

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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LG DISPLAY CO., LTD.,  
Petitioner,

v.

SOLAS OLED LTD.,  
Patent Owner.

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IPR2020-01055  
Patent 7,907,137 B2

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Before SALLY C. MEDLEY, JOHN A. HUDALLA, and JULIA HEANEY,  
*Administrative Patent Judges.*

HUDALLA, *Administrative Patent Judge.*

DECISION  
Denying Institution of *Inter Partes* Review  
35 U.S.C. § 314

LG Display Co., Ltd. (“Petitioner”) filed a Petition (Paper 2, “Pet.”) requesting an *inter partes* review (IPR) of claims 1, 9–11, 15, 36, 37, and 39 (“the challenged claims”) of U.S. Patent No. 7,907,137 B2 (Ex. 1001, “the ’137 patent”). Petitioner filed a Declaration of Miltiadis Hatalis, Ph.D. (Ex. 1003) with its Petition. Patent Owner, Solas OLED Ltd. (“Patent Owner”), filed a Preliminary Response (Paper 6, “Prelim. Resp.”). With our

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authorization (Paper 7), Petitioner filed a Reply (Paper 8, “Pet. Reply”) and Patent Owner filed a Sur-reply (Paper 9, “PO Sur-reply”) to address the Board’s precedential decision in *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential) (“*Fintiv*”).

We have authority to determine whether to institute an *inter partes* review. *See* 35 U.S.C. § 314; 37 C.F.R. § 42.4(a). Under 35 U.S.C. § 314(a), we may not authorize an *inter partes* review unless the information in the petition and the preliminary response “shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” The Board, however, has discretion to deny a petition even when a petitioner meets that threshold. *Id.*; *see, e.g., Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2140 (2016) (“[T]he agency’s decision to deny a petition is a matter committed to the Patent Office’s discretion.”); *NHK Spring Co. v. Intri-Plex Techs., Inc.*, IPR2018-00752, Paper 8 (PTAB Sept. 12, 2018) (precedential) (“*NHK*”). For the reasons that follow, we exercise our discretion under 35 U.S.C. § 314(a) to deny institution of *inter partes* review.

## I. BACKGROUND

### A. *Real Parties-in-Interest*

Petitioner identifies LG Display Co., Ltd. as the real party-in-interest. Pet. 1. Patent Owner identifies Solas OLED Ltd. as the real party-in-interest. Paper 4, 1.

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*B. Related Proceedings*

The parties identify the following proceeding related to the '137 patent (Pet. 2; Paper 4, 1):

*Solas OLED Ltd. v. LG Display Co., Ltd.*, No. 6:19-cv-00236-ADA (W.D. Tex. filed April 1, 2019) (“the underlying litigation”).

In the underlying litigation, Patent Owner has asserted two other patents in addition to the '137 patent: U.S. Patent Nos. 7,432,891 B2 (“the '891 patent”) and 7,573,068 B2 (“the '068 patent”). Petitioner has challenged the '891 patent in IPR2020-00177, and the panel instituted *inter partes* review in that case. Petitioner has challenged the '068 patent in IPR2020-01238 and IPR2020-01546, but the Board has not yet issued decisions on institution in those cases.

*C. The '137 patent*

The '137 patent is directed to a drive control method for a display drive apparatus that controls a display panel with a plurality of organic electroluminescent elements (OEL). Ex. 1001, 1:18–26. Each pixel, which includes an OEL, is controlled by a driver circuit with thin film transistors. *See id.* at 2:11–25. One of the transistors allows driving current corresponding to display data through the OEL so that it emits light. *Id.* at 2:26–52. The '137 patent recognizes that the element characteristics, i.e., the threshold voltage characteristics, of this transistor may change over time. *Id.* at 3:15–30. As such, the invention of the '137 patent seeks to compensate for variations in element characteristics in order to obtain uniform image quality. *Id.* at 3:45–53. Accordingly, the '137 patent discloses a display drive apparatus that includes

a threshold voltage detection circuit which detects a threshold voltage peculiar to the drive element of the display pixel, and a compensation voltage application circuit which generates a compensation voltage for compensating for the threshold voltage of the drive element on the basis of the threshold voltage and applies the compensation voltage to the drive element.

*Id.*, code (57).

*D. Illustrative Claim*

Of the challenged claims, claims 1, 10, and 36 are independent. Claim 9 depends from claim 1; claims 11 and 15 depend from claim 10; and claims 37 and 39 depend from claim 36. Claim 10 is illustrative of the challenged claims and recites:

10. A display drive apparatus which operates, in accordance with display data, a current control type optical element of each display pixel of a display, wherein each display pixel is provided with the optical element and a drive element which supplies a driving current to the optical element, the display drive apparatus comprising:

a gradation signal generation circuit which generates a gradation current having a current value for allowing the optical element to perform a light emitting operation at a luminance corresponding to a luminance gradation of the display data, as a gradation signal corresponding to the luminance gradation of the display data, and supplies the gradation current to the display pixel through a data line connected to the display pixel;

a threshold voltage detection circuit which detects a threshold voltage peculiar to the drive element of the display pixel through the data line; and

a compensation voltage application circuit which generates a compensation voltage for compensating for the threshold voltage of the drive element based on the threshold voltage and applies the compensation voltage to the drive

element through the data line before the gradation signal generation circuit supplies the gradation current to the display pixel.

Ex. 1001, 57:66–58:22.

*E. Prior Art*

Petitioner relies on the following prior art:

U.S. Patent Application Publication No. 2005/0116902 A1, filed Sept. 9, 2004, published June 2, 2005 (Ex. 1005, “Miyazawa”);

Patent Cooperation Treaty (PCT) Patent Application Publication No. WO 2005/069267 A1, published July 28, 2005 (Ex. 1006, “Childs”); and

U.S. Patent Application Publication No. 2005/0156837 A1, filed Dec. 8, 2004, published July 21, 2005 (Ex. 1007, “Kasai”).

*F. The Asserted Grounds*

Petitioner challenges claims 1, 9–11, 15, 36, 37, and 39 of the ’137 patent on the following grounds (Pet. 3):<sup>1</sup>

Claims Challenged	35 U.S.C. §	References
1, 10, 11, 36, 37	103(a) <sup>2</sup>	Miyazawa
1, 10, 11, 36, 37	103(a)	Miyazawa, Childs

<sup>1</sup> Petitioner styles its grounds as “Miyazawa, alone or with Childs” and “Miyazawa, alone or with Childs, and Kasai.” Pet. 3. In accordance with *Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1372–73 (Fed. Cir. 2019), we consider these to be four separate grounds of unpatentability.

<sup>2</sup> The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284, 287–88 (2011), amended 35 U.S.C. § 103. Because the ’137 patent was filed before March 16, 2013 (the effective date of the relevant amendments), the pre-AIA version of § 103 applies.

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