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**Kim et al.** (45) **Date of Patent:** **\*\* Jan. 24, 2017**

(54) **PORTABLE ELECTRONIC DEVICE**

(56) **References Cited**

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U.S. PATENT DOCUMENTS

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D303,111 S 8/1989 Paley  
D504,109 S \* 4/2005 Hagman ..... D13/103  
D546,276 S \* 7/2007 Hagman ..... D13/103  
D593,994 S \* 6/2009 Andre ..... D14/203.7  
D604,713 S \* 11/2009 Andre ..... D14/203.3  
D629,384 S \* 12/2010 Lee ..... D14/203.3  
D631,458 S \* 1/2011 Liao ..... D14/138 G  
D636,752 S \* 4/2011 Liao ..... D14/138 G  
D647,876 S \* 11/2011 Andre ..... D14/203.3  
D656,496 S \* 3/2012 Andre ..... D14/341  
D656,497 S 3/2012 Chiu  
D657,358 S 4/2012 Ferrari et al.  
D665,774 S \* 8/2012 Akana ..... D14/203.1  
D678,270 S 3/2013 Song et al.  
D681,056 S \* 4/2013 Akana ..... D14/203.3  
8,605,421 B2 \* 12/2013 Verschoor ..... G06F 1/1652  
361/679.21

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Suwon-si (KR)

(\*\*) Term: **14 Years**

(21) Appl. No.: **29/504,705**

(22) Filed: **Oct. 8, 2014**

D706,300 S \* 6/2014 Akana ..... D14/341  
D706,738 S 6/2014 Kim et al.  
D719,506 S \* 12/2014 Jung ..... D13/108  
D720,353 S \* 12/2014 Nakamura ..... D14/432  
D722,035 S \* 2/2015 Nam ..... D14/138 AD  
D722,036 S \* 2/2015 Nam ..... D14/138 G  
D722,037 S \* 2/2015 Nam ..... D14/138 G  
D726,674 S \* 4/2015 Lee ..... D14/138 G  
D732,499 S \* 6/2015 Lee ..... D14/138 G  
D737,238 S \* 8/2015 Lee ..... D14/138 G  
D737,794 S \* 9/2015 Lee ..... D14/138 G  
D741,308 S \* 10/2015 Lee ..... D14/248  
D742,867 S \* 11/2015 Lee ..... D14/248  
D744,990 S \* 12/2015 Lee ..... D14/138 G  
D744,991 S \* 12/2015 Lee ..... D14/248  
D745,004 S \* 12/2015 Kim ..... D14/341  
D745,484 S \* 12/2015 Lee ..... D14/138 G  
D747,301 S \* 1/2016 Lee ..... D14/138 G  
D750,617 S \* 3/2016 Akana ..... D14/341  
D755,166 S \* 5/2016 Lee ..... D14/248  
D757,714 S \* 5/2016 Akana ..... D14/341  
D757,716 S \* 5/2016 Park ..... D14/341  
D758,334 S \* 6/2016 Du ..... D14/138 G  
D761,251 S \* 7/2016 Senda ..... D14/341  
D761,252 S \* 7/2016 Senda ..... D14/341  
D761,787 S \* 7/2016 Yamazaki ..... D14/341  
D761,788 S \* 7/2016 Yamazaki ..... D14/341  
D761,789 S \* 7/2016 Yamazaki ..... D14/341  
D763,188 S \* 8/2016 Park ..... D13/108  
2003/0108786 A1 \* 6/2003 Aaltonen ..... H01M 2/1066  
429/61

**Related U.S. Application Data**

(63) Continuation of application No. 29/504,002, filed on Oct. 1, 2014.

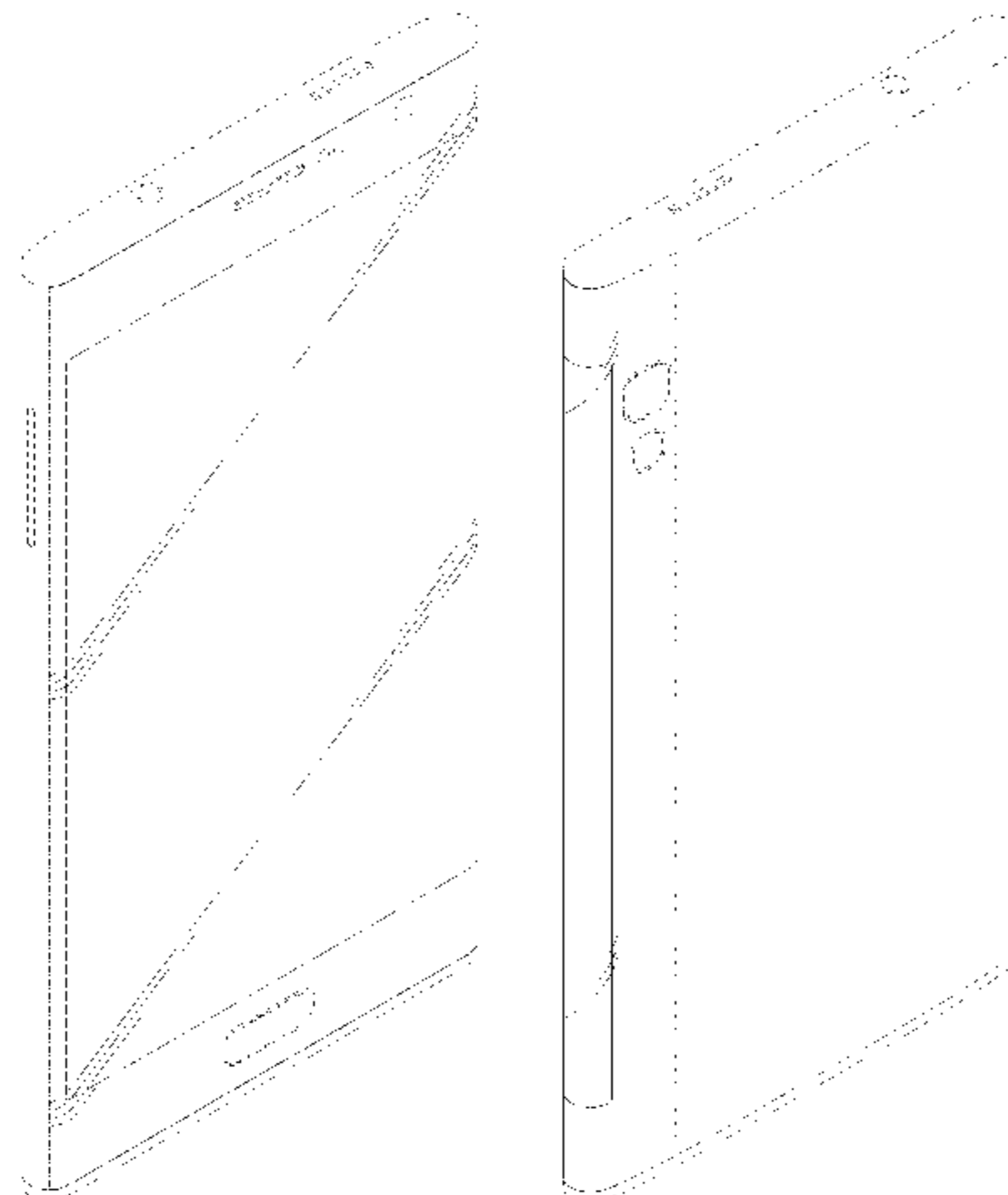
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(52) **U.S. Cl.**  
USPC ..... **D14/138 G**

(58) **Field of Classification Search**

USPC ..... D14/138 G, 138 AD, 138 R, 496, 203.1, D14/203.3, 203.5, 203.7, 248, 218, 439, D14/250, 341-347, 138 AA, 315, 336, D14/338-340; D21/517, 329; D13/168; 455/575.1, 556.2, 575.3, 575.4, 566; 379/433.01, 433.04; 361/679.3, 679.56; D6/300-303, 308-314; D9/414-433  
CPC ... G06F 1/1626; G06F 1/1652; H04M 1/0266; H04M 1/0268; H04M 1/02; H04M 2250/22; H04M 1/72527; H04M 1/0235; H04M 1/0237; H04M 1/0239; H04M 1/03; H04M 1/23; H04M 1/0202-1/035; G09F 9/301; H01L 2251/5338

See application file for complete search history.



(56)

## References Cited

## U.S. PATENT DOCUMENTS

2009/0051316	A1*	2/2009	Park	.....	H01M 10/46
					320/113
2010/0048252	A1*	2/2010	Kang	.....	H04M 1/72522
					455/566
2010/0134961	A1*	6/2010	Huang	.....	H01M 2/1066
					361/679.01
2011/0148782	A1*	6/2011	Wu	.....	H04M 1/0216
					345/173
2011/0296724	A1*	12/2011	Yang	.....	B44F 1/06
					40/541
2012/0019482	A1*	1/2012	Wang	.....	G06F 1/1652
					345/175
2012/0093498	A1*	4/2012	Hietala	.....	B29C 45/4421
					396/535
2013/0164958	A1*	6/2013	Zhang	.....	G06K 13/08
					439/153
2013/0222293	A1*	8/2013	Chung	.....	G06F 3/041
					345/173
2013/0300679	A1*	11/2013	Oh	.....	A45C 11/00
					345/173
2015/0015512	A1*	1/2015	Kwak	.....	G06F 3/0416
					345/173
2015/0169002	A1*	6/2015	Kemppinen	.....	G06F 1/1643
					361/679.55
2016/0109852	A1*	4/2016	Kuwabara	.....	G06F 1/163
					368/223
2016/0139629	A1*	5/2016	Yeo	.....	G06F 1/1624
					361/679.27
2016/0210257	A1*	7/2016	Szeto	.....	G06F 13/4022
2016/0253039	A1*	9/2016	Heo	.....	G06F 3/0412

## FOREIGN PATENT DOCUMENTS

CN	3543532	S	7/2006
CN	301090576	S	12/2009
CN	301328952	S	8/2010
CN	301397797	S	12/2010
CN	301552949	S	5/2011
CN	301633578	S	8/2011
CN	301720627	S	11/2011
CN	302190209	S	11/2012
CN	302219811	S	12/2012
CN	302254377	S	12/2012
CN	302341226	S	3/2013
CN	302483721	S	6/2013
CN	302680760	S	12/2013
EP	000800750-0001		10/2007
EP	001053060-0001		10/2009
EP	001169692-0001		10/2009
EP	000974449-0032		1/2011
EP	001935800-0014		11/2011
EP	002236091-0001		6/2013
EP	002236091-0002		6/2013
EP	002233437-0001		7/2013
EP	002233437-0002		7/2013
EP	002233437-0009		7/2013
EP	002234666-0001		7/2013
EP	002234666-0003		7/2013
EP	002255430-0001		10/2013
JP	D1170795	S	4/2003
JP	D1247848	S	8/2005
JP	D1260808	S	1/2006
JP	D1322619	S	2/2008
JP	D1381654	S	3/2010
JP	D1382708	S	3/2010
JP	D1336377	S	7/2011
JP	D1448200	S	8/2012
JP	D1455302	S	11/2012
JP	D1456537	S	12/2012
JP	D1469501	S	5/2013
JP	D1471843	S	6/2013
JP	D1472408	S	6/2013
JP	D1472870	S	6/2013

KR	30-2006-0008340		3/2007
KR	30-2008-0050046		12/2009
KR	30-2009-0007557		2/2010
KR	30-2009-0001361		4/2010
KR	30-2009-0025463		7/2010
KR	30-2009-0026909		8/2010
KR	30-2009-0027640		8/2010
KR	30-2009-0049005		11/2010
KR	30-2009-0035093		1/2011
KR	30-2009-0057676		1/2011
KR	30-2010-0000080		1/2011
KR	30-2009-0057692		3/2011
KR	30-2010-0006998		6/2011
KR	30-2010-0005624		10/2011
KR	30-2010-0012577		11/2011
KR	30-2010-0039332		12/2011
KR	30-2011-0031636		8/2012
KR	30-2012-0026103		2/2013
KR	30-2012-0009747		5/2013
KR	30-2012-0025064		6/2013
KR	30-2012-0055682		6/2013
KR	30-2012-0000907		7/2013
KR	30-2012-0000909		7/2013
KR	30-2012-0000933		7/2013
KR	30-2012-0000937		7/2013
KR	30-2012-0000951		7/2013
KR	30-2013-0008155		7/2013
KR	30-2013-0008369		7/2013
KR	30-2013-0008371		7/2013
KR	30-2013-0008375		7/2013
KR	30-2012-0051931		10/2013
KR	30-2012-0051936		10/2013
KR	30-2012-0053714		11/2013
KR	30-2012-0053718		11/2013
KR	30-2012-0053719		11/2013
KR	30-2013-0005876		11/2013
KR	30-2012-0052895		12/2013
KR	30-2012-0054649		12/2013
KR	30-2012-0053715		1/2014
KR	30-2012-0053722		1/2014
KR	30-2013-0000105		1/2014
KR	30-2013-0007758		1/2014
KR	30-2013-0035224		1/2014
KR	30-2013-0018699		3/2014
KR	30-2012-0053723		4/2014
KR	30-2013-0000106		4/2014
KR	30-2013-0000107		4/2014
KR	30-2013-0000108		4/2014
KR	30-2013-0037240		4/2014
KR	30-2013-0035223		6/2014
KR	30-2011-0035681		8/2014
KR	30-2014-0048600	*	10/2014
KR	30-2014-0048601	*	10/2014
KR	30-2014-0048602	*	10/2014
KR	30-2014-0048603	*	10/2014

## OTHER PUBLICATIONS

Samsung Galaxy S5 concept like iPhone 6 (via PR), available Sep. 23, 2013, [online], [site visited Sep. 13, 2016]. Available from internet, <URL: <http://www.product-reviews.net/2013/09/23/samsung-galaxy-s5-concept-like-iphone-6/>>.\*

Flux Concept Phone (via Concept Phones), available Mar. 29, 2015, [online], [site visited Sep. 14, 2016]. Available from internet, <URL: <http://www.concept-phones.com/cool-concepts/flux-concept-phone-perfect-android/>>.\*

Sony Xperia Curve Concept (via GSM Dome), available Jan. 19, 2015, [online], [site visited Sep. 14, 2016]. Available from internet, <URL: <http://www.gsm-dome.com/sony-xperia-curve-concept-borrows-elements-lumia-series-curved-phones>>.\*

iPhone Nano Concept (via Concept Phones), available Jul. 16, 2011, [online], [site visited Sep. 16, 2016]. Available from internet, <URL: <http://www.concept-phones.com/apple/iphone-nano-concept-created-dallas-bradshaw/>>.\*

iPhone 6 by Federico Ciccarese (YouTube), available Jan. 4, 2013, [online], [site visited Aug. 15, 2016]. Video available from internet, <URL: <https://www.youtube.com/watch?v=bl1cGOW5i68>>.\*

(56)

**References Cited**

## OTHER PUBLICATIONS

Bangera, Abhijit. "Wrap-Around BlackBerry Smartphone—A Concept Phone". [2012] www.geektech.in. Feb. 9, 2012. <<http://www.geektech.in/wrap-around-blackberry-smartphone-a-concept-phone/>>.

Seth, Radhika. "Sony Pocket Tablet Concept by Patrik Eriksson". [2012] www.yankodesign.com. Aug. 16, 2012. <<http://www.yankodesign.com/2012/08/16/entering-the-genre-of-pocket-tablets/>>.

"Flexible Display Concept". [2013] www.gallery.citizen.com. Feb. 3, 2013. <<http://gallery.citizen.com/bbs.php?id=gallery&category=0401&q=view&uid=175276>>.

Smoyu. "iPhone 6 Concept". [2013] www.cdida.org. Aug. 8, 2013. <<http://www.cdida.org/technology/20138/20138853.html>>.

Grover, Tushar. "Blackberry Wraparound Display Phone". [2012] www.optimisedtech.com. Apr. 6, 2012. <<http://www.optimisedtech.com/2012/04/blackberry-phone-with-wraparound.html>>.

"Flexible Display iPhone Mockup". [2013] blog.daum.net. May 20, 2013 <<http://blog.daum.net/mobileinnovation/228>>.

Ho, Kim Kyung. "Pandora Portable Pouch-Type Flexible Display Note Concept". [2013] www.chucksidea.com. Apr. 28, 2013 <<http://chucksidea.com/?p=2377>>.

P., Daniel. "Samsung Flexible Display Patents Include Pull-Out and Rollable Concept Units". [2012] www.phonearena.com. Mar. 7, 2012 <[http://www.phonearena.com/news/Samsung-flexible-display-patents-include-pull-out-and-rollable-concept-units\\_id27765](http://www.phonearena.com/news/Samsung-flexible-display-patents-include-pull-out-and-rollable-concept-units_id27765)>.

Samsung. Jan. 11, 2013 dated Jan. 11, 2013, accessed Sep. 22, 2014.

Thrystan, "Samsung Galaxy Youm Flexible Display Phone Gets Rendered, Spec'ed" dated May 23, 2013, accessed Sep. 19, 2014.

"Samsung Flexible Prototype". [2013] www.avenuel.tistory.com. Jan. 10, 2013. <<http://avenuel.tistory.com/1668>>.

Thrystan. "Wrap Around Screen Makes a Concept Hip". [2008] www.concept-phones.com. Jul. 8, 2008 <<http://www.concept-phones.com/cool-concepts/wrap-around-screen-makes-a-concept-hip/>>.

Hashslush Team. "LIMBO Smartphone Transforms into a Smartwatch". [2013] www.hashslush.com. Jul. 16, 2013 <<http://www.hashslush.com/limbo-smartphone-transforms-into-a-smartwatch/>>.

Buaniam, Than. "Galaxy Note 4 YOUM Display". [2014] www.oopsmobile.net. Apr. 17, 2014 <<http://www.oopsmobile.net/amazon-smartphone/>>.

Rijal, Samsur. "iPhone 6 Concept Design". [2013] www.intellectit.blogspot.kr. Apr. 20, 2013. <<http://intellectit.blogspot.kr/2013/04/iphone-6-concept-design.html>>.

"Nokia Lumia 999". [2013] www.ittrend.am. Jan. 17, 2013 <<http://ittrend.am/ru/2013/01/17/nokia-lumia-999-%D0%BA%D0%BE%D0%BD%D1%86%D0%B5%D0%BF%D1%82-%D1%87%D0%B5%D1%80%E2%80%A6>>.

Briden, Paul, "Samsung Flexible OLED Display Prototype Phones Showcased" dated Jan. 10, 2013, accessed Sep. 19, 2014.

Prasad. "Samsung Showcases Flexible OLED Displays". [2013] www.blog.gsmarena.com. Jan. 10, 2013 <<http://blog.gsmarena.com/samsung-showcases-flexible-oled-displays/>>.

Kellex, "Samsung Shows Off 'Youm' Flexible Display on Prototype Phone at CES" dated Jan. 9, 2013, accessed Sep. 19, 2014.

Richardson, Valerie, "Samsung's Flexible Display Smartphone Launching This Week as the Galaxy Round" dated Oct. 7, 2013, accessed Sep. 19, 2014.

"Vans Concept". [2012] www.vansfans.cn. Jan. 27, 2012 <<http://www.vansfans.cn/weiboshidaishouji/>>.

Warwick, Stephen. "iPhone 6 Concept Surfaces Based on Wrap-around Display Patent". [2013] www.todaysiphone.com. Apr. 19,

2013. <<http://www.todaysiphone.com/2013/04/iphone-6-concept-surfaces-based-on-wraparound-display-patent/>>.

Wordlesstech team. "LG Triptych Concept Tablet-Phone". [2011] www.wordlesstech.com. Feb. 12, 2011 <<http://wordlesstech.com/2011/02/12/lg-triptych-concept-tablet-phone/>>.

Loveridge, Sam. "Apple Patent Reveals Flexible Wrap-Around Display for Future iPhone, Unlikely for iPhone 6". [2013] www.trustedreviews.com. Mar. 28, 2013. <<http://www.trustedreviews.com/news/apple-patent-reveals-flexible-wrap-around-display-for-future-iphone-unlikely-for-iphone-6>>.

Malik, Adnan. "Apple iPhone: Flexible Display Screen Phone is Coming!". [2013] www.itechwhiz.com. May 2013 <<http://www.itechwhiz.com/2013/05/apple-iphone-flexible-screen-display-releasedate.html>>.

Darell, Richard. "Apple Patents Flexible Wraparound Display Smartphone". [2013] www.bitrebels.com. <<http://www.bitrebels.com/technology/apple-patents-flexible-smartphone/>>.

"Concept Floater: Hybrid Smart Phone and E-Books" dated May 10, 2012, accessed Sep. 22, 2014.

Arghire, Ionut. "HTC 1 Phone Concept on Display". [2010] www.news.softpedia.com. Jul. 13, 2010 <<http://news.softpedia.com/news/HTC-1-Phone-Concept-on-Display-147276.shtml>>.

"Guards iPhone 6 Concept Photo: Tall on Three Sides Around the Screen.". [2014] www.chinaz.com. Feb. 27, 2014 <<http://www.chinaz.com/mobile/2014/0227/341020.shtml#g341020=10>>.

U.S. Appl. No. 29/503,971, filed Oct. 1, 2014, Kim et al.

U.S. Appl. No. 29/503,973, filed Oct. 1, 2014, Kim et al.

U.S. Appl. No. 29/503,978, filed Oct. 1, 2014, Kim et al.

U.S. Appl. No. 29/503,968, filed Oct. 1, 2014, Kim et al.

U.S. Appl. No. 29/503,975, filed Oct. 1, 2014, Kim et al.

U.S. Appl. No. 29/504,020, filed Oct. 1, 2014, Kim et al.

\* cited by examiner

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*Assistant Examiner* — Teddy Falloway  
 (74) *Attorney, Agent, or Firm* — NSIP Law

(57)

**CLAIM**

We claim the ornamental design for a portable electronic device, as shown and described.

**DESCRIPTION**

FIG. 1 is a front perspective view of a portable electronic device showing our new 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;  
 FIG. 7 is a bottom view thereof; and,  
 FIG. 8 is a rear perspective view thereof.

The broken lines shown in the figures that are immediately adjacent to the shaded areas and define unshaded regions, represent the bounds of the claim. All other broken lines, including the top, bottom and rear of the phone, and the broken lines on the front surface to the right of the speaker, are directed to portions of the portable electronic device. The broken lines form no part of the claimed design.

**1 Claim, 8 Drawing Sheets**

FIG. 1

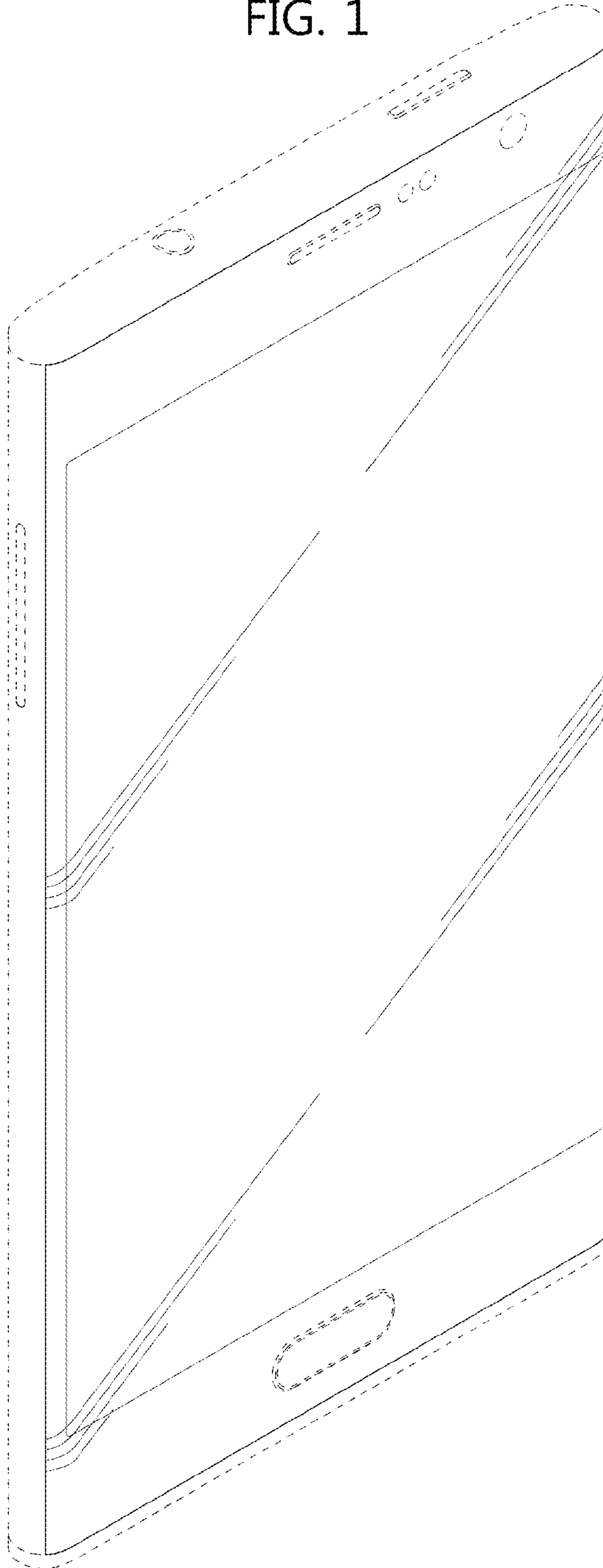


FIG. 2

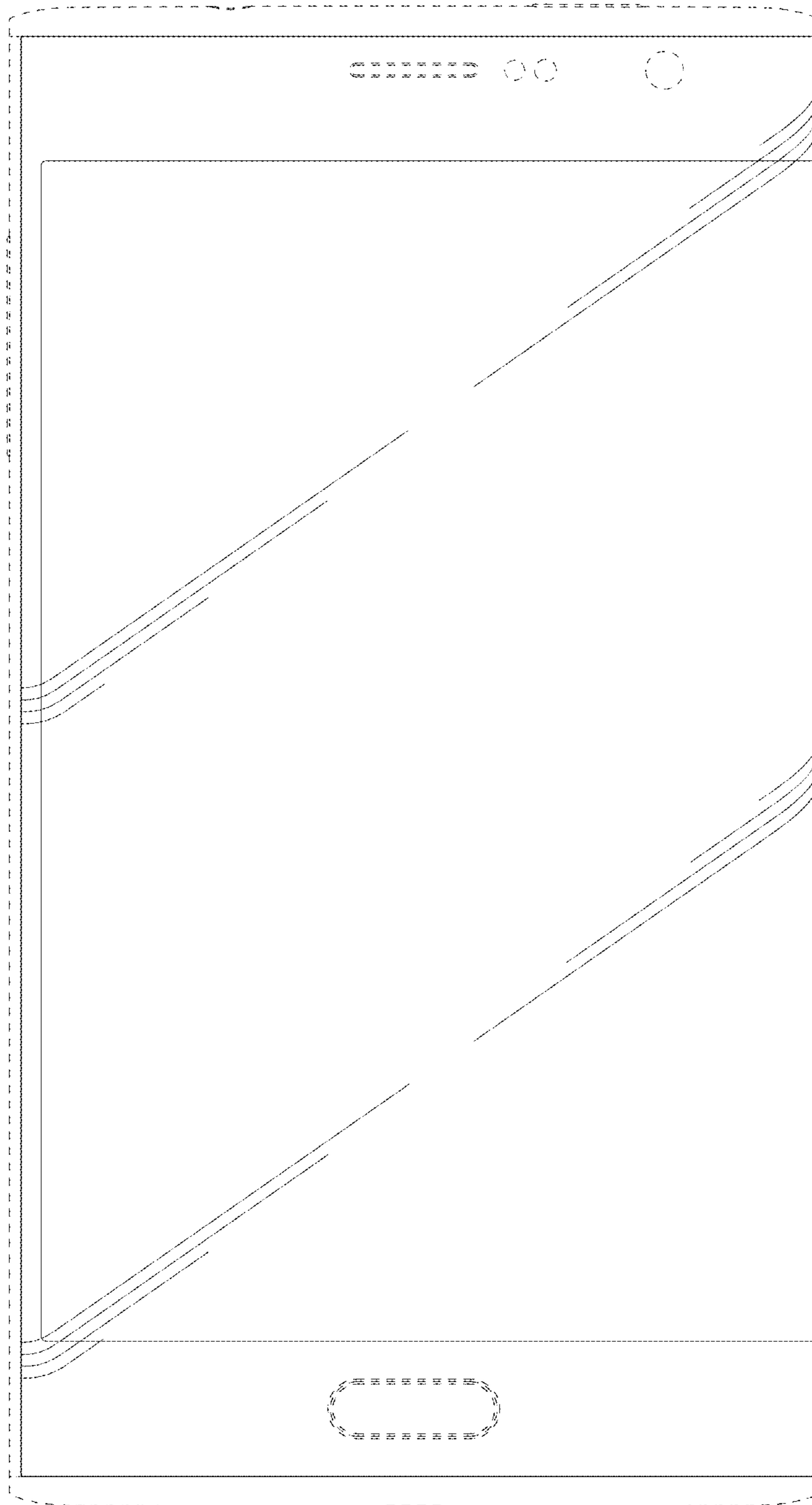


FIG. 3

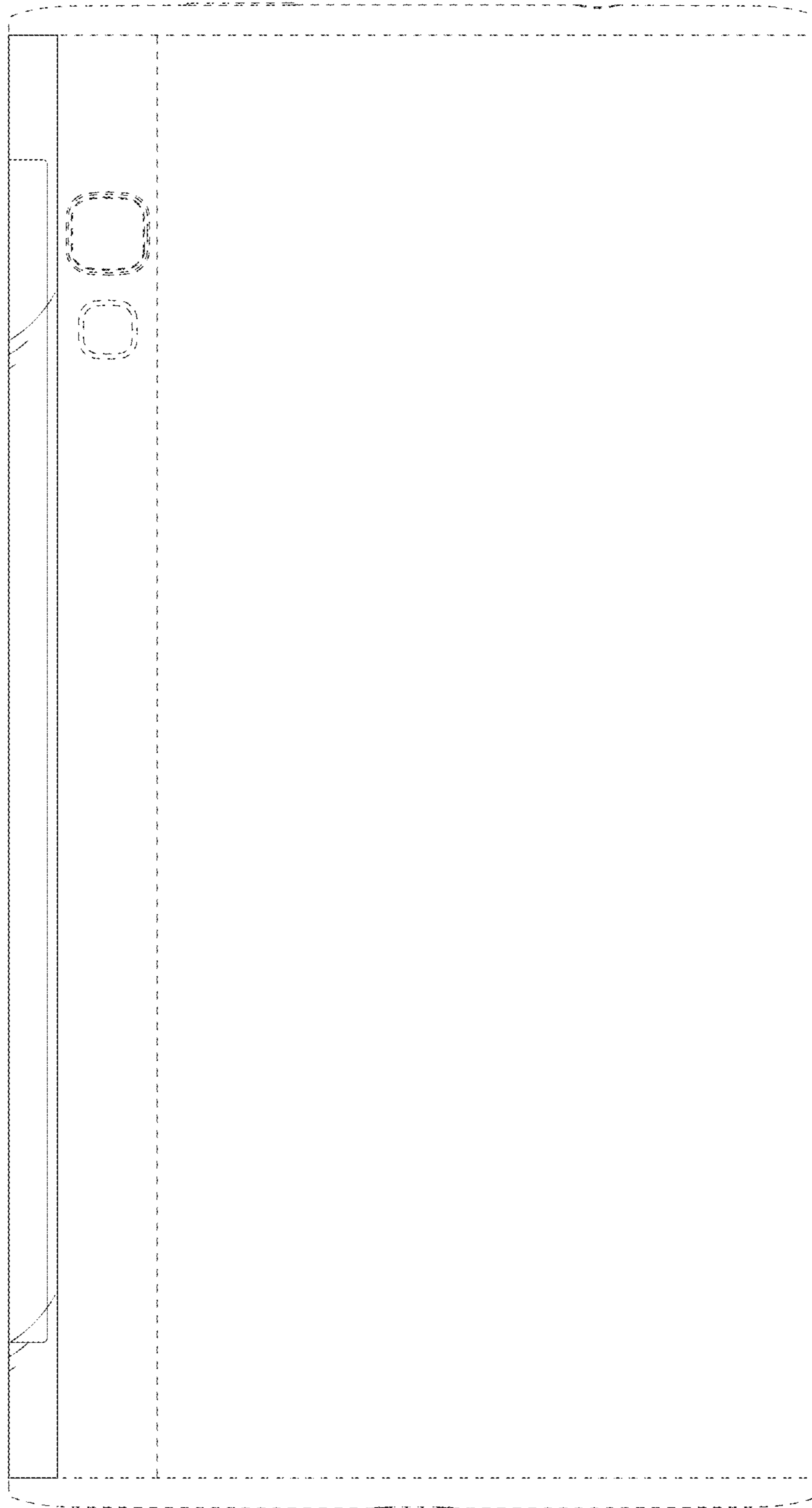


FIG. 4



FIG. 5

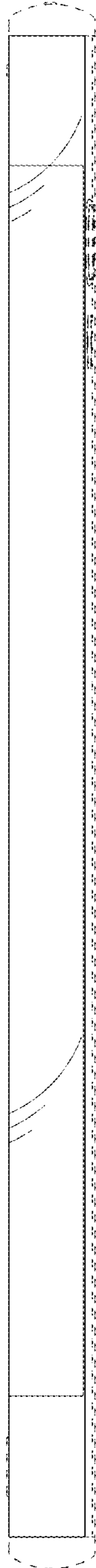




FIG. 6

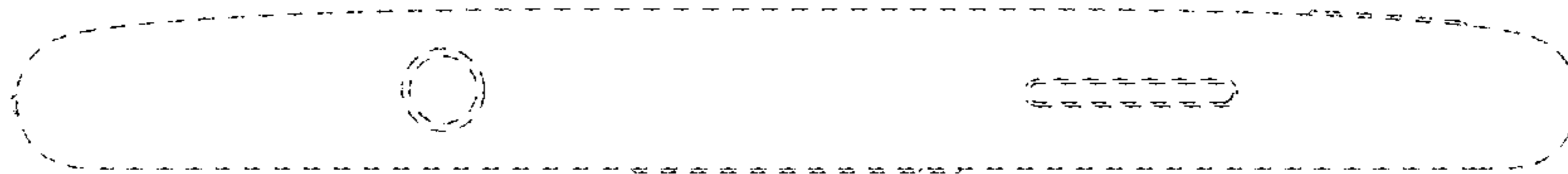


FIG. 7

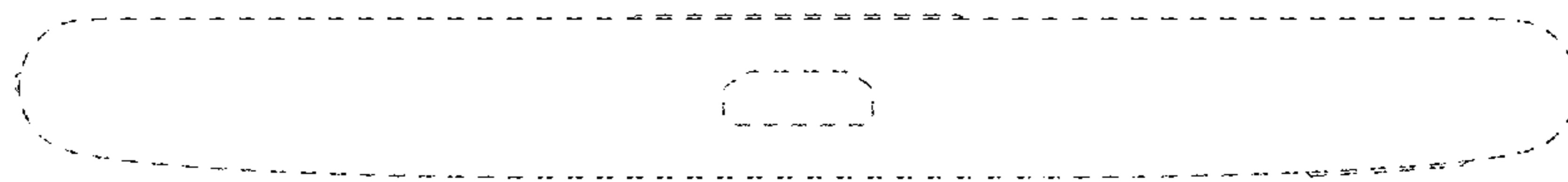


FIG. 8

