

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

RESEARCH FRONTIERS, INCORPORATED,	:	
	:	
Plaintiff,	:	
	:	
v.	:	C.A. No. 13-1231-LPS
	:	
E INK CORPORATION, E INK HOLDINGS	:	
INC., SONY ELECTRONICS INC., SONY	:	
CORPORATION, BARNES & NOBLE INC.,	:	
BARNESANDNOBLE.COM LLC, and	:	
AMAZON.COM INC.,	:	
	:	
Defendants.	:	

**MEMORANDUM ORDER**

WHEREAS, Magistrate Judge Burke issued a 48-page Report and Recommendation (D.I. 162) (“Report”), dated March 24, 2016, recommending that the Court adopt certain claim constructions for disputed terms in U.S. Patent Nos. 5,463,491 (the “491 Patent”); 6,606,185 (the “185 Patent”); and 6,271,956 (the “956 Patent”) (the “patents-in-suit”);

WHEREAS, on April 11, 2016, Plaintiff Research Frontiers, Incorporated (“Plaintiff”) objected to the Report (D.I. 164) (“Objections”), and specifically objected to the Report’s constructions of the terms “light modulating unit comprising a suspension,” “light valve suspension,” “light-modulating unit,” “liquid light valve suspension,” and “SPD film,” arguing that the constructions improperly limit the terms to embodiments that control light transmission using a suspension of particles opening through particle alignment and closing through Brownian movement (*see, e.g.*, D.I. 164 at 2-3);

WHEREAS, on April 28, 2016, Defendants E Ink Corporation, E Ink Holdings Inc., Sony

Electronics Inc., Sony Corporation, Barnes & Noble Inc., BarnesandNoble.com LLC, and Amazon.com Inc. (“Defendants”) responded to the Objections (D.I. 165), arguing that Judge Burke properly construed the claims as being directed to “suspended particle devices” (“SPDs”) “and that the disputed claim limitations require (1) control of light transmission (2) via particle alignment (to open) and Brownian movement (to close)” (D.I. 165 at 1-3);

WHEREAS, the Court has considered the parties’ claim construction disputes addressed in the Report *de novo*, see *St. Clair Intellectual Prop. Consultants, Inc. v. Matsushita Elec. Indus. Co., Ltd.*, 691 F. Supp. 2d 538, 541-42 (D. Del. 2010); 28 U.S.C. § 636(b)(1); Fed. R. Civ. P. 72(b)(3);

NOW THEREFORE, IT IS HEREBY ORDERED that:

1. Plaintiff’s Objections (D.I. 164) are OVERRULED. Judge Burke’s Report (D.I. 162) is ADOPTED in all respects.
2. Plaintiff objects to Judge Burke’s construction of “light modulating unit comprising a suspension.” Judge Burke construed the term as “a unit which controls light transmission using a suspension of particles opening through particle alignment and closing through Brownian movement.” (D.I. 162 at 29) Plaintiff argues that Judge Burke should not have limited the terms based on how the suspension functions, contending that the term should be construed as “a unit comprising a suspension of light absorbing or reflecting particles that changes its appearance when activated.” (D.I. 164 at 3) The Report correctly rejected Plaintiff’s broad construction, noting that the patent defines “light modulating element” as encompassing two different types of suspensions. (D.I. 162 at 26) (citing ’185 patent at 1:18-25) The patent explains that, in the absence of an electrical field, the suspended particles block the transmission

of light by assuming random positions through Brownian movement, and, in the presence of an electrical field, the suspended particles become aligned in a way that allows light to pass through the suspension. (*Id.*) (citing '185 patent at 1:26-40)

Plaintiff now raises a new argument that claim differentiation (between independent claims 1 and 22 of the '185 patent) militates in favor of a broader construction of “light modulating unit comprising a suspension.” (D.I. 164 at 4) According to Plaintiff, Judge Burke’s construction of the disputed term is coextensive with his construction of the term “suspended particle device” (“SPD”). (*Id.*) Plaintiff argues that claim 22 demonstrates that this cannot be correct, because the patentee’s use of the term “SPD” in that claim indicates that “[i]f the patentee intended to restrict claim 1 to SPDs, he would have done so explicitly.” (*Id.* at 4) Although “other claims of the patent in question, both asserted and unasserted, can . . . be valuable sources of enlightenment as to the meaning of a claim term,” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005), the doctrine of claim differentiation “cannot alter a definition that is otherwise clear from the claim language, description, and prosecution history,” *O.I. Corp. v. Tekmar Co.*, 115 F.3d 1576, 1582 (Fed. Cir. 1997). Even assuming that Judge Burke’s construction gives similar or identical scope to the terms “SPD” and “light modulating unit comprising a suspension,” this fact would not alter the proper construction, given the clarity with which the patent defines the disputed term (as discussed in the Report).

3. Plaintiff argues that Judge Burke’s construction of “light valve suspension” as “a liquid suspension of particles opening through particle alignment and closing through Brownian movement” improperly imports functional limitations from the specification into the claims. (D.I. 164 at 8) To the contrary, the patent defines a “light valve suspension” as a liquid

suspension of particles that operates to control the transmission of light, in the manner described in Judge Burke's construction. (See D.I. 162 at 30-31; '185 patent at 1:26-43)

4. Plaintiff objects to Judge Burke's construction of "light-modulating unit" as "a unit which controls light transmission using a suspension of particles," arguing that this construction improperly imports the limitation of "controlling light transmission" from the specification into the claims, and thereby excludes electrophoretic displays ("EPDs") from the scope of the claims. (D.I. 164 at 9) As the Report notes, however, the patentee overcame an examiner's rejection during the prosecution of the '491 patent by emphasizing the control of light transmission. (D.I. 162 at 12-13) When a patentee "characterizes an aspect of his invention in a specific manner to overcome prior art," the patentee disavows embodiments of the invention that are inconsistent with that characterization. *Purdue Pharma L.P. v. Endo Pharm., Inc.*, 438 F.3d 1123, 1136 (Fed. Cir. 2006). Such definitive statements constitute disavowal even when they are not strictly necessary to overcome a prior art rejection. See *Saffran v. Johnson & Johnson*, 712 F.3d 549, 559 (Fed. Cir. 2013). Because the patentee unequivocally stated that the patented devices control light transmission, Judge Burke was correct to include this limitation in his construction of this term.

5. Plaintiff argues that Judge Burke's construction of "liquid light valve suspension" as "a liquid suspension of particles opening through particle alignment and closing through Brownian movement" is improper because the patent assigns a broader definition to the term. (D.I. 164 at 10) Although the Court agrees with Plaintiff that the patent specification defines a "liquid light valve suspension" as a "liquid suspending medium' in which a plurality of small particles are dispersed" (*id.*; see also '491 patent at 2:53-55), Judge Burke is also correct that the

patent and prosecution history unequivocally explain that the small particles open through particle alignment and close through Brownian movement. (D.I. 162 at 21-24) Thus, the Report is correct to include these limitations in its construction.

6. Plaintiff argues that Judge Burke’s construction of “SPD film” is incorrect because it would exclude EPDs from the scope of the claims, which Plaintiff contends are a type of suspended particle device. (D.I. 164 at 10) Given Judge Burke’s thorough analysis of this issue, and especially his discussion of the intrinsic evidence (D.I. 162 at 31-33), Plaintiff’s conclusory argument gives the Court no reason to reject his recommendation.

7. Given the detailed reasoning provided in the Report, and given that the parties have not raised any arguments that are not adequately addressed therein, the Court finds it unnecessary to address Plaintiff’s Objections any further.

December 13, 2016  
Wilmington, Delaware

  
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HON. LEONARD P. STARK  
UNITED STATES DISTRICT JUDGE