UNITED STATES DISTRICT COURT
MIDDLE DISTRICT OF NORTH CAROLINA
Case No. 1:15-CV-889

TEST PRODUCTS INTERNATIONAL, an Oregon Corporation, Plaintiff, vs. DANIEL BARBER SULLIVAN, an individual Defendant.	**COMPLAINT FOR:** **1. DECLARATORY JUDGMENT OF PATENT INVALIDITY AND NON-INFRINGEMENT** **2. PRODUCT DISPARAGEMENT** **3. UNLAWFUL TRADE PRACTICES (LANHAM ACT § 43)** **DEMAND FOR JURY TRIAL**

Plaintiff TEST PRODUCTS INTERNATIONAL ("Plaintiff"), for its Complaint against defendant DANIEL BARBER SULLIVAN ("Sullivan"), alleges as follows:

THE PARTIES

1. Plaintiff is an Oregon corporation having its principal place of business located at 9615 SW Allen Blvd., Beaverton Oregon, 97005.

2. Defendant Sullivan is an individual who, upon information and belief, resides at 7 Spring Water Lane, Durham, North Carolina.

NATURE OF THE ACTION

3. This is a declaratory judgment action seeking a determination that (1) U.S. Patent No 6,356,853 ("the '853 Patent") is invalid under 35 U.S.C. §102, 35 U.S.C. §103, and/or 35 U.SC. §112; and (2) the manufacture and sale of the EECT 400 by Plaintiff or any other person or entity does not infringe any valid or enforceable claim of the '853 Patent under 35 U.S.C. § 271. Plaintiff also alleges trade libel under Oregon common law and violation of the Lanham Act (15 U.S.C. § 1125).

4. On information and belief, Sullivan is the owner of the '853 Patent, entitled "Enhanced Voltmeter Functionality." issued on March 12, 2002. A true and correct copy of the '853 Patent is attached as **Exhibit A**.

JURISDICTION AND VENUE

5. This is a complaint for declaratory relief under the patent laws of the United States, 35 U.S.C. §§1, et seq., with a specific remedy sought under the Federal Declaratory Judgment Act, 28 U.S.C. §§ 2201 and 2202. An actual, substantial, and continuing justiciable controversy exists between Plaintiff and Sullivan that requires a declaration of rights by this Court. This court has subject matter jurisdiction over this action under 28 U.S.C. §§ 1331, 1338, 2201, and 2202.

6. This is also a complaint for trade libel under Oregon common law and violation of the Lanham Act (15 U.S.C. § 1125). This court has supplemental jurisdiction to hear these claims under 28 U.S.C. § 1367.

7. This court has general personal jurisdiction over Sullivan because Sullivan resides in North Carolina. The court has specific personal jurisdiction over Sullivan because Sullivan has filed a patent infringement lawsuit in the Middle District of North Carolina against Snap-on Tools, alleging that the EECT400 infringes the '853 patent.

8. There presently exists between the parties a real and substantial controversy, of sufficient immediacy and reality to warrant issuance of a declaratory judgment against Plaintiff, because Sullivan has filed a complaint against Snap-on Tools, Incorporated (Snap-on) alleging that Snap-on's sales of the EECT400 circuit tester (EECT400) violates the '853 patent. Plaintiff is the manufacturer of the EECT400 products at issue in Sullivan's complaint of patent infringement.

9. Venue is proper in this judicial district pursuant to 28 U.S.C. §§1391(b) because, among other reasons, Sullivan's complaint for patent infringement was brought in this district.

THE SUBSTANTIAL CONTROVERSY BETWEEN THE PARTIES

The Prosecution History of the '853 Patent

10. On December 27, 1999 Sullivan filed in the United States Patent and Trademark Office (USPTO) a nonprovisional patent application ("application"), Serial No. 09/472,425 entitled "Enhancing Voltmeter Functionality." This application issued as the '853 patent.

11. The specification of the '853 patent ("specification") discloses devices and methods that test for defects in electrical circuitry delivering current and/or voltage to electrical or electromechanical devices. One specific type of defect indicated as being detectable by the disclosed devices and methods was described in the "Background of the Invention" section as "high resistance faults caused by corrosion" within a circuit under test.

12. In order to detect "high resistance faults caused by corrosion" within a circuit under test (CUT), the specification disclosed, in the "Summary of the Invention" section, "circuitry for dynamic testing of a circuit under load" where the "circuitry includes a test load adapted to be coupled between inputs of a voltmeter, and a switch adapted to short circuit test leads of the voltmeter through the test load."

13. The specification recited in the "Summary of the Invention" section that the disclosed "circuitry can be used systematically in locating and identifying the fault from voltage readings at the location of a removed component or a blown fuse or circuit breaker in the circuit under test. Voltage drop readings are obtained

at various points in the circuit under test with the test load both coupled and decoupled between (or effectively coupled between) the test leads."

14. The specification disclosed (at column 5 line 67 to column 7 line 2 of the published '853 patent) that "[c]ontact can be made with [test leads] respectively, to [the] terminals . . . of the [circuit under test] at (sic) usually couple to the component before its removal."

15. The specification (at column 9 lines 4-7 of the published '853 patent) disclosed that with the test leads coupled to the circuit under test as described in paragraph 14, and assuming that the circuit under test had no open or short circuits, "the voltmeter 108 would indicate nominal system voltage with the switch 130 turned off."

16. The specification (at column 9 lines 10-15) disclosed that after "closing the switch 130 to couple in the test load 115 . . . if the voltmeter 108 reading remains substantially constant at the nominal system voltage or drops only slightly, then the user/technician can assume that no additional undesired resistance exists in the CUT 110."

17. The specification (at column 6 lines 57-60) disclosed that, in the circumstance of paragraph 16, "the nominal or nearly nominal voltage drop value is obtained . . . from the series combination of the test load 115 and the negligible circuit resistance being tested under load."

18. Conversely, the specification (at column 6 line 67 to column 7 line 3) disclosed that "a voltage drop across the test load 115 far below an expected voltage drop (e.g. well or substantially below the expected system voltage) indicates that an undesired high resistance fault exists somewhere in the CUT 110."

19. Thus, as shown in paragraphs 11-18, the application filed in the USPTO disclosed that "a test load adapted to be coupled between inputs of a voltmeter, and a switch adapted to short circuit test leads of the voltmeter through the test load" enabled the detection of a high resistance fault, such as a corrosion fault, in a circuit under test. Specifically, when the test leads of such an apparatus were connected across the terminals of a removed component ordinarily powered by the circuit, the switch allows readings to be taken of an open circuit, or static circuit voltage across the terminals, as well as a closed circuit, or dynamic voltage reading across the terminals as current flows through the test load, which replaces the removed component. Any significant voltage drop of the dynamic voltage reading relative to a static system voltage reading can be inferred to be caused by a high resistance fault such as a corrosive fault.

20. Every claim of the application, as filed, required the limitations of (1) a "test load" and (2) "a switch" to "short circuit" test leads (or inputs) of the voltmeter through the test load.

21. Attached as **Exhibit B** is a true and correct copy of the claims of the application, as filed, retrieved from the USPTO file history of the '853 patent.

22. The Examiner, in an Office Action mailed on October 4, 2000, rejected every claim then pending as being unpatentable over Hanson, U.S. Patent No. 2,432,013 (Hanson). Attached as **Exhibit C** is a true and correct copy of the Office Action mailed on October 24, 2000, retrieved from the USPTO file history of the '853 patent. Attached as **Exhibit D** is a true and correct copy of Hanson.

23. Hanson was published in December of 1947 and disclosed a device for testing current leakage in a battery.

24. Hanson disclosed, in its only drawing, a voltmeter 5 having test leads, along with a switch 7 that alternatingly coupled a resistor 6 between the test leads of the voltmeter and decoupled the resistor from between the test leads of the voltmeter.

25. Sullivan's application indicated at col. 4 lines 22-24 that "the test load 115" could be "for example, a load, resistor, resistive load, emulated resistive load, and the like of known resistance that can couple across the leads 100A and 100B."

26. In response to the citation by the Examiner to Hansen, in a February 8, 2001 amendment, every claim of Sullivan's application, as filed, was amended to require either the limitation of "the test load replacing a component of the circuit under load" or a limitation that the test load be "for replacing a component of the

circuit under load." Attached as **Exhibit E** is a true and correct copy of the February 8, 2001 amendment, retrieved from the USPTO file history of the '853 patent.

27. In the February 8, 2001 amendment, the applicant also added new claims, where every new claim except claim 39 (corresponding to claim 44 of the issued patent) required a "test load adapted to be coupled between test leads of a voltmeter" and "a switch adapted, when closed, to couple the test load between the test leads and, when opened, to decouple the test load from the test leads."

28. Claim 39 of the amendment adding new claims recited the limitations of "a load adapted to be switchably coupled between . . . first and second test leads such that, in one switchable state, the load completes the circuit under test, replacing a component of the circuit under test."

29. In the February 8, 2001 amendment, at page 13, the applicant argued that the claims, as amended, distinguished over Hanson because "Hanson is not replacing a component of a circuit under load. Hanson has no way of replacing a component of a circuit under load."

30. In a final Office Action mailed on March 9, 2001 (Final Office Action), the Examiner rejected all pending claims as being obvious over respective combinations, each citing Hanson as the primary reference. Attached as **Exhibit F**

is a true and correct copy of the Final Office Action, retrieved from the USPTO file history of the '853 patent.

31. In the Final Office Action, at page 3, the Examiner wrote that, although "Hanson does not teach that the test load replaces a component of the circuit under load . . . [a] well known troubleshooting technique is to remove a suspect component of a circuit or system and replace it with a component known to be operating correctly or with a part which will simulate the correct operation of the removed part. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include removing a component from a circuit and replacing it with a test load of comparable or equal value in the voltmeter, as taught by Hanson, because then one could quickly determine whether a single faulty component is causing a malfunction of a circuit."

32. In response to the Final Office Action, the applicant submitted an after-final amendment dated August 9, 2001 (After-Final Amendment). Attached as **Exhibit G** is a true and correct copy of the After-Final Amendment, retrieved from the USPTO file history of the '853 patent.

33. In the After-Final Amendment, the applicant amended independent claim 22 to recite the limitation that "when the test leads are coupled to the circuit under test and the switch is closed, the test load replaces a component of the circuit under test."

34. In the After-Final Amendment, the applicant also amended every independent claim to specify that the voltmeter recited in the claims was a "digital voltmeter."

35. Along with the After-Final Amendment, the applicant also submitted the personal declaration ("Declaration") of the inventor and applicant Daniel Barber Sullivan (Sullivan), defendant in the present case. Attached as **Exhibit H** is a true and correct copy of the Declaration, retrieved from the USPTO file history of the '853 patent.

36. In the Declaration, Sullivan represented in headings 3 and 4 that he had "been involved in the field of heavy vehicle maintenance, troubleshooting, and repair for 20 years, in both training and technician capacities" and that he was "very familiar through both the practice of the art of the associated methods of troubleshooting, and the teachings of those arts, with 1999 and prior methods, as well as 1999 to current methods of electrical troubleshooting."

37. In the Declaration, Sullivan wrote in heading 8 that the pending claims were distinguished over the cited prior art because "[n]one of the references cited by the Examiner - which represent a portion of the 1999 art of troubleshooting – in any case, include in their respective troubleshooting logic, any steps that involve the use of an analog voltmeter and shunt resistor as taught by Hanson to locate a resistance fault."

38. In the Declaration, in heading 9, Sullivan stated that "[i]n the application under consideration (09/472,425), the test load is placed in series with the real circuit under test by replacing the installed component. The Examiner admits that Hanson does not teach the replacement of a load component."

39. In the Declaration, in heading 11, Sullivan stated that the "Volvo Manual . . . further teaches (citation f., p. 6) that 'Any abnormal resistance reduces the current flow in a circuit and leaves the unit intermittent or non-functioning', and then states, 'A voltmeter, depending on where it is placed in relation to the open circuit, may or may not give a reading'. Volvo thus teaches away from using a voltmeter for locating a resistance fault. This clearly illustrates that the current art does not teach the use of a method or device as described in the application under consideration (09/472,425)."

40. In the Declaration, in heading 15, Sullivan stated that "In application 09/472,425, the claims recite the removal of a component and the use of the test leads to apply a load to the circuit in place of the removed component. Hanson does not apply a load to a circuit, but creates a circuit in parallel with an inadvertent circuit where one does not exist . . . . One skilled in the art would not look to Hanson for using Hanson's shunt resistor to replace a component in a circuit under test and use Hanson's analog voltmeter to test for faults in the circuit under test, as in the invention of application 09/472,425."

41. On or about October 31, 2001, Sullivan participated in a personal interview with the Examiner. Attached as **Exhibit I** is a true and correct copy of an Interview Summary documenting the personal interview, retrieved from the USPTO file history of the '853 patent.

42. The Interview Summary indicates that "Mr. Sullivan used his invention to demonstrate how a test load improved the troubleshooting function of a digital voltmeter by replacing a component of a circuit under test with the test load. When the digital voltmeter is used without the test load a simulated corrosion fault was not detected. When the test load was introduced the corrosion fault was immediately apparent. Mr. Sullivan explained that the sensitivity of digitall (sic) voltmeters is a disadvantage to seeing corrosion faults. With this invention a one point test is used to identify a fault. It was made clear that the component is replaced with a test lead, rahter (sic) than another component of the same kind . . . . Mr. Gross stated that the prior art used to show well known troubleshooting techniques teaches away from replacing a component and this along with the fact that Hanson teaches an analog voltmeter to test for a different type of fault makes an obviousness-type rejection improper."

43. Following the October 31, 2001 personal interview, the applicant submitted a Supplemental Interview Summary, a true and correct copy of which is attached as **Exhibit J**, retrieved from the USPTO file history of the '853 patent.

44. The Supplemental Interview Summary recited that "SPE Hoff and Examiner Barbee provided applicant with an Interview Summary at the conclusion of the interview, which included some changes suggested by Applicant. Applicant accepts the substance of the Interview Summary in this matter. Applicant, however, wishes to make additional changes, specifically a typographical correction (pointed out by Mr. Gross during the interview) and a phrase change to further clarify the phrase's actual meaning in the Interview Summary to reflect what was understood by all interview participants at the time. Applicant had accepted the Interview Summary perhaps a little too hastily in the nervousness of moment, and upon further review, decided that these changes should be made. The changes are set forth below.

. . .

1. In the second paragraph, fourth sentence, the word "lead" should be replaced with "load" so that it reads "test load"; and

2. In the second paragraph, fourth sentence, after the now corrected "test load," the phrase "rahter [sic] than another component of the same kind" should be replaced with "rather than with the identical replacement component," which more clearly expresses the actual meaning of the former phrase prior to this change."

45. In a Notice of Allowability, mailed on November 6, 2001, a true and correct copy of which is attached as **Exhibit K**, and retrieved from the USPTO file history of the '853 patent, the Examiner stated as reasons for allowance that "Neither Hanson nor Scott et al. teach dynamic testing of a circuit under load that includes a test load that can be coupled between the leads of a voltmeter replacing a component of the circuit. Further, the prior art teaches away from the troubleshooting technique of removing a component and replacing it with a component known to be in good condition."

46. The '853 patent issued on March 12, 2002.

The EECT 400

47. Plaintiff manufactures the EECT400, a digital voltmeter that includes a backlit color LED display that shows a color indicative of whether the voltage reading taken from the tip of the voltmeter is touching power or ground.

48. The EECT400 is manufactured in South Korea and is imported as a finished product into the United States. Attached as **Exhibit L** is a copy of packaging in which the EECT400 is sold and instructions provided with that packaging, respectively, both of which recite text indicating that the EECT400 is manufactured in South Korea.

49. Plaintiff provides the EECT400 to Snap-on, which sells the EECT400 to its customers.

50. The EECT400 as manufactured and sold does not have a test load adapted to be coupled between inputs of a voltmeter (or test leads of a voltmeter) nor does it have a switch adapted to short circuit test leads of the voltmeter through a test load.

51. The EECT400 as manufactured and sold does not have any load that replaces a component of a circuit being tested.

52. The EECT400 competes with one or more circuit testers Sullivan licenses under his '853 patent. Sullivan profits from the sales of these circuit testers that compete with the EECT400.

Sullivan's Disparagement of the EECT400

53. After the '853 patent issued to Sullivan, he attempted to commercialize it with limited success. In one Internet post, Sullivan stated that he was "disappointed that the LOADpro Leads (sic) I developed in a class in 1999 and patented in 2002 haven't been better promoted." This post may be accessed at http://www.garagejournal.com/forum/showthread.php?t=157064&page=2.

54. In other public statements, which can be accessed at http://www.garagejournal.com/forum/showthread.php?t=178561&page=5, Sullivan described frustrations he experienced after trying to market his product by sending the tool to be evaluated by numerous engineers at different tool manufacturers, but receiving negative evaluations.

55. In response to these rejections, Sullivan repeatedly and publicly expressed his view that his licensed product, ostensibly covered by his '853 patent, permitted a simple diagnostic procedure that made obsolete more expensive tools that used much more complicated diagnostic procedures. Sullivan alleged that the reason his product was received negatively by the engineers to whom he had sent his licensed product, was not because it did not present a simpler diagnostic solution than existing circuit testers, but because its adoption would require that engineers re-write the manuals they had spent a large amount of time writing, "making everything [the engineers have] done in the past several years useless" and that this would "risk their jobs."

56. In one particular diatribe, Sullivan stated that "I'm not going to shut up, I'm not going to back down, and I'm going to be the voice of the thousands of us who are out there desperately trying to fix this junk that the engineers who are so much smarter than us that they made straight-A's in English and they can't communicate for squat. I'm trying to teach them how to work on this stuff, we don't get data that's worth a damn, they give us procedures and processes that are pointless and stupid, and I invent a tool after thirty years in the industry that actually solves the problem, and I've been handed the . . . I've been shown the door. Repeatedly. By engineers who are too arrogant and pinheaded to acknowledge that I actually came up with a solution that they couldn't. Tough."

57. Sometime beginning in and around early 2006, pursuant to the efforts to monetize his patent referenced in paragraph 53, Sullivan began soliciting Snap-on to sell a product developed by Sullivan and allegedly employing his patent. Sometime after July 2006, Sullivan sent a sample product to Snap-on for review. Snap-on's initial review of the tool was mixed, and Snap-on was uncertain whether Sullivan had the capability to manufacture the product for Snap-on. Snap-on thus did not become a supplier of Sullivan's tool at that time, although much later in 2011 Snap-on eventually became a supplier of the EECT180 under its Blue-point brand, which Snap-on believes Sullivan is paid a license by the manufacturer..

58. Sullivan publicly indicated his displeasure at Snap-on, stating that "I am angry. I am angry because I am being taken advantage of, I'm angry because in my opinion, the work that I've done and paid for through the patent process, which cost me a lot more than money . . . I believe that I'm being abused by Snap-on because all they had to do was call me and say 'hey Dan . . . great tool – David Brekke here – we'd like to sell it.' 'Okay, sign a license deal.' 'No problem.' Manufacture it, everybody's happy. They make a little money, I get a little bit of money. Everybody's happy. That's the capitalist way. I'm a capitalist."

59. After Snap-on's introduction of the EECT 400 in 2013, Sullivan discovered a Snap-on press release from Mr. Brekke introducing the EECT400. Sullivan viewed the EECT400 as another circuit tester that was inferior to his own

product in that he did not believe that the EECT400 was capable of diagnosing the types of circuit faults that his licensed products were capable of diagnosing.

60. After seeing the press release referenced in paragraph 59, Sullivan publicly indicated that he was especially upset because David Brekke had the "audacity" and "nerve" to introduce the EECT400 when "he knew that my tool was there and he didn't adopt it for whatever reason he had for not adopting it, even though that was his job . . . to produce and sell the most profitable and functional solution to problems." Sullivan also stated that he was angry at Brekke's "grandiose promises of [the EECT400's] ability to do wonderful things . . . [that] it can't do."

61. On or about May 15, 2014, Sullivan sent an e-mail to Snap-on stating his "expert opinion" that the EECT400 infringed the '853 patent. A true and correct copy of this e-mail is attached as **Exhibit M**.

62. The e-mail attached as **Exhibit M** also included an allegation by Sullivan that in addition to infringing the '853 patent in the United States, the EECT400 also infringed a corresponding European patent, EU1203202.

63. At the time Sullivan alleged that the EECT400 infringed his European '202 patent, all his patent rights had previously expired in Europe due to the failure to pay periodic maintenance fees required to keep the patent in force.

64. Snap-on forwarded Sullivan's e-mail, referenced in paragraph 61, to plaintiff. After investigating Sullivan's allegation, including reviewing the specification and file history referenced in paragraphs 10-46, plaintiff responded to Sullivan on July 17, 2014. **Exhibit N** shows a true and correct copy of the plaintiff's response.

65. The response attached as **Exhibit N** informed Sullivan that plaintiff manufactured the EECT400.

66. The response attached as **Exhibit N** informed Sullivan that the EECT400 "is not covered by any claim of the '853 patent. Specifically, the EECT 400 does not include a 'test load' that 'replaces a component of a circuit' being tested." The response further informed Sullivan that "the EECT 400 lacks a 'switch to short circuit test leads' through any load (let alone a 'test' load)."

67. At the time Sullivan was sent the response attached as **Exhibit N**, Sullivan had already publicly acknowledged that his patent claims required a switch that short circuits a load through the test leads of a voltmeter.

68. Specifically, on or about December 17, 2012, after publishing an Internet video accusing the Waekon Volt-Pro of infringing the '853 patent, Sullivan posted to an Internet board that his "patent establishes a switched load through leads to a voltmeter. The Volt-Pro has a voltmeter, a load and a switch --- it's pretty clear." This comment appeared on the thread "Waekon patent

infringement on Loadpro" of the Garage Journal Board, http://www.garagejournal.com/forum/showthread.php?p=2760455.

69. On or about June 16, 2014 Snap-on sent Sullivan a response also indicating that the EECT400 did not infringe his '853 patent.

70. On or about June 25, 2014, Sullivan sent an e-mail to Snap-on that accused the EECT400 of being a product that "doesn't work" and being a "tool that has no operational diagnostic purpose." Attached as **Exhibit O** is a true and correct copy of this e-mail.

71. In the e-mail attached as **Exhibit O**, Sullivan further threatened to publicly release "a professional quality video online . . . explaining the total lack of operational effectiveness of your EECT400, and waiting for the video to go viral when all of the mechanics of the world witness proof of what they've known for years - tool companies are only interested in profits." A link to a draft of the threatened video was provided for Snap-on to view.

72. The threat described in paragraph 71 was made, at least in part, for the purpose of obtaining a competitive advantage for Sullivan's licensed products relative to the EECT400.

73. After Snap-on failed to respond to this threat, Sullivan engaged in a pervasive Internet campaign to falsely convince prospective purchasers that the EECT400 infringed his patent rights, and to disparage the quality of the EECT400.

74. On or about August 13, 2014, Sullivan publicly posted a modified version of the video referenced in paragraph 71. The video, entitled "Mr. Nick Pinchuk - Snap-on CEO - I'm calling you out..." is accessible at www.youtube.com/watch?v=ir3FLhP5URQ and was posted with the comment "EECT400 – Epic fail . . . ."

75. In the public video referenced in paragraph 74, Sullivan stated that the "EECT400 doesn't work." Sullivan accused the EECT400 of being a "tool that fails" and compared it to a "pig with lipstick." Sullivan continued to assert that the EECT400 was "essentially useless" and "does not do anything of value." He asserted that the EECT400 was "junk" that is "hurting people."

76. In the public video referenced in paragraph 74, Sullivan stated that the EECT400 was "operationally useless and fundamentally a piece of crap . . . or you could call it a turd, I guess." Sullivan continued by asserting that the EECT400 was a "throwback to the 1950s" and "can't do shit."

77. In the public video referenced in paragraph 74, Sullivan reiterated the assertion that the EECT 400 infringes his '853 patent.

78. In making the assertion in the public video referenced in paragraph 74 that the EECT400 infringes his patent, Sullivan deliberately misrepresented the scope of his patent as broadly covering diagnostic tools that "load" a circuit.

79. To ostensibly "prove" that the EECT400 "loads" a circuit, the video referenced in paragraph 74 included a demonstration in which Sullivan misleadingly rigged the demonstration by using the EECT400 to read a voltage in a circuit outside the specifications of the EECT400.

80. Specifically, Sullivan used the EECT400 to read a voltage in series with a 10,000 ohm circuit resistance – a resistance larger than the input resistance of the EECT400. The maximum circuit resistance that the EECT400 may be placed in series with, and still provide an accurate voltage reading, is 2500 ohms.

81. In Sullivan's demonstration, the voltage drop across the 10,000 ohm resistor was approximately 10 Volts, which did not leave enough voltage across the EECT400 to adequately power its internal circuitry. The minimum voltage necessary to power the EECT400 is openly advertised by Snap-on in its marketing materials. Sullivan's prior e-mail to Snap-on alleging infringement and attached as **Exhibit M** includes such marketing materials and shows that Sullivan was aware that he was testing the EECT400 outside of its specifications.

82. In the public video referenced in paragraph 74, Sullivan did not inform the viewers that each of his patent claims required the element of a "test load" and a "switch" to short the test load through test leads of a voltmeter. Nor did Sullivan inform viewers that each of his patent claims to a voltmeter or other

apparatus required that the test load "replace a component" of the circuit being tested.

83. At the time Sullivan released the video referenced in paragraph 74, Sullivan knew that the EECT400 did not infringe his patent because it did not include a "test load" that "replaced" a component of a circuit being tested.

84. Specifically, Sullivan had characterized the EECT400 as being a "standard, unloaded voltmeter" and a "tool . . . that doesn't load the circuit."

85. Furthermore, in a prior Internet video publicly uploaded in 2012, Sullivan indicated his awareness that the behavior shown by the EECT400, in the demonstration referenced in paragraphs 74 and 79-82, did not show infringement of the claims of his patent.

86. Specifically, on or about May 21, 2012 Sullivan uploaded an Internet video, accessible at https://www.youtube.com/watch?v=U_W-454cMIw, comparing his licensed product to the Power Probe III (Power Probe video) and including a demonstration similar to that later used with respect to the EECT400 and referenced in paragraphs 74-79.

87. In the Power Probe video, to show that the Power Probe III was only capable of reading an open circuit voltage, and not capable of loading a circuit to show a dynamic voltage drop across any circuit resistance, Sullivan sequentially used the Power Probe III to probe different locations in an open circuit, each

following an added circuit resistance of increasing value. When probing such locations, the Power Probe III showed source voltage until it was used to probe a point in the open circuit following a 100,000 ohm resistor. When probing the point following the 100,000 ohm resistor, the Power Probe III did not read source voltage, but instead read a voltage approximately 5 volts below the 12.6 source voltage.

88. Notably, after demonstrating that the Power Probe III showed a voltage less than source voltage when probing a location in a circuit having a very large circuit resistance, Sullivan acknowledged that the Power Probe III did not infringe his patent, despite this behavior. Specifically, in the comments posted to that video, Sullivan stated that "I've actually spent days setting up tests to see exactly what the PP3 does, how it does it, and what the technique in the manual teaches . . . There is no internal load in the PP3 - because of my patent."

89. Aside from the video referenced in paragraph 74, Sullivan repeatedly made other public comments disparaging the EECT400 and/or alleging that it infringed his patent.

90. For example, Sullivan made more than one Internet post alleging that the EECT400 was responsible for trucks breaking down on the side of the highway.

91. In another Internet post, Sullivan referred to the EECT400 as a "Stupid Hopeless Idiotic Tool." In a third post, Sullivan called the EECT 400 "a more expensive icepick that gives an incorrect answer" and in yet another called it "a crap tool that is detrimental to the people who buy it and don't understand its failings."

92. Sullivan released a second Internet video, accessible at https://www.youtube.com/watch?v=iMIbLj4Ast0, alleging that the EECT400's "design is really bad . . . and the tool in general is operationally worthless."

93. Sullivan's disparagement of the EECT400 was specifically intended to promote sales of his licensed product as an alternative to the EECT400. For example, Sullivan publicly asked in one Internet post "why would you buy and defend an $85 tool that fails when you already have a [Digital Multimeter] and my tool costs less?"

94. A specific aspect of Sullivan's promotion of his licensed product at the expense of the EECT400 was the public facade that the EECT400 infringed his patent. For example, in one Internet thread, when responding to an individual who argued that the EECT400 would be useful to a purchaser for determining circuit conditions other than those that Sullivan's product is intended to diagnose, Sullivan responded "except that the tool is specifically designed to determine the

'integrity' of the circuit, which is code for conductivity - which is what my patent protects."

95. Sullivan also launched a GoFundMe account to raise money from the public for the specific purpose of funding a patent infringement action over the EECT400, and money has been donated to this account.

96. As part of his campaign to raise money for an infringement lawsuit against the EECT400, and to convince customers that this prospective lawsuit had merit, Sullivan represented that he had an attorney who was assisting him in preparing the lawsuit as well as an expert witness who had evaluated the case. For example, in one Twitter post, Sullivan stated "One step closer to suing @Snapon_Tools . . . for patent infringement. Final meeting with lawyer Tuesday." In another Twitter post, Sullivan stated "One step closer to filing suit against @Snapon_Tools . . . expert witnesses signed on."

97. On or about October 6, 2015, when answering a declaratory judgment complaint filed by Power Probe in the Central District of California, Sullivan admitted that the "attorney" mentioned in the post referenced in paragraph 96 did not exist.

98. Sullivan also has acknowledged that the purpose of bringing an infringement action against the EECT400 is not to win the lawsuit. Instead, Sullivan acknowledged that "in truth - I expect to lose." Sullivan markets his

licensed product as making circuit testers like the EECT400 unnecessary, and also publicly alleges that their use is detrimental. Sullivan has indicated publicly that the primary purpose he has in filing a lawsuit is as a vehicle to advance these views and that, if as a result of the lawsuit "the world changes a little bit for the better - it will be worth it."

99. As a result of Sullivan's disparagement of the EECT400 and the allegations that it infringes his patent, plaintiff has lost sales.

100. In one specific instance, a person posting under the name "Brian_Sause" indicated that he returned an EECT400 that he had purchased, and replaced it with one of Sullivan's licensed products. This post can be accessed at http://www.garagejournal.com/forum/showthread.php?t=218644&page=2. In other posts in this same thread, "Brian_Sause" indicated that this decision was made after watching the video referenced in paragraph 74, and influenced in part by Sullivan's accusations of infringement. In one post in particular, "Brian_Sause" stated "why hate [Sullivan] for inventing a tool and wanting to get paid and to protect it. If he got the patent then shouldn't he be able to do what he could to protect it?" In another post, "Brian_Sause" indicated that the "snap-on (sic) man showed me the box and said that it test (sic) circuit 'integrity' and that that was code for loading the circuit (sic)" – language that closely follows Sullivan's public allegations of infringement against the EECT400.

101. Other prospective purchasers similarly expressed sentiments that their purchasing decisions were being influenced by Sullivan's Internet campaign against the EECT400.

102. As one example, a poster identified by name "John S" commented that "Dan: Just from your video, I am not impressed with Snap-On's EECT400." Another person, posting under the name "Dave_G" stated that "My dealer came in with the 24v version of this test light. I looked it over and passed . . . I just bought a load pro and I have to say it is an ingenious idea. Simple and accurate. Snap on markets this test light as a circuit tester, not a simple test light. It also states that it tests the 'integrity' of the circuit which we all know means a loaded circuit."

103. On or about June 12, 2015 Sullivan filed a *pro-se* lawsuit against Snap-on alleging that Snap-on's sales of the EECT400 infringed his '853 patent.

COUNT I: DECLARATION OF INVALIDITY OF '853 PATENT BASED ON ATKINSON, U.S. PATENT NO. 2,555,306 (35 U.S.C. § 103(a))

104. Independent claim 1 of the '853 patent claims

> Circuitry for dynamic testing of a circuit under load, comprising:
>
> a test load adapted to be coupled between inputs of a digital voltmeter, the test load replacing a component of the circuit under load; and

a switch adapted to short circuit test leads of the voltmeter through the test load.

"Circuitry for dynamic testing of a circuit under load"

105. The specification of the '853 patent discloses that dynamic tests occur when a "circuit under test is energized" (column 3 line 60).

106. The specification of the '853 patent discloses in the Background of the Invention that, in prior art techniques, having a circuit "active or energized . . . requires the circuit to be intact and the load to be installed."

107. Atkinson discloses at col. 1 lines 1-21 "novel electrical instruments" that "measur[e] the voltage drop and efficiency of electrical wiring under load conditions." Atkinson is attached as **Exhibit P**.

108. Atkinson discloses at col. 2 lines 14-38 and FIG. 1 a procedure of measuring a voltage drop, expressed as "IR" (or current times resistance), across a load after a switch is thrown to allow current to flow through the load.

109. Atkinson discloses "circuitry for dynamic testing of a circuit under load" as claimed in independent claim 1.

"a test load"

110. The specification of the '853 patent discloses at column 4 lines 21-24 that the "load circuitry 105 includes a test load 115, for example, a load, resistor,

resistive load, emulated resistive load, and the like of known resistance that can couple across the leads 100A and 100B."

111. The specification of the '852 patent discloses at column 4 lines 51-52 that "[i]n general, the test load 115 is in effect an artificial load for the removed component from the CUT 110."

112. Atkinson discloses at col. 1 lines 35-36 a "test load device."

113. Atkinson discloses at FIG. 1 and column 2 lines 14-16 that the test load device is a resistor 10 that "represents a load impedance, such as a wire wound resistor, electric iron, toaster, or other power consuming load."

114. Atkinson discloses "a test load" as claimed in independent claim 1.

"adapted to be coupled between inputs of a digital voltmeter"

115. The specification of the '853 patent discloses at FIGS 1 and 2A a test load 115 that is switchably coupled across the test leads of the voltmeter 108 so that the test load 115 is connected across the inputs of the voltmeter 108 when a switch 130 is closed.

116. Atkinson discloses at column 1 lines 35-36 that the voltmeter is "in parallel with a switch and the test load device."

117. Atkinson discloses at FIG. 1 that the test load device 10 is coupled across the inputs of the digital voltmeter when a switch 12 is closed.

118. Atkinson discloses that the test load device 10 is "adapted to be coupled between inputs of a . . . voltmeter" as claimed in independent claim 1.

"the test load replacing a component of the circuit under load"

119. The specification of the '853 patent discloses at col. 9 lines 1-20 that "the user/technician couples, at block 300 the test leads 100A and 100B of the voltmeter 108 on the CUT 110, replacing the component normally resident in the CUT 110 . . . by closing the switch 130 to couple in the test load 115. At block 330, if the voltmeter 108 reading remains substantially constant at the nominal system voltage or drops only slightly, then the user/technician can assume that no additional undesired resistance exists in the CUT 110 and the component itself that was removed probably has failed. This is because any added resistance (e.g. if there were no open circuit) in the CUT 110 would cause the voltmeter 108 reading to drop significantly due to the added voltage drop, according to Kirchoff's law."

120. The specification of the '853 patent, at column 6 lines 52-63, states that "[w]ith the switch 130 in the on position, as in FIG. 3, a nominal or nearly nominal (i.e., slightly less than) standard voltage reading is expected across the load 115 that completes the CUT without any adjustment in the location or settings of the voltmeter 108. The nominal or nearly nominal voltage drop value is obtained in the latter situation from the series combination of the test load 115 and the negligible circuity resistance being tested under load. This difference between a

static voltage test and a dynamic voltage drop test is one of the primary improvements of the invention over existing circuit troubleshooting systems."

121. Atkinson discloses at column 1 lines 5-10 "a need for a simple, compact, readily portable low cost device that can be used for quickly determining the relative adequacy of electrical wiring circuits such as house wiring circuits . . ."

122. Atkinson discloses at FIGS. 1 and 2, col. 1 line 36, column 2 lines 14-20, and column 3 lines 33-40 a "test load device" such as a test load 10 or test load 38 that may represent "an electric iron, toaster, or other power consuming load."

123. Atkinson discloses at FIG. 1 and column 2 lines 17-20 "a source of power, such as may be obtained at an outlet in a domestic wire circuit."

124. Atkinson discloses at FIG. 1 and col. 2 lines 22-34 that if "suitable load impedance 10 is connected to the outlet 11 by means of switch 12, the resulting IR drop in the circuit will result in a lower voltage, usually designated as the load voltage. The difference between the no-load voltage and the load voltage is essentially the IR drop of the supply circuit attributable to the load 10. This IR drop may be used as an indicator of the circuit adequacy, for example the smaller the IR drop the more adequate the circuit."

125. The procedure described in paragraph 85 is inherently performed without "an electric iron, toaster, or other power consuming load" plugged into the "domestic wire circuit" 11.

126. Atkinson discloses the use of the test load device with the test load device "replacing a component of the circuit under load" as claimed in independent claim 1.

"a switch"

127. The specification of the '853 patent states at column 4 lines 55-57 that the "load circuitry 105 also includes a switch 130 (termed an "ETL" switch which can be a push button or other type of switch) . . ."

128. Atkinson discloses at FIG. 1 and column 2 lines 19-20 a switch 12.

129. Atkinson discloses at FIG. 2 and column 3 lines 35-36 a relay 35.

130. Atkinson discloses "a switch" as claimed in independent claim 1.

"adapted to short circuit test leads of the voltmeter through the test load"

131. The specification of the '853 patent states at column 6 lines 15-26 that "[w]ith the switch 130 in the load circuitry turned 'on' i.e. closed) (sic) the switch 130 completes (in the sense of completing a circuit) the CUT 110 instead of the circuit component. The switch 130 short circuits the leads 100A and 100B of the voltmeter 108 (or short circuits the leads 100A" and 100B" of the voltmeter 108') for the purpose of completing the CUT 110 to make a dynamic test of the CUT 110 under load. The test load 115 can be electrically decoupled from the leads 100A and 100B (or the leads 100A" and 100B" of the voltmeter 108') and the CUT 110 by turning "off", (i.e. by opening) the switch 130."

132. Atkinson discloses in FIG. 1 and col. 2 lines 15-33 that with the switch closed, the test load completes the CUT instead of the circuit component, and that the test leads are therefore shorted through the test load.

133. Atkinson discloses a switch "adapted to short circuit test leads of the voltmeter through the test load" as claimed in independent claim 1.

a "digital" voltmeter

134. Atkinson's voltmeter is an analog voltmeter rather than a digital voltmeter.

135. Plaintiff re-alleges paragraphs 35-36

136. Atkinson discloses at column 2 lines 14-32 that the voltmeter 13 measures the difference in voltage across its inputs first with the switch12 open and then with the switch 12 closed. "The difference between the no-load voltage and the load voltage is essentially the IR drop of the supply circuit attributable to the load 10. This IR drop may be used as an indicator of the circuit adequacy, for example the smaller the IR drop the more adequate the circuit."

137. In the Declaration submitted to the USPTO, attached as **Exhibit H**, Sullivan at heading 11 informed the USPTO that at the time his application was filed, "digital voltmeters are 'highly recommended' because 'digital voltmeters are generally more accurate.'"

138. In the Declaration submitted to the USPTO, attached as Exhibit H, Sullivan at heading 11 also informed the USPTO that "[a]nalog voltmeters were not in general use in 1999 or today as electrical troubleshooting tools for resistance faults."

139. Since the function of Atkinson's voltmeter is simply to obtain accurate voltage readings across its inputs, with the test load alternately switched on and off, one of ordinary skill in the art at the time Sullivan invented his claimed subject matter, would have substituted a digital voltmeter for Atkinson's analog voltmeter because, as stated by Sullivan, "digital voltmeters are generally more accurate" and because "[a]nalog voltmeters were not in general use in 1999 or today as electrical troubleshooting tools for resistance faults."

140. Atkinson has a publication date prior to the effective filing date of the '853 patent. Therefore, at the time Sullivan invented claim 1, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 2

141. Dependent claim 2 of the '853 patent claims the "circuitry of claim 1, wherein the switch is adapted to be closed to complete the circuit under load."

142. Atkinson discloses in FIG. 1 and at col. 2 lines 15-33 that with the switch 12 closed, the test load 10 completes the circuit under load.

143. Therefore, at the time Sullivan invented claim 2, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 3

144. Dependent claim 3 of the '853 patent claims the "circuitry of claim 1, wherein the switch, when closed, is adapted to allow dynamic testing of the circuit under load."

145. Plaintiff re-alleges paragraphs 107, 108, 124, and 142.

146. Therefore, at the time Sullivan invented claim 3, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 4

147. Dependent claim 4 of the '853 patent claims the "circuitry of claim 1, wherein the test load and the switch are incorporated in the voltmeter."

148. Atkinson discloses in FIGS 1, 3, and 4 that the test load 10 may be incorporated within a voltmeter 18.

149. Atkinson discloses at FIGS 2-4 and at column 1 line 47 to col. 2 line 4 and at column 2 lines 39-54 that the test load 38 may be incorporated in a voltmeter.

150. Therefore, at the time Sullivan invented claim 4, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 5

151. Dependent claim 5 of the '853 patent claims the "circuitry of claim 1, wherein the test leads comprise conventional test leads."

152. Atkinson discloses at FIGS 1 and 2 conventional test leads.

153. Therefore, at the time Sullivan invented claim 5, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

154. Even if Atkinson did not disclose conventional test leads, claim 5 would be obvious in view of Atkinson and the admissions in Sullivan's Declaration because of the plain meaning of the word "conventional."

Dependent claim 6

155. Dependent claim 6 of the '853 patent claims the "circuitry of claim 1, wherein the test load comprises a resistive load."

156. Atkinson discloses at column 2 lines 14-16 that the test load 10 may be a "wire would resistor."

157. Atkinson discloses at column 3 lines 33-34 that the test load 38 may be an "impedance" which is a resistive load.

158. Therefore, at the time Sullivan invented claim 6, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 7

159. Dependent claim 7 of the ‘853 patent claims the “circuitry of claim 1, wherein the test load comprises a load adapted to drop an equivalent voltage drop to a removed component of the circuit under load.”

160. Plaintiff re-alleges paragraphs 122 and 124.

161. Therefore, at the time Sullivan invented claim 7, that claim was obvious in view of Atkinson and the admissions in Sullivan’s Declaration.

Independent claim 8

162. Independent claim 8 of the ‘853 patent claims

A method for dynamic testing of a circuit under load, the method comprising:

removing a component from the circuit under load;

coupling leads of a digital voltmeter to remaining terminals of the removed component in the circuit;

closing a switch to short circuit inputs of the digital voltmeter through a test load; and

making dynamic tests of the circuit under load using the digital voltmeter, the test load completing the circuit under load.

163. Plaintiff re-alleges paragraphs 104-140.

164. At the time Sullivan invented independent claim 8, that claim was obvious in view of Atkinson and the admissions in Sullivan’s declaration since one

of ordinary skill in the art would obviously perform the steps of claim 8 while using the device disclosed by Atkinson, as modified to include a digital voltmeter, whenever a device was already plugged into a circuit or outlet that is to be tested.

Dependent claim 9

165. Dependent claim 9 of the '853 patent recites the "method of claim 8 further comprising using a test load of comparable resistive load value as the removed component."

166. Plaintiff re-alleges paragraphs 122 and 124.

167. Therefore, at the time Sullivan invented claim 9, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 10

168. Dependent claim 10 of the '853 patent recites the "method of claim 8, wherein the completing the circuit under load comprises ensuring that a maximum current in the circuit under load remains below a maximum allowable for the circuit under load."

169. Atkinson discloses at column 1 lines 5-18 that his device is intended to be used to test "electrical wiring circuits such as house wiring circuits . . ."

170. At the time Sullivan invented claim 10, house wiring circuits were commonly connected to circuit breakers in a circuit breaker panel that ensure that a maximum current in the circuit remains below a maximum allowable amount.

171. Therefore at the time Sullivan invented claim 10, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Independent claim 11

172. Independent claim 11 of the '853 patent claims

An enhanced functionality digital voltmeter comprising:

Circuitry for dynamic testing of a circuit under load, comprising:

a test load adapted to be coupled between inputs of a digital voltmeter, the test load replacing a component of the circuit under load; and

a switch adapted to short circuit test leads of the voltmeter through the test load.

173. Plaintiff re-alleges paragraphs 114-140, 148, and 149.

174. Therefore, at the time Sullivan invented claim 11, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 12

175. Dependent claim 12 of the ‘853 patent claims the “enhanced voltmeter of claim 11, further comprising test leads adapted to be coupled to the circuit under load and to couple the test load to the circuit under load.”

176. Atkinson at FIG. 1 discloses test leads adapted to be coupled to the circuit under load and to couple the test load to the circuit under load.

177. Therefore, at the time Sullivan invented claim 12, that claim was obvious in view of Atkinson and the admissions in Sullivan’s Declaration.

Independent Claim 13

178. Independent claim 13 of the ‘853 patent claims

A method of enhancing digital voltmeter functionality, the method comprising:

incorporating, in a digital voltmeter, circuitry for dynamic testing of a circuit under load, comprising:

incorporating a test load adapted to be coupled between inputs of a digital voltmeter for replacing a component of the circuit under load; and

incorporating a switch adapted to short circuit test leads of the digital voltmeter through the test load.

179. Plaintiff re-alleges paragraphs 114-140.

180. At the time Sullivan invented independent claim 13, that claim was obvious in view of Atkinson and the admissions in Sullivan's declaration since one of ordinary skill in the art would obviously perform the steps of claim 13 when making the device disclosed by Atkinson, as modified to include a digital voltmeter.

Dependent claim 14

181. Dependent claim 14 of the '853 patent claims the "method of claim 13 further comprising coupling test leads of the voltmeter to the circuit under load."

182. Atkinson at FIG. 1 discloses test leads adapted to be coupled to the circuit under load.

183. Therefore, at the time Sullivan invented claim 14, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 15

184. Dependent claim 15 of the '853 patent claims the "method of claim 14 further comprising dynamically testing the circuit under load to identify the type and location of circuit faults in the circuit under load."

185. Atkinson discloses at column 1 lines 5-21 that the device disclosed therein is "used for quickly determining the relative adequacy of electrical wiring circuits."

186. Therefore, at the time Sullivan invented claim 15, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 16

187. Dependent claim 16 of the '853 patent claims the "method of claim 14, further comprising jumping the leads together through the test load."

188. The applicant re-alleges paragraphs 124 and 132.

189. Therefore, at the time Sullivan invented claim 16, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 17

190. Dependent claim 17 of the '853 patent claims the "method of claim 13 further comprising incorporating a variable test load in the voltmeter for applicability to different circuits under load."

191. Atkinson discloses in FIG. 2 and column 3 lines 3-14 a variable test load used to adjust the voltmeter to different types of circuits to be tested.

192. Therefore, at the time Sullivan invented claim 17, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 18

193. Dependent claim 18 of the '853 patent claims the "method of claim 13, further comprising incorporating a current limiting fuse or circuit breaker."

194. During prosecution, at page 7 of the Final Office Action attached as **Exhibit F**, the Examiner rejected claim 18 on grounds that "[i]t would have further been obvious to one of ordinary skill in the art at the time the invention was made to include a fuse or circuit breaker in the voltmeter . . . because then high current damages to the circuit being tested could be prevented."

195. The specification of the '853 patent discloses in FIGS 2, 3, 5-7, 9A-10B, and12A-13C as well as column 7 lines 35-41 that at the time that Sullivan invented claim 18, fuses were known to be useful to protect circuitry from excessive current.

196. Therefore, at the time Sullivan invented claim 18, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 19

197. Dependent claim 19 of the '853 patent claims the "method of claim 13 further comprising incorporating the switch for accessibility by a user/technician."

198. Atkinson discloses at col. 3 lines 17-20 and FIG. 4 a switch 26 that is accessible by a user/technician so that the switch can be manually operated between open and closed positions.

199. Therefore, at the time Sullivan invented claim 19, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 20

200. Dependent claim 20 of the ‘853 patent claims the “method of claim 13, further comprising providing the test load as an equivalent load of a component removed from the circuit under load.”

201. Plaintiff re-alleges paragraphs 122-124.

202. Therefore, at the time Sullivan invented claim 20, that claim was obvious in view of Atkinson and the admissions in Sullivan’s Declaration.

Dependent claim 21

203. Dependent claim 21 of the ‘853 patent claims the “method of claim 13, further comprising providing the test load as an artificial load of the circuit under load.”

204. Plaintiff re-alleges paragraphs 122-124.

205. Therefore, at the time Sullivan invented claim 21, that claim was obvious in view of Atkinson and the admissions in Sullivan’s Declaration.

Independent claim 22

206. Independent claim 22 of the ‘853 patent claims

> Circuitry for use in identifying a fault in a circuit under test, comprising:
>
> a test load adapted to be coupled between leads of a digital voltmeter; and

a switch adapted, when closed, to couple the test load between the test leads and, when opened, to decouple the test load from the test leads, wherein when the test leads are coupled to the circuit under test and the switch is closed, the test load replaces a component of the circuit under test.

"Circuitry for use in identifying a fault in a circuit under test"

207. Plaintiff re-alleges paragraphs 105-108.

208. Atkinson discloses circuitry for use in identifying a fault in a circuit under test as claimed in independent claim 22.

"a test load"

209. Plaintiff re-alleges paragraphs 110-113.

210. Atkinson discloses a test load as claimed in independent claim 22.

"adapted to be coupled between leads of a digital voltmeter"

211. Plaintiff re-alleges paragraphs 115-117.

212. Atkinson discloses a test load adapted to be coupled between leads of a voltmeter.

"a switch"

213. Plaintiff re-alleges paragraphs 127-129.

214. Atkinson discloses a switch as claimed in independent claim 22.

"adapted, when closed, to couple the test load between test leads"

215. Plaintiff re-alleges paragraphs 131-132.

216. Atkinson discloses a switch that is adapted, when closed, to couple the test load between test leads as claimed in independent claim 22.

"and, when opened, to decouple the test load from the test leads"

217. Atkinson discloses at FIG. 1 and column 2 lines 19-22 a switch 12 that, when opened, decouples a test load 10 from the test leads.

218. Atkinson discloses a switch that is adapted, when opened, to decouple the test load from the test leads as claimed in independent claim 22.

"wherein when the test leads are coupled to the circuit under test and the switch is closed, the test load replaces a component of the circuit under test"

219. Plaintiff re-alleges paragraphs 119-125.

220. Atkinson discloses that when the test leads are coupled to the circuit under test and the switch is closed, the test load replaces a component of the circuit under test, as claimed in independent claim 22.

a "digital" voltmeter

221. Atkinson does not expressly disclose a test load adapted to be coupled between leads of a digital voltmeter.

222. Plaintiff re-alleges paragraphs 134-139.

223. Therefore, at the time Sullivan invented claim 22, one of ordinary skill in the art would have found that claim obvious in view of the combination of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 23

224. Dependent claim 23 of the '853 patent claims the "circuitry of claim 22, further comprising a fuse or circuit breaker adapted to help avoid a further fault in the circuit under test."

225. Plaintiff re-alleges paragraphs 194-195.

226. Therefore, at the time Sullivan invented claim 23, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 24

227. Dependent claim 24 of the '853 patent claims the "circuitry of claim 22, wherein the test load is adapted to be in parallel with an input resistance of the voltmeter."

228. Atkinson discloses in FIG. 1 that the test load 10 is in parallel with inputs of a voltmeter.

229. Every voltmeter inherently has an input resistance.

230. Atkinson discloses in FIG. 2 and column 3 lines 3-14 a test load 38 in series with a selective one of a plurality of input resistances 19, 21, and 22 of the voltmeter 23.

231. Therefore, at the time Sullivan invented claim 24, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 25

232. Dependent claim 25 of the '853 patent claims the "circuitry of claim 22, where the test load is adapted to couple to the circuit under test for taking a voltage drop reading by the digital voltmeter across the test load when the switch is closed while the circuit under test is tested for identifying the type and location of the fault in the circuit under test."

233. Atkinson discloses at FIG. 1 and col. 2 lines 22-34 that if "suitable load impedance 10 is connected to the outlet 11 by means of switch 12, the resulting IR drop in the circuit will result in a lower voltage, usually designated as the load voltage. The difference between the no-load voltage and the load voltage is essentially the IR drop of the supply circuit attributable to the load 10. This IR drop may be used as an indicator of the circuit adequacy, for example the smaller the IR drop the more adequate the circuit."

234. Therefore, at the time Sullivan invented claim 25, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 26

235. Dependent claim 26 of the '853 patent claims the "circuitry of claim 25, wherein the voltage is read when the test load is decoupled from the circuit under test also for identifying the type and location of the fault."

236. Plaintiff re-alleges paragraph 233.

237. Therefore, at the time Sullivan invented claim 26, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 27

238. Dependent claim 27 of the '853 patent claims the "circuitry of claim 22, wherein conventional test leads can be used with the voltmeter.

239. Plaintiff re-alleges paragraphs 152-154.

240. Therefore, at the time Sullivan invented claim 27, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 28

241. Dependent claim 28 of the '853 patent claims the "circuitry of claim 22, wherein the test load and the switch are integrated with the voltmeter."

242. Plaintiff re-alleges paragraphs 148-149.

243. Therefore, at the time Sullivan invented claim 28, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 29

244. Dependent claim 29 of the ‘853 patent claims the “circuitry of claim 28, wherein conventional test leads can be used with the voltmeter.”

245. Plaintiff re-alleges paragraphs 152-154.

246. Therefore, at the time Sullivan invented claim 29, that claim was obvious in view of Atkinson and the admissions in Sullivan’s Declaration.

Dependent claim 30

247. Dependent claim 30 of the ‘853 patent claims the “circuitry of claim 22, wherein the test load comprises a resistor.”

248. Plaintiff re-alleges paragraphs 150-158.

249. Therefore, at the time Sullivan invented claim 30, that claim was obvious in view of Atkinson and the admissions in Sullivan’s Declaration.

Dependent claim 31

250. Dependent claim 31 of the ‘853 patent claims the “circuitry of claim 22, wherein the test load is adapted to be coupled to complete the circuit under test where a component of the circuit under test has been removed.”

251. Plaintiff re-alleges paragraphs 119-125.

252. Therefore, at the time Sullivan invented claim 31, that claim was obvious in view of Atkinson and the admissions in Sullivan’s Declaration.

Dependent claim 32

253. Dependent claim 32 of the '853 patent claims the "circuitry of claim 22, wherein the test load and the switch are adapted to help determine the-type (sic) and location of the fault by following a systematic procedure of testing the circuit under test that comprises combining the position where the test leads are coupled to the circuit under test and whether or not the test load is coupled between the test loads."

254. Plaintiff re-alleges paragraphs 119-125.

255. Therefore, at the time Sullivan invented claim 32, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 33

256. Dependent claim 33 of the '853 patent claims the "circuitry of claim 22, wherein voltage readings obtained on the voltmeter with the test load coupled between the test leads comprise a nominal system voltage or a nearly nominal system voltage of the circuit under test, or a ghost reading upon loss of ground to the circuit under test."

257. Plaintiff re-alleges paragraphs 105-108, 119-125, and 135-139.

258. The behavior of claim 33 is inherent to the circuitry of Atkinson as modified by the teachings of Sullivan's Declaration.

259. Therefore, at the time Sullivan invented claim 33, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 34

260. Dependent claim 34 of the '853 patent claims the "circuitry of claim 22, wherein the test load is adapted to replace a component in the circuit under test."

261. Plaintiff re-alleges paragraphs 84-90.

262. Atkinson discloses that when the test leads are coupled to the circuit under test and the switch is closed, the test load replaces a component of the circuit under test, as claimed in independent claim 22.

263. Therefore, at the time Sullivan invented claim 34, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 35

264. Dependent claim 35 of the '853 patent claims the "circuitry of claim 22, wherein the test load is adapted to replace a fuse or circuit breaker in the circuit under test."

265. Atkinson at FIG. 1 discloses that the test load 10 is adapted to replace a fuse or circuit breaker in the circuit under test.

266. Therefore, at the time Sullivan invented claim 35, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 36

267. Dependent claim 36 of the ‘853 patent claims the “circuitry of claim 22, wherein the test load is adapted to couple to the circuit under test and to be used in performing a dynamic voltage drop test rather than a static voltage test of the circuit under test.”

268. Atkinson discloses at FIG. 1 and col. 2 lines 22-34 that if “suitable load impedance 10 is connected to the outlet 11 by means of switch 12, the resulting IR drop in the circuit will result in a lower voltage, usually designated as the load voltage. The difference between the no-load voltage and the load voltage is essentially the IR drop of the supply circuit attributable to the load 10. This IR drop may be used as an indicator of the circuit adequacy, for example the smaller the IR drop the more adequate the circuit.”

269. Therefore, at the time Sullivan invented claim 36, that claim was obvious in view of Atkinson and the admissions in Sullivan’s Declaration.

Dependent claim 37

270. Dependent claim 37 of the ‘853 patent claims the “circuitry of claim 22, wherein the test load is adapted to provide a parallel voltage drop with the voltmeter.”

271. Atkinson discloses at FIG. 1 and col. 2 lines 22-34 that if “suitable load impedance 10 is connected to the outlet 11 by means of switch 12, the

resulting IR drop in the circuit will result in a lower voltage, usually designated as the load voltage. The difference between the no-load voltage and the load voltage is essentially the IR drop of the supply circuit attributable to the load 10. This IR drop may be used as an indicator of the circuit adequacy, for example the smaller the IR drop the more adequate the circuit."

272. Therefore, at the time Sullivan invented claim 37, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 38

273. Dependent claim 38 of the '853 patent claims the "circuitry of claim 22, wherein interpretation of results of voltage readings of the voltmeter with or without the test load coupled between the test leads enables the fault to be located and its type identified in the circuit under test."

274. Atkinson discloses at FIG. 1 and col. 2 lines 22-34 that if "suitable load impedance 10 is connected to the outlet 11 by means of switch 12, the resulting IR drop in the circuit will result in a lower voltage, usually designated as the load voltage. The difference between the no-load voltage and the load voltage is essentially the IR drop of the supply circuit attributable to the load 10. This IR drop may be used as an indicator of the circuit adequacy, for example the smaller the IR drop the more adequate the circuit."

275. Therefore, at the time Sullivan invented claim 38, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 39

276. Dependent claim 39 of the '853 patent claims the "circuitry of claim 22, wherein the test load is adapted to couple to the circuit under test for taking a voltage reading by the digital voltmeter across the test load when the test leads are coupled to the circuit under test in a procedure for identifying the type and location of the fault in the circuit under test."

277. Atkinson discloses at FIG. 1 and col. 2 lines 22-34 that if "suitable load impedance 10 is connected to the outlet 11 by means of switch 12, the resulting IR drop in the circuit will result in a lower voltage, usually designated as the load voltage. The difference between the no-load voltage and the load voltage is essentially the IR drop of the supply circuit attributable to the load 10. This IR drop may be used as an indicator of the circuit adequacy, for example the smaller the IR drop the more adequate the circuit."

278. Therefore, at the time Sullivan invented claim 39, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 40

279. Dependent claim 40 of the '853 patent claims the "circuitry of claim 22, wherein the test load is adapted to decouple from the circuit under test for

taking a voltage reading by the digital voltmeter when the test leads are coupled to the circuit under test in a procedure for identifying the type and location of the fault in the circuit under test."

280. Atkinson discloses at FIG. 1 and col. 2 lines 22-34 that if "suitable load impedance 10 is connected to the outlet 11 by means of switch 12, the resulting IR drop in the circuit will result in a lower voltage, usually designated as the load voltage. The difference between the no-load voltage and the load voltage is essentially the IR drop of the supply circuit attributable to the load 10. This IR drop may be used as an indicator of the circuit adequacy, for example the smaller the IR drop the more adequate the circuit."

281. Therefore, at the time Sullivan invented claim 40, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 41

282. Dependent claim 41 of the '853 patent claims the "circuitry of claim 22, wherein the test load is adapted to couple to the circuit under test in series with a corrosive fault in a circuit under test when the test leads are coupled to the circuit under test for finding a voltage reading by the digital voltmeter across the test load for isolating the corrosive fault in the circuit under test."

283. Atkinson discloses at FIG. 1 and col. 2 lines 22-34 that if "suitable load impedance 10 is connected to the outlet 11 by means of switch 12, the

resulting IR drop in the circuit will result in a lower voltage, usually designated as the load voltage. The difference between the no-load voltage and the load voltage is essentially the IR drop of the supply circuit attributable to the load 10. This IR drop may be used as an indicator of the circuit adequacy, for example the smaller the IR drop the more adequate the circuit."

284. Therefore, at the time Sullivan invented claim 41, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 42

285. Dependent claim 42 of the '853 patent claims the "circuitry of claim 22, wherein the test load is adapted to couple to the circuit under test for taking a voltage reading by the digital voltmeter across the test load when the test leads are coupled to the circuit under test not for measuring a resistance fault to ground."

286. Atkinson discloses at FIG. 1 and col. 2 lines 22-34 that if "suitable load impedance 10 is connected to the outlet 11 by means of switch 12, the resulting IR drop in the circuit will result in a lower voltage, usually designated as the load voltage. The difference between the no-load voltage and the load voltage is essentially the IR drop of the supply circuit attributable to the load 10. This IR drop may be used as an indicator of the circuit adequacy, for example the smaller the IR drop the more adequate the circuit."

287. Therefore, at the time Sullivan invented claim 42, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Dependent claim 43

288. Dependent claim 43 of the '853 patent claims the "circuitry of claim 22, wherein the test load is adapted to couple to the circuit under test for taking a voltage reading by the digital voltmeter across the test load when the test leads are coupled to the circuit under test for locating a corrosive fault in the circuit under test."

289. Atkinson discloses at FIG. 1 and col. 2 lines 22-34 that if "suitable load impedance 10 is connected to the outlet 11 by means of switch 12, the resulting IR drop in the circuit will result in a lower voltage, usually designated as the load voltage. The difference between the no-load voltage and the load voltage is essentially the IR drop of the supply circuit attributable to the load 10. This IR drop may be used as an indicator of the circuit adequacy, for example the smaller the IR drop the more adequate the circuit."

290. Therefore, at the time Sullivan invented claim 43, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

Independent claim 44

291. Independent claim 44 of the '853 patent claims

Test leads for testing a circuit under test with a digital voltmeter, comprising:

a first test lead;

a second test lead; and

a load adapted to be switchably coupled between the first and second test leads such that, in one switchable state, the load completes the circuit under test, replacing a component of the circuit under test.

"Test leads for testing a circuit under test"

292. Atkinson discloses in FIGS 1 and 2 test leads for testing a circuit under test, as claimed in the '853 patent.

"a first test lead"

293. Atkinson discloses in FIGS 1 and 2 a first test lead as claimed in the '853 patent.

"a second test lead"

258. Atkinson discloses in FIGS 1 and 2 a second test lead as claimed in the '853 patent.

"a load"

294. Atkinson discloses in FIG. 1 and column 2 lines 14-15 a load 10, as claimed in the '853 patent.

295. Atkinson discloses in FIG. 2 and column 3 lines 33-40 a load 38, as claimed in the ‘853 patent.

“adapted to be switchably coupled between the first and second test leads”

296. Atkinson discloses in FIG. 1 that the load 10 is adapted to be switchably coupled between the first and second test leads, as claimed in the ‘853 patent.

297. Atkinson discloses in FIG. 2 that the load 38 is adapted to be switchably coupled between the first and second test leads, as claimed in the ‘853 patent.

“such that, in one switchable state, the load completes the circuit under test”

298. Plaintiff re-alleges paragraphs 119-125 and 131.

299. Atkinson discloses in FIG. 1 that with the switch 12 closed, the load 10 completes the circuit under test, as claimed in the ‘853 patent.

300. Atkinson discloses in FIG. 2 that with the relay 35 closed, the load 38 completes the circuit under test, as claimed in the ‘853 patent.

“replacing a component of the circuit under test”

301. Plaintiff re-alleges paragraphs 119-125.

302. Atkinson discloses the use of the test load 10 for replacing a component of the circuit under load” as claimed in independent claim 44.

303. Atkinson discloses the use of the test load 38 for replacing a component of the circuit under load" as claimed in independent claim 44.

"a digital voltmeter"

304. Plaintiff re-alleges paragraph 134-139.

305. Therefore, at the time Sullivan invented claim 44, that claim was obvious in view of Atkinson and the admissions in Sullivan's Declaration.

COUNT II: DECLARATION OF INVALIDITY OF '853 PATENT BASED ON HAVEL, U.S. PATENT NO. 4,794,383 (35 U.S.C. § 102 and/or § 103(a))

306. Plaintiff re-alleges paragraph 104.

"Circuitry for dynamic testing of a circuit under load"

307. Plaintiff re-alleges paragraphs 105-106.

308. Havel discloses at FIG. 51, at column 4 lines 43-44, and at column 21 line 52 – column 22 line 3 a digital multimeter having an ammeter function that test for the amount of current running through a loaded circuit. Havel is attached as **Exhibit Q**.

309. Havel discloses circuitry for dynamic testing of a circuit under load as claimed in independent claim 1.

"a test load"

310. Plaintiff re-alleges paragraph 110.

311. Havel discloses at FIG. 51 a test load 126a-126e.

312. Havel discloses at column 21 lines 54-58 that "the precision shunt resistors 126a, 126b, 126c, 126d, 126e, connected in series, convert measured current to voltage, which is applied, via a resistor 125f of suitable value, to the input terminal of a digital voltmeter 108."

313. Havel discloses "a test load" as claimed in independent claim 1 of the '853 patent.

"adapted to be coupled between inputs of a digital voltmeter"

314. Plaintiff re-alleges paragraph 115.

315. Havel discloses at FIG. 51 that the test load 126a-126e is switchably coupled between the test leads HI and LO of a digital voltmeter "DVM" 108.

316. Havel discloses a test load that is "adapted to be coupled between inputs of a digital voltmeter" as claimed in independent claim 1.

"the test load replacing a component of the circuit under load"

317. Plaintiff re-alleges paragraphs 38-45, 119-120, and 84-85.

318. The specification of the '853 patent discloses at column 7 lines 35-47 that an "exemplary flow chart of such a process or method is shown in FIG. 4, in accordance with an embodiment of the invention . . . . The enhanced voltmeter test load circuitry 100 (e.g. using the test leads 100A and 100B) can be installed, with the component removed, from the voltmeter 108 and coupled at block 210 to the

terminals 119a and 119b, replacing the fuse or circuit breaker in the suspect CUT 110."

319. The limitation of "the test load replacing a component of the circuit under test" recites the mere use of the structure claimed in independent claim 1, and therefore has no patentable weight.

320. Alternatively, one of ordinary skill in the art would find it obvious to replace a fuse in a circuit under test with the precision resistors 126a-126e, because the purpose of the ammeter disclosed in FIG. 51 is to determine the current flowing in the circuit by inserting a resistance of known value in series within the circuit under test and measuring the voltage drop across the resistance using the digital voltmeter. Since the resistance inserted into the circuit under test should have a value low enough relative to the series circuit resistance so as to have a negligible effect on current, the precision resistors are in that respect analogous to a fuse, hence one of ordinary skill in the art would find it obvious to measure current in a circuit by replacing a fuse with one or more of the precision resistors 126a-126e of known value so that current in the circuit can be calculated based on the voltage drop across them.

"a switch"

321. Plaintiff re-alleges paragraph 127."

322. Havel discloses at FIG. 51 and column 21 lines 58-60 a switch 123a.

323. Havel discloses at FIG. 43 and column 19 lines 34-61 a switch 121a.

324. Havel discloses "a switch" as claimed in independent claim 1.

"adapted to short circuit test leads of the voltmeter through the test load"

325. Plaintiff re-alleges paragraph 131."

326. Havel discloses in FIG. 51 and column 21 lines 58-65 that with the switch 123a closed to a selective one of five positions, an appropriate resistance is shorted through the test leads so as to accurately measure current in a circuit.

327. Havel discloses in FIG. 43 and column 19 lines 24-61 that the function selector switch 121a is used to select the ammeter function of Havel's multimeter.

328. Havel discloses a switch "adapted to short circuit test leads of the voltmeter through the test load" as claimed in independent claim 1 of the '853 patent.

329. Havel has a publication date prior to the effective date of the '853 patent. Therefore, at the time Sullivan invented claim 1, that claim was either anticipated by Havel and unpatentable under 35 U.S.C. § 102, or would have been an obvious modification of Havel and unpatentable under 35 U.S.C. § 103(a).

Dependent claim 2

330. Dependent claim 2 of the '853 patent claims the "circuitry of claim 1, wherein the switch is adapted to be closed to complete the circuit under load."

331. Atkinson at FIG. 51 discloses that with the switch 123a closed, the circuit under load is completed.

332. Havel discloses at FIG. 43 that with the switch 121a selected to the ammeter function, the circuit under load is completed.

333. Therefore, at the time Sullivan invented claim 2, that claim was unpatentable in view of Havel.

Dependent claim 3

334. Dependent claim 3 of the '853 patent claims the "circuitry of claim 1, wherein the switch, when closed, is adapted to allow dynamic testing of the circuit under load."

335. Plaintiff re-alleges paragraphs 105, 106, and 326.

336. Therefore, at the time Sullivan invented claim 3, that claim was unpatentable in view of Havel.

Dependent claim 4

337. Dependent claim 4 of the '853 patent claims the "circuitry of claim 1, wherein the test load and the switch are incorporated in the voltmeter."

338. Havel discloses in FIGS 43 and 51 and the Abstract that the that the test load 126a-126e and the switch 121a and/or 123a is incorporated into a digital voltmeter.

339. Therefore, at the time Sullivan invented claim 4, that claim was unpatentable in view of Havel.

Dependent claim 5.

340. Dependent claim 5 of the '853 patent claims the "circuitry of claim 1, wherein the test leads comprise conventional test leads."

341. Havel discloses at FIG. 51 conventional test leads.

342. Therefore, at the time Sullivan invented claim 5, that claim was unpatentable in view of Havel.

343. Even if Havel did not disclose conventional test leads, claim 5 would be obvious in view of Havel because of the plain meaning of the word "conventional."

Dependent claim 6

344. Dependent claim 6 of the '853 patent claims the "circuitry of claim 1, wherein the test load comprises a resistive load."

345. Havel discloses at FIG. 51 the test load 126a-126e is a "resistive load."

346. Therefore, at the time Sullivan invented claim 6, that claim was unpatentable in view of Havel.

Dependent claim 7

347. Dependent claim 7 of the ‘853 patent claims the “circuitry of claim 1, wherein the test load comprises a load adapted to drop an equivalent voltage drop to a removed component of the circuit under load.”

348. Plaintiff re-alleges paragraphs 320.

349. Therefore, at the time Sullivan invented claim 6, that claim was unpatentable in view of Havel.

Independent claim 8

350. Plaintiff re-alleges paragraph 162.

351. Plaintiff re-alleges paragraphs 306-329.

352. At the time Sullivan invented independent claim 8, that claim was unpatentable over Havel since one of ordinary skill in the art would perform the steps of claim 8 while using the device disclosed by Havel.

Dependent claim 9

353. Dependent claim 9 of the ‘853 patent recites the “method of claim 8 further comprising using a test load of comparable resistive load value as the removed component.”

354. Plaintiff re-alleges paragraph 320.

355. Therefore, at the time Sullivan invented claim 9, that claim was unpatentable over Havel.

Dependent claim 10

356. Dependent claim 10 of the ‘853 patent recites the “method of claim 8, wherein the completing the circuit under load comprises ensuring that a maximum current in the circuit under load remains below a maximum allowable for the circuit under load.”

357. Havel discloses at column 21 lines 54-60 the selection of a precision resistance appropriate for the circuit being tested, which would necessarily include ensuring that a maximum current remains below a maximum allowable current.

358. Therefore at the time Sullivan invented claim 10, that claim was unpatentable over Havel.

Independent claim 11

359. Plaintiff re-alleges paragraph 172.

360. Plaintiff re-alleges paragraphs 306-329 and 338.

361. Therefore, at the time Sullivan invented claim 11, that claim was unpatentable over Havel.

Dependent claim 12

362. Dependent claim 12 of the ‘853 patent claims the “enhanced voltmeter of claim 11, further comprising test leads adapted to be coupled to the circuit under load and to couple the test load to the circuit under load.”

363. Havel at FIG. 51 discloses test leads HI and LO adapted to be coupled to the circuit under load and to couple the test load to the circuit under load.

364. Therefore, at the time Sullivan invented claim 12, that claim was unpatentable over Havel.

Independent Claim 13

365. Plaintiff re-alleges paragraph 178.

366. Plaintiff re-alleges paragraphs 306-329 and 338.

367. At the time Sullivan invented independent claim 13, that claim was unpatentable over Havel since one of ordinary skill in the art would obviously perform the steps of claim 13 when making the device disclosed by Havel.

Dependent claim 14

368. Dependent claim 14 of the '853 patent claims the "method of claim 13 further comprising coupling test leads of the voltmeter to the circuit under load."

369. Havel at FIG. 51 discloses test leads HI and LO adapted to be coupled to the circuit under load.

370. Therefore, at the time Sullivan invented claim 14, that claim was unpatentable over Havel.

Dependent claim 15

371. Dependent claim 15 of the '853 patent claims the "method of claim 14 further comprising dynamically testing the circuit under load to identify the type and location of circuit faults in the circuit under load."

372. Havel discloses at column 21 lines 52-58 that the device disclosed therein is used to check current levels at selected locations in a circuit.

373. Therefore, at the time Sullivan invented claim 15, that claim was unpatentable over Havel.

Dependent claim 16

374. Dependent claim 16 of the ‘853 patent claims the “method of claim 14, further comprising jumping the leads together through the test load.”

375. The applicant re-alleges paragraphs 320, 328, and 332.

376. Therefore, at the time Sullivan invented claim 16, that claim was unpatentable over Havel.

Dependent claim 17

377. Dependent claim 17 of the ‘853 patent claims the “method of claim 13 further comprising incorporating a variable test load in the voltmeter for applicability to different circuits under load.”

378. Atkinson discloses in FIG. 51 that the resistance value of the test load is variably selected by switch 123a.

379. Therefore, at the time Sullivan invented claim 17, that claim was unpatentable over Havel.

Dependent claim 18

380. Dependent claim 18 of the ‘853 patent claims the “method of claim 13, further comprising incorporating a current limiting fuse or circuit breaker.”

381. During prosecution, at page 7 of the Final Office Action, the Examiner rejected claim 18 on grounds that “[i]t would have further been obvious to one of ordinary skill in the art at the time the invention was made to include a fuse or circuit breaker in the voltmeter . . . because then high current damages to the circuit being tested could be prevented.”

382. The specification of the ‘853 patent discloses in FIGS 2, 3, 5-7, 9A-10B, and12A-13C as well as column 7 lines 35-41 that at the time that Sullivan invented claim 18, fuses were known to be useful to protect circuitry from excessive current.

383. Therefore, at the time Sullivan invented claim 18, that claim was obvious in view of Havel and the admissions in Sullivan’s Declaration.

Dependent claim 19

384. Dependent claim 19 of the ‘853 patent claims the “method of claim 13 further comprising incorporating the switch for accessibility by a user/technician.”

385. Havel discloses at FIG. 51 and column 21 lines 58-60 that the switch 123a is manually moved by a rotary dial.

386. Havel discloses at FIG. 43 and column 19 lines 39-42 that the switch 121a is an "external control selector."

387. Therefore, at the time Sullivan invented claim 19, that claim was unpatentable over Havel.

Dependent claim 20

388. Dependent claim 20 of the '853 patent claims the "method of claim 13, further comprising providing the test load as an equivalent load of a component removed from the circuit under load."

389. Plaintiff re-alleges paragraphs 320.

390. Therefore, at the time Sullivan invented claim 20, that claim was unpatentable over Havel.

Dependent claim 21

391. Dependent claim 21 of the '853 patent claims the "method of claim 13, further comprising providing the test load as an artificial load of the circuit under load."

392. Plaintiff re-alleges paragraphs 320.

393. Therefore, at the time Sullivan invented claim 21, that claim was unpatentable over Havel.

Independent claim 22

394. Plaintiff re-alleges paragraph 206.

“Circuitry for use in identifying a fault in a circuit under test”

395. Plaintiff re-alleges paragraphs 105-108, and 308.

396. Havel discloses “circuitry of use in identifying a fault in a circuit under test” as claimed in claim 22 of the ‘853 patent.

“a test load”

397. Plaintiff re-alleges paragraphs 110-111 and 311-312.

398. Havel discloses a test load as claimed in independent claim 22.

“adapted to be coupled between leads of a digital voltmeter”

399. Plaintiff re-alleges paragraphs 115 and 315.

400. Havel discloses a test load adapted to be coupled between leads of a digital voltmeter.

“a switch”

401. Plaintiff re-alleges paragraphs 127 and 312-313.

402. Havel discloses a switch as claimed in independent claim 22.

“adapted, when closed, to couple the test load between test leads”

403. Plaintiff re-alleges paragraph 131.

404. Havel discloses in FIGS. 43 and 51 a switch 121a that is adapted, when closed to a position that selects the ammeter function, to couple the test load 126a-126e between test leads as claimed in independent claim 22.

405. Havel discloses a switch that is "adapted, when closed, to couple the test load between test leads" as claimed in independent claim 22.

"and, when opened, to decouple the test load from the test leads"

406. Havel discloses in FIGS 43 and 51 that the switch 121a that, when opened from the ammeter function, decouples the test load 126a-126e from the test leads.

407. Havel discloses a switch that is adapted, when opened, to decouple the test load from the test leads as claimed in independent claim 22.

"wherein when the test leads are coupled to the circuit under test and the switch is closed, the test load replaces a component of the circuit under test"

408. Plaintiff re-alleges paragraphs 38-45, 119-120, and 318-320.

409. Havel discloses that when the test leads are coupled to the circuit under test and the switch is closed, the test load replaces a component of the circuit under test, as claimed in independent claim 22.

410. Therefore, at the time Sullivan invented claim 22, that claim was either anticipated by Havel or obvious in view of Havel.

Dependent claim 23

411. Dependent claim 23 of the ‘853 patent claims the “circuitry of claim 22, further comprising a fuse or circuit breaker adapted to help avoid a further fault in the circuit under test.”

412. Plaintiff re-alleges paragraphs 194-195.

413. Therefore, at the time Sullivan invented claim 23, that claim was unpatentable over Havel.

Dependent claim 24

414. Dependent claim 24 of the ‘853 patent claims the “circuitry of claim 22, wherein the test load is adapted to be in parallel with an input resistance of the voltmeter.”

415. Havel discloses in FIG. 51 that the test load 126a-126e is in parallel with an input resistance 125f of the voltmeter.

416. Havel discloses in FIG. 1 that the test load 126a-126e is in parallel with an input resistance 129a of the voltmeter.

417. Therefore, at the time Sullivan invented claim 24, that claim was unpatentable over Havel.

Dependent claim 25

418. Dependent claim 25 of the ‘853 patent claims the “circuitry of claim 22, where the test load is adapted to couple to the circuit under test for taking a

voltage drop reading by the digital voltmeter across the test load when the switch is closed while the circuit under test is tested for identifying the type and location of the fault in the circuit under test."

419. Plaintiff re-alleges paragraph 320 and 372.

420. Therefore, at the time Sullivan invented claim 25, that claim was unpatentable over Havel.

Dependent claim 26

421. Dependent claim 26 of the '853 patent claims the "circuitry of claim 25 wherein the voltage is read when the test load is decoupled from the circuit under test also for identifying the type and location of the fault."

422. Havel discloses at FIG. 52 a digital voltmeter function that is enabled by turning the control switch 212a to a location that decouples the test load 126a-126e from the digital voltmeter inputs.

423. Therefore, at the time Sullivan invented claim 26, that claim was unpatentable over Havel.

Dependent claim 27

424. Dependent claim 27 of the '853 patent claims the "circuitry of claim 22, wherein conventional test leads can be used with the voltmeter."

425. Plaintiff re-alleges paragraph 341.

426. Therefore, at the time Sullivan invented claim 27, that claim was unpatentable over Havel.

Dependent claim 28

427. Dependent claim 28 of the '853 patent claims the "circuitry of claim 22, wherein the test load and the switch are integrated with the voltmeter."

428. Plaintiff re-alleges paragraph 338.

429. Therefore, at the time Sullivan invented claim 29, that claim was unpatentable over Havel.

Dependent claim 29

430. Dependent claim 29 of the '853 patent claims the "circuitry of claim 28, wherein conventional test leads can be used with the voltmeter."

431. Plaintiff re-alleges paragraph 341.

432. Therefore, at the time Sullivan invented claim 28, that claim was unpatentable over Havel.

Dependent claim 30

433. Dependent claim 30 of the '853 patent claims the "circuitry of claim 22, wherein the test load comprises a resistor."

434. Plaintiff re-alleges paragraphs 345.

435. Therefore, at the time Sullivan invented claim 30, that claim was unpatentable over Havel.

Dependent claim 31

436. Dependent claim 31 of the ‘853 patent claims the “circuitry of claim 22, wherein the test load is adapted to be coupled to complete the circuit under test where a component of the circuit under test has been removed.”

437. Plaintiff re-alleges paragraphs 119, 120 and 318-320.

438. Therefore, at the time Sullivan invented claim 31, that claim was unpatentable over Havel.

Dependent claim 32

439. Dependent claim 32 of the ‘853 patent claims the “circuitry of claim 22, wherein the test load and the switch are adapted to help determine the-type (sic) and location of the fault by following a systematic procedure of testing the circuit under test that comprises combining the position where the test leads are coupled to the circuit under test and whether or not the test load is coupled between the test loads.”

440. Plaintiff re-alleges paragraphs 119, 120, 318-320, 372 and 422.

441. Therefore, at the time Sullivan invented claim 32, that claim was unpatentable over Havel.

Dependent claim 33

442. Dependent claim 33 of the ‘853 patent claims the “circuitry of claim 22, wherein voltage readings obtained on the voltmeter with the test load coupled

between the test leads comprise a nominal system voltage or a nearly nominal system voltage of the circuit under test, or a ghost reading upon loss of ground to the circuit under test."

443. Plaintiff re-alleges paragraphs 105, 106, 372 and 422.

444. The behavior of claim 33 is inherent to the circuitry of Havel.

445. Therefore, at the time Sullivan invented claim 33, that claim was unpatentable over Havel.

Dependent claim 34

446. Dependent claim 34 of the '853 patent claims the "circuitry of claim 22, wherein the test load is adapted to replace a component in the circuit under test."

447. Plaintiff re-alleges paragraphs 119, 120 and 318-320.

448. Therefore, at the time Sullivan invented claim 34, that claim was unpatentable over Havel.

Dependent claim 35

449. Dependent claim 35 of the '853 patent claims the "circuitry of claim 22, wherein the test load is adapted to replace a fuse or circuit breaker in the circuit under test."

450. Plaintiff re-alleges paragraph 320.

451. Therefore, at the time Sullivan invented claim 35, that claim was unpatentable over Havel.

Dependent claim 36

452. Dependent claim 36 of the ‘853 patent claims the “circuitry of claim 22, wherein the test load is adapted to couple to the circuit under test and to be used in performing a dynamic voltage drop test rather than a static voltage test of the circuit under test.”

453. Plaintiff re-alleges paragraphs 119, 120, 318-320, 372 and 422.

454. Therefore, at the time Sullivan invented claim 36, that claim was unpatentable over Havel.

Dependent claim 37

455. Dependent claim 37 of the ‘853 patent claims the “circuitry of claim 22, wherein the test load is adapted to provide a parallel voltage drop with the voltmeter.”

456. FIG. 51 of Havel shows that the test load 126a-126e is adapted to provide a parallel voltage drop with the voltmeter.

457. Therefore, at the time Sullivan invented claim 37, that claim was unpatentable over Havel.

Dependent claim 38

458. Dependent claim 38 of the ‘853 patent claims the “circuitry of claim 22, wherein interpretation of results of voltage readings of the voltmeter with or without the test load coupled between the test leads enables the fault to be located and its type identified in the circuit under test.”

459. Plaintiff re-alleges paragraphs 372, 378, and 422.

460. Therefore, at the time Sullivan invented claim 38, that claim was unpatentable over Havel.

Dependent claim 39

461. Dependent claim 39 of the ‘853 patent claims the “circuitry of claim 22, wherein the test load is adapted to couple to the circuit under test for taking a voltage reading by the digital voltmeter across the test load when the test leads are coupled to the circuit under test in a procedure for identifying the type and location of the fault in the circuit under test.”

462. Plaintiff re-alleges paragraphs 318, 320, and 422.

463. Therefore, at the time Sullivan invented claim 39, that claim was unpatentable over Havel.

Dependent claim 40

464. Dependent claim 40 of the ‘853 patent claims the “circuitry of claim 22, wherein the test load is adapted to decouple from the circuit under test for

taking a voltage reading by the digital voltmeter when the test leads are coupled to the circuit under test in a procedure for identifying the type and location of the fault in the circuit under test."

465. Plaintiff re-alleges paragraphs 119, 120, 318-320, 372 and 422.

466. Therefore, at the time Sullivan invented claim 40, that claim was unpatentable over Havel.

Dependent claim 41

467. Dependent claim 41 of the '853 patent claims the "circuitry of claim 22, wherein the test load is adapted to couple to the circuit under test in series with a corrosive fault in a circuit under test when the test leads are coupled to the circuit under test for finding a voltage reading by the digital voltmeter across the test load for isolating the corrosive fault in the circuit under test."

468. Plaintiff re-alleges paragraphs 119, 120, 318-320, 372 and 422.

469. Therefore, at the time Sullivan invented claim 41, that claim was unpatentable over Havel.

Dependent claim 42

470. Dependent claim 42 of the '853 patent claims the "circuitry of claim 22, wherein the test load is adapted to couple to the circuit under test for taking a voltage reading by the digital voltmeter across the test load when the test leads are coupled to the circuit under test not for measuring a resistance fault to ground."

471. Plaintiff re-alleges paragraphs 119, 120, 318-320, 372 and 422.

472. Therefore, at the time Sullivan invented claim 42, that claim was unpatentable over Havel.

Dependent claim 43

473. Dependent claim 43 of the '853 patent claims the "circuitry of claim 22, wherein the test load is adapted to couple to the circuit under test for taking a voltage reading by the digital voltmeter across the test load when the test leads are coupled to the circuit under test for locating a corrosive fault in the circuit under test."

474. Plaintiff re-alleges paragraphs 119, 120, 318-320, 372 and 422.

475. Therefore, at the time Sullivan invented claim 43, that claim was unpatentable over Havel.

Independent claim 44

476. Plaintiff re-alleges paragraph 291.

"Test leads for testing a circuit under test with a digital voltmeter"

477. Havel discloses in FIG. 51 test leads HI and LO for testing a circuit under test, as claimed in the '853 patent.

478. The test leads HI and LO connect to the inputs of a digital voltmeter.

479. Havel discloses "test leads for testing a circuit under test with a digital voltmeter" as claimed in independent claim 44.

“a first test lead”

480. Havel discloses in FIG. 51 a first test lead HI as claimed in the ‘853 patent.

“a second test lead”

481. Havel discloses in FIG. 51 a second test lead LO as claimed in the ‘853 patent.

“a load”

482. Havel discloses in FIG. 51 and col. 21 lines 52-58 a load 126a-126e.

“adapted to be switchably coupled between the first and second test leads”

483. Havel shows in FIG. 21 that the load 126a-126e is adapted to be switchably coupled between the HI and LO test leads.

“such that, in one switchable state, the load completes the circuit under test”

484. Plaintiff re-alleges paragraphs 38-45 and 119, 120, and 418-420.

485. Havel discloses that in one switchable state, the load 126a-126e completes the circuit under test.

“replacing a component of the circuit under test”

486. Plaintiff re-alleges paragraphs 38-45 and 119, 120, and 418-420.

487. Havel discloses the use of the load 126a-126e for replacing a component of the circuit under load” as claimed in independent claim 44.

488. Therefore, at the time Sullivan invented claim 44, that claim was unpatentable in view of Havel.

COUNT III: DECLARATION OF INVALIDITY OF '853 PATENT BASED ON HANSON IN VIEW OF ALEXANDER, U.S. PATENT NO. 2,634,318 (35 U.S.C. § 103(a))

489. Plaintiff re-alleges paragraphs 10-46.

490. The prosecution history of the '853 patent shows that Hanson discloses or makes obvious the all limitations of each of claims 1-24, 27-37, and 39-44 except for disclosing the use of a digital voltmeter, and except for disclosing the use of a test load or other load to "replace a component" of a circuit under test.

491. Plaintiff re-alleges paragraphs 119-120.

492. Alexander discloses at column 1 lines 10-20 that "the effective series impedance in the line from [a] generator to [a] load must be reasonably low if adequate voltages are to be maintained when the heavy load of starting a motor is applied. Excessive impedance may be in the power supply to the user's meter or in the branch circuits in the premises. The average installer and serviceman finds this difficult to measure and evaluate with the test equipment such as a voltmeter and an ammeter, ordinarily available to him." Alexander is attached as **Exhibit R**.

493. To solve this problem, Alexander discloses at FIG. 1 and column 1 line 61 to column 2 line 4 a "switching arrangement . . . so that the voltmeter can

be connected either alone across the power supply connection or in series with [a potentiometer but in parallel with an electrical test load across the power supply connection."

494. Alexander denotes the "test load" as reference 56 in FIG. 1.

495. Alexander discloses at column 3 lines 46-55 that "for ordinary purposes, where the maximum appliance or other load is principally a resistance load, I prefer to employ an ordinary resistance coil of 20 ohms as the test load, providing a test current of about 5¾ amperes at 150 volts. This is a sufficient load to provide a voltage drop which can easily be determined on the voltmeter and yet is small enough to minimize any problem of heat dissipation."

496. Alexander discloses at column 4 lines 50-54 that "[i]f an appliance manufacturer intends that my testing device be used to determine where his appliances may be connected, it is necessary for him to supply the tester with certain information. He must decide upon and make available the maximum quality factor values permitted for each appliance at each no load voltage within the area of satisfactory operation."

497. Alexander discloses at column 4 line 40 that the "quality factor" referenced in paragraph 496 is a comparison of the voltage across a source without a load across terminals to the source, and the voltage measured using the test load across the source's terminals.

498. Paragraphs 495-497 demonstrate that the test load 56 of Alexander "replaces a component" of the power supply circuit, i.e. the component to be plugged in and supplied by the manufacturer referenced in paragraph 496.

499. Hanson and Alexander were both published prior to the effective date of the '853 patent.

500. One of ordinary skill in the art, at the time Sullivan invented each of claims 1-24, 27-37, and 39-44 would have realized, given the teachings of Alexander, that the test load 6 shown in the figure of Hanson could be used to replace a component of a device under test as taught by Alexander, so that a comparison of the unloaded voltage with the loaded voltage after the switch 7 is thrown, would indicate deficiencies in the power supply circuit of Alexander.

501. Plaintiff re-alleges paragraphs 137-138.

502. Since the function of both Hanson's and Alexander's voltmeters is simply to obtain accurate voltage readings across their respective inputs, with the test load alternately switched on and off, one of ordinary skill in the art at the time Sullivan invented his claimed subject matter, would have substituted a digital voltmeter for an analog voltmeter because, as stated by Sullivan, "digital voltmeters are generally more accurate" and because "[a]nalog voltmeters were not in general use in 1999 or today as electrical troubleshooting tools for resistance faults."

503. Therefore, each of claims 1-24, 27-37, and 39-44 of the ‘853 patent would have been obvious to one of ordinary skill in the art at the time each of these claims was invented.

Dependent claims 25, 26, and 38.

504. Plaintiff re-alleges paragraphs 232, 235, and 273.

505. The combination of Hanson and Alexander teach the limitations of these claims as indicated in paragraphs 493 and 497.

506. Each of claims 25, 26, and 38 of the ’853 patent would have been obvious to one of ordinary skill in the art at the time these claims were invented.

COUNT IV: INVALIDITY BASED ON THE INDEFINITENESS OF THE TERM “TEST LOAD” (35 U.S.C. § 112, SECOND PARAGRAPH)

507. The ‘853 patent discloses at column 4 lines 28-45 that “[t]he test load 115 can be any component or circuit capable of presenting the same or similar load to the CUT 110 as the removed component (i.e. it produces a similar voltage drop). The resistance or resistive load value of the test load 115 may be determined in non-limiting fashion, by taking an average of resistance or resistive load values of components present in systems for which the enhanced voltmeter test load circuitry 100 will be used. This value will change in various embodiments of the invention, as 115 (sic) be appreciated by those of skill in the art. For example, in another

embodiment, the value could be the same as that of the component having the highest resistive load value among such system components. In another embodiment, the typical resistive loads of components in a given system incorporating the CUT 110 will be known, and the user/technician can adjust or switch (or activate an automatic adjustment of) the resistive load value of the test load 115 correspondingly at the load circuitry 105 or at the voltmeter."

508. The '853 patent discloses at column 4 lines 48-54 that "In another embodiment, the resistive load value of the test load 115 is adapted to drop an equivalent voltage drop to the removed component of the CUT 110. In general, the test load 115 is in effect an artificial load for the removed component from the CUT 110. The load circuitry 105 and the test load 115 thus extend the functionality of the voltmeter 108."

509. The '853 patent discloses at column 5 lines 16-33 that "The resistance value of the test load 115 will of necessity be low enough so as to make it possible to detect relatively small resistance faults and be large enough so as to limit the current through the test load 115 and the CUT 110 to a value below (or well below) the maximum allowable system current through the CUT 110. In general, the value chosen for the test load 115 should be as near to the average resistance value(s) of any or all load components that may reside in the CUT 110. For example, as a non-limiting example, the test load may have a value designed to

work with a 12 volt CUT 110 having resistive components typically between approximately 5Ω and 300Ω (or double that for a 24V CUT). Another non-limiting example is that the test load 11 may be required to perform a dynamic test, replacing a coil load of approximately 2000Ω. A variety of possible test load 115 values are possible depending on parameters or characteristics of the CUT, as will be appreciated by those of skill in the art."

510. Each of claims 1-7 and 11-43 are invalid for indefiniteness because one of ordinary skill in the art would not know the metes and bounds of the term "test load" at the time a device was manufactured and sold, since the element of a "test load" depends on the circuit to which the device will be used to test.

COUNT V: INVALIDITY BASED ON THE INDEFINITENESS OF THE TERM "REPLACING A COMPONENT OF" A CIRCUIT (35 U.S.C. § 112, SECOND PARAGRAPH)

511. Plaintiff re-alleges paragraphs 10-46 and 497-499.

512. The '853 patent discloses at column 5 lines 1-4 that "[r]eturning to FIG. 8 in more detail, the user/technician couples, at block 300, the test leads 100A and 100B of the voltmeter 108 on the CUT 110, replacing the component normally resident in the CUT 110."

513. Each of claims 1-7 and 11-44 are invalid for indefiniteness because one of ordinary skill in the art would not know the metes and bounds of the term

"replacing a component of" a circuit under load or a circuit under test, at the time a device was manufactured and sold, since this element depends on the manner in which a device is used to test a circuit.

COUNT VI: INVALIDITY BASED ON INDEFINITENESS - HYBRID CLAIMS (35 U.S.C. § 112, SECOND PARAGRAPH)

514. Each of claims 14-16, 20, and 21 are indefinite because they claim a method of making a device while including limitations on how the device is used.

COUNT VII: NONINFRINGEMENT OF THE EECT400

515. The EECT 400 does not infringe any of claims 1-7 and 11-21 because: (1) it does not have "a test load adapted to be coupled between inputs of a digital voltmeter;" (2) it does not have a "test load replacing a component of the circuit under load;" and/or (3) it does not have "a switch adapted to short circuit test leads of the voltmeter through the test load."

516. The EECT400 does not infringe any of claims 8-10 because: (1) it does not include "a switch to short circuit inputs of a digital voltmeter through a test load;" and (2) it does not include a "test load" capable of "completing the circuit under load."

517. The EECT400 does not infringe claim 17 because it does not include a "variable test load."

518. The EECT400 does not infringe any of claims 18, 23, and 35 because it includes neither a fuse nor a circuit breaker.

519. The EECT400 does not infringe claim 18 because it does not include a "switch for accessibility by a user/technician."

520. The EECT400 does not infringe claims 22-43 because it does not include: (1) a test load adapted to be coupled between test leads of a digital voltmeter;" (2) it does not include "a switch adapted, when closed, to couple the test load between the test leads;" (3) it does not include "a switch adapted . . . when opened, to decouple the test load from the test leads;" and/or (4) it does not include a "test load" that "replaces a component of" a "circuit under test.

521. The EECT400 does not infringe claim 44 because: (1) it does not include "a load;" and/or (2) it does not include a load "such that, in one switchable state, the load completes the circuit under test, replacing a component of the circuit under test."

COUNT VIII: PRODUCT DISPARAGEMENT

522. Plaintiff incorporates by reference and re-alleges Paragraphs 53-103.

523. The statements made by Sullivan to the public and to Snap-on referenced in these paragraphs are false statements intended to disparage the quality of the EECT400.

524. Sullivan made such statements with either knowledge of falsity or with reckless disregard of its truth or falsity.

525. Sullivan made such statements with the intent or knowledge that they would harm sales of the EECT400.

526. On information and belief, these statements played a material and substantial part in inducing others not to do business with Plaintiff and to refrain from purchasing Plaintiff's product. As such, Plaintiff has suffered damages in the form of lost profits from sales of its products, and damage to its reputation, among other things.

527. As a direct and proximate result of Sullivan's conduct, Plaintiff has suffered damages in an amount to be proven at trial.

COUNT IX: UNFAIR COMPETITION – LANHAM ACT §43

(15 U.S.C. § 1125(a))

528. Plaintiff re-alleges Paragraphs 53-103.

529. The disparaging statements referenced in paragraphs 53-103misrepresent the characteristics and qualities of the EECT400.

530. The disparaging statements referenced in paragraphs 53-103were made publicly to commercially promote competing products licensed by Sullivan.

531. Both the EECT400 and the products licensed by Sullivan are sold in interstate commerce.

532. The disparaging statements referenced in paragraphs 53-103 have the potential to mislead a substantial segment of the potential customers for the EECT400.

533. The disparaging statements referenced in paragraphs 53-103 are material, and are likely to influence the purchasing decisions of potential customers of the EECT400 and the products licensed by Sullivan.

534. Plaintiff has, or is likely to be injured, by the disparaging statements referenced in paragraphs 53-103.

PRAYER FOR RELIEF

Wherefore, Plaintiff requests judgment against Sullivan and respectfully prays that this Court enter orders that:

1. Order a trial by jury of all Plaintiff's claims so triable;

2. Declare the '857 patent invalid;

3. Declare that neither Plaintiff nor any other party has committed any act of direct and/or indirect infringement of the '853 Patent with respect to the manufacture or sale of the EECT400;

4. Enjoin Sullivan, his agents, servants, employees and attorneys, and all those in active participation or privity with any of them, from charging Plaintiff or its agents, distributors, or customers with infringement of the '853 Patent, and from

otherwise using the '853 Patent to interfere in any way with Plaintiff's manufacture, use, offer for sale, or sale of the EECT400;

5. Preliminarily and permanently enjoin Sullivan, his agents, servants, employees and attorneys, and all those in active participation or privity with any of them, from continuing to disparage the EECT400 and/or allege that it infringes the '853 patent;

6. Award compensatory damages of an amount to be proven at trial;

7. Find this case exceptional pursuant to 35 U.S.C. §285, and award Plaintiff its reasonable attorney fees, expenses, and costs in this action; and

8. Grant Plaintiff such other and further relief as the Court deems just and proper.

This the 20th day of October, 2015.

/s/ William C. Mayberry
William C. Mayberry
N.C. State Bar No. 20572

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