

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF OHIO

FEIT ELECTRIC COMPANY, INC.,

Plaintiff,

v.

SAVANT TECHNOLOGIES LLC d/b/a
GE LIGHTING,

Defendant,

Civil Action No. 1:24-cv-00473-BMB

REBUTTAL DECLARATION OF WILLIAM A. DOOLITTLE, PH.D

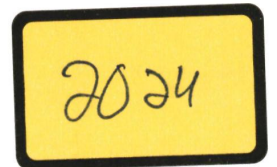


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I, William A. Doolittle, Ph.D., of Hampton, Georgia, USA, hereby declare as follows.

I. INTRODUCTION

1. I am over the age of eighteen and otherwise competent to make this declaration.

2. I have been retained by Radulescu LLP on behalf of Savant Technologies LLC (“Savant”), in connection with the above-captioned litigation. Although I am being compensated at my hourly rate for the time I spend on this matter, no part of my compensation depends on the outcome of this proceeding, and I have no other interest in this proceeding.

3. I respectfully submit this Declaration in support of Savant’s *Markman* Briefs, with respect to U.S. Patent No. 8,604,678 (“the ’678 Patent”), and in response to the Declaration of E. Fred Schubert, Ph.D., dated November 6, 2024.

4. If called upon as a witness, I could competently testify to the truth of each statement herein.

5. I am being compensated at the rate of \$450 per hour (plus any expenses) for my work and testimony. My fee is not contingent on the outcome of any matter or on any of the technical positions I explain in this declaration.

II. EXPERIENCE AND QUALIFICATIONS

6. A summary of my background and qualifications can be found in Section II of my November 6, 2024 Declaration, which is incorporated herein by reference.

III. MATERIALS CONSIDERED AND BASIS OF OPINIONS

7. In formulating my opinion, I have considered any documents cited in this declaration, specifically including the ’678 Patent and its file history, and my first declaration.

IV. PERSON OF ORDINARY SKILL (“POSA”)

8. I understand Dr. Schubert opined that a POSA “would have had an undergraduate degree in electrical engineering, chemical engineering, materials science, physics, or a similar discipline in addition to at least two years of experience in the field of LED packaging design. More education could substitute for experience and vice versa.” Schubert Decl. ¶ 16.

9. Dr. Schubert and I differ in the field of degree that a POSA would have, with his definition including chemical engineering, whereas my definition does not explicitly list that field. Dr. Schubert’s definition also requires “at least two years of experience in the field of LED packaging design,” whereas my definition requires one to two years of experience in that field. The differences between Dr. Schubert’s proposed level of ordinary skill in the art and mine would not affect my opinions in this declaration or in my first declaration.

V. “light scattering material” (Claims 1, 19, 29)

10. Dr. Schubert opines that “I understand that Savant proposes that the term ‘light scattering material’ is indefinite.” Schubert Decl. ¶ 36. It is my understanding that Savant has **not** proposed that the stand-alone term “light scattering material” is indefinite and that Savant has not proposed a construction for this term.

11. After discussing several sections of the specification and the ’678 Patent’s figures, Dr. Schubert opines that the term should be “afforded its plain and ordinary meaning. Schubert Decl. ¶ 45. However, his declaration does not provide any disclosure of what he believes that plain and ordinary meaning to be. Instead, he only summarizes the claimed “light scattering material” based on what it does. Schubert Decl. ¶ 44.

VI. “improves an off-state white appearance of the wavelength conversion component” / “improves an OFF state white appearance of the wavelength conversion component” (Claims 1, 19, 29)

12. I understand that Dr. Schubert that the terms “improves an off-state white appearance of the wavelength conversion component” and “improves an OFF state white appearance of the wavelength conversion component” should be given their plain and ordinary meaning. Schubert Decl. ¶¶ 46-58. According to Dr. Schubert, “a POSA would understand the light diffusing layer produces an appearance of the wavelength conversion component that is whiter than an appearance of a wavelength conversion component without the diffusion layer, when the device is in an OFF-state (i.e., the device is OFF).” *Id.* ¶ 57. I disagree.

13. As I discussed in my opening declaration, neither the claims nor the specification provide any objective boundary on what is meant by “improves an off-state white appearance.” Doolittle Op. Decl. ¶¶ 68-75. Although Dr. Schubert makes a comparison between a device having the claimed diffusion layer and a device not having such a layer, his analysis does not address the issues with the ’678 Patent’s failure to disclose to a POSA what it means to improve the off-state white appearance. Instead, he introduces the equally nebulous phrase “an appearance . . . that is whiter than . . .” Schubert Decl. ¶¶ 48, 57. However, he does not explain what this phrase means, nor does he point to anything in the claims or the specification that sheds light on it.

14. Indeed, that phrase suffers from all of the same problems that the claim terms suffer from, as I discussed in my opening declaration. What constitutes something that is “whiter?” Both Dr. Schubert and the specification are silent. In addition, how much “whiter” does the claim require? Does it have to be visible to the human eye or can an optical measurement be made with an optical measurement device? And, if an optical measurement

device is used, what parameters are used to determine the quantity of “white” present in the measurement?

15. Additionally, the specification discloses TiO_2 as an example of a light scattering material, and gives various particle sizes that can be used. It discloses the use of nanoparticles (100-150 nm), whose scattering is purportedly described by Figure 10 (although as discussed in my opening declaration, this data is merely theoretical), but also discloses the use of larger particles (1 – 50 μm , or 1000 - 50,000 nm). '678 Patent, 3:65-66. Neither Figure 10 nor any of the other figures describe the amount of scattering via these larger diameters. Nor does the specification disclose how many of these larger particles would need to be added to the light diffusing layer to be infringing. Is one grain sufficient? Two? 10? Similarly, if a wavelength conversion component includes 1000 grains that are added across half of the wavelength conversion component, does that component have a “whiter” appearance? And, for the measurement, if 90% of the wavelength conversion component emits one color, while the ends of the wavelength conversion component emits a second, both of which contribute to the overall “appearance of the wavelength conversion component,” how does one determine if the component has a “whiter” appearance?

16. Dr. Schubert’s “whiter than” plain and ordinary meaning also does not resolve the perception I discussed in my opening declaration. Does the wavelength conversion component need to appear whiter via human perception or is analytic improvement enough? Similarly, whether something “appears whiter” than something else is a subjective measure that will depend on the particular observer.

17. For these reasons and the reasons discussed in my opening declaration, the terms are indefinite.

VII. “the light scattering material will scatter the excitation light relatively more than the light scattering material will scatter light generated by the at least one photoluminescence material” (Claim 11)

18. I understand that Dr. Schubert did not address this term in his opening declaration.

VIII. “wherein the light scattering material scatters the excitation light at least twice as much as light generated by the at least one photoluminescence material” (claim 12)

19. I understand that Dr. Schubert did not address this term in his opening declaration.

IX. “corresponds to an average particle size that improves the OFF state white appearance of the wavelength conversion component” (claim 21)

20. I discussed in my opening declaration that this term is indefinite because neither the claim language nor the specification provide any guidance on how to measure the claimed “average particle size.”

21. Although Dr. Schubert offers an opinion on this term’s purported plain and ordinary meaning, he does not address the issues I identified in my opening declaration regarding how to measure the claimed “average particle size.” Instead, it is his opinion that the term is not indefinite and that it means “corresponds to an average particle size that produces an appearance of the wavelength conversion component that is whiter than the appearance of a wavelength conversion component without the diffusion layer, when the device is in an off-state.” Schubert Decl. ¶ 64. For the reasons discussed above in Section VI, I disagree.

X. “light mixing chamber” (claim 29)

22. I understand that Dr. Schubert opines that this term should be given its plain and ordinary meaning. Schubert Decl. ¶¶ 66-75.

23. Dr. Schubert agrees with me that this term should be construed such that the light mixing chamber needs to define a volume where the light emitters are located. Schubert Decl. ¶ 68. However, he disagrees that the term, properly construed requires an “interior volume” that is separate from the wavelength conversion component, as required by Savant’s construction. *Id.*

24. Notably, all of the sections from the specification that Dr. Schubert cites and the figures he includes supports Savant’s construction of the term. He cites the specifications disclosure that “[t]he interior volume may also be referred to as light mixing chamber.” ’678 patent at 24:49-55.” Schubert Decl. ¶ 71. He also cites Figures 20 and 23, both of which I discuss in my opening declaration, and both of which depict an interior volume that is separate from the wavelength conversion component. Schubert Decl. ¶ 73.

25. For this reason and the reason discussed in my opening declaration, it is my opinion that the term should be construed as “an interior volume separate from the wavelength conversion component.”

XI. “planar shapes” (claim 25)

26. Dr. Schubert contends that the term “planar shapes” should be given its plain and ordinary meaning, but does not disclose what that meaning is. Schubert Decl. ¶¶ 77-83.

27. Dr. Schubert discusses the specification’s disclosure at column 22, lines 22-26, which I also discuss in my opening declaration. Schubert Decl. ¶ 80. That disclosure explicitly delineates between “the wavelength conversion component 36 of FIGS. 20A, 20B, and 20G [which] has a two-dimensional shape (e.g., is substantially planar), [and] the wavelength conversion component 700 of FIGS. 21A, 21B, and 21C [which] has a three-dimensional shape (e.g., elongated dome shaped shell).” Schubert Decl. ¶ 80 (citing ’678 Patent 22:22-26); Doolittle Op. Decl. ¶ 112. Dr. Schubert, however, does not address these two different structures, instead

merely concluding that the disclosure “underscore[s] that a POSA would reasonably understand the term ‘planar shapes’ in its ordinary and customary manner.” Schubert Decl. ¶ 81.

28. As discussed in my opening declaration, to the extent that Dr. Schubert is arguing that the term “planar shapes” should be construed to cover three-dimensional shapes similar to the dome or elongated dome shape disclosed in the ’678 Patent, I disagree with such an interpretation. A POSA would understand that a wavelength conversion component with a three-dimensional shape, such as an elongated dome shaped shell, does not have a planar shape.

I declare under penalty of perjury and under the laws of the United States that the foregoing is true and correct.

Date: November 20, 2024


William A. Doolittle, Ph.D.