UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF WISCONSIN

Illinois Tool Works Inc. and Miller Electric Mfg. Co.,	)	
Plaintiffs,	)	CASE NO. 1:16-cv-00201-WCG
vs.	)	**JURY TRIAL DEMANDED**
The ESAB Group, Inc. and Victor Technologies International Inc.	)	
Defendants.	)	

FIRST AMENDED COMPLAINT

Plaintiffs Illinois Tool Works Inc. ("ITW") and Miller Electric Mfg. Co. ("Miller Electric") (collectively "Plaintiffs"), for their First Amended Complaint against Defendants The ESAB Group, Inc. ("ESAB") and Victor Technologies International Inc. ("VTI") (collectively "Defendants"), hereby allege as follows:

JURISDICTION AND VENUE

1. This is an action for patent infringement and breach of contract.

2. The patent infringement action alleging infringement of United States Patent Nos. 6,236,014 (the "'014 Patent") and 6,815,639 (the "'639 Patent"), hereinafter the Asserted Patents, arises under the patent laws of the United States, 35 U.S.C. § 1 et seq.

3. This Court has subject matter jurisdiction over the patent infringement action under 28 U.S.C. §§ 1331 and 1338(a).

4. This Court has subject matter jurisdiction over the breach of contract action under 28 U.S.C. §§ 1332(a) and 1367.

5. This Court has personal jurisdiction over Defendants because Defendants have done or are doing business in this judicial district, both generally and, on information and belief, with respect to allegations in the Complaint, including Defendants' one or more acts of infringement in this district.

6. Venue is proper under 28 U.S.C. § 1391(c) and § 1400(b), as Defendants have regularly conducted business in this judicial district and, on information and belief have committed, and continue to commit, acts of patent infringement by making, using, selling, or offering to sell (1) plasma cutting products and systems that infringe the '014 Patent and the '639 Patent and (2) welding products and systems that infringe the '014 Patent and the '639 Patent.

PARTIES

7. ITW is a corporation organized and existing under the laws of Delaware, having its principle place of business at 3600 West Lake Avenue, Glenview, Illinois 60025.

8. Miller Electric is a corporation organized and existing under the laws of Wisconsin, having its principle place of business at 1635 West Spencer Street, Appleton, Wisconsin 54912.

9. Upon information and belief, ESAB is a corporation organized and existing under the laws of Delaware, having its principal place of business at 411 S. Ebenezer Road, Florence, South Carolina 29501.

10. Upon information and belief, VTI is a corporation organized and existing under the laws of Delaware, having its principal place of business at 16052 Swingley Ridge Rd., Suite 300, Chesterfield, Missouri 63017.

11. Upon information and belief, Thermadyne Industries, Inc. ("TDI") was a corporation organized and existing under the laws of Delaware, having its principal place of business at 16052 Swingley Ridge Rd., Suite 300, Chesterfield, Missouri 63017.

12. Upon information and belief, Thermal Dynamics Corporation ("TDC"), a subsidiary of TDI, was a corporation organized and existing under the laws of Delaware, having its principal place of business at 82 Benning St., West Lebanon, New Hampshire 03784.

13. Upon information and belief, on May 21, 2012, TDI changed its name to VTI.

14. Upon information and belief, Defendants ESAB and VTI are subsidiaries of Colfax Corporation ("Colfax").

15. Upon information and belief, Colfax is a corporation organized and existing under the laws of Delaware, having its principal place of business at 420 National Business Parkway, 5th Floor, Annapolis Junction, Maryland 20701.

16. ITW is a leading diversified manufacturer of specialized industrial equipment, consumables, and related service businesses.

17. Miller Electric is a leading manufacturer of arc welding equipment, plasma cutting equipment, consumables and accessories for a wide array of industrial and commercial applications.

18. Defendants make, use, sell, and/or offer for sale (either currently or previously) plasma arc cutting systems and products, including the Cutmaster® 38, the Cutmaster® 39 and the Cutmaster® 42 products.

19. Defendant ESAB makes, uses, sells, and/or offers for sale the Rebel™ Series Welding Machines, including the Rebel EMP 215ic.

THE ITW PATENTS

20. On May 22, 2001, United States Patent No. 6,236,014 ("the '014 Patent") entitled "Method and Apparatus for Providing Welding/Plasma Power," duly and legally issued. A copy of the '014 Patent is attached hereto as Exhibit A.

21. The '014 Patent is assigned to ITW.

22. Miller Electric is and has been the exclusive licensee of the '014 Patent with the sole exclusive right and license to advertise, market, distribute, sell and offer for sale products covered by the '014 Patent in the United States, and the right to sue for past, present and future damages for the infringement of the '014 Patent.

23. The '014 Patent is valid and enforceable.

24. On May 29, 2001, United States Patent No. 6,239,407 ("the '407 Patent") entitled "Method and Apparatus for Receiving a Universal Input Voltage in a Welding Power Source," duly and legally issued. A copy of the '407 Patent is attached hereto as Exhibit B.

25. The '407 Patent is assigned to ITW.

26. Miller Electric is and has been the exclusive licensee of the '407 Patent with the sole exclusive right and license to advertise, market, distribute, sell and offer for sale products covered by the '407 Patent in the United States, and the right to sue for past, present and future damages for the infringement of the '407 Patent.

27. The '407 Patent was valid and enforceable until its expiration.

28. On May 23, 2006, United States Patent No. 7,049,546 ("the '546 Patent") entitled "Method and Apparatus for Receiving a Universal Input Voltage in a Welding Power Source," duly and legally issued. A copy of the '546 Patent is attached hereto as Exhibit C.

29. The '546 Patent is assigned to ITW.

30. Miller Electric is and has been the exclusive licensee of the ’546 Patent with the sole exclusive right and license to advertise, market, distribute, sell and offer for sale products covered by the ’546 Patent in the United States, and the right to sue for past, present and future damages for the infringement of the ’546 Patent.

31. The ’546 Patent was valid and enforceable until its expiration.

32. On November 9, 2004, United States Patent No. 6,815,639 (“the ’639 Patent”) entitled “Method and Apparatus for Receiving a Universal Input Voltage in a Welding, Plasma or Heating Power Source,” duly and legally issued. A copy of the ’639 Patent is attached hereto as Exhibit D.

33. The ’639 Patent is assigned to ITW.

34. Miller Electric is and has been the exclusive licensee of the ’639 Patent with the sole exclusive right and license to advertise, market, distribute, sell and offer for sale products covered by the ’639 Patent in the United States, and the right to sue for past, present and future damages for the infringement of the ’639 Patent.

35. The ’639 Patent is valid and enforceable.

REEXAMINATION OF THE PATENTS-IN-SUIT

36. On January 6, 2006, the United States Patent and Trademark Office (the “USPTO”) granted a request for reexamination of the ’014 Patent filed by TDC. On June 2, 2009, the USPTO confirmed the patentability of claims 1-16 and 26-31. The Reexamination Certificate is attached as Exhibit E.

37. On March 30, 2007, the USPTO granted a request for reexamination of the ’407 Patent filed by The Lincoln Electric Company (“Lincoln”). The USPTO issued a Reexamination Certificate on October 13, 2009. The Reexamination Certificate is attached as Exhibit F.

38. On July 30, 2008, the USPTO granted a request for reexamination of the ’407 Patent filed by TDC. The USPTO issued a Reexamination Certificate on October 13, 2009. The Reexamination Certificate is attached as Exhibit F.

39. On April 10, 2007, the USPTO granted a request for reexamination of the ’639 Patent filed by Lincoln. The USPTO issued a Reexamination Certificate on March 6, 2013. The Reexamination Certificate is attached as Exhibit G.

40. On April 10, 2007, the USPTO granted a request for reexamination of the ’546 Patent filed by Lincoln. On May 13, 2014, the USPTO confirmed the patentability of claims 14-22, 30-31 and 36. The Reexamination Certificate is attached as Exhibit H.

THE ACCUSED PRODUCTS

41. Defendants make, use, sell and/or offer for sale (either currently or previously) plasma arc cutting systems and products, including the Cutmaster® 38, Cutmaster® 39 and Cutmaster® 42 (the “Cutmaster Plasma Cutting Products”).

42. Defendant ESAB makes, uses, sells, and/or offers for sale the Rebel™ Series Welding Machines, including the Rebel EMP 215ic (the “Rebel Welding Products”).

43. The Operating Manual for the Cutmaster® 38 provides, *inter alia*, that the Cutmaster® 38 is a plasma cutting system that accepts an input voltage that ranges from 208-230 VAC (± 10%), Single-Phase, 50/60 Hz line voltage and produces an output suitable for plasma cutting. The Operating Manual for the Cutmaster® 38 is attached as Exhibit I.

44. The Operating Manual for the Cutmaster® 39 provides, *inter alia*, that the Cutmaster® 39 is a plasma cutting system that accepts an input voltage that ranges from 208-230 VAC (± 10%), Single-Phase, 50/60 Hz line voltage and produces an output suitable for plasma cutting. The Operating Manual for the Cutmaster® 39 is attached as Exhibit J.

45. The Operating Manual for the Cutmaster® 42 provides, *inter alia*, that the Cutmaster® 42 is a plasma cutting system that accepts an input voltage that ranges from 208-230 VAC (± 10%), Single-Phase, 50/60 Hz line voltage and produces an output suitable for plasma cutting. The Operating Manual for the Cutmaster® 42 is attached as Exhibit K.

46. The Fact Sheet for the Rebel™ Series Welding Machines provides, *inter alia*, that the Rebel™ EMP 215ic is a dual-voltage welding machine that accepts input voltages of 120 VAC or 208/230 VAC and produces an output suitable for welding. The Fact Sheet is attached as Exhibit O.

THE SETTLEMENT AGREEMENT

47. On October 3, 2003, Plaintiffs filed a Complaint against TDC in the United States Court for the Eastern District of Wisconsin, Civil Action 1:03-CV-00966-WCG (the "Action"). The Complaint charged TDC's Cutmaster® 38 products with infringement of one or more claims of the '014 Patent, the '407 Patent, the '639 Patent and U.S. Patent No. 6,849,827. On September 8, 2005, Plaintiffs and TDC entered into a confidential Settlement Agreement (the "Settlement Agreement").

48. Plaintiffs and TDC stipulated that under the Settlement Agreement, all claims made in the Action were settled.

49. The Court entered an order dismissing all claims in the Action with prejudice.

50. In a letter dated November 8, 2007, TDI and TDC informed Miller Electric that TDI was suspending performance of its obligations as required by the terms of the Settlement Agreement. The letter is attached as Exhibit L.

51. In a letter dated October 20, 2015, ESAB informed ITW that Defendants would not perform as required by the terms of the Settlement Agreement. Defendants' failure to

perform as required by the terms of the Settlement Agreement was a material breach of the Settlement Agreement. The letter is attached as Exhibit M.

52. In a letter dated January 19, 2016, pursuant to the terms of the Settlement Agreement, Miller Electric gave Colfax notice of termination of the Settlement Agreement due to Defendants' material breach. The letter is attached as Exhibit N.

53. The Settlement Agreement is now terminated.

COUNT I

INFRINGEMENT OF U.S. PATENT NO. 6,236,014
(Cutmaster Plasma Cutting Products)

54. Plaintiffs repeat and re-allege the allegations in paragraphs 1-53 as though fully set forth herein.

55. Defendants are and/or have manufactured, used, offered for sale or sold one or more Cutmaster Plasma Cutting Products that infringe, either literally or under the doctrine of equivalents, one or more claims of the '014 Patent, either directly, contributorily, by inducement or otherwise, in violation of 35 U.S.C. § 271. Defendants' infringement will continue unless enjoined by this Court.

56. The Cutmaster Plasma Cutting Products infringe one or more claims of the '014 Patent, including claim 1, which reads as follows:

1. A welding/plasma power source comprising:

> an input stage configured to receive an ac input signal having a period of T seconds and to rectify the ac input signal to provide a rectified intermediate signal having a peak voltage and further wherein the input stage provides a dc voltage signal having a voltage of V volts across a dc bus, wherein V is greater than the peak voltage of the rectified intermediate signal;
>
> an output stage disposed to receive the dc voltage signal and configured to provide an available output power signal having a power of P watts; and

a bus capacitor connected across the dc bus wherein the bus capacitor has a capacitance of at least $(3PT)/(V^2)$ farads.

57. The Cutmaster Plasma Cutting Products include a welding/plasma power source. The welding/plasma power source comprises an input stage configured to receive an ac input signal having a period of T seconds and to rectify the ac input signal to provide a rectified intermediate signal having a peak voltage and further wherein the input stage provides a dc voltage signal having a voltage of V volts across a dc bus, wherein V is greater than the peak voltage of the rectified intermediate signal. The welding/plasma power source also comprises an output stage disposed to receive the dc voltage signal and configured to provide an available output power signal having a power of P watts. The welding/plasma power source also comprises a bus capacitor connected across the dc bus wherein the bus capacitor has a capacitance of at least $(3PT)/(V^2)$ farads.

58. Defendants' infringement has damaged and continues to damage and injure Plaintiffs. The injury to Plaintiffs is irreparable and will continue unless and until Defendants are enjoined from further infringement.

59. Defendants have been aware of the '014 Patent at least since the service of the Complaint in the prior Action. Defendants were or reasonably should have been aware of the outcome of the reexamination of the '014 Patent that was requested by TDC. Defendants had knowledge of the reexamined claims of the '014 Patent based on the December 19, 2007 correspondence received from TDC and TDI.

60. Defendants are engaging in willful and deliberate infringement of the '014 Patent, which justifies an increase of three times the damages to be assessed pursuant to 35 U.S.C. § 284, and further qualifies this action as an exceptional case supporting an award of reasonable attorneys' fees pursuant to 35 U.S.C. § 285.

COUNT II

INFRINGEMENT OF U.S. PATENT NO. 6,815,639
(Cutmaster Plasma Cutting Products)

61. Plaintiffs repeat and re-allege the allegations in paragraphs 1-53 as though fully set forth herein.

62. Defendants are and/or have manufactured, used, offered for sale or sold one or more Cutmaster Plasma Cutting Products that infringe, either literally or under the doctrine of equivalents, one or more claims of the ’639 Patent, either directly, contributorily, by inducement or otherwise, in violation of 35 U.S.C. § 271. Defendants’ infringement will continue unless enjoined by this Court.

63. The Cutmaster Plasma Cutting Products infringe one or more claims of the ’639 Patent, including claim 19, which reads as follows:

> 19. A method of providing welding type power from a range of input voltages and frequencies, comprising:
>
> rectifying an input power signal having an input frequency and an input magnitude to provide a rectified signal having a rectified magnitude responsive to the input magnitude;
>
> boost converting, including slow voltage switching and slow current switching, the rectified signal to provide a boost dc signal having a boost magnitude greater than and independent of the rectified input magnitude;
>
> inverting, including switching a snubber, the dc second signal to provide a welding type power output having an output frequency independent of the input frequency and having an output voltage independent of the rectified magnitude; and
>
> buck converting the boost dc signal to provide a control power signal, wherein the control power signal has a control power magnitude less than and independent of the boost magnitude, and a control frequency independent of the input frequency, and providing power to a buck convertor from a first set of circuit elements at start-up, and from a second set of circuit elements after start-up.

64. The Cutmaster Plasma Cutting Products perform the method steps of providing welding type power from a range of input voltages and frequencies. The Cutmaster Plasma Cutting Products perform the method step of rectifying an input power signal having an input frequency and an input magnitude to provide a rectified signal having a rectified magnitude responsive to the input magnitude. The Cutmaster Plasma Cutting Products also perform the method step of boost converting, including slow voltage switching and slow current switching, the rectified signal to provide a boost dc signal having a boost magnitude greater than and independent of the rectified input magnitude. The Cutmaster Plasma Cutting Products also perform the method step of inverting, including switching a snubber, the dc second signal to provide a welding type power output having an output frequency independent of the input frequency and having an output voltage independent of the rectified magnitude. The Cutmaster Plasma Cutting Products also perform the method step of buck converting the boost dc signal to provide a control power signal, wherein the control power signal has a control power magnitude less than and independent of the boost magnitude, and a control frequency independent of the input frequency, and providing power to a buck convertor from a first set of circuit elements at start-up, and from a second set of circuit elements after start-up.

65. Defendants' infringement has damaged and continues to damage and injure Plaintiffs. The injury to Plaintiffs is irreparable and will continue unless and until Defendants are enjoined from further infringement.

66. Defendants have been aware of the '639 Patent at least since the service of the Complaint in the prior Action. Upon information and belief, Defendants were or reasonably should have been aware of the outcome of the reexamination of the '639 Patent since on or about March 6, 2013.

67. Defendants are engaging in willful and deliberate infringement of the ’639 Patent, which justifies an increase of three times the damages to be assessed pursuant to 35 U.S.C. § 284, and further qualifies this action as an exceptional case supporting an award of reasonable attorneys’ fees pursuant to 35 U.S.C. § 285.

COUNT III

INFRINGEMENT OF U.S. PATENT NO. 6,236,014
(Rebel Welding Products)

68. Plaintiffs repeat and re-allege the allegations in paragraphs 1-53 as though fully set forth herein.

69. Defendant ESAB is and/or has manufactured, used, offered for sale or sold one or more Rebel Welding Products that infringe, either literally or under the doctrine of equivalents, one or more claims of the ’014 Patent, either directly, contributorily, by inducement or otherwise, in violation of 35 U.S.C. § 271. Defendant ESAB’s infringement will continue unless enjoined by this Court.

70. The Rebel Welding Products infringe one or more claims of the ’014 Patent, including claim 1, which reads as follows:

> 1. A welding/plasma power source comprising:
>
> an input stage configured to receive an ac input signal having a period of T seconds and to rectify the ac input signal to provide a rectified intermediate signal having a peak voltage and further wherein the input stage provides a dc voltage signal having a voltage of V volts across a dc bus, wherein V is greater than the peak voltage of the rectified intermediate signal;
>
> an output stage disposed to receive the dc voltage signal and configured to provide an available output power signal having a power of P watts; and
>
> a bus capacitor connected across the dc bus wherein the bus capacitor has a capacitance of at least $(3PT)/(V^2)$ farads.

71. The Rebel Welding Products (e.g., the Rebel™ EMP 215ic) include a welding/plasma power source. The welding/plasma power source comprises an input stage configured to receive an ac input signal having a period of T seconds and to rectify the ac input signal to provide a rectified intermediate signal having a peak voltage and further wherein the input stage provides a dc voltage signal having a voltage of V volts across a dc bus, wherein V is greater than the peak voltage of the rectified intermediate signal. The welding/plasma power source also comprises an output stage disposed to receive the dc voltage signal and configured to provide an available output power signal having a power of P watts. The welding/plasma power source also comprises a bus capacitor connected across the dc bus wherein the bus capacitor has a capacitance of at least $(3PT)/(V^2)$ farads.

72. Defendant ESAB's infringement has damaged and continues to damage and injure Plaintiffs. The injury to Plaintiffs is irreparable and will continue unless and until Defendant ESAB is enjoined from further infringement.

73. Defendant ESAB has been aware of the '014 Patent at least since the service of the Complaint in the prior Action. Defendant ESAB was or reasonably should have been aware of the outcome of the reexamination of the '014 Patent that was requested by TDC. Defendant ESAB had knowledge of the reexamined claims of the '014 Patent based on the December 19, 2007 correspondence received from TDC and TDI.

74. Defendant ESAB is engaging in willful and deliberate infringement of the '014 Patent, which justifies an increase of three times the damages to be assessed pursuant to 35 U.S.C. § 284, and further qualifies this action as an exceptional case supporting an award of reasonable attorneys' fees pursuant to 35 U.S.C. § 285.

COUNT IV

INFRINGEMENT OF U.S. PATENT NO. 6,815,639
(Rebel Welding Products)

75. Plaintiffs repeat and re-allege the allegations in paragraphs 1-53 as though fully set forth herein.

76. Defendant ESAB is and/or has manufactured, used, offered for sale or sold one or more Rebel Welding Products that infringe, either literally or under the doctrine of equivalents, one or more claims of the '639 Patent, either directly, contributorily, by inducement or otherwise, in violation of 35 U.S.C. § 271. Defendant ESAB's infringement will continue unless enjoined by this Court.

77. The Rebel Welding Products infringe one or more claims of the '639 Patent, including claim 35, which reads as follows:

> 35. A method of starting to provide welding type power from a range of input voltages and frequencies, comprising:
>
> receiving an input power signal having an input frequency and an input magnitude;
>
> providing a first dc signal having a first dc magnitude responsive to the input magnitude;
>
> deriving a second dc voltage having a second dc magnitude less than the first dc magnitude
>
> controlling a control converter with the second dc voltage to produce a control dc voltage from a first set of circuit elements at start up and from a second set of circuit elements after start-up; and
>
> controlling an output converter with the control dc voltage to produce an output signal.

78. The Rebel Welding Products (e.g., the Rebel™ EMP 215ic) perform the method steps of starting to provide welding type power from a range of input voltages and frequencies.

The Rebel Welding Products perform the method step of receiving an input power signal having an input frequency and an input magnitude. They further perform the method step of providing a first dc signal having a first dc magnitude responsive to the input magnitude. They also perform the method step of deriving a second dc voltage having a second dc magnitude less than the first dc magnitude. They further perform the method step of controlling a control converter with the second dc voltage to produce a control dc voltage from a first set of circuit elements at start up and from a second set of circuit elements after start-up. They further perform the method step of controlling an output converter with the control dc voltage to produce an output signal.

79. Defendant ESAB's infringement has damaged and continues to damage and injure Plaintiffs. The injury to Plaintiffs is irreparable and will continue unless and until Defendant ESAB is enjoined from further infringement.

80. Defendant ESAB has been aware of the '639 Patent at least since the service of the Complaint in the prior Action. Upon information and belief, Defendant ESAB was or reasonably should have been aware of the outcome of the reexamination of the '639 Patent since on or about March 6, 2013.

81. Defendant ESAB is engaging in willful and deliberate infringement of the '639 Patent, which justifies an increase of three times the damages to be assessed pursuant to 35 U.S.C. § 284, and further qualifies this action as an exceptional case supporting an award of reasonable attorneys' fees pursuant to 35 U.S.C. § 285.

COUNT V

BREACH OF CONTRACT

82. Plaintiffs repeat and re-allege the allegations in paragraphs 1-53 as though fully set forth herein.

83. The Settlement Agreement constituted a valid and enforceable contract between Plaintiffs and TDC, its affiliates, successors, and assigns.

84. But for the Settlement Agreement, Defendants' manufacture, use, offer for sale and/or sale of the Cutmaster Plasma Cutting Products would have constituted an infringement of one or more claims of the '014 Patent, including claim 1, which reads as follows:

> 1. A welding/plasma power source comprising:
>
> an input stage configured to receive an ac input signal having a period of T seconds and to rectify the ac input signal to provide a rectified intermediate signal having a peak voltage and further wherein the input stage provides a dc voltage signal having a voltage of V volts across a dc bus, wherein V is greater than the peak voltage of the rectified intermediate signal;
>
> an output stage disposed to receive the dc voltage signal and configured to provide an available output power signal having a power of P watts; and
>
> a bus capacitor connected across the dc bus wherein the bus capacitor has a capacitance of at least $(3PT)/(V^2)$ farads.

85. The Cutmaster Plasma Cutting Products include a welding/plasma power source. The welding/plasma power source comprises an input stage configured to receive an ac input signal having a period of T seconds and to rectify the ac input signal to provide a rectified intermediate signal having a peak voltage and further wherein the input stage provides a dc voltage signal having a voltage of V volts across a dc bus, wherein V is greater than the peak voltage of the rectified intermediate signal. The welding/plasma power source also comprises an output stage disposed to receive the dc voltage signal and configured to provide an available output power signal having a power of P watts. The welding/plasma power source also comprises a bus capacitor connected across the dc bus wherein the bus capacitor has a capacitance of at least $(3PT)/(V^2)$ farads.

86. But for the Settlement Agreement, Defendants' manufacture, use, offer for sale or sale of the Cutmaster Plasma Cutting Products would have constituted an infringement of one or more claims of the '639 Patent, including claim 19, which reads as follows:

> 19. A method of providing welding type power from a range of input voltages and frequencies, comprising:
>
> rectifying an input power signal having an input frequency and an input magnitude to provide a rectified signal having a rectified magnitude responsive to the input magnitude;
>
> boost converting, including slow voltage switching and slow current switching, the rectified signal to provide a boost dc signal having a boost magnitude greater than and independent of the rectified input magnitude;
>
> inverting, including switching a snubber, the dc second signal to provide a welding type power output having an output frequency independent of the input frequency and having an output voltage independent of the rectified magnitude; and
>
> buck converting the boost dc signal to provide a control power signal, wherein the control power signal has a control power magnitude less than and independent of the boost magnitude, and a control frequency independent of the input frequency, and providing power to a buck convertor from a first set of circuit elements at start-up, and from a second set of circuit elements after start-up.

87. The Cutmaster Plasma Cutting Products perform the method steps of providing welding type power from a range of input voltages and frequencies. They perform the method step of rectifying an input power signal having an input frequency and an input magnitude to provide a rectified signal having a rectified magnitude responsive to the input magnitude. They also perform the method step of boost converting, including slow voltage switching and slow current switching, the rectified signal to provide a boost dc signal having a boost magnitude greater than and independent of the rectified input magnitude. They also perform the method step of inverting, including switching a snubber, the dc second signal to provide a welding type power output having an output frequency independent of the input frequency and having an

output voltage independent of the rectified magnitude. They also perform the method step of buck converting the boost dc signal to provide a control power signal, wherein the control power signal has a control power magnitude less than and independent of the boost magnitude, and a control frequency independent of the input frequency, and providing power to a buck convertor from a first set of circuit elements at start-up, and from a second set of circuit elements after start-up.

88. But for the Settlement Agreement, Defendants' manufacture, use, offer for sale or sale of the Cutmaster Plasma Cutting Products would have constituted an infringement of one or more claims of the '407 Patent, including claim 9 (as amended during reexamination), which reads as follows:

> 9. A method of providing a welding, cutting or heating current from a range of input voltages, comprising:
>
> converting and power factor correcting an ac input signal to a second ac signal, including converting the ac signal to a dc signal having a desired magnitude and inverting the dc signal to provide the second ac signal;
>
> transforming the second ac signal into a third ac signal having a current suitable for welding, cutting or heating; and
>
> deriving auxiliary power from the ac input signal using a first set of circuitry prior to the dc signal reaching the desired magnitude, and a second set of circuitry used after the dc signal reaches the desired magnitude for at least one input in the range of input voltages, and providing the auxiliary power at a preselected voltage.

89. The Cutmaster Plasma Cutting Products perform the method steps of providing a welding, cutting or heating current from a range of input voltages. They perform the method step of converting and power factor correcting an ac input signal to a second ac signal, including converting the ac signal to a dc signal having a desired magnitude and inverting the dc signal to provide the second ac signal. They also perform the method step of transforming the second ac signal into a third ac signal having a current suitable for welding, cutting or heating. They

further perform the method step of deriving auxiliary power from the ac input signal using a first set of circuitry prior to the dc signal reaching the desired magnitude, and a second set of circuitry used after the dc signal reaches the desired magnitude for at least one input in the range of input voltages, and providing the auxiliary power at a preselected voltage.

90. But for the Settlement Agreement, Defendants' manufacture, use, offer for sale or sale of the Cutmaster Plasma Cutting Products would have constituted an infringement of one or more claims of the '546 Patent, including claim 32 (as amended during reexamination), which reads as follows:

> 32. A welding, cutting or heating system capable of receiving a range of input voltages including having a ratio of at least 1.5, comprising:
>
> a power circuit comprising an input circuit, a converter and an output circuit, wherein the power circuit is capable of providing a welding cutting or heating output;
>
> wherein the input circuit is configured to receive at least one input voltage, and provide a converter input signal to the converter;
>
> wherein the converter includes a boost circuit and is configured to receive and boost the converter input signal and to provide a dc bus output having a magnitude greater than an average rectified magnitude of the highest voltage in the range of input voltages, and configured to receive at least one control input;
>
> wherein the output circuit is configured to receive the dc bus, and to provide the welding, heating or cutting signal;
>
> a controller, including a power factor correction circuit, configured to provide at least one control signal to the converter and further including a driver circuit responsive to feedback indicative of an input current; and
>
> an auxiliary power circuit configured to receive any voltage within a range of input voltages spanning at least two utility voltages, and configured to provide a control power signal to the controller regardless of the magnitude of the input.

91. The Cutmaster Plasma Cutting Products include a welding, cutting or heating system capable of receiving a range of input voltages including having a ratio of at least 1.5. The

system comprises a power circuit comprising an input circuit, a converter and an output circuit, wherein the power circuit is capable of providing a welding cutting or heating output; wherein the input circuit is configured to receive at least one input voltage, and provide a converter input signal to the converter; wherein the converter includes a boost circuit and is configured to receive and boost the converter input signal and to provide a dc bus output having a magnitude greater than an average rectified magnitude of the highest voltage in the range of input voltages, and configured to receive at least one control input; and wherein the output circuit is configured to receive the dc bus, and to provide the welding, heating or cutting signal. The system also comprises a controller, including a power factor correction circuit, configured to provide at least one control signal to the converter and further including a driver circuit responsive to feedback indicative of an input current. The system further comprises an auxiliary power circuit configured to receive any voltage within a range of input voltages spanning at least two utility voltages, and configured to provide a control power signal to the controller regardless of the magnitude of the input.

92. Defendants breached the Settlement Agreement by failing to perform as required by the terms of the Settlement Agreement.

93. Plaintiffs have suffered damages as a result of Defendants' breach of the Settlement Agreement.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs pray for the entry of judgment as follows:

A. That the '014 and '639 Patents be found to be valid, enforceable, and infringed by Defendants, and that Defendants' infringement be judged willful;

B. That the Court preliminarily and permanently enjoin Defendants, their subsidiaries, parents, divisions, agents, servants, and employees from making, using, selling, offering for sale, importing or distributing the Cutmaster Plasma Cutting Products and from infringing, contributing to the infringement of, and/or inducing infringement of the ’014 and ’639 Patents, and for all further and proper injunctive relief;

C. That the Court preliminarily and permanently enjoin Defendant ESAB, its subsidiaries, parents, divisions, agents, servants, and employees from making, using, selling, offering for sale, importing or distributing the Rebel Welding Products and from infringing, contributing to the infringement of, and/or inducing infringement of the ’014 and ’639 Patents, and for all further and proper injunctive relief;

D. That judgment be entered in favor of Plaintiffs and against Defendants on all Counts, and that Plaintiffs be awarded damages, including damages for Defendants’ breach of the Settlement Agreement, and for patent infringement, together with interests and costs;

E. That Plaintiffs be awarded treble damages pursuant to 35 U.S.C. § 284;

F. That Plaintiffs be awarded their reasonable costs, expenses, and attorneys’ fees pursuant to 35 U.S.C. § 285, or other applicable law; and

G. That Plaintiffs be awarded other and further relief as this Court may deem just and proper under the circumstances.

JURY DEMAND

Plaintiffs demand a jury trial on all issues that are triable by a jury.

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Respectfully submitted,

s/Christopher R. Liro
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