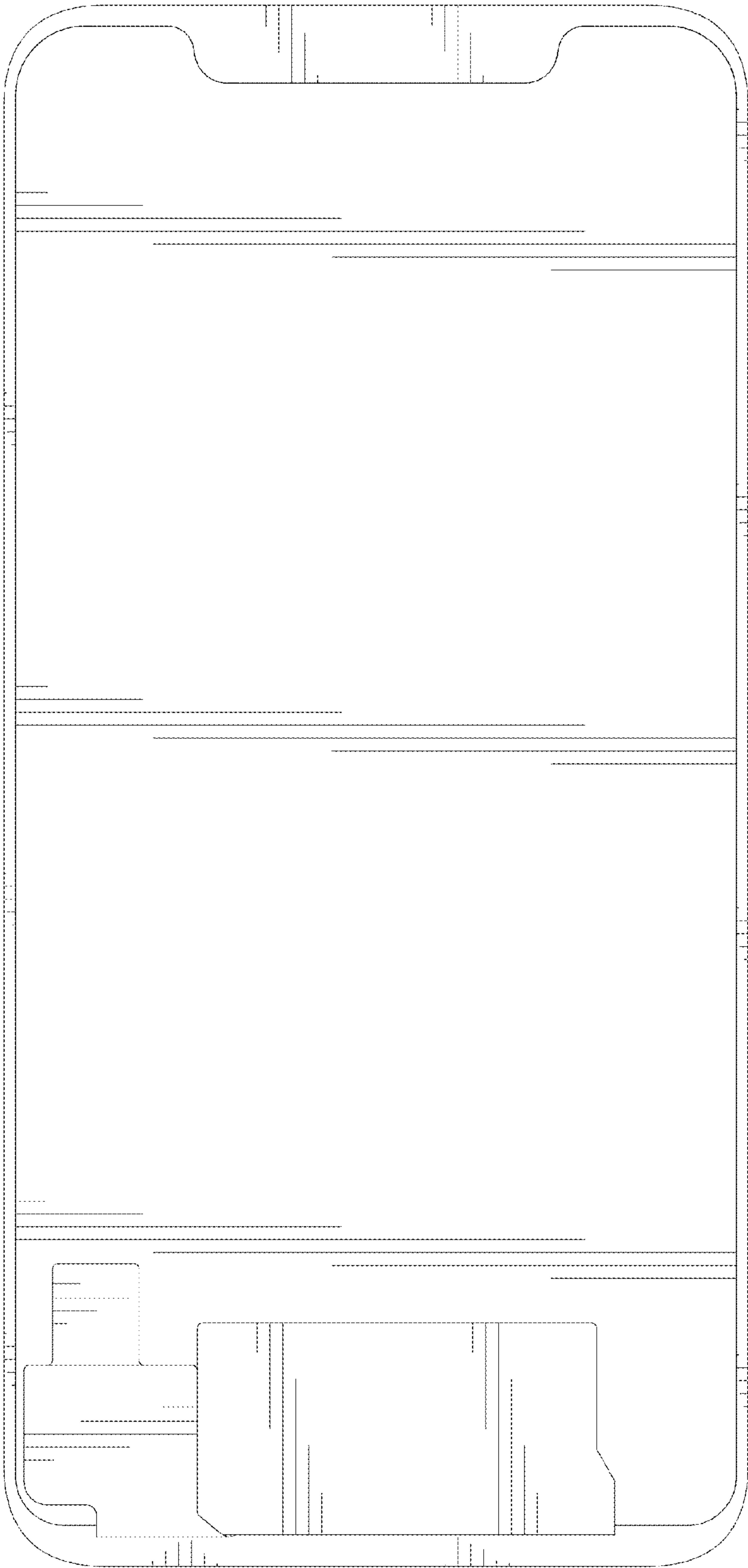


FIG. 4



FIG. 5



FIG. 6

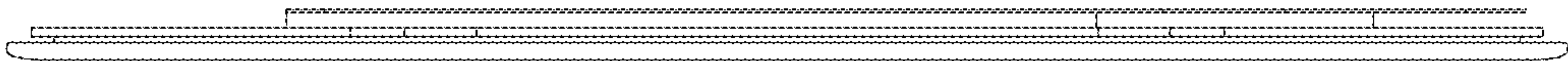


FIG. 7

