

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
AUSTIN DIVISION**

**IFPOWER CO., LTD.,**

**Plaintiff,**

**v.**

**ZAGG, INC.,**

**Defendant.**

**Civil Action No. 1:23-cv-01501-RP**

**Jury Trial Demanded**

**PLAINTIFF’S FIRST AMENDED COMPLAINT**

Plaintiff IFPower Co., Ltd. (“IFPower” or “Plaintiff”) hereby files its First Amended Complaint against Zagg, Inc. (“Defendant” or “Zagg”) alleging infringement of U.S. Patent Nos. 7,298,361 (the “’361 Patent”); and 7,863,860 (the “’860 Patent”) (collectively, the “Patents-in-Suit”).

**I. PARTIES**

1. Plaintiff IFPower is a company existing under the laws of Taiwan, with its principal place of business located 1 F., No. 2, Ln. 18, Shuangyuan St., Wanhua Dist., Taipei City 10884, Taiwan (R.O.C.).

2. Upon information and belief, Defendant Zagg, Inc. is a Delaware corporation with its principal places of business located at 910 Legacy Center Way, Suite 500, Midvale, Utah 84047. Upon information and belief, Defendant is authorized to do business in Texas and has an established place of business in this District located at 2901 S. Capital of Texas Highway, Austin, Texas 78746. Defendant can be served by through its registered agent, CT Corporation System, 1108 E. South Union Avenue, Midvale, UT 84047.

## II. JURISDICTION AND VENUE

3. This is an action for patent infringement which arises under 35 U.S.C. §§ 271, 281, 284 and 285. This Court has subject matter jurisdiction over this action under 28 U.S.C. §§1331 and 1338(a).

4. This Court has personal jurisdiction over Defendant, and venue is proper in this Court pursuant to 28 U.S.C. §§1391(b), (c), and 1400. This Court has personal jurisdiction over Defendant because, among other things, Defendant has established minimum contacts within the forum such that the exercise of jurisdiction over Defendant will not offend traditional notions of fair play and substantial justice. For example, Defendant has placed products that practice and/or embody the claimed inventions of the Patents into the stream of commerce with the reasonable expectation and/or knowledge that purchasers and users of such products were located within this district.

5. Defendant has an established place of business in this District with a physical address at 2901 S. Capital of Texas Highway, Austin, Texas 78746.

6. In addition, Defendant has sold, advertised, marketed, and distributed products in this district that practice the claimed inventions of the Patents. Defendant derives substantial revenue from the sale of infringing products distributed within the district, and/or expects or should reasonably expect its actions to have consequences within the district and derives substantial revenue from interstate and international commerce.

## III. FACTUAL BACKGROUND

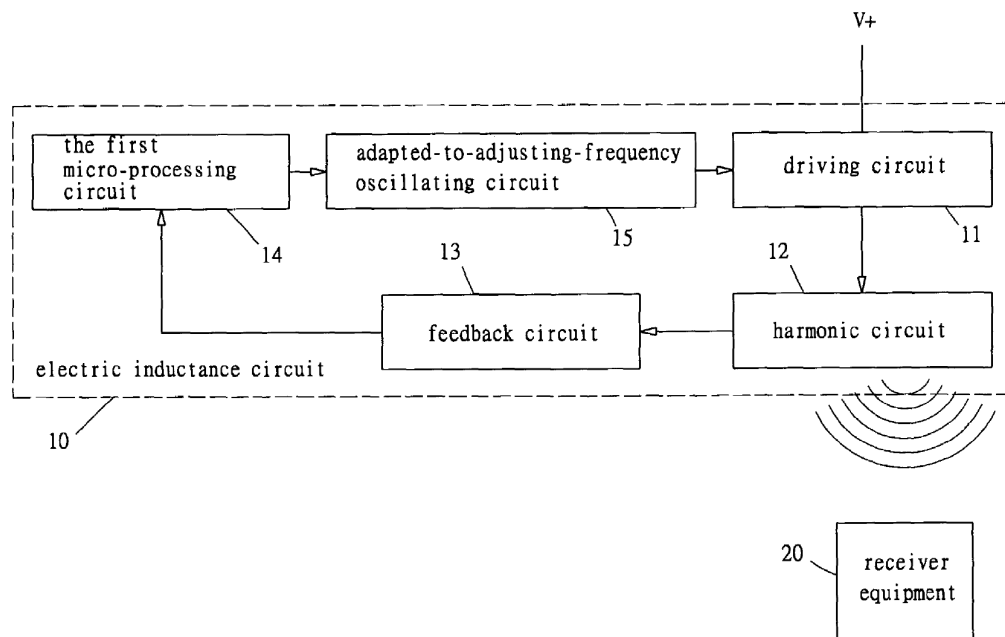
### PATENTS-IN-SUIT

7. IFPower is the owner of all right, title, and interest in and to U.S. Patent No. 7,298,361 (attached as **Exhibit 1**), entitled “Non-Contact Electric Inductance Circuit for Power Source,” issued on November 20, 2007.

8. IFPower is the owner of all right, title, and interest in and to U.S. Patent No. 7,863,860 (attached as **Exhibit 2**), entitled “Battery Cover,” issued on January 4, 2011.

TECHNICAL OVERVIEW

9. The '361 Patent is directed to a non-contact inductance circuit for a power source. The inductance circuit converts input alternating current into signals with a high-frequency harmonic vibration. The alternating electric current passes through an amplifier.



'361 Patent, Fig. 1.

10. During operation, a feedback circuit **13** transmits the voltage or current of the harmonic circuit to a processor to analyze the value of the detected voltage or current.

11. Conventional chargers for electronic devices with rechargeable batteries such as computer mice or smartphones required a physical cable connection between the power supply and the electronic device.

12. Prior art wireless chargers used harmonic vibration energy provided by alternating signals from a coil. That energy is converted into electrical energy by the receiving device. '361

patent, 1:17-24. This is accomplished through interoperations of an internal inductance and an internal capacitor. *Id.*, 1:38-43.

13. Even for inductors and capacitors with a given specification, however, there are practical operating ranges that reflect some differences during operation. As a result, mismatches between characteristics arise which reduce the efficiency of the circuit or require repeated and cumbersome adjustment. *Id.*, 1:43-56.

14. The inventions are thus directed to a nonconventional feedback and adapted-to-adjusting frequency oscillating circuit for physical, wireless chargers.

When in operation, the adapted-to-adjusting-frequency oscillating circuit generates alternating electric current that passes to the harmonic circuit after being amplified through the driving circuit, and the feedback circuit transmits the voltage or the current of the harmonic circuit to the microprocessing circuit that analyses the value of the voltage or the current detected, then the adapted-to-adjusting-frequency oscillating circuit adjusts the frequency of subsequent input alternating electric current, in order that the entire electric inductance circuit for the power source can generate the best harmonic frequency.

*Id.*, 2:5-15.

15. Additionally, in certain embodiments, the inductance circuit is further integrated with a signal processing circuit. In this way, the electric inductance circuit for the power source can be used for radio signal transmission. *Id.* 15 2:16-24.

16. The '860 Patent is directed to wireless charging, whereby a device incorporating the inventions claimed therein can be charged without a cable between the device and charger or removing internal batteries.

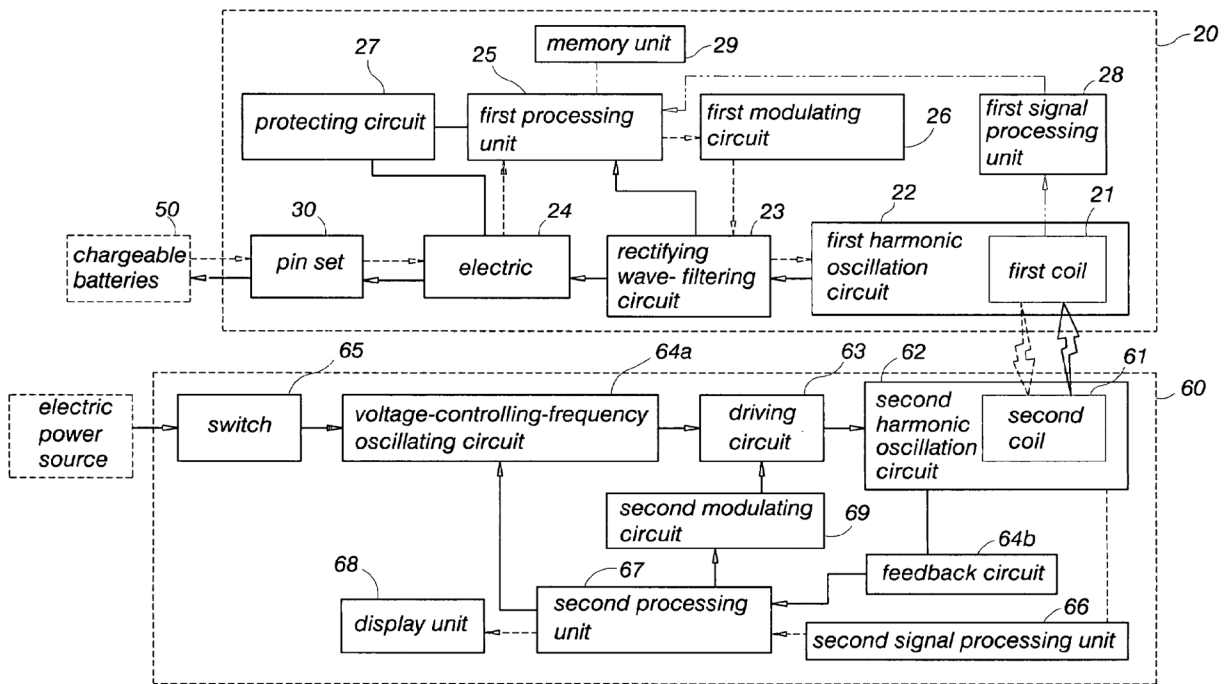
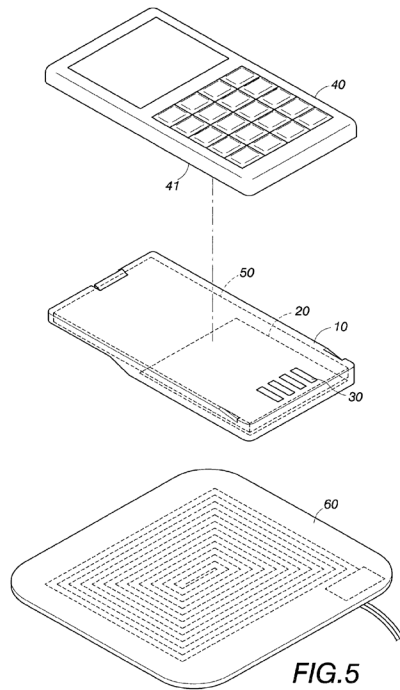


FIG. 4

'860 Patent, Fig. 4.

17. The invention provides a battery cover with circuitry adapted to wireless couple to an RF (radio frequency) emitter for generating electric power for charging a battery by a non-touch induction mode.



'860 Patent, Fig. 5.

18. The '860 Patent claims priority to a Taiwanese application filed on June 29, 2007.

19. The WPC published the Qi low-power specification over two years later, in August 2009.

#### DEFENDANT'S ACTS

20. Defendant is a provider of consumer electronics products offering wireless charging in accordance with certain WPC Qi wireless charging standards.







21. For example, Defendant offers a line of wireless chargers for sale in the United States that comply with the Qi wireless charging standard. Defendant represents compliance to its customers and instructs them how to wirelessly charge using the Qi charging standard.

22. The Wireless Power Consortium provides a definitive list of products that "have been certified to meet the Qi standard for safety and interoperability [and] are issued a certified ID

number and are included in the Wireless Power Consortium Product Database.”

<https://www.wirelesspowerconsortium.com/products/>

23. Defendant has sought and obtained certification from the Wireless Power Consortium. The “Certified Products Database” identifies the following products in response to the query “Mophie”:

<b>Qi-ID</b>	<b>Brand Name</b>	<b>Manufacturer Part Number</b>	<b>Product Name</b>	<b>Picture</b>
<a href="#">20279</a>	mophie	SNP-PS-MINI-STND-5K	mophie snap+ powerstation mini with stand	
<a href="#">20455</a>	mophie	WRLS-3IN1-QI2-STND	mophie WRLS-3-in-in-1-Qi2 charging stand	
<a href="#">14835</a>	mophie	SNP-WRLS-VNTMNT	mophie Wireless Charger	
<a href="#">14713</a>	mophie	WRLS-PAD-15W	mophie wireless charge pad	
<a href="#">14569</a>	mophie	3N1-TRVL-MS-A	mophie 3-in-1 travel charger with Magsafe	
<a href="#">14439</a>	mophie	MAGSFE-3IN1-EXT-STND	mophie Magsafe wireless stand-extendable-arm	

<b>Qi-ID</b>	<b>Brand Name</b>	<b>Manufacturer Part Number</b>	<b>Product Name</b>	<b>Picture</b>
<a href="#">10580</a>	mophie	JPA-iP7	mophie juice pack air	
<a href="#">11347</a>	mophie	PS-WRLS-PD-XL-10K	powerstation wireless XL	
<a href="#">11159</a>	mophie	WRLS-BYO-MS-WCH	mophie 3-in-1 wireless pad with PD	
<a href="#">11124</a>	mophie	WRLS-CHG-Hub	Universal Wireless Charging Hub	
<a href="#">10693</a>	mophie	WRLS-PAD-STAND	mophie wireless charging stand+	
<a href="#">10692</a>	mophie	WRLS-MULTI-WATCH-STAND	mophie 3-in-1 wireless charging stand	
<a href="#">10153</a>	mophie	wrls-chgmat	mophie 4 device charging mat	
<a href="#">9719</a>	mophie	SC-WRLS-BASE-15W	mophie wireless charging pad	



<b>Qi-ID</b>	<b>Brand Name</b>	<b>Manufacturer Part Number</b>	<b>Product Name</b>	<b>Picture</b>
<a href="#">10143</a>	mophie	PSW5K	Wireless Power Bank	
<a href="#">9792</a>	mophie	ps-wrls-stand	mophie powerstation wireless stand	
<a href="#">9181</a>	mophie	CT02C	wireless charge pad	
<a href="#">9650</a>	mophie	MUV-WC-201	UV Sanitizer with Wireless Charging	
<a href="#">9239</a>	mophie	WRLS-STAND-WATCH-A	mophie 2-in-1 wireless charging stand	
<a href="#">9206</a>	mophie	WRLS-CHGPAD-AMZ-3	mophie wireless charging pad (v3)	
<a href="#">9238</a>	mophie	WRLS-MULTI-WATCH-STAND-A	mophie 3-in-1 wireless charging stand	
<a href="#">9161</a>	mophie	PS-AIO-8K-A	mophie all-in-one powerstation	

<b>Qi-ID</b>	<b>Brand Name</b>	<b>Manufacturer Part Number</b>	<b>Product Name</b>	<b>Picture</b>
<a href="#">8674</a>	mophie	SC-WRLS-BASE-C2	mophie wireless charge pad mini	
<a href="#">7760</a>	mophie	PS-WRLS-LTG-RXTX-10K	powerstation wireless XL	
<a href="#">8006</a>	mophie	PWRSTION-WRLS-6K-PX	mophie charge stream powerstation wireless	
<a href="#">7759</a>	mophie	PSP-WRLS-PD	powerstation plus XL	
<a href="#">7645</a>	mophie	JPAC-IPXSM	juice pack access for iPhone 11 pro Max	
<a href="#">7627</a>	mophie	JPAC-IPXS	juice pack access for iPhone 11	
<a href="#">7462</a>	mophie	DUAL-WRLS-BASE	mophie dual wireless charging pad	

<b>Qi-ID</b>	<b>Brand Name</b>	<b>Manufacturer Part Number</b>	<b>Product Name</b>	<b>Picture</b>
<a href="#">7461</a>	mophie	SC-WRLS-BASE	mophie wireless charging pad mini	
<a href="#">7460</a>	mophie	WRLS-CHGPAD-AMZ	mophie wireless charging pad	
<a href="#">6342</a>	mophie	MC-WRLS-STAND-A	mophie wireless charging stand	
<a href="#">6344</a>	mophie	WRLS-MULTI-WATCH	mophie all-in-one wireless charging pad	
<a href="#">6343</a>	mophie	DUAL-WRLS-BASE	mophie dual wireless charging base	
<a href="#">6341</a>	mophie	SC-WRLS-BASE-A	mophie wireless charging base	
<a href="#">6478</a>	mophie	JP-SGS10P	juice pack for Samsung Galaxy S10P	

<b>Qi-ID</b>	<b>Brand Name</b>	<b>Manufacturer Part Number</b>	<b>Product Name</b>	<b>Picture</b>
<a href="#">6477</a>	mophie	JP-SGS10E	juice pack for Samsung Galaxy S10e	
<a href="#">6476</a>	mophie	JP-SGS10	juice pack for Samsung Galaxy S10	
<a href="#">5837</a>	mophie	JPAC-IPXR	juice pack access for iPhone Xr	
<a href="#">6247</a>	mophie	trvlstion-wrls-6k	mophie powerstation hub	
<a href="#">5895</a>	mophie	JPA-IPXSM	mophie juice pack air for iPhone Xs Max	
<a href="#">5894</a>	mophie	JPA-IPXR	mophie juice pack air for iPhone Xr	
<a href="#">5836</a>	mophie	JPAC-IPXS	juice pack access for iPhone Xs	








<b>Qi-ID</b>	<b>Brand Name</b>	<b>Manufacturer Part Number</b>	<b>Product Name</b>	<b>Picture</b>
<a href="#">5834</a>	mophie	JPAC-IPXSM	juice pack access for iPhone Xs Max	
<a href="#">5808</a>	mophie	JPA-IPXS	juice pack air for iPhone Xs	
<a href="#">4789</a>	mophie	WRLS-CHGBASE-10W-N	mophie wireless charging base	
<a href="#">4634</a>	mophie	cs-wrls-desktd-10w	mophie charge stream desk stand	
<a href="#">4143</a>	mophie	PSPLUS-WRLS-10K	mophie powerstation plus XL	
<a href="#">2398</a>	mophie	JPA-IPX	juice pack	
<a href="#">4144</a>	mophie	cs-wrls-vntmt-10w	mophie charge stream vent mount	


<b>Qi-ID</b>	<b>Brand Name</b>	<b>Manufacturer Part Number</b>	<b>Product Name</b>	<b>Picture</b>
<a href="#">3818</a>	mophie	pwrstion-wrls-10k	mophie powerstation wireless XL	
<a href="#">3817</a>	mophie	pwrstion-wrls-6k	mophie powerstation wireless	
<a href="#">3704</a>	mophie	cs-wrls-vntmt-10w-a	charge stream vent mount	
<a href="#">3315</a>	mophie	psplus-ltg-wrls-10k	mophie powerstation plus XL	
<a href="#">2658</a>	mophie	JPA-IP8P	juice pack for iPhone 8 plus	
<a href="#">3301</a>	mophie	pwrstion-wrls-ltg-10k	mophie charge stream powerstation	
<a href="#">2865</a>	mophie	WRLS-CHGBASEMINI-5W	mophie charge stream pad mini	
<a href="#">2527</a>	mophie	WRLS-CHGBASE-5W	mophie charge stream pad	

<b>Qi-ID</b>	<b>Brand Name</b>	<b>Manufacturer Part Number</b>	<b>Product Name</b>	<b>Picture</b>
<a href="#">2526</a>	mophie	WRLS-CHGBASE-10W	mophie charge stream pad plus	
<a href="#">2225</a>	mophie	WRLS-CHGPAD-AC	mophie wireless charging base	
<a href="#">2049</a>	mophie	JP-GOGL-PXLXL	juice pack for Google Pixel XL	
<a href="#">2266</a>	mophie	JP-SGN8	mophie juice pack for Samsung Galaxy Note 8	
<a href="#">2047</a>	mophie	JP-SGS8P	juice pack for Samsung Galaxy S8+	
<a href="#">2046</a>	mophie	JP-SGS8	juice pack for Samsung Galaxy S8	
<a href="#">1940</a>	mophie	PWSTION-CF-OTR-IP	Charge Force Battery for OtterBox uniVERSE	

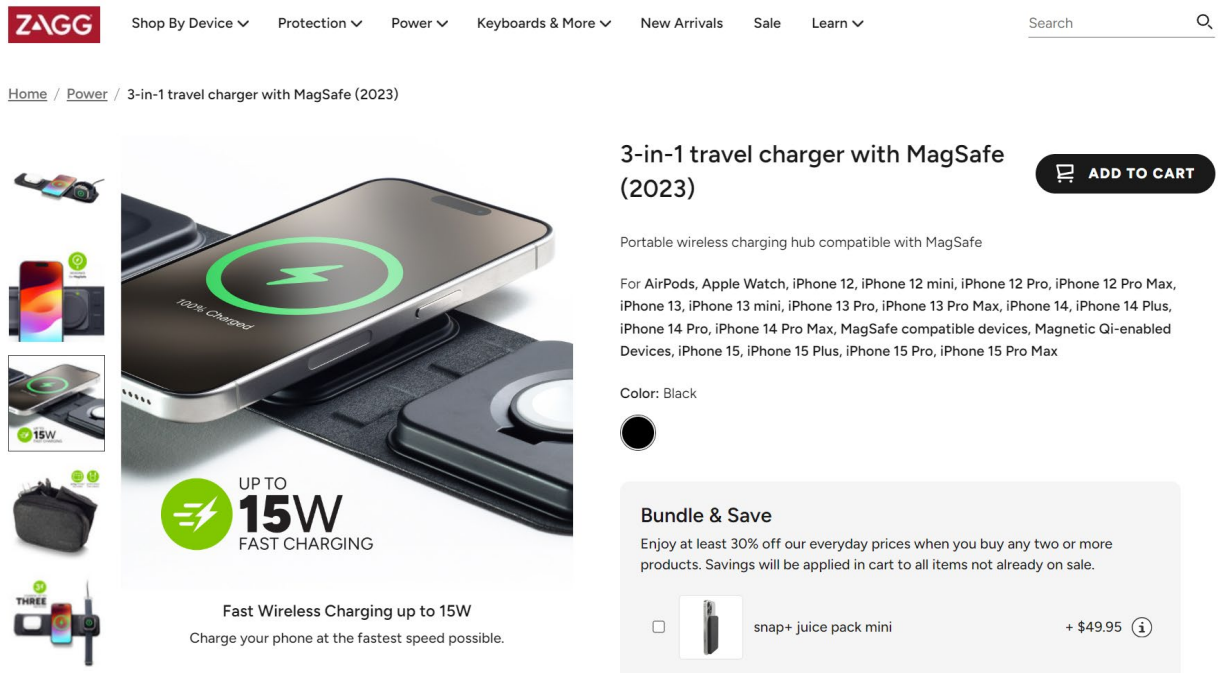
<b>Qi-ID</b>	<b>Brand Name</b>	<b>Manufacturer Part Number</b>	<b>Product Name</b>	<b>Picture</b>
<a href="#">1918</a>	mophie	CHRG-FRCE-IP7	Charge Force Case for iPhone 7	
<a href="#">1919</a>	mophie	CHRG-FRCE-iP7P	Charge Force Case for iPhone 7 plus	
<a href="#">1941</a>	mophie	ADPTR-CF-OTR-IP	Charge Force Adapter for OtterBox uniVERSE	
<a href="#">1855</a>	mophie	JPA-iP7P-BLK	juice pack air for iPhone 7 plus	
<a href="#">1852</a>	mophie	JPA-iP7-BLK	juice pack air for iPhone 7 - black	
<a href="#">1792</a>	mophie	WRL-CHGPAD	charge force wireless charging base	
<a href="#">1703</a>	mophie	PWRSTION-WRLS	charge force powerstation	



<b>Qi-ID</b>	<b>Brand Name</b>	<b>Manufacturer Part Number</b>	<b>Product Name</b>	<b>Picture</b>
<a href="#">1691</a>	mophie	WRL-DESK	Charge Force Desktop Dock	
<a href="#">1642</a>	mophie	WRL-VENT	Charge Force	
<a href="#">1634</a>	mophie	JPW-IP6P	juice pack wireless for iPhone 6 plus & 6s plus	
<a href="#">1633</a>	mophie	JPRW-IP6	juice pack wireless for iPhone 6 & iPhone 6s	
<a href="#">1650</a>	mophie	JP-SGS7	juice pack for Samsung Galaxy S7	
<a href="#">1621</a>	mophie	JP-SGS7E	juice pack for Samsung Galaxy S7 Edge	
<a href="#">1620</a>	mophie	JP-SGS7	juice pack for Samsung Galaxy S7	

Qi-ID	Brand Name	Manufacturer Part Number	Product Name	Picture
<a href="#">1597</a>	mophie	WRL-CHGPAD	mophie wireless charging base	

24. One example of such a product is the 3-in-1 travel charger with MagSafe (Qi-ID 14569). Defendant sells that product in the United States, including this District.



**ZAGG** Shop By Device ▾ Protection ▾ Power ▾ Keyboards & More ▾ New Arrivals Sale Learn ▾ Search

Home / Power / 3-in-1 travel charger with MagSafe (2023)

### 3-in-1 travel charger with MagSafe (2023)

**ADD TO CART**

Portable wireless charging hub compatible with MagSafe

For AirPods, Apple Watch, iPhone 12, iPhone 12 mini, iPhone 12 Pro, iPhone 12 Pro Max, iPhone 13, iPhone 13 mini, iPhone 13 Pro, iPhone 13 Pro Max, iPhone 14, iPhone 14 Plus, iPhone 14 Pro, iPhone 14 Pro Max, MagSafe compatible devices, Magnetic Qi-enabled Devices, iPhone 15, iPhone 15 Plus, iPhone 15 Pro, iPhone 15 Pro Max

Color: Black

**Bundle & Save**  
Enjoy at least 30% off our everyday prices when you buy any two or more products. Savings will be applied in cart to all items not already on sale.

snap+ juice pack mini + \$49.95 ⓘ

<https://www.zagg.com/mophie-universal-wireless-3-in-1-travel-charger-MagSafe-2023>

25. Defendant further instructs and encourages its customers to wirelessly charge their products as it specifies in its documentation.



<https://www.zagg.com/mophie-universal-wireless-3-in-1-travel-charger-MagSafe-2023>

26. On information of belief, Defendant also implements contractual protections in the form of license and use restrictions with its customers to preclude the unauthorized reproduction, distribution, and modification of its products.

27. Moreover, on information and belief, Defendant implements technical precautions to attempt to thwart customers who would circumvent the intended operation of Defendant's products.

#### **IV. PATENT INFRINGEMENT**

##### COUNT I — INFRINGEMENT OF U.S. PATENT NO. 7,298,361

28. Zagg has directly infringed and continues to infringe one or more claims of the '361 Patent in this judicial district and elsewhere in the United States by, among other things, making, having made, importing, using, offering for sale, and/or selling the claimed system and methods of the '361 Patent.

29. At a minimum, Zagg has been, and now is, infringing claims of the '361 Patent by making, importing and/or using infringing systems and/or methods. Zagg infringes at least claim 1 of the '361 Patent.

30. The infringing products include, but are not limited to, Zagg's wireless chargers, including when used in conjunction with Qi-compliant devices (the "'361 Infringing Products"). IFPower alleges that each and every element is literally present in the '361 Infringing Products. To the extent not literally present, IFPower reserves the right to proceed under the doctrine of equivalents.

31. More specifically, Zagg's wireless chargers include a non-contact electric inductance circuit for power source wherein a circuit amplifies an alternating current by an oscillator through a driving circuit and pass to a harmonic circuit.

32. In accordance with the WPC specification, the electric inductance circuit has a feedback circuit, a micro-processing circuit and an adapted-to-adjusting-frequency oscillating circuit integrated with one another.

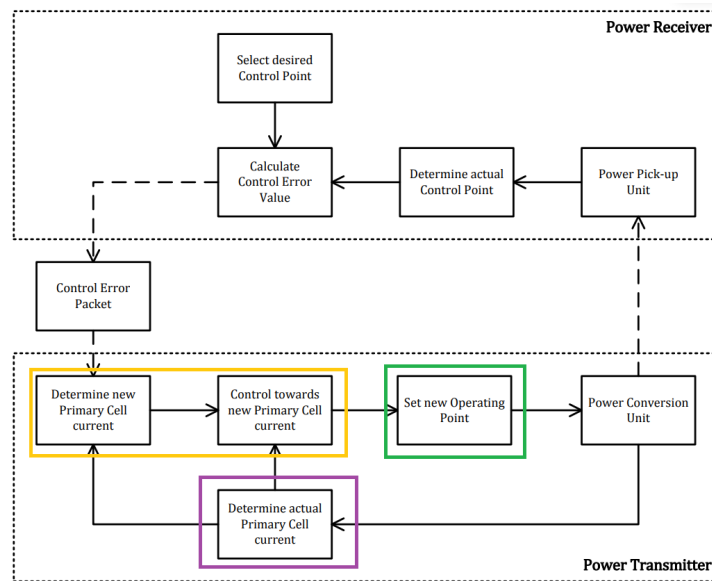


Figure 5-2: Power transfer control loop

<https://cupdf.com/document/wpc-specification.html>

33. The '361 Infringing Products modulate frequency to find a frequency with a good match, as the mutual inductance between transmitter and receiver coils will vary according to the standoff distance between transmitter and receiver coils, and thus the natural resonance frequency will vary. The '361 Infringing Products support a range of frequencies.

**Statement of Compliance:**

Hereby, mophie declares that the radio equipment wireless charging base is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: [http://www.mophie.com/cert\\_red](http://www.mophie.com/cert_red)

**RF SPECIFICATIONS:**

RF Frequency Range: 112 kHz – 205 kHz

RF Power: 64.8 dB $\mu$ V

RF Field Strength: 84.9 dB $\mu$ V/m

Mophie Wireless Charging Pad User Manual at 10.

34. Defendant has sought and obtained approval from the FCC to sell products in the United States. Those tests confirm the variable frequency of the '361 Infringing Products.

## 2.5. Test Result for Test setup A:

<b>E-field strength</b>			
Frequency range (KHz)	110.5 to 205		
Test Mode	Full Load	Half Load	Empty Load
Position A(V/m)	0.345	0.346	0.344
Position B(V/m)	0.346	0.344	0.345
Position C(V/m)	0.345	0.344	0.343
Position D(V/m)	0.367	0.348	0.344
Position E(V/m)	0.618	0.523	0.345
Limits (V/m)	614		
50% Limits(V/m)	307		

<b>H-field strength</b>			
Frequency range (KHz)	110.5 to 205		
Test Mode	Full Load	Half Load	Empty Load
Position A(A/m)	0.048	0.043	0.046
Position B(A/m)	0.052	0.044	0.044
Position C(A/m)	0.046	0.043	0.045
Position D(A/m)	0.046	0.044	0.045
Position E(A/m)	0.044	0.043	0.047
Limits (A/m)	1.630		
50% Limits (A/m)	0.815		

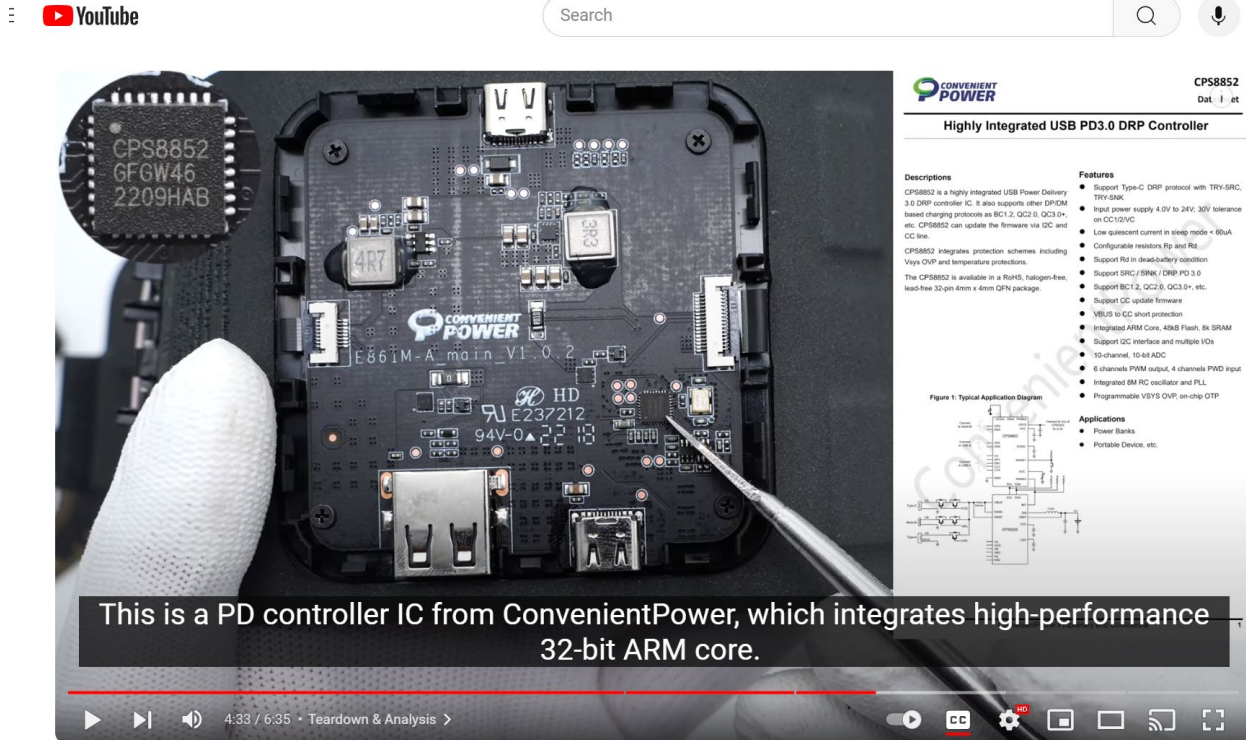
RF Exposure Report For Certification on behalf of mophie LLC at 8.

35. The '361 Infringing Products further include inductors for a buck circuit. For example, multiple inductors are found in the Mophie Snap + Foldable Wireless Travel Charger.



<https://www.youtube.com/watch?v=l39awHhznzFU> (at 4:41)

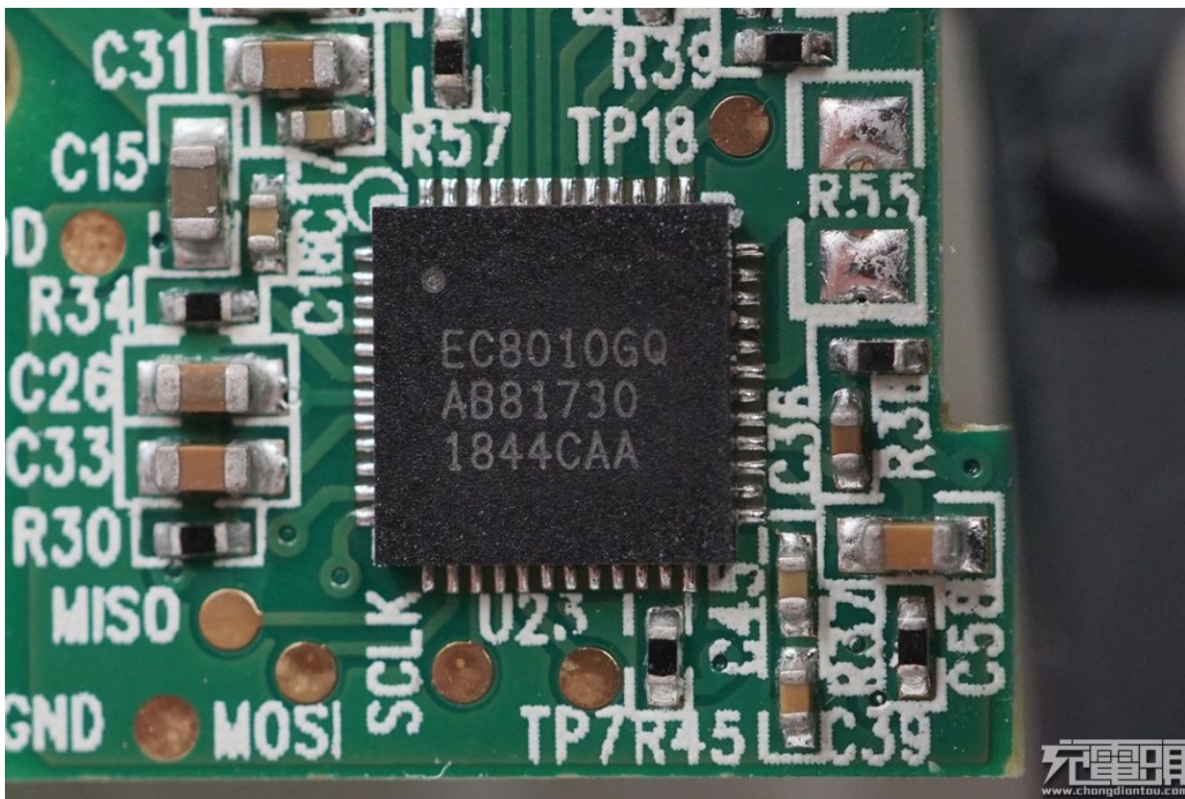
36. The '361 Infringing Products further include a wireless charging controller. For example, the following controller is found in the Mophie Snap + Foldable Wireless Travel Charger.



<https://www.youtube.com/watch?v=l39awHhznfU> (at 4:33)

37. Another of the '361 Infringing products includes a system on chip in the form of the CPS EC8010 for performing certain control and feedback functions.





The CPS EC8010 is a highly efficient, Qi-compliant, magnetic inductive wireless power transmitter IC for applications up to 5W. The system-on-chip integrates power controller, micro-controller, voltage regulator, foreign object detection (FOD), full bridge drivers and on-chip voltage and current demodulation. The EC8010 integrates one full bridge driver. Internal protection functions are provided for over current and over temperature. It has passed the CE/FCC/Qi-BPP certification.

<https://www.chargerlab.com/mophie-powerstation-hub-teardown-review-all-in-one/>

38. The '361 Infringing Products further include harmonic resonance circuit. For example, the following four capacitors are found in the Mophie Snap + Foldable Wireless Travel Charger for harmonic resonance.



Teardown of Mophie Snap+ Foldable Wireless Travel Charger

<https://www.youtube.com/watch?v=l39awHhznfU> (at 5:15)

39. Zagg has indirectly infringed and continues to infringe the '361 Patent by inducing the infringement of the '361 Patent. With knowledge of the '361 Patent, Zagg directs and aids its customers in using the '361 Infringing Products by the provision of its products and software, and related equipment and provision of instruction (including, by way of example, the tutorials, user guides, product guides, and other documentation located at <https://www.zagg.com/user-guides/>) to customers as well as functionality embedded in the '361 Infringing Products (including firmware and source code) with knowledge that the induced acts constitute patent infringement. When a user of one of the '361 Infringing Products uses MagSafe for wireless charging, the '361 Infringing Product operates in an infringing manner. Zagg possesses specific intent to encourage infringement by its customers, insofar as it sought and obtained Qi certification for the '361 Infringing Products knowing such did and will infringe the '361 Patent.

40. Zagg has contributed to the infringement of, and continues to contribute to the infringement of, one or more claims of the '361 Patent under 35 U.S.C. § 271(c) and/or 271(f), either literally and/or under the doctrine of equivalents, by selling, offering for sale, and/or importing into the United States the '361 Infringing Products. Zagg knows that the components of the '361 Infringing Products: constitute a material part of the inventions claimed in the '361 Patent; are especially made or adapted to infringe the '361 Patent; and are not staple articles or commodities of commerce suitable for non-infringing use, but rather the Components are used for or in systems that infringe one or more claims of the '361 Patent. The hardware and/or software Components are not a staple article or commodity of commerce because they are specifically designed to perform the claimed functionality. These products are specifically designed for their infringing purpose and certified to comply with the Qi standard, namely wireless charging in accordance with the claims of the '361 Patent. Any other use of the hardware and/or software Components would be unusual, far-fetched, illusory, impractical, occasional, aberrant, or experimental.

41. IFPower has been damaged as a result of Zagg's infringing conduct. Zagg is thus liable to IFPower in an amount that adequately compensates it for Zagg's infringements, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

COUNT II — INFRINGEMENT OF U.S. PATENT NO. 7,863,860

42. Zagg has directly infringed and continues to infringe one or more claims of the '860 Patent in this judicial district and elsewhere in the United States by, among other things, making, having made, importing, using, offering for sale, and/or selling the claimed system and methods of the '860 Patent.

43. At a minimum, Zagg has been, and now is, infringing claims of the '860 Patent by making, importing and/or using wireless chargers that comply with the Qi wireless standard. Zagg's chargers are specifically designed and tested to interact with a battery cover of the type claimed in the '860 Patent.

44. More specifically, the Wireless Power Consortium provides that a wireless power transfer system that complies with the Qi standard requires a Power Transmitter and a Power Receiver, as shown below.



Qi Specification  
Power Delivery

Version 1.3  
Introduction

## 2 Introduction

Figure 2 provides a simplified model of a wireless power system, consisting of six blocks. The three blocks to the left of the power transfer interface represent a Power Transmitter and its supply. The three to the right represent a Power Receiver and its Load. Typically, these blocks comprise the following elements.

*Supply*; in many cases a separate adapter such as a USB PD brick.

*Inverter*; a half-bridge or full-bridge for DC/AC conversion.

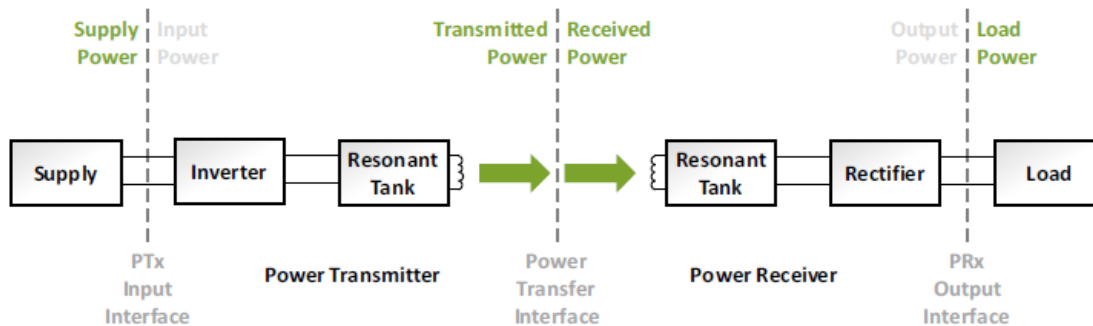
*Resonant Tank*; a coil and series capacitor boosting the power transfer capability.

*Resonant Tank*; a coil and series capacitor enhancing the power transfer efficiency.

*Rectifier*; either a diode bridge or an active (synchronous) bridge for AC/DC conversion.

*Load*; a battery with associated control circuitry.

Figure 2. Simplified model of a wireless power transfer system

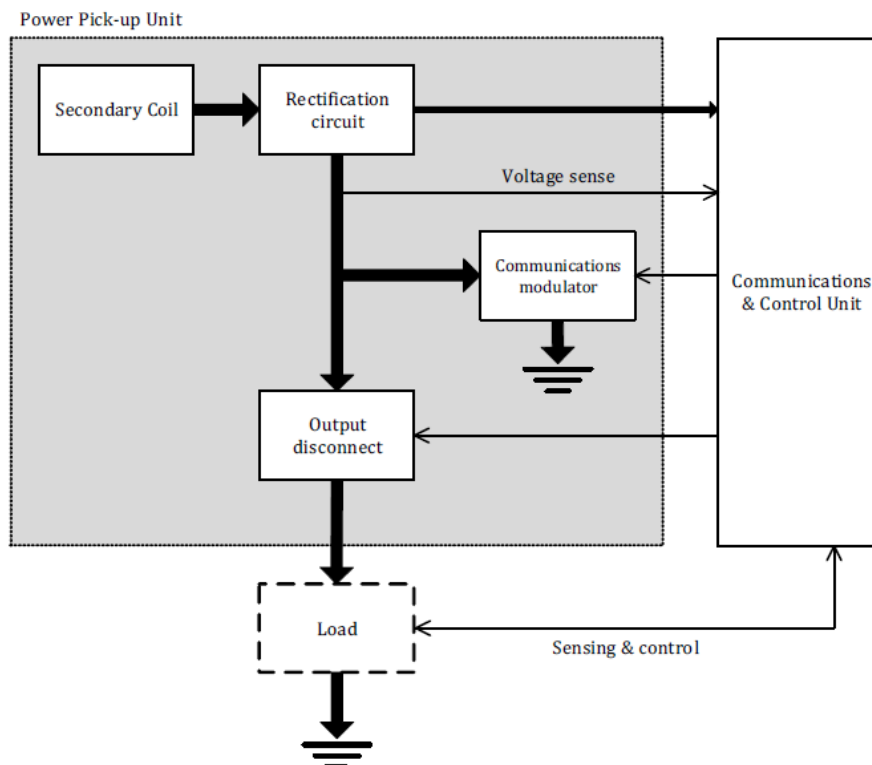


Qi Specification v1.3 (January 2021) at 10. Defendant's Power Transmitters are specifically adapted and tested to communicate with Power Receivers as shown.

### 3 Power Receiver construction

Figure 3 illustrates an example of a functional block diagram for a Baseline Power Profile Power Receiver.

Figure 3. Functional block diagram for a Baseline Power Profile Power Receiver



Qi Specification v1.3 (January 2021) at 12.

45. The Power Receiver is required to monitor DC Voltage directly at the output of the rectification circuit to comply with the Qi Specification v.1.3.

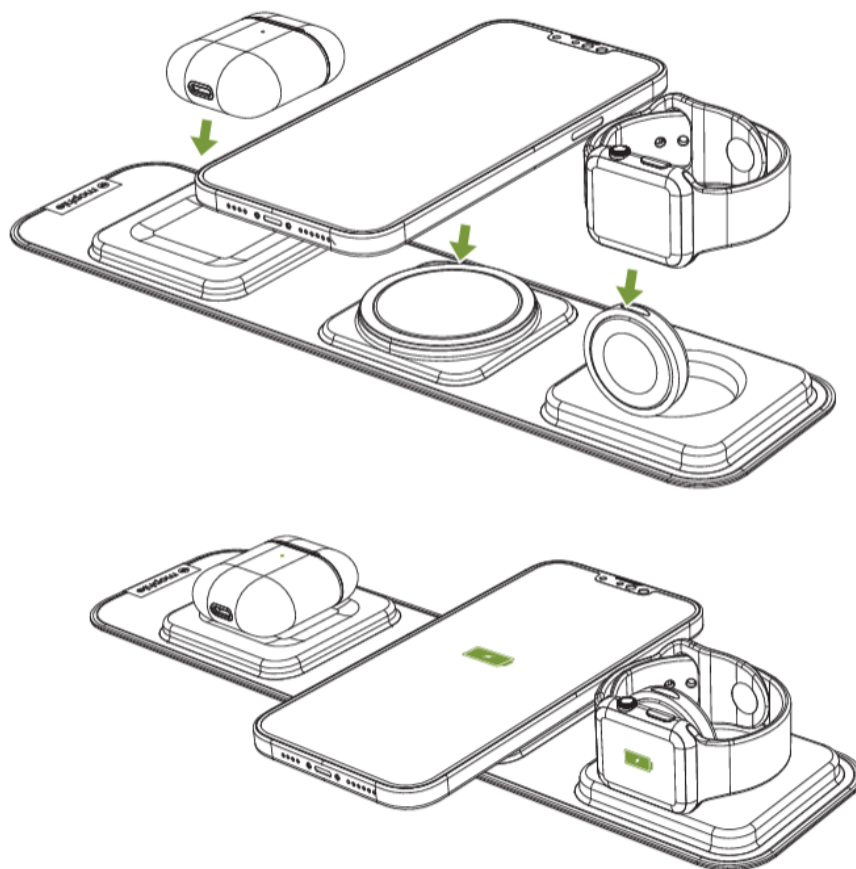
46. The Power Receiver is required to have the means to modulate the Primary Cell current and Primary Cell voltage to comply with the Qi Specification v.1.3.

47. The Power Receiver is required to have the means to demodulate frequency-shift keying (FSK) data to comply with the Qi Specification v.1.3.

48. Zagg infringes at least claim 1 of the '860 Patent.

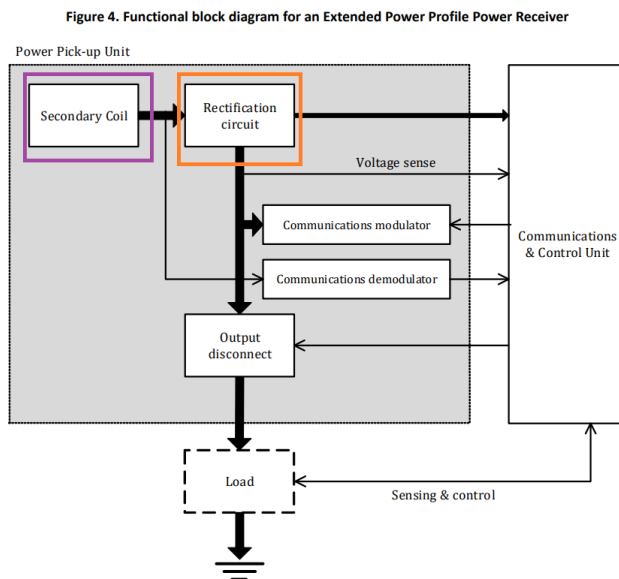
49. Zagg’s infringing products include, but are not limited to, Zagg’s 3 in 1 travel charger, snap + juice pack mini, powerstation wireless stand and other product lines that are compliant with or use the Qi wireless charging protocol (the “’860 Infringing Products”). The ’860 Infringing Products are specifically designed to interoperate with a battery cover as claimed. Zagg puts the infringing system into use as a whole. On information and belief, Zagg tests the ’860 Infringing Products to ensure that battery covers meeting specified criteria are used in conjunction with its products.

50. Zagg instructs its users how to perform wireless charging with their devices using the ’860 Infringing Products.



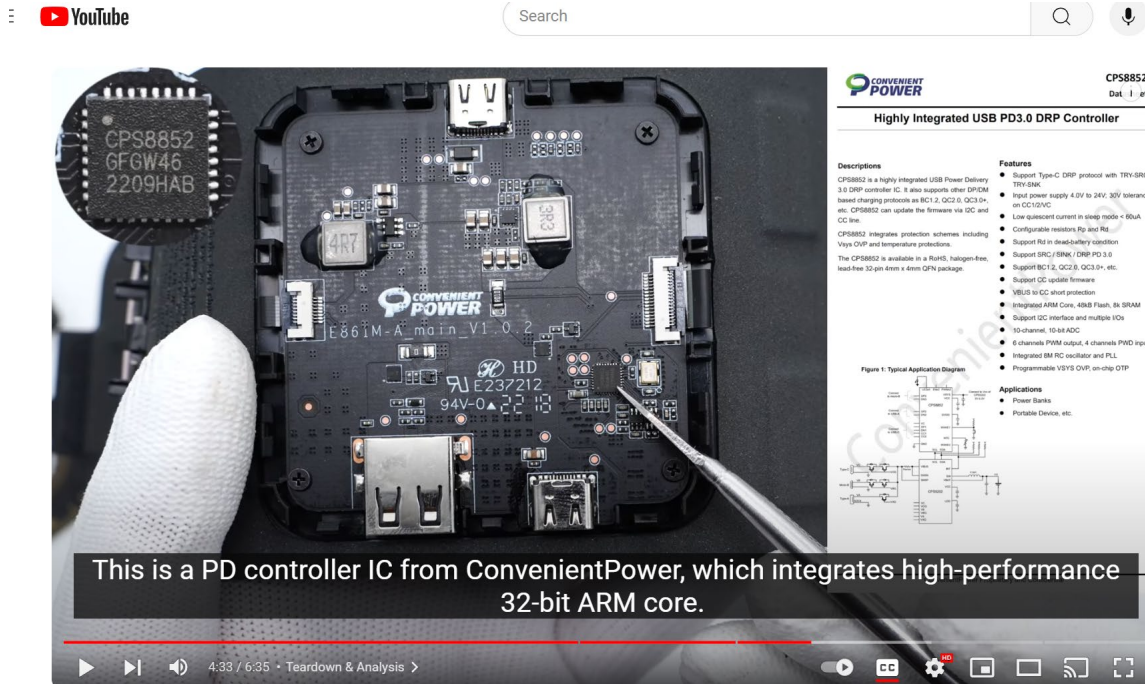
Mophie 3-in-1 Travel Charger with Magsafe User Guide, p. 4.

51. In accordance with the WPC specification, devices interacting with the '860 Infringing Products includes a rectifying wave filtering circuit.



<https://www.wirelesspowerconsortium.com/data/downloadables/3/3/2/3/qi-v13-public.zip>

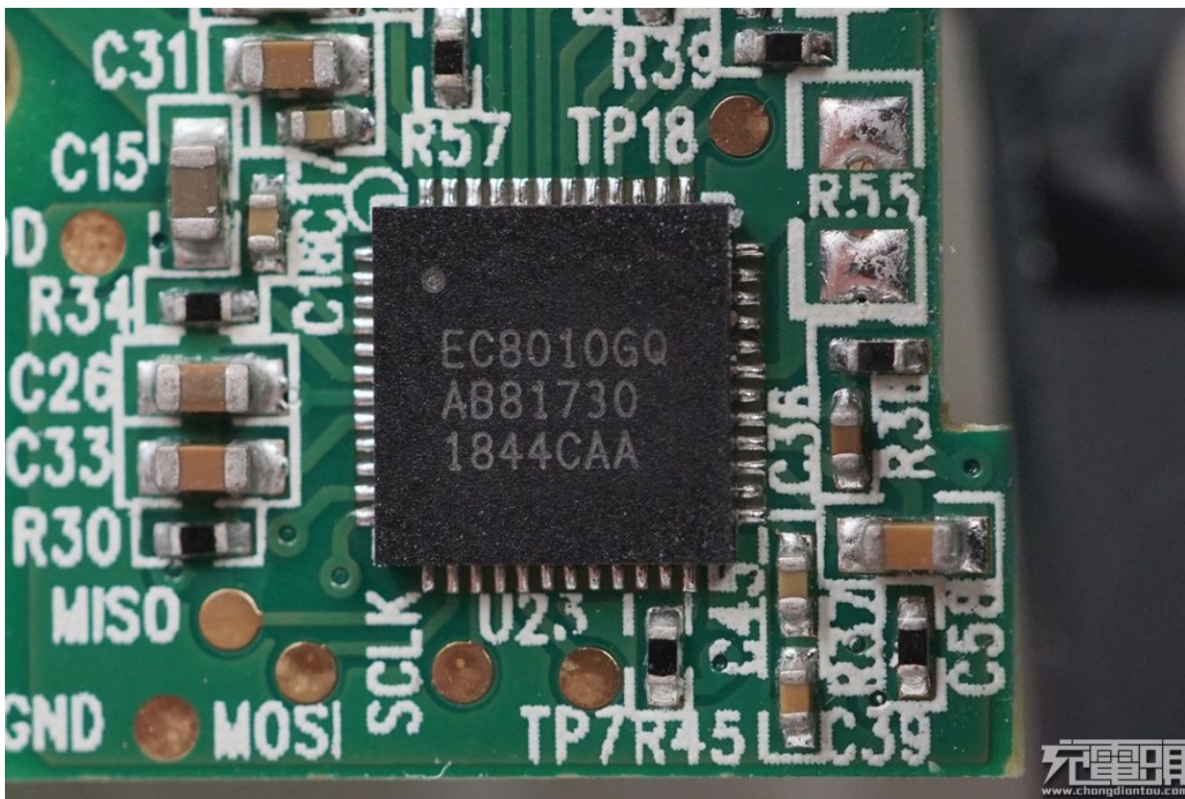
52. The '860 Infringing Products further include a wireless charging processor. The wireless charging processor works to accept and respond to feedback from the target device, with which it seeks to optimize resonance and charging. For example, the following controller is found in the Mophie Snap + Foldable Wireless Travel Charger.



<https://www.youtube.com/watch?v=l39awHhnzfU> (at 4:33)

53. Another of the '860 Infringing products includes a system on chip in the form of the CPS EC8010 for performing certain control and feedback functions.





The CPS EC8010 is a highly efficient, Qi-compliant, magnetic inductive wireless power transmitter IC for applications up to 5W. The system-on-chip integrates power controller, micro-controller, voltage regulator, foreign object detection (FOD), full bridge drivers and on-chip voltage and current demodulation. The EC8010 integrates one full bridge driver. Internal protection functions are provided for over current and over temperature. It has passed the CE/FCC/Qi-BPP certification.

<https://www.chargerlab.com/mophie-powerstation-hub-teardown-review-all-in-one/>

54. The '860 Infringing Products further include harmonic resonance circuit. For example, the following four capacitors are found in the Mophie Snap + Foldable Wireless Travel Charger for harmonic resonance.



Teardown of Mophie Snap+ Foldable Wireless Travel Charger

<https://www.youtube.com/watch?v=l39awHhznfU> (at 5:15)

55. IFPower alleges that each and every element is literally present in the '860 Infringing Products. To the extent not literally present, IFPower reserves the right to proceed under the doctrine of equivalents.

56. Zagg has indirectly infringed and continues to infringe the '860 Patent by inducing the infringement of the '860 Patent. With knowledge of the '860 Patent, Zagg directs and aids its customers in using the '860 Infringing Products by the provision of its products and software, and related equipment and provision of instruction (including, by way of example, the tutorials, user guides, product guides, and other documentation located at <https://www.zagg.com/user-guides/>) to customers as well as functionality embedded in the '860 Infringed Products (including firmware and source code) with knowledge that the induced acts constitute patent infringement. When a user of one of the '860 Infringing Products charges the phone or watch, the '860 Infringing Product

operates in an infringing manner. Zagg possesses specific intent to encourage infringement by its customers.

57. Zagg has contributed to the infringement of, and continues to contribute to the infringement of, one or more claims of the '860 Patent under 35 U.S.C. § 271(c) and/or 271(f), either literally and/or under the doctrine of equivalents, by selling, offering for sale, and/or importing into the United States, the '860 Infringing Products. Zagg knows that the components of the '860 Infringing Products: constitute a material part of the inventions claimed in the '860 Patent; are especially made or adapted to infringe the '860 Patent; and are not staple articles or commodities of commerce suitable for non-infringing use, but rather the Components are used for or in systems that infringe one or more claims of the '860 Patent. These products are specifically designed for their infringing purpose, namely wireless charging in accordance with the claims of the '860 Patent. The hardware and/or software Components are not a staple article or commodity of commerce because they are specifically designed to perform the claimed functionality. Any other use of the hardware and/or software Components would be unusual, far-fetched, illusory, impractical, occasional, aberrant, or experimental.

58. IFPower has been damaged as a result of Zagg's infringing conduct. Zagg is thus liable to IFPower in an amount that adequately compensates it for Zagg's infringements, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

#### **V. WILLFULNESS**

59. Zagg was provided notice of IFPower's claims at least as early as the Original Complaint filed against it.

60. Zagg acted and continues to act with knowledge of the Patents-in-Suit despite an objectively high likelihood that its actions constituted infringement of IFPower's valid patent rights.

61. This objectively defined risk was either known or so obvious that it should have been known to Zagg. IFPower seeks enhanced damages pursuant to 35 U.S.C. §284.

#### **VI. JURY DEMAND**

62. IFPower demands a trial by jury of all matters to which it is entitled to trial by jury, pursuant to FED. R. CIV. P. 38.

#### **VII. PRAYER FOR RELIEF**

63. WHEREFORE, Plaintiff IFPower prays for judgment and seeks relief against Defendant as follows:

- a. Judgment that one or more claims of the Patents-in-Suit have been infringed, either literally and/or under the doctrine of equivalents;
- b. Award Plaintiff past and future damages together with prejudgment and post-judgment interest to compensate for the infringement by Defendant of the Patents-in-Suit in accordance with 35 U.S.C. §284, and increase such award by up to three times the amount found or assessed in accordance with 35 U.S.C. §284;
- c. That the Court declare this an exceptional case and award Plaintiff its reasonable attorney's fees and costs in accordance with 35 U.S.C. § 285; and
- d. That Plaintiff be granted such other and further relief as the Court may deem just and proper under the circumstances.

Dated: March 29, 2024

Respectfully submitted,

/s/ Andrew G. DiNovo

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**ATTORNEYS FOR PLAINTIFF  
IFPOWER**

**FIRST AMENDED COMPLAINT**

**CERTIFICATE OF SERVICE**

The undersigned hereby certifies that on March 29, 2024, a true and correct copy of the foregoing document was caused to be served on all counsel of record who are deemed to have consented to electronic service via the Court's CM/ECF system.

/s/ Andrew G. DiNovo  
Andrew G. DiNovo