

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ONTEL PRODUCTS CORORATION,

Petitioner,

v.

HAPPY PRODUCTS, INC,

Patent Owner

U.S. Patent No. RE48,479

Title: MULTIPLE VIEWING ANGLE MEDIA SUPPORT

DECLARATION OF

James B. Babcock

I, James B. Babcock, hereby declare as follows:

1. I am over the age of 18 and competent to make this declaration. If called to testify as a witness in this matter, I could and would testify truthfully to each of the matters herein.

2. I have been retained by Devlin Law Firm, LLC on behalf of Patent Owner Happy Products, Inc. (“HPI”) as an independent technical expert in this matter.

3. I have been asked by counsel for Patent Owner to provide my analysis and opinions with respect to how a person of ordinary skill in the art would have understood the disclosures in the priority chain leading to U.S. Patent No. RE48,479 (the “’479 patent”).

4. I understand this Declaration will be filed in support of HPI’s Patent Owner’s Preliminary Response to Petitioner Ontel’s Petition to Institute *Inter Partes* Review of U.S. Patent No. RE48,479.

5. For my time and effort relating to this Declaration, I am being paid at a rate of \$425/hour. My compensation is not in any way dependent upon the opinions expressed in this Declaration, the institution or non-institution of Petitioner’s Petition for *Inter Partes* Review, or the outcome of any such review that may be instituted.

I. QUALIFICATIONS

6. I have attached my curriculum vitae as Exhibit A to this declaration. As indicated in my CV, I am currently President of MechEx, LLC. I was previously the Vice President of Research and Development/Engineering at Taylor Technologies, Inc. Taylor Technologies was a company that designs and manufactures water testing systems, and my role as Vice President of Research and Development/Engineering was to oversee all aspects of product design and manufacturing automation.

7. My professional career has been devoted to the practice of mechanical engineering in various fields. The mechanical engineering fields in which I have practiced range from the design of small implantable medical devices (e.g., the Vasca Dialysis Port shown below):



to large, high-speed printing systems weighing over 100,000 lbs, such as the Sun 625 Flexographic Rotary Diecutter shown here:



8. I have been granted U.S. Patent No. 9,569,858 (“Cloud-Based System for Water Analysis”), at the core of which are several complex injection molded parts and a tablet computer. The patented device is shown below:

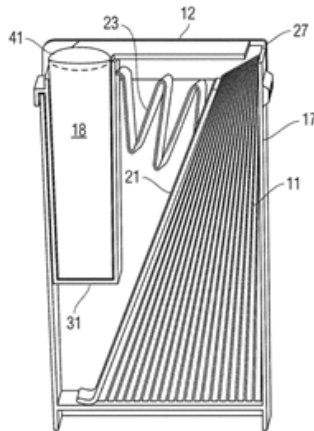


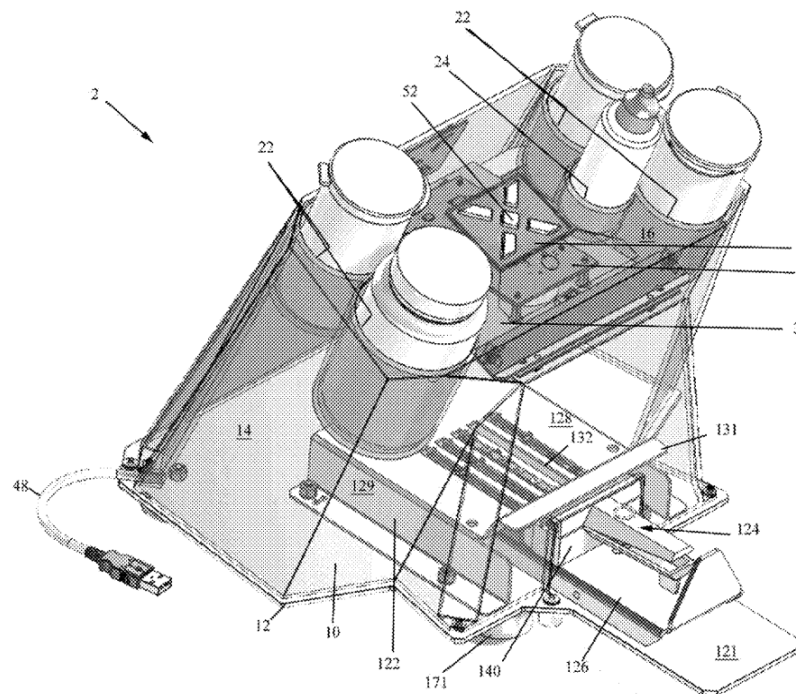
Fig. 5

9. I have extensive experience designing, testing, and developing complex consumer products that include within them many complex molded parts. For example, the kiosk and devices disclosed in U.S. Patent No. 9,569,858 contain no less than 14 injection molded plastic parts, for each of which I did all of the design, prototype and development work. The test strip case disclosed contains 4 parts, one of which is a spring biasing member as shown in the patent figure below.

10. The kiosk contains a portable device mounting system that uses a clamp with to secure the device against a mounting surface. Another mechanism within the same kiosk is a 2-axis articulated cam follower pin that contains a spring biasing mechanism as depicted in the figure below:



11. The multiple strip reader in US 2023/0152238A1 (Provisional 63/279,726) shown in the figure below, also contains at least 8 injection molded parts, for which I was completely responsible for the design of.



12. Furthermore, I have years of experience designing soft and sewn products such as the multi-function diaper bag and the watersports carrier shown below.



13. I received a Bachelor of Science degree in Mechanical Engineering from Lehigh University in 1985 and a Masters of Engineering Management degree from George Washington University in 1993.

14. I am being compensated for my work on this case at my standard consulting rate of \$425 per hour. I am also being reimbursed for any out-of-pocket expenses I incur in relation to my work. None of my compensation depends on the outcome of this litigation or on the nature of any particular opinions I provide. I do not have any other interests in this case or in any

II. MATERIALS CONSIDERED

15. In preparing my declaration, I have considered a variety of information and documents, including those expressly cited in the body of this declaration. I have relied on my personal experiences in designing, developing and testing mechanical devices with electrical connectors. My analysis is ongoing, however, and I reserve the right to supplement my testimony in view of any additional information produced. I also reserve the right to use animations, demonstratives, enlargements of exhibits, and other devices to illustrate my opinions at trial.

III. MY UNDERSTANDING OF CERTAIN LEGAL STANDARDS

16. I will not offer opinions of law, as I am not an attorney. However, in formulating my opinions, I have taken into account the following principles of the law regarding patent infringement of which I have been informed.

A. Ordinary Skill in the Art

17. When interpreting a patent, I understand that it is important as a preliminary matter to identify the relevant art pertaining to the patent-in-suit, as well as the level of ordinary skill in that art at the time of the invention. The level of ordinary skill in the art at the time the application for patent was filed can be determined by looking at the following factors: the type of problems encountered in the art, prior art solutions to those problems, the speed with which innovations are

made, the sophistication of the technology, and the educational level of active workers in the field including the inventors.

B. Claim Construction

18. I have been informed and understand that claim terms are generally given their “ordinary and customary” meaning, which is the meaning that the term would have to a person of ordinary skill in the art in question (“POSITA”) at the time of the invention.

19. I further understand that the POSITA is to read the claim term in the context of not only the claim in which it appears but also in the context of the entire patent, including the specification and prosecution history, which is referred to as “intrinsic evidence.”

20. The POSITA may also look to “extrinsic evidence,” that is all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises, although I understand that extrinsic evidence is considered less reliable than intrinsic evidence and therefore given less weight.

21. I understand that some ambiguity in the wording of a patent is permissible as long as the claims provide objective boundaries for those skilled in the art, in view of the entire written description and prosecution history of the patent. In this regard, I understand that the Supreme Court has explained that some modicum of uncertainty is the price of ensuring the appropriate inventiveness for innovation, and that courts must take into account the inherent limitations of language.

22. Relatedly, I understand that the exact terms employed in the claims need not appear verbatim in the specification, so long as the claims, read in light of the specification and prosecution history, inform, with reasonable certainty, those skilled in the art about the scope of the invention.

C. Priority and Disclosure

23. It is my understanding that a prior art reference will be considered to provide sufficient disclosure if the recited claim limitation is expressly contained within the four corners of that reference.

24. I have been informed that the claimed invention need not be described in specific terminology to satisfy written description or entitlement to priority, so long as the disclosure reasonably conveys to those skilled in the art that the inventor possessed the claimed subject matter.

25. It is my understanding that the disclosure need not be contained within the four corners of a reference itself to satisfy a priority claim, such as when another document is incorporated by reference in a patent application.

26. Specifically, I have been informed that according to the Patent Office and the Federal Circuit, “information incorporated [by reference] is as much a part of the application as filed as if the text was repeated in the application, and should be treated as part of the text of the application as filed.”

27. Accordingly, it is my understanding that if the document incorporated by reference has sufficient disclosure, an incorporation by reference in a patent application satisfies the written description requirement, and thus a priority claim, even if the four corners of the incorporating application do not contain the required disclosure.

IV. LEVEL OF ORDINARY SKILL IN THE ART

28. The relevant art is not merely “support apparatuses and stands” but rather “support apparatuses and stands *for media devices*.”

29. Based on my experience, it is my opinion that a broader description of the field that does not account for the specific engineering and design considerations for media devices would miss many of the subtleties that come in to play here. For example, rather than merely needing to consider mechanical support as in the case

of a support apparatus or stand in general, a stand for a media device will also need to consider the optical properties, viewing angles, and usage consideration of the media device or devices that are intended to be displayed.

30. As one of skill in the art would readily appreciate, one would not simply use a support apparatus intended for a painting or portrait (such as a frame or easel) for a media device such as a television display, monitor, or tablet. Even beyond the different mechanical considerations due to the increased density and mass of similarly-sized media devices relative to portraits and paintings, the active displays commonly found on media devices have their own optical properties and thereby present additional design considerations that do not exist for passive objects.

31. With the field of art in question properly characterized as “support apparatuses and stands for media devices,” a person of ordinary skill in the art would have a college education and understand basic principles of geometry, trigonometry, and the operation of support materials (including cushions). The person of ordinary skill in the art would further have at least one year of experience in the development of support apparatuses and stands for media devices, or knowledge and experience equivalent thereto.

32. This is confirmed by the backgrounds of the inventors of the ’479 patent. It is my understanding that one inventor is a serial entrepreneur educated in business, and the other is an optical engineer.

33. I am at least a person of ordinary skill in the art as described above. Further, I have hired, trained, and supervised POSITAs in my career.

V. THE ’479 PATENT AND ITS PRIORITY CHAIN

34. I understand that Patent Owner’s provisional application, Ser. No. 61/896,540 (“Provisional”), was filed on October 28, 2013. Ex. 2016.

35. I am aware that Patent Owner's first non-provisional application, Ser. No. 14/518,443 ("Cannon Application"), was filed on October 20, 2014 and published on April 3, 2015 as No. 2015/0115124 ("Cannon Publication"). Ex. 2017.

36. It is my understanding that the Cannon Publication is merely the published version of the Cannon Application. In other words, Petitioner is relying on the Cannon Publication as a prior art publication of the content and substance of the previously-filed Cannon Application based on the fact of its publication on April 3, 2015.

37. I am not aware of any disclosure in the four corners of the Cannon Publication that was not contained in the four corners of the Cannon Application.

38. I am aware that the Cannon Application claimed priority to the Provisional.

39. I am aware that the application for the original '454 patent, Ser. No. 15/192,737 ("Continuation"), issued on May 9, 2017 from the June 24, 2016 filing of a continuation-in-part of the Cannon Application.

40. It is my understanding that the Continuation likewise claimed ultimate priority to the Provisional.

41. The Continuation contains additional disclosure beyond that within the four corners of the Cannon Application.

42. Among other things, the Continuation provided within its four corners disclosure for specific angles disclosed in general terms within the four corners of the Cannon Application. Specifically, where the Cannon Application stated, "In one embodiment, the first viewing angle 120a may be X degrees, the second viewing angle 120b may be X degrees, and the third viewing angle 120c may be X degrees," the Continuation replaced the three "X"s with 36, 74, and 49, respectively, as recited in claim 1 of the '454 and '479 patents.

43. I have reviewed Exhibit 2018, which shows how the Continuation differs from its parent Cannon Application.

44. On January 30, 2019, Patent Owner filed a reissue application (Ser. No. 16/262,797) based on the '454 patent ("Reissue Application"), which issued on March 23, 2021 as the '479 patent.

45. From the face of both documents, I am aware that both the '454 and the '479 patents claim ultimate priority to the Provisional through the Cannon Application.

46. I am also aware that the '479 patent has the same figures, title, and descriptions as the '454 patent, and includes the same first 10 claims as the '454 patent, as well as 19 additional claims added during reissue.

47. It is my understanding that collectively, the '454 and '479 patents spent about four and a half years in examination.

48. Based on my review of the file history and the references cited, a substantial number of references were identified and evaluated, including Klepar II (U.S. Pat. No. D703,216), Dean (U.S. Pat. No. 3,746,296), and Barcalo (U.S. Pat. No. 1,928,806), relied on by Petitioner in the Petition—before allowance was granted.

A. Comparison of Disclosures of the '479 Patent, the Cannon Application, and the Provisional

49. I have reviewed the '479 patent, the Cannon Application, and the Provisional, from the perspective of one of ordinary skill in the art.

50. Based on that review and my analysis, as I will explain in greater detail below, it is my opinion that a POSITA would have understood that the inventors of the '479 patent were in possession of the inventions claimed therein based on the disclosures in the Provisional and the Cannon Application to which priority is claimed.

51. In summary, it is my opinion that the disclosures of the Provisional and the Cannon Application reasonably convey to a POSITA that the named inventors of the '479 patent were in possession of the inventions claimed therein.

52. As an initial matter, I am aware that the '479 patent claims priority to the Cannon Application, and, via the Cannon Application, ultimately to the Provisional.

53. I am also aware that the Cannon Application itself both claims priority to the Provisional and expressly incorporates by reference the Provisional, as is also the case for the '454 and '479 patents.

54. Thus, it is my understanding that for purposes of priority claims and satisfying the written description requirement, the Cannon Application is considered to contain, and thus disclose, the full contents of the Provisional as well.

55. In summary, as shown in Exhibit 2018, the Cannon Application contains within its four corners express disclosure sufficient to support almost all of what is recited by the claims of the '479 patent. Indeed, almost all of what is disclosed in the '479 patent (which began as a continuation-in-part of the Cannon Application) is included word-for-word in the Cannon Application, as shown in Exhibit 2018.

56. As is relevant to this proceeding, both the '479 patent and the Cannon Application explain that:

- The described device “provide[s] support for multiple viewing angles[, which] are carefully chosen to support the media on a table for a sitting user, in the lap of a sitting user, and on a lying user” such that “the media support [] provides a comfortable support at an appropriate angle for the most common viewing positions.” Ex.1001 at 2:41–46; Ex. 2017 at [0015].

- The described “media support 100 include three support sides 155,” each of which “comprises a support back 105 and a support edge 110.” Ex.1001 at 2:47–49; Ex. 2017 at [0016].
- “A user may place the media support 100 on a table, in the user’s lap, or on the user while lying down.” Ex.1001 at 2:15-16; Ex. 2017 at [0020]. Specifically, “[t]he user may place media on the edge support 110, [which] holds the media with the back of the media against the back support 105,” where each “back support 105[] has a longitudinal length 115.” Ex.1001 at 3:19-27, 3:49-58; Ex. 2017 at [0020], [0022].

57. From the perspective of a POSITA, it is clear that the ’479 patent and the Cannon Application use the terms “support edge” and “edge support” interchangeably. Likewise, it is clear that the terms “back support” and “support back” are also used interchangeably.

58. Both the ’479 patent and the Cannon Application describe plane angles and virtual planes with reference to their shared disclosures of the aforementioned edge supports/support edges and back supports/support backs.

59. Among other things, they explain how various plane angles and virtual planes are formed.

60. In particular, both explain that each back support forms a so-called “plane angle” relative to “a virtual plane [] between the top of a[] back support . . . and an outer edge of a[] edge support” of an adjacent support side, and identifies 120a, 120b, and 120c in Figure 2 as plane angles.¹ Ex.1001 at 3:31–48; Ex. 2017 at [0021].

¹ These angles are also referred to, in inconsistent fashion, as “viewing angles” at one point (see Ex. 1001 at 3:61–63), but in view of that same paragraph’s prior identification of elements 160 as “viewing angles” and the lengthy prior discussion of elements 120 as “plane angles”, a POSITA would not have been confused.

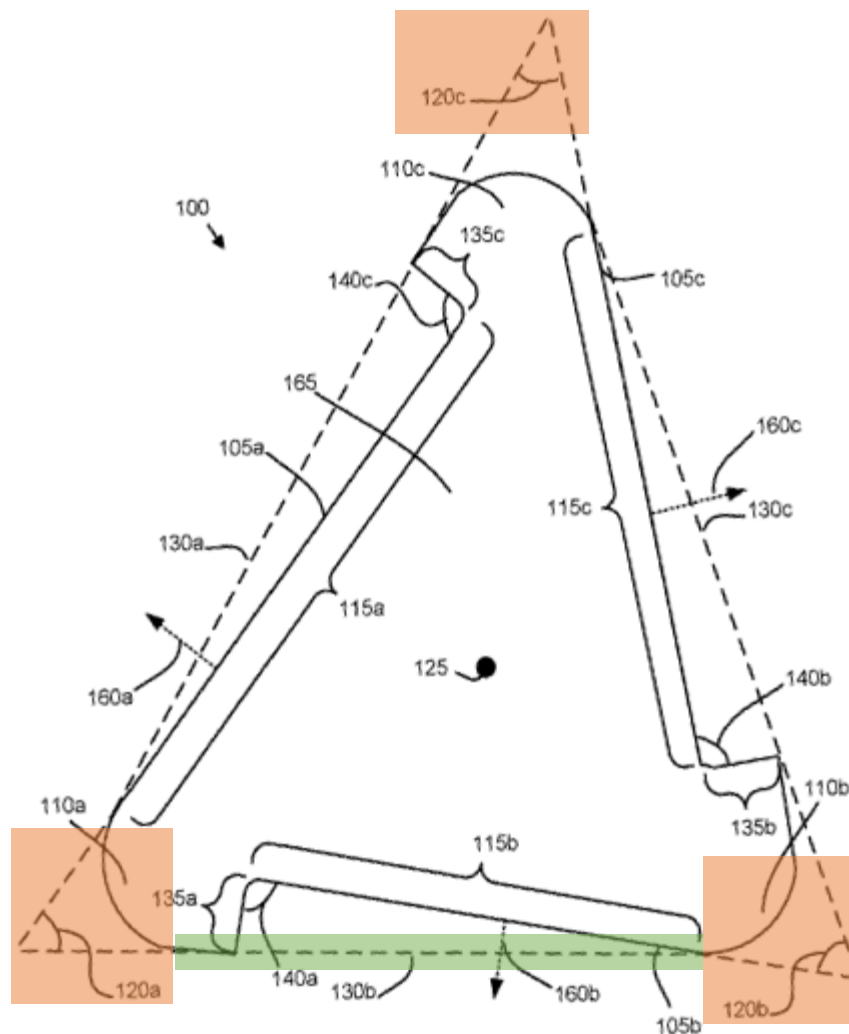


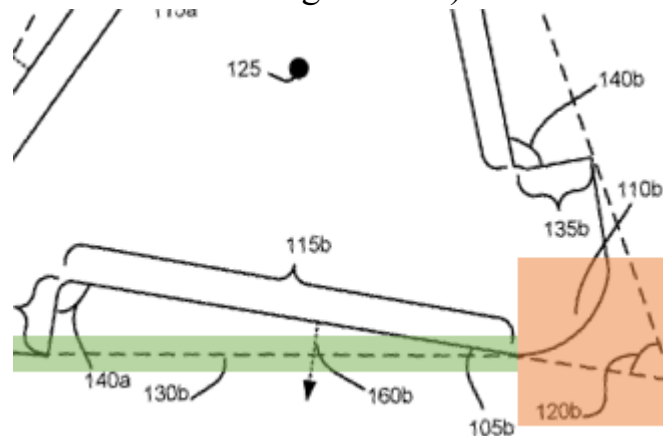
FIG. 2

61. In addition, both indicate that the three plane angles can be “in a range of,” respectively, “50 to 60 degrees,” “55 to 65 degrees,” and “50 to 75 degrees.” *Id.*

62. The foregoing disclosed ranges for the three plane angles encompasses three plane angles that sum to 180 degrees—such as 55 degrees, 60 degrees, and 65 degrees.

63. As a POSITA would have understood, the disclosed ranges for the three plane angles also disclose sets of angles that ***do not*** sum to 180 degrees—such as the example of the plane angles depicted in Figure 2.

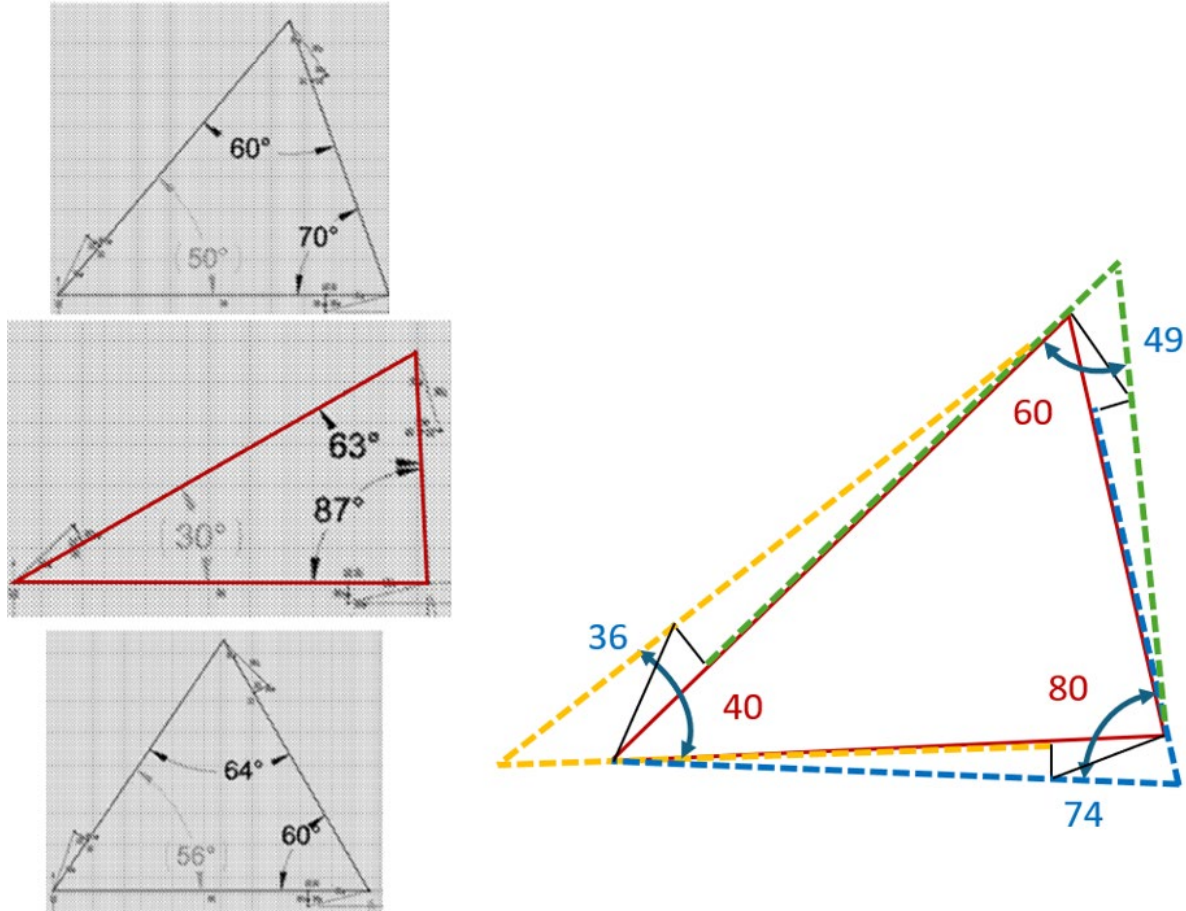
64. Specifically, the plane angle 120b in Figure 2, as shown by the lower dashed line in the orange box of the annotated figure below, is more acute (i.e., is smaller or a sharper angle) than the corresponding angle of a simple triangle (which is shown by the dashed line within the green box).



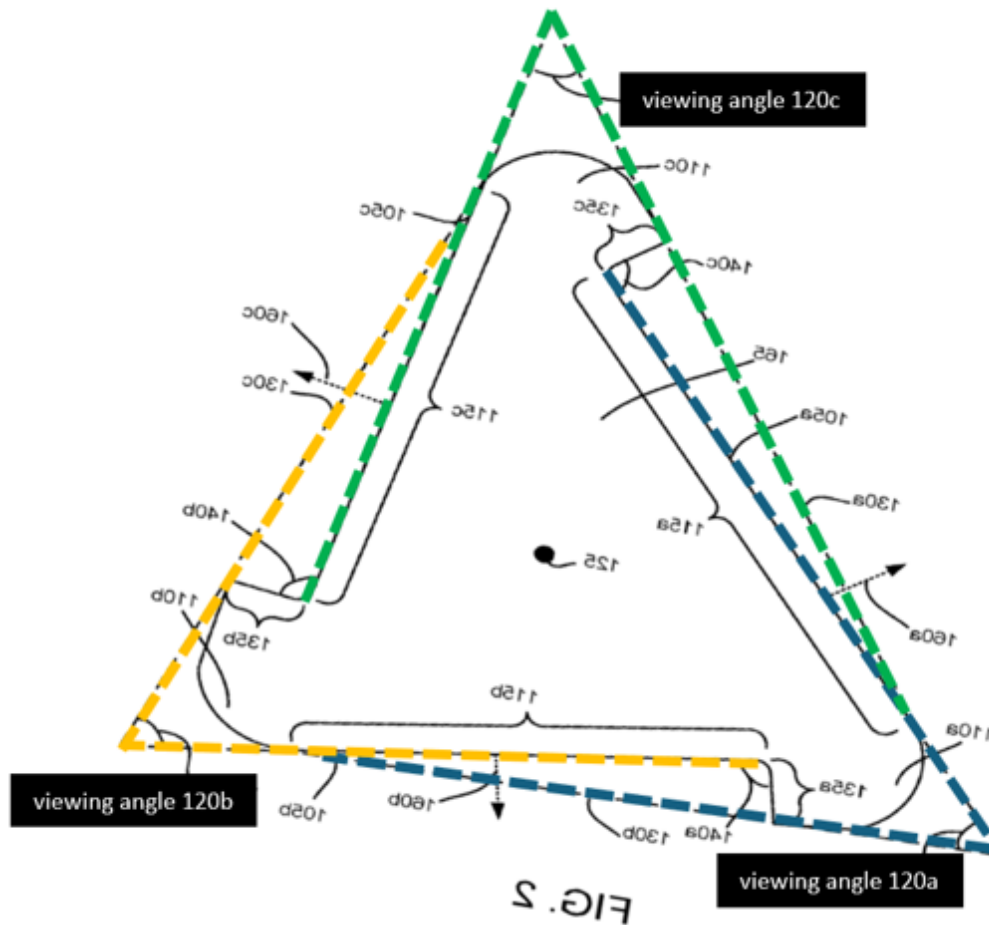
65. Thus, as shown in Figure 2, the plane angles sum to less than 180 degrees because each of the identified plane angles is sharper (i.e., is a smaller angle than) the corresponding angle would be on a simple triangle.

66. Based on the express depiction of a more-acute plane angle in Figure 2 (for element 120b as compared to a simple triangle), it is my opinion that a POSITA would thus have understood that both the '479 patent and the Cannon Application disclosed sets of the three plane angles that summed to less than 180 degrees, as I will elaborate below.

67. The following images also show how the plane angles or viewing angles of the claimed invention differ from the angles of the ordinary triangle of similar side lengths:



As shown above on the right, a triangle of 40, 60, and 80 degrees (solid red lines on the right) produces viewing angles or plane angles of 36 (yellow dashes), 49 (green dashes), and 74 (blue dashes) degrees respectively. Notably, while the sum of the angles of the triangle add up to 180, the sum of the viewing angles or plane angles produced therefrom adds up to 159 degrees. This is further illustrated schematically below with an annotated version of figure 2 of the '479 patent:



68. Both the '479 Patent and the Cannon Application continue to explain how viewing angles result from the arrangement of the back supports and the plane angles. Specifically, they detail that:

- The “side supports 155 may be arranged to provide three different viewing angles 160.” Ex.1001 at 2:63–65; Ex. 2017 at [0018].
- That “arrangement of *the longitudinal lengths* 115 [of the back support 105 of the side support 155] *and the plane angles 120* generate[s] three distinct viewing angles 160.” Ex.1001 at 3:59–60; Ex. 2017 at [0023].
- “Each viewing angle [*sic.* – vector]² 160 is orthogonal to a support back 105.” Ex.1001 at 2:65–66; Ex. 2017 at [0018].

² As a POSITA would have understood, the terminology used in this portion of the patent is not standard. Specifically, an angle is not, itself, orthogonal to anything.

69. In short, the “arrange[ment]” of the support back 105 against which a media device is placed, relative to plane angles formed with “a virtual plane” of an adjacent side (which sum to 180 as indicated in claim 1), provide the different viewing angles.

70. A POSITA would have further understood the foregoing disclosures to convey the concept of “supporting a media device at” various “support angles” as recited by claim 12 of the ’479 patent and its dependent claims.

71. As an initial matter, this is readily apparent to a POSITA from the recitation of the claims themselves. In relevant part, Claim 12 recites the following (emphases added):

wherein the media support apparatus is configured to provide [1] a first viewing angle of the media device when the media support apparatus body rests on the first virtual plane and *the media device is supported at the first support angle*, [2] a second viewing angle when the media support apparatus body rests on the second virtual plane *and the media device is supported at the second support angle*, and [3] a third viewing angle when the media support apparatus body rests on the third virtual plane *and the media device is supported at the third support angle*

72. And as the recitation of claim 12 makes clear, each support angle results from the media’s device’s position, when supported by the support back and support edge, relative to the virtual plane on which the device is resting. And these support angles can (but need not) differ, according to the recitation of claim 12.

73. In other words, what claim 12 is reciting is that the three different viewing angles of the media device (which I have previously discussed) result from

Rather, a vector corresponding to one component of the angle can be orthogonal to another vector or plane. A POSITA would have understood this inartful verbiage to refer to, in more technically precise terminology, a vector normal to (i.e, orthogonal to the vectors that comprise) the plane of the back support providing one of the two vectors that defines the viewing angle 160.

the combination of the media support body resting on a particular virtual plane when a media device is being engaged by a particular support edge and support back.

74. From the perspective of a POSITA, this just describes the same invention previously disclosed in a different way than did claim 1 and its dependent claims.

75. Whereas claim 1 defined the invention (in part) based on “the plane of a back support” relative to a virtual plane,” claim 12 is not so limited. As relating to the terms at issue here, is broader in at least two ways based on its recitation alone.

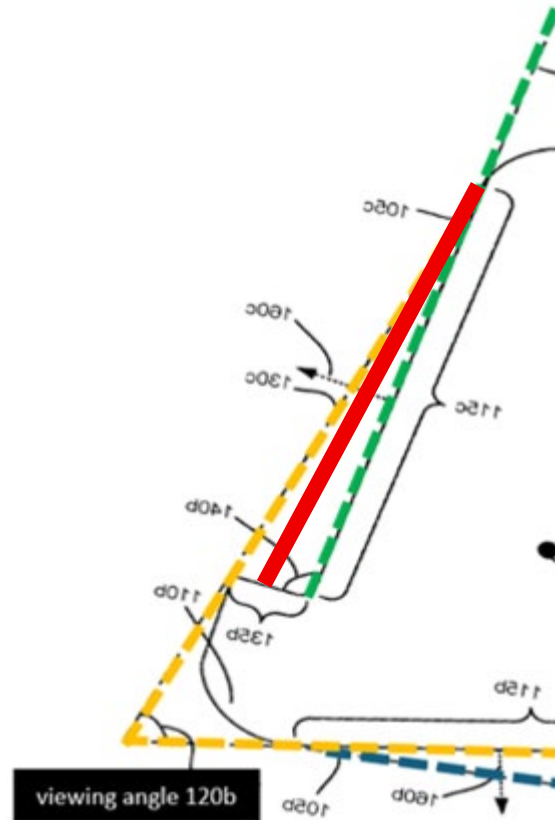
76. First, unlike the edge support and back support recited in claim 1, the support edge and support back of claim 12 are not limited to a 90 degree angle relative to each other. Instead, they are “configured to support a media device at a [particular] support angle.”

77. Second, and this is a more subtle point, the support angle is not limited to the angle between the support edge/edge support and support back/back support. Rather, it is defined as the angle *at which the media device is supported* based on a particular configuration of the respective corresponding edge support and back support.

78. To be clear, the support angle recited in claim 12 *could be* identical to a plane angle formed by the plane of a back support relative to a virtual plane if the media device were perfectly flush with the support back, as shown by the red line in the left image below. However, the support angle *need not* be identical to this angle, such as if the back of the media device were not flush against the support back, as shown by the red line in the right image below:



Support angle at the plane angle



Support angle not at the plane angle

79. So as a POSITA would have understood from the recitation of claim 12, the recited term “support angle” refers to the angle formed by a media device that is supported by a support back and support edge, which can be separated by anywhere from 85 to 120 degrees. This which relates to and is based at least in part on, but is not necessarily the same as—a plane angle between the support back itself and the virtual plane of an adjacent side.

80. And a POSITA would have readily understood that the Cannon Application discloses the concept of a media device being displayed at a particular angle based on the configuration of a support back and a support edge.

81. In particular, the Cannon Application describes each of the three sides comprising “a support back 105 and a support edge 110.” Ex. 2017 at 76, [0016].

82. Likewise, the Cannon Application explains that “[t]he edge support 110 holds the media with the back of the media against the back support 105,” *Id.* at 77, [0020], but a POSITA would have understood that language to describe some portion of the back of the media touching or resting against the back support, and not the entire back of the media device aligned with the back support.

83. A POSITA would have understood that this language *did not* describe the back of the media being held “flush with” or “flat against” the back support, and that such modifiers would have been used to convey such a scenario or requirement.

84. This is confirmed by the Cannon Application’s express description of the support edge or edge support having a particular width, width range, or range of widths, over which the bottom of the media device could rest. *See* Ex. 2017 at 78–79, [0024]. The described widths expressly included a 1–5cm range and 2cm, but were not limited to those dimensions. *See id.*

85. A POSITA would have understood that the non-trivial width of the edge support meant that the back of the media need not be flush with the support back, but rather, allowed the bottom edge of the media device to rest at (nearly) any portion along that width.

86. The Cannon Application uses the terms “support back” and “back support” interchangeably; likewise, it uses the terms “support edge” and “edge support” interchangeably. *See id.* at 76–79. Thus, a POSITA would have understood that each set of terms refers to the same underlying concept—i.e., a support for the back of the media, and a support for the bottom of the media, respectively.

87. Paragraph [0020] discloses how the viewing angle results from the media device being displayed when supported by the support edge against the support back. In particular, it explains that when the user “place[s] media on the

edge support,” which “holds the media with the back of the media against the back support [a]s a result the media may be viewed at the viewing angle 160.”

88. By describing how the viewing angle results from the media being placed on the edge support such that its back rests against the back support, Paragraph [0020] of the Cannon Application thus confirms to a POSITA that it is describing the support angles recited in claim 12, which describe the viewing angle resulting from the same scenario.

89. In view of the foregoing, it is my opinion that of the Cannon Application reasonably conveys to a POSITA that its inventors were in possession of the “support angles” recited in claim 12 of the ’479 patent.

90. It is also my opinion that the disclosure of the Provisional also reasonably conveys to a POSITA that the inventors were in possession of the concept of a support angle.

91. In particular, the Provisional describes the shape of the claimed invention as having “a bumper to hold the device from the bottom of the pillow” and “a bumper on the bottom to hold the eReader.” Ex. 2016 at 20.

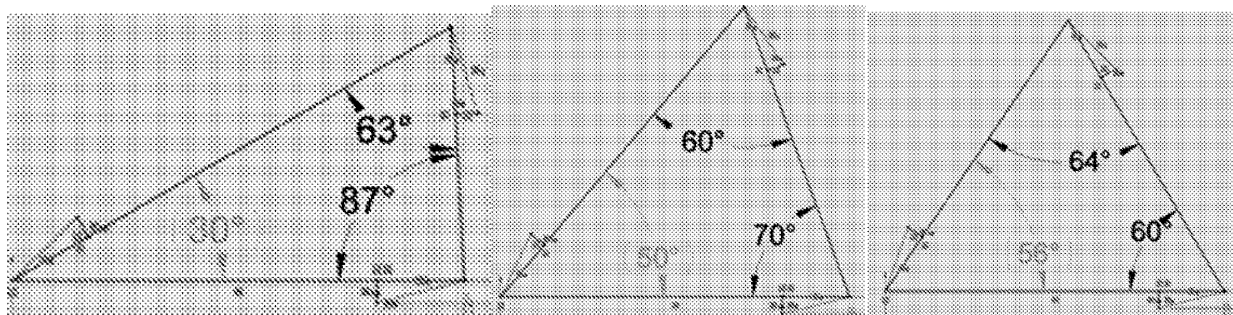
92. The Provisional further explains that “[t]he working surface on this pillow has a ledge that helps hold and stabilize the device,” and that the angle of the working surface in the preferred embodiments “is at least somewhat acute to help give the tablet device some direction to lean so that it will stay in position.” *Id.* at 2016. This indicates that the tablet will be leaning up against a back support (but need not be flush against it) such that it will be relatively stable.

93. Those different working angles allow the user to “choose how steeply the display is inclined for viewing”—i.e., select a different viewing angle based on the support angle of the display.

94. Accordingly, at least the foregoing portions of the Provisional also reasonably convey to a POSITA that the named inventors were in possession of the “support angles” recited in claim 12 of the ’479 patent.

95. In addition, through its express incorporation-by-reference of the Provisional, the Cannon Application further includes the disclosure of the Provisional, including the specific angles identified in the Provisional. Thus, the Provisional further supports that the named inventors had possession of the inventions recited in the ’479 claims.

96. Specifically, the Provisional discloses angles between the support back of one side and that of an adjacent side ranging from 30 to 87 degrees, where each set of angles sums to 180. *See* Ex. 1005 at 5.



97. The Provisional expressly describes these three particular configurations as “example[s]” of the “preferred embodiment” in which “the pillow has three surfaces, so the cross section is triangular, and each of the 3 angles is different.” Ex. 1005 at 5.

98. The Provisional also explains that these sets of angles of the described device “might be something like” the most extreme example, “something like . . . some intermediate” version, or “something approaching a near-equilateral triangle at maybe 64, 56, 60.”

99. A POSITA would have understood that this extensive use of hedging, exemplary or approximation language—“for example,” “something like,” “some intermediate,” “something approaching,” and “maybe specific angles—to indicate

that these were just particular illustrations of certain angles within the broader context of the preferred embodiment of an invention being a three-surfaced pillow based on a scalene triangle.

100. This is reinforced by the nature of the particular media support device at issue, which the Provisional, the Cannon Application, and the '479 patent all make clear is a pillow or similar soft media support.

101. Based on my experience, a POSITA would have readily understood that given such materials being used to form the media support device, any angles are necessarily going to be approximate by nature, and would have understood that there would be substantial tolerances in the disclosed angles.

102. This is certainly true for manufacturing, where such materials do not allow the sort of close tolerances common to harder, less-deformable materials like metal, wood, and hard plastic.

103. But it is also true in use, where a pillow or foam material bearing the weight of a media device during operation may result in different angles in use compared to when the device is not load-bearing, depending on what is being displayed, due to deformation of the structure.

104. A POSITA would not have been ignorant of the nature of foam support devices in manufacturing and in use; rather, a POSITA would have readily appreciated that angles and even ranges of angles for such devices are necessarily going to be approximate based on the nature of using such materials for purposes of supporting media display devices.

105. Thus, it is my opinion, a POSITA would have understood in view of the disclosure of the Provisional and the nature of the invention the inventors of the Provisional were in possession of more than merely those three sets of angles shown in the three exemplary figures or approximations thereof, but a broader and more

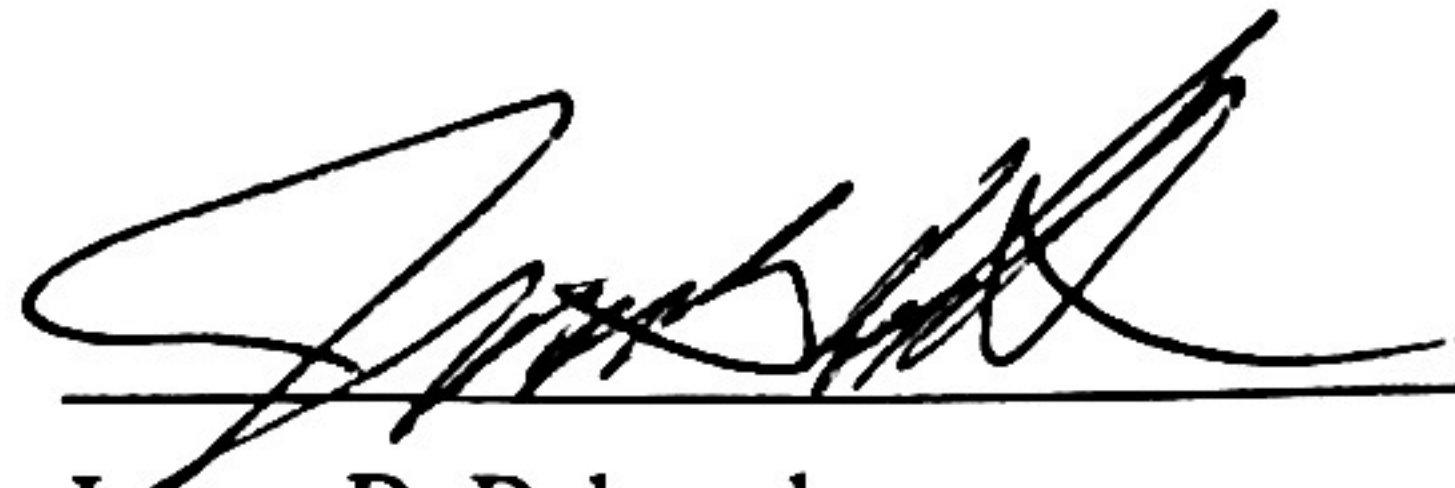
general invention rather, could vary within and between (and even beyond) those particular examples of the preferred embodiment.

106. In particular, this includes plane angles of 40 degrees (which is “something like” or “something approaching” the expressly disclosed example of 37 degrees) and of 80 degrees (which again is “something like” or “something approaching” the expressly disclosed example of 87 degrees), as well as sets of plane angles that sum to 180 degrees.

107. Thus, from the perspective of a POSITA, it is my opinion that the ’479 patent and Cannon Application both teach that each support side has a protruding edge support—which, in relation to the back support, forms “virtual” planes (on which the device can rest), so the angle of each back support relative to the virtual plane of an adjacent side can be “arranged” (slanted more or slanted less) to provide “an appropriate angle for [a particular] viewing position[.]” Ex. 1001 at 2:41–46; Ex. 2017 at [0015].

1 I declare under penalty of perjury that all statements made herein of my
2 knowledge are true, and that these statements were made with the knowledge that
3 willful false statements and the like are punishable under Section 1001 of Title 18
4 of the United States Code.

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7 Date: Jan. 22nd, 2026

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9 James B. Babcock

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DECLARATION OF JAMES B. BABCOCK

EXHIBIT A

James Bennett Babcock
President, MechEx, LLC
jbbabcock1963@gmail.com 410-599-2369

HIGHLIGHTS

- Degreed mechanical engineer with more than 40 years of experience developing intricate, high-speed industrial machinery, precision automation equipment, accurate custom testing systems, and consumer products ranging from complex to simple. Fully versed in all aspects of machine and product design.
- Expert witness since 2013 with casework in patent litigation, ITC, PTAB, contract law and personal injury cases, including trial testimony in Federal court, technical tutorials, expert reports and depositions.
- Accomplished department and project manager responsible for multidisciplinary staff and complex projects requiring 1000s of hours. Responsible for project budgets, schedules, system performance specifications, and machine build and commissioning. Full ownership of department personnel issues including performance reviews, hiring, and dismissals.

UNIVERSITY EDUCATION, PATENTS AND PUBLICATIONS

- Masters of Engineering Management, George Washington University, 1993
- Bachelor of Science in Mechanical Engineering, Lehigh University, 1985
- US 7,047,890: Integrated Flat Panel Workstation
- US 9,126,381: Box-Making Machines
- US 9,539,785: Box-Making Machines
- US 9,569,858: Cloud-Based System for Water Analysis
- US Application 17/358,192: Flip-Top Vial
- US Application 63/279,726: Multiple-Strip Reader
- Babcock, James, *Getting the most out of your FDM 3D printer*, Machine Design, October 2015
- Babcock, James, *3D Printing Tips and Techniques - Part 4*, Machine Design, December 2015
- Babcock, James, *Getting the most out of your FDM 3D printer, Part 2*, Machine Design, January 2016
- Babcock, James, *Overconstraint – The Hidden Killer*, Machine Design, May 2016

CONTINUING EDUCATION

- Patent Design Arounds: Minimizing Risk of Infringement or Reducing Likelihood of Design Arounds
- 3D Printing: Implications for Patents, Trademarks, Trade Secrets and Copyrights
- Obviousness Standard After the AIA: Leveraging Latest PTO and Court Guidance
- Section 102 and Prior Art: Navigating the Expanded Scope of Prior Art and AIA Exceptions
- Simplifying Scientific Evidence for Jurors
- ISO14119: The New Machine Safety Standard for Guard Door Interlocks
- TRIZ: Systematic Innovation Methods for Product Development
- LEAN Facilities Design
- FCC Part 15 Compliance
- Patent Claims: After Williamson
- Trademarks: Basics, Filing, and Enforcement

WORK HISTORY

12/2021—Present: President, MechEx, LLC, Phoenix, MD
Engineering and expert witness consulting practice.

8/2015—Present: Contributing Technical Expert, *Machine Design* Magazine

- Write articles on various topics pertaining to the field of machine design.

10/2017—1/2022: VP of R&D Engineering, Taylor Technologies, Inc., Sparks, MD
New position reporting to the CEO of this specialty chemical company. Responsible for overseeing all aspects of product development and engineering operations.

11/2011—10/2017: Director of Engineering, Taylor Technologies, Inc., Sparks, MD
New position reporting to the CEO of this specialty chemical company. Responsible for overseeing product development, automation, and engineering operations.

- Invented an in-store water-testing kiosk for the mass-merchant market that tests a customer's swimming pool water automatically and provides them with complete pool treatment requirements: chemicals needed, dosing, and instructions. A completely new packaging system was created for the water test strips used in the kiosk in order to enhance the user experience and further differentiate the product from the competition. First-year beta test sales exceed \$1M, and full-scale implementation will exceed 4000 units.
- Created a line of in-store testing stations for swimming pool stores that replaces all manual operations using micropumps and automation to reduce testing time and

eliminate operator errors. To date, \$2M in sales on the equipment; back-end consumables are just coming up to speed.

- Oversaw \$3M project to bring in-house the manufacture of all aspects of test strips. This included the coating, floatation drying, slitting, rewinding, and lamination operations. Also oversaw manufacture of the equipment at selected vendors and expansive facility build project to house the new process. Included management of state and local regulatory compliance with safety, environmental, and fire codes.

9/2010—10/2011 Engineering Manager, McCormick & Company, Atlanta, GA

- Created and implemented all capital projects. Oversaw with 11 direct employees, the IT and Maintenance functions for plant and a budget of \$850,000 (maintenance) and \$6M (projects).

6/2008—9/2010: Director of Engineering, SUN Automation Group, Sparks, MD

Selected for newly created position in the corrugated box machinery company to invigorate product development and oversee engineering and technical operations within the \$62M international machinery company. Reporting directly to the president. Drove new product development, process improvements, and market expansion. Extensive daily interaction with sales and manufacturing groups. Presented regularly to Board of Directors on status of department and projects. Managed staff of 22 in Engineering Department.

- Developed/executed a revolutionary, patented machinery product; results include \$10M in incremental annual sales plus revitalization of spare parts business. This is now the flagship product of the company.
- Created unique visual scheduling system that enabled team to stay on target and deliver between 10 and 20 production engineering jobs per week, including retrofits and ETO (Engineer to Order) items.

6/1994—9/2005 and 9/2006—6/2008: President, Integer Design and Engineering, Inc., Sparks, MD

Founder and Principal Engineer. Directed all technical activities within the 12-person company, as well as finance, marketing and sales.

- Selected by Black and Decker to design and build multiple automated test cells for various power tools and consumables.
- Created mechanical design and working prototypes for Avery Dennison that resulted in the first automated handheld, battery-operated cable tie gun.
- Retained by NxStage Medical to design and build 1st and 2nd round prototypes for the disposable tube and filter sets used in their patented home hemodialysis equipment, as well as the pumping and valve systems.

- Designed and prototyped several foam and fabric soft and sewn consumer products. Also sources volume manufacturing solutions for these products.
- Designed the injection-molded packaging and engineered and built the high-speed automated assembly line for a local client's high-volume consumer product that accounts for 1/3 of their sales.
- Other clients included Becton Dickinson, McCormick & Company, Locke Insulator, EPI Labelers, AMBEC, J.L. Wickham, Ward Machinery, KBA North America, JLS Automation, Hershey Foods, Vasca, Georgia Pacific, Harley Davidson, Sylvania.

9/2005—9/2006: Manager - Product Development, KBA North America, Inc., York, PA

- Drove all new product development activities within the \$35M division of the German ISO 9000 certified printing press company.
- Selected to oversee strategic project that created a system to automatically change the anilox rolls on the printing press. Resulted in a leading edge product in direct print corrugated packaging.

11/1992—6/1994: Senior R&D Engineer, AMBEC, Inc., Owings Mills, MD

- Developed, tested, and launched new products in a wide range of food, beverage, and consumer products industries. Provided field support for prototypes and newly developed machinery across the country.

11/1991—11/1992: Senior Engineer, J.L. Wickham Co., Inc., Baltimore, MD

- Designed workholding fixtures and machining stations for high-volume machine tool systems used in the automotive industry.

7/1985—11/1991: Senior Project Engineer, Prime Technology, Inc., Hunt Valley, MD

- Designed and engineered machinery for the corrugated box industry that enhanced the performance of existing capital equipment. This included high-speed feeding systems, machine vision registration systems, and counting/stacking systems.

CURRENT AFFILIATIONS

- ASME (The American Society of Mechanical Engineers)
- SME (The Society of Manufacturing Engineers)
- SAE (The Society of Automotive Engineers)

OTHER SKILLS

- Languages: English (native), Spanish (proficient+), German (intermediate), Mandarin Chinese (basic).
- Industrial: Welding, fabrication, milling, turning, 3D printing, machine rebuilding and restoration.

VOLUNTEER WORK

- 1/2016 –Present: Consulting Engineer, Project oversight committee member, V-LINC.org
 - V-LINC is a non-profit organization that serves people with disabilities of any kind in central Maryland. They bring volunteer engineers together with people who can't find a commercial solution to their unique needs.
 - Oversight committee member, project engineer, working one-on-one with clients, then designing and building a solution that meets their unique needs.

EXAMPLES OF MACHINERY AND PRODUCTS DESIGNED AND ENGINEERED

- Sheet feeders
- Flexographic printers
- Linear actuators
- Pick and place mechanisms
- Labelling machines
- Product inserters
- Vacuum sheet transfers
- Servo counter ejectors
- Anvil trimmers
- Sheet-fed digital printers
- Medical waste sterilizers
- Conveyor systems
- Bottle washers
- Soldering systems
- Die-cutting machines
- Angle grinder test cells
- Corrugated box machines
- Sortation systems
- Postal machinery
- Linear actuators
- Dialysis machines
- Cable tie guns
- Machine tools
- Tooling fixtures
- Optical instruments
- Retail kiosks
- Dispensing machines
- Gear reducers
- Cleaning systems
- Agricultural tillers
- Bottling lines
- Concrete reinforcing systems
- Rolling beach chairs
- 3D imaging systems
- Injection-molding tools
- Test strip retail dispenser cases
- Stacking machines
- Dredge and barge cranes
- Welding systems
- CNC cutoff saws
- Brush-making machines
- Foundry brick automation machines
- Vibratory parts feeders
- Workholding fixtures
- Bottling machines
- Sheet feeding systems
- Parts feeding mechanisms
- Part orienting systems
- Inserting machines
- Color recognition devices
- Molded bottles
- Optical scanning systems
- Filling machinery
- Folding beach chairs
- Soft sewn products
- Heat sealing systems
- Mobile device mounting systems