# IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

IC DISPLAY SYSTE	EMS, LLC,	
	Plaintiff,	Civil Action No
V.		JURY TRIAL DEMANDED
VIZIO, INC.,		V 0 1 1 1 1 1 2 2 2 1 1 2 2 2 2 2 2 2 2 2
	Defendant.	

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## **COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff IC Display Systems LLC ("ICDS" or "Plaintiff"), for its Complaint against Defendant Vizio, Inc. ("Vizio" or "Defendant") alleges the following:

### **NATURE OF THE ACTION**

1. This is an action for patent infringement arising under the Patent Laws of the United States, 35 U.S.C. § 1 *et seq*.

## **THE PARTIES**

- Plaintiff is a limited liability company organized under the laws of the State of
   Delaware and can be served through its registered agent at 717 North Union Street, Wilmington,
   Delaware 19805.
- 3. Upon information and belief, Defendant is a corporation organized and existing under the laws of California, with a place of business at 39 Tesla, Irvine, California 92618 and can be served through its registered agent, Registered Agent Solutions, Inc., 1220 S Street, Suite 150, Sacramento, CA 95811. Upon information and belief, Defendant sells and offers to sell products and services throughout the United States, including in this judicial district, and introduces products and services that into the stream of commerce and that incorporate infringing

technology knowing that they would be sold in this judicial district and elsewhere in the United States.

## **JURISDICTION AND VENUE**

- 4. This is an action for patent infringement arising under the Patent Laws of the United States, Title 35 of the United States Code.
  - 5. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).
- 6. Venue is proper in this judicial district under 28 U.S.C. §§ 1391(b), (c), (d) and/or 1400(b). On information and belief, Defendant conducts business in this District, the claims alleged in this Complaint arise in this District, and the acts of infringement have taken place and are continuing to take place in this District.
- 7. On information and belief, Defendant is subject to this Court's general and specific personal jurisdiction because Defendant has sufficient minimum contacts within the State of Delaware, pursuant to due process and/or the Del. Code. Ann. Tit. 3, § 3104 because Defendant purposefully availed itself of the privileges of conducting business in the State of Delaware, because Defendant regularly conducts and solicits business within the State of Delaware, and because Plaintiff's causes of action arise directly from Defendant's business contacts and other activities in the State of Delaware.

## COUNT I – INFRINGEMENT OF U.S. PATENT NO. 5,892,561

- 8. The allegations set forth in the foregoing paragraphs 1 through 7 are incorporated into this First Claim for Relief.
- 9. On April 6, 1999, U.S. Patent No. 5,892,561 ("the '561 patent"), entitled "LC Panel with Reduced Defects Having Adhesive Smoothing Layer on an Exterior Surface of the Substrate(s)," was duly and legally issued by the United States Patent and Trademark Office. A true and correct copy of the '561 patent is attached as Exhibit 1.

- 10. Plaintiff is the assignee and owner of the right, title and interest in and to the '561 patent, including the right to assert all causes of action arising under said patents and the right to any remedies for infringement of them.
- 11. Upon information and belief, Defendant has and continues to directly infringe at least claims 1-3 of the '561 patent by making, using, selling, importing and/or providing and causing to be used liquid crystal panels that fall within the scope of claims 1-3 of the '561 patent, including, but not limited to, the products with the following designations or trade names: Vizio M260VA-W 26" Razor LED LCD HDTV, Vizio M260VA 26" Razor LED LCD HDTV, Vizio M190MV 19" RazorLED™ LCD HDTV, Vizio M220VA-W 22" Razor LED LCD HDTV, Vizio M190VA-W 19" Razor LED LCD HDTV, Vizio M220VA 22" Razor LED LCD HDTV, Vizio M190VA 19" Razor LED LCD HDTV, Vizio XVT472SV 47" TruLED™ LCD HDTV, Vizio SV422XVT 42" LCD HDTV, Vizio SV472XVT 47" TruLED<sup>TM</sup> LCD HDTV, Vizio VF552XVT 55" TruLED™ LCD HDTV, Vizio VO400E 40" LCD HDTV, Vizio VM230XVT 23" Razor LED LCD HDTV, Vizio VM190XVT 19" Razor LED LCD HDTV, Vizio VA320E 32" LCD HDTV, Vizio VA370M 37" LCD HDTV, Vizio SV370XVT 37" LCD HDTV, Vizio SV320XVT 32" LCD HDTV, Vizio VO420E 42" LCD HDTV, Vizio VF551XVT 55" TruLED™ LCD HDTV, Vizio VT470M 47" LCD HDTV, Vizio VT420M 42" LCD HDTV, Vizio VA320M 32" LCD HDTV, Vizio SV471XVT 47" LCD HDTV, Vizio SV421XVT 42" LCD HDTV, Vizio VL260M 26" LCD HDTV, Vizio VL320M 32" LCD HDTV, Vizio VL370M 37" LCD HDTV, Vizio VL420M 42" HDTV, Vizio VL470M 47" LCD HDTV, Vizio VX200E 20" LCD HDTV, Vizio VX240M 24" LCD HDTV, Vizio VA220E 22" LCD HDTV, Vizio VF550M 55" LCD HDTV, Vizio SV470M 47" LCD HDTV, Vizio SV420M 42" LCD HDTV, Vizio VO370M 37" LCD HDTV, Vizio VO320E 32" LCD HDTV, Vizio VF550XVT1A 55"

LCD HDTV, Vizio VW26LHDTV10A 22" LCD HDTV, Vizio VW22LHDTV10T 22" LCD HDTV, Vizio VO22LFHDTV10A 22" LCD HDTV, Vizio VO22LFHDTV10A 22" LCD HDTV, Vizio VA26LHDTV10T 26" LCD HDTV, Vizio VA22LFHDTV10T 22" LCD HDTV, Vizio VA19LHDTV10T 19" LCD HDTV, Vizio VW37LHDTV40A 37" LCD HDTV, Vizio VW32LHDTV30A 32" LCD HDTV, Vizio VU37LHDTV10A 37" LCD HDTV, Vizio VOJ370F1A 37" LCD HDTV, Vizio VOJ320F1A 32" LCD HDTV, Vizio VO37LFHDTV10A 37" LCD HDTV, Vizio VW46LFHDTV10A 46" LCD HDTV, Vizio VO32LHDTV10A 32" LCD HDTV, Vizio VW42LFHDTV10A 42" LCD HDTV, Vizio VS42LFHDTV10A 42" LCD HDTV, Vizio VO47LFHDTV10A 47" LCD HDTV, Vizio VO42LFHDTV10A 42" LCD HDTV, Vizio SV470XVT1A 47" LCD HDTV, Vizio VO32LFHDTV10A 32" LCD HDTV, R Series Television Displays, P Series Television Displays, M Series Television Displays, E Series Television Displays, and D Series Television Displays (the "Infringing Instrumentalities"). Exemplary images of the Infringing Instrumentalities and such liquid crystal panels are provided below:

## VIZIO VA370M 37-Inch Full HD 1080p LCD HDTV





VIZIO VA370M 37-Inch Full HD 1080p LCD HDTV

## VIZIO VA370M 37-Inch Full HD 1080p LCD HDTV

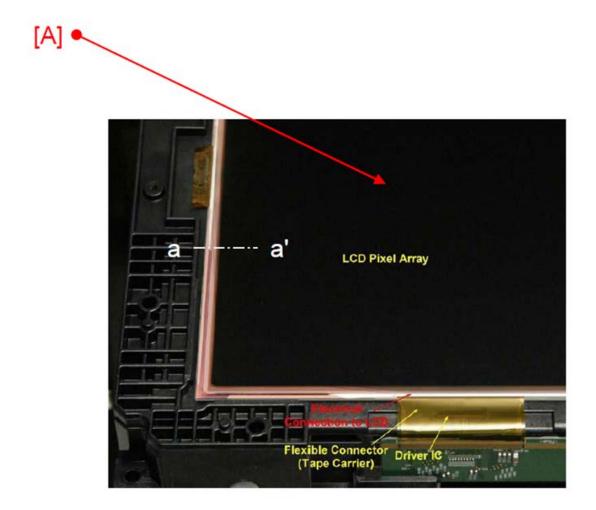


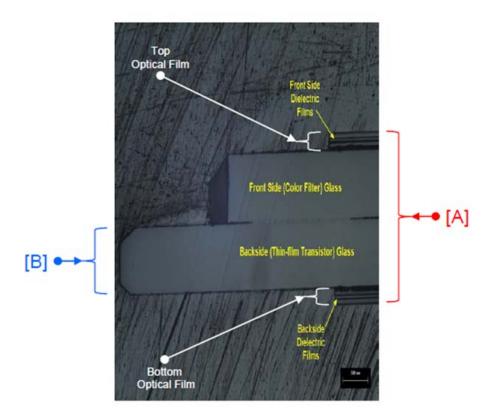


LG LCD Module, LC550WUL used in VIZIO VA370M 37-Inch Full HD 1080p LCD HDTV

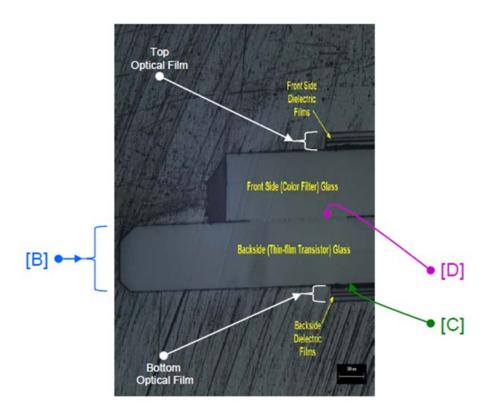
- 12. Claim 1 of the '561 patent generally recites a liquid crystal panel, comprising: a first transparent substrate having a first principal surface and a second principal surface opposite to the first principal surface; a second transparent substrate having a third principal surface and a fourth principal surface opposite to the third principal surface, the second transparent substrate being disposed such that the third principal surface faces the second principal surface of the first transparent substrate, with a gap formed between them; a liquid crystal layer interposed between the second principal surface and the third principal surface so as to fill the gap; at least one transparent film provided on at least one of the first and fourth principal surfaces; an adhesive layer interposed between the transparent film and at least one of the first and fourth principal surfaces on which the transparent film is provided, wherein the adhesive layer substantially smooths out minor defects on the principal surface associated therewith; and a dielectric multilayer film provided on the transparent film.
- 13. On information and belief, and as demonstrated in the exemplary images below, the Infringing Instrumentalities infringe claim 1 of the '561 patent because they comprise a liquid crystal panel (designated [A] above), comprising: a first transparent substrate (designated [B] below) having a first principal surface (designated [C] below) and a second principal surface (designated [D] below) opposite to the first principal surface; a second transparent substrate (designated [E] below) having a third principal surface (designated [F] below) and a fourth principal surface (designated [G] below) opposite to the third principal surface, the second transparent substrate being disposed such that the third principal surface faces the second principal surface of the first transparent substrate, with a gap formed between them (designated [H] below); a liquid crystal layer (designated [I] below) interposed between the second principal surface and the third principal surface so as to fill the gap; at least one transparent film

(designated [J] below) provided on at least one of the first and fourth principal surfaces; an adhesive layer (designated [K] below) interposed between the transparent film and at least one of the first and fourth principal surfaces on which the transparent film is provided, wherein the adhesive layer substantially smooths out minor defects on the principal surface associated therewith; and a dielectric multilayer film (designated [L] below) provided on the transparent film.

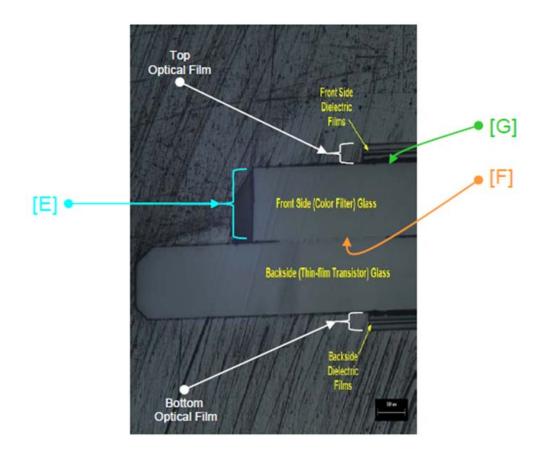




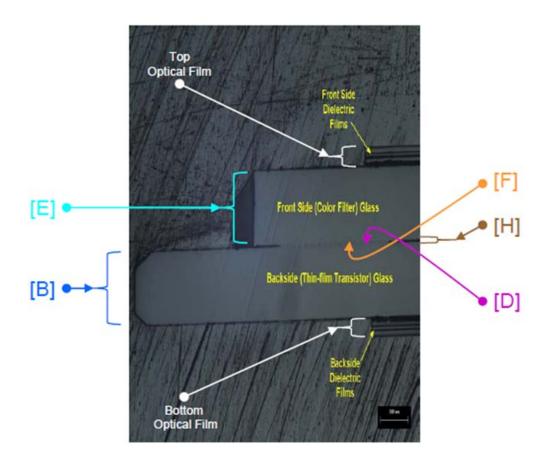
Cross Sectional View, a-a' of LG LCD panel in LG LCD Module, LC550WUL



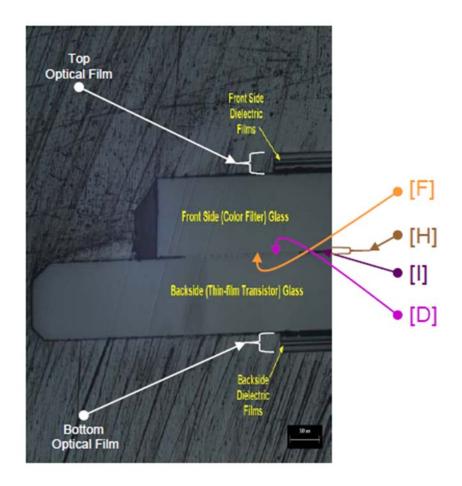
Cross Sectional View, a-a' of LG LCD panel in LG LCD Module, LC550WUL



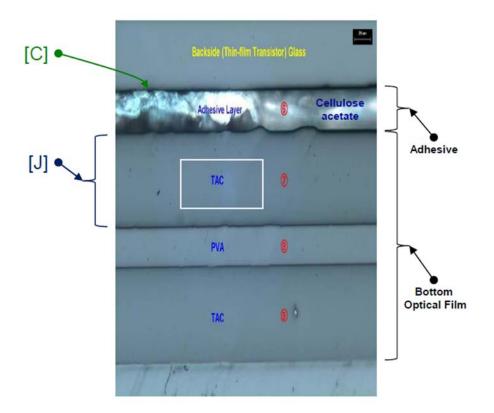
Cross Sectional View, a-a' of LG LCD panel in LG LCD Module, LC550WUL



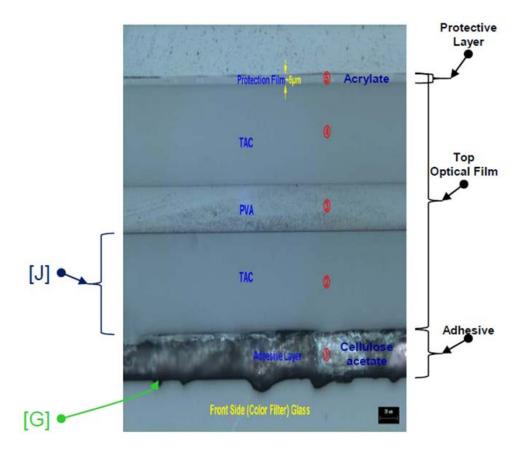
Cross Sectional View, a-a' of LG LCD panel in LG LCD Module, LC550WUL



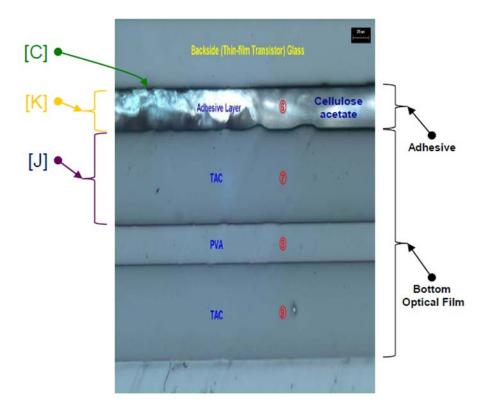
Cross Sectional View, a-a' of LG LCD panel in LG LCD Module, LC550WUL



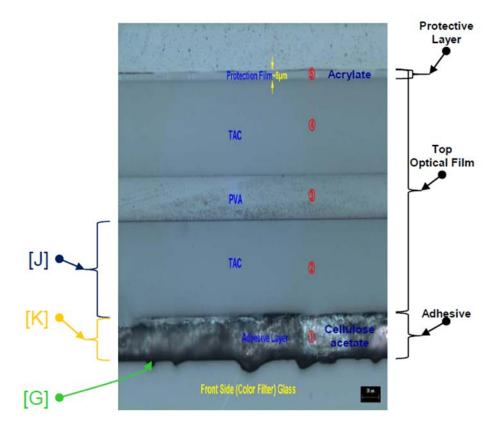
Magnified View of Bottom Optical Film



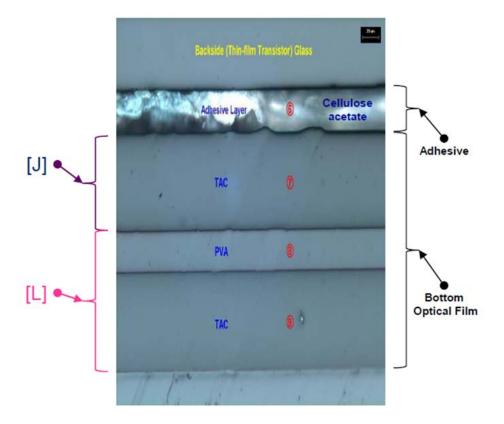
Magnified View of Top Optical Film



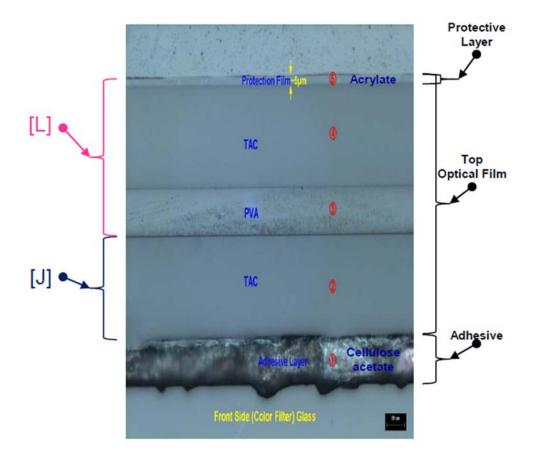
Magnified View of Bottom Optical Film



Magnified View of Top Optical Film



Magnified View of Bottom Optical Film



## Magnified View of Top Optical Film

- 14. Claim 2 of the '561 patent generally recites a liquid crystal panel as claimed in claim 1, wherein the adhesive layer has a refractive index within a range of  $\pm 0.2$  from a refractive index of said first and second substrates.
- 15. On information and belief, and as demonstrated in the exemplary images above and below, the Infringing Instrumentalities infringe claim 2 of the '561 patent because they comprise a liquid crystal panel as claimed in claim 1 (as shown in paragraph 13 above), and that liquid crystal panel contains an adhesive layer [K] (as shown in paragraph 13 above) with a refractive index (designated [M] below) within a range of ±0.2 (designated [N] below) from a refractive index of said first and second substrates (designated [O] below).

[O]								
Corning <sup>®</sup> EAGLE XG <sup>™</sup> AMLCD Glass Substrates Material Information								
Optical	Refractive							
Wavelength	Index							
435.8 nm	1.5198							
467.8 nm	1.5169							
480 nm	1.5160							
508.6 nm	1.5141							
546.1 nm	1.5119							
589.3 nm	1.5099							
643.8 nm	1.5078							

Samsung Corning Precision Glass Co., Ltd. 12<sup>th</sup> floor, Taepyungro Building 310 Taepyungro-2ga
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tically C	lear Adh	nesive		1		
Adhesive Thickness (mil)	Peel Adhesion to Glass (oz/in)	PET Release Film	Refractive Index	Haze (%)	Coating/ Processing Environment	Typical Applications
1	42	2.0 mil/2.0 mil	1.475	0.6	Cleanroom	PC/PMMA Substrate
2	45	2.0 mil/2.0 mil	1.474	8.0		
3	41	2.0 mil/2.0 mil	1.474	1		
1	54	2.0 mil/2.0 mil	1.473	0.1		General Purpose
2	65	2.0 mil/2.0 mil	1.475	0.6		
3	69	2.0 mil/2.0 mil	1.473	0.4		
4	67	2.0 mil/2.0 mil	1.474	1.2		
5	69	2.0 mil/2.0 mil	1.473	8.0		
1	47	2.0 mil/2.0 mil	1.485	0.3		'Bare' ITO Surface
2	46	2.0 mil/2.0 mil	1.489	1.0		
2	57	2.0 mil/2.0 mil	1.485	0.3		
3	67	2.0 mil/2.0 mil	1.487	0.3		
3	60	2.0 mil/2.0 mil	1.489	1.4		
4	80	2.0 mil/2.0 mil	1.487	0.1		
5	80	2.0 mil/2.0 mil	1.487	0		
	Adhesive Thickness (mil)  1 2 3 1 2 3 4 5 1 2 2 3 4 5 4 5 4 5 4 4 5 4 4 5 4 4 5 4 6 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Adhesive Thickness (mil)  1	Adhesive Thickness (mil) to Glass (oz/in)  1	Adhesive Thickness (mil)         Peel Adhesion to Glass (oz/in)         PET Release Film         Refractive Index           1         42         2.0 mil/2.0 mil         1.475           2         45         2.0 mil/2.0 mil         1.474           3         41         2.0 mil/2.0 mil         1.474           1         54         2.0 mil/2.0 mil         1.473           2         65         2.0 mil/2.0 mil         1.473           3         69         2.0 mil/2.0 mil         1.473           4         67         2.0 mil/2.0 mil         1.474           5         69         2.0 mil/2.0 mil         1.473           1         47         2.0 mil/2.0 mil         1.485           2         46         2.0 mil/2.0 mil         1.489           2         57         2.0 mil/2.0 mil         1.485           3         67         2.0 mil/2.0 mil         1.487           3         60         2.0 mil/2.0 mil         1.489           4         80         2.0 mil/2.0 mil         1.487	Adhesive Thickness (mil)         Peel Adhesion to Glass (oz/in)         PET Release Film         Refractive Index         Haze (%)           1         42         2.0 mil/2.0 mil         1.475         0.6           2         45         2.0 mil/2.0 mil         1.474         0.8           3         41         2.0 mil/2.0 mil         1.474         1           1         54         2.0 mil/2.0 mil         1.473         0.1           2         65         2.0 mil/2.0 mil         1.475         0.6           3         69         2.0 mil/2.0 mil         1.473         0.4           4         67         2.0 mil/2.0 mil         1.474         1.2           5         69         2.0 mil/2.0 mil         1.473         0.8           1         47         2.0 mil/2.0 mil         1.485         0.3           2         46         2.0 mil/2.0 mil         1.489         1.0           2         57         2.0 mil/2.0 mil         1.487         0.3           3         67         2.0 mil/2.0 mil         1.489         1.4           3         60         2.0 mil/2.0 mil         1.489         1.4           4         80         2.0 mil/2.0 mil	Adhesive Thickness (mil)

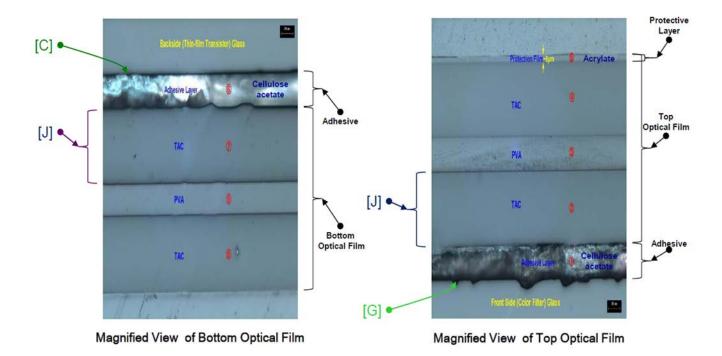


#### Electronics Markets Materials Division

3M Electronics 3M Center, Building 21-1W-10 St. Paul, MN 55144-1000 www.3M.com/electronics 1-800-251-8634

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[N] = [O] - [M]
= 0.0448 [Max] ~ 0.0208 [Min]
\leq \pm 0.2
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- 16. Claim 3 of the '561 patent generally recites a liquid crystal panel as claimed in claim 1, wherein said transparent film is provided on both said first and fourth principal surfaces.
- 17. On information and belief, and as demonstrated in the exemplary images above and below, the Infringing Instrumentalities infringe claim 3 of the '561 patent because they comprise a liquid crystal panel as claimed in claim 1 that includes a transparent film [J] on both the first [C] and fourth principal surfaces [G].



18. Plaintiff has been harmed by Defendant's infringing activities.

## JURY DEMAND

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Plaintiff demands a trial by jury on all issues triable as such.

## **PRAYER FOR RELIEF**

WHEREFORE, Plaintiff demands judgment for itself and against Defendant as follows:

- A. An adjudication that Defendant has infringed the '561 patent;
- B. An award of damages to be paid by Defendant adequate to compensate Plaintiff for Defendant's past infringement of the '561 patent, and any continuing or future infringement through the date such judgment is entered, including interest, costs, expenses and an accounting of all infringing acts including, but not limited to, those acts not presented at trial;
- C. A declaration that this case is exceptional under 35 U.S.C. § 285, and an award of Plaintiff's reasonable attorneys' fees; and

D. An award to Plaintiff of such further relief at law or in equity as the Court deems just and proper.

Dated: March 14, 2017 DEVLIN LAW FIRM LLC

## /s/ Timothy Devlin

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