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4 UNITED STATES DISTRICT COURT

5 NORTHERN DISTRICT OF CALIFORNIA

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7 In re: RAH COLOR TECHNOLOGIES   Case No. 18-md-02874-SI
LLC PATENT LITIGATION

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9   **ORDER RE: CLAIM CONSTRUCTION**

10 This Document Relates to Cases: Re: Dkt. Nos. 137-140

11 RAH Color Technologies LLC v. Adobe
Inc., 3:18-cv-3277-SI,

12 RAH Color Technologies LLC v. Dalim
Software GmbH, 3:19-cv-00518-SI

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15   On January 21, 2021, the Court held a claim construction hearing. The Court enters this

16 claim construction order.

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18   **BACKGROUND**

19 I.   **Procedural background**

20   There are two defendants remaining in this currently consolidated MDL: Adobe and Dalim.

21 RAH Color Technologies accuses Adobe of infringing four patents, numbers 7,312,897; 7,729,008;

22 7,791,761; and 8,416,444. RAH Color Technologies accuses Dalim of infringing three patents,

23 numbers 6,995,870; 7,312,897; and 7,729,008.

24   On February 1, 2019, Adobe filed petitions with the United States Patent and Trademark

25 Office ("USPTO") for *inter partes* review of all asserted claims of the four patents in the Adobe

26 case. The USPTO issued Final Written Decisions in all cases on August 19, 2020 and September

27 3, 2020. In IPR2019-00627 (U.S. Pat. 7,729,008) and IPR2019-00628 (U.S. Pat. 8,416,444), the

28 PTAB found that Adobe had not demonstrated that all challenged claims were unpatentable. In

IPR2019-00646 (U.S. Pat. 7,791,761), the PTAB found that Adobe had not demonstrated that claim 15 was unpatentable but that the remaining challenged claims (claims 7-11 and 13) were unpatentable. In IPR2019-00629 (U.S. Pat. 7,312,897), the PTAB determined all challenged claims were not patentable.

Adobe has filed Notices of Appeal for the IPRs involving the '008 and '444 Patents. RAH has not appealed the decision regarding the '897 Patent, and states in the opening claim construction brief that it intends to remove the '897 Patent from the current litigation. Adobe has not appealed the '761 Patent Final Written Decision with regard to the finding about claim 15.

The parties have identified three terms requiring claim construction that are in the '870 and '444 patents: (1) "sites" ('870 and '444 Patents); (2) "appear substantially the same" ('870 Patent); and (3) "interactive conference" ('444 Patent). None of the PTAB decisions construed any of these claim terms.

II.   Background of the Invention

Both patents are titled "System for Distributing and Controlling Color Reproduction at Multiple Sites," and they share a specification. The "Summary of the Invention" states:

> A general object of the present invention is to provide a system for controlling and distributing color reproduction in a network of nodes having rendering devices or systems, such as volume production machinery, pre-press and proofing devices, in which colors reproduced at each rendering device have substantially the same appearance within output colors attainable by the rendering devices.

'870 Patent at 8:27-34.

Figure 3A "shows the system of the present invention":
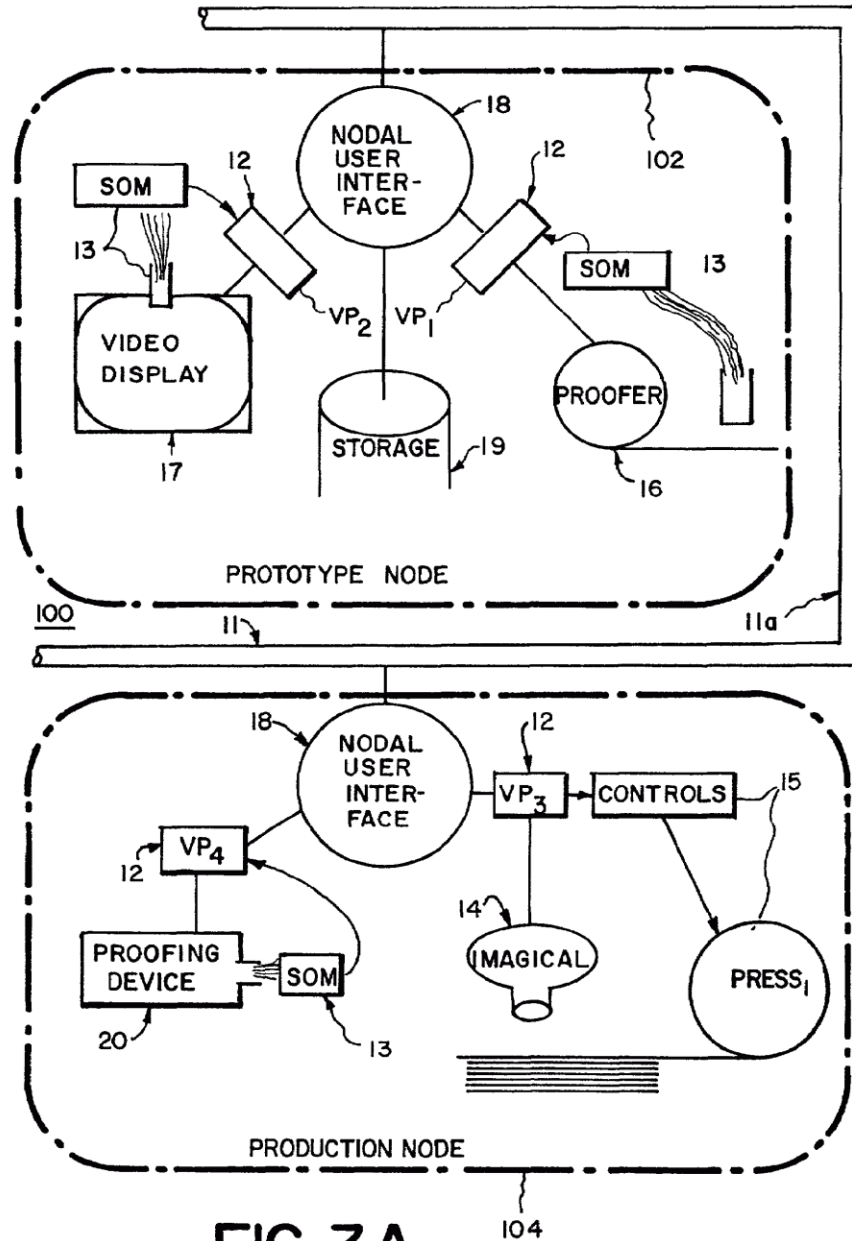
FIG. 3A

Figure 3A shows "a network 11 having a pipe 11a through which multiple nodes (or sites)

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1   of network 11 can be linked for data flow between nodes." *Id*. at 12:4-7. "Two types of nodes are

2   present in the system 100, prototype nodes 102 and production nodes 104[,] . . . only a general node

3   of each type" is shown in Figure 3A, "however there may be multiple nodes of each type in network

4   11." *Id*. at 12:9-13. "Each node has a micro-processor based computer, with a network

5   communication device, such as a modem, which is part of a system having a rendering device for

6   producing color reproduction and color measuring instrument (CMI) for measuring the color output

7   of the rendering device." *Id*. at 12:15-20.

8   Prototype nodes "allow a user to perform pre-publishing functions in system 100, such as

9   proofing (hard or soft), as well as the input of color image data." *Id*. at 12:25-27. "A user may

10   interface with the node through standard interface devices, such as a keyboard or a mouse." *Id*. at

11   12:27-29. "Rendering devices in system 100 define any type of system or device for presenting a

12   color reproduction in response to digital color signals. The rendering devices of prototype node 102

13   are proofing devices, such as video screen display device 17 or proofer device 16." *Id*. at 12:29-34.

14   Proofing devices "are hard copy devices, such as analog film-based devices, dye diffusion thermal

15   transfer devices, ink jet printers, xerographic printers, and other similar devices." *Id*. at 12:34-37.

16   "The CMI associated with each proofing device is referred to as a standard observer meter (SOM)

17   13 and provides color measurement data from images from the proofing device." *Id*. at 12:45-47.

18   "One of the pre-publishing functions supported by prototype node 102 is designing page layouts."

19   *Id*. at 12:51-52.

20   Production nodes "control a production rendering device via the device's control system."

21   *Id*. at 12:62-63. "Production rendering devices include volume production machinery, such as press

22   15, which includes gravure presses, offset presses, electrophotographic printing machines, ink jet

23   printers, flexographic presses and the like." *Id*. at 12:62-67. Production nodes "may also have one

24   or more rendering devices and SOMs 13 of a prototype node 102, such as proofing devices 20,

25   which allows proofing to occur at a production site." *Id*. at 13:1-4. "CMIs of [production] node

26   104 are called imagicals." *Id*. at 13:4-5. "Like SOMs 13 of prototype nodes 102, imagicals 14

27   provide color data for images rendered by press 15 in color coordinates of the Standard Observer."

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Id. at 13:4-7.[1]

Prototype and production nodes have circuitry that performs several functions. *Id*. at 13:29-36.

> First, it accepts measurement data from CMIs and computes color transformation functions to translate between human-perceptible colors of the measurement data into rendering device colorant values. Second, it processes and transmits color graphical/image data from one node or site in a network 11 to another. Third, it can issue reading instructions to CMIs mounted on a rendering device to measure rendered color images, and issue rendering instructions to a rendering device at the node using a stored color transformation. Fourth, the circuitry performs communications in system 100 in accordance with protocols for local or wide area networks, or telecommunications networks based on modem (either direct or mediated by Internet connection—note that Internet connectivity is not limited to modem,) satellite link, T1 or similar leased line technologies . . . . Fifth, the circuity implements calibration of rendering devices to a common, human perceptible language of color, such as CIE, defined earlier, by producing and storing color transformation information. Sixth, the circuitry performs verification of the calibration of the rendering device to maintain accuracy of the stored color transformation information.

Id. at 13:36-58.

One feature of the invention is a "data structure" called a "Virtual Proof" or "VP." *Id*. at 13:63-65. "The VP data structure is a file structure for storing and transmitting files representing color transformation information between network 11 nodes. . . . The VP is dynamic because it can be revised by nodes to assure the output color (colorants) of a rendering device using data from CMIs." *Id*. at 13:65-14:3. The VP provides the system "with many useful features, which include remote proofing for both intermediate and final approval of color products, conferencing at multiple nodes in the network between users which may have different rendering devices, and distributing color preference data with or without page layout image data." *Id*. at 14:30-35. "The conferencing . . . allows users to negotiate over the colors appearing in page layout and to confer about color corrections. For example, conferencing may use video displays 17 (soft proofs) of the page layouts

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[1] The specification states that the "common language" of color "is a color space, typically based on the internationally accepted Standard Observer which quantifies color in terms of what normal humans see, rather than in terms of specific samples or instances of color produced by particular equipment." *Id*. at 3:8-12. "The Standard Observer is the basis of device-independent, colorimetric methods of image reproduction and is defined by the Commission Internationale de L'Eclairage in CIE Publication 15.2 . . . ." *Id*. at 3:12-17. "Color Space is defined as a three-dimensional, numerical scheme in which each and every humanly perceivable color has a unique coordinate. CIELAB is a color space defined by the CIE in 1976 to simulate various aspects of human visual performance." *Id*. at 3:20-24.

1   using remote annotation software, such as imagexpo." *Id*. at 14:35-40.

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3   **LEGAL STANDARD**

4   Claim construction is a matter of law. *Markman v. Westview Instr., Inc.*, 517 U.S. 370, 372

5   (1996). Terms contained in claims are "generally given their ordinary and customary meaning."

6   *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005). "[T]he ordinary and customary

7   meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the

8   art in question at the time of the invention[.]" *Id.* at 1313. In determining the proper construction

9   of a claim, a court begins with the intrinsic evidence of record, consisting of the claim language, the

10 patent specification, and, if in evidence, the prosecution history. *Id.* at 1314; *see also Vitronics*

11 *Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). "The appropriate starting

12 point…is always with the language of the asserted claim itself." *Comark Communications, Inc. v.*

13 *Harris Corp.*, 156 F.3d 1182, 1186 (Fed. Cir. 1998); *see also Abtox, Inc. v. Exitron Corp.*, 122 F.3d

14 1019, 1023 (Fed. Cir. 1997).

15   Accordingly, although claims speak to those skilled in the art, claim terms are construed in

16 light of their ordinary and accustomed meaning, unless examination of the specification, prosecution

17 history, and other claims indicates that the inventor intended otherwise. *See Electro Medical*

18 *Systems, S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048, 1054 (Fed. Cir. 1994). The written

19 description can provide guidance as to the meaning of the claims, thereby dictating the manner in

20 which the claims are to be construed, even if the guidance is not provided in explicit definitional

21 format. *SciMed Life Systems, Inc. v. Advanced Cardiovascular Systems, Inc.*, 242 F.3d 1337, 1344

22 (Fed. Cir. 2001). In other words, the specification may define claim terms "by implication" such

23 that the meaning may be "found in or ascertained by a reading of the patent documents." *Vitronics*,

24 90 F.3d at 1582, 1584 n.6.

25   In addition, the claims must be read in view of the specification. *Markman v. Westview*

26 *Instruments*, *Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995), *aff'd*, 517 U.S. 370 (1996). Although claims

27 are interpreted in light of the specification, this "does not mean that everything expressed in the

28 specification must be read into all the claims." *Raytheon Co. v. Roper Corp.*, 724 F.2d 951, 957

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1   (Fed. Cir. 1983). For instance, limitations from a preferred embodiment described in the

2   specification generally should not be read into the claim language. *See Comark*, 156 F.3d at 1187.

3   However, it is a fundamental rule that "claims must be construed so as to be consistent with the

4   specification[.]" *Phillips*, 415 F.3d at 1316 (citations omitted). Therefore, if the specification

5   reveals an intentional disclaimer or disavowal of claim scope, the claims must be read consistently

6   with that limitation. *Id.*

7   Finally, the Court may consider the prosecution history of the patent, if in evidence.

8   *Markman*, 52 F.3d at 980. The prosecution history limits the interpretation of claim terms so as to

9   exclude any interpretation that was disclaimed during prosecution. *See Southwall Technologies,*

10   *Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1576 (Fed. Cir. 1995). In most situations, analysis of this

11   intrinsic evidence alone will resolve claim construction disputes. *See Vitronics*, 90 F.3d at 1583.

12   Courts should not rely on extrinsic evidence in claim construction to contradict the meaning

13   of claims discernable from examination of the claims, the written description, and the prosecution

14   history. *See Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1308 (Fed. Cir. 1999)

15   (citing *Vitronics*, 90 F.3d at 1583). However, it is entirely appropriate "for a court to consult

16   trustworthy extrinsic evidence to ensure that the claim construction it is tending to from the patent

17   file is not inconsistent with clearly expressed, plainly apposite, and widely held understandings in

18   the pertinent technical field." *Id.* at 1309. Extrinsic evidence "consists of all evidence external to

19   the patent and prosecution history, including expert and inventor testimony, dictionaries, and

20   learned treatises." *Phillips*, 415 F.3d at 1317 (citation omitted). All extrinsic evidence should be

21   evaluated in light of the intrinsic evidence. *Id.* at 1319.

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23   **DISCUSSION**

24   I.   **Person of Ordinary Skill in the Art ("POSITA")**

25   RAH's expert Dr. Michael Vrhel states, "In my opinion, a person of ordinary skill in the art

26   would have had either: a bachelor's degree in computer science or electrical engineering and about

27   5 years of work experience in color management or color science, or a bachelor's degree in color

28   science and 2-3 years of work experience in color management or color science. A master's degree

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1 in color science could substitute for 1-2 years of work experience." Vrhel Decl. ¶ 11 (Dkt. No. 134-

2 1). The relevant time period for the '870 and '444 patents is February 26, 1996, which is the filing

3 date of the patent application to which priority was claimed. *Id*. ¶ 12.

4 Defendants do not propose a definition of a POSITA, nor do they object to RAH's proposed

5 POSITA.

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7 II. **"sites" ('870 Patent, Claims 34 and 42; '444 Patent, Claims 11, 19, 26 and 27)**

8 **A. Claims**

9 Claim 34 of the '870 Patent reads:

10 A method for providing control to a user for processing color images comprising the
   steps of:

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12 Providing an interface operable at a computer through which the user is able to select
   a plurality of **sites** having one or more color input or output devices;

13 Communicating between said **sites** through a network interface at said sites; and
   providing information for transforming input color image data into output color

14 image data for the color input or output devices at said plurality of **sites** such that
   colors produced by the color devices appear substantially the same within colors

15 attainable by each of the devices, wherein said information for transforming
   comprises information relating the color gamuts of different ones of said color

16 devices to each other and user preferences for color reproduction for at least one of
   the color devices.

17 Claim 42 of the '870 Patent reads:

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19 The method according to claim 34 wherein at least two of the said **sites** are capable
   of being remote from each other.

20 Claim 11 of the '444 Patent reads:

21 A system for controlling color reproduction comprising:

22 a computer at a **site**;

23 memory storing information, said information comprising:

24 data representing tonal transfer functions for a plurality of color channels;

25 one or more color transformations for converting a first set of color
   coordinates into a second set of coordinates;

26

27 a gamut filter, said gamut filter representing an array stored in a file and
   accessible through a file header, wherein said array has inputs which are color values

28 and outputs indicative of whether said color values of said inputs are inside or outside
   of a color gamut; and

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a chromatic adaptation transform stored in a file and accessible through a file header, said chromatic adaptation transform enabling conversion of input color coordinates to output color coordinates representative of different viewing conditions;

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said memory storing programs for performing at least one color conversion utilizing at least part of said stored information; and

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a network interface enabling communication of at least part of said information by said computer with at least one other **site** using a network protocol.

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Claim 19 of the '444 Patent reads:

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The system according to claim 13 wherein said graphical user interface enables a user to add annotations to displayed images, wherein said annotations are separable from the image data and are communicable as part of an interactive conference with a user at said at least one other **site**.

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Claim 26 of the '444 Patent reads:

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The system according to claim 19 further comprising one or more other **sites**, each of said one or more other **sites** having a computer and software enabling a user to participate in said interactive conference.

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Claim 27 of the '444 Patent reads:

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The system according to claim 11 further comprising one or more other **sites**, each of said one or more other **sites** having a computer which provides a reproduction of color responsive to said at least part of said information.

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B.   Analysis

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RAH contends that this term should be given its plain and ordinary meaning to a POSITA,

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or alternatively, construed as "devices in a network." Adobe and Dalim contend this term should

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be construed as "physical locations." ***The Court construes "sites" as "locations."***

21

The claims use the term "sites" in the context of "sites having one or more color input or

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output devices," "site having a computer" or a "computer at a site," and the claims and the

23

specification provide that the "sites" are connected through a network that allows for communication

24

of data between sites. Thus, the claims refer to "sites" as locations on a network.

25

The Court rejects RAH's proposed construction of "devices in a network" because the

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specification repeatedly refers to "devices" being at "sites," rather than "devices" and "sites" being

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synonymous. *See, e.g.*, '870 Patent at 1:11-18 ("This invention relates to a system (method and

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apparatus) for distributing and controlling color reproduction at multiple sites, and particularly to, a

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1   system for distributing and controlling the color output of rendering devices, such as proofing

2   devices and presses, at multiple sites or nodes of a network to provide a uniform appearance of color

3   within the output colors attainable at each rendering device."); *see also id.* at 46:3-45 (regarding an

4   example of a user at an ad agency: "To pursue the example of the preceding paragraph, suppose

5   that I find that the hard copy proofer at node 'pub' has not been calibrated recently. A study of the

6   information about the device in the updated Virtual Proof reveals whether re-calibration or

7   verification procedures can be carried out without operator intervention at that site. From one site

8   or the other, the Define (Transformation) menu (FIG. 21C) supports verification. A node can be

9   activated in the Network menu and then a device at the node singled out for calibration within

10   Define.").

11   However, while the Court agrees with defendants that "site" means "location," the Court

12   does not agree that the claim language supports the additional descriptor "physical." Defendants

13   argue that "site" means "physical location" because the patents use the word "sites" to refer to

14   different locations in the printing process, and much of defendants' arguments are centered on the

15   idea that the "sites" must be *different* physical locations. However, there is nothing in the claim

16   language providing that sites in a network must have "physical locations," or that "sites" must be in

17   different physical places. Indeed, the Court notes that one portion of the specification upon which

18   defendants rely undercuts defendants' argument that "sites" must always be at different physical

19   locations. *See* '870 Patent at 1:66-2:1 (in the context of discussing production sites, "*Oftentimes*,

20   the sites represent different business entities (for example, an advertising agency, a publisher, or an

21   'engraver') which are geographically separated.") At the hearing, defense counsel acknowledged

22   that a single location, such as an office, could contain multiple "sites." The Court finds that

23   "physical" is both not supported by the claim language and that defining "sites" as "physical

24   locations" could inject ambiguity into the term.

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III. **"appear substantially the same" ('870 patent, claim 34)**

A. Claim 34

Claim 34 of the '870 Patent recites:

A method for providing control to a user for processing color images comprising the steps of:

Providing an interface operable at a computer through which the user is able to select a plurality of sites having one or more color input or output devices;

Communicating between said sites through a network interface at said sites; and providing information for transforming input color image data into output color image data for the color input or output devices at said plurality of sites such that colors produced by the color devices **appear substantially the same** within colors attainable by each of the devices, wherein said information for transforming comprises information relating the color gamuts of different ones of said color devices to each other and user preferences for color reproduction for at least one of the color devices.

B. Analysis

RAH contends that this term should be given its plain and ordinary meaning to a POSITA, or alternatively, construed as "appear largely, but not necessarily exactly, the same." Dalim contends that the term is indefinite. ***The Court concludes that the term is not indefinite and that the term should be given its plain and ordinary meaning to a POSITA.***

The Supreme Court has stated that "a patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.,* 572 U.S. 898, 901 (2014). "The definiteness standard 'must allow for a modicum of uncertainty' to provide incentives for innovation, but must also require 'clear notice of what is claimed, thereby appris[ing] the public of what is still open to them.'" *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1370 (Fed. Cir. 2014) (quoting *Nautilus*, 572 U.S. at 909). The Court recognizes that "the term 'substantially' is a descriptive term commonly used in patent claims to 'avoid a strict numerical boundary to the specified parameter.'" *Ecolab, Inc. v. Envirochem, Inc.*, 264 F.3d 1358, 1367 (Fed. Cir. 2001). However, "[a]lthough absolute or mathematical precision is not required, it is not enough, as some of the language in our prior cases may have suggested, to

1   identify 'some standard for measuring the scope of the phrase.'" *Interval Licensing*, 766 F.3d at

2   1370-71 (quoting *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1351 (Fed.Cir. 2005).

3   "While a claim employing a 'term[] of degree' may be definite 'where it provide[s] enough certainty

4   to one of skill in the art when read in the context of the invention,' a term of degree that is 'purely

5   subjective' and depends 'on the unpredictable vagaries of any one person's opinion' is indefinite."

6   *Intellectual Ventures I LLC v. T-Mobile USA, Inc.*, 902 F.3d 1372, 1381 (Fed. Cir. 2018) (internal

7   citations omitted).

8   Dalim argues that "appear substantially the same" is indefinite because "appear" is

9   subjective and "substantially" is imprecise. Dalim relies on *Intellectual Ventures I*, in which the

10   Federal Circuit held claim language "allocating means for allocating resources to said IP flow . . .

11   so as to optimize end user application IP QoS requirements of said software application" indefinite.

12   The court found that the "QoS requirements" were "entirely subjective and user-defined," and noted

13   that the specification analogized "QoS" to "a continuum, defined by what network performance

14   characteristic is most important to a particular user" and characterized it as "a relative term, finding

15   different meanings for different users." *Id*. at 1381. The patent stated that "[u]ltimately, the end-

16   user experience is the final arbiter of QoS." *Id*. In addition, the Federal Circuit found that

17   "optimizing" is a subjective term of degree that depended on individual opinion. *Id*. Dalim argues

18   that as in *Intellectual Ventures I*, the phrase "appear substantially the same" does not contain any

19   objective boundaries and depends on subjective opinions about whether colors "appear substantially

20   the same."

21   The Court agrees with RAH that the specification provides sufficient guidance for a POSITA

22   to understand how to ensure that colors appear substantially the same through color measurements,

23   calibration, verification, and calculation of confidence intervals or other objective measures of error.

24   As an initial matter, the Court finds that the word "appear" as used in the claim term is not a

25   subjective term, but rather refers to perception of color by the human eye, which the specification

26   teaches can be measured and quantified. *See, e.g.*, '870 Patent at 3:6-29 ("The common language

27   [of color] is a color space, typically based on the internationally accepted Standard Observer which

28   quantifies color in terms of what normal humans see, rather than in terms of specific samples or

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1   instances of color produced by particular equipment."); *see also Sonix Tech. Co., Ltd. v.*

2   *Publications Int'l, Ltd.*, 844 F.3d 1370, 1378 (Fed. Cir. 2017) (in the context of a patent for a system

3   and method of using a "graphical indicator" to encode information on the surface of an object (such

4   as an interactive book), holding "visually negligible" was not subjective because it involved "what

5   can be seen by the normal human eye" and "[t]his provides an objective baseline through which to

6   interpret the claims.").

7   The specification discloses that calibration is used to determine the output colors of a

8   rendering device at a node in the system, and discusses using a verification process to ensure that

9   output colors closely match intended colors, with the accuracy based in part on whether measured

10   color values fall within acceptable tolerances for color errors. *See, e.g.*, '870 Patent at 41:46-58

11   ("The reason for verification is that the use of system 100 for remote proofing and distributed control

12   of color must engender confidence in users that a proof produced at one location looks substantially

13   the same as one produced in another location, provided that the colors attainable by the devices are

14   not very different. Once rendering devices are calibrated and such calibration is verified to each

15   user, virtual proofing can be performed by the users at the rendering devices. In production control,

16   such verification provides the user reports as to the status of the color quality."); *id.* at 42:6-9

17   ("colors produced by the device are compared to desired values and mechanisms affecting colorant

18   application are modulated to reduce the discrepancy between measured and desired values."); *id.* at

19   42:41-47 ("user-defined requirements for accuracy are expressed in terms of standard deviations (or

20   like quantity) within the process variation to define confidence limits for the process. Three kinds

21   of color error derived from verification procedures are used to control the process and are referred

22   to the confidence interval in order to decide if recalibration is necessary."). The specification

23   discloses measuring color patches and comparing those measurements to historical measurements

24   to "yield estimates of color error" and that "if color errors assessed in this way exceed confidence

25   limits, the User(s) are advised that the system needs recalibration and corrective actions." *Id.* at

26   42:53-54, 42:59-62.

27   RAH's expert Dr. Vrhel states, "Based on these examples, a POSITA would readily

28   understand that determining if colors 'appear substantially the same' can be accomplished using a

verification process to confirm color accuracy, with such accuracy based on deviations between

measured and desired (or target) color values as rendered by the rendering device, or color error.

Moreover, a POSITA would have understood at the time that 100% color accuracy is not generally

the goal. Instead, the accuracy is based on whether the deviation or discrepancy falls within desired

tolerances, or confidence intervals." Vrhel Decl. ¶ 42. Dr. Vrhel continues,

> 43. Based on my experience, at the time, persons in the field were aware of the use of color errors and tolerance values for color accuracy, and that the "confidence interval" (e.g., a tolerance) would vary from rendering device to rendering device, with each device having unique color reproduction characteristics. As a result of each rendering device being different, each device may require adjustments to threshold tolerances. A POSITA would have recognized at the time that there is not necessarily a one-size-fits-all tolerance, but that some customization of tolerances may be needed.

> 44. As discussed, the patent specification describes that confidence intervals themselves should be determined based on the inherent variability between rendering devices: "User-defined requirements for accuracy are expressed in terms of standard deviations (or like quantity) within the process variation to define confidence limits for the process." '870 Patent at 42:41-47 (emphasis added). Because every system (and perhaps every project) would exhibit variability in the way they render colors (even between jobs), a POSITA would understand the concept that the colors should match—but are not needed to match with absolute scientific precision as some flexibility is needed—by using the phrase "appear substantially the same." The claim itself acknowledges this by stating that the color matching is limited by the "output colors attainable by the rendering devices." "Appear substantially the same" is how a POSITA would capture and convey this concept, with the POSITA understanding that following the methods described in the patent specification would allow for determining if rendered colors "appear substantially the same" as originally intended.

> 45. As discussed, a POSITA, after reading the specification, would also recognize that whether a color appears substantially the same can be determined using the methods described in the patent (e.g., confidence intervals and confidence limits). In other words, a POSITA would understand what qualifies as appearing substantially the same in the context of colors and rendering of colors by using a quantitative approach as discussed in the specification.

Id. ¶¶ 43-45.[2]

The Federal Circuit has held that claims using terms of degree are not indefinite where the

written description provides sufficient guidance through examples and criteria to determine whether

the term of degree has been met. For example, in *Sonix*, the Federal Circuit held that "visually

negligible" was not indefinite because the written description provided "(1) a general exemplary

design for a visually-negligible indicator . . . ; (2) 'requirements for the graphical indicators being

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[2] Dalim did not submit any evidence disputing or rebutting Dr. Vrhel's testimony.

negligible to human eyes,' . . . ; and (3) two specific examples of visually-negligible indicators . . ." *Id.* at 1379. The Federal Circuit found that this guidance was sufficient, and rejected the argument that the claim was indefinite simply because the examples and requirements in the written description could not be translated into an objective standard. *Id.*; *see also Tinnus Enterprises, LLC v. Telebrands Corp.*, 846 F.3d 1190, 1206 (Fed. Cir. 2017) (claim term requiring a balloon to be "substantially filled" was not indefinite because claims teach that if balloons detached after shaking they were "substantially filled"); *Enzo Biochem, Inc. v. Applera Corp.*, 599 F.3d 1325, 1333-35 (Fed. Cir. 2010) (holding "not interfering substantially" was not indefinite because specification provided examples of noninterfering structures and procedures for selecting them).

Here, the patent discusses at great length various methods of color measurement, calibration, verification, and using tolerances, confidence intervals and/or standard deviations to correct for color error. The specification discusses a series of specific steps which, if followed, result in the measured colors appearing substantially the same, and thus, like the patents in *Sonix*, *Tinnus*, and *Enzo Biochem*, disclose procedures and criteria to determine whether the term of degree has been met. As such, the Court concludes that the term "appear substantially the same" is not indefinite and that it does not require construction.

IV.   **"interactive conference" ('444 patent, claims 19 and 26)**

    A.   Claims

Claim 19 of the '444 patent recites:

> The system according to claim 13 wherein said graphical user interface enables a user to add annotations to displayed images, wherein said annotations are separable from the image data and are communicable as part of an **interactive conference** with a user at said at least one other site.

Claim 26 recites:

> The system according to claim 19 further comprising one or more other sites, each of said one or more other sites having a computer and software enabling a user to participate in said **interactive conference**.

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B.   Analysis

RAH contends that this term should be given its plain and ordinary meaning to a POSITA, or alternatively, construed as "communications between two or more persons using a two-way electronic communication system." Adobe contends that this term should be construed as "a meeting between two or more persons conducted over a telecommunications network in which participants can simultaneously view, comment on, or mark up documents in real time." ***The Court construes "interactive conference" as "a meeting between two or more persons conducted over a telecommunications network."***

Both parties agree that an "interactive conference" includes the concept of a meeting between two or more persons. During the IPR, in arguing against invalidity RAH and its expert, Dr. Vrhel, asserted that "interactive conference" meant "a meeting of two or more persons for discussing matters of common concern using a two-way electronic communication system." *See* Liang Decl., Ex. 1 (Dr. Vrehl's IPR Decl. ¶ 164).[3] The Court agrees with RAH that "interactive" indicates the need for two or more people to be able to communicate with each other, and that in the '444 patent, the interactivity arises in the context of parties conferring to negotiate how colors of an image should appear using the inventive system. *See, e.g.*, '444 Patent at 14:8-21 ("The conferencing mentioned above allows users to negotiate over the colors appearing in page layout and to confer about color corrections. For example, conferencing may use video displays 17 (soft proofs) of the page layouts using remote annotation software, such as imagexpo.").

Adobe does not cite any language in the claims or the specification that requires an interactive conference to occur simultaneously or in real-time. Adobe argues that the specification describes the concepts of "interactive remote viewing" and "conferring . . . us[ing] video display" by reference to a third-party product called "Imagexpo" that was designed for remote viewing of comments and other markups. However, although the '444 Patent mentions imagexpo as a tool that allows for interactive conferencing and that includes an annotation feature, there is nothing in the

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[3]   The Court is not persuaded by Adobe's argument that Dr. Vrhel's IPR testimony is inconsistent with his claim construction declaration, as Dr. Vrhel acknowledged during the IPR and in his current declaration that there is a temporal aspect to an "interactive conference" but that the patent "makes no reference or restrictions to the time scales in performing this interactive conference." Vrhel Decl. ¶ 60.

'444 Patent's description of imagexpo that requires that participants can simultaneously view, comment on, or mark up documents in real time.

Adobe also contends that the specification uses the words "interactive" and "conference" in ways that support a simultaneous or real-time requirement. For example, Adobe cites the '444 Patent at 27:50-52, which states "However, offering interactive control over key aspects of the separation transformation (also called SEP) implies that at least some parts of the calculation occur nearly in real time." As RAH notes, this sentence is not discussing an "interactive conference," but rather is discussing a step in Figure 5, which relates to calibrating a class of rendering devices to provide color transformation information. *Id.* & 10:20-25, Fig. 5. Adobe also notes that the specification states that the "initiation of display and conferencing about color image data" between an advertising agency and a printing facility involves "updating virtual proof files at either end of the link." *Id*. at 44:66-45:14. Nothing about this description of the virtual proof requires that participants simultaneously view, comment on, or mark up documents in real time.

CONCLUSION

For the foregoing reasons, the Court construes "sites" as "locations"; concludes that "appear substantially the same" is not indefinite and does not require construction; and construes "interactive conference" as a "a meeting between two or more persons conducted over a telecommunications network."

IT IS SO ORDERED.

Dated: January 22, 2021

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SUSAN ILLSTON
United States District Judge