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Attorneys for Plaintiff
THE NOCO COMPANY

UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA

THE NOCO COMPANY,

Plaintiff,

v.

WINPLUS NORTH AMERICA, INC., WINPLUS NA, LLC, AND ADC SOLUTIONS AUTO LLC

Defendants.

Case No. 8:25-cv-00335

COMPLAINT FOR PATENT INFRINGEMENT

DEMAND FOR JURY TRIAL

Plaintiff The NOCO Company ("NOCO" or "Plaintiff") for its Complaint against Defendants Winplus North America, Inc., Winplus NA, LLC, and ADC Solutions Auto LLC (collectively, "Winplus" or "Defendants") alleges as follows:

INTRODUCTION

1. NOCO, a designer of consumer electronics headquartered in the greater Cleveland, Ohio area, has set a new standard in the performance, design and safety of portable jump starters. An unfortunate by product of NOCO's tremendous success has been widespread copycats entering the market from outside of the U.S. seeking to trade off of NOCO's substantial investment in its research, design and marketing. These knockoff and copycat products are pouring into the United States from overseas infringing NOCO's valuable intellectual property rights.

2. This is an action to cease the unlawful and infringing activities of Defendants in the manufacture and sale of their jump starter products. As set forth more fully below, NOCO seeks damages, costs and attorneys' fees and permanent injunctive relief as authorized by the Patent Act.

THE PARTIES

3. NOCO is a corporation organized under the laws of the State of Ohio, with its principal place of business in Glenwillow, Ohio.

4. Upon information and belief, Defendant Winplus North America, Inc. is a California company having a principal place of business at 2975 Red Hill Avenue, Suite 100 Costa Mesa, CA, 92626-1201, as registered with the California Secretary of State.

5. Upon information and belief, Defendant Winplus NA, LLC is a Delaware company registered to do business in California, having a principal place of business at 2975 Red Hill Avenue, Suite 100 Costa Mesa, CA, 92626-1201, as registered with the California Secretary of State.

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6. Upon information and belief, Defendant ADC Solutions Auto LLC is a corporation incorporated under the laws of California with its principal place of business located at 2975 Red Hill Ave. #100, Costa Mesa, CA 92626.

JURISDICTION AND VENUE

7. This action involves statutory questions and claims arising under the laws of the United States. This Court has jurisdiction over the subject matter of this action pursuant to 35 U.S.C. § 271, *et. seq*., and 28 U.S.C. §§ 1331 and 1338.

8. Personal jurisdiction exists over Defendants. Defendants share and maintain a principal place of business in the State of California within this District. Defendants also have minimum contacts with the State of California and this District as a result of substantial business regularly conducted or solicited within the State of California and this District. Moreover, Defendants have placed its products within the stream of commerce, which stream is directed to residents of the State of California and this District. Defendants are causing harm to NOCO as a result of tortious activity occurring in the State of California and in this District.

9. Venue is proper in this Court under 28 U.S.C. §§ 1391 and 1400, as Defendants reside in this District and wrongful acts giving rise to NOCO's claims have occurred in this District.

BACKGROUND

10. Founded in the greater Cleveland, Ohio area in 1914, and continuously owned and managed by the same family since then, NOCO is a power supply and consumer electronics company. Among other things, NOCO is in the business of designing and marketing innovative, premium battery products including jump starters, battery chargers, cables and accessories.

11. NOCO's patents asserted in this matter generally relate to technologies implemented in portable battery jump starters. They concern technologies related to specific circuitry for improving the performance and safety of these devices.

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12. Since the early days of automobiles in the 1900s, car batteries have provided power to start engines. Batteries, however, lose charge over time, and eventually lack sufficient power to start the car. When a car battery dies, the engine can be started using an external current source, a process known as "jump starting." The conventional way to jump start a dead car battery has been through the use of "jumper cables," where two cables run from the positive and negative terminals of a live battery (usually in a running car) to the corresponding terminals of the dead battery.

13. Using jumper cables to provide the current needed to start a car with a dead battery has long been problematic, even dangerous. This method can entail, among other things, a second car with a live battery or a heavy and bulky lead-acid battery system to provide the current boost. The method also presents a risk that the cables are improperly connected to either battery, which may cause sparks and short circuits that damage the car and potentially injure those performing the process.

14. NOCO solved the safety problems presented by jump starting a car with jumper cables in 2014 and introduced what is now known as the NOCO BOOST® line of jump starter products.

15. NOCO's NOCO BOOST® products are tremendously popular and are the market-leading compact lithium-ion battery-based jump starters in the United States. The NOCO BOOST® products have become known for safety, ease of use, and reliability.

16. NOCO is an innovator and has made substantial investments in research and development resulting in NOCO having been awarded numerous utility and design patents, including the asserted patents identified below, that cover the key safety and performance features of NOCO's NOCO BOOST® products.

17. Some of NOCO's game changing patented technology relate to flexible and convenient ways to re-charge jump starters using, for example, specific

types of charging circuits and input charging interfaces (including USB charging interfaces). Previously, re-charging a jump starter powerful enough to jump start a 12-volt car battery frequently required a high-power charger through a non-standard or proprietary plug. NOCO engineers devised a new way to re-charge using low-voltage inputs through standardized, convenient, and (now) widely-used plugs (including USB plugs). The asserted patents relating to NOCO's inventions include United States Patent Nos. 12,187,143 ("the '143 Patent") and 12,208,696 ("the '696 Patent").

18. The '143 Patent is entitled "Portable Vehicle Battery Jump Start Apparatus with Safety Protection" The '143 Patent was duly and legally issued on January 7, 2025 by the USPTO, a true and correct copy of which is attached hereto as Exhibit A and by reference is herein incorporated. NOCO is the assignee and owner of all right, title and interest, including the right to recover for past infringement, in the '143 Patent.

19. The '696 Patent is entitled "Portable Vehicle Battery Jump Start Apparatus with Safety Protection." The '696 Patent was duly and legally issued on January 28, 2025 by the USPTO, a true and correct copy of which is attached hereto as Exhibit B and by reference is herein incorporated. NOCO is the assignee and owner of all right, title and interest, including the right to recover for past infringement, in the '696 Patent.

DEFENDANTS' INFRINGING ACTIVITIES

20. Unfortunately, the success and popularity of NOCO's BOOST® products has resulted in imitation, copying, and unlawful piggybacking off of NOCO's substantial investment in its intellectual property rights, including the asserted patents.

21. Upon information and belief, Defendants develop, import, distribute, offer to sell, sell, and/or use jump starter products within the state of California, within this District, and elsewhere around the country.

22. More particularly, according to their website (https://typesauto.com/), Winplus offers for sale and sells at least the following jump starter products (collectively, "Winplus jump starters"):

- TYPE S Dynamic Plus – DP40 (https://typesauto.com/products/type-s-wireless-jump-starter-8000mah-with-lcd-ac530013)
- TYPE S Dynamic Light – DL30 (https://typesauto.com/products/type-s-jump-starter-10-000mah-with-lcd-and-emergency-light-ac532781)
- TYPE S Dynamic D20 (https://typesauto.com/products/type-s-jump-starter-and-portable-power-bank-with-lcd-ac530171)
- TYPE S Dynamic Plus – DP60 (https://typesauto.com/products/type-s-12v-6-0l-battery-jump-starter-with-built-in-lightning-cable-lcd-display-and-8-000mah-power-bank-ac532777)
- TYPE S Dynamic Plus (Lightning) – DP50 (https://typesauto.com/products/type-s-12v-6-0l-battery-jump-starter-with-built-in-usb-c-cable-lcd-display-and-8-000mah-qi-power-bank-ac532671)
- TYPE S 12V 9.0L ProJump™ Battery Jump Starter with JumpGuide™ and 18,000 mAh Power Bank (https://typesauto.com/products/type-s-12v-9-0l-projump-18000-jump-starter-ac530017)
- TYPE S 12V 8.0L ProJump™ Battery Jump Starter with JumpGuide™ and 15,000 mAh Power Bank (https://typesauto.com/products/type-s-12v-8-0l-projump%E2%84%A2-battery-jump-starter-with-jumpguide%E2%84%A2-and-15-000-mah-power-bank-ac532780)
- TYPE S 12V 9.0L ProJump™ Battery Jump Starter with JumpGuide™ and 26,000 mAh Power Bank (https://typesauto.com/products/type-s-12v-9-0l-projump%E2%84%A2-battery-jump-starter-with-jumpguide%E2%84%A2-and-26000-mah-power-bank-ac530020)
- TYPE S Dynamic Flex Series - DF20(https://typesauto.com/products/type-s-12v-jump-starter-power-bank-tire-inflator-ac533150)
- TYPE S Mike Power 8000mAh Wireless Jump Starter with Built-in Cable AC533655-1 (https://typesauto.com/products/mike-power-8000mah-wireless-jump-starter-with-built-in-cable)
- TYPE S Dynamic Flex Series – DF10 (https://typesauto.com/products/type-s-jump-starter-work-lantern-ac533419)
- TYPE S Power Series – P10 AC534341-1 (https://typesauto.com/products/jump-starter-portable-power-bank)

23. Upon information and belief, as set forth more fully below, the Winplus jump starters infringe one or more claims of the '143 and '696 Patents.

The '143 Patent

24. On information and belief, as set forth more fully below, the Winplus jump starters infringe one or more claims of the '143 Patent.

25. The '143 Patent is generally directed to a hand held jump starter comprising a USB input port and circuit for charging or recharging an internal power supply.

26. Exemplary Independent claim 1 of the '143 Patent recites:

> A hand held, portable jump starter device, comprising:
>
> a housing having a multi-cell rechargeable battery including at least three battery cells connected in series, a USB input port for receiving a charging current from an external source to recharge the multi-cell rechargeable battery, and an output port for providing jump starting current to an external vehicle;
>
> a USB charge circuit connected to the USB input port, the USB charge circuit including a DC-to-DC converter circuit for upconverting an input voltage on the USB input port to a higher charging voltage for recharging the multi-cell rechargeable battery, and a pair of series connected transistor devices coupled between the DC-to-DC converter circuit and the multi-cell rechargeable battery for controlling current flow into and out of the multi-cell rechargeable battery;
>
> a control circuit for detecting the voltage of the multi-cell rechargeable battery and configured to turn off the USB charge circuit to prevent over charging of the multi-cell rechargeable battery if the detected voltage exceeds a threshold value; and
>
> a battery charge controller coupled to the multi-cell rechargeable battery and the pair of series connected transistor devices and configured to prevent over discharging of the multi-cell rechargeable battery.

27. On information and belief, Defendants offer to sell and sell Winplus jump starters within this District and throughout the United States that infringe one or more claims of the '143 Patent.

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28. With respect to claim 1, for example, the Winplus jump starters are handheld portable jump starting devices, as shown in the following representative images:

https://typesauto.com/products/type-s-jump-starter-10-000mah-with-lcd-and-emergency-light-ac532781.

29. Upon information and belief, each of the Winplus jump starters comprises a housing having a multi-cell rechargeable battery including at least three battery cells connected in series, a USB input port for receiving a charging current from an external source to recharge the multi-cell rechargeable battery, and an output port for providing jump starting current to an external vehicle. For example, as illustrated below, the Winplus jump starter is a 12V jump starter that includes an internal lithium-ion battery. Lithium battery cells typically have a voltage of approximately 3.7 V so a multi -cell configuration with at least three cells in series would be required for a 12V output as advertised on the Winplus website.

Additionally, as shown below, the Winplus jump starter device includes multiple battery cells. The Winplus jump starter also includes an output port for providing jump starting current to an external vehicle. The Winplus jump starter also includes a micro-USB and USB-C input port for recharging the battery and an output jumper cable port for providing jump starting current to an external vehicle.

Meet the second generation, TYPE S Dynamic Light - DL30 12V 6.0L Battery Jump Starter & Power Bank with Jump Guide. This portable jump box is equipped with additional lighting safety features to keep you safer during a breakdown. In addition to the multimode LED flashlight, this portable battery jump starter has two red emergency hazard LEDs that flash, strobe or display emergency S.O.S. light patterns. An integrated LCD screen displays step-by-step jump-starting instructions to get you back on the road. Simply connect the jumper cables and follow the on-screen Jump Guide prompts. This multipurpose jump box is also a portable power bank, keeping USB-A and USB-C mobile devices and laptops charged on the go. Compact for the glove box or everyday carry, this portable jump starter power bank provides peace of mind on any journey.

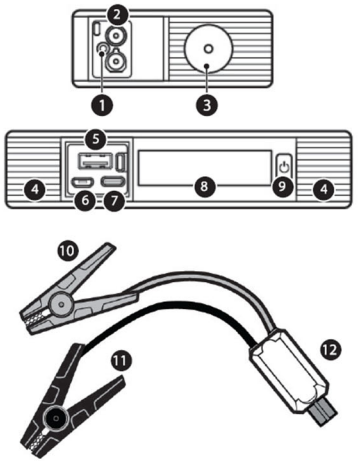
Color: Black

TECHNICAL SPECIFICATIONS:

Product Dimensions:	6.2 x 3.6 x 1.2 in (158 x 91.5 x 33 mm)
Product Weight:	1 lbs (450g)
Internal Battery:	Lithium-Ion
Battery Capacity:	37 Wh
Input (Micro USB):	5V 2A
Input (USB-C):	5V 2A / 9V 2A
USB-A Output:	5V 2.4A / 9V 2A
USB-C Output:	5V 3A / 9V 2A
Jump Start Current:	400A
Operating Temperature:	-20°C ~ 34°C (-4°F ~ 93°F)
Storage Temperature:	-20°C ~ 40°C (-4°F ~ 104°F) Avg. Temp.
Charging Temperature:	0°C ~ 34°C (32°F ~ 93°F)
Charging Time:	4-5 hours
Housing Protection:	IP64 Splash-Resistant (with Ports Covered)

FEATURE OVERVIEW :

1. Smart Protection Circuit
2. Jumper Cables Port
3. LED Flashlight, Strobe & Hazard Modes
4. Hazard Light
5. USB-A Output
6. Micro USB Input
7. USB-C Output / Input
8. LCD Display
9. Mode Button: Power, LED & Language Selection
10. Positive Clamp (Red)
11. Negative Clamp (Black)
12. Polarity Circuit Protection Box with Built-in LED Indicators



https://typesauto.com/products/type-s-jump-starter-10-000mah-with-lcd-and-emergency-light-ac532781; https://cdn.shopify.com/s/files/1/0096/6764/1402/files/user-manual-type-s-12V-6.0L-battery-jump-starter-qith-jumpguide-and-10000-mAh-power-bank-AC532781.pdf.

TYPE S Dynamic Light – DL30 (AC532781-1).

TYPE S Dynamic D20 (AC530171A-1).

TYPE S 12V 9.0L ProJump™ Battery Jump Starter with JumpGuide™ and 26,000 mAh Power Bank (AC530020-1).

30. For example, upon information and belief and as described and depicted above, the power supply in each of the Winplus jump starters is charged/provided power through a USB-C and/or micro-USB input connection. Accordingly, the "USB input port" limitation is directly met by the Winplus jump starters.

31. In the alternative, each of the Winplus jump starters includes a USB port that satisfies the claim limitation "a USB input port" under the doctrine of equivalents. NOCO maintains that the correct construction of this claim limitation should encompass all forms and formats of USB standards, including at least those that were formally issued and those which were in draft form and otherwise known to those of skill in the art at the time of the invention. The correct construction literally encompasses all of these known forms of USB at the time of the invention, as well as later issued USB standards. Because all of the USB standards transfer power in a substantially similar manner as evidenced by at least the fact that many of the Winplus jump starters include both a USB-C and micro-USB port to charge the jump starter device, each of these USB input ports would also satisfy the claim limitation under the doctrine of equivalents.

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32. Upon information and belief, the Winplus jump starters comprise a USB charge circuit connected to the USB input port, the USB charge circuit including a DC-to-DC converter circuit for upconverting an input voltage on the USB input port to a higher charging voltage for recharging the multi-cell rechargeable battery, and a pair of series connected transistor devices coupled between the DC-to-DC converter circuit and the multi-cell rechargeable battery for controlling current flow into and out of the multi-cell rechargeable battery. For example, upon information and belief, each of the Winplus jump starters is configured to be charged through a micro-USB or USB-C input port as described and shown above. Each of the Winplus jump starters include a USB-C port connected to a USB input circuit that includes a DC/DC converter circuit for upconverting an input voltage (e.g., 5V or 9V) on the USB input port to a higher charging voltage for recharging the multi-cell rechargeable battery (e.g., 12V). In many instances, the Winplus jump starters also include a micro-USB port connected in parallel to the same USB input circuit that includes a DC/DC converter circuit for upconverting an input voltage on the USB input port to a higher charging voltage for recharging the multi-cell rechargeable battery. As illustrated below, the Winplus jump starters further include a pair of series connected transistor devices coupled between the DC-to-DC converter circuit and the multi-cell rechargeable battery for controlling current flow into and out of the multi-cell rechargeable battery.

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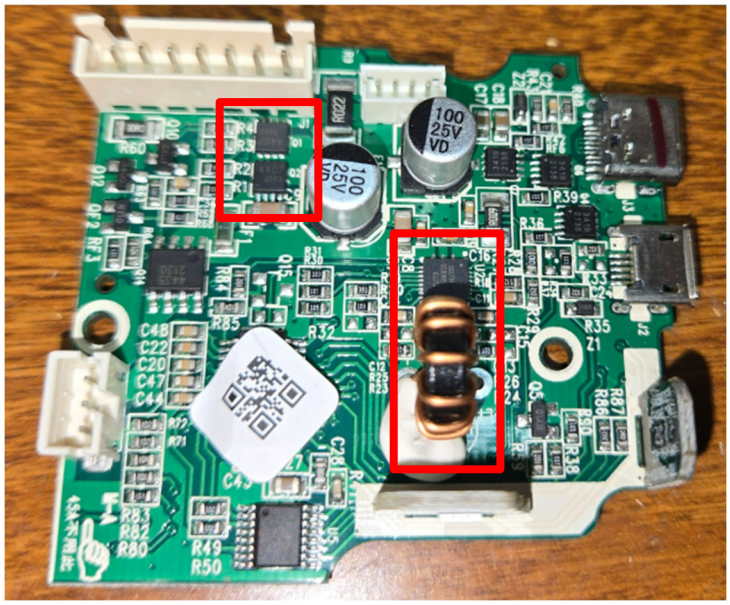
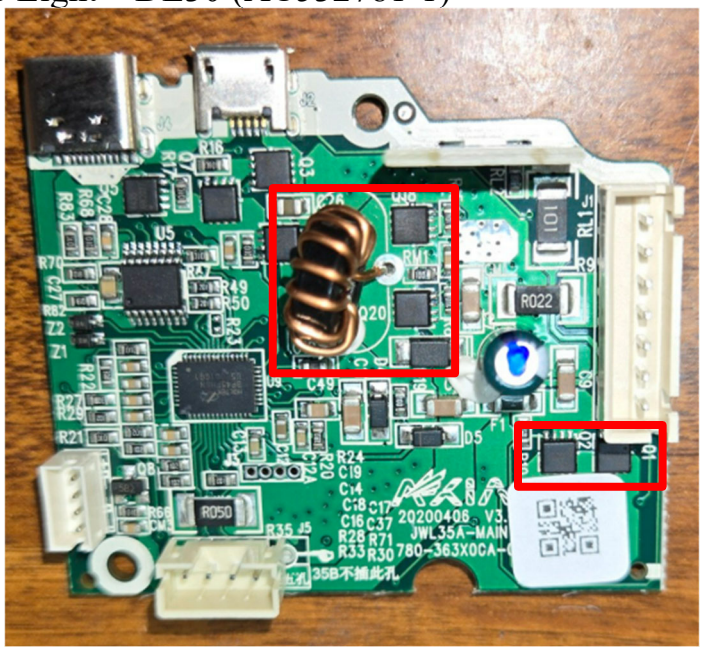
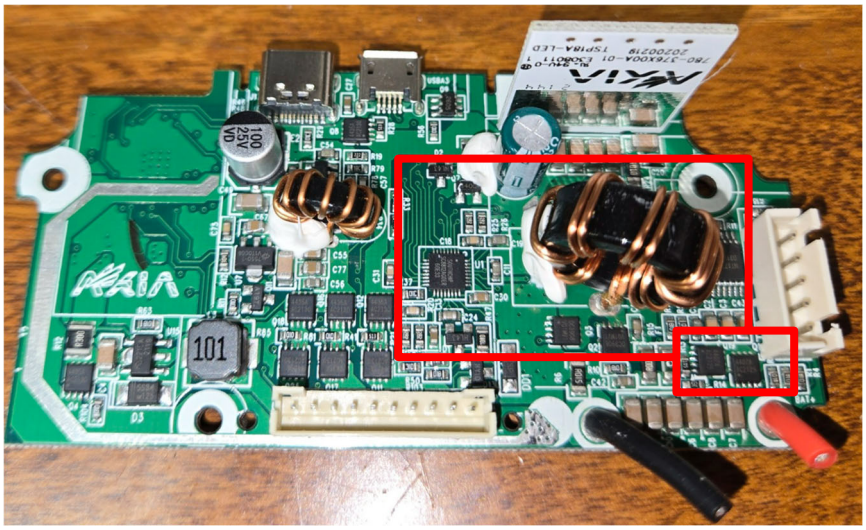


TYPE S Dynamic Light – DL30 (AC532781-1)



TYPE S Dynamic D20 (AC530171A-1).

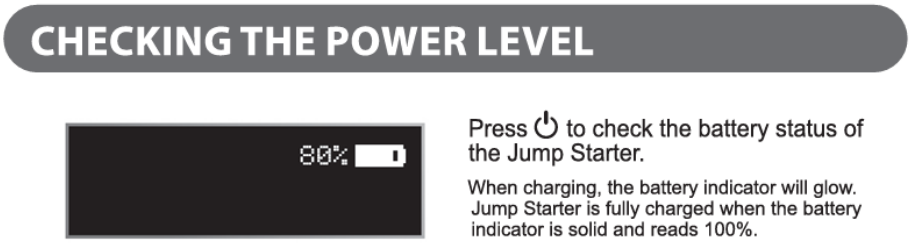


TYPE S 12V 9.0L ProJump™ Battery Jump Starter with JumpGuide™ and 26,000 mAh Power Bank (AC530020-1).

33. Each of the Winplus jump starters includes circuitry that literally meets the claim language with respect to "a USB charge circuit" at least because the same USB charge circuit is used regardless of whether the USB-C or micro-USB port is utilized. Additionally, no USB standard applies to or limits the claimed "USB charge circuit." USB standards are not concerned with internal device circuitry upstream or downstream of USB plugs, cables, and ports or connectors, such as internal circuitry that converts power received through a USB port to voltage sufficient to charge an internal lithium-ion battery pack.

34. In the alternative, each of the Winplus jump starters includes circuitry that satisfies the claim limitation "a USB charge circuit" under the doctrine of equivalents. NOCO maintains that the correct construction of this claim limitation should encompass all forms and formats of USB standards, including at least those that were formally issued and those which were in draft form and otherwise known to those of skill in the art at the time of the invention. The correct construction literally encompasses all of these known forms of USB at the time of the invention, as well as later issued USB standards. Because all of the USB standards transfer power in a substantially similar manner, each of these USB standards would also satisfy the claim limitation under the doctrine of equivalents.

35. Upon information and belief, the Winplus jump starters further comprise a control circuit for detecting the voltage of the multi-cell rechargeable battery and configured to turn off the USB charge circuit to prevent over charging of the multi-cell rechargeable battery if the detected voltage exceeds a threshold value. For example, as illustrated below, the Winplus jump starter is configured to detect when the battery is fully charged.



https://typesauto.com/products/type-s-jump-starter-10-000mah-with-lcd-and-emergency-light-ac532781; https://cdn.shopify.com/s/files/1/0096/6764/1402/files/user-manual-type-s-12V-6.0L-battery-jump-starter-qith-jumpguide-and-10000-mAh-power-bank-AC532781.pdf

36. Upon information and belief, the Winplus jump starters further comprise a battery charge controller coupled to the multi-cell rechargeable battery and the pair of series connected transistor devices and configured to prevent over discharging of the multi-cell rechargeable battery. For example, the website explains the Winplus jump starters have "Safe & Smart Jump-Starting Technology" including "Over-discharge Protection":

https://typesauto.com/products/type-s-jump-starter-10-000mah-with-lcd-and-emergency-light-ac532781.

37. Exemplary Independent claim 23 of the '143 Patent recites:

A jump starting device for boosting or charging a depleted

or discharged vehicle battery having a positive battery terminal and a negative battery terminal, the jump starting device comprising:

a power supply comprising a plurality of series connected lithium batteries;

a positive battery connector for electrically connecting the jump starting device to the positive battery terminal of the depleted or discharged vehicle battery;

a negative battery connector for electrically connecting the jump starting device to the negative battery terminal of the depleted or discharged vehicle battery;

a power switch coupled between the power supply and at least one of the positive and negative battery connectors, the power switch configured to switch power on from the power supply to boost or charge the depleted or discharged vehicle battery when connected to the positive and negative battery connectors;

a USB input connector;

a USB charge circuit coupling the USB input connector to the power supply, the USB charge circuit comprising a power converter configured to upconvert voltage from the USB input connector to charge the series connected lithium batteries;

a battery charge controller coupled to the power supply for preventing over charging and over discharging of the series connected lithium batteries; and

a plug and a pair of cables integrated with the plug, the pair of cables being respectively connected to the positive battery connector and the negative battery connector, the plug being configured to connect to an output port of the jump starting device in a specific orientation.

38. Exemplary Independent claim 30 of the ’143 Patent recites:

A jump starting device for boosting or charging a depleted or discharged vehicle battery having a positive battery terminal and a negative battery terminal, the jump starting device comprising:

a power supply comprising a plurality of series connected lithium batteries;

a positive battery connector for electrically connecting the jump starting device to the positive battery terminal of the depleted or discharged vehicle battery;

a negative battery connector for electrically connecting the

jump starting device to the negative battery terminal of the depleted or discharged vehicle battery;

a power switch coupled between the power supply and at least one of the positive and negative battery connectors, the power switch configured to switch power on from the power supply to boost or charge the depleted or discharged vehicle battery when connected to the positive and negative battery connectors;

a USB input connector;

a USB charge circuit coupling the USB input connector to the power supply, the USB charge circuit comprising a power converter configured to upconvert voltage from the USB input connector to charge the series connected lithium batteries; and

a battery charge controller coupled to the power supply for preventing over charging and over discharging of the series connected lithium batteries,

wherein the power converter is a DC-to-DC converter for upconverting the voltage at the USB input connector to a higher voltage for charging the series connected lithium batteries, and

wherein the DC-to-DC converter comprises an integrated circuit device having an input pin coupled to the USB input connector and an output pin coupled to the power supply and a parallel connected inductor coupled to the integrated circuit DC-to-DC converter.

39. With respect to claims 23 and 30, for example, the Winplus jump starters are jump starting devices for boosting or charging a depleted or discharged vehicle battery having a positive battery terminal and a negative battery terminal, as shown in the following representative images:

https://typesauto.com/products/type-s-jump-starter-10-000mah-with-lcd-and-emergency-light-ac532781.

40. Upon information and belief, each of the Winplus jump starters comprises a power supply comprising a plurality of series connected lithium batteries. For example, as illustrated below, the Winplus jump starter is a 12V jump starter that includes an internal lithium-ion battery. Lithium battery cells typically have a voltage of approximately 3.7 V so a multi -cell configuration with at least three cells in series would be required for a 12V output as advertised on the Winplus website. Additionally, as shown below, the Winplus jump starter device includes multiple battery cells.

Meet the second generation, TYPE S Dynamic Light - DL30 12V 6.0L Battery Jump Starter & Power Bank with Jump Guide. This portable jump box is equipped with additional lighting safety features to keep you safer during a breakdown. In addition to the multimode LED flashlight, this portable battery jump starter has two red emergency hazard LEDs that flash, strobe or display emergency S.O.S. light patterns. An integrated LCD screen displays step-by-step jump-starting instructions to get you back on the road. Simply connect the jumper cables and follow the on-screen Jump Guide prompts. This multipurpose jump box is also a portable power bank, keeping USB-A and USB-C mobile devices and laptops charged on the go. Compact for the glove box or everyday carry, this portable jump starter power bank provides peace of mind on any journey.

Color: Black

TECHNICAL SPECIFICATIONS:	
Product Dimensions:	6.2 x 3.6 x 1.2 in (158 x 91.5 x 33 mm)
Product Weight:	1 lbs (450g)
Internal Battery:	Lithium-Ion
Battery Capacity:	37 Wh
Input (Micro USB):	5V 2A
Input (USB-C):	5V 2A / 9V 2A
USB-A Output:	5V 2.4A / 9V 2A
USB-C Output:	5V 3A / 9V 2A
Jump Start Current:	400A
Operating Temperature:	-20°C ~ 34°C (-4°F ~ 93°F)
Storage Temperature:	-20°C ~ 40°C (-4°F ~ 104°F) Avg. Temp.
Charging Temperature:	0°C ~ 34°C (32°F ~ 93°F)
Charging Time:	4-5 hours
Housing Protection:	IP64 Splash-Resistant (with Ports Covered)

https://typesauto.com/products/type-s-jump-starter-10-000mah-with-lcd-and-emergency-light-ac532781; https://cdn.shopify.com/s/files/1/0096/6764/1402/files/user-manual-type-s-12V-6.0L-battery-jump-starter-qith-jumpguide-and-10000-mAh-power-bank-AC532781.pdf.

TYPE S Dynamic Light – DL30 (AC532781-1).

TYPE S Dynamic D20 (AC530171A-1).

TYPE S 12V 9.0L ProJump™ Battery Jump Starter with JumpGuide™ and 26,000 mAh Power Bank (AC530020-1).

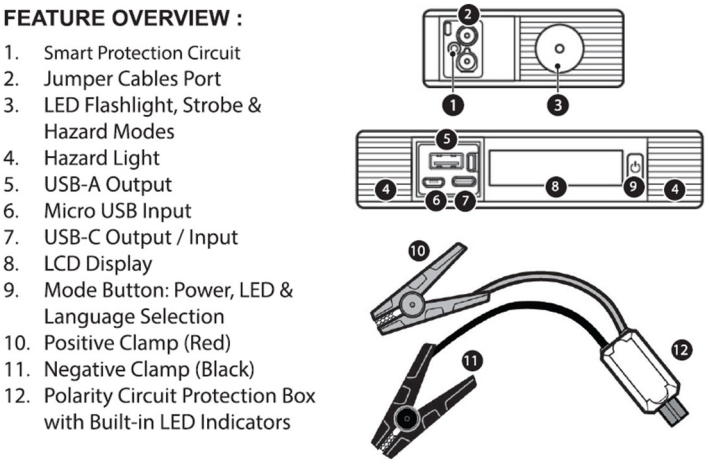
41. Each of the Winplus jump starters also comprises a positive battery terminal connector (**red**) and a negative battery terminal connector (**black**) that connects the jump starting device to the positive battery terminal and the negative battery terminal of the depleted or discharged battery, respectively, as shown in the following representative image:

https://typesauto.com/products/type-s-jump-starter-10-000mah-with-lcd-and-emergency-light-ac532781.

42. Upon information and belief, each of the Winplus jump starters comprises a power switch coupled between the power supply and at least one of the positive and negative battery connectors, and the power switch is configured to switch power on from the power supply to boost or charge the depleted or discharged vehicle battery when connected the positive and negative battery terminal connectors. For example, upon information and belief, the Winplus jump starters comprise a power relay or power switches that turns on power from the power supply to the positive and negative polarity battery terminal connectors.

43. Upon information and belief, each of the Winplus jump starters comprises a USB input connector. For example, the Winplus jump starter includes a micro-USB and USB-C input port for recharging the battery.

TECHNICAL SPECIFICATIONS:	
Product Dimensions:	6.2 x 3.6 x 1.2 in (158 x 91.5 x 33 mm)
Product Weight:	1 lbs (450g)
Internal Battery:	Lithium-Ion
Battery Capacity:	37 Wh
Input (Micro USB):	5V 2A
Input (USB-C):	5V 2A / 9V 2A
USB-A Output:	5V 2.4A / 9V 2A
USB-C Output:	5V 3A / 9V 2A
Jump Start Current:	400A
Operating Temperature:	-20°C ~ 34°C (-4°F ~ 93°F)
Storage Temperature:	-20°C ~ 40°C (-4°F ~ 104°F) Avg. Temp.
Charging Temperature:	0°C ~ 34°C (32°F ~ 93°F)
Charging Time:	4-5 hours
Housing Protection:	IP64 Splash-Resistant (with Ports Covered)

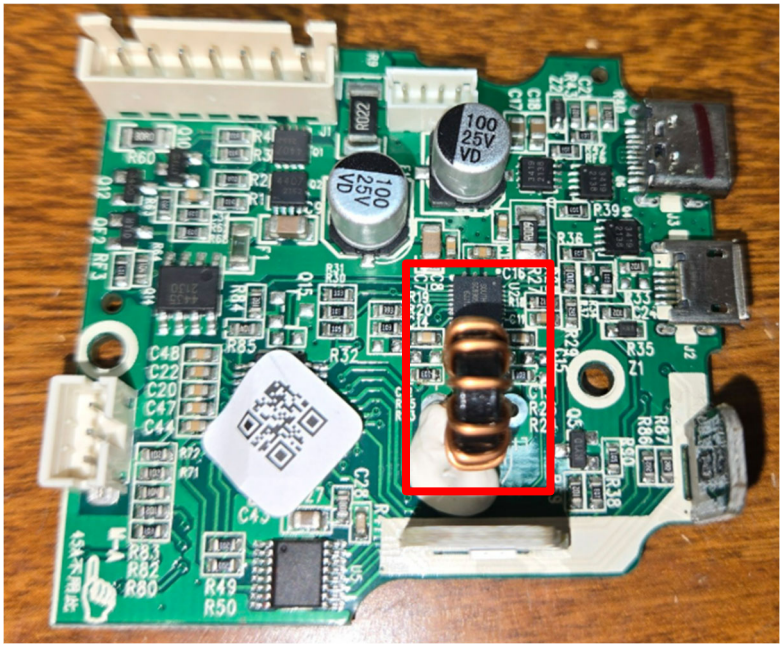


https://cdn.shopify.com/s/files/1/0096/6764/1402/files/user-manual-type-s-12V-6.0L-battery-jump-starter-qith-jumpguide-and-10000-mAh-power-bank-AC532781.pdf.

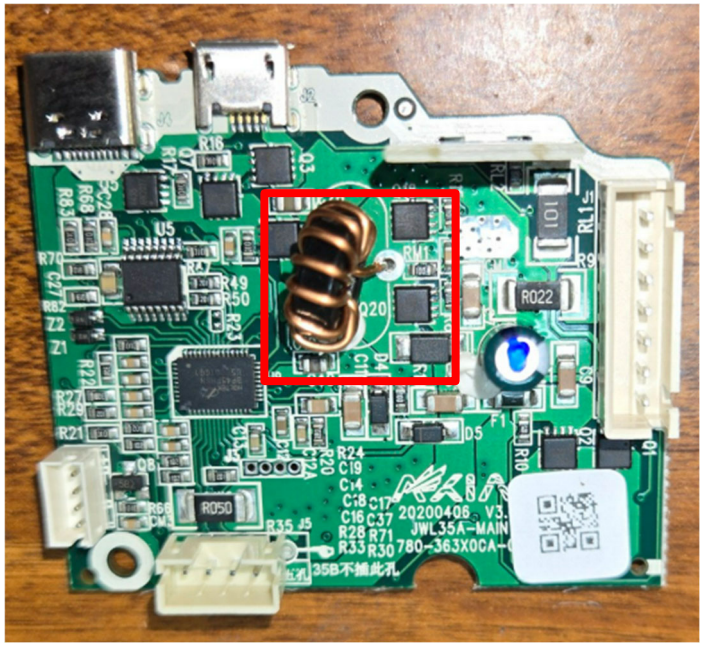
44. In the alternative, each of the Winplus jump starters includes a USB input port that satisfies the claim limitation "a USB input connector" under the doctrine of equivalents. NOCO maintains that the correct construction of this claim limitation should encompass all forms and formats of USB standards, including at least those that were formally issued and those which were in draft form and otherwise known to those of skill in the art at the time of the invention. The correct construction literally encompasses all of these known forms of USB at the time of the invention, as well as later issued USB standards. Because all of the USB standards transfer power in a substantially similar manner as evidenced by at least the fact that many of the Winplus jump starters include both a USB-C and micro-USB port to charge the jump starter device, each of these USB input ports would also satisfy the claim limitation under the doctrine of equivalents.

45. Upon information and belief, the Winplus jump starters comprise a USB charge circuit coupling the USB input connector to the power supply, the USB charge circuit comprising a power converter configured to upconvert voltage from the USB input connector to charge the series connected lithium batteries, wherein the power converter is a DC-to-DC converter for upconverting the voltage at the USB input connector to a higher voltage for charging the series connected lithium

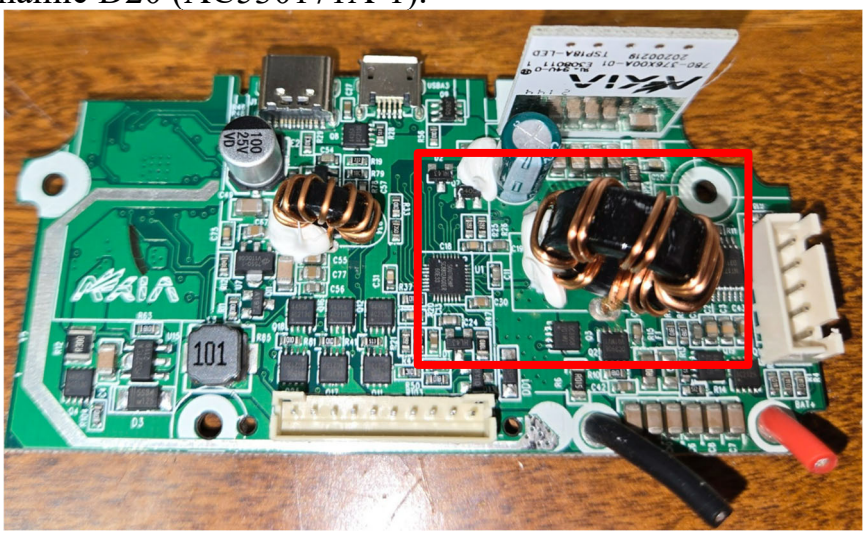
batteries, and wherein the DC-to-DC converter comprises an integrated circuit device having an input pin coupled to the USB input connector and an output pin coupled to the power supply and a parallel connected inductor coupled to the integrated circuit DC-to-DC converter. For example, upon information and belief, each of the Winplus jump starters is configured to be charged through a micro-USB or USB-C input port as described and shown above. Each of the Winplus jump starters include a USB-C port connected to a USB input circuit that includes a DC/DC converter circuit for upconverting an input voltage (e.g., 5V or 9V) on the USB input port to a higher charging voltage (e.g., 12V) for recharging the multi-cell rechargeable battery. In many instances, the Winplus jump starters also include a micro-USB port connected in parallel to the same USB input circuit that includes a DC/DC converter circuit for upconverting an input voltage on the USB input port to a higher charging voltage for recharging the multi-cell rechargeable battery. As illustrated below, the Winplus jump starters further include an integrated circuit device having an input pin coupled to the USB input connector and an output pin coupled to the power supply and a parallel connected inductor coupled to the integrated circuit DC-to-DC converter.



TYPE S Dynamic Light – DL30 (AC532781-1).



TYPE S Dynamic D20 (AC530171A-1).



TYPE S 12V 9.0L ProJump™ Battery Jump Starter with JumpGuide™ and 26,000 mAh Power Bank (AC530020-1).

46. Each of the Winplus jump starters includes circuitry that literally meets the claim language with respect to "a USB charge circuit" at least because the same USB charge circuit is used regardless of whether the USB-C or micro-USB port is utilized. Additionally, no USB standard applies to or limits the claimed "USB charge circuit." USB standards are not concerned with internal device circuitry upstream or downstream of USB plugs, cables, and ports or

connectors, such as internal circuitry that converts power received through a USB port to voltage sufficient to charge an internal lithium-ion battery pack.

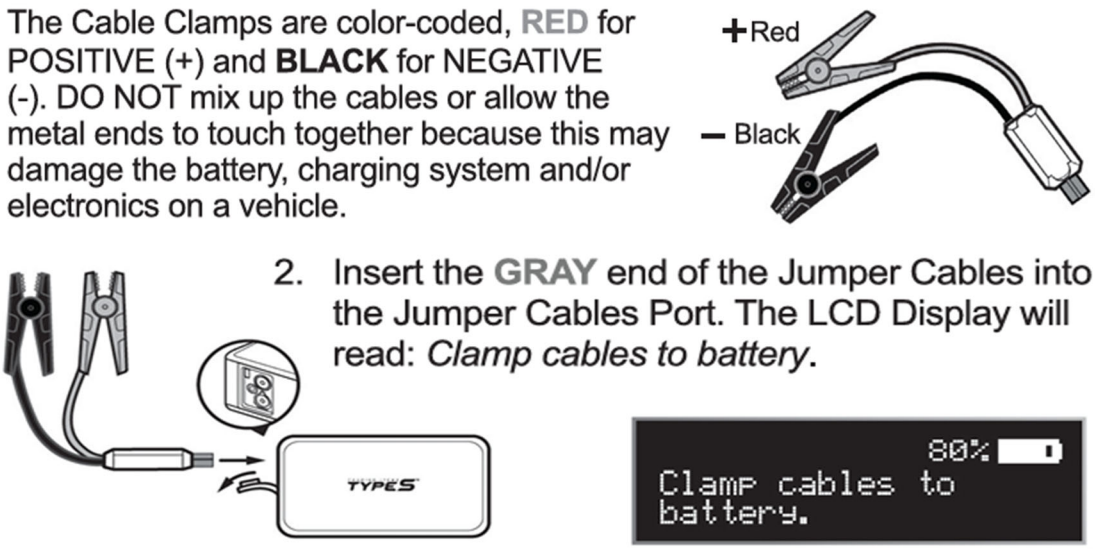
47. In the alternative, each of the Winplus jump starters includes circuitry that satisfies the claim limitation "a USB charge circuit" under the doctrine of equivalents. NOCO maintains that the correct construction of this claim limitation should encompass all forms and formats of USB standards, including at least those that were formally issued and those which were in draft form and otherwise known to those of skill in the art at the time of the invention. The correct construction literally encompasses all of these known forms of USB at the time of the invention, as well as later issued USB standards. Because all of the USB standards transfer power in a substantially similar manner, each of these USB standards would also satisfy the claim limitation under the doctrine of equivalents.

48. Upon information and belief, the Winplus jump starters further comprise a battery charge controller coupled to the power supply for preventing over charging and over discharging of the series connected lithium batteries. For example, the website explains the Winplus jump starters have "Safe & Smart Jump-Starting Technology" including "Over-discharge Protection":

https://typesauto.com/products/type-s-jump-starter-10-000mah-with-lcd-and-emergency-light-ac532781.

49. Upon information and belief, each of the Winplus jump starters comprises a plug and a pair of cables integrated with the plug, the pair of cables being respectively connected to the positive battery connector and the negative battery connector, the plug being configured to connect to an output port of the

jump starting device in a specific orientation. For example, the Winplus jump starter user manual instructs to plug in the "Jumper Cables into the Jumper Cables Port" and shows a pair of battery cables integrated with the plug and shows the positive (**red**) and negative (**black**) terminal connectors. Further, the user manual shows a gray plug with a three-prong configuration that ensures the plug will fit into the output port in a specific orientation. These features are shown in the following representative images:



https://cdn.shopify.com/s/files/1/0096/6764/1402/files/user-manual-type-s-12V-6.0L-battery-jump-starter-qith-jumpguide-and-10000-mAh-power-bank-AC532781.pdf.

50. Upon information and belief, the Winplus jump starters infringe one or more dependent claims of the '143 Patent, for example, dependent claims 24 and 25.

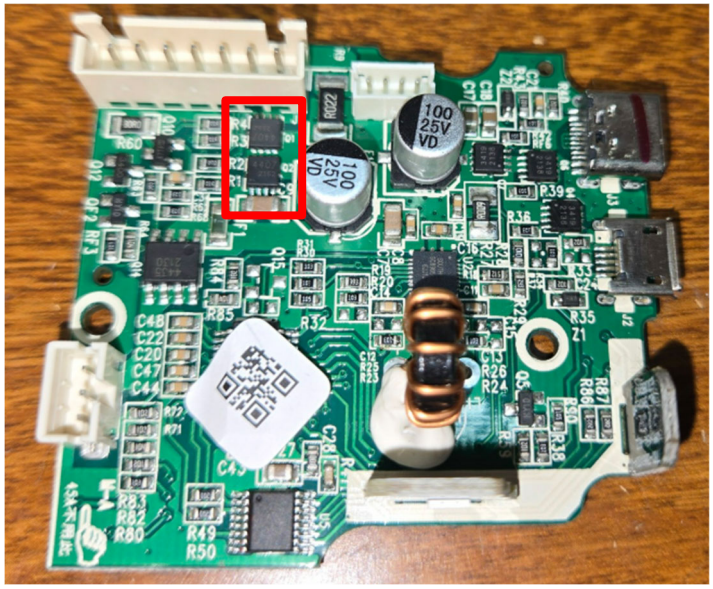
51. Dependent claim 24 of the '143 Patent recites:

> The jump starting device of claim 23, wherein the battery charge controller is further coupled to a pair of series coupled transistors configured to control the over charging and over discharging of the series connected lithium batteries, the pair of series coupled transistors comprising a discharge control transistor and a charge control transistor.

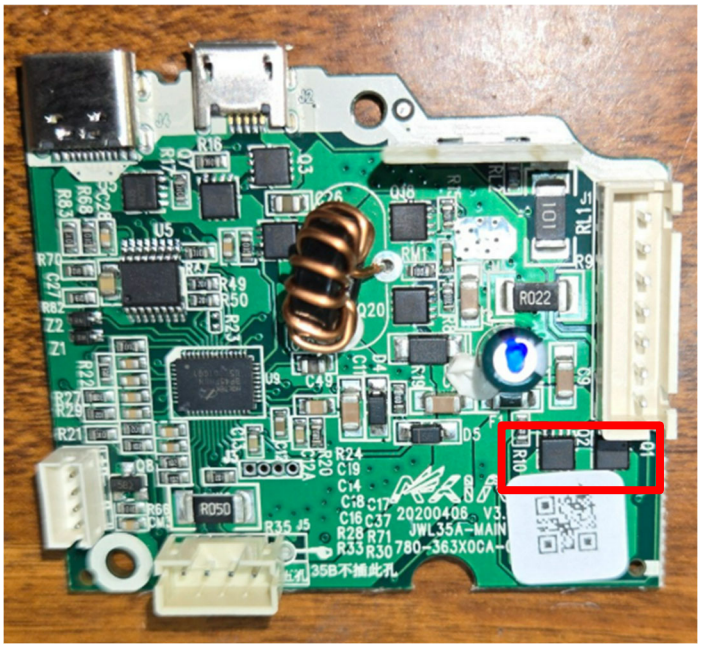
52. Dependent claim 25 of the ’143 Patent recites:

> The jump starting device of claim 23, wherein the battery charge controller is configured to detect the voltages of the series connected lithium batteries and to control the discharge and charge control transistors based on the detected battery voltages.

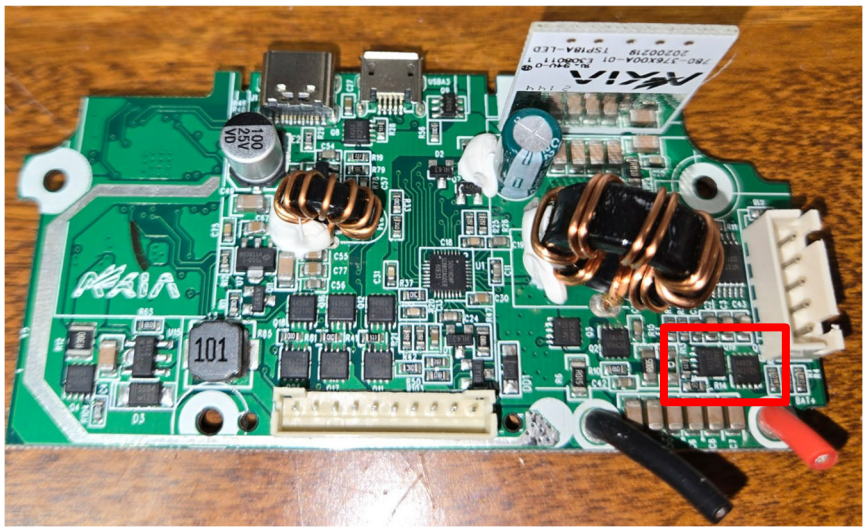
53. Upon information and belief, the battery charge controller of the Winplus jump starters is further coupled to a pair of series coupled transistors configured to control the over charging and over discharging of the series connected lithium batteries, comprising a discharge control transistors and a charge control transistor, and the battery charge controller is configured to detect the voltages of the series connected lithium batteries and to control the discharge and charge control transistors based on the detected battery voltages. As illustrated below, the Winplus jump starters include a battery charge controller coupled to a pair of series connected transistors to control over charging and over discharging based on the detected voltages of the series connected lithium batteries, wherein the pair of series coupled transistors comprising a discharge control transistor and a charge control transistor, and wherein the battery charge controller is configured to detect the voltages of the series connected lithium batteries and to control the discharge and charge control transistors based on the detected battery voltages:



TYPE S Dynamic Light – DL30 (AC532781-1).



TYPE S Dynamic D20 (AC530171A-1).



TYPE S 12V 9.0L ProJump™ Battery Jump Starter with JumpGuide™ and 26,000 mAh Power Bank (AC530020-1).

The '696 Patent

54. Upon information and belief, as set forth more fully below, the Winplus jump starters infringe one or more claims of the '696 Patent.

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55. The ’696 Patent is generally directed to a jump starting device comprising an input connector and a circuit for charging or recharging an internal power supply.

56. Exemplary Independent claim 1 of the ’696 Patent recites:

> An apparatus for jump starting a vehicle, comprising:
>
> a handheld booster device comprising a rechargeable battery pack, a control circuit, a power switch, and an output port, wherein the control circuit detects when it is safe to couple the handheld booster device to the vehicle's battery and connects the rechargeable battery pack to the output port thru the power switch; and
>
> a jumper cable device comprising a plug and a pair of cables integrated with the plug, the plug being configured to connect to the output port of the handheld booster device in a specific orientation;
>
> wherein the handheld booster device further comprises an input port for providing power from an external source to the rechargeable battery pack, and
>
> wherein the handheld booster device further comprises a charge circuit connected to the input port, the charge circuit including an upconverter circuit coupled between the input port and the rechargeable battery pack for converting the voltage from the input port to a higher voltage for charging the rechargeable battery pack, and a pair of series connected transistor devices coupled between the upconverter circuit and the rechargeable battery pack for controlling current flow into and out of the rechargeable battery pack.

57. Upon information and belief, Defendants offer to sell and sell Winplus jump starters within this District and throughout the United States that infringe one or more claims of the ’696 Patent.

58. For example, the Winplus jump starters are jump starting apparatuses for jump starting a vehicle, as shown in the following representative images:

https://typesauto.com/products/type-s-jump-starter-10-000mah-with-lcd-and-emergency-light-ac532781.

59. Upon information and belief, the Winplus jump starters comprises a handheld booster device comprising a rechargeable battery pack, a control circuit, a power switch, and an output port, wherein the control circuit detects when it is safe to couple the handheld booster device to the vehicle's battery and connects the rechargeable battery pack to the output port thru the power switch. For example, as illustrated below, the Winplus jump starter is a 12V jump starter that includes an internal lithium-ion battery, a control circuit, an output port, and a power relay or power switches that connects the rechargeable battery pack to the output port. On information and belief, the Winplus jump starters have "Safe & Smart Jump-Starting Technology" including "Polarity Protection," "Over-discharge Protection," "Low Voltage Protection," "Reverse Charging Protection," "Short-circuit Protection," "Overheat Protection," "Timeout Protection," "Temperature Control

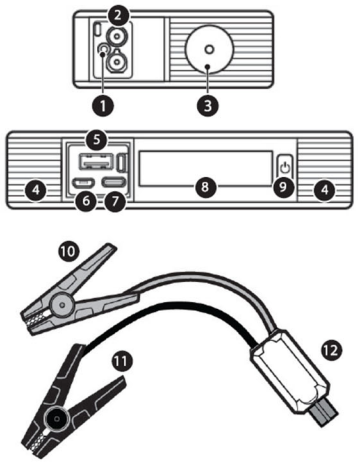
Protection," and "Spark-proof Clamps," to detect when it is safe to couple the handheld booster device to the vehicle's battery and connect the rechargeable battery pack to the output port thru the power switch.

TECHNICAL SPECIFICATIONS:

Product Dimensions:	6.2 x 3.6 x 1.2 in (158 x 91.5 x 33 mm)
Product Weight:	1 lbs (450g)
Internal Battery:	Lithium-Ion
Battery Capacity:	37 Wh
Input (Micro USB):	5V 2A
Input (USB-C):	5V 2A / 9V 2A
USB-A Output:	5V 2.4A / 9V 2A
USB-C Output:	5V 3A / 9V 2A
Jump Start Current:	400A
Operating Temperature:	-20°C ~ 34°C (-4°F ~ 93°F)
Storage Temperature:	-20°C ~ 40°C (-4°F ~ 104°F) Avg. Temp.
Charging Temperature:	0°C ~ 34°C (32°F ~ 93°F)
Charging Time:	4-5 hours
Housing Protection:	IP64 Splash-Resistant (with Ports Covered)

FEATURE OVERVIEW :

1. Smart Protection Circuit
2. Jumper Cables Port
3. LED Flashlight, Strobe & Hazard Modes
4. Hazard Light
5. USB-A Output
6. Micro USB Input
7. USB-C Output / Input
8. LCD Display
9. Mode Button: Power, LED & Language Selection
10. Positive Clamp (Red)
11. Negative Clamp (Black)
12. Polarity Circuit Protection Box with Built-in LED Indicators



https://typesauto.com/products/type-s-jump-starter-10-000mah-with-lcd-and-emergency-light-ac532781; https://cdn.shopify.com/s/files/1/0096/6764/1402/files/user-manual-type-s-12V-6.0L-battery-jump-starter-qith-jumpguide-and-10000-mAh-power-bank-AC532781.pdf.

60. In the alternative, if the "control circuit" or the "power switch" or any other feature of the Winplus jump starter is located in a housing outside the main handheld booster device, these limitations would still be met under the doctrine of equivalents. NOCO maintains that the correct construction of these terms should encompass circuitry present any component of the handheld booster device (jumper cable device or main handheld booster device).

61. Upon information and belief, the Winplus jump starters comprises a jumper cable device comprising a plug and a pair of cables integrated with the plug, the plug being configured to connect to the output port of the handheld booster device in a specific orientation. As shown above, the Winplus jump starters include a jumper cable device with a plug at one end to connect the cables to the output port of the handheld booster device in a specific orientation and a pair of cables and clamps integrated with the plug.

62. Upon information and belief, the Winplus jump starter handheld booster device further comprises an input port for providing power from an external source to the rechargeable battery pack. For example, as depicted above, the Winplus jump starters are charged/provided power through a USB-C and/or micro-USB input connection.

63. Upon information and belief, the Winplus jump starter handheld booster device further comprises a charge circuit connected to the input port, the charge circuit including an upconverter circuit coupled between the input port and the rechargeable battery pack for converting the voltage from the input port to a higher voltage for charging the rechargeable battery pack, and a pair of series connected transistor devices coupled between the upconverter circuit and the rechargeable battery pack for controlling current flow into and out of the rechargeable battery pack. For example, upon information and belief and as described and depicted above, the battery pack in each of the Winplus jump starters is charged/provided power through a USB input connection and corresponding

circuit, including a USB-C and/or micro-USB connector. The USB input connection is coupled to a charge circuit including an upconverter circuit coupled between the input port and the rechargeable battery pack for converting the voltage from the input port (e.g., 5V or 9V) to a higher voltage (e.g., 12V) for charging the rechargeable battery pack.

64. Each of the Winplus jump starters includes circuitry that literally meets the claim language with respect to "charge circuit" because the charge circuit is not limited to a USB charge circuit or a particular type of USB charge circuit and because the same charge circuit in the Winplus devices is used regardless of whether the USB-C or micro-USB port is utilized. Even if improperly limited to a USB charge circuit, no USB standard applies to or limits a USB charge circuit. USB standards are not concerned with internal device circuitry upstream or downstream of USB plugs, cables, and ports or connectors, such as internal circuitry that converts power received through a USB port to voltage sufficient to charge an internal lithium ion battery pack.

65. In the alternative, if "charge circuit" is improperly limited to a USB charge circuit, each of the Winplus jump starters includes circuitry that satisfies the claim limitation "charge circuit" under the doctrine of equivalents. NOCO maintains that the correct construction of this claim limitation should encompass all forms and formats of charge circuits – without limitation. This includes all forms and formats of USB standards, including at least those that were formally issued and those which were in draft form and otherwise known to those of skill in the art at the time of the invention. The correct construction literally encompasses all of these known forms of USB at the time of the invention, as well as later issued USB standards. Because all of the USB standards transfer power in a substantially similar manner as evidenced by at least the fact that many of the Winplus jump starters include both a USB-C and micro-USB port connected in parallel to the

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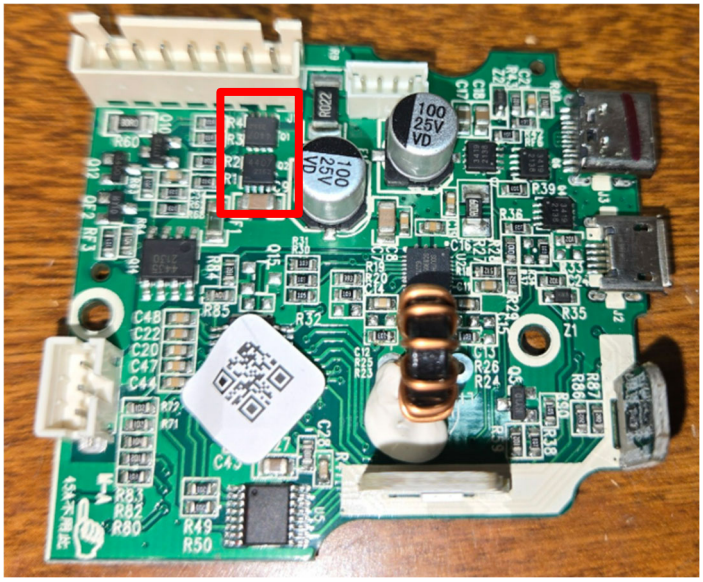
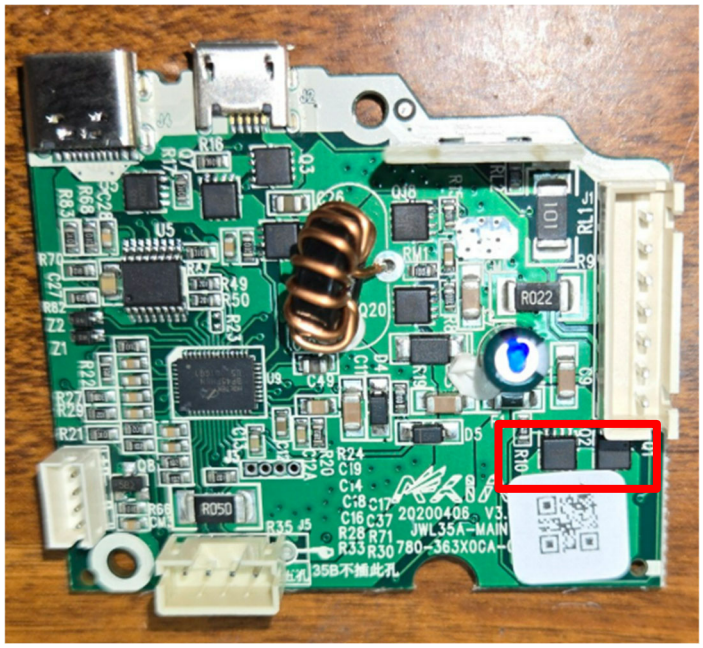
same circuitry to charge the jump starter device, each of these USB standards would also satisfy the claim limitation under the doctrine of equivalents.

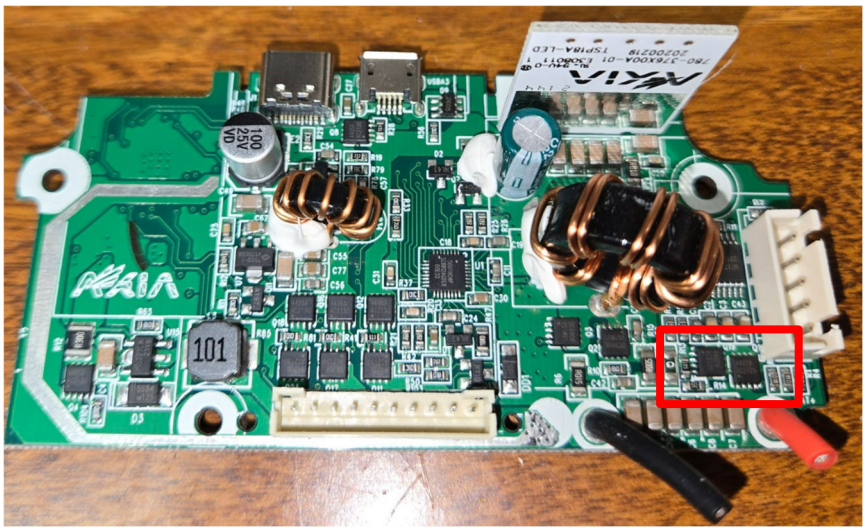
66. As illustrated below, the Winplus jump starters further include a pair of series connected transistor devices coupled between the upconverter circuit and the rechargeable battery pack for controlling current flow into and out of the rechargeable battery pack.



TYPE S Dynamic Light – DL30 (AC532781-1).



TYPE S Dynamic D20 (AC530171A-1).



TYPE S 12V 9.0L ProJump™ Battery Jump Starter with JumpGuide™ and 26,000 mAh Power Bank (AC530020-1).

67. Exemplary Independent claim 23 of the ’696 Patent recites:

> An apparatus for jump starting a vehicle comprising: a handheld booster device comprising
>
> a power supply, wherein the power supply includes one or more rechargeable batteries,
>
> a vehicle battery sensor configured to detect presence of a vehicle battery connected to the apparatus,
>
> a reverse polarity sensor, separate from the vehicle battery sensor, configured to detect a proper polarity connection

between the apparatus and the vehicle battery,

a power switch configured to electrically connect the power supply to an output port of the handheld booster device, wherein the power switch is controlled based on signals from the vehicle battery sensor and the reverse polarity sensor such that the power supply is connected to the output power when both (i) the vehicle battery sensor currently indicates that the vehicle battery is connected to the apparatus, and (ii) the reverse polarity sensor currently indicates that the apparatus and the vehicle battery are connected with the proper connection,

an input port configured to receive power from an external power source for charging the one or more batteries, and

a charge circuit connected to the input port, the charge circuit including a DC-DC converter circuit coupled between the input port and the one or more rechargeable batteries for converting the voltage from the input port to a higher voltage for charging the one or more rechargeable batteries, and a pair of series connected transistor devices coupled between the DC-DC converter circuit and the one or more rechargeable batteries for controlling current flow into and out of the one or more rechargeable batteries; and

a jumper cable device comprising a plug and a pair of cables integrated with the plug for connecting the handheld booster device to the vehicle battery, the plug being configured to connect to the output port of the handheld booster device in a specific orientation.

68. For example, the Winplus jump starters are handheld booster devices for jump starting a vehicle, as shown in the following representative images:

https://typesauto.com/products/type-s-jump-starter-10-000mah-with-lcd-and-emergency-light-ac532781.

69. Upon information and belief, each of the Winplus jump starters comprises a power supply which includes one or more rechargeable batteries. For example, as illustrated below, the Winplus jump starter is a 12V jump starter that includes an internal lithium-ion battery. Lithium battery cells typically have a voltage of approximately 3.7 V so a multi -cell configuration with at least three cells in series would be required for a 12V output as advertised on the Winplus website.

Meet the second generation, TYPE S Dynamic Light - DL30 12V 6.0L Battery Jump Starter & Power Bank with Jump Guide. This portable jump box is equipped with additional lighting safety features to keep you safer during a breakdown. In addition to the multimode LED flashlight, this portable battery jump starter has two red emergency hazard LEDs that flash, strobe or display emergency S.O.S. light patterns. An integrated LCD screen displays step-by-step jump-starting instructions to get you back on the road. Simply connect the jumper cables and follow the on-screen Jump Guide prompts. This multipurpose jump box is also a portable power bank, keeping USB-A and USB-C mobile devices and laptops charged on the go. Compact for the glove box or everyday carry, this portable jump starter power bank provides peace of mind on any journey.

Color: Black

TECHNICAL SPECIFICATIONS:	
Product Dimensions:	6.2 x 3.6 x 1.2 in (158 x 91.5 x 33 mm)
Product Weight:	1 lbs (450g)
Internal Battery:	Lithium-Ion
Battery Capacity:	37 Wh
Input (Micro USB):	5V 2A
Input (USB-C):	5V 2A / 9V 2A
USB-A Output:	5V 2.4A / 9V 2A
USB-C Output:	5V 3A / 9V 2A
Jump Start Current:	400A
Operating Temperature:	-20°C ~ 34°C (-4°F ~ 93°F)
Storage Temperature:	-20°C ~ 40°C (-4°F ~ 104°F) Avg. Temp.
Charging Temperature:	0°C ~ 34°C (32°F ~ 93°F)
Charging Time:	4-5 hours
Housing Protection:	IP64 Splash-Resistant (with Ports Covered)

https://typesauto.com/products/type-s-jump-starter-10-000mah-with-lcd-and-emergency-light-ac532781; https://cdn.shopify.com/s/files/1/0096/6764/1402/files/user-manual-type-s-12V-6.0L-battery-jump-starter-qith-jumpguide-and-10000-mAh-power-bank-AC532781.pdf.

70. Upon information and belief, the Winplus jump starters have a vehicle battery sensor configured to detect presence of a vehicle battery connected to the apparatus and a reverse polarity sensor, separate from the vehicle battery sensor, configured to detect a proper polarity connection between the apparatus and the vehicle battery. For example, the user manual explains that "[o]nce the clamps are properly connected to the vehicle battery, the LCD Display will read: "Ready, Start vehicle ignition," and further identifies status indicators in a "Polarity Protection Circuit Status" table, as shown in the following representative images:

6. Once the clamps are properly connected to the vehicle battery, the LCD Display will read: *Ready, Start vehicle ignition.* You have 45 seconds to start your vehicle before the Jump Starter shuts off in order to prevent the vehicle battery from reverse charging the unit.

Polarity Protection Circuit Status

Status (Light & Sound Indicator)			Status Meaning
Red Light	Green Light	Sound	
○	●	None	The car battery is ready for jump start
●	○	None	The Jump Starter needs to be charged
☀	☀	None	The car battery is ready for jump start. If the indicator doesn't turn solid Green, the car battery voltage is higher than the Jump Starter. You can still jump start your battery, but may need to charge your Jump Starter.
☀	○	Beeping	Disconnect the jumper cables from the car battery and Jump Starter. Either the car jump start is complete or there is a connection problem.
●	●	None	This status shows after 45 seconds time out. Disconnect the jumper cables from the car battery and Jump Starter to reset. Reconnect the jumper cables to jump start the vehicle.
○	○	None	Please contact TYPE S for troubleshooting

https://cdn.shopify.com/s/files/1/0096/6764/1402/files/user-manual-type-s-12V-6.0L-battery-jump-starter-qith-jumpguide-and-10000-mAh-power-bank-AC532781.pdf.

71. Upon information and belief, each of the Winplus jump starters comprises a power switch configured to electrically connect the power supply to an output port of the handheld booster device, wherein the power switch is controlled based on signals from the vehicle battery sensor and the reverse polarity sensor such that the power supply is connected to the output power when both (i) the vehicle battery sensor currently indicates that the vehicle battery is connected to the apparatus, and (ii) the reverse polarity sensor currently indicates that the apparatus and the vehicle battery are connected with the proper connection. For example, upon information and belief, the Winplus jump starters comprise a power switch that electrically connects the power supply to an output port of the jump starters based on signals from a presence sensor and reverse polarity sensor, as shown in the above representative images.

72. In the alternative, if the "vehicle battery sensor," "reverse polarity sensor," or the "power switch," or any other feature of the Winplus jump starter is

located in a housing outside the main handheld booster device, these limitations would still be met under the doctrine of equivalents. NOCO maintains that the correct construction of these terms should encompass circuitry present in either component of the handheld booster device (jumper cable device or main handheld booster device). Further, insofar as the Winplus jump starters implement the vehicle battery and reverse polarity sensors using a different combination of software and/or hardware, they still infringe under the doctrine of equivalents. Specifically, the Winplus jump starters (1) detect the presence of a vehicle battery connected to the apparatus and detect a proper polarity connection between the apparatus and the vehicle battery; (2) generate outputs that reflect the polarity of the connection and the presence of a connected vehicle battery that is used to control the power switch; and (3) prevent the jump starter from powering on the clamps when the clamps are not properly connected to the vehicle battery, as shown in the above representative images.

73. Upon information and belief, the Winplus jump starters further comprise an input port configured to receive power from an external power source for charging the one or more batteries. For example, as depicted above, the Winplus jump starters are charged/provided power through a USB-C and/or micro-USB input connection. For example, the Winplus jump starter includes a micro-USB and USB-C input port for recharging the battery:

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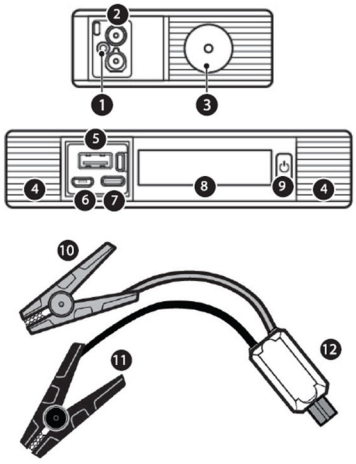
TECHNICAL SPECIFICATIONS:	
Product Dimensions:	6.2 x 3.6 x 1.2 in (158 x 91.5 x 33 mm)
Product Weight:	1 lbs (450g)
Internal Battery:	Lithium-Ion
Battery Capacity:	37 Wh
Input (Micro USB):	5V 2A
Input (USB-C):	5V 2A / 9V 2A
USB-A Output:	5V 2.4A / 9V 2A
USB-C Output:	5V 3A / 9V 2A
Jump Start Current:	400A
Operating Temperature:	-20°C ~ 34°C (-4°F ~ 93°F)
Storage Temperature:	-20°C ~ 40°C (-4°F ~ 104°F) Avg. Temp.
Charging Temperature:	0°C ~ 34°C (32°F ~ 93°F)
Charging Time:	4-5 hours
Housing Protection:	IP64 Splash-Resistant (with Ports Covered)

FEATURE OVERVIEW :

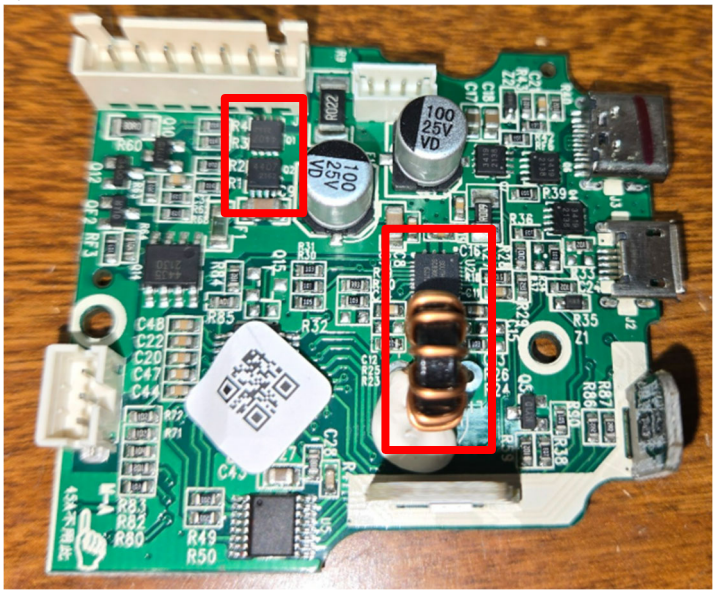
1. Smart Protection Circuit
2. Jumper Cables Port
3. LED Flashlight, Strobe & Hazard Modes
4. Hazard Light
5. USB-A Output
6. Micro USB Input
7. USB-C Output / Input
8. LCD Display
9. Mode Button: Power, LED & Language Selection
10. Positive Clamp (Red)
11. Negative Clamp (Black)
12. Polarity Circuit Protection Box with Built-in LED Indicators



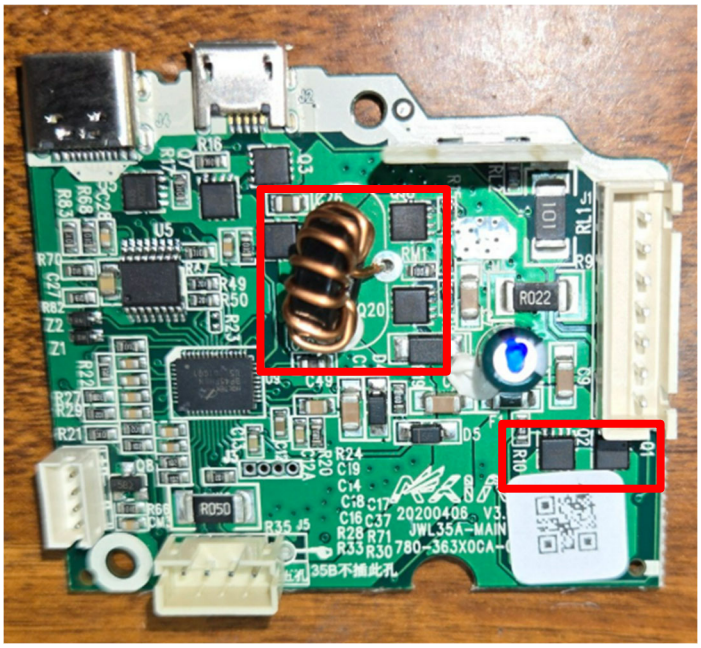
https://cdn.shopify.com/s/files/1/0096/6764/1402/files/user-manual-type-s-12V-6.0L-battery-jump-starter-qith-jumpguide-and-10000-mAh-power-bank-AC532781.pdf.

74. Upon information and belief, the Winplus jump starters comprise a charge circuit connected to the input port, the charge circuit including a DC-to-DC converter circuit coupled between the input port and the one or more rechargeable batteries for converting the voltage from the input port to a higher voltage for charging the one or more rechargeable batteries, and a pair of series connected transistor devices coupled between the DC-to-DC converter circuit and the one or more rechargeable batteries for controlling current flow into and out of the one or more rechargeable batteries. For example, upon information and belief, each of the Winplus jump starters is configured to be charged through a micro-USB or USB-C

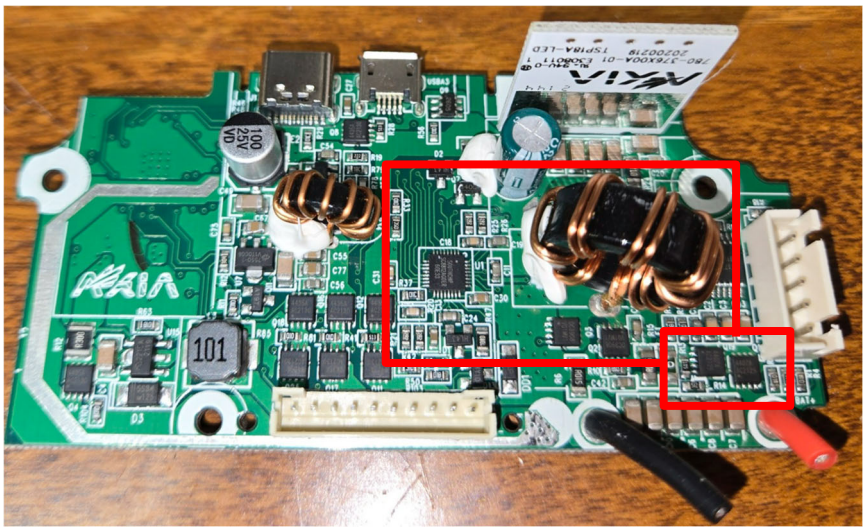
input port as described and shown above. Each of the Winplus jump starters include a USB-C port connected to a USB input circuit that includes a DC/DC converter circuit for upconverting an input voltage (e.g., 5V or 9V) on the USB input port to a higher charging voltage (e.g., 12V) for recharging the multi-cell rechargeable battery. In many instances, the Winplus jump starters also include a micro-USB port connected in parallel to the same USB input circuit that includes a DC/DC converter circuit for upconverting an input voltage on the USB input port to a higher charging voltage for recharging the multi-cell rechargeable battery. As illustrated below, the Winplus jump starters further include a pair of series connected transistor devices coupled between the DC-to-DC converter circuit and the rechargeable batteries for controlling current flow into and out of the multi-cell rechargeable battery.



TYPE S Dynamic Light – DL30 (AC532781-1).



TYPE S Dynamic D20 (AC530171A-1).



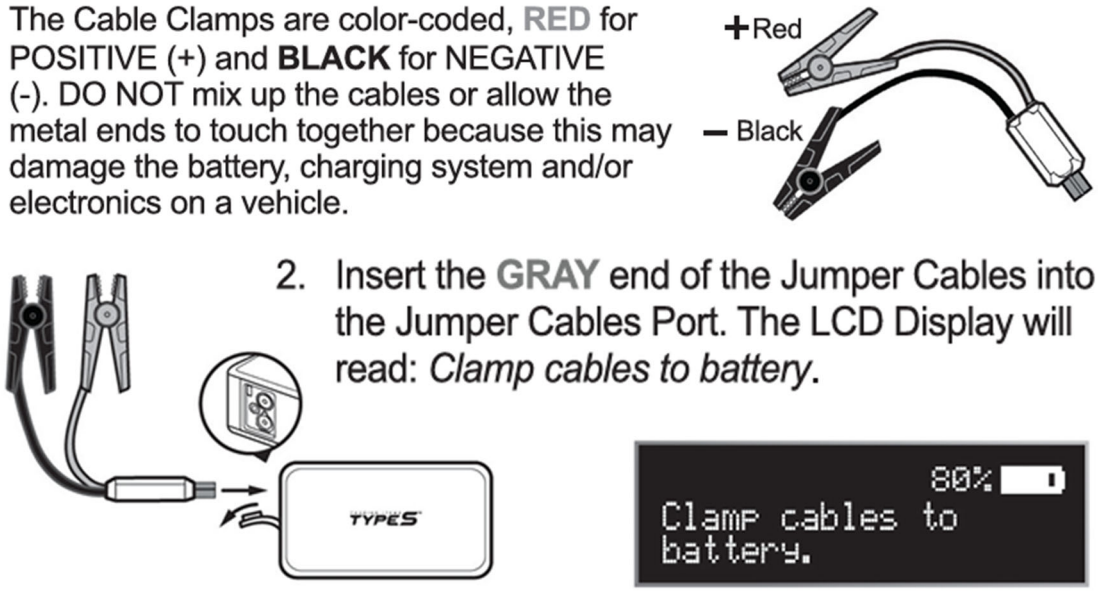
TYPE S 12V 9.0L ProJump™ Battery Jump Starter with JumpGuide™ and 26,000 mAh Power Bank (AC530020-1).

75. Each of the Winplus jump starters includes circuitry that literally meets the claim language with respect to "charge circuit" because the charge circuit is not limited to a USB charge circuit or a particular type of USB charge circuit and because the same charge circuit in the Winplus devices is used regardless of whether the USB-C or micro-USB port is utilized. Even if improperly limited to a USB charge circuit, no USB standard applies to or limits a USB charge circuit.

USB standards are not concerned with internal device circuitry upstream or downstream of USB plugs, cables, and ports or connectors, such as internal circuitry that converts power received through a USB port to voltage sufficient to charge an internal lithium ion battery pack.

76. In the alternative, if "charge circuit" is improperly limited to a USB charge circuit, each of the Winplus jump starters includes circuitry that satisfies the claim limitation "charge circuit" under the doctrine of equivalents. NOCO maintains that the correct construction of this claim limitation should encompass all forms and formats of charge circuits – without limitation. This includes all forms and formats of USB standards, including at least those that were formally issued and those which were in draft form and otherwise known to those of skill in the art at the time of the invention. The correct construction literally encompasses all of these known forms of USB at the time of the invention, as well as later issued USB standards. Because all of the USB standards transfer power in a substantially similar manner as evidenced by at least the fact that many of the Winplus jump starters include both a USB-C and micro-USB port connected in parallel to the same circuitry to charge the jump starter device, each of these USB standards would also satisfy the claim limitation under the doctrine of equivalents.

77. Upon information and belief, each of the Winplus jump starters comprises a jumper cable device comprising a plug and a pair of cables integrated with the plug for connecting the handheld booster device to the vehicle battery, the plug being configured to connect to the output port of the handheld booster device in a specific orientation. For example, the Winplus jump starter user manual instructs to plug in the "Jumper Cables into the Jumper Cables Port" and shows a pair of battery cables integrated with the plug on one end. Further, the user manual shows a gray plug with a three-prong configuration that ensures the plug will fit into the output port in a specific orientation. These features are shown in the following representative images:



https://cdn.shopify.com/s/files/1/0096/6764/1402/files/user-manual-type-s-12V-6.0L-battery-jump-starter-qith-jumpguide-and-10000-mAh-power-bank-AC532781.pdf.

COUNT ONE – INFRINGEMENT OF U.S. PATENT NO. 12,187,143

78. NOCO realleges, adopts, and incorporates by reference the allegations included within paragraphs 1-77 as if fully set forth herein.

79. On information and belief, Winplus has directly infringed the '143 Patent by importing, offering to sell, selling, and/or using the Winplus jump starters in the United States, without authority, in a manner that infringes at least claim 1 of the '143 Patent to the injury of NOCO both literally and under the doctrine of equivalents.

80. Defendants are liable for infringement of the '143 Patent pursuant to 35 U.S.C. § 271.

81. Upon information and belief, Winplus has willfully infringed the '143 Patent. Among other things, Winplus competes with NOCO. NOCO's portfolio of issued patents is public knowledge and, upon information and belief, Winplus has actually known about the '143 Patent and their infringement thereof since prior to this lawsuit. In fact, NOCO has previously accused Winplus (and others) of

infringing related patents (U.S. Patent Nos. 9,007,015, 11,447,023, and 11,584,243) in earlier litigations. *See, e.g.*, *Certain Portable Battery Jump Starters & Components Thereof*, Inv. No. 337-TA-1256 (U.S. Int'l Trade Comm'n) and *Certain Portable Battery Jump Starters & Components Thereof II*, Inv. No. 337-TA-1359 (U.S. Int'l Trade Comm'n).

82. As a result of Defendants' infringement of the '143 Patent, NOCO has suffered and will continue to suffer monetary damages, including lost profits and/or a reasonable royalty, that are compensable under 35 U.S.C. § 284 in an amount to be determined at trial. NOCO complied with the patent marking statute, 35 U.S.C. § 287(a), by providing an address of a posting on the Internet, accessible to the public without charge for accessing the address, that associates the patented article with the number of the patent (https://no.co/intellectual-property, https://no.co/patents, and https://npats.co).

83. Unless an injunction is issued enjoining Defendants and their officers, agents, servants, employees, attorneys, representatives, affiliates, and all others acting on its behalf from infringing the '143 Patent, NOCO will continue to be greatly and irreparably harmed and has no adequate remedy at law.

COUNT TWO – INFRINGEMENT OF U.S. PATENT NO. 12,208,696

84. NOCO realleges, adopts, and incorporates by reference the allegations included within paragraphs 1-83 as if fully set forth herein.

85. On information and belief, Winplus has directly infringed the '696 Patent by importing, offering to sell, selling, and/or using the Winplus jump starters in the United States, without authority, in a manner that infringes at least claim 1 of the '696 Patent to the injury of NOCO both literally and under the doctrine of equivalents.

86. Defendants are liable for infringement of the '696 Patent pursuant to 35 U.S.C. § 271.

87. Upon information and belief, Winplus has willfully infringed the '696 Patent. Among other things, Winplus competes with NOCO. NOCO's portfolio of issued patents is public knowledge and, upon information and belief, Winplus has actually known about the '696 Patent and their infringement thereof since prior to this lawsuit. In fact, NOCO has previously accused Winplus (and others) of infringing related patents (U.S. Patent Nos. 9,007,015, 11,447,02, and 11,584,243) in earlier litigations. *See, e.g.*, *Certain Portable Battery Jump Starters & Components Thereof*, Inv. No. 337-TA-1256 (U.S. Int'l Trade Comm'n) and *Certain Portable Battery Jump Starters & Components Thereof II*, Inv. No. 337-TA-1359 (U.S. Int'l Trade Comm'n).

88. As a result of Defendants' infringement of the '696 Patent, NOCO has suffered and will continue to suffer monetary damages, including lost profits and/or a reasonable royalty, that are compensable under 35 U.S.C. § 284 in an amount to be determined at trial. NOCO complied with the patent marking statute, 35 U.S.C. § 287(a), by providing an address of a posting on the Internet, accessible to the public without charge for accessing the address, that associates the patented article with the number of the patent (https://no.co/intellectual-property, https://no.co/patents, and https://npats.co).

89. Unless an injunction is issued enjoining Defendants and their officers, agents, servants, employees, attorneys, representatives, affiliates, and all others acting on its behalf from infringing the '696 Patent, NOCO will continue to be greatly and irreparably harmed and has no adequate remedy at law.

PRAYER FOR RELIEF

NOCO respectfully requests the following relief:

(a) Judgment for NOCO and against Defendants on all Counts asserted herein;

(b) Permanent injunctive relief enjoining Defendants and their officers, agents, servants, employees, attorneys, representatives, affiliates, and all

others acting on their behalf or in active concert or participation with them from infringement of the ’143 and ’696 Patents;

(c) Damages to which NOCO is entitled including without limitation as provided under 35 U.S.C. § 284;

(d) Actual, statutory, and compensatory damages as proven at trial;

(e) Enhanced damages in an amount equal to three times NOCO’s damages for Defendants’ willful infringement of the ’143 and ’696 Patents pursuant to 35 U.S.C. § 284;

(f) Pre-judgment and post-judgment interest;

(g) That the Court find that this is an exceptional case within the meaning of 35 U.S.C. § 285;

(h) NOCO’s costs, expenses, and reasonable attorneys’ fees and litigation expenses incurred in this action; and

(i) Such other relief as the Court may deem just and proper.

Dated: February 20, 2025

Respectfully submitted,

JONES DAY

By: */s/ Alexis A. Smith*

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JURY TRIAL DEMAND

Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, The NOCO Company demands a trial by jury of all issues triable of right by jury.

Dated: February 20, 2025

Respectfully submitted,

JONES DAY

By: */s/ Alexis A. Smith*

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