UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

GILBERT P. HYATT, Plaintiff, v. ANDREI IANCU, Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office, Defendant.	Civil Action No. 1:05-cv-2310 (RCL)

USPTO'S PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW

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INTRODUCTION

Defendant Andrei Iancu,[1] Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office ("USPTO"), respectfully submits the USPTO's proposed findings of fact and conclusions of law.

Mr. Hyatt filed a patent application in 1984 that describes, in over 650 pages of text and figures, a system for manipulating images on a screen by rotating, sliding, and zooming. His explanation includes something that he called a "window" that is in the computer's memory and is not visible to the user. Mr. Hyatt amended his claims a number of times and, fifteen years later, in 1999, filed the claims that are now at issue. By 1999, the term "window" had taken on a much different and more valuable meaning in computing and to the general public. Mr. Hyatt's claims now recite a type of window that is visible on the user's screen, can be overlapped to run multiple applications at once, includes interactive features such as menus and icons, and allows the user to interact directly with the display monitor by, for example, clicking on a pull-down menu or choosing a menu option. Those claimed inventions are not described in Mr. Hyatt's original specification, and that lack of written description means the claims have correctly been rejected by the USPTO and should also be rejected by this Court.

Mr. Hyatt seeks a judgment that—on the issues tried before this Court—the pending claims have sufficient written description. Mr. Hyatt's current claims all include "windows," which overlay each other and include interactive features such as menus and icons. All of the claims have been rejected based on a failure to describe the term "window." The USPTO also rejected claims for a failure to describe the term "menu" and addressed the use of the term "icon." And a

[1] Andrei Iancu has been automatically substituted as the defendant in this action. Fed. R. Civ. P. 25(d).

subset of the claims recite "making a product," which this Court has explained is neither described nor enabled, two requirements under 35 U.S.C. § 112. Furthermore, the USPTO has demonstrated that all of the claims fail for lack of enablement because they all require multiple channels and a multiplexer/demultiplexer/combiner, which Mr. Hyatt never built and did not sufficiently explain how to build.

This case is not about whether Mr. Hyatt disclosed a patentable invention; the USPTO said he did decades ago in issuing a notice of allowance on the application that is a parent to the application at issue and contains the same disclosure. The problem is that since then, Mr. Hyatt has tried to patent more than he invented. He has taken bits and pieces mentioned in his specification and assembled them into "inventions" that he neither conceived nor described in 1984. It is as if he described a process of etching on a stone tablet, kept the examination process going until Apple invented the iPad, then wrote claims to cover the iPad tablet and demanded royalties for iPad sales. He cannot do that; he is entitled to claim only the invention he described in his specification.

STATUTORY AND REGULATORY BACKGROUND

A. Before any patent can issue, an application must undergo a back-and-forth examination process between the USPTO and the applicant

1. The USPTO examines patent applications and is charged with determining when patents should issue. *See, e.g.*, *In re Alappat*, 33 F.3d 1526, 1535 (Fed. Cir. 1994) (en banc). Indeed, "[t]he [Director] has an obligation to refuse to grant a patent if he believes that doing so would be contrary to law." *Id*. Thus, the USPTO, beginning with an examiner who has the relevant scientific or technical competence, examines the application. *In re Berg*, 320 F.3d 1310, 1315 (Fed. Cir. 2003). If the examiner believes the claims are unpatentable for any reason, he is obligated to reject them. *Alappat*, 33 F.3d at 1535.

2. A patent application consists of a written description, which describes the invention, 35 U.S.C. § 112, and one or more claims, which "provide[ ] the metes and bounds of the right which the patent confers on the patentee to exclude others," *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1257 (Fed. Cir. 1989). Because the applicant's rights will be determined by the scope of the claims, much of the examination process focuses on the claims.

3. Specifically, patent examination (also known as "prosecution") generally consists of a back-and-forth between the patent examiner and the applicant. The examiner initially looks at each proposed claim and reviews it for novelty, support in the written description, and compliance with the USPTO's other statutory directives and rules. *See, e.g.*, 35 U.S.C §§ 101, 102, 103, 112. After initial examination, the examiner sends the applicant an "office action," which may allow or reject each claim. If claims are rejected, the applicant may respond with amendments, evidence of patentability, arguments in favor of patentability, or some combination thereof. The written description in the specification remains fixed, and the applicant may add, delete, or modify the claims. The goal of this back-and-forth communication is to either reach an agreement on allowable claims or have the examiner and the applicant set forth their positions in the administrative record for appeal to the Board. 35 U.S.C. § 134. After the Board hears an applicant's appeal, if the applicant is dissatisfied with the Board's decision, he may seek review of that decision in court. He may choose to appeal the Board's decision to the Federal Circuit (35 U.S.C. § 141(a)) or may seek to overturn the Board's decision in district court (35 U.S.C. § 145), as Mr. Hyatt has done here.

4. A section 145 action is a hybrid action—partly an appeal and partly a new evidentiary proceeding. Unlike an appeal, new evidence can be added in a section 145 action. But

like an appeal, the Board's decision forms the evidentiary nucleus of the case. *See Hyatt v. Kappos*, 625 F.3d 1320, 1322 (Fed. Cir. 2010) (*en banc*), *aff'd*, 566 U.S. 431 (2012). Thus, fact-findings made by the Board untouched by any new evidence are reviewed by this Court with the deference given under the Administrative Procedure Act (APA)—a substantial-evidence review. *Id.* at 1336 ("When the court reviews a case on the administrative record—that is, when no party introduces new evidence—the court applies the APA standard of review to Patent Office fact findings."). With regard to any new evidence that is admissible, this "court must make a *de novo* finding when new evidence is presented on a disputed question of fact." *Kappos v. Hyatt*, 566 U.S. 431, 434 (2012). And this Court "must assess the credibility of new witnesses and other evidence, determine how the new evidence comports with the existing administrative record, and decide what weight the new evidence deserves." *Id.* at 444. In deciding the weight to afford to the new evidence, this Court may "consider the proceedings before and findings of the Patent Office." *Id.* at 445 (quoting *Hyatt*, 625 F.3d at 1335). As to new evidence, the applicant bears the burden of proof by a preponderance of the evidence. *Disney Enters., Inc. v. Rea*, 940 F. Supp. 2d 288, 292 (E.D. Va. 2013)

B. A patent must satisfy the written description, enablement, and definiteness requirements

5. In examining a patent application, the USPTO determines, among other things, whether the application satisfies the requirement of 35 U.S.C. § 112 that "[t]he specification . . . contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same."

6. "The essence of the written description requirement is that a patent applicant, as part of the bargain with the public, must describe his or her invention so that the public will know

what it is and that he or she has truly made the claimed invention." *AbbVie Deutschland GmbH & Co., KG v. Janssen Biotech, Inc.*, 759 F.3d 1285, 1298 (Fed. Cir. 2014). The purpose of the written description requirement "is to 'ensure that the scope of the right to exclude, as set forth in the claims, does not overreach the scope of the inventor's contribution to the field of art as described in the patent specification.' It is part of the *quid pro quo* of the patent grant and ensures that the public receives a meaningful disclosure in exchange for being excluded from practicing an invention for a period of time." *Ariad Pharms., Inc. v. Eli Lilly and Co.*, 598 F.3d 1336, 1353-1354 (Fed. Cir. 2010) (en banc) (citations omitted). Thus, even though claims can be added at a time after the specification was filed, the claimed invention must always be described in the original specification.

7. Determining whether the written description requirement has been met "requires an objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art. Based on that inquiry, the specification must describe an invention understandable to that skilled artisan and show that the inventor actually invented the invention claimed." *Ariad*, 598 F.3d at 1351.

8. The Federal Circuit has explained, "The purpose of the 'written description' requirement is broader than to merely explain how to 'make and use'; the applicant must also convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention." *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64 (Fed. Cir. 1991). A "patent is not a hunting license. It is not a reward for the search, but compensation for its successful conclusion." *Ariad*, 598 F.3d at 1353. The applicant must—as of the filing date—"conceive of the complete and final invention with all its claimed limitations [] and disclose the fruits of that effort to the public." *Id.* As the Federal Circuit recently explained, a claim should

be rejected as violating the written description requirement when the claim recites "a technically difficult solution that the . . . specification does not solve, let alone contemplate or suggest as a goal or desired result." *Cisco Systems, Inc. v. Cirrex Systems, LLC*, 856 F.3d 997, 1010 (Fed. Cir. 2017).

9. Enablement is a separate inquiry from written description and is a question of law, based on underlying facts. *Sitrick v. Dreamworks, LLC*, 516 F.3d 993, 999 (Fed. Cir. 2008). "In order to satisfy the enablement requirement of § 112, paragraph 1, the specification must enable one of ordinary skill in the art to practice the claimed invention without undue experimentation. Thus, with respect to enablement the relevant inquiry lies in the relationship between the specification, the claims, and the knowledge of one of ordinary skill in the art. If, by following the steps set forth in the specification, one of ordinary skill in the art is not able to replicate the claimed invention without undue experimentation, the claim has not been enabled as required by § 112, paragraph 1." *National Recovery Techs., Inc. v. Magnetic Separation Systems, Inc.*, 166 F.3d 1190, 1196 (Fed. Cir. 1999).

10. And the claims must also be sufficiently definite, under § 112, ¶ 2, which requires that the claims "particularly point[] out and distinctly claim[] the subject matter which the inventor . . . regards as his invention." A pending claim is indefinite if its metes and bounds are ill-defined because the claim contains words or phrases whose meaning is unclear. *See In re Packard*, 751 F.3d 1307, 1310 (Fed. Cir. 2014) (citing MPEP § 2173.05(e)); *see also* MPEP § 2173.02(I) (9th ed. Rev. 7, Nov. 2015) (advising examiners that a rejection for indefiniteness is appropriate "after applying the broadest reasonable interpretation to the claim, if the metes and bounds of the claimed invention are not clear"); *cf. Nautilus Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2129 (2014) (A "patent must be precise enough to afford clear notice of what is claimed, thereby appris[ing]

the public of what is still open to them." (internal quotation marks and citations omitted)). Claim clarity keeps the rights conferred by a patent commensurate with the invention's contribution to the art. *Packard*, 751 F.3d at 1313 (explaining that the claim language must be as precise as the subject matter reasonably permits).

USPTO'S PROPOSED FINDINGS OF FACT

A. This is an action to overturn an agency decision that Mr. Hyatt's claims are unpatentable

11. This is a civil action under 35 U.S.C. § 145 in which plaintiff Gilbert Hyatt is seeking to overturn a decision by the Board of Patent Appeals and Interferences ("Board")[2] that certain claims of U.S. Patent Application No. 08/457,211 ("the '211 application") are not patentable. PTX4.8-9.

12. There are 208 claims from the '211 application currently pending before the Court. The claims in dispute are 131, 132, 134, 135, 139, 151, 152, 156, 157, 159, 160, 172-177, 194-197, 199, 200, 202, 210, 211, 236-238, 250-256, 266-269, 271-277, 282, 283, 287-291, 298, 299, 306, 307, 314-318, 322, 323, 331, 332, 334-336, 340, 341, 343-346, 350-358, 360, 362-367, 369, 375, 377, 379-386, 388-391, 393-395, 398, 399, 401-406, 408-411, 413-421, 423-425, 427, 428, 430, 432-440, 442, 443, 445, 447-450, 452-455, 457-464, 466-478, 480-488, 490-492, 494-505, and 508-513.[3]

[2] The Board of Patent Appeals and Interferences was renamed the Patent Trial and Appeal Board effective September 16, 2012. 35 U.S.C. § 6(a).

[3] Mr. Hyatt's proposed findings of fact references some other claims as allegedly being before the Court. Hyatt FF, ECF No. 227, p. 1 and ¶¶ 254, 499, 505, 518, 572, 574 (each listing claims 126, 168, 169, 221, 222, 235, 285, 329, 338, 348, 349, and 361 as being before the Court). But Mr. Hyatt dropped those claims before trial. Trial Tr., Dec. 4, 2017, AM, 4:19-5:2 (listing claims 126, 168, 169, 221, 222, 235, 285, 329, 338, 348, 349, and 361 as claims that Mr. Hyatt was "withdrawing").

13. All of the claims are subject to a written description rejection under 35 U.S.C. § 112 ¶1.[4] All of the claims have been rejected based on a failure to describe the term "window."

14. A subset of the claims have been rejected based on a failure to describe the term "menu." Sixty-three of the claims at issue include the term "menu": claims 134, 135, 172-174, 199, 200, 236, 250, 251, 268, 269, 271-273, 316-318, 332, 340, 345, 350, 351, 355, 356, 367, 375, 377, 379-386, 388-391, 393-395, 398, 424, 425, 427, 449, 450, 452, 453, 459-462, 472-476, 503, 508, and 509.[5]

15. Another subset of the claims have been rejected based on a failure to describe the term "icon." Eleven of the claims at issue include the term "icon": claims 159, 160, 236-238, 415-419 and 510.[6]

Mr. Hyatt's list of all of the claims at issue (Hyatt FF, p.1 and ¶ 574) appears to drop independent claims 266, 274, 282, 290, 298, 306, 314, and 322. But because Mr. Hyatt independently asserted the written description of those claims in his proposed findings of fact, the USPTO understands that omission to be a mistake and includes those claims in its list of claims at issue.

The USPTO's list of claims at issue differs from the list in the USPTO's pretrial statement (ECF No. 201 at 3 n.3) also because Mr. Hyatt withdrew several dependent claims based on the Board's affirmance of the rejections of those claims for lack of enablement. *See* Pretrial Hearing Tr., Nov. 28, 2017, 5:15-22; *id.* at 9:24-10:6. Those are dependent claims 133, 201, 257, 278, 378, 422, 426, 431, 441, 446, 456, 479, and 489. *See* DX2012.9. Mr. Hyatt also appears to have withdrawn dependent claim 397 because he has not asserted the validity of that claim anywhere in his proposed findings of fact, nor was it mentioned at trial. *See* Hyatt FF, p.1 and ¶ 574.

[4] The Leahy-Smith America Invents Act ("AIA") amended section 112 such that the written description requirement is now found in 35 U.S.C. § 112(a). Because this is a pre-AIA case, the USPTO will refer to the older version of the statute.

[5] This list differs from Mr. Hyatt's list (Hyatt FF, ¶ 570) because it includes the dependent claims that depend on independent claims reciting the word "menu." Those claims incorporate all of the terms in the independent claims, including the word "menu."

[6] Again, this list differs from Mr. Hyatt's list (Hyatt FF, ¶ 571) because it includes the dependent claims that depend on independent claims reciting the word "icon." Those claims incorporate all of the terms in the independent claims, including the word "icon."

16. Another subset of the claims—all of the dependent claims at issue—recite "making a product," "making a signal product," or the like. Those are claims 132, 135, 152, 157, 160, 173, 174, 176, 177, 195, 197, 200, 211, 237, 238, 251, 253, 254, 256, 267, 269, 272, 273, 275, 277, 283, 288, 289, 291, 299, 307, 315, 317, 318, 323, 331, 332, 334-336, 340, 341, 343-346, 350-358, 360, 362-367, 369, 377, 379, 380, 382-384, 386, 388, 389, 391, 393, 395, 398, 401-404, 406, 408, 409, 411, 413, 414, 416-419, 421, 423, 425, 427, 430, 432, 433, 435-438, 440, 442, 445, 447, 448, 450, 452, 453, 455, 457, 458, 460-462, 464, 466, 468-471, 473-476, 478, 480, 481, 483-486, 488, 490, 492, 494, 495, and 497-499. Thus a total of 140 of the pending claims contain the "making a product" limitation.[7] The Board rejected several claims for failing to describe or enable "making a product." *See* DX2011.19-39; DX2012.7-9. Mr. Hyatt has dropped all of the claims that the Board rejected on that basis. But even if the Board did not reject them on that basis, all 140 of the pending "making a product" claims contain those limitations. And, of course, all of the dependent claims have been rejected for lack of written description at least on the basis that they recite the word "window."

17. Finally, all of the claims at issue require multiple channels and a multiplexer/ demultiplexer/combiner. As the USPTO's evidence showed, the claims are therefore also not enabled.

18. Plaintiff Gilbert Hyatt is the owner of the '211 application. PTX4.5. The '211 application names Mr. Hyatt as the inventor. *Id.*

19. Defendant Andrei Iancu is the Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office.

[7] This list, like the list of all of the claims at issue, differs from Mr. Hyatt's list because Mr. Hyatt dropped a number of the claims on his list before trial but mistakenly included them in his proposed findings of fact. *Supra* ¶ 12 n.3.

20. This Court has jurisdiction under 35 U.S.C. § 145 and 28 U.S.C. §§ 1331 and 1338(a).[8]

B. The USPTO called Dr. Castleman as its expert witness in this case; plaintiff called Mr. Hyatt as a fact witness and Mr. Hite as an expert witness

21. The USPTO called one witness in support of its case, Dr. Kenneth Castleman. The Court accepted Dr. Castleman as an expert in the subject matters of digital imaging, video processing, and the memory design and architecture of such systems. Trial Tr. (Case No. 09-1872), Nov. 15, 2017, PM, 28:12-21.[9] Mr. Hyatt's counsel did not oppose. *Id.* Mr. Hyatt's expert witness agreed that Dr. Castleman was qualified to serve as an expert in this case. Trial Tr., Jan. 18, 2018, 37:23-25.

22. Dr. Castleman received his bachelor's degree, master's degree, and Ph.D. in electrical engineering, all from the University of Texas at Austin. DX2022.3.

23. Dr. Castleman worked at NASA's Jet Propulsion Laboratory developing hardware related to digital imaging. Trial Tr. (Case No. 09-1872), Nov. 15, 2017, PM, 19:14-21:4. After leaving the Jet Propulsion Laboratory, Dr. Castleman returned to NASA to assist in the image analysis of the Challenger and Columbia space shuttle accidents. *Id.* at 21:5-22:19.

24. Dr. Castleman enjoyed a long career in the private sector designing and building image processing systems. Trial Tr. (Case No. 09-1872), Nov. 15, 2017, PM, 22:20-24:15; DX2022.1-2.

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[8] In 2005 when this suit was filed, a proceeding under section 145 had to be filed in the United States District Court for the District of Columbia. Since that time, section 145 has been amended, and such suits must now be filed in the United States District Court for the Eastern District of Virginia. *See* 35 U.S.C. § 145.

[9] Although the testimony was taken at trial in Case No. 09-1872, the parties agreed in this case to designate that testimony to avoid repeating it. ECF No. 220.

25. Dr. Castleman has taught college courses related to image processing. Trial Tr. (Case No. 09-1872), Nov. 15, 2017, PM, 24:16-25:3. He wrote college-level textbooks on image processing, including *Digital Image Processing* (1979 and 1996 editions). *Id.* at 25:11-26:13; DX2022.1. Dr. Castleman has published over 60 scientific articles in technical journals. Trial Tr. (Case No. 09-1872), Nov. 15, 2017, PM, 26:14-22; DX2022.3-8.

26. Dr. Castleman has prior experience serving as an expert witness in intellectual property cases. Trial Tr. (Case No. 09-1872), Nov. 15, 2017, PM, 26:23-27:21. He has served as an expert in approximately 33 cases. *Id.*; DX2022.8-14.

27. Plaintiff called Mr. Hyatt as a fact witness and Mr. Bradford Hite as an expert witness.

C. The ’211 application discloses a system for rotating, sliding, expanding, and compressing an image

28. The ’211 application, titled “Improved Image Processing Architecture” (DX2002.75), discusses a system for displaying images on a screen.

29. The specification discusses image processing “capable of geometrically manipulating a highly detailed image in true real time; such as for simultaneous rotation, translation, expansion, compression, 3D perspective, and warping at a 30-times per second update rate.” DX2002.90; *see* Trial Tr., Jan. 18, 2018, 125:19-126:4. The static image that is manipulated can be imported “from a video camera or from a database memory.” DX2002.90. In the ’211 specification, the terms rotation, translation, expansion, compression, 3D processing, and warping are each described in the context of a flight simulator application in which an operator uses joysticks to control a virtual airplane. DX2002.113-114 (discussing “flight simulator application”); DX2002.128; DX2002.131; DX2002.217 (discussing movement using a joystick). The user is looking out a window of the airplane cockpit and sees the ground below. *See, e.g.*,

DX2002.520 ("The moving map display can be implemented . . . as if the display is a special optical window in the floor of the cockpit."). For example, as the user operates the joystick to move the simulated airplane higher, the user sees objects shrink to look farther away; as the simulated airplane turns, objects rotate. DX2002.113-114; DX2002.128 (describing rotation); DX2002.131 (describing shrinking).

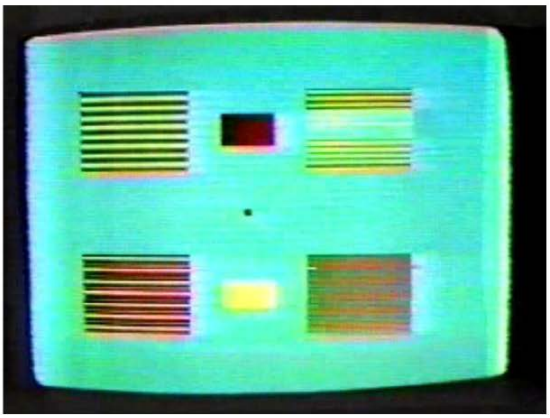
30. The system described in the '211 specification relies on having two monitors. DX2002.15 (showing separate "interface" and "mainframe"). One is an input terminal monitor that is connected to input devices such as a keyboard or joystick, in which the user inputs commands, sets up initial conditions, and selects an image to be displayed. DX2002.90-91 ("user interface comprising a computer terminal with keyboard, joysticks, or trackball"). For example, the input terminal monitor may show a menu for setting initial conditions of the system. DX2002.622; Trial Tr., Jan. 18, 2018, 131:10-16 (Dr. Castleman: "The software running in the supervisory processor displays a menu of options on the terminal screen. And the operator can read the menu and select a number that corresponds to one of the options and then press the corresponding key on the keyboard, thereby causing the computer to execute that option."). The other monitor is an output monitor—or "display monitor"—that shows the image. DX2002.105 ("The processed image is scanned out to [the] display monitor."). The user can see what is output on the output monitor and, for example, rotate the image, but the output on the output monitor does not get fed back to the processor in any way. There is a one-directional flow of information, and the user cannot click on anything shown on the output monitor.[10] Trial Tr., Jan. 18, 2018, 131:17-132:7.

[10] Mr. Hyatt asserts that the specification describes a "feed forward" and "feed backward" flow of image information. Hyatt FF, ¶ 53. But this "feed backward" does not flow from the output monitor back to the processor. As figure 1A shows, the only arrows connected to the two output

31. Mr. Hyatt maintains that he built an "experimental system" that "embod[ies] the invention claimed in the '211 Application." DX2002.105; Trial Tr., Dec. 4, 2017, AM, 32:10-15, 36:6-12 (Mr Hyatt: "I reduced [the '211 application] to practice in the experimental system.").[11] The experimental system includes these two separate devices: an "interface" or "terminal" for inputting commands, shown below left, and a separate output monitor for output, shown below right. The terminal monitor shows only text, while the output monitor shows an image but does not accept any direct user input.

devices 110K flow *into* the output devices. DX2002.9. Any backward flow of information ends at the "spacial [sic] mux/demux" 110I. *Id.*

[11] Without citing any supporting authority, Mr. Hyatt asserts that: (1) he submitted a video of his experimental system to the USPTO via its disclosure document program; (2) the USPTO was supposed to keep these disclosure documents forever; and (3) the USPTO lost the video. Hyatt FF ¶¶ 4, 35. Mr. Hyatt has an incorrect understanding of the USPTO's disclosure document program. During its existence, the disclosure document program permitted applicants to file a paper including a disclosure of an invention. MPEP § 1706 (Fifth Ed. Aug. 1983), *available at* https://go.usa.gov/xnske. Notably, the MPEP explained that the "Disclosure Document is not a patent application, and the date of its receipt in the Patent and Trademark Office" was not an "effective filing date of any patent application subsequently filed." *Id.* Further, the MPEP explained that any filed disclosure document would be preserved for only two years and then "destroyed unless it is referred to in a separate letter in a related patent application filed within the two year period." *Id.* The disclosure document program was limited to "written matter or drawings on paper or other thin, flexible material, such as linen or plastic drafting material." *Id.* While photographs were allowable, videos were not permitted. *Id.* Finally, contrary to Mr. Hyatt's contentions (Hyatt FF, ¶ 42; Trial Tr., Dec. 4, 2017, PM, 16:23-17:10), even properly filed disclosure documents cannot be incorporated by reference to support the written description in a patent application. 37 C.F.R. 1.57(d) (only U.S. patents or published U.S. patent applications may be incorporated by reference to support written description).



DX2039; DX2040.

32. In the experimental system Mr. Hyatt built, a single image is displayed on the output monitor. Trial Tr., Dec. 4, 2017, PM, 66:23-67:1 ("Because I only had a single channel here, all of these overlays were in one image memory. Therefore, when I transformed them, they all transformed together, they all moved together."). That image is accessed from a database. The single image may be composed of more than one part, but the image moves as one. Trial Tr., Dec. 4, 2017, PM, 66:23-67:1, 68:15-18 ("This is done with the experimental system which is a single channel version. And, therefore, I overlapped and overlaid these two images in the single-image memory; and, therefore, the transformation is the same for both of them."); *see* PTX200; PTX332; Trial Tr., Dec. 6, 2017, AM, 7:6-8:1 (Mr. Hite describing "destructive overlays" in which original information is replaced when part of an image is covered up); Hyatt FF, ¶ 133 (discussing "permanent" overlays). The different parts—for example the rectangle at the top left and the rectangle at the top right shown in DX2040—cannot move independently of each other. One rectangle cannot move left while the other stays stationary; they cannot rotate independently of each other. *Id.*; Trial Tr., Jan 18, 2018, 132:23-133:15.

33. If Mr. Hyatt had wanted his system to display more than one image that can move independently, Mr. Hyatt's disclosure states that more than one channel would have to be used.

DX2002.91. Each independent image would be displayed on a different channel. *Id.*; Trial Tr., Dec. 5, 2017, AM, 23:21-23 (Mr. Hyatt: "In order to move . . . the different images independently to each other, we need multiple channels in order to implement that."); Trial Tr., Dec. 4, 2017, PM, 35:22-24 (Mr. Hyatt: "we have all of these channels which can independently transform different images and position them, and then overlay them, and then display them"); Trial Tr., Jan. 18, 2018, 44:5-12 (Mr. Hite agreeing that each independent image (nondestructive overlay) requires a separate channel). To combine the images onto one monitor, where they could overlap each other and move independently of each other, Mr. Hyatt's disclosure states that a "geometric multiplexer/demultiplexer/combiner" is used. DX2002.91. Mr. Hyatt's experimental system did not have a geometric multiplexer/demultiplexer/combiner.[12] *See* DX2002.105-107 (describing elements of experimental system, which do not include multiplexer/demultiplexer/combiner); Trial Tr., Dec. 4, 2017, AM, 43:15-44:19 (Mr. Hyatt describing experimental system and not mentioning any multiplexer/demultiplexer/combiner); *see also* Trial Tr. (Case No. 09-1864), Feb. 13, 2018, 199:17-201:11 (Mr. Hyatt agreeing that "[T]he experimental system did not have a

[12] Mr. Hyatt asserts that the '211 application incorporates by reference the specification sheet for the 74ALS365 chip. Trial Tr., Jan. 19, 2018, 299:20-300:20; *see* Hyatt FF, ¶ 152; PTX4.7925 (or DX2002.446). As an initial matter, Mr. Hyatt's specification actually refers to the slower 74LS365 chip (DX2002.92, 469), so the specification sheet for the faster ALS chip is irrelevant. *See* Trial Tr., Jan. 19, 2018, 301:13-19 (Mr. Hyatt); *id.* at 322:17-323:18 (Mr. Hite). Further, the incorporation by reference is irrelevant for purposes of the written description requirement. The only incorporated material that may be relied upon for purposes of demonstrating written description are "a U.S. patent or U.S. patent application publication." 37 C.F.R. § 1.57(d). This limitation on an applicant's reliance on incorporated material was in place at the time Mr. Hyatt originally filed the '211 specification. *See* MPEP § 608.01(p) (Fifth Ed. Aug. 1983) (explaining that only incorporated U.S. patents or U.S. patent applications can be relied upon for demonstrating compliance with 35 U.S.C. § 112). And, finally, this Court should exclude that specification sheet because it is not in evidence. When Mr. Hyatt identified PTX914 at trial, and attempted to admit it into evidence, the USPTO objected on grounds including late disclosure. Trial Tr., Jan. 19, 2018, 304:24-305:4. The Court reserved its ruling at that time. *Id*. at 305:6. Mr. Hyatt has requested no ruling since that time, so the document has not been admitted into evidence. ECF No. 225 at 5.

geometric multiplexer/demultiplexer combiner")[13]. Mr. Hyatt never built a system with more than one channel. Trial Tr., Dec. 4, 2017, PM, 63:22-64:1; Trial Tr., Dec. 5, 2017, PM, 41:3-16.

34. It is puzzling that Mr. Hyatt argues that a three-dimensional perspective embodiment—mentioned in the specification—produced "spectacular" results (Hyatt FF, ¶ 84 (citing, e.g., Trial Tr., Jan 19, 2018, 291:16-19)). He never built a three-dimensional perspective embodiment and never saw those results. Trial Tr., Dec. 4, 2017, PM, 63:22-64:1 (Mr. Hyatt: "And the experimental system did not implement 3D perspective either."); Trial Tr., Dec. 4, 2017, PM, 10:11-14 ("Now, the experimental system did not have the 3D perspective, and I wish I had the time and resources to put that in, because that is really a spectacular visual effect.").[14]

35. As Mr. Hyatt explained, improving on a system does not necessarily work in practice the way one might think it would work on paper. "[W]hen you come up with an improvement, for example, increase of speed of one part of the system, then you run into all kinds of other problems." Trial Tr., Dec. 4, 2017, AM, 33:7-17. Those problems require solutions and "other inventions." *Id.*

36. As for the geometric multiplexer/demultiplexer/combiner, as Mr. Hyatt's application states, it would have to choose between images "on a pixel-by-pixel basis." Trial Tr.,

[13] Indeed, to the extent that Mr. Hyatt now asserts that his experimental system did have a "hardwired mux/demux" (Hyatt FF, ¶ 156), that is contradicted by his testimony in the 09-1864 case that there was no such combiner and that his experimental system "did not have multiple channels." Trial Tr. (Case No. 09-1864), Feb. 13, 2018, 199:17-201:11.

[14] Incidentally, Mr. Hyatt asserts that windows with three-dimensional perspective are "not known in the graphical user interface systems, to the best of my knowledge. Even to this day." Trial Tr., Dec. 5, 2017, AM, 29:20-30:2. As Dr. Castleman demonstrated at trial, warping of an image to show three-dimensional perspective projection was known at least as early as 1971, when Dr. Castleman's colleagues warped a series of images and overlaid them on a map grid. DX2049; Trial Tr., Jan. 18, 2018, 126:5-129:5. The effect of that sort of warping "is that of printing the image on a rubber sheet, stretching the rubber sheet, and then tacking it down at various points." DX2049.4.

Dec. 6, 2017, AM, 10:5-20 (Mr. Hite discussing PTX4.7941 (or DX2002.462)). Thus, if there were five different channels, the combiner would have to choose—one pixel at a time—whether each pixel's color and hue should come from the image on channel 1, channel 2, channel 3, channel 4, or channel 5. *See* Trial Tr., Jan. 18, 2018, 46:7-15 (Mr. Hite stating that claim 394 would require five separate channels to be implemented). Each channel would require 24 separate wires—eight bits of red, eight bits of green, and eight bits of blue. Trial Tr., Jan 18, 2018, 135:3-15. Each channel would have nine million pixels per second coming into the geometric multiplexer/demultiplexer/combiner. *Id.* at 137:3-16. Also, the combiner works on a binary system; with each additional channel "it'll become harder and harder to implement the circuitry to make those control decisions in the small amount of time that's available." *Id.* at 140:20-141:1.

37. Dr. Castleman "found about a page and a half of guidance [within the 650-plus page specification] of how to build that device. There's a lot of discussion of how to use it, of what it could do if you had it, all the nice things that would happen if you had one of these things. But when it comes down to how to build it, I found precious little in the specification to indicate or to give guidance as to how to solve all the problems one would run into, especially in 1984, trying to build one of these things." Trial Tr., Jan. 18, 2018, 139:1-13 (referring to DX2002.469-470 and DX2002.472-473, *see* Trial Tr., Jan. 18, 2018, 141:2-14); Hyatt FF, ¶ 144-145 (discussing what geometric multiplexer/demultiplexer/combiner can allegedly do but not how to build it). Thus, Dr. Castleman presented testimony that in 1984 it would have been hard to build a multiplexer/demultiplexer/combiner that works as Mr. Hyatt hoped it would work; that Mr. Hyatt's specification did not tell one of skill in the art how to build it; and that the specification would not teach one of skill in the art how to make the invention because "there's no indication that he had

thought through all the problems required, all the steps required to build this thing."[15] *Id.* at 138:17-139:19; Trial Tr., Jan. 19, 2018, 225:3-17. And Mr. Hyatt explained that he never built such an embodiment.

38. Mr. Hite explained that if one wanted to simulate moving through a forest, "for the perspective to look right," one would need a separate channel for each tree, requiring possibly dozens of separate channels. Trial Tr., Jan. 18, 2018, 45:15-24; *see* Trial Tr., Jan. 18, 2018, 134:4-20 (Dr. Castleman explaining that, to move mountains in the background slowly and telephone poles beside a road quickly, "that would require a multichannel system where the background could be in one channel . . . mov[ing] slowly, and the telephone poles would be in a second channel which could move more quickly across the screen"); *id.* at 141:15-142:4. But, as discussed above, Mr. Hyatt only ever implemented a system with one channel. Trial Tr., Dec. 4, 2017, PM, 63:22-64:1; Trial Tr., Dec. 5, 2017, PM, 41:3-16. And he never implemented three dimensional perspective. *Id.*; Trial Tr., Jan. 19, 2018, 312:16-18.

39. It is odd that Mr. Hyatt never implemented three-dimensional perspective or a multi-channel system, in view of his contentions that neither would be hard, and each would only require a few off-the-shelf parts. *See* Trial Tr., Jan. 19, 2018, 289:10-14 (Mr. Hyatt stating that 3D capability could be added to the experimental system "merely by adding, as we'll see later on,

[15] Mr. Hyatt argues that Dr. Castleman's expert report did not address the argument that the specification fails to describe how to build the multiplexer/demultiplexer/combiner. Hyatt FF, ¶¶ 158-165. As Dr. Castleman pointed out at trial, his expert report explained that "[t]he hardware arrangement depicted makes no provision for displaying multiple overlapping windows of a single display screen." Dr. Castleman's expert report further explained that none of the program lines in Mr. Hyatt's specification "would have illustrated to one of ordinary skill in the art in 1984 that Mr. Hyatt was in possession of any of the overlaying limitations of claim 172," along with other paragraphs further discussing the lack of disclosure. Trial Tr., Jan. 18, 2018, 145:25-148:6; *See* Hyatt FF, ¶ 161. The Court listened to the discussion in Dr. Castleman's expert report and overruled Mr. Hyatt's counsel's objection to the discussion.

shortly, essentially a couple of registers and adders"); *id.* at 290:12-14 (Mr. Hyatt: "not letting it go there because [3D perspective is] so easy to implement, I foresaw the future having . . . other types of distortions); *id.* at 292:18-293:2 (Mr. Hyatt stating that a 3D image "is very, very simple to implement," "is very inexpensive," and is "almost instantaneous to achieve, and it takes no essentially no computational burden on the system"); *id.* at 293:9-14 (Mr. Hyatt stating that 3D perspective could be added "by a slight addition of circuitry and a slight amount of initial condition processing"); *id.* at 298:5-22 (Mr. Hyatt stating that additional channels would require only "integrated circuits and multiplexer circuits that have six bit bus on a single integrated circuit chip. And those are old, simple integrated circuit chips. You can put most of this on a single chip and very easily. It's a very simple one. And there's no computational load in the mux/demux block. It's merely some logical circuits, which I'll show shortly."); *id.* at 305:19-306:18 (Mr. Hyatt stating that one way of implementing additional channels "requires absolutely zero propagation delay or computations or anything else, just wires"); Hyatt FF, ¶¶ 83, 151.

40. Mr. Hyatt also asserts that he wanted venture capital, but the venture capitalists did not believe that the system could do what he said it could do. Trial Tr., Dec. 4, 2017, AM, 36:14-18 (Mr. Hyatt: "you tell someone that you can get hundreds and thousands of times improvement in—in cost and performance, they are very disbelieving"); Trial Tr., Dec. 4, 2017, PM, 31:8-11; Trial Tr., Dec. 5, 2017, PM, 10:16-20 (Q: "[Y]ou made the decision that because [your inventions] were unbelievable, you needed to build them, right, that's what that says?" Mr. Hyatt A: "Well, I needed to be able to demonstrate parts of them, the key parts, yes."). And in 1999 Mr. Hyatt wrote claims that *all* require a multi-channel system because they *all* have different windows that move independently of each other. *See* PTX912.122-123; *see generally* PTX912 (slides from Mr. Hite

that diagram independent claims, and all require multiple channels). Yet Mr. Hyatt never built such a system.

D. Mr. Hyatt received a notice of allowance for claims that encompassed rotating, sliding, expanding, and compressing an image

41. Mr. Hyatt filed the '211 application in June 1995. DX2002.1. Although it was filed in 1995, the '211 application claims to be a continuation of a prior patent application filed by Mr. Hyatt—U.S. Patent Application Serial No. 06/663,094 ("the '094 application"), filed over ten years earlier, in October 1984. DX2002.76. A continuation application contains the same disclosure, or specification, as the original application and is treated as if filed on the filing date of the earlier application. 35 U.S.C. § 120; *Transco Prods., Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 555-57 (Fed. Cir. 1994); Trial Tr., Jan 18, 2018, 107:22-108:7. In fact, the continuation and the original application "are considered part of the same transaction constituting one continuous application." *Transco*, 38 F.3d at 556.

42. In the '094 application, Mr. Hyatt received a notice of allowance for 10 claims in October 1988. DX2014.14-16; Trial Tr., Jan. 18, 2018, 108:19-22. Those claims covered an image processing system. *See, e.g.*, DX2014.2. Like Mr. Hyatt's experimental system, those claims recited accessing a single image from storage and manipulating that image by, for example, rotating, translating (sliding), and scaling (expanding or compressing) it. *Id.* The claims covered a single channel system. Trial Tr., Jan 18, 2018, 110:7-13. For example, claim 1, which was an independent claim, recited the following:

> An image processing system comprising:
>
> means for storing an image
>
> means for accessing the image from said storing means
>
> geometric means for geometrically processing the image accessed with said accessing means, said geometrical processing including

> rotating, translating, scaling, and perspective processing the image accessed with said accessing means; and
>
> spatial means for spatially processing a geometrically processed rotated, translated, scaled, and perspective processed image from said geometric means to generate a spatially processed image having reduced aliasing.

DX2014.2.

43. Thus, the claims that were allowed closely match the system that is described in the '211 specification and that Mr. Hyatt experimentally built in 1984. *See* Trial Tr., Jan. 18, 2018, 109:20-110:17. Because of that close match, the USPTO allowed the claims. DX2014.14-16. But Mr. Hyatt chose not to pay the issue fee, a necessary step for the allowed claims to be issued as a patent. By failing to pay the issue fee, he abandoned the '094 application. Trial Tr., Dec. 5, 2017, PM, 15:11-21 (Mr. Hyatt agreeing that he did not pay the issue fee for the '094 application, which is "a necessary condition for the issuance of a patent"); Trial Tr., Jan. 18, 2018, 108:19-109:8.[16]

44. Mr. Hyatt filed different claims in 1999, fifteen years later, that recite multiple images that are presented separately on multiple channels, as well as graphical-user-interface elements like windows, menus, and icons. The examiner rejected these later claims under 35 U.S.C. § 112, and the Board affirmed. DX2011; DX2012.

[16] If Mr. Hyatt had allowed those claims to issue in 1988, his patent would have expired in 2005. And any other claims that were not patentably distinct from those claims would have expired at the same time under the doctrine of obviousness-type double patenting. *Proctor & Gamble Co. v. Teva Pharmaceuticals USA, Inc.*, 566 F.3d 989, 999, 90 USPQ2d 1947 (Fed. Cir. 2009). By not accepting those claims, Mr. Hyatt is attempting to retain the option to present similar claims up to the present day, with the potential of receiving a 17-year term from when a patent issues.

E. Mr. Hyatt's specification uses the word "window" in multiple senses.

45. Mr. Hyatt's specification uses the word "window" repeatedly. According to Mr. Hyatt's counsel, it is mentioned 268 times in the '211 specification. Trial Tr., Jan 19, 2018, 280:15-20.

46. Mr. Hyatt has explained that he did not invent windows as used in his specification. In fact, he explained that they are not an important part of his invention. Trial Tr., Dec. 5, 2017, PM, 20:3-13 (Q: "Windows are a very important part of your invention; is that right?" Mr. Hyatt A: "No." Q: "So the word 'window' is used in every single claim that is before this Court, are you saying that that word is not important to your invention?" Mr. Hyatt A: "I didn't invent windows; and, therefore, it's not an important part of the invention. Windows is an old technology that has been around the display field for a long time before I filed this, and I was using a narrower version of what was well known in the field."); Trial Tr., Dec. 4, 2017, AM, 55:14-19 (Mr. Hyatt: "I am claiming special types of windows, like 3D perspective rotating windows. Just because windows are mentioned in the claims don't mean that I am claiming a window in its generic form."). Indeed, the claims that were allowed in 1988 based on the 1984 specification never mention the word "window." DX2014.2, 6-8, 12-13.[17]

47. Mr. Hyatt did not define the word "window" in his specification. Trial Tr., Dec. 5, 2017, PM, 21:10-13. He stated that he "didn't need to" provide definitions because he "had extensive descriptions from a top level, way down to detailed lower level descriptions" (Trial Tr., Dec. 4, 2017, PM, 31:14-20), though he later conceded that he did not present his figures in the top-down order from more general to more specific and that "there is no fixed sequence to, for a

[17] Claim 20 of Mr. Hyatt's original '094 application recited a "window means for processing the frame related information as window information under stored program control." DX2014.11. Mr. Hyatt was required to cancel that claim before receiving the notice of allowance. DX2014.16.

reviewer to go through these figures." Trial Tr., Dec. 5, 2017, AM, 52:24-53:2, 54:22-23; *see* PTX910.32 (Mr. Hyatt's demonstrative triangle presenting, e.g., Fig. 6A as a higher level block diagram than Fig. 2I, and Figs. 5A-5D as higher level block diagrams than Fig. 1K). He further stated that he is not defining the word "window" even at trial. Trial Tr., Dec. 5, 2017, PM, 25:17-24.

48. Mr. Hyatt argues that the primary definition of "window" is "a portion of image memory that is scanned out for display or processing." Hyatt FF, ¶¶ 172-195; *see* Trial Tr., Dec. 4, 2017, PM, 8:6-12. That window is not visible but is stored in memory. Trial Tr., Dec. 4, 2017, PM, 9:12-13 (Mr. Hyatt: "as a window is rotated it also encompasses different image information in the image memory"); Trial Tr., Dec. 4, 2017, AM, 59:3-6 (Mr. Hyatt: "Then as the window is translated and moved across the image memory, the displayed image looks like it is being moved like a vehicle—like an airplane flying over the terrain."); Trial Tr., Jan. 18, 2018, 64:13-17 (Mr. Hite: "[O]ne description is content specific to the memory and the other one is to the display."). As shown in Mr. Hyatt's figure 2A, a "window" resides inside "image memory," which resides inside "buffer memory," which resides inside "database memory," meaning the window exists in the computer's memory, rather than as a visible image.[18] DX2002.20.

49. What is displayed on the output monitor is an image. That is why, when the specification discusses what is shown on the output monitor, it discusses an "image," rather than a "window." For example, the specification states that "[t]he window can be translationally positioned over image memory to implement image translation, can be rotationally oriented over

[18] Mr. Hyatt argues that "Figure 2A shows a window image superimposed on a buffer memory image superimposed on a database memory image." Hyatt FF, ¶ 61. That figure simply does not indicate that any of the boxes represent "images." They all represent portions of memory inside the computer. DX2002.20. Indeed, the terms "buffer memory image" and "database memory image" do not appear anywhere in Mr. Hyatt's specification. DX2002.

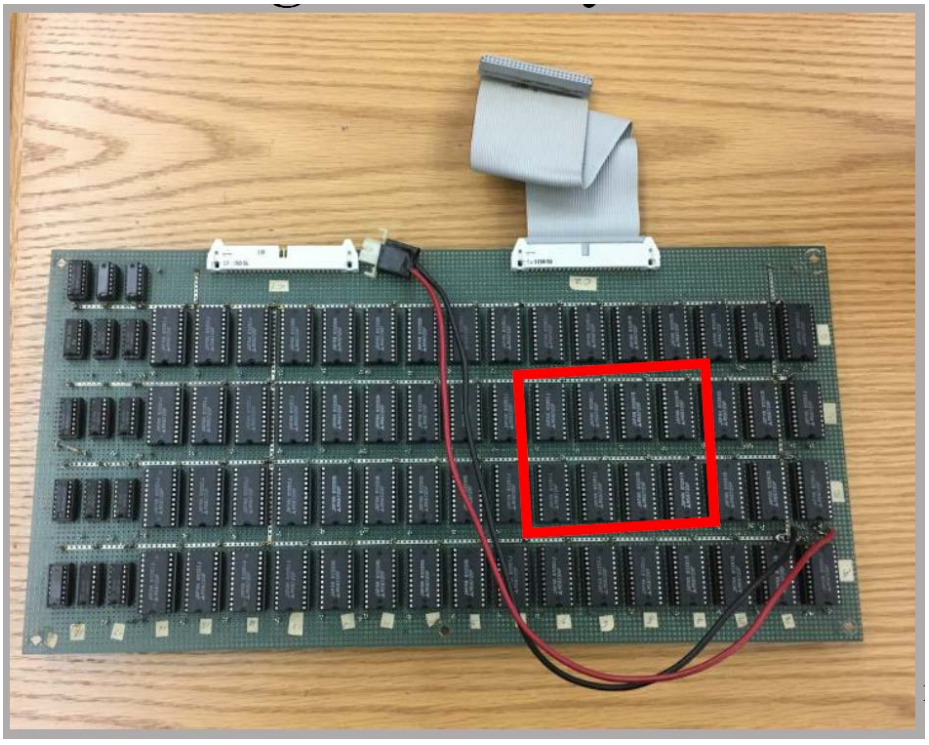
image memory to implement image rotation, can be expanded or compressed to implement image compression or expansion respectively, [and] can be warped to implement image warping." DX2002.147; *see* Trial Tr., Dec. 5, 2017, AM, 7:13-8:11 (Mr. Hyatt explaining that passage by stating that "transforming the window" results in a "transformed image on the display"); DX2002.150 ("Window 204D can be rotated . . . in accordance with geometric processing to provide a correspondingly rotated . . . image.") (quoted at Hyatt FF, ¶¶ 174, 179); DX2002.154 ("A window arrangement may be considered as mapping a portion of image memory seen through a window into the display viewport. . . . Translation of the window relative to image memory translates the image seen in the viewport."). That means that when the window in memory is moved, the image itself—shown on the output monitor—also moves. It does not mean that a "window" is then shown on the output monitor. Trial Tr., Jan. 18, 2018, 153:12-154:7 (Dr. Castleman explaining that the statements at DX2002.154 show "that what we're seeing on the display viewport is the content of the window and not the window itself").

50. Similarly, the specification states that "[t]he portion of the image contained within the rotated window EFGH is displayed in the viewport." DX2002.156. It is an image, not the window itself, that is displayed in the viewport (which is another word for the output monitor). *See* Trial Tr., Dec. 5, 2017, AM, 10:7-18 (Mr. Hyatt discussing same paragraph of specification).

51. And Mr. Hyatt explained very clearly during his testimony at trial that a window within this description was not something that was visible on the screen. According to Mr. Hyatt, "[i]n my system the windows were a way to scan out the image information, but they themselves were not portrayed on the screen. So that the operator did not have any perception in my system that windows were being used." Trial Tr., Dec. 5, 2017, AM, 31:9-13. Indeed, Mr. Hyatt explained that having a window be visible on the screen would have ruined the effect of his

invention: "The operator would merely see the imagery contained within the window, but he wouldn't—I did not present the window on the screen, because that would have destroyed the perception of a pictorial type of presentation. . . . In my system I kept the window off of the screen because I did not want to distort, detract from the image, the processed image that I was portraying on the screen." *Id.* at 31:14-24.

52. Dr. Castleman illustrated this first meaning of the word "window" in a few of his slides. For example, Dr. Castleman showed a picture of one of Mr. Hyatt's memory boards containing 64 chips.

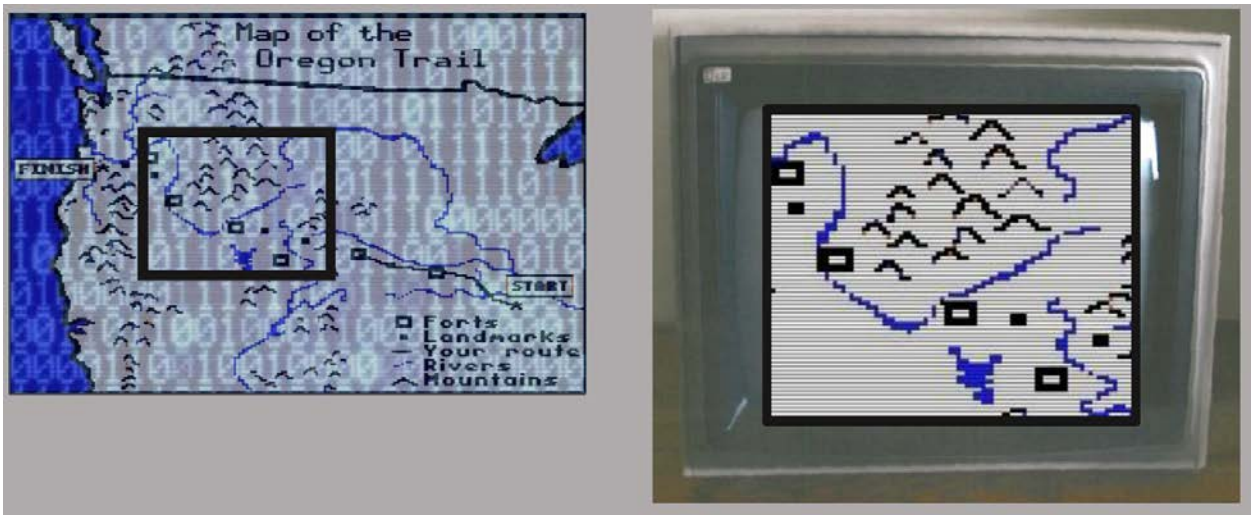


DX2050.21; PTX903. As Dr. Castleman explained, "one can imagine that those 64 chips contain one large image. And that image could be displayed on the display monitor." Trial Tr., Jan. 18, 2018, 150:13-151:5. However, according to Dr. Castleman, "one could also select a subset of those memory chips, such as the eight chips that are shown inside the red rectangular outline, and take only the data from those eight memory chips and route that to the display system so that

whatever image content is contained in those eight memory chips is used to fill up the entire screen." *Id.* Thus, the red box represents "a window which is a portion of computer memory which has been selected to supply the data to display on the display screen." *Id.*

53. The set of image data occupying all of the chips in image memory is imported from an image source such as a database. DX2002.11 (block 111A is an "image source"); Trial Tr., Jan. 18, 2018, 153:4-11.

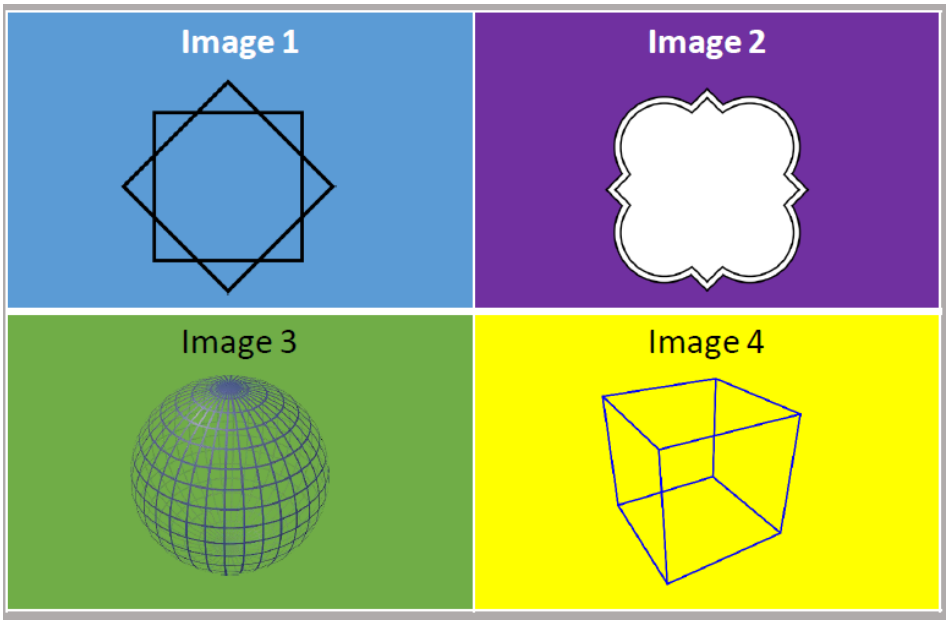
54. Dr. Castleman also illustrated the window in image memory using data that represents a map of the northwestern United States.



DX2050.22. On the left, there is a picture representing the entire map, stored in image memory. "The little ones and zeros in the background just are there to remind us that the data that's stored in the memory is actually digital data, numbers ones and zeros basically." Trial Tr., Jan. 18, 2018, 151:6-20. "[T]he black rectangle shows that a certain subsection of that image has been selected for display. So only the data, the ones and zeros, that fall inside that black box are then routed to the display." *Id.* Thus, the user will see on the monitor, on the right, an image that is formed from only the data inside the black box. *Id.* The rectangle on the left, then, is a window that is not

visible but is only in memory. And on the right, what is displayed is only an image and not a "window." *Id.* at 152:12-18 (Dr. Castleman: "you wouldn't see the window itself").

55. Mr. Hyatt's specification has another meaning of "window" as well. This one is something displayed on the output monitor and not information contained in image memory. It is what Mr. Hyatt calls a "windowed viewport." The specification states, "A window arrangement may be considered as mapping a portion of image memory seen through a window into the display viewport. *This is different from windowing of the viewport, where the viewport is divided into a plurality of different areas, called windows, for different images*." DX2002.154 (emphasis added); *see* DX2002.111 ("For windowing, geometric processor 111D can be implemented as a single geometric processor time shared between the 2-images for display in windows of the viewport."). As Dr. Castleman explained, here "window" means "dividing the display monitor up into different sections and displaying a different image in each one of those sections." Trial Tr., Jan. 18, 2018, 150:3-12. Dr. Castleman illustrated that with the following image of a "windowed viewport."



DX2050.26. "[E]ach of the sections is being used to display a different image. So we have four different images displayed in four different sections, non-overlapping sections of the display

screen." Trial Tr., Jan. 18, 2018, 156:3-12. In other words, a "windowed viewport" is an output monitor divided into multiple non-overlapping areas.

56. Mr. Hite used the "windowed viewport" as support for his second definition of "window."[19] Trial Tr., Dec. 5, 2017, PM, 75:9-21.

57. Dr. Castleman explained that, reading Mr. Hyatt's specification, his "understanding is that it's up to the reader to determine from context which meaning of the word 'windows' is to be used when reading the application." Trial Tr., Jan. 18, 2018, 155:21-156:2. But neither of the meanings established by the specification refers to a user-interactive window as used in a graphical user interface. "[O]ne of them is not even visible on a display screen. And the other type, the second type, windowing of the viewport, these windows are not interactive. You can't click on them, and they don't overlap." *Id.* at 156:13-21.

F. Mr. Hyatt's specification describes displaying menus only on the input terminal monitor

58. In the specification, Mr. Hyatt describes menus only as displayed on the input terminal monitor, to allow the user to choose what will then be displayed on the output monitor.

59. Mr. Hyatt explained that he described "menus which are in some of the source code." Trial Tr., Dec. 4, 2017, PM, 47:13-22. Those menus in the source code are displayed on the input terminal monitor. Trial Tr., Dec. 5, 2017, PM, 31:12-21 (Mr. Hyatt explaining that the menu lines that are preceded by the word "print" are displayed on the input terminal monitor); DX2002.622 (specification showing menus preceded by the word "print"); Trial Tr., Dec. 5, 2017, AM, 33:3-17 (Mr. Hyatt explaining that, on the input terminal monitor, you can see a menu with

[19] The specification refers to other meanings of the word "window," like a physical window of an airplane. DX2002.520 ("The moving map display can be implemented . . . as if the display is a special optical window in the floor of the cockpit."). But that meaning is not at issue in this case.

descriptions that "identify the types of images that I had preprogrammed" on the left and a list of numbers on the right such that, when you press a number key, the corresponding image could be loaded into image memory).

60. The input terminal monitor could show only text, and the menu was made up of text. Trial Tr., Dec. 5, 2017, AM, 34:5-6 (Mr. Hyatt); Trial Tr., Jan. 18, 2018, 132:10-16 (Dr. Castleman explaining that the input terminal monitor would have "a menu of options" displayed on it, and "in order to execute one of those options, the operator would press the corresponding number key on the keyboard"). Mr. Hyatt explained that "the operator would select from a menu. He would select it from the computer terminal, from the keyboard on the computer terminal." Trial Tr., Dec. 5, 2017, AM, 32:5-10. As Mr. Hite put it, the menus that are shown in Mr. Hyatt's specification will "print a text formatted string on the [input] terminal display." Trial Tr., Jan. 18, 2018, 74:5-24 (discussing menus from PTX4.8101-02 (or DX2002.622-23)). "This BASIC program puts it on the terminal screen." *Id.* That is true for all of the menu code that Mr. Hite pointed to. *Id.* at 74:25-75:12; *see* Hyatt FF, ¶ 239 (discussing "menu-driven interface" referring to menus on the input terminal monitor).

61. Indeed, as Dr. Castleman explained, the menus shown in code in Mr. Hyatt's application must be shown in the input terminal monitor and not on the output monitor because the program to display a menu "does not have direct access to the output monitor." Trial Tr., Jan. 18, 2018, 158:9-25. The "computer code that's running on the supervisory processor does not have the capability to write data on the—on the display screen." *Id.*

62. In fact, although Mr. Hyatt's claims recite the term "menu image" repeatedly (e.g., DX2003.4 (claim 134); DX2003.9 (claim 172); DX2003.11 (claim 199); DX2003.14 (claim 236)), that term never once appears in the specification (Trial Tr., Jan. 19, 2018, 184:19-20 (Dr.

Castleman)). The specification refers to menus solely on the input terminal monitor, and the text shown on the input terminal monitor is not generally referred to as an "image."

63. What is shown on the output monitor, on the other hand, is an image that is pulled up from a database of images. DX2002.90. The application discloses that the database of images could include images of text—"alphanumeric characters." PTX4.7943 (or DX2002.464). But displaying images of text does not imply displaying menus, contrary to Mr. Hite's assertions. Trial Tr., Dec. 6, 2017, AM, 56:7-13 ("And to a skilled artisan the image with alphanumeric information that was stationary would be recognized as another window—a menu, I'm sorry."); Hyatt FF, ¶ 228; *but see* Trial Tr., Jan. 18, 2018, 77:18-19 (Mr. Hite conceding that not all text is a menu). Dr. Castleman pointed this out in his testimony. Trial Tr., Jan. 18, 2018, 174:4-8 (Q: "[T]he window of alphanumeric information, is that a menu?" Dr. Castleman: "In this case it's not. There is a menu. There is a menu [elsewhere in the claim], but the window of alphanumeric information is not specified to be a menu."). And, indeed, Mr. Hyatt's claims separately recite displaying a "menu image" and displaying a "window of alphanumeric images," showing that Mr. Hyatt understands that menus and alphanumeric images are different things. DX2003.41 (claim 394); Trial Tr., Jan. 18, 2018, 174:4-8 (Dr. Castleman).

64. And Mr. Hyatt explained that, although an image of a menu—like any other image—could be loaded into image memory to be chosen for display, he did not implement that; he did not include an image of a menu as one of the choices of images to be loaded into image memory or displayed on the output monitor. Trial Tr., Dec. 5, 2017, AM, 33:18-23 ("[A]n image *that is not in this list* but that also *could be* loaded into image memory is a menu [image] . . . that I would program and add to this menu." (emphasis added)); Trial Tr., Dec. 6, 2017, AM, 55:13-22 (Mr. Hite: "I'm going into [the] complexity of this because *I'm assuming that the application*

also describes the database which *could* you know contain hundreds of these." (emphasis added)); Trial Tr., Jan 18, 2018, 78:15-79:11 (Mr. Hite explaining that, although specification describes showing a generic image on the output monitor, it does not specifically describe showing a menu there). There is no figure in Mr. Hyatt's specification that shows an image of a menu being displayed on the output monitor. Trial Tr., Jan. 18, 2018, 84:13-16 (Mr. Hite); *id.* at 162:1-3 (Dr. Castleman). Mr. Hyatt's experimental system, shown in videos, never shows an image of a menu being displayed on the output monitor. *Id.* at 84:17-25 (Mr. Hite); *id.* at 162:4-9 (Dr. Castleman). When asked if, in reading the whole specification, there was any discussion of an image of a menu being shown on the output monitor (or display screen), Dr. Castleman stated, "I didn't find that at all." *Id.* at 161:22-25.

65. Indeed, the function of the menus in Mr. Hyatt's application is to allow the user to select what image will be loaded into image memory. Trial Tr., Dec. 6, 2017, AM, 53:12-22 (Mr. Hite: "[T]he menu would say essentially select image to be loaded into image memory . . . and then the operator would enter an 8, and that would cause the image processor to load a square image into the image memory."). No image will be displayed on the output monitor until *after* the image is selected and loaded into image memory. *See* Trial Tr., Jan. 18, 2018, 80:10-13, 81:17-24, 82:20-83:6 (Mr. Hite agreeing that image must be selected, then loaded into memory, then displayed); Hyatt FF, ¶ 306 ("'the architect can select a shrub as an overlay object' (which will *then* be stored in overlay image memory" (emphasis added)). So showing an image of a menu on the output monitor in Mr. Hyatt's application would have no function; that menu could not be shown on the output monitor until *after* the operational menu had already been used. Trial Tr., Jan. 18, 2018, 159:18-161:21 (Dr. Castleman explaining that, because the image is accessed from the database and displayed on the output monitor only after being chosen on a menu, there would

be no opportunity in Mr. Hyatt's program to have a menu on the output monitor allow the user to pick an option).

66. Instead, the way Mr. Hyatt's menus worked was that the menu was shown on the input terminal monitor, the user could read a description of an image and type in a number to select it, and the image would then be accessed and displayed on the output monitor. *See id.*; Trial Tr., Jan 18, 2018, 83:7-84:14 (Mr. Hite agreeing that the way Mr. Hyatt's code worked was that the user would select images using the description of those images on the input terminal monitor).

67. Mr. Hyatt went on to argue that "menus implemented with alphanumerics would be overlaid on the images as disclosed and claimed" (Trial Tr., Dec. 4, 2017, PM, 47:13-22), but nowhere does the specification show menus being shown on top of images or even on the same screen as images. *See* Trial Tr., Jan. 18, 2018, 85:1-9 (Mr. Hite agreeing that no figure or video of Mr. Hyatt's experimental system shows a menu being displayed on top of an image)[20]; Trial Tr., Jan. 18, 2018, 161:22-162:3 (Dr. Castleman testifying that specification nowhere discusses menus being shown on the display screen).

G. Mr. Hyatt's specification uses the word "icon" only once, including it in a list of "terrain primitives" that are small reproducible images

68. In the specification, the word "icon" appears only once. DX2002.484; Trial Tr., Jan. 19, 2018, 190:2-6. It is included in a list of "terrain primitives" that are small reproducible images that can create a larger picture. DX2002.484 ("In non-real world applications, an unlimited amount of terrain can be constructed with a relatively small amount of database memory by

[20] Mr. Hite asserted that PTX4.8013-14 (DX2002.534-535) describes making a selection from a menu on the output monitor of a background image and overlay images. Trial Tr., Jan. 18, 2018, 85:10-86:6; *see* Hyatt FF, ¶¶ 237-238. But he also conceded that the image shown on the output monitor would not arrive there until *after* it had been selected from a menu on the input terminal monitor. Trial Tr., Jan. 18, 2018, 80:10-13. Thus, Mr. Hite's position on that particular disclosure simply does not make sense.

overlaying terrain primitives stored in the database. The primitives can include forested terrain, desert terrain, hilly terrain, mountainous terrain, cultural features, graphics, alphanumerics, icons, and other such primitives."); Trial Tr., Dec. 5, 2017, PM, 35:7-9 (Mr. Hyatt agreeing that "primitives" are "building-block elements which can be combined to make a larger picture"); Trial Tr., Jan. 19, 2018, 190:7-14 (Dr. Castleman).

69. Among those terrain primitives are things like trees, which have "foliage overlays." DX2002.484. Mr. Hyatt explained at trial that a small reproducible image, like a tree image, is not "an operator aid." Trial Tr., Dec. 5, 2017, AM, 23:7-12 (Q: "Do you consider a tree image like this to be a computer operator aid as well?" Mr. Hyatt A: "A tree image is an image used in the, creating the overall complex image such as for pilot training simulators and the like. I wouldn't call it an operator aid. I would call it a portion of a pictorial image on the screen.").

70. The specification does not use the word "icon" to represent an image that can be clicked on to execute a program or anything else. Trial Tr., Dec. 5, 2017, AM, 21:16-23 (Mr. Hyatt: icons as used in the specification "don't have the ability to control anything"); Trial Tr., Jan. 19, 2018, 191:7-15 (Dr. Castleman). And the specification does not refer to icons or any other terrain primitives as "computer operator aids." Instead, "an icon is described as an image." Trial Tr., Dec. 5, 2017, PM, 35:18-20 (Mr. Hyatt).

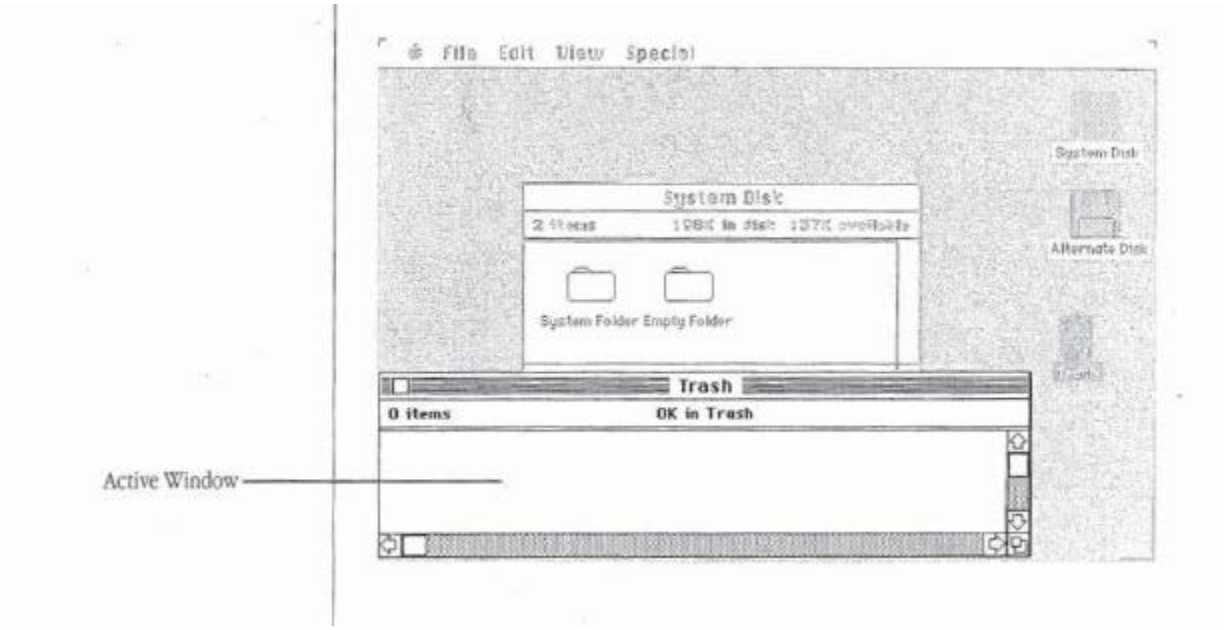
H. In 1984, Apple was using a graphical user interface, but Mr. Hyatt was not aware of it

71. Dr. Castleman explained that a graphical user interface (sometimes called a GUI) is "a method for allowing an operator to control the operation of a computer. It's called a user interface because it allows the user to interface with the execution of the software that's running on the computer. And it's called a graphical user interface because it's done through the use of graphic images on the screen." Trial Tr., Jan. 18, 2018, 120:18-121:4.

72. In the present day, Microsoft Windows and Apple computers operate on graphical user interfaces. *Id.* at 121:5-122:12. A user uses a mouse or other device to control a pointer, and the user can move the pointer to an icon, click it, and thereby open a window on the screen. *Id.*; *see id.* at 65:16-66:1 (Mr. Hite saying the same). The interface is characterized by two-way communication between the user and the processor, because the location of the pointer and user input (e.g., click of the mouse button) send information back to the processor telling the processor specifically what to do. *Id.* at 121:5-122:12. For example, if the user moves a mouse to the point on the screen where an icon is located and then clicks on that icon to open an internet browser, the processor is directed to open an internet browser rather than Microsoft Word because of where on the screen the user has clicked. *See id.* (Dr. Castleman: "[T]he computer can detect the position or knows the position of the cursor or the pointer at the time the operator presses a button. And it knows the location of the different graphic items on the screen. So the software can sense the fact that the operator has activated a certain icon or menu item and then use that to direct the operation of the software."); *id.* at 66:2-67:3 (Mr. Hite).

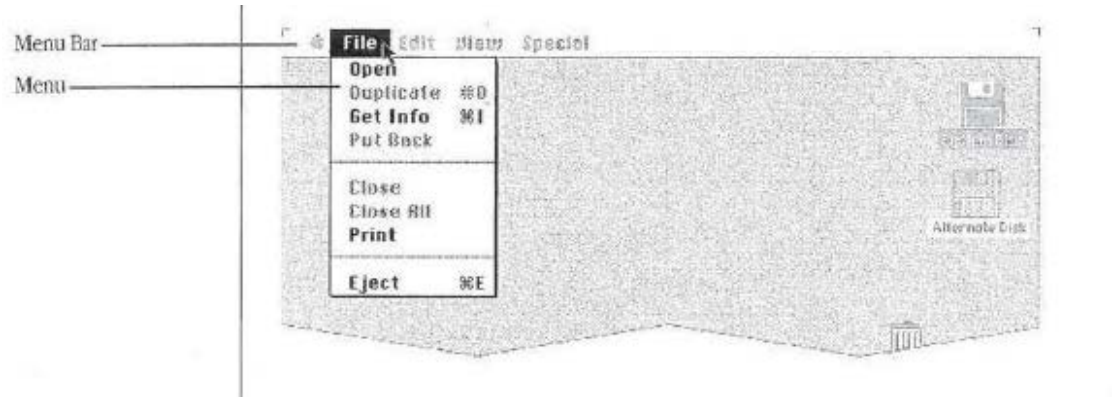
73. By 1984, Apple Computer, Inc. was using a graphical user interface in a commercially available product. DX2023 (copyrighted 1983); *see* Trial Tr., Jan 18, 2018, 122:24-123:6. That interface included user-interactive windows, menus, and icons. The user could move the mouse, select windows, menus, or icons representing files or programs with the mouse by clicking, and give commands by dragging things like windows or icons with the mouse. DX2023.5-6; Trial Tr., Jan. 18, 2018, 122:24-123:14. The user could send information back to the processor with the mouse. For example, when a user clicks on an icon representing an application, that click gives a command to the processor to select and activate that particular application. DX2023.8.

74. In the Apple system, when the user selects a particular window, that window becomes active. DX2023.13. As the manual explains, "[w]ith Macintosh you can have many windows on your desktop at the same time. When there's more than one window, your Macintosh needs to know which one you're working on at the moment, so that the commands you choose and the text you type end up in the right place." *Id.* In other words, the processor handles information differently depending on which window the user is working on. "The window you're working on is always in front of all the others. It's called the active window, the place you want the next action to happen." *Id.* Thus, the active window appears brighter on the screen and overlaps the other windows, while the inactive windows appear dimmer and can be covered up by the active window, as shown below. *Id.*; Trial Tr., Jan. 18, 2018, 118:11-18.



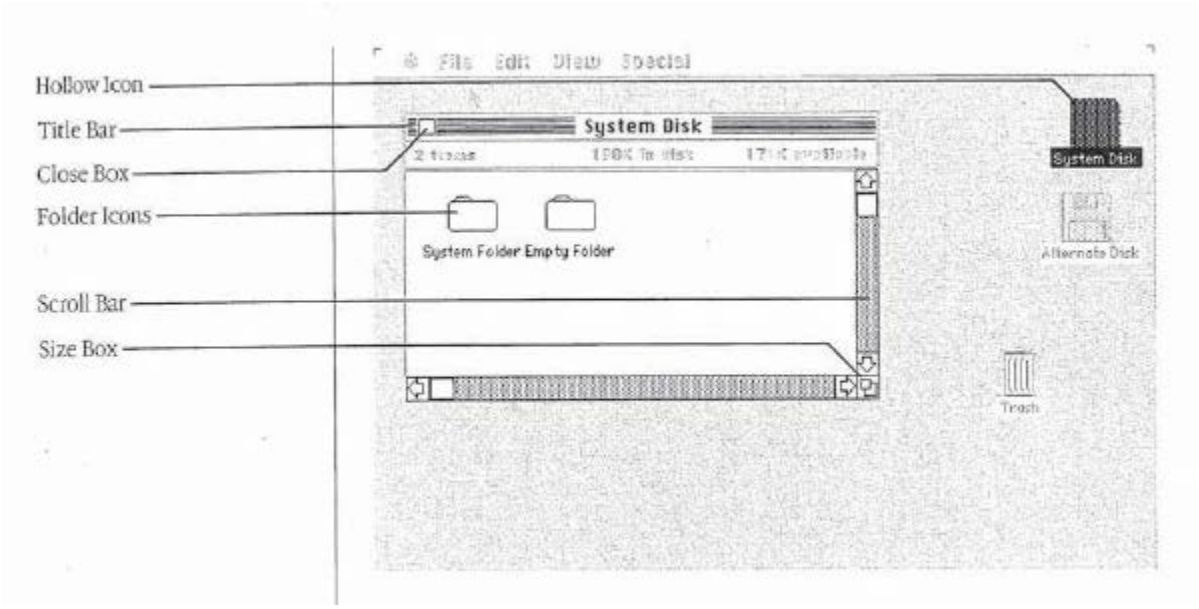
DX2023.13.

75. When the user clicks on a menu title on the menu bar at the top of the screen, the processor causes a particular pull-down (or drop-down) menu to appear, as shown below.



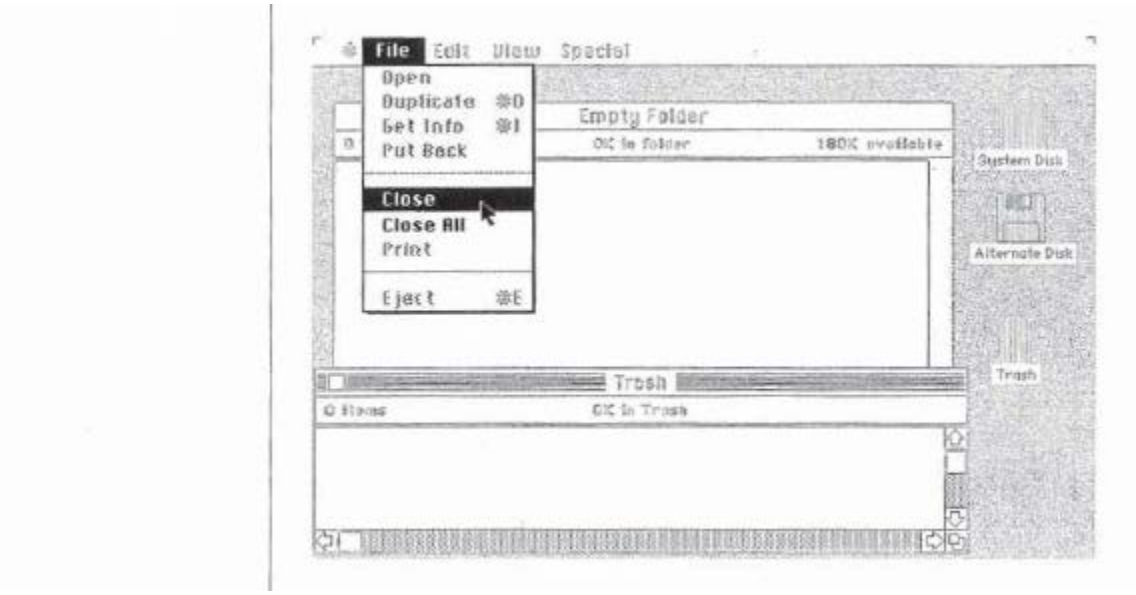
DX2023.8. Thus, the user interacts with the display screen by clicking on a menu title, which sends information back to the processor, causing the correct pull-down menu to appear. Trial Tr., Jan. 18, 2018, 118:19-119:14. The user can choose a command from the pull-down menu, and selecting that command with an input device gives the processor instructions to carry out that command. *Id.*; DX2023.8.

76. Apple used icons in 1984 to represent executable programs or applications. Thus, clicking on an icon would allow the user to then open a particular program or application, which would appear in a window. DX2023.8-10; Trial Tr., Jan 18, 2018, 119:17-120:1. The manual shows some icons like "Folder Icons."



DX2023.10.

77. Thus, at DX2023.16, the Apple manual shows a menu overlapping a window and a window overlapping another window. It also shows icons that can be selected to run particular applications or programs.



DX2023.16; *see* Trial Tr., Jan. 18, 2018, 120:2-17.

78. Although graphical user interfaces existed in 1984, when Mr. Hyatt filed his patent application, Mr. Hyatt was not aware of them and had not used them. Trial Tr., Dec. 5, 2017, PM, 13:22-14:11.

I. By 1999, when Mr. Hyatt filed the claims at issue, graphical user interfaces with windows, menus, and icons were immensely popular

79. In 1999, after fifteen years had passed, though, graphical user interfaces had become immensely popular. In that fifteen-year period, a "tremendous explosion of technology happened. Computers got more powerful, cheaper, smaller." Trial Tr., Jan. 18, 2018, 163:3-11. And "graphical user interfaces became almost ubiquitous thanks to Microsoft and Apple." *Id.* "[I]t got to the point where if you wanted to sell a system, you better put a graphical user interface on it." *Id.* at 164:1-5.

J. This Court has to determine the meanings of the terms "window," "menu," and "icon" as used in the claims and determine whether those terms are described in the specification

80. Before a court can determine if a claim term is supported by written description or is sufficiently definite, the court must first construe—or attempt to construe—the term. *See Bamberg v. Dalvey*, 815 F.3d 793, 797 (Fed. Cir. 2016) (after determining that claim term had been properly construed, moving on to see if the specification supported the claim to meet the written description requirement); *Media Rights Techs. v. Capital One Financial Corp.*, 800 F.3d 1366, 1371 (Fed. Cir. 2015) (explaining that indefiniteness in this case is "intertwined with claim construction").

81. Claim construction, also known as claim interpretation, is a question of law based on underlying facts. *Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 835 (2015).

82. Claim construction is the process of determining the operative meaning of a term. "During patent examination the pending claims must be interpreted as broadly as their terms reasonably allow." *In re Zletz*, 893 F.2d 319, 321 (Fed. Cir. 1989). "[D]uring patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed." *Id.*; *see In re Yamamoto*, 740 F.2d 1569, 1571 (Fed. Cir. 1984) ("The PTO broadly interprets claims during examination of a patent application since the applicant may 'amend his claims to obtain protection commensurate with his actual contribution to the art.'" (citations omitted)).

83. Claim terms are interpreted according to the understanding of a person of ordinary skill in the art at the time of the invention. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc). Both Dr. Castleman and Mr. Hite gave their opinions on the level of ordinary skill for the invention disclosed in the '211 application. Dr. Castleman stated that "a person of ordinary skill in the art in 1984 would have a master's degree in electrical engineering or closely

related field, and three to five years' experience in digital circuit design." Trial Tr., Jan. 18, 2018, 114:5-18. In 1984—at the time of Mr. Hyatt's invention—Dr. Castleman met those qualifications. *Id.*

84. Mr. Hite stated that a person of ordinary skill in the art in 1984 would have at least "a bachelor's degree in electrical engineering and at least five years' experience working in the field of image processing. Also, they would have to possess a good understanding of digital logic design." Trial Tr., Dec. 5, 2017, PM, 54:3-14. In 1984—at the time of Mr. Hyatt's invention—Dr. Castleman met those qualifications. *See* DX2022. Mr. Hite, however, did not meet those qualifications until 1994, ten years later. Trial Tr., Jan. 18, 2018, 37:6-22. By 1994, as opposed to 1984, the landscape of image processing and design had changed significantly, personal computing was readily available, and graphical user interface systems like Microsoft Windows were common. *See generally* Trial Tr., Jan. 18, 2018, 163:15-164:5.

K. Mr. Hyatt's claims use the word "window" both (1) in multiple senses, rendering the claims invalid as indefinite and (2) to cover a graphical user interface, which Mr. Hyatt agrees he did not invent

85. Mr. Hyatt argues in this Court that his claims use the word "window" to mean "a portion of image memory that is scanned out for display or processing."

86. But that definition of "window" is inconsistent with what the claims recite.

1. This Court must engage in claim construction to determine whether "window" is described and definite, and neither Mr. Hyatt nor Mr. Hite proposed claim constructions for the term

87. As discussed above, the Court must engage in claim construction to determine issues like written description and definiteness. In this trial, plaintiff presented only two witnesses—Mr. Hyatt and Mr. Hite. Both refused to interpret or define the term "window."

88. Rather than engaging in claim interpretation and providing a definition for "window," Mr. Hite explicitly refused to provide an interpretation. Mr. Hite stated, "you're asking

me to interpret the claim; right?" Trial Tr., Jan. 18, 2018, 69:1-70:4. When counsel for the USPTO said yes, Mr. Hite stated, "I didn't write the claim." *Id.* When Mr. Hite was then asked, "you're an expert in this case; correct?" he responded, "As far as providing written description of these claims." *Id.* When asked whether that includes providing an interpretation of the meaning of the claims, Mr. Hite responded, "Mr. Hyatt wrote the claims." *Id.* When finally asked whether part of his job as an expert witness is to understand the metes and bounds of the claims, Mr. Hite responded, "I don't know. I hadn't thought about it that way." *Id.* Later, when asked about the process of claim construction, Mr. Hite stated, "I didn't construct the claims in this disclosure. I was just, you know, trying to demonstrate adequate written description, … and you know, interaction of claims, and that was kind of the process I followed." *Id.* at 54:20-55:1. Indeed, rather than engaging in the claim construction process to determine the appropriate definition of "window" in the context of the record, Mr. Hite dismissed it as "a question of semantics." *Id.* at 53:5-55:10.

89. Similarly, Mr. Hite never provided a definition of the word "window" in either his expert report or his supplemental expert report. Trial Tr., Jan. 18, 2018, 47:7-49:4 (Mr. Hite ultimately explaining that he did not give a definition of the word "window" in the supplemental expert report). Mr. Hite gave a deposition and refused to give a definition of the word "window." Trial Tr., Jan. 18, 2018, 50:12-18 (Mr. Hite agreeing, when asked in his deposition whether he had an opinion on what the claim term "window" means, that he had responded only "I guess I have an opinion as the word is used in the claim[,] as much as it's described."); *id.* at 98:2-13 (Mr. Hite agreeing that he had testified in his deposition that he had not "offered a definition of the word 'window' as it's used in the claims"). It was only after he looked at the deposition transcript, on reflection, that he was able to provide a definition of the word "window." *Id.* at 50:19-51:11.

90. And even then, he did not provide a single definition but instead provided two definitions, depending on the context in which the word was used in the claim. *Id.* at 51:5-52:7. In other words, Mr. Hite provided two different definitions for the word "window" *within a single claim*, depending on whether it refers to image information stored in memory or an image displayed on an output monitor. *Id.* at 51:24-53:4, 55:21-57:20 (Q: "So your understanding is that the same word can mean two different things within the same claim; correct?" Mr. Hite: ". . . Yes. The word 'window' in certain claim elements would be relative to a memory. And in other claim elements it would be relative to the display.").

91. Mr. Hyatt also never provided a definition of the word "window," either in his application or at trial. Trial Tr., Dec. 4, 2017, AM, 55:14-22 (Mr. Hyatt: "I'm not claiming windows. I am claiming special types of windows, like 3D perspective rotating windows. Just because windows are mentioned in the claims don't mean that I am claiming a window in its generic form."); Trial Tr., Dec. 4, 2017, PM, 8:6-9:1 (Mr. Hyatt: "Just saying a window is claimed is meaningless because we're not just claiming a window."); *id.* at 31:14-32:2 (Mr. Hyatt explaining that he did not provide definitions in his specification); Trial Tr., Jan. 18, 2018, 47:7-15 (Mr. Hite agreeing that "window" is not defined in the specification). Indeed, Mr. Hyatt stated that it is "silly for me to have to define 'window' in a vacuum. It is an image processing window of a special type that I described." Trial Tr., Dec. 5, 2017, PM, 21:2-23:6. Further, in response to a question whether a window is "a set of image information that is scanned out of image memory and used to generate an image," Mr. Hyatt replied not that that was a definition of the word but that it was "a description of it," and he explained that it was only "one of the ways [the word 'window'] was characterized" in his disclosure. *Id.*

2. In each of Mr. Hyatt's claims, Mr. Hyatt's newly proposed definition of the word "window" does not work for the "displaying" steps

92. In his proposed findings of fact, Mr. Hyatt now asserts for the first time that only one definition applies to the claims, and that definition is "a portion of image memory scanned out for display." Hyatt FF, ¶¶ 172-195. For one thing, Mr. Hyatt's most recent definition of "window" cannot apply to each instance in any claim. Using claim 172 as an example, that claim recites the following:

> A process comprising the acts of:
>
> generating operator input information;
>
> generating background image information;
>
> generating menu information in response to the operator input information;
>
> generating a first window of three dimensional perspective image information;
>
> overlaying the first window of three dimensional perspective image information onto the background image information;
>
> overlaying the menu information onto the first window of three dimensional perspective image information;
>
> generating a second window of graphics image information;
>
> overlaying the second window of graphics image information onto the background image information overlapping with the first window of three dimensional perspective image information; and
>
> displaying a background image overlaid by a first window of three dimensional perspective images further overlaid by a menu image and overlaid by an overlapping second window of graphics images in response to the background image information overlaid with the first window of three dimensional perspective image information overlaid with the menu information and in response to the background image information overlaid with the overlapping second window of graphics image information.

DX2003.8-9.

93. The claim thus recites both "generating a first window of three dimensional perspective image information" and "displaying . . . a first window of three dimensional perspective images." Those are two different windows. One is generated in image memory and the other is displayed on a screen. As Mr. Hite explained, all of the claims follow this general pattern of generating a window and then displaying a window. Trial Tr., Dec. 5, 2017, PM, 69:11-16; *see* DX2003.

94. The window that is generated, according to Mr. Hite, is defined as "a portion of image memory that is scanned out for image processing or display." Trial Tr., Jan. 18, 2018, 51:5-53:4 ("[A]s applied to the geometric processor, window means a portion of image memory that is scanned out for image processing or display.").

95. The window that is displayed, on the other hand, is not a portion of image memory but is instead something else—something that is displayed. Mr. Hite attempts to define the displayed "window" as "a portion of the display containing an image." *Id.* ("As applied to the display, window means a portion of the display containing an image."). Thus, Mr. Hite alleges that two different definitions apply to the word "window" *within the same claim*, depending on whether it is a window that is "generated" or a window that is "displayed." *Id.* ("It depends on the context of usage with an image memory or the display."); *id.* at 55:21-57:20 (Q: "So your understanding is that the same word can mean two different things within the same claim; correct?" Mr. Hite: ". . . Yes. The word 'window' in certain claim elements would be relative to a memory. And in other claim elements it would be relative to the display.").

96. And Mr. Hite testified that those definitions are mutually exclusive. "[O]ne description is content specific to the memory and the other one is to the display." Trial Tr., Jan 18, 2018, 64:13-17; *see id.* at 67:18-21 (Q: "Are the windows described in Mr. Hyatt's

specification user interactive?" Mr. Hite: "Are you talking windows on the screen, or windows in the memory? Because we have these two—").

97. The claims do not work with only one of those definitions. If a "window" is defined only as a portion of image memory, as Mr. Hyatt now principally argues in his proposed findings of fact (Hyatt FF, ¶¶ 172-195), then a window itself cannot be displayed. Only an image is displayed, not the memory or the data in memory. Thus, the part of each claim that recites "displaying . . . a first window of three dimensional perspective images" (DX2003.9), displaying another type of window, or the like simply makes no sense under that single definition.

98. Similarly, if a "window" were defined as "a portion of the display containing an image," that definition makes no sense for the windows that are generated.

99. The problem with having two different definitions apply within the same claim—in addition to it violating the basic definiteness requirement for claims under 35 U.S.C. § 112(b)—is that the two different types of windows as discussed in the specification are very different things. The specification explicitly distinguishes them from each other. The specification states, "A window arrangement may be considered as mapping a portion of image memory seen through a window into the display viewport. *This is different from* windowing of the viewport, where the viewport is divided into a plurality of different areas, called windows, for different images." DX2002.154 (emphasis added). (Mr. Hyatt now argues that the specification "expressly disclaims" the second definition—"windowing of the viewport." Hyatt FF, ¶ 191. But Mr. Hite apparently does not agree because he argued to the Court that the sentence about "windowing of the viewport" "provides written description that you can have multiple windows of image information on the viewport, which is the display." Trial Tr., Dec. 5, 2017, PM, 75:9-21; *see also* Trial Tr., Jan. 18, 2018, 63:7-64:1 (referring to A114 (DX2002.111), which says, "For windowing,

geometric processor 111D can be implemented as a single geometric processor time shared between the 2-images for display in windows of the viewport.").)

100. Dr. Castleman illustrated the difference between the two different types of windows discussed in the specification during his testimony. *Supra* ¶¶ 52-57.

101. Furthermore, even if a claim term could have two different meanings depending on the context, the specification gives *no meaning* that is consistent with the claimed windows that are displayed. As discussed above, the window contained in memory is not displayed. And the "windowed viewport" does not make sense with those displayed windows because the claimed displayed windows do things like overlap each other. *E.g.*, DX2003.9 (claim 172 reciting displaying two overlapping windows). The "windowed viewport" is "divided into a plurality of *different areas*, called windows, for different images." DX2002.154 (emphasis added). Those different areas are not overlapping—they make up "non-overlapping sections of the display screen." Trial Tr., Jan. 18, 2018, 156:3-12 (Dr. Castleman). Thus, neither of the usages of "window" in the specification can account for the "windows" that are "displayed" in Mr. Hyatt's claims. Trial Tr., Jan. 18, 2018, 170:25-171:12 (Dr. Castleman).

102. And it is "considerably more complicated to implement overlapping windows" than the separate areas in a windowed viewport. Trial Tr., Jan. 18, 2018, 171:13-21. "[F]or each pixel, the software has to make the decision as to which of the windows is on top and, therefore, obscures the windows below. Whereas, with the nonoverlapping windows in the windowing of the viewport, then the different images are selected only by their x-y position on the screen, which is a simpler process to do." *Id.*

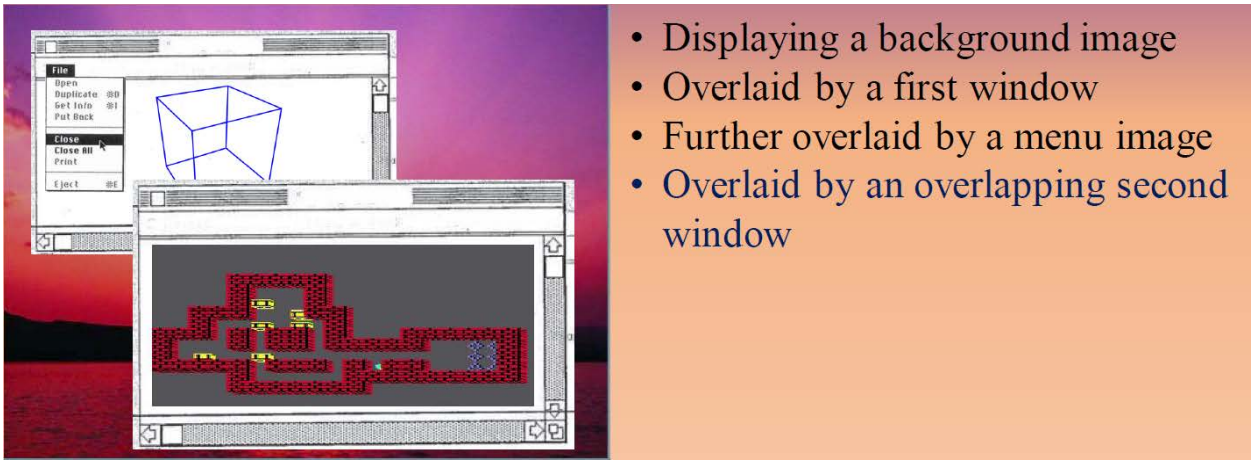
103. Thus, even though the specification uses the word "window" in two potentially relevant ways, neither of those usages work for the "window" that is displayed in each of Mr.

Hyatt's claims. "A person of ordinary skill in the art would find that the meanings [of the term] as specified in the '211 application, don't fit the word as it's used in the 1999 claims." Trial Tr., Jan. 19, 2018, 218:15-21 (Dr. Castleman). "[A] person of ordinary skill in the art would have a problem applying the two definitions in the '211 application to the—to the claims, to the rejected claims, the 1999 claims. The language of those claims would be, it would be difficult or impossible to apply either one of those first two definitions in a reasonable way to the wording in those claims." *Id.* at 232:8-18 (Dr. Castleman).

3. In each of Mr. Hyatt's claims, the only way for the word "window" to have a single consistent definition is if it covers a graphical user interface

104. All of Mr. Hyatt's current claims include "windows" that overlay each other and include interactive features such as menus and icons.

105. For example, Dr. Castleman illustrated the items displayed during the "displaying" step of claim 172 with the following picture.



DX2050.8

106. And, as discussed above, the claims recite both generating windows and displaying windows. The only consistent way to understand those claims is if the "windows" being referred to are the user-interactive-type windows used in a graphical user interface. In a graphical user

interface, windows are both generated and displayed because the user can actually see something that is called a "window."

107. Indeed, as Dr. Castleman explained, the display shown in a claim like claim 394 would only work if the overlapping windows can be easily switched, where the one in back can be quickly moved to the front. That kind of switching is easy in a graphical user interface including windows that the user can click on to make them active, but it is much more difficult in a system like the one described by Mr. Hyatt.

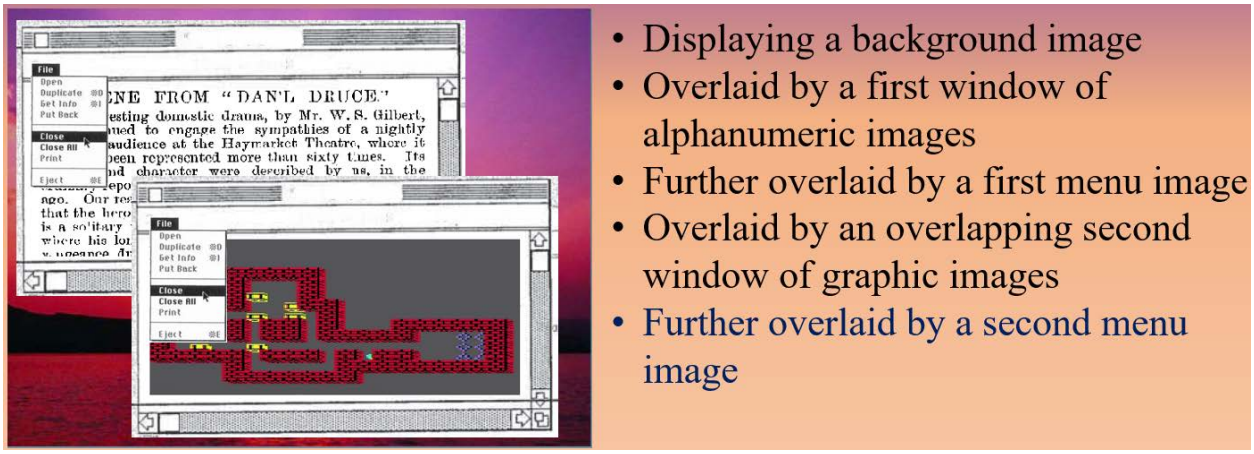
108. Specifically, claim 394 recites the following:

> A process comprising the acts of:
>
> generating operator input information;
>
> generating background image information;
>
> generating a first window of alphanumeric image information;
>
> overlaying the first window of alphanumeric image information onto the background image information;
>
> generating first menu information in response to the operator input information;
>
> overlaying the first menu information onto the first window of alphanumeric image information;
>
> generating a second window of graphics image information;
>
> overlaying the second window of graphics image information onto the background image information overlapping with the first window of alphanumeric image information;
>
> generating second menu information in response to the operator input information;
>
> overlaying the second menu information onto the second window of graphics image information; and
>
> *displaying* a background image overlaid by *a first window of alphanumeric images further overlaid by a first menu image and overlaid by an overlapping second window of graphics images*

> further overlaid by a second menu image in response to the background image information overlaid with the first window of alphanumeric image information overlaid with the first menu information and in response to the background image information overlaid with the overlapping second window of graphics image information overlaid with the second menu information.

DX2003.40-41 (emphasis added).

109. Dr. Castleman illustrated the items displayed during the "displaying" step with the following picture.



DX2050.40; *see* Trial Tr., Jan. 18, 2018, 172:11-21.

110. As Dr. Castleman explained, the first displayed window of "alphanumeric images"—or text—is partly obscured by an "overlapping second window of graphic images." Trial Tr., Jan. 18, 2018, 173:22-175:5. Because some of the text would be covered, the user could not read that text. Dr. Castleman explained that it might be useful to cover some of the text if the user did not need to see it at the moment, but the user would need to see the text to read it. *Id.* And, as Dr. Castleman explained, the process of covering and uncovering a particular window in a graphical user interface is easy, such that the user could later easily see the text. The user can simply click on the inactive window to make it active and to be able to read the text. *Id.*

111. But, Dr. Castleman explained, the process of reading text that had been covered up in the invention described by Mr. Hyatt would be cumbersome. Trial Tr., Jan. 18, 2018, 175:6-

176:5. To switch the order of priority of the two images so that the text would be visible, the user could "reload the different channels." *Id.* That would mean "interchang[ing] the images between the two channels so that the one you wanted to see moves to the high priority channel." *Id.* That would require a number of steps—"you could copy the images into the different channels, and then you would see what you needed to see. But it wouldn't be a simple click thing." *Id.* Mr. Hyatt agreed that it would be difficult but "doesn't have to be done very often." Trial Tr., Jan. 19, 2018, 307:1-15.

112. Thus, the fact that Mr. Hyatt wrote claims in 1999 that include windows of text that are overlapped by other windows indicates that Mr. Hyatt intended his claims to cover a graphical user interface and not the system he described in his 1984 specification.

113. Claim 472 recites displaying a "menu window." DX2003.59. That menu window, although never discussed in the specification (Trial Tr., Jan. 18, 2018, 92:7-19 (Mr. Hite); Trial Tr., Jan. 19, 2018, 180:17-21 (Dr. Castleman)), must include a menu, which, as discussed below (¶¶ 130-143), must be user interactive.

114. Indeed, in 2001, not long after he wrote his 1999 claims to cover windows, menus, and icons, Mr. Hyatt argued to the USPTO, to avoid invalidating prior art, that the claims covered graphical-user-interface technology. *See* Trial Tr., Jan. 18, 2018, 125:14-18 (Dr. Castleman). Mr. Hyatt argued that the examiner should have construed the claims and should have "concluded that the claimed 'windows' having menus, cursors, icons, or *other computer operator aids*, are significantly different from [prior-art reference] Marsh's windows of an aircraft displaying pictorial windows of terrain (e.g. Marsh's Fig. 2A) without any teaching of such claim limitations." DX2010.184 (emphasis added). In other words, Mr. Hyatt asserted that Marsh shows only pictorial windows of terrain—like the mountains, shrubs, and icon primitives discussed in Mr.

Hyatt's specification. Mr. Hyatt asserted that his claims—unlike the mountains, shrubs, and icon primitives that his specification and Marsh's figure 2A both include—instead are claiming "computer operator aids" like windows, menus, cursors, and a different kind of icons. And, in fact, Mr. Hite conceded in Case No. 09-1864 that his '211 specification does not describe a cursor, even though Mr. Hyatt's claims require one. Trial Tr. (Case No. 09-1864), Feb. 14, 2018, 410:20 (Mr. Hite: "There is no cursor described in the specification."); *see* DX2003.5 (claim 151 recites a cursor).

115. Similarly, Mr. Hyatt elsewhere repeatedly tried to distinguish his system from prior art systems because it is "operator interactive." DX2010.155-156. Again trying to distinguish Marsh, Mr. Hyatt stated that "Marsh is non-analogous to the instant claimed invention. Marsh shows a graphics (polygon) flight simulator system, while the instant claimed invention is directed to an operator interactive window display system." *Id.* According to Dr. Castleman, Mr. Hyatt was "saying here that all Marsh can do is display—is display images. Whereas the claimed invention is directed toward an operator interactive window display system." Trial Tr., Jan. 18, 2018, 166:14-22.

116. And Mr. Hyatt again tried to distinguish Marsh because all Marsh shows is terrain-type pictures—like the mountains and shrubs described in Mr. Hyatt's specification. According to Mr. Hyatt, "Marsh shows physical windows of an aircraft displaying terrain-type pictures, not computer-type 'windows' for computer operator interaction having computer-type features such as menus, cursors, and irregularly cropped image information." DX2010.159. As Dr. Castleman described that argument, Mr. Hyatt was "basically saying here that all Marsh can do is display pictures on a screen. But the claimed invention has computer-type windows for computer operator

interaction, and that those computer-type windows have menus, cursors and are able to display irregularly cropped image information." Trial Tr., Jan. 18, 2018, 167:3-14.

117. Indeed, Mr. Hyatt argued to the Board that "menus and cursors" were examples of "windows." DX2010.186; Trial Tr., Dec. 5, 2017, PM, 45:6-13 (Mr. Hyatt). He stated, "[t]he claims recite combinations of different types of computer windows (e.g., menus and cursors) in addition to other significant distinguishing limitations." DX2010.186. He added that "[n]either Netravali nor Marsh teach even a single computer-type 'window,' much less the claimed combinations of multiple computer 'windows' nor the specific limitation thereof recited in the claims." *Id.* As Dr. Castleman explained, Mr. Hyatt was "basically saying that Marsh and Netravali can only display pictures on their screen. Whereas, his claimed invention can display computer-type 'windows,' in quotes, which include menus and cursors. So this, again, supports the idea that the window—the claimed windows are computer interactive windows." Trial Tr., Jan. 18, 2018, 169:4-23.

118. In sum, Mr. Hyatt was asserting to the Board that his claims covered user-interactive windows. He was further asserting that those windows include menus, cursors, and icons as "computer operator aids" to assist in that interaction with the windows. DX2010.184; *see* Trial Tr., Jan 18, 2018, 167:15-168:5 (Dr. Castleman). "These are the elements of a graphical user interface." Trial Tr., Jan. 18, 2018, 169:24-170:3.

119. Mr. Hyatt's argument was primarily to distinguish the Marsh reference, which showed images of terrain—like Mr. Hyatt's specification—but did not have images of menus and icons and other computer operator aids. Mr. Hyatt was now asserting that pictorial images of terrain are *not* what his claims covered (Trial Tr., Jan. 18, 2018, 168:11-17 (Dr. Castleman)), even though the specification describes pictorial images of terrain (Trial Tr., Dec. 5, 2017, PM, 59:21-

60:1 (Mr. Hite discussing helicopter simulator portraying background terrain with trees and buildings)).[21]

120. Mr. Hite similarly explained that he would define a "user interactive window" "in terms of a GUI [graphical user interface], with a mouse, and a cursor, and like we had discussed." Trial Tr., Jan 18, 2018, 70:12-15.

121. Mr. Hyatt and his counsel agree that his specification does not describe windows in a graphical user interface. Trial Tr., Dec. 5, 2017, AM, 12:9-12 (Mr. Hyatt: "This is completely different than a graphical user interface type system."), 17:14-18; Trial Tr., Dec. 5, 2017, PM, 46:24-47:3; Trial Tr., Dec. 4, 2017, AM, 13:22-14:1 (counsel arguing same).

122. Trying to be consistent with the position that the specification does not cover a graphical user interface, Mr. Hite asserted that a person using windows in a graphical user interface would not be practicing the claims of the '211 application. Trial Tr., Jan 18, 2018, 70:16-21; *see also* Hyatt FF, ¶ 171 (asserting that "the broadest reasonable interpretation of the term 'window' as used in the claims does not include a graphical user interface"). Mr. Hyatt agreed that "the

[21] Mr. Hyatt asserts that Dr. Castleman's testimony was "not credible" because it relied on Mr. Hyatt's stating that "his system was 'operator interactive' in a Reply Brief to the Board." Hyatt FF, ¶ 201. Not only did Dr. Castleman rely on much more in Mr. Hyatt's brief to the Board than just a statement that the windows in the system were "operator interactive," but he also relied on the actual language of the claims and the description provided in the specification. Trial Tr., Jan. 19, 2018, 218:15-21; *id.* at 232:8-18.

Mr. Hyatt also asserts that Dr. Castleman's expert report addresses "computer operator aids" only in the context of the term "icon" and not in the context of the term "window." Hyatt FF, ¶ 209. That is incorrect. Dr. Castleman's expert report contained a paragraph in which he led with, "Mr. Hyatt argued to the PTO Board in his Reply Brief that his patent claims were directed to *user-interactive computer display windows*." DX2018.34 (emphasis added); Trial Tr., Jan. 19, 2018, 282:23-283:22. Dr. Castleman then listed Mr. Hyatt's arguments in bullet points in the same paragraph, including the statement that "*the claimed 'windows' hav*[*e*] *menus, cursors, icons, or other computer operator aids*." *Id.* Dr. Castleman emphasized that language about computer operator aids, in reference to Mr. Hyatt's arguments about windows.

claims are directed to the image processing technology, not to the graphic user interface technology." Trial Tr., Dec. 4, 2017, AM, 27:4-9; *but see* Trial Tr., Dec. 4, 2017, AM, 26:25-27:3 (Q. "Are you seeking to claim in the claims of the '211 application a graphical user interface?" Mr. Hyatt A. "No, I'm not, *if the claims don't cover that technology*.").

123. But Mr. Hyatt continues to stand behind the statements he made in the reply brief about what his claims cover. Trial Tr., Dec. 5, 2017, AM, 42:1-10. And he testified in his deposition that "claim 172 is not limited to user-interactive" (Trial Tr., Dec. 5, 2017, PM, 47:11-14), meaning he thinks it is broad enough to cover user-interactive windows.

124. Thus, Dr. Castleman explained that the claims are operating under a definition of "window" that is a "computer operator aid, as used in a graphical user interface, which is visible to the user, is capable of overlapping, and is user interactive."[22] Trial Tr., Jan. 18, 2018, 172:1-10; Trial Tr., Jan. 19, 2018, 182:1-4; *see* DX2050.42. And Dr. Castleman agreed with the Board that the window, as used in the claims, is not described in the specification. Trial Tr., Jan. 19, 2018, 182:5-183:1.

4. Mr. Hyatt has taken numerous inconsistent positions on the meaning of the word "window"

125. Throughout this proceeding, both in court and at the USPTO, Mr. Hyatt and his expert have taken numerous inconsistent positions on the definition of the word "window."

[22] In his expert report, Dr. Castleman used the similar definition of "a separate user interactive viewing area on a display screen." Trial Tr., Jan. 19, 2018, 198:7-9. Dr. Castleman explained that the two definitions were "basically alternate ways of saying essentially the same thing." Trial Tr., Jan. 19, 2018, 281:16-282:1. He explained that he "just used different words." *Id.* As he elaborated, "user interactive" implies a computer operator aid and implies a graphical user interface, in the context of this case. *Id.* at 282:14-19.

126. Mr. Hyatt argued to the USPTO that "window" had to be user interactive. *Supra* ¶¶ 114-119; DX2008.7 (Mr. Hyatt stating in his opening brief to the Board that the "instant claims are directed to an operator interactive window display invention").

127. Meanwhile, Mr. Hite, having been hired as the expert for Mr. Hyatt, when asked, "Are either of the descriptions of Mr. Hyatt's windows described as being user interactive," stated, "I would have to say no." Trial Tr., Jan. 18, 2018, 67:22-24. "[T]he specification describes an operator interactive system, but the windows are not interactive on their own." Id. at 68:23-25.

128. Within Mr. Hyatt's proposed findings of fact, Mr. Hyatt actually takes two different inconsistent positions about the window that is displayed. In one place, Mr. Hyatt adopts the definition that the displayed window is the "windowed viewport," in which "the viewport is divided into a plurality of different areas, called windows, for different images." Hyatt FF, ¶ 173 (referencing PTX4.7633 (or DX2002.154)). Mr. Hite did the same at trial, explaining that the sentence about "windowing of the viewport" "provides written description that you can have multiple windows of image information on the viewport, which is the display." Trial Tr., Dec. 5, 2017, PM, 75:9-21; *see* Trial Tr., Jan. 18, 2018, 64:13-17 ("[O]ne description is content specific to the memory and the other one is to the display."); *id.* at 99:21-101:15 (Mr. Hite explaining that "windowing of the viewport" means that the screen "can be divided up into different areas which can overlay or overlap or be independent, and each of those areas would contain an image," and that the definition "a portion of the display containing an image" is consistent with the description of "windowing of the viewport").

129. Elsewhere, Mr. Hyatt tries to disclaim that definition and assert that only one definition of "window" applies to the claims—the one in which a "window" only exists in memory. Mr. Hyatt asserts that the disclosure "expressly disclaims the interpretation of 'window[s]'" that

is "a plurality of areas on the display screen or viewport, each of which is used to display a different image." Hyatt FF, ¶ 191. Mr. Hyatt cannot take inconsistent positions on the definition of window depending on the particular immediate need.

L. Mr. Hyatt's claims use the word "menu" to cover menus shown on the output monitor, which was not disclosed or described in the specification

130. Each of the claims that recites a menu recites it being displayed on the output, or display, monitor. *See, e.g.*, DX2003.9 (claim 172 reciting "displaying . . . a first window of three dimensional perspective images further overlaid by a menu image"). Further, Mr. Hite asserts that those menus are "user interactive menus" displayed on the output monitor. Trial Tr., Jan 18, 2018, 87:15-23, 89:6-11.

131. Indeed, in his appeal to the Board, Mr. Hyatt argued for the patentability of claims reciting a "pull-down menu image" displayed on the output monitor. DX2003.7-8 (claim 170 reciting "generating first pull-down menu information," "generating second pull-down menu information," and "displaying . . . a first pull-down menu image and . . . a second pull-down menu image."); Trial Tr., Dec. 5, 2017, PM, 32:1-3 (Mr. Hyatt agreeing that some of the claims he appealed to the Board related to pull-down menus). And Mr. Hite discussed a definition of a "pull-down menu" in his supplemental expert report because, up until just before trial, Mr. Hyatt maintained that claim 170's pull-down menu image was patentable under his written description of a menu. Trial Tr., Jan. 18, 2018, 86:7-25.

132. Dr. Castleman discussed what a pull-down menu is: "The user would see what's called a menu bar, which is a line that would have the names of different menus that are available." Trial Tr., Jan. 19, 2018, 186:3-22. The user "would move the pointer to one of those menu names, and then press the button or otherwise activate that particular selection. At that point the computer would then cause the corresponding menu to be displayed, typically below the name on the menu

bar. That's why it's called a pull-down menu." *Id.* After causing the menu to be displayed, the user "would then be able to see the selection options that are available in that menu, and would then move the pointer to the desired selection and activate it by pressing a button, at which point the computer would then execute that particular option." *Id.*

133. The user's interactions with the displayed image send information "back to the computer, which then executes the selected software." Trial Tr., Jan. 19, 2018, 187:10-15 (Dr. Castleman). "One of skill in the art at the time would know that a pull-down menu is terminology directly from the land of graphical user interfaces because it describes the action of a graphical user interface. When you click on the menu name on the menu bar, the menu appears to drop down from the menu bar, and so that terminology comes directly from graphical user interface technology. One of skill in the art would understand that." Trial Tr., Jan. 19, 2018, 186:23-187:9.

134. A pull-down menu thus requires precisely the sort of "point and click and drag and drop features" that Mr. Hyatt argues are characteristic of an "established GUI." Hyatt FF, ¶¶ 212, 216, 204.

135. Mr. Hyatt's use of "menu" must be broad enough to support the claim he argued to the Board that recites a "pull-down menu." Thus, even though he has dropped any claim that recites a "pull-down menu" before this trial, Mr. Hyatt's use of that term in the prosecution history must be taken into account in defining the word "menu." Trial Tr., Jan. 19, 2019, 187:24-188:9 (Dr. Castleman).

136. Similarly, the term "menu window" appears in Mr. Hyatt's claims. *See* DX2003.59 (claim 472). Mr. Hyatt maintains that a "menu window" is described in the specification, even though the term "menu window" never even once appears in the 650-plus page specification. *See* Trial Tr., Jan. 18, 2018, 92:7-19 (Mr. Hite); Trial Tr., Jan. 19, 2018, 180:17-21 (Dr. Castleman).

137. In fact, Mr. Hyatt did not disclose a menu displayed on the output monitor at all. The only menus he disclosed were displayed on the input terminal monitor. *See supra* ¶¶ 58-67.

138. Mr. Hyatt argues that his disclosure covers menus being shown on the output monitor because any image can be saved in the database and called up to be shown on the output monitor. But that ignores both that (1) the specification never discusses showing a menu on the output monitor, and (2) it would not make any sense to display a menu on Mr. Hyatt's output monitor because Mr. Hyatt's system uses menus to choose what to display on the output monitor. *Supra* ¶¶ 65-66. Once the menu was shown, it would be too late for the user to interact with or choose an option from that menu.

139. For example, following the code in Mr. Hyatt's specification, a menu would first appear on the input terminal monitor. That menu would say at the top, "SELECT IMAGE TO BE LOADED INTO IMAGE MEMORY." PTX4.8101 (or DX2002.622) (line 122). Then, among the options of images, in addition to "concentric square frames," "rectangles and lines," "spirals," "square pattern," and others, there would have to appear—hypothetically—an additional option that said "image of a menu" or the like. So perhaps "image of a menu" would appear after line 142, and the user could press 13 to select "image of a menu." If the user pressed the number 13, a predetermined picture of a menu would appear on the output monitor. By that time, the user would be finished using the actual menu from the input terminal monitor, and finished picking options, because an image would already be on the output monitor. *See* Trial Tr., Jan. 18, 2018, 159:18-161:21 (Dr. Castleman explaining that image processor accesses an image to put on the output monitor only after the user has picked it from a menu on the input terminal monitor); *id.* at 80:10-13, 81:17-24, 82:20-83:6 (Mr. Hite agreeing that image must be selected, then loaded into memory, then displayed); Hyatt FF, ¶ 306 ("'the architect can select a shrub as an overlay object'

(which will *then* be stored in overlay image memory)" (emphasis added)). Of course, Mr. Hyatt's specification did not include "image of a menu" among its menu options.

140. And, in light of Mr. Hyatt's 2001 arguments to the USPTO, a menu image is part of "an interactive display system." Trial Tr., Jan. 19, 2018, 184:24-185:12. As Dr. Castleman explained, "one of skill in the art would interpret [Mr. Hyatt's claimed 'menu image'] to mean that the operator would see a menu or cause a menu to be displayed on the display screen itself, and would then make a choice of one of the items on the menu, typically by moving a pointer to a particular item and pressing a button or touching the screen at the location where that menu item is located. The software would then detect that and would cause to be executed the software that corresponds to that particular menu selection." *Id.* Thus, using a "menu image" as claimed would require having a graphical user interface. *Id.*

141. Similarly, even though Mr. Hyatt has conceded that his specification does not contain graphical-user-interface type menu features (Hyatt FF, ¶ 241), Mr. Hite argued that point and click and drag and drop menus were somehow disclosed in the specification to show "a menu" that the user "could select a shrub from" (Trial Tr., Dec. 6, 2017, AM, 54:18-55:12). Specifically, to support his interpretation of the claimed menus, Mr. Hite stated that, within Mr. Hyatt's specification, on the "display screen," "you could construct [a menu] out of a couple of overlaying images where the one would be kind of visualized as a paned window that might contain nine sections. . . . And the architect could, for example, use a joystick to move through the list or display of objects. And they would pretty much be framed in the window." Trial Tr., Dec. 6, 2017, AM, 54:18-55:12; Hyatt FF, ¶ 238. Using a joystick (or mouse or other device) to move through a display of various objects to pick one is what is in a graphical-user-interface type menu.

142. Thus, the USPTO has proposed that the word "menu" should be construed as "an on-screen display of command options presented to the user for selection directly on the menu itself, e.g., by using a mouse-controlled pointer." ECF No. 57 at 4.

143. Given all of the evidence from the specification, claims, prosecution history, and testimony at trial, Dr. Castleman opined that the word "menu" is not described in the specification as it is used in the claims, so the claims that recite the word "menu" are not patentable based on the written description requirement. Trial Tr., Jan. 19, 2018, 188:14-189:5.

M. Mr. Hyatt's claims use the word "icon" to cover icons that are user-interactive, which was not disclosed or described in the specification

144. Some of Mr. Hyatt's claims recite the word "icon." For example, claim 415 reads as follows:

> A process comprising the acts of:
>
> generating background image information;
>
> *generating icon image information*;
>
> overlaying the icon image information onto the background image information;
>
> generating a window of graphics image information;
>
> overlaying the window of graphics image information onto the background image information *overlapping with the icon image information*; and
>
> *displaying* a background image overlaid by *an icon image* and overlaid by an overlapping window of graphics images in response to the background image information overlaid with the icon image information and in response to the background image information overlaid with the overlapping window of graphics image information.

DX2003.45-46 (emphasis added).

145. Mr. Hyatt stated at trial that an icon "is a small symbol generally used to identify a feature of . . . an image." Trial Tr., Dec. 5, 2017, AM, 20:20-24. And, according to Mr. Hyatt,

although some "terrain primitives" in the specification are not computer operator aids (Trial Tr., Dec. 5, 2017, AM, 23:7-12), an icon is a computer operator aid because its "purpose is to identify a portion of an image for the operator." *Id.* at 20:25-21:3. Mr. Hite, however, stated that a person using a user-interactive icon would not be practicing the claims reciting "icon." Trial Tr., Jan 18, 2018, 73:1-3.

146. As Dr. Castleman explained, with regard to the use of the word "icon" in the claims, particularly in light of what Mr. Hyatt said to the USPTO in 2001 about his claimed icons, "[o]ne of skill in the art would interpret this to mean the type of icon you find in a graphical user interface, the type of icon that can be used to open a window or perform other software operations directly from the display screen." Trial Tr., Jan. 19, 2018, 192:1-10.

147. The Board defined an "icon" as requiring "displaying a small graphics image on a screen to represent an object that can be manipulated by the user." DX2011.52 (citing Microsoft Press Computer Dictionary 205 (2d ed. 1994)). Dr. Castleman agreed with the Board's definition "to a degree." Trial Tr., Jan. 19, 2018, 193:5-15. The Board's definition says that an icon represents an object that "can be manipulated by a user. I think one would understand that manipulation means more than just moving it around on the screen. It would include being able to use that icon to activate execution of software." *Id.*

148. Dr. Castleman concluded that the specification does not describe the kind of user-interactive icon that is claimed in Mr. Hyatt's claims. Trial Tr., Jan. 19, 2018, 193:12-18. Thus, he concluded that the word "icon" as used in the claims is not supported by the written description. *Id.*

N. The Board determined that all of the 1999 claims lack written description support

149. In 2005, the Board issued its initial and rehearing decisions on the 1999 claims, affirming the examiner's rejection of each claim for lack of written description. To back up a bit, after Mr. Hyatt received the notice of allowance in 1988 and abandoned his 1984 '094 application (discussed *supra* ¶¶ 41-43), he opted to pursue an entirely different set of claims in the '211 application. PTX4.6868-6890. In 1997, Mr. Hyatt again overhauled his claims, canceling all but four of the claims that were then pending, to have a total of 213 almost entirely new claims. PTX4.6392. And in 1999, Mr. Hyatt thoroughly amended his pending claims and added another nearly 200 entirely new claims. PTX4.5869; PTX4.5905. Thus, by the time Mr. Hyatt appealed the rejection of his nearly 300 claims to the Board, they bore no resemblance to the claims filed in 1984 or even those filed in 1997, based on the same specification.

150. The examiner rejected the claims for lack of written description. *See, e.g.*, PTX4.6790 (nonfinal office action of Sept. 22, 1995); PTX4.6626 (final office action of July 31, 1996); PTX4.6055 (nonfinal office action of Aug. 23, 1998); PTX4.5746-5756 (final office action of Aug. 27, 1999). The examiner explained that Mr. Hyatt had failed to "specifically mention a single claim or specific rejection" in responding to office actions. PTX4.5772. Instead, Mr. Hyatt stated that he disagreed with the rejection; stated that the claim language need not come verbatim from the specification; stated that the applicant is presumptively correct; and stated without examples or evidence that the specification supplies written description for the claims. PTX4.5772-5779 (examiner's summary of Mr. Hyatt's arguments); PTX4.6013-6041 (Mr. Hyatt's arguments). The examiner later explained in response to Mr. Hyatt's appeal brief that Mr. Hyatt's "discussion of claim 172 in the 'Summary of the Invention' of the Brief is the first time in the prosecution history of this application that he has presented any specific remarks directed to where

he believes he has support for any specific claim, even though the claims have repeatedly been rejected under 35 U.S.C. 112, first paragraph." PTX4.4785 (examiner's answer).

151. The Board affirmed the examiner's rejections based on the lack of written description support for "window" and "menu." The Board also affirmed some of the examiner's rejections of "making a product" claims. DX2011. The Board denied Mr. Hyatt's rehearing petition. DX2012.

152. The Board explained that, had Mr. Hyatt "shown support in his original disclosure for each of the new claims *when he filed his amendments*, he might have preempted a written description rejection thereof. [Mr. Hyatt] chose not to do so." DX2011.8 (emphasis in original). The Board further explained that Mr. Hyatt had not chosen to provide written description support for his claims until his appeal brief to the Board, rather than when the application was in front of the examiner. *Id*.

153. In light of Mr. Hyatt's arguments in his appeal briefs, the Board explained that the "invention at issue concerns 'an operator interactive window display.'" DX2011.2 (quoting DX2010.155). The Board added that the claims "require simultaneously displaying plural windows on the same screen." DX2011.43. In particular, referring to claim 172, "the limitations require overlaying a window showing at least one three dimensional ('3D') image onto a background image; overlaying a menu onto the window showing the 3D image; and overlaying a window showing graphics onto the background image such that it overlaps with the window showing the 3D image." DX2011.13-14. The Board explained that, as alleged support for the terms "window" and "menu," Mr. Hyatt had pointed to portions of the specification that did not mention windows, and they did not mention menus in the context of windows. DX2011.15, 17, 18. The Board thus found that Mr. Hyatt had not conveyed that he "had possession" of the claimed

invention as of the filing date of his application. DX2011.15-16. The Board affirmed the examiner's written description rejection. DX2011.18-19; DX2012.2-6 (rehearing decision).

154. With respect to the term "icon," the Board construed the term as "a small graphics image displayed on the screen to represent an object that can be manipulated by the user." DX2011.52 (quoting Microsoft Press Computer Dictionary 205 (2d ed. 1994)). The Board did not separately address written description for the word "icon."

155. The Board also addressed the "making a product" claims. DX2011.19-24, 36-39. The Board affirmed the written description and enablement rejections of some of those claims and reversed the rejections of others. Among other things, the examiner had not specifically addressed some of them, leading the Board to reverse those rejections. *Id.* For the affirmed rejections, the Board explained that, "without knowing the identity of the claimed products, we are not persuaded that the specification would have enabled one skilled in the art to make and use the claimed products without undue experimentation." DX2011.39; *see* DX2011.23-24; DX2012.7-9 (rehearing decision).

O. Mr. Hyatt introduced no testimony at trial that any dependent claim was supported by the written description

156. At trial, Mr. Hyatt introduced no testimony that any dependent claim was supported by the written description. The USPTO moved for judgment as a matter of law on the basis that Mr. Hyatt had failed to introduce any testimony on those claims. Trial Tr., Jan. 18, 2018, 101:22-105:5. Further, counsel for the USPTO explained, this Court has already determined on summary judgment in Case No. 09-1864 that claims taking the very same form—dependent claims that recite a further step of "making a product," "making a signal product," or the like—based on the very same specification fail for lack of written description. *See* Case No. 09-1864, ECF No. 71 (Aug. 23, 2016). In response, Mr. Hyatt's counsel simply requested that the parties be allowed to brief

the issue. Trial Tr., Jan. 18, 2018, 105:7-16. But Mr. Hyatt still did not introduce any testimony or argument to sustain his burden that the "making a product" claims are supported by the written description.

PROPOSED CONCLUSIONS OF LAW

A. Burden of proof

157. In a § 145 action, "it is the plaintiff and not the USPTO that bears the burden of proof." *Disney Enters., Inc. v. Rea*, 940 F. Supp. 2d 288, 292 (E.D. Va. 2013). Indeed, the Federal Circuit has explained that in a § 145 action, "the applicant has the laboring oar to establish error by the board." *Fregeau v. Mossinghoff*, 776 F.2d 1034, 1038 (Fed. Cir. 1985).

B. Standard of review

158. This action is a hybrid action—partly an appeal and partly a new evidentiary proceeding. Unlike an appeal, new evidence can be added in a section 145 action. But like an appeal, the Board's decision forms the evidentiary nucleus of the case. *See Hyatt v. Kappos*, 625 F.3d 1320, 1322 (Fed. Cir. 2010) (*en banc*), *aff'd*, 566 U.S. 431 (2012).

159. Findings made by the Board untouched by any new evidence are reviewed by this Court with APA deference—a substantial-evidence review. *Hyatt*, 625 F.3d at 1336 ("When the court reviews a case on the administrative record—that is, when no party introduces new evidence—the court applies the APA standard of review to Patent Office fact findings.").

160. A plaintiff in a § 145 action is free to introduce new evidence subject only to the Federal Rules of Evidence and the Federal Rules of Civil Procedure. *Kappos*, 566 U.S. at 444. This "court must make a *de novo* finding when new evidence is presented on a disputed question of fact." *Id.* at 434. And, this Court "must assess the credibility of new witnesses and other evidence, determine how the new evidence comports with the existing administrative record, and decide what weight the new evidence deserves." *Id.* at 444. In deciding the weight to afford to

the new evidence, this Court may "consider the proceedings before and findings of the Patent Office." *Id.* at 445 (quoting *Hyatt*, 625 F.3d at 1335).

C. Applicable law

161. In examining a patent application, the USPTO determines, among other things, whether the application satisfies the requirement of 35 U.S.C. § 112 that "[t]he specification . . . contain a written description of the invention." The USPTO is "not only permitted but *obligated* to reject" a claim "when appellants failed precisely to define in the written description the disputed language, and there was a reasonable alternative definition." *In re Morris*, 127 F.3d 1048, 1057 (Fed. Cir. 1997).

162. "The essence of the written description requirement is that a patent applicant, as part of the bargain with the public, must describe his or her invention so that the public will know what it is and that he or she has truly made the claimed invention." *AbbVie Deutschland GmbH & Co., KG v. Janssen Biotech, Inc.*, 759 F.3d 1285, 1298 (Fed. Cir. 2014). The purpose of the written description requirement "is to 'ensure that the scope of the right to exclude, as set forth in the claims, does not overreach the scope of the inventor's contribution to the field of art as described in the patent specification.' It is part of the *quid pro quo* of the patent grant and ensures that the public receives a meaningful disclosure in exchange for being excluded from practicing an invention for a period of time." *Ariad Pharms., Inc. v. Eli Lilly and Co.*, 598 F.3d 1336, 1353-1354 (Fed. Cir. 2010) (en banc) (citations omitted). Determining whether the written description requirement has been met "requires an objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art. Based on that inquiry, the specification must describe an invention understandable to that skilled artisan and show that the inventor actually invented the invention claimed." *Id.* at 1351. Whether the written description requirement has been met is a question of fact. *Id.*

163. The Federal Circuit has explained, "The purpose of the 'written description' requirement is broader than to merely explain how to 'make and use'; the applicant must also convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention." *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64 (Fed. Cir. 1991). As the Federal Circuit explained, a "patent is not a hunting license. It is not a reward for the search, but compensation for its successful conclusion." *Ariad*, 598 F.3d at 1353. The applicant must—as of the filing date—"conceive of the complete and final invention with all its claimed limitations [] and disclose the fruits of that effort to the public." *Id.*

164. The Federal Circuit has stated the written description requirement another way: "one skilled in the art, reading the original disclosure, must immediately discern the limitation at issue in the claims." *Purdue Pharma LP v. Faulding Inc.*, 230 F. 3d 1320, 1323 (Fed. Cir. 2000).

165. Part of the requirement of public disclosure is that the applicant must ensure that the boundaries of the invention are clear. "This clarity is essential to promote progress, because it enables efficient investment in innovation. A patent holder should know what he owns, and the public should know what he does not. For this reason, the patent laws require inventors to describe their work in 'full, clear, concise, and exact terms,' 35 U.S.C. § 112, as part of the delicate balance the law attempts to maintain between inventors, who rely on the promise of the law to bring the invention forth, and the public, which should be encouraged to pursue innovations, creations, and new ideas beyond the inventor's exclusive rights." *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 730-31 (2002). Thus, contrary to Mr. Hyatt's argument (ECF No. 62 at 10), "[i]t is the applicants' burden to precisely define the invention, not the PTO's." *Morris*, 127 F.3d at 1056. The definiteness requirement of the Patent Act "puts the burden of precise claim drafting squarely on the applicant." *Id.*

166. Indeed, while the USPTO typically bears the initial burden of establishing a prima facie case of unpatentability, once the agency notifies the applicant of the perceived shortcomings in his application, "the burden shifts to the applicant to rebut the prima facie case with evidence and/or argument." *Hyatt v. Dudas*, 492 F.3d 1365, 1369-70 (Fed. Cir. 2007). For a written description rejection, "[w]hen no such description can be found in the specification, the only thing the PTO can reasonably be expected to do is to point out its nonexistence." *Id.* at 1370. Indeed, Mr. Hyatt does not contest that the USPTO presented a prima facie case of unpatentability against the '211 application. ECF No. 62 at 5 n.10. Thus, in order to contest the USPTO's unpatentability finding, Mr. Hyatt must demonstrate how the specification provides written description support for the claims.

167. Section 112, ¶ 1's twin requirements, of (1) describing the manner and process of making and using the full scope of the invention, and (2) describing the invention sufficiently to convey the patentee had possession of the claimed invention, are viewed in this same light and "usually rise and fall together." *Lizard Tech, Inc. v. Earth Res. Mapping, Inc.*, 424 F.3d 1336, 1344-45 (Fed. Cir. 2005).

168. USPTO guidelines, adopted by the Federal Circuit, require "disclosure of sufficiently detailed, relevant identifying characteristics . . . i.e., complete or partial structure, other physical and/or chemical properties, functional characteristics when coupled with a known or disclosed correlation between function and structure, or some combination of such characteristics." *Enzo Biochem, Inc. v. Gen-Probe Inc.*, 323 F.3d 956, 964 (Fed. Cir. 2002). To provide written description for a genus, "[o]ne needs to show that one has truly invented the genus, i.e., that one has conceived and described sufficient representative species encompassing the breadth of the

genus. Otherwise, one has only a research plan, leaving it to others to explore the unknown contours of the claimed genus." *AbbVie*, 759 F.3d at 1300.

169. Even if the specification describes each of the claim elements in isolation, that is not sufficient to satisfy the written description requirement. Instead, the specification must demonstrate that the inventor was in possession of the claimed system, *i.e.* all of the recited elements, each connected in the manner recited in the claim. *Novozymes A/S v. DuPont Nutrition Biosciences APS*, 723 F.3d 1336, 1349 (Fed. Cir. 2013) (explaining that each claim must be taken "as an integrated whole rather than as a collection of independent limitations"); *Hyatt v. Dudas*, 492 F.3d 1365, 1371 (Fed. Cir. 2007) (upholding examiner's rejection when the examiner stated that "while each element may be *individually* described in the specification, the deficiency was the lack of adequate description of their *combination*"); *Trans Video Elecs., Ltd. v. Sony Elecs., Inc.*, 822 F. Supp. 2d 1020, 1027 (N.D. Cal. 2011) (stating that "a court does not simply look to see whether the specification contains descriptions of the individual elements of the claim," but instead "look[s] to see whether there is a written description for the entirety of the claimed invention—*i.e.*, the *combination* of elements").

170. In fact, the Federal Circuit has found that patent claims lacked written description support even where the specification "provide[d] formal textual support for each individual limitation recited in the claims," because the specification did not describe the claimed inventions as a whole. *Novozymes*, 723 F.3d at 1349. Accordingly, "one cannot disclose a forest in the original application, and then later pick a tree out of the forest and say here is my invention. In order to satisfy the written description requirement, the blaze marks directing the skilled artisan to that tree must be in the originally filed disclosure." *Purdue Pharma L.P. v. Faulding Inc.*, 230 F.3d 1320, 1326-27 (Fed. Cir. 2000).

171. Furthermore, while the doctrines of written description and enablement are distinct, determining if there is sufficient written description support for a broadly claimed invention can be "analogous to enablement of a genus under § 112, ¶1, by showing the enablement of a representative number of species within the genus." *Regents of the Univ. of California v. Eli Lilly & Co.*, 119 F.3d 1559, 1569 (Fed. Cir. 1997); *see also Kennecott Corp. v. Kyocera Int'l, Inc.*, 835 F.2d 1419, 1421 (Fed. Cir. 1987) ("These requirements may be viewed separately, but they are intertwined.")

D. Mr. Hyatt failed to meet his burden to show that the term "window" satisfies § 112

172. In his use of the term "window," Mr. Hyatt has tried to claim more than he invented. As discussed above, Mr. Hyatt's specification describes a window in two different ways, as a portion of image memory and as a segment of a divided screen. The "portion of image memory" definition works for the first part of each claim—where the claim recites "generating" a window, which happens in memory. That definition does not work for the latter part of each claim, which recites displaying a window. Only Dr. Castleman's definition of "window" is broad enough to encompass every part of each claim. Because Mr. Hyatt concedes that Dr. Castleman's definition is not described in the specification, this Court should affirm the Board's determination that the claims are invalid for lack of written description. And even if the two definitions of "window" proposed by Mr. Hite could apply to each claim, the Court should find the claims invalid as indefinite for requiring two different definitions of the same term within the same claim.

1. Mr. Hyatt failed to show that "window" as claimed is described in the specification

173. As discussed above (¶¶ 104-124), the only way for the word "window" as used in the claims to have a single consistent definition is if it covers a graphical user interface. The first place a court should look when construing a claim term is "the words of the claims themselves."

Phillips v. AWH Corp., 415 F.3d 1303, 1314 (Fed. Cir. 2005) (en banc). As the Federal Circuit has explained, a claim term must be construed "consistently throughout the claims." *CVI/Beta Ventures, Inc. v. Tura Lp*, 112 F.3d 1146, 1159 (Fed. Cir. 1997); *Digital Biometrics, Inc. v. Identix, Inc.*, 149 F.3d 1335, 1345 (Fed. Cir. 1998) ("whatever interpretation we assign [to a single word] should encompass both uses because the same word appearing in the same claim should be interpreted consistently"). Of the definitions proposed at trial, only one definition for the word "window" can apply consistently throughout the claims. That is the definition proposed by Dr. Castleman: a "computer operator aid, as used in a graphical user interface, which is visible to the user, is capable of overlapping, and is user interactive." *Supra* ¶ 124. Graphical user interfaces are capable of generating a window and displaying a window; graphical user interfaces can display overlapping windows with interactive menus, pull-down menus, icons, cursors, and other computer operator aids.

174. If Mr. Hyatt's proposed definition were to be used instead, it could only be used for the "generating" portions of the claims and not the "displaying" portions. *Supra* ¶¶ 92-100. Dr. Castleman explained that Mr. Hyatt's proposed definition is inconsistent with the "displaying" portions of the claims. *Supra* ¶ 103. And Mr. Hite agreed that the claims require multiple different definitions of the word "window" to apply if the claims are going to be supported by the specification. *Supra* ¶¶ 48, 90, 93-96; Trial Tr., Jan 18, 2018, 64:13-17 ("[O]ne description is content specific to the memory and the other one is to the display.").

175. Indeed, the window that is generated must be different from the window that is displayed for the additional reason that claim drafting conventions require that they be different windows. Mr. Hyatt's claims recite "a first window" twice—once when generating "a first window" and once when displaying "a first window." The convention is that, to avoid

indefiniteness, a claim should refer to the first instance of an object as "a first window," and any subsequent instance of that same object as "*the* first window" or "*said* first window." When both are referred to as "*a* first window," the implication is that there are two different first windows. *See Radware, Ltd. v. A10 Networks, Inc.*, 2014 WL 2738538. *8 (N.D. Cal. June 11, 2014) (explaining that claim that recited "a remote computer" twice in the same claim was not indefinite because it was referring to two different remote computers); *see generally* Manual of Patent Examining Procedure (MPEP) § 2173.05(e) (discussing indefiniteness based on problems with antecedent basis). Thus, Mr. Hyatt is incorrect—from a claim drafting standpoint—that the "windows viewable on the screen" could possibly be "the same windows mapped out for display" (Hyatt FF, ¶ 173).

176. And, as discussed above (¶¶ 92-103), the windows that are "displayed" have no written description support under Mr. Hyatt's new proposed definition because (1) the window contained in memory is not displayed, and (2) the "windowed viewport" does not make sense with those displayed windows because the claimed displayed windows do things like overlap each other.

177. Furthermore, as discussed above (¶¶ 114-119), Mr. Hyatt argued to the USPTO, to avoid a prior-art rejection, that his claims cover user-interactive windows, menus, and icons. Those arguments amount to an admission that Mr. Hyatt cannot avoid by arguing (Trial Tr., Jan. 19, 2018, 235:2-24) that he had not made the admission by 1984. *See generally* 35 U.S.C. § 301(a)(2) ("Any person at any time may cite to the Office in writing . . . statements of the patent owner filed in a proceeding before . . . the Office in which the patent owner took a position on the scope of any claim of a particular patent."). Mr. Hyatt suggests that the Court should not take Mr. Hyatt's statements characterizing his claimed windows, menus, and icons at face value because,

for other arguments in the same brief, it was convenient for him to characterize those terms a different way. Hyatt FF, ¶ 221. But the fact that Mr. Hyatt has made inconsistent statements about his claims does not prevent some of those statements from being admissions that limit the claims. *See Computer Docking Station Corp. v. Dell, Inc.*, 519 F.3d 1366, 1374-75 (Fed. Cir. 2008) ("A patentee could [disavow claim scope], for example, by clearly characterizing the invention in a way to try to overcome rejections based on prior art."); *Arendi S.A.R.L. v. Google LLC*, No. 2016-1249, 2018 WL 943636, *3 (Fed. Cir. Feb. 20, 2018) (reversing Board for failing to find a disclaimer of claim scope during prosecution, under the broadest-reasonable-interpretation standard). And unlike the doctrine of judicial estoppel, surrender of claim scope applies even where the USPTO does not rely on the disclaimer. *Springs Window Fashions LP v. Novo Industries, L.P.*, 323 F.3d 989, 993-96 (Fed. Cir. 2003).

178. Graphical-user-interface type windows, unlike the invention that is described in Mr. Hyatt's specification, are used in all sorts of products that are used today, including personal computers, cars with navigation systems, and smart televisions. Trial Tr., Jan. 19, 2018, 183:17-184:10. As Dr. Castleman explained (¶ 124), that type of "window" is not described in Mr. Hyatt's specification. Mr. Hyatt agreed. Trial Tr., Dec. 5, 2017, AM, 12:9-12 (Mr. Hyatt: "This is completely different than a graphical user interface type system."), 17:14-18; Trial Tr., Dec. 5, 2017, PM, 46:24-47:3.

179. Thus, the specification simply does not support the full breadth of the claims, which are broad enough to encompass user-interactive graphical-user-interface type "windows." *See, e.g., Rivera v. Int'l Trade Comm'n*, 857 F.3d 1315, 1319-23 (Fed. Cir. 2017); *Cisco Systems, Inc. v. Cirrex Systems, LLC*, 856 F.3d 997, 1009-10 (Fed. Cir. 2017) (explaining that specification did not support breadth of the claims, which recited "a technically difficult solution that the [patent]

specification does not solve"); *Halliburton Oil Well Cementing Co. v. Walker*, 329 U.S. 1, 11 (1946) ("[T]o prevent extension of a patent's scope beyond what was actually invented, courts have viewed claims to combinations and improvements or additions to them with very close scrutiny. . . . It is quite consistent with this strict interpretation of patents for machines which combine old elements to require clear description in combination claims."); *Purdue Pharma L.P. v. Faulding Inc.*, 230 F.3d 1320, 1327 (Fed. Cir. 2000); *In re Brown*, 477 F.2d 946, 952 (CCPA 1973) (explaining that invention was not enabled where there was little "description of the operative relationships of the elements").

180. Because the word "window" is recited in every claim at issue in this case, all of the claims fail for lack of written description.

2. The evidence shows that "window" as claimed is indefinite under Mr. Hyatt's proposed construction

181. The definition that Mr. Hyatt proposes for "window"—"a portion of image memory that is scanned out for image processing or display"—does not work for the displayed windows in each claim. Because that "portion of image memory" resides in the computer's memory, it is not what is displayed. *Supra* ¶¶ 48-54, 94-97. If this Court were to adopt that claim construction, the claims would require two different definitions for "window," depending on context. *Supra* ¶¶ 48, 90, 92-103. In that situation, this Court should hold the claims indefinite.

182. A patent's specification must "conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." 35 U.S.C. § 112, ¶ 2. A pending claim is indefinite if its metes and bounds are ill-defined because the claim contains words or phrases whose meaning is unclear. *See In re Packard*, 751 F.3d 1307, 1310 (Fed. Cir. 2014) (citing MPEP § 2173.05(e)); *see also* MPEP § 2173.02(I) (9th ed. Rev. 7, Nov. 2015) (advising examiners that a rejection for indefiniteness is appropriate

"after applying the broadest reasonable interpretation to the claim, if the metes and bounds of the claimed invention are not clear"); *cf. Nautilus Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2129 (2014) (A "patent must be precise enough to afford clear notice of what is claimed, thereby appris[ing] the public of what is still open to them." (internal quotation marks and citations omitted)). Thus, "during patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed." *In re Zletz*, 893 F.2d 319, 321 (Fed. Cir. 1990). In situations where the broadest reasonable interpretation of a term reveals ambiguity, "the applicant may 'amend his claims to obtain protection commensurate with his actual contribution to the art.'" *In re Yamamoto*, 740 F.2d 1569, 1571 (Fed. Cir. 1984) (quoting *In re Prater*, 415 F.2d 1393, 1404-05 (CCPA 1969)).

183. Indefiniteness is a question of law. *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 789 F.3d 1335, 1341 (Fed. Cir. 2015).

184. *Teva* is a particularly relevant case to the facts here. In *Teva*, the claims at issue were directed to a drug product with a chemical composition within a certain range of molecular weights. 789 F.3d at 1338. There were at least three ways to measure and report "molecular weight," and each would produce different results. *Id.* at 1341. The patent at issue did not state which specific method should be used, and the prosecution history contained two contradictory statements as to which measuring method should be used. *Id.* at 1338-39, 1345. Under those circumstances, the Federal Circuit determined that the claims were invalid for indefiniteness. *Id.* Thus, the Federal Circuit held that a claim that is susceptible to two different definitions, where the applicant (or patentee) has argued for both, is indefinite.

185. That is the case here. Mr. Hyatt's current proposed definition cannot cover all of the instances of "window" that occur in each claim. And Mr. Hyatt and Mr. Hite have previously

argued that the definition of window actually varies, within a single claim, depending on context. *Supra* ¶¶ 90, 93-96. The specification itself refers to several different types of windows. *Supra* ¶¶ 45-57. That is a classic case of indefiniteness. Thus, if the Court does not find the claims invalid for lack of written description, it should nevertheless hold them indefinite, based on the undefined term "window."

E. Mr. Hyatt failed to meet his burden to show that the term "menu" as claimed is described in the specification

186. Mr. Hyatt's claims recite menus that are shown and interacted with on the output monitor. *Supra* ¶¶ 130-143. His specification discusses only menus that are shown on the text-only input terminal monitor. *Supra* ¶¶ 58-67. Because menus that are shown on the output monitor are not described in the specification, the claims that recite the word "menu" are invalid for lack of written description.

187. Mr. Hyatt explained that the code he wrote to show a menu always showed the menu on the input terminal monitor. *Supra* ¶¶ 59-60. He agreed that he never implemented a picture of a menu being shown on the output monitor. *Supra* ¶ 64. Mr. Hite argues that a picture of alphanumerics—or text—shown on the output monitor is a written description of a menu shown on the output monitor. *Supra* ¶¶ 63, 67. But text is not necessarily a menu (Trial Tr., Jan. 18, 2018, 77:18-19 (Mr. Hite)), and Mr. Hyatt's claims separately recite displaying a "menu image" and displaying a "window of alphanumeric images," showing that Mr. Hyatt understands that menus and alphanumeric images are different things. *See Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1237-38 (Fed. Cir. 2016) (applying the broadest reasonable construction, Board properly construed the term "menu" to not require a hierarchical structure since that feature was expressly recited in other claim terms). And, as discussed above (¶¶ 65-66, 138-139), it would not make sense to show a menu on the output monitor because, by the time the picture of the menu was

accessed from the database, there would no longer be a need for a menu. Thus, although any image can be theoretically loaded into the database and displayed—including one with text—if an image of a menu were loaded and displayed it would not be able to function as a menu. That is true even under Mr. Hyatt's proposed definition of "an on-screen display of options presented to a user for selection." Hyatt FF, ¶ 227.

188. Indeed, Mr. Hyatt's claims require user interaction with the menu on the output monitor, not just a still image of a menu. Mr. Hite called the claimed menus "user interactive menus" (Trial Tr., Jan 18, 2018, 87:15-23, 89:6-11; *see supra* ¶¶ 130-131, 141), Mr. Hite explained that the menu on the output monitor would allow the user to "for example, use a joystick to move through the list or display of objects" (Trial Tr., Dec. 6, 2017, AM, 54:21-55:12; Hyatt FF, ¶ 238), and Mr. Hyatt's claims included things like "pull-down menus," which require a user to point to or click on something on the screen to cause the menu to pull down (*supra* ¶¶ 131-135). These are classic graphical-user-interface capabilities. Hyatt FF, ¶¶ 212, 216, 204. That is why Dr. Castleman explained that a "menu" as claimed requires user-interactive graphical-user-interface functionality. *See, e.g.*, Trial Tr., Jan. 19, 2018, 184:24-185:12.

189. Although Mr. Hyatt dropped his claims that recite a "pull-down menu" before trial, his argument to the Board that those claims were patentable as a type of "menu" available to be displayed on the output monitor shows the interpretation of the term "menu" he was relying on for his claims. *Schriber-Schroth Co. v. Cleveland Trust Co.*, 311 U.S. 211, 217-18 (1940) ("[T]he particular invention to which the patentee has made claim in conformity to the statute is not always to be ascertained from an inspection of the specifications and claims of the patent alone. Where the patentee in the course of his application in the patent office has, by amendment, canceled or surrendered claims, those which are allowed are to be read in light of those abandoned.").

190. Thus, the USPTO proposes that the term "menu" be construed to be "an on-screen display of command options presented to the user for selection directly on the menu itself, e.g., by using a mouse-controlled pointer." ECF No. 57 at 4. That type of menu is not described in Mr. Hyatt's specification. *Supra* ¶ 143.

191. Furthermore, as discussed above (¶¶ 62, 113, 136, 140), the terms "menu image" and "menu window" do not appear anywhere in the specification. Although the precise claim terms are not required to appear in the specification for them to have written description support, "the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description." 37 C.F.R. § 1.75(d)(1).

192. Because Mr. Hyatt's claimed menus are not described in the specification, all of the claims that recite that term are invalid for lack of written description.

F. Mr. Hyatt failed to meet his burden to show that the term "icon" as claimed is described in the specification

193. As discussed above (¶¶ 68-70), the word "icon" appears once in the specification, as an example of a "terrain primitive." A terrain primitive is a small reproducible image. Mr. Hyatt stated at trial that such small reproducible images as disclosed in the specification are not "operator aid[s]." Trial Tr., Dec. 5, 2017, AM, 23:7-12. And Mr. Hyatt agrees that the specification does not use icons as images that can be clicked on to execute a program or "control anything." *Id.* at 21:16-23.

194. But, when it comes to the claims, Mr. Hyatt argued to the Board that icons are "computer operator aids." *Supra* ¶¶ 114, 118. Given that argument, the Board defined an "icon" as requiring "displaying a small graphics image on a screen to represent an object that can be manipulated by the user." DX2011.52. And based on Mr. Hyatt's argument to the Board and use

of "icon" in his claims, Dr. Castleman added that "one would understand that manipulation means more than just moving it around on the screen. It would include being able to use that icon to activate execution of software." Trial Tr., Jan. 19, 2018, 193:5-15.

195. Because an icon by that definition is not described in Mr. Hyatt's specification, this Court should find that the term "icon" lacks written description support. Thus, all of the claims that recite the term "icon" are invalid for lack of written description.

G. Mr. Hyatt failed to present any evidence at all that the "making a product" claims are patentable, and this Court has held claims in that form to lack written description based on the same specification

196. Furthermore, all 140 claims that recite "making a product," "making a display product," or the like, also fail for lack of written description and lack of enablement. All of the dependent claims at issue in this case take that form. This Court should hold that Mr. Hyatt has failed to meet his burden to prove patentability of those claims for two separate reasons—he failed to put on any testimony about those claims, and even if he had, virtually identical claims have already been held unpatentable by this Court, and the reasons the Court gave apply equally in this case.

197. First, Mr. Hyatt did not put on any evidence at trial that any of the "making a product" claims are supported by the written description. Indeed, he did not mention a single one of the dependent claims at all during the trial. Mr. Hyatt bears the burden to prove the validity of each and every claim at issue. In a § 145 action, "it is the plaintiff and not the USPTO that bears the burden of proof." *Disney Enters., Inc. v. Rea*, 940 F. Supp. 2d 288, 292 (E.D. Va. 2013); *see Fregeau v. Mossinghoff*, 776 F.2d 1034, 1038 (Fed. Cir. 1985) (In a § 145 action, "the applicant has the laboring oar to establish error by the board."); *see also In re Morris*, 127 F.3d 1048, 1056 (Fed. Cir. 1997) ("It is the applicant's burden to precisely define the invention, not the PTO's."). Mr. Hyatt agrees that he bears the burden of proof for the rejected claims because the USPTO has

"made out a prima facie case." ECF No. 62 at 5 n.10. Each of the claims in the '211 application was rejected by the Board for lack of written description. DX2011; DX2012. Thus, Mr. Hyatt had the burden to prove that each of the claims was supported by the written description, and he never even mentioned the "making a product" claims or the "making a product" claim language during trial.[23]

198. Second, even if Mr. Hyatt had put on evidence to support written description for these "making a product" claims, this Court has already addressed claims taking the very same form against the backdrop of the very same specification. These claims generally take the form of "A process as set forth in claim X, further comprising the act of making a product." *See, e.g.*, DX2003.4 (claim 135). This Court has already addressed claims taking that form in Case No. 09-1864, which involves an application with the identical specification to the '211 application. Case No. 09-1864, ECF No. 71 at 9-10 & n.4; *see also* ECF No. 75 at 2 n.1 (explaining that, like Case No. 09-1864, "there are very similar claims at issue here"). In Case No. 09-1864, this Court granted summary judgment that the "making a product" claims were not supported by the specification and thus failed the written description requirement. Case No. 09-1864, ECF No. 71 at 12.

199. As the Court explained, the specification of the '211 application includes examples of "products" as varied as a video signal, a video disk storing an arcade game, rotating images,

[23] Although Mr. Hyatt may have submitted evidence on the "making a product claims" "in the administrative file history record" (Hyatt FF, ¶ 16), Mr. Hyatt should not decline to mention a whole set of claims at trial and then raise them afterward based on the administrative record, having passed on a chance to have the Court hear testimony on those claims. *See generally* Trial Tr. from Pretrial Hearing, Nov. 28, 2017, 7:25-8:5 (Mr. Hyatt's counsel: "We do want to make sure we present evidence to the limitations in the claims to make sure that, you know, we have a developed record on that. And so that we satisfy all limitations in the claims, and the Court has a basis to find for us on all that.").

and guidance systems for "Star Wars R2D2 type robots." Case No. 09-1864, ECF No. 71 at 12; *see* DX2002.568. The Court further explained that nothing in the specification "would show one of ordinary skill in the art that Mr. Hyatt possessed the full scope of these claims, nor that he provided sufficient detail to demarcate what he was claiming." Case No. 09-1864, ECF No. 71 at 12; *see id.* at 15. "This is no less true with respect to claims that have limiting terms such as 'display' or 'signal.'" *Id.* at 16; *see, e.g.*, DX2003.19 (claim 273 reciting "making a display product").

200. "It is not enough that the specification or applicant proclaim something to be invented, for disclosure to be sufficient it must 'reasonably convey[] to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.'" Case No. 09-1864, ECF No. 71 at 16 (quoting *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (*en banc*)). Here, as this Court explained, "it is not actually clear what the outer boundaries of the claimed invention are, but there is no need to specify the precise delimitation of the claims as the Court finds the territory defined by examples so disparate [that it] necessarily creates an area broader than that taught by the specification. That is to say, while Mr. Hyatt's application may well disclose *something*, it does not disclose the *full scope* of his product claims." *Id.* at 16-17. Mr. Hyatt cannot—consistent with this Court's summary judgment decision—show that the same "making a product" claims are adequately described by the same specification.

201. The Board rejected all of the claims for lack of written description, including the "making a product" claims. The USPTO recognizes that the Board rejected only some of Mr. Hyatt's claims in this application on the basis of their "making a product" limitations (DX2011.19-24; DX2012.7-9), and Mr. Hyatt has just recently abandoned all of the ones that the Board rejected on that independent basis (*supra* ¶ 12 n.3). Nevertheless, this Court's summary judgment

reasoning on the "making a product" claims in Case No. 09-1864 applies equally to all of the claims that contain those limitations and supersedes the Board's reasoning on the issue.

202. As Mr. Hyatt well knows, in a district court action under 35 U.S.C. § 145, a party may raise new issues. *Kappos v. Hyatt*, 132 S. Ct. 1690, 1694 (2012); *Troy v. Samson Mfg. Corp.*, 758 F.3d 1322, 1325 (Fed. Cir. 2014) (explaining that the Supreme Court in *Kappos v. Hyatt* "held, without qualification, that 'there are no evidentiary restrictions beyond those already imposed by the Federal Rules of Evidence and the Federal Rules of Civil Procedure.'"); Hyatt FF, ¶ 554. "[T]he district court must make its own findings *de novo* and does not act as the 'reviewing court' envisioned by the [Administrative Procedure Act]. . . . [T]he principles of administrative exhaustion do not apply in a § 145 proceeding." *Troy*, 758 F.3d at 1325. Thus, even though the "making a product" claims that are currently pending were not rejected by the Board on the basis of the "making a product" language, this Court should nevertheless find them unpatentable on that basis, in the interest of consistency with the Court's prior decision.

203. Indeed, Mr. Hyatt's only argument on the "making a product" claims is that the Board found the specific claim elements that he has not dropped at trial to be enabled and supported by the written description. Hyatt FF, ¶¶ 499-505. But that argument does not take into account this Court's later, superseding decision on the same issue.

204. In sum, the Court should affirm the rejection of the "making a product" claims for two reasons: (1) Mr. Hyatt did not put on any testimony to support the written description for those claims; and (2) those claims suffer from the same defects as the claims in Case No. 09-1864, based on the same specification. Because the '211 specification's disclosure warranted granting summary judgment that the "making a product" claims were not described in Case No. 09-1864, similarly, here, Mr. Hyatt cannot show that those claims are adequately described by the very same

specification. Thus, in addition to the reasons discussed above, the following claims also fail for lack of written description and lack of enablement because of the unsupported "making a product" limitation: claims 132, 135, 152, 157, 160, 173, 174, 176, 177, 195, 197, 200, 211, 237, 238, 251, 253, 254, 256, 267, 269, 272, 273, 275, 277, 283, 288, 289, 291, 299, 307, 315, 317, 318, 323, 331, 332, 334-336, 340, 341, 343-346, 350-358, 360, 362-367, 369, 377, 379, 380, 382-384, 386, 388, 389, 391, 393, 395, 398, 401-404, 406, 408, 409, 411, 413, 414, 416-419, 421, 423, 425, 427, 430, 432, 433, 435-438, 440, 442, 445, 447, 448, 450, 452, 453, 455, 457, 458, 460-462, 464, 466, 468-471, 473-476, 478, 480, 481, 483-486, 488, 490, 492, 494, 495, and 497-499.

H. The evidence shows that the geometric multiplexer/demultiplexer/ combiner is not enabled

205. Enablement is a separate inquiry from written description and is a question of law, based on underlying facts. *Sitrick v. Dreamworks, LLC*, 516 F.3d 993, 999 (Fed. Cir. 2008). "In order to satisfy the enablement requirement of § 112, paragraph 1, the specification must enable one of ordinary skill in the art to practice the claimed invention without undue experimentation. Thus, with respect to enablement the relevant inquiry lies in the relationship between the specification, the claims, and the knowledge of one of ordinary skill in the art. If, by following the steps set forth in the specification, one of ordinary skill in the art is not able to replicate the claimed invention without undue experimentation, the claim has not been enabled as required by § 112, paragraph 1." *National Recovery Techs., Inc. v. Magnetic Separation Systems, Inc.*, 166 F.3d 1190, 1196 (Fed. Cir. 1999).

206. In *National Recovery Technologies*, the Federal Circuit held that the specification was not enabling even though it "recognizes a specific need in the [technical] field and suggests a theoretical answer to that need. It provides a starting point from which one of skill in the art can perform further research in order to practice the claimed invention, but this is not adequate to

constitute enablement." *National Recovery Techs.*, 166 F.3d at 1198. The Federal Circuit has also, for example, affirmed summary judgment of lack of enablement where the specification provided only a short conceptual description of the claimed electronic sensor. *Automotive Technologies Int'l, Inc. v. BMW of North America, Inc*., 501 F.3d 1274, 1284 (Fed. Cir. 2007). In that case, the Court rejected the patentee's argument that the knowledge of one of skill in the art made up for any deficiencies in the conceptual disclosure. *Id.*

207. Dr. Castleman opined that a person of ordinary skill in the art reading Mr. Hyatt's specification would not know how to make the geometric multiplexer/demultiplexer/combiner to allow for multiple channels, and multiple channels are required to implement every claim. *Supra* ¶¶ 32-40. He explained that, with each additional channel, "it'll become harder and harder to implement the circuitry to make those control decisions in the small amount of time that's available." Trial Tr., Jan 18, 2018, 140:20-141:1. Dr. Castleman also explained that he "found about a page and a half of guidance of how to build that device. There's a lot of discussion of how to use it, of what it could do if you had it, all the nice things that would happen if you had one of these things. But when it comes down to how to build it, I found precious little in the specification to indicate or to give guidance as to how to solve all the problems one would run into, especially in 1984, trying to build one of these things." Trial Tr., Jan. 18, 2018, 139:1-13 (referring to DX2002.469-470 and DX2002.472-473, *see* Trial Tr., Jan. 18, 2018, 141:2-14); Hyatt FF, ¶ 144-145 (discussing what geometric multiplexer/demultiplexer/combiner can allegedly do but not how to build it). And, of course, Mr. Hyatt created an experimental system but never implemented a system with multiple channels or with a geometric multiplexer/demultiplexer/combiner. *Supra* ¶¶ 33, 37, 40. In other words, making the geometric multiplexer/demultiplexer/combiner would require undue experimentation. *National Recovery Techs.*, 166 F.3d at 1196.

208. An inventor's failure to attempt to make a claimed system supports a determination that the system is not enabled. *See, e.g.*, *Ormco Corp. v. Align Technology, Inc.*, 498 F.3d 1307, 1318-19 (Fed. Cir. 2007) (affirming summary judgment of non-enablement where "one of the inventors of the Ormco patents[ ] testified that Ormco had never attempted to create" the claimed automated system but had only made one involving human decision making).

209. Dr. Castleman did not use the specific word "enablement" in testifying that the reader's inability to make the geometric multiplexer/demultiplexer/combiner amounts to a lack of enablement. But Dr. Castleman is not an expert in patent law. Trial Tr., Jan. 19, 2018, 238:21-239:4. And what he stated about the reader's inability to make the multiplexer amounts to a conclusion that the multiplexer is not enabled. Regardless, experts are relied upon to give their expert testimony about the facts of the case, not the legal conclusions. *High Point Design LLC v. Buyers Direct, Inc.*, 730 F.3d 1301, 1313 (Fed. Cir. 2013) ("Although obviousness is assessed from the vantage point of an ordinary designer in the art, an expert's opinion on the legal conclusion of obviousness is neither necessary nor controlling. That said, an expert's opinion may be relevant to the factual aspects of the analysis leading to that legal conclusion." (citations and quotation marks omitted)).

210. Furthermore, every claim at issue requires a geometric multiplexer/demultiplexer/combiner. *See, e.g.*, PTX912.123 (diagramming claim 172, with an orange box showing the "Geometric Mux/Demux Combiner 110D" that allows the windows and menu to be overlaid on each other and then allows images to be displayed). Because Mr. Hyatt never built a system with such a multiplexer and did not, in his specification, enable a person of ordinary skill to build a system with such a multiplexer, this Court should hold that Mr. Hyatt's claims are not enabled.

I. This Court should give Mr. Hyatt's new evidence little weight based on his failure to offer any of it before the USPTO

211. While Mr. Hyatt was entitled to offer new evidence in this § 145 action, the Supreme Court has explained that "[i]n deciding what weight to afford that evidence, the district court may . . . consider whether the applicant had an opportunity to present the evidence to the PTO." *Kappos*, 566 U.S. at 434. The Supreme Court further stated that "the proper means for the district court to accord respect to decisions of the PTO is through the court's broad discretion over the weight to be given to evidence newly adduced in the § 145 proceedings." *Id.* at 445.

212. During prosecution, Mr. Hyatt was put on notice by the examiner that he needed to explain how the '211 specification provides written description support for his claims. *See, e.g.*, PTX4.6055 (nonfinal office action of Aug. 23, 1998); PTX4.5746-5756 (final office action of Aug. 27, 1999). The examiner explained that Mr. Hyatt had not shown "disclosure directed to [the] claimed interconnections and interrelations," which he would need to overcome the rejections. PTX4.6066.

213. Yet before the USPTO, Mr. Hyatt never attempted to offer any explanation of how the '211 specification provides written description support for any claim until he filed his appeal brief to the Board, when he discussed only claim 172. PTX4.4785.

214. Mr. Hyatt's failure to offer any written description explanation is evident in the Board decision. The Board explained that, had Mr. Hyatt "shown support in his original disclosure for each of the new claims *when he filed his amendments*, he might have preempted a written description rejection thereof. [Mr. Hyatt] chose not to do so." DX2011.8 (emphasis in original).

215. Mr. Hyatt has not offered an explanation for why he declined to provide a written description analysis during prosecution, even when the examiner repeatedly explained that the specification lacked written description for the products that were claimed, and Mr. Hyatt

repeatedly had the opportunity to respond. Now, during trial, Mr. Hyatt has offered a specific written description analysis, both through his own testimony and the testimony of Mr. Hite.

216. The Supreme Court has explained that the new evidence offered by a patent applicant may be weighed based on "whether the applicant had an opportunity to present the evidence" to the USPTO. *Kappos*, 566 U.S. at 434. This Court should give the new evidence little weight because Mr. Hyatt failed to offer a specific written description explanation before the agency even though he was provided the opportunity to do so. Instead, Mr. Hyatt waited until the case reached this Court before first offering a specific explanation of how the '211 specification allegedly provides written description support for the claims.

217. During the *Kappos v. Hyatt* Supreme Court case, the USPTO noted its concern about applicants intentionally withholding evidence before the agency and then presenting that evidence to a district court: "The Director warns that allowing the district court to consider all admissible evidence and to make *de novo* findings will encourage patent applicants to withhold evidence from the PTO intentionally with the goal of presenting that evidence for the first time to a nonexpert judge." *Kappos*, 566 U.S. at 445. The Supreme Court dismissed this scenario as "unlikely" because an applicant would "would be intentionally undermining his claims before the PTO on the speculative chance that he will gain some advantage in the § 145 proceeding by presenting new evidence to a district court judge." *Id.*

218. This scenario that the USPTO identified in the Supreme Court case involving Mr. Hyatt, a scenario that the Supreme Court dubbed "unlikely," is exactly what has played out in this § 145 action involving Mr. Hyatt. A patent applicant has withheld evidence from the agency during prosecution, and then put that evidence in front a district court in a § 145 action. While the USPTO does not know what Mr. Hyatt's motive was for pursuing this strategy, there must be some

negative consequence for his choice to withhold evidence while before the agency only to offer the evidence in the § 145 action. The USPTO is the expert agency tasked with examining patent applications and issuing patents, and Mr. Hyatt's actions have frustrated the agency's ability to carry out its statutory function. In addition, Mr. Hyatt's strategy forces this Court to become a patent examiner and assess the written description evidence in the first instance, without any guidance or insight from the agency. *See Star Fruits S.N.C. v. United States*, 280 F. Supp. 2d 512, 516 (E.D. Va. 2003) ("This result would, in our opinion, turn a federal court into a super patent examiner, a role far beyond its proper judicial authority."). This is not the way that patent prosecution should work, and Mr. Hyatt should not be rewarded for refusing to answer the agency's inquiries and waiting until this § 145 action to first attempt to explain how his claims satisfy the written description requirement.

J. Dr. Castleman offered credible testimony

219. Mr. Hyatt generally attacks Dr. Castleman's credibility as an expert witness. *E.g.*, Hyatt FF ¶¶ 506-514. This attack is unpersuasive.

220. As an initial matter, Mr. Hite sat through the entire trial in this case, and he has not questioned Dr. Castleman's credibility as a witness. For example, even after having sat through the entire trial, in the next trial he continued to agree that Dr. Castleman is qualified to serve as an expert witness with respect to this same specification. Trial Tr. (Case No. 09-1864), Feb. 14, 2018, 355:12-20; *see also* Trial Tr., Jan. 18, 2018, 37:23-25.

221. In questioning Dr. Castleman's credibility, Mr. Hyatt ignores the issues with his own expert, Mr. Hite. Mr. Hite's testimony amounted to little more than a verbatim recitation of a 366-page slide presentation that laid out the positions that Mr. Hite was to take during the direct examination. *See, e.g.*, PTX912.2-3. Mr. Hite had difficulty recalling basic, central concepts—

like what field of expertise would be the relevant one for evaluating the written description of the claims at issue—without the help of the slide presentation. Trial Tr., Jan. 18, 2018, 36:9-24.

222. Mr. Hite's conclusions regarding whether the claims at issue met the required standards of written description are not helpful to the court because Mr. Hite did not demonstrate to the court that he had a basic understanding of those standards. Mr. Hite could not correctly explain the test for compliance with the written description requirement, or even come close. Specifically, Mr. Hite testified that, to determine that an inventor had "possession" of an invention for written description purposes, one would have to show that the invention "was original and distinguishable from what existed at the time." *Id.* at 35:18-25. Comparing the claimed invention to the prior art is not relevant to the written description analysis, but is relevant to anticipation and obviousness. *See Cohesive Techs., Inc. v. Waters Corp.*, 543 F.3d 1351, 1364 (Fed. Cir. 2008) ("Obviousness can be proven by combining existing prior art references, while anticipation requires all elements of a claim to be disclosed within a single reference.").

223. In contrast, Dr. Castleman accurately explained the written description test, from memory, without any assistance or prompting. *See* Trial Tr., Jan. 18, 2018, 113:5-114:18.

224. Dr. Castleman accurately stated the legal standard governing the possession portion of the written description requirement when he testified that "by possessed, we knew he understood the invention, that he knew how to make it, and he knew how to use it." Hyatt FF, ¶¶ 506-507 (quoting Trial Tr., Jan. 18, 2018, 113:5-13). Mr. Hyatt erroneously charges that Dr. Castleman misstated the standard (Hyatt FF, ¶ 507), but the Federal Circuit has described the written description requirement in just those terms—as an ability to make and use the invention plus more. "The purpose of the 'written description' requirement is broader than to merely explain how to 'make and use'; the applicant must also convey with reasonable clarity to those skilled in the art

that, as of the filing date sought, he or she was in possession of the invention." *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64 (Fed. Cir. 1991); *see Ariad*, 598 F.3d at 1353 (applicant must—as of the filing date—"conceive of the complete and final invention with all its claimed limitations [] and disclose the fruits of that effort to the public."). Mr. Hyatt asserts that Dr. Castleman's view is wrong because it intertwines the written description and enablement requirements (Hyatt FF, ¶ 507), but the Federal Circuit has similarly explained that the written description and enablement "requirements may be viewed separately, but they are intertwined." *Kennecott Corp. v. Kyocera Int'l, Inc.*, 835 F.2d 1419, 1421 (Fed. Cir. 1987); *see LizardTech, Inc. v. Earth Resource Mapping, Inc.*, 424 F.3d 1336, 1344-45 (Fed. Cir. 2005) (describing the enablement and written description requirements as "two closely related requirements" that "usually rise and fall together").

225. Dr. Castleman further elaborated that he understands that the written description and enablement requirements "have been dealt with in the courts over the years. They're acknowledged to be similar, but they are different. And basically the written description requirement is that the application should be able to persuade one of skill in the art that the inventor possessed the invention. And if he can make and use it, he definitely does possess it." Trial Tr., Jan. 19, 2018, 224:16-225:2.

226. Dr. Castleman rendered his expert opinion that Mr. Hyatt's disclosed version of three dimensional imagery requires multiple channels. Mr. Hyatt disputes this testimony. Hyatt FF, ¶ 84. But Mr. Hite—Mr. Hyatt's own expert—similarly explained that, to implement 3D perspective, multiple "overlays" would be "independently processed." Trial Tr., Dec. 5, 2017, PM, 71:5-14; *see* Trial Tr., Dec. 4, 2017, PM, 63:7-14 (Mr. Hyatt similarly explaining that he would use multiple channels to implement a form of 3D perspective with an aircraft "moving at a

relatively fast speed and a relatively large size in the foregrounds" and mountains "moving at a very slow speed, and a compressed form in the background"). And Mr. Hite agreed that, to create the particular three dimensional effect that Mr. Hyatt had described in his testimony of looking out the side of a moving car, you would move trees in the foreground independently of mountains in the background, requiring multiple channels. Trial Tr., Jan. 18, 2018, 42:9-20.

227. And Mr. Hyatt attacks Dr. Castleman for his claim interpretation positions. Hyatt FF, ¶¶ 201, 208-224, 236. But Mr. Hite simply refused to take a position on claim interpretation at all, instead asserting that his job was not to interpret claims. *Supra* ¶¶ 88-90.

228. Dr. Castleman's testimony as to the sufficiency of the written description for the '211 application carries more weight than Mr. Hite's testimony, because Dr. Castleman was a person of ordinary skill on the date the specification was filed. Trial Tr., Jan. 18, 2018, 114:5-18. Mr. Hite, on the other hand, did not obtain the minimum qualifications until 1994, which was ten years after Mr. Hyatt filed the '211 specification and only five years before Mr. Hyatt filed the 1999 claims at issue in this case. Trial Tr., Jan. 18, 2018, 37:10-22.

K. This Court should give Mr. Hyatt's written description testimony little to no weight

229. During the trial, Mr. Hyatt testified as a fact witness in support of his own case. Mr. Hyatt offered opinion testimony to support his position that the '211 specification provides written description support for the claims at issue. Specifically, Mr. Hyatt addressed certain claim limitations and provided his understanding of how those claim limitations find written description support in the specification. *See, e.g.*, Trial Tr., Dec. 4, 2017, AM, 55:14-19; Trial Tr., Dec. 4, 2017, PM, 4:13-9:18; *id.* at 35:7-38:1; *id.* at 47:2-50:23.

230. Mr. Hyatt's slide presentation quoted portions of the USPTO's pretrial statement where the USPTO summarized the written description disputes, and then Mr. Hyatt testified

regarding his understanding of how the claim or claims at issue find written description support in the '211 specification. *See, e.g.,* PTX910.112-135; Trial Tr., Dec. 5, 2017, AM, 14:17-34:17 (discussing USPTO's pretrial statement at 29:14-30:2).

231. Both Mr. Hyatt and the USPTO have retained expert witnesses for this case, and the experts provided extensive opinion testimony regarding the written description requirement. This testimony was intended to be from the objective view of one of ordinary skill in the art, and the experts were permitted to offer opinions based on their specialized knowledge and experience. *See*, *e.g*., Trial Tr., Dec. 6, 2018, AM, 20:20-21:6; *id.* at 52:14-21; Trial Tr., Jan. 18, 2018, 139:14-24; *id.* at 161:3-21; Fed. R. Evid. 702. On the other hand, Mr. Hyatt has not been designated as an expert witness in this case and has not authored any expert reports.

232. There are three reasons why this Court should give Mr. Hyatt's opinion testimony little to no weight. First, because Mr. Hyatt was not an expert witness, his testimony should be limited to factual issues within the scope of his personal knowledge. Mr. Hyatt was permitted to provide the Court with a background understanding of his patent applications and the relevant technology at issue. *See, e.g., Voice Techs. Group, Inc. v. VMC Sys., Inc.*, 164 F.3d 605, 615 (Fed. Cir. 1999) (stating that an inventor may testify to explain the invention). But, to the extent that Mr. Hyatt intended to offer opinion testimony as a fact witness, he was not permitted to do so under Fed. R. Evid. 701(c), which precludes opinion testimony from lay witnesses if such opinion testimony is "based on scientific, technical or other specialized knowledge." Fed. R. Evid. 701(c). The USPTO objected to Mr. Hyatt's testimony on that basis. Trial Tr. (Case No. 09-1872), Nov. 13, 2017, AM, 45:10-18.

233. Second, the Federal Circuit has found that inventor testimony is not helpful in determining patent validity. *See Solomon v. Kimberly-Clark Corp.*, 216 F.3d 1372, 1379-80 (Fed.

Cir. 2000). The Court in *Solomon* held that "[i]t is particularly inappropriate to consider inventor testimony obtained in the context of litigation in assessing validity under section 112, paragraph 2, in view of the absence of probative value of such testimony." *Id.* at 1379. The current case primarily focuses the written description requirement in 35 U.S.C. § 112, ¶ 1 (with the definiteness requirement of § 112, ¶ 2 also at issue). Regardless, the USPTO sees no reason why that distinction matters, as both rely on what the specification itself conveys to the reader.

234. Third, with respect to the written description requirement, the Federal Circuit has explained that the inquiry focuses on whether the specification *itself* conveys to a person of ordinary skill in the art that the inventor possessed the claimed invention. *See Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc) (explaining that the written description test "requires an objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art"); *New Railhead Mfg., LLC v. Vermeer Mfg. Co.*, 298 F.3d 1290, 1295 (Fed. Cir. 2002) ("The adequacy of the written description . . . is measured from the face of the application."). Therefore, the Court's written description analysis should focus on the specification, and Mr. Hyatt's testimony about what he believes is described in the specification cannot be used to supplement or modify the specification's disclosure.

235. Indeed, although the specification is supposed to speak for itself, Mr. Hyatt's counsel repeatedly had to ask him what he meant by the words in his specification. Trial Tr., Dec. 4, 2017, PM, 46:11 (Q. about PTX4.8024 or DX2002.545 "What are you trying to convey here?"), 49:3-4 (about PTX4.8000 or DX2002.521), 50:14-15, 52:23-24, 73:23-24, 74:14-21, 77:10-15, 70:3 (Q. about PTX4.7948 or DX2002.469 "What did you mean by that?").

236. Further, Mr. Hyatt asserts that he wrote his specification in a "top-down" manner with the more general description first and the more detailed description coming later. Hyatt FF,

¶¶ 47-50, 56. He asserts that he did this because that is the most comprehensible way to read a specification. Hyatt FF, ¶ 49. But Mr. Hyatt's specification does not even read in a top-down order, instead having a more general figure, 6A, coming after many more detailed figures, e.g., 2I, 1K, and 2H. *See* Hyatt FF, ¶¶ 50, 56. The specification similarly discusses figure 6A after it discusses the more detailed figures 2I, 1K, and 2H. DX2002.

237. In fact, Mr. Hyatt's drafting techniques led the examiner at one point to explain, for example, that his claim language was "incomprehensible." PTX4.6723. A claim reciting "an input circuit generating a sequence of input words in response" contained at least the following problems: (1) it was not clear what information was "contained in the 'input words'" because it was "impossible to determine whether these words are sub-units of previous image information, or if they represent information extracted from previous image information, or if they represent something else entirely"; (2) there was no clear connection between the image memory/processor and the rest of the claimed apparatus; (3) the word "simultaneous" was used in the claim without stating what was simultaneous with what; (4) there was no meaningful interconnection between the claimed input, output, and memories; (5) the same claim recited "[p]rocessing the plurality of memories between an input memory . . . and a plurality of output memories," which was "incomprehensible"; and (6) it was not clear how, if at all, "processing memories" involves input and output. PTX4.6723.

238. All of that is why it is affirmatively good that Dr. Castleman "lacks first-hand knowledge of what Mr. Hyatt intended to convey with" documents from prosecution like his reply brief. Hyatt FF, ¶ 223. Just like Dr. Castleman, the person of ordinary skill in the art has no way to know what Mr. Hyatt *intended* to convey. Dr. Castleman has "no special insights into the workings of Mr. Hyatt's mind." Trial Tr., Jan. 19, 2018, 244:12-20. Mr. Hyatt may know exactly

what he intended to convey, but what he intended to convey is irrelevant. What matters is what a reader of ordinary skill in the art—like Dr. Castleman or another third party—would understand from reading those documents. *See Ariad*, 598 F.3d at 1351.

239. In sum, given the fact that: (1) Mr. Hyatt was not an expert witness and could only testify as to his personal knowledge; (2) the Federal Circuit has found that inventor testimony is not helpful in determining patent validity; and (3) the written description inquiry focuses on how the ordinary artisan would understand what is disclosed within the four corners of the specification, not on what the applicant intended to convey, this Court should give little to no weight to Mr. Hyatt's testimony explaining how the claims at issue find written description support in the '211 specification.[24]

L. The USPTO dropped its obviousness contentions, but that does not render the prior art irrelevant to the section 112 issues in this case

240. As the USPTO explained during summary judgment briefing (ECF No. 57 at 3), it never intended to pursue the Board's obviousness rejections during trial. Mr. Hyatt attempts to convert that into an argument that the USPTO cannot now rely on prior art to show the Court the problems with Mr. Hyatt's case. Hyatt FF, ¶¶ 15, 513. But the fact that the USPTO did not pursue obviousness rejections here does not render the prior art irrelevant to the claim construction and section 112 inquiries. All of those inquiries focus on the knowledge of a person of ordinary skill in the art at the time of the invention. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc); *Boston Scientific Corp. v. Johnson & Johnson Inc.*, 647 F.3d 1353, 1366 (Fed. Cir.

[24] The USPTO made a similar argument in a motion *in limine*. *See* ECF No. 203. The USPTO's motion *in limine* was directed to the admissibility of the evidence, and this argument relates to the weight that the Court gives that evidence.

2011). Thus, they require knowing what that person would have known, which includes things like the Apple manual the USPTO discussed at trial.

CONCLUSION

241. Pursuant to Fed. R. Civ. P. 52, the Court should render judgment in favor of the USPTO and against Mr. Hyatt.

242. The Court should find that Mr. Hyatt has not demonstrated that the USPTO erred in rejecting all of the pending claims in the '211 application.

243. Even if the Court were to find error in some or all of the rejections at issue, the Court should not hold "that Mr. Hyatt is entitled to a patent" on those claims, as Mr. Hyatt contends (Hyatt FF, p. 1 and ¶ 574). The Court can reverse pending rejections, but when the application returns to the USPTO, "the Patent Office can always reopen prosecution and cite new [prior art] references." *In re Gould*, 673 F.2d 1385, 1386 (CCPA 1982) (quoting *In re Fisher*, 448 F.2d 1406, 1407 (CCPA 1971)); *see also In re Arkley*, 455 F.2d 586, 589 (CCPA 1972) (reversing an anticipation rejection, but suggesting that the USPTO could re-open prosecution and make an obviousness rejection). As the Federal Circuit has explained, a court in a § 145 action does not have the authority to direct the USPTO to issue a patent. *Gould v. Quigg*, 822 F.2d 1074, 1079 (Fed. Cir. 1987) ("Turning now to the issue of whether the district court has authority to direct the issuance of a patent, we conclude it does not."). A court's role in a § 145 action is limited to "resolv[ing] questions of patentability to the extent issues are raised at trial." *Id.*

244. Regardless of the outcome, the Court should award the USPTO "[a]ll the expenses of the proceedings" as required by 35 U.S.C. § 145.

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