## IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF TEXAS WACO DIVISION

SOLAS OLED LTD.,	
Plaintiff,	) )
v.	Case No. 6:19-cv-00515-ADA
GOOGLE LLC,	) )
Defendant.	) )
SOLAS OLED LTD.,	)
Plaintiff,	) )
v.	Case No. 6:19-cv-00537-ADA
APPLE INC.,	) )
Defendant.	) )
SOLAS OLED LTD.,	)
Plaintiff,	) )
v.	Case No. 6:19-cv-00631-ADA
HP INC.,	) )
Defendant.	, ) )
SOLAS OLED LTD.,  Plaintiff,  v.  HP INC.,	Case No. 6:19-cv-00631-ADA  ) ) )

**DEFENDANTS' AND INTERVENOR'S OPENING CLAIM CONSTRUCTION BRIEF** 



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<i>Trustees of Bos. Univ. v. Everlight Elecs. Co.</i> , 896 F.3d 1357 (Fed. Cir. 2018)



## **TABLE OF EXHIBITS**

Ex. No.	Publication
AA01	Excerpt from Prosecution History of U.S. Patent No. 7,446,338 – February 25,
	2008 Amendment
AA02	Claim Construction Memorandum and Order, Solas OLED Ltd. v. Samsung
	Display Co. Ltd., et al., 2:19-cv-00152-JRG, Dkt. 99 (Apr. 17, 2020, E.D. Tex.)
AA03	Excerpts from Deposition of Richard A. Flasck, Solas OLED Ltd. v. Samsung
	Display Co. Ltd. et al., 2:19-cv-00152-JRG (Feb. 6, 2020, W.D. Tex.)
AA04	Solas's Proposed terms for Construction
AA05	Patent Owner's Preliminary Response, IPR2020-00320 (April 25, 2020, PTAB)
BB01	Prosecution History of European Patent Application No. 1,372,136
BB02	Prosecution History of U.S. Patent No. 7.499,042
BB03	Jiun-Haw Lee et al., Introduction to Flat Panel Displays 50-52 (John Wiley &
	Sons 2008)
BB04	Johnathan Halls, Short Course S-4: Fundamentals of OLEDs/PLEDs, S-4/101
	(Society for Information Display, May 18, 2008)
DD01	Declaration of Richard A. Flasck in Support Of Solas's Responsive Claim
	Construction Brief, Solas OLED Ltd. v. LG, Ltd., et al, 6:19-cv-00236-ADA
	(Apr. 3, 2020, W.D. Tex.)
DD02	Solas's Reply Claim Construction Brief, Solas OLED Ltd. v. LG, Ltd., et al, 6:19-
	cv-00236-ADA (Apr. 24, 2020, W.D. Tex.)
DD03	Videoconference Deposition of Richard A. Flasck, Solas OLED Ltd. v. LG, Ltd.,
	et al, 6:19-cv-00236-ADA, Dkt82 (Apr. 14, 2020, W.D. Tex.)
DD04	Phillip A. Laplante, Comprehensive Dictionary of Electrical Engineering 213,
	643 (Taylor & Francis Group, 2nd ed. 2005)
DD05	Stan Gibilisco, The Illustrated Dictionary of Electronics 179 (McGraw-Hill, 8th
	ed. 2001)
DD06	A Dictionary of Science 738-39 (Oxford University Press, 2006)

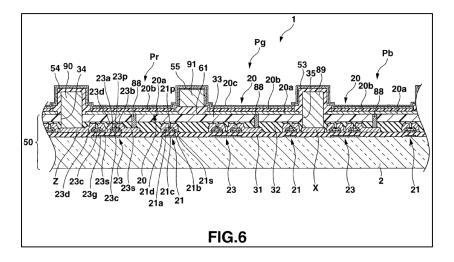


The Defendants and Intervenor hereby submit their Opening Claim Construction Brief.

### I. U.S. Patent No. 7,446,338 ("'338 Patent")

### A. '338 Patent Background

The '338 Patent is directed to active-matrix organic electroluminescent (AMOLED) display panels. *See, e.g.*, '338 at 1:17-21, 8:18-23. These are many-layered devices that consist of organic electroluminescent pixels and circuitry, which drive the pixels to produce particular colors and brightness. Figure 6 illustrates the layered structure of an exemplary display panel of the '338 Patent, consisting of two main structures: (1) the red, green, and blue OLED pixels (Pr, Pg, and Pb), each made up of a pixel electrode 20a, an electroluminescent layer 20b, and a counter electrode 20c; and (2) the layers making up the "transistor array substrate" 50, *id.* at 10:42-47, which includes the transistors 21 and 23 that make up the active-matrix circuit for each pixel:



In the original patent application, prosecution claim 1 was directed to the arrangement of elements in the layered structure, as exemplified by Figure 6. That claim, however, was rejected as anticipated by prior art. To overcome the rejection, the applicants amended claim 1 to recite the particular three-transistor pixel circuit structure recited by a dependent claim (prosecution claim 2), illustrated in Figure 2 of the '338 Patent. Ex. AA01 at 2-3, 12. This three-transistor circuit uses a pull-out current, which the patent refers to as a write current, to set the brightness of



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