

THE UNITED STATES INTERNATIONAL TRADE COMMISSION

WASHINGTON, D.C.

In the Matter of

CERTAIN UNMANNED AERIAL
VEHICLES AND COMPONENTS THEREOF

§
§
§
§
§
§

Investigation No. 337-TA-_____

VERIFIED COMPLAINT UNDER SECTION 337 OF THE TARIFF ACT OF 1930,
AS AMENDED

Complainant

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Non-Confidential Exhibits

Exhibit Number	Item
1	Certified Copy of U.S. Patent No. 7,979,174
2	Certified Copy of U.S. Patent No. 9,260,184
3	Copy of U.S. Patent No. 10,044,013
4	Certified Copy of Assignment Documents for U.S. Patent No. 7,979,174
5	Certified Copy of Assignment Documents for U.S. Patent No. 9,260,184
6	Copy of Assignment Documents for U.S. Patent No. 10,044,013
7	DroneLab Review of Autel X-Star Premium
8	RotorDrone Magazine, <i>Review: Autel Robotics Evo</i>
9	Complaint for Patent Infringement, Dkt. 1, <i>SZ DJI Technology Co., Ltd. v. Autel Robotics USA LLC</i> , No. 1:16-cv-706-LPS (D. Del. 2016)
10	Statement of Information filed with the California Secretary of State by DJI Technology Inc.
11	Entity Information for DJI Technology Inc. from NYS Department of State
12	Press Release from DJI.com discussing opening of Los Angeles facility
13	Plaintiffs' Corporate Disclosure Statement, Dkt. 6, <i>SZ DJI Technology Co., Ltd. v. Autel Robotics USA LLC</i> , No. 1:16-cv-706-LPS (D. Del. 2016)
14	Screenshot of https://www.dji.com/company
15	Statement of Information filed with the California Secretary of State by DJI Research LLC
16	Statement of Information filed with the California Secretary of State by DJI Service LLC
17	Statement of Information filed with the California Secretary of State by DJI Creative Studio LLC
18	Copy of User Manual for DJI Mavic Pro
19	Copy of User Manual for DJI Spark
20	Copy of User Manual for DJI Phantom 4 Pro
21	Copy of User Manual for DJI Inspire 2
22	Infringement Claim Chart for U.S. Patent No. 7,979,174
23	Infringement Claim Chart for U.S. Patent No. 9,260,184
24	Infringement Claim Chart for U.S. Patent No. 10,044,013
25	Photographs of the DJI Mavic Pro
26	Photographs of the DJI Spark
27	Photographs of the DJI Phantom 4 Pro
28	Photographs of the DJI Inspire 2
29	Article from aving.net discussing DJI's Booth at CES 2018
30	Press Release from DJI.com discussing DJI's Booth at CES 2018
31	BestBuy Shipping Summary for Purchased DJI Mavic Pro
32	Photographs of DJI Mavic Pro Labeled Made in China
33	BestBuy Shipping Summary for Purchased DJI Spark
34	Photographs of DJI Spark Labeled Made in China
35	BestBuy Shipping Summary for Purchased DJI Phantom 4 Pro

36	Photographs of DJI Phantom 4 Pro Labeled Made in China
37	BestBuy Shipping Summary for Purchased Inspire 2
38	Photographs of DJI Inspire 2 Labeled Made in China
39	Second BestBuy Shipping Summary for Second Purchased DJI Spark
40	Photographs of Second DJI Spark Labeled Made in China
41	User Manual for Autel EVO
42	Photographs of Autel EVO
43	Photographs of the Packaging of the Autel EVO
44	Docket Report, <i>SZ DJI Technology Co., Ltd. v. Autel Robotics USA LLC</i> , No. 1:16-cv-706-LPS (D. Del. 2016)
45	Docket Report, <i>SZ DJI Technology Co., Ltd. v. Autel Robotics USA LLC</i> , No. 2:17-cv-00776-RAJ (W.D. Wash. 2017)
46	Docket Report, <i>Autel Robotics USA LLC v. SZ DJI Technology Co., Ltd.</i> , No. 1:18-cv-03667-GHW (S.D.N.Y. 2018)
47	Domestic Industry Claim Chart for U.S. Patent No. 7,979,174
48	Domestic Industry Claim Chart for U.S. Patent No. 9,260,184
49	Domestic Industry Claim Chart for U.S. Patent No. 10,044,013

Confidential Exhibits

Exhibit Number	Item
50C	Confidential List of Licensees of the '174 Patent
51C	Confidential List of Licensees of the '184 Patent
52C	Confidential List of Licensees of the '013 Patent
53C	Confidential Declaration of Jeff Powell
54C	Confidential Patent Assignments for U.S. Patent No. 7,979,174
55C	Confidential Patent Assignments for U.S. Patent No. 9,260,184

Physical Exhibits

Exhibit Number	Item
56	Representative Sample of DJI Products in the form of a DJI Spark
57	Representative Sample of the Autel EVO

Appendices

Appendix Letter	Item
A	Certified Copy and Three Additional Copies of the Prosecution History of U.S. Patent No. 7,979,174
B	References Cited in the Prosecution History of U.S. Patent No. 7,979,174
C	Non-Patent Technical References Cited in the Prosecution History of U.S. Patent No. 7,979,174
D	Certified Copy and Three Additional Copies of the Prosecution History of U.S. Patent No. 9,260,184

E	References Cited in the Prosecution History of U.S. Patent No. 9,260,184
F	Copy and Three Additional Copies of the Prosecution History of U.S. Patent No. 10,044,013
G	References Cited in the Prosecution History of U.S. Patent No. 10,044,013
H	Non-Patent Technical References Cited in the Prosecution History of U.S. Patent No. 10,044,013

I. INTRODUCTION

1.1 Autel Robotics USA LLC (“Autel”) files this Complaint pursuant to Section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, based upon the unlawful sale for importation into the United States, importation into the United States, and/or sale within the United States after importation of certain unmanned aerial vehicles and components thereof. Examples of these include without limitation, unmanned aerial vehicles (“UAVs”) designated as the “DJI Mavic,” which includes at least the DJI Mavic Air, Mavic Pro, Mavic Pro Platinum, Mavic 2 Pro, and Mavic 2 Zoom; “DJI Spark;” “DJI Phantom,” which includes at least the DJI Phantom 4 Pro, Phantom 4 Pro V2.0, Phantom 4 Advanced, Phantom 4 RTK, and Phantom 3 SE; and “DJI Inspire,” which includes at least the DJI Inspire 1 and Inspire 2 (collectively, “the Accused Products”). The Accused Products are made by or for and/or sold by or for the Proposed Respondents SZ DJI Technology Co. Ltd. (“SZ DJI”), DJI Europe B.V. (“DJI Europe”), DJI Technology Inc. (“DJI Technology”), iFlight Technology Co. Ltd. (“iFlight”), DJI Baiwang Technology Co. Ltd. (“DJI Baiwang”), DJI Research LLC (“DJI Research”), DJI Service LLC (“DJI Service”), and DJI Creative Studio LLC (“DJI Creative Studio”) (collectively, “DJI”). The Accused Products infringe at least the following Asserted Claims and Asserted Patents in violation of Section 337¹:

Asserted Patents	Asserted Claims ²
U.S. Patent No. 7,979,174 (the ’174 patent)	1 –8, 14 –16, 17
U.S. Patent No. 9,260,184 (the ’184 patent)	1 –5, 11
U.S. Patent No. 10,044,013 (the ’013 patent)	1 , 3–16, 18, 21–24

¹ See Exs. 22–24.

² Independent claims are notated in **bold** font.

1.2 Autel seeks, as relief for the unfair acts of DJI, an investigation into DJI's violations, a public hearing, a limited exclusion order barring from entry into the United States the Accused Products that infringe one or more claims of the Asserted Patents, a permanent cease and desist order prohibiting the importation, sale, sale for importation, offer for sale, promotion, marketing, advertising, and the soliciting of the sale in the United States, the Accused Products that infringe one or more of the Asserted Patents, the imposition of a bond on importation and sales of infringing products during the 60-day Presidential review period pursuant to 19 U.S.C. § 1337(j), and other such relief as the Commission deems proper.

II. COMPLAINANT

2.1 Autel is a limited liability company organized under the laws of Delaware and headquartered in Bothell, Washington, just outside of Seattle. Autel has its principal place of business and headquarters at 22522 29th Dr. SE, Suite 101, Bothell, WA 98021. Autel has 10,086 sq. ft. of space at that location, staffed by at least 20 employees devoted to various tasks, including technical support and the development of the application used to control the UAV.

2.2 Autel has another facility in Silicon Valley. Until recently that facility was located in San Ramon, California and consisted of an office, laboratory, and living space. Autel relocated that facility to Redwood City, California on July 1, 2018. The newly-leased premises includes 5,785 sq. ft. of space and is the base of its engineering, design, and research and development.

2.3 Autel along with its corporate siblings³ is a leader in the research, development, fabrication, and manufacture of unmanned aerial vehicles ("UAVs"). Autel sells its state-of-the-

³ Autel currently operates as a wholly-owned subsidiary of Autel Robotics Holding LLC, which is a wholly-owned subsidiary of Shenzhen Software Development Co., Ltd., which is a wholly-owned subsidiary of Autel Robotics Co., Ltd. Ex. 53C ¶ 4.

art UAVs to both the consumers and professionals in the United States. Autel's UAVs have quickly become one of the most popular brands of ready-to-fly UAVs in the United States.

2.4 Autel began selling world-class UAVs (or "drones") to U.S. consumers in 2016. Its first product was the X-Star series, which was an easy-to-fly quadcopter (or UAV with four propellers) designed for superb aerial imagery. Below is a picture of the X-Star Premium:

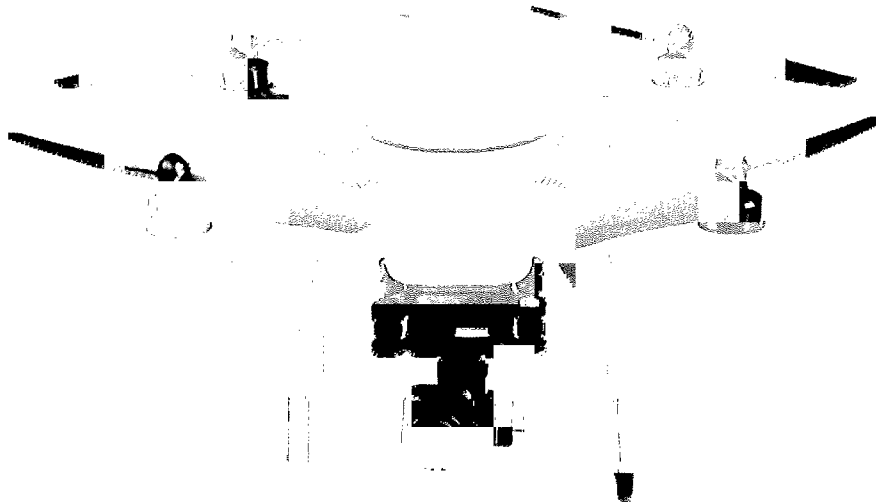


Figure 1. Autel Robotics X-Star Premium

The X-Star Premium model, for example, included: an industry-leading camera that takes 4K ultra HD video and up to 12MP (megapixel) photos mounted on a quick-release 3-axis gimbal stabilizer, an intuitive remote controller with LCD display and one-touch action buttons that can control the drone up to 1.25 miles away, dual GPS/GLONASS satellite positioning to ensure stable flight, autonomous flight modes and HD live view via free iOS and Android apps, and an intelligent battery with up to 25-minute flight time and 1-hour fast charging capability.

2.5 Upon release of the X-Star, the reviews were overwhelmingly positive. *See, e.g.,* Ex. 7 ("The X-Star Premium by Autel Robotics is the newest 4K resolution drone that is taking flight and stealing the hearts of the masses.).

2.6 Autel launched its new flagship aircraft, the EVO, in June 2018. The EVO is a portable camera drone with foldable arms and a compact form factor that builds on the technological advancements used in the X-Star Premium. Below is a picture of the EVO:



Figure 2. Autel Robotics EVO

The EVO includes: a 4K ultra HD 60FPS (frames per second) camera equipped on a 3-axis gimbal, front & downward (computer vision) and rear (IR sensor) obstacle avoidance systems, a 3.3 inch built-in OLED screen remote controller with 720p live video, 30-minute flight time, fast speeds up to 20 meters per second, a 4300 mAh Li-Po battery with 1.3 hour recharge time, a 7km (4.2 mi) range, along with a mobile app (Autel Explorer) allowing for intelligent flight features.

2.7 Autel's EVO has been sold in the United States since June 2018. Initial reviews have been very positive. *See, e.g.,* Ex. 8 ("our first impressions are very positive...a great platform for [Autel's] class-leading camera gear").

III. RESPONDENTS

3.1 Proposed Respondent SZ DJI is a Chinese corporation with its principal place of business at 14th Floor, West Wing, Skyworth Semiconductor Design Building, No. 18 Gaoxin

South 4th Ave, Nanshan District, Shenzhen, China. SZ DJI is responsible for the research and development of DJI-branded products sold in the United States. *See* Ex. 9 ¶ 1.

3.2 Proposed Respondent DJI Europe is a European corporation with its principal place of business at Bijdorp-Oost 6, 2992 LA Barendrecht, Netherlands. DJI Europe sells DJI-branded products in the United States. *See* Ex. 9 ¶ 2.

3.3 Proposed Respondent DJI Technology is a California corporation with its principal place of business at 201 S. Victory Blvd., Burbank, California 91503. *See* Ex. 10. DJI Technology Inc. is registered with the New York Department of State (DOS ID# 512262) and has a regular and established place of business at 632 Broadway, New York, New York 10012. *See* Ex. 11. On information and belief, DJI Technology is involved in sales, marketing, and importation of the Accused Products. *See* Ex. 12.

3.4 Proposed Respondent iFlight is a Hong Kong corporation with its principal place of business at Units 912-916, 9/F, Building 16W, No. 16 Science Park West Avenue, Hong Kong Science Park, Pak Shek Kok, Hong Kong. iFlight is the parent company of both SZ DJI and DJI Europe. *See* Ex. 13.

3.5 On information and belief, Proposed Respondent DJI Baiwang is a Chinese corporation with its principal place of business at Building 9, 7, 2, 1, Baiwang Creative Factory No. 1051, Songbai Road, Xili, Nanshan District, Shenzhen, China. On information and belief, DJI Baiwang is responsible for the manufacturing of the Accused Products. *See* Ex. 14.

3.6 On information and belief, Proposed Respondent DJI Research is a California corporation with its principal place of business at 435 Portage Avenue, Palo Alto, California 94306. *See* Ex. 15. On information and belief, DJI Research performs research and development related to the Accused Products. *See* Ex. 15.

3.7 On information and belief, Proposed Respondent DJI Service is a California corporation with its principal place of business at 17301 Edwards Road, Cerritos, California 90703. *See* Ex. 16. On information and belief, DJI Service performs customer service and support for the Accused Products. *See* Ex. 16.

3.8 On information and belief, Proposed Respondent DJI Creative Studio is a California corporation with its principal place of business at 201 S. Victory Blvd., Burbank, California 91502. *See* Ex. 17. On information and belief, DJI Creative Studio takes part in the marketing of the Accused Products. *See* Ex. 17.

IV. THE TECHNOLOGY AND PRODUCTS AT ISSUE

4.1 Autel and DJI both produce UAVs that are used for aerial photography and videotaping, in addition to use in fields such as agriculture. An image of Autel's EVO ("EVO") is reproduced below:

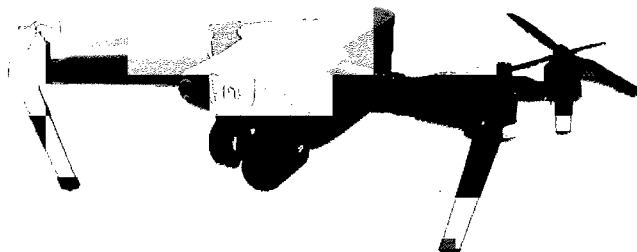


Figure 3. Autel's EVO

4.2 The UAVs produced by Autel and DJI include quadcopters and other multi-rotor UAVs consisting of a central body with multiple arms, each with a rotor attached at the distal end, extending from the body. Of the rotors, half spin clockwise and half spin counterclockwise so as to negate the torque produced by each rotor, which would otherwise result in the UAV spinning in circles.

4.3 Most of the UAVs produced by Autel and DJI are quadcopters with a video camera attached via gimbal to the bottom of the UAV. This allows the UAVs to act as flying cameras, getting into positions and capturing angles on film that previously had to be accomplished by using manned aircraft.

4.4 An autonomous vehicle needs to be able to determine the characteristics of its environment to enable it to carry out the task it has been assigned, such as following a path while avoiding obstacles. The UAVs at issue in this case include sensors configured to obtain data regarding conditions which affect their movements and include one or more processors coupled to the one or more sensors and configured to calculate a desired speed based in part on the data obtained from the one or more sensors. Both the Accused Products and the EVO use one or more processors coupled to the one or more sensors for tasks such as obstacle avoidance and automatic braking. This allows, among other things, the EVO and the Accused Products to slow their forward progress when an obstacle is sensed by UAV.

4.5 Another requirement for a UAV is for the rotors to be attached so as to stay tight during flight. One of the patents asserted here claims a UAV in which the rotors are attached by using notches and lugs, which requires that the rotor be spun into place, where it is then locked by a lug on the UAV rotor assembly to a notch on the rotor itself, or vice versa. With this formulation, only certain rotors can be attached to certain UAV rotor assemblies as the directions of spin must match each other, *i.e.*, a right-hand lug can only attach to a right-hand notch as opposed to a left-hand notch.

4.6 A third feature that can be implemented in a UAV is the ability to easily switch out battery packs so that the lag time between flights can be minimized. The ability to quickly change out battery packs while keeping the battery pack secure during flight through the use of a

restorable elastic piece connected to a clamp button on the battery pack, which then detachably connects to a clamping portion on the main body of the UAV, allows the user to charge multiple battery packs and easily exchange them so as to reduce the downtime when trying to fly the UAVs for extended periods of time.

4.7 Pursuant to Commission Rule 210(a)(12) (19 C.F.R. § 210.12(a)(12)), Complainant states in plain English that the categories of products accused are drones, rotors, rotor assemblies, actuators, propulsion assemblies, batteries, battery components, battery assemblies, controllers, processors, processing components, modules, chips, and circuits used therein or therewith.

V. THE PATENTS AT ISSUE

A. U.S. Patent No. 7,979,174

5.1 On July 12, 2011, the U.S. Patent and Trademark Office duly and lawfully issued the '174 patent, titled "Automatic Planning and Regulation of the Speed of Autonomous Vehicles," to Kingsley Fregene, Michael Elgersma, Samar Dajani-Brown, and Stephen Pratt. The '174 patent was subsequently assigned to Autel. The '174 patent is practiced by Autel's EVO.

5.2 Autel is the sole owner and assignee of the '174 patent.

5.3 The '174 patent has 17 claims. Claims 1, 9 and 14 are independent claims, and claims 2–8, 10–13, and 15–17 are dependent claims. DJI infringes at least the following claims of the '174 patent:

Asserted Patent	Asserted Claims
'174 patent	1–8, 14–16, 17

5.4 Pursuant to Commission Rules 210.12(a) and (c), the Complaint is accompanied by a certified copy of the '174 patent as Exhibit 1 and a certified copy of the assignment of

ownership as Exhibit 4⁴. Additionally, Appendix A contains a certified copy and three additional copies of the prosecution history of the '174 patent. Four copies of each patent mentioned in the prosecution history of the '174 patent are included in Appendix B.

5.5 Pursuant to Commission Rule 210.12(c)(2), four copies of each non-patent technical reference mentioned in the '174 patent are included in Appendix C.

5.6 The following foreign patents and patent applications correspond to the '174 patent: (a) European Patent Application 2042405 (withdrawn November 4, 2009); (b) Israeli Patent Number 192490 (granted March 24, 2013).

5.7 Non-Technical Description of the '174 Patent: The following non-technical description of the '174 patent is for descriptive purposes only and does not limit or expand the scope of its claims. The '174 patent is generally directed to the unmanned aerial vehicle's ability to fly along a predetermined path at a predetermined speed. The UAV does this by accepting a flight path from a user, and then by using sensors to make sure that the UAV stays on the predetermined path at a determined speed by taking the inputs from the sensors, such as the strength of headwinds and/or tailwinds, and accordingly adjusting the speed of the actuators spinning the rotors to adjust the speed of the UAV. Thus, the '174 patent is generally directed to a UAV that can adjust its speed due to the inputs from various sensors when flying along a predetermined flight path. Figure 1 of the '174 patent illustrates this process and is reproduced below:

⁴ Alteration in original certified copy. An unredacted copy is attached hereto as Confidential Ex. 54C.

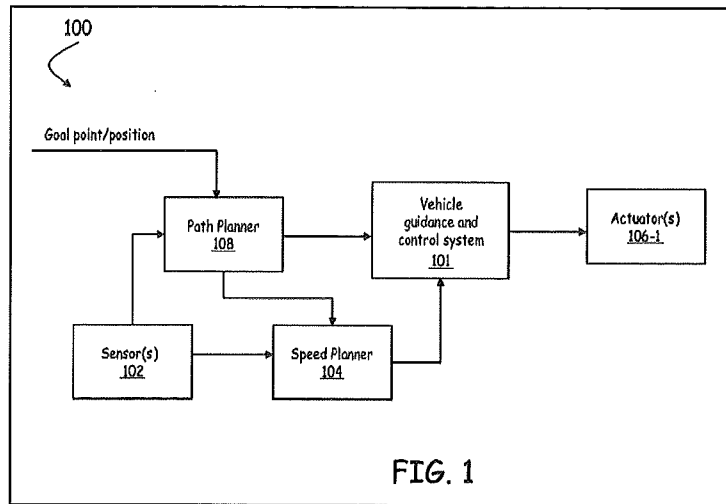


Figure 4. Fig. 1 of the '174 Patent

5.8 A list of the licensees of the '174 patent is included as Confidential Exhibit 50C.

5.9 The expiration date of the '174 patent is January 8, 2030.

B. U.S. Patent No. 9,260,184

5.10 On February 16, 2016, the U.S. Patent and Trademark Office duly and lawfully issued the '184 patent, titled "Compact Unmanned Rotary Aircraft," to Orville Olm, Greg Wood, and Zenon Dragan. The '184 patent was subsequently assigned to Autel. The '184 patent is practiced by the EVO. More specifically, the '184 patent relates to a UAV wherein the rotors are secured to the unmanned aerial vehicle so as to not be released during flight.

5.11 Autel is the sole owner and assignee of the '184 patent.

5.12 The '184 patent has 11 claims. Claim 1 is an independent claim and claims 2–11 are dependent claims. DJI infringes at least the following claims of the '184 patent:

Asserted Patent	Asserted Claims
'184 patent	1–5, 11

5.13 Pursuant to Commission Rule 210.12(a) and (c), this Complaint is accompanied by a certified copy of the '184 patent as Exhibit 2 and a certified copy of the assignment of

ownership as Exhibit 5⁵. Additionally, Appendix D contains a certified copy and three additional copies of the prosecution history of the '184 patent. Four copies of each patent mentioned in the prosecution history of the '184 patent are included in Appendix E.

5.14 There are no non-patent technical references cited in the '184 patent prosecution history.

5.15 The following foreign patents and patent applications correspond to the '184 patent: (a) Canadian Patent Number 2815885 (granted May 15, 2018); and (b) Canadian Patent Application Number 2997790 (currently pending).

5.16 Non-Technical Description of the '184 patent: The following non-technical description of the '184 patent is for descriptive purposes only and does not limit or expand the scope of its claims. The '184 patent is generally directed to a UAV with rotors that can be removably coupled to the UAV through a clockwise/counterclockwise locking mechanism that only allows the correct rotor to be attached to the corresponding electric motor of the UAV. This allows the rotors configured to spin clockwise to only be able to lock to the UAV motors configured to spin rotors clockwise, and allows the rotors configured to spin counterclockwise to only be able to lock to the UAV motors configured to spin rotors counterclockwise.

5.17 A list of the licensees of the '184 patent has been included as Confidential Exhibit 51C.

5.18 The expiration date of the '184 patent is May 14, 2034.

⁵ Alteration in original certified copy. An unredacted copy is attached hereto as Confidential Ex. 55C.

C. U.S. Patent No. 10,044,013

5.19 On August 7, 2018, the U.S. Patent and Trademark Office duly and lawfully issued the '013 patent, titled "Battery Used for Unmanned Aerial Vehicle and an Unmanned Aerial Vehicle," to Longxue Qiu and Xingwen Wu. The '013 patent was subsequently assigned to Autel. The '013 patent was practiced by Autel's first products, the X-Star WiFi and X-Star Premium, and is practiced by the EVO. More specifically, the '013 patent relates to a UAV wherein the battery assembly is detachably connected to the body of the UAV.

5.20 Autel is the sole owner and assignee of the '013 patent.

5.21 The '013 patent has 24 claims. Claim 1 is an independent claim and claims 2–24 are dependent claims. DJI infringes at least the following claims of the '013 patent:

Asserted Patent	Asserted Claims
'013 patent	1, 3–16, 18, 21–24

5.22 Pursuant to Commission Rule 210.12(a) and (c), this Complaint is accompanied by a copy of the '013 patent as Exhibit 3⁶ and a copy of the assignment of ownership as Exhibit 6⁷. Additionally, Appendix F contains a copy and three additional copies of the prosecution history of the '013 patent⁸. Four copies of each patent mentioned in the prosecution history of the '013 patent are included in Appendix G.

5.23 Pursuant to Commission Rule 210.12(c)(2), four copies of each non-patent technical reference mentioned in the '013 patent are included in Appendix H.

⁶ A certified copy of the '013 patent has been ordered and will be supplied upon receipt.

⁷ A certified copy of the Assignments of the '013 patent has been ordered and will be supplied upon receipt.

⁸ A certified copy of the Prosecution History of the '013 patent has been ordered and will be supplied upon receipt.

5.24 The following foreign patents and patent applications correspond to the '013 patent: (a) European Patent Application Number 20160863190 (currently pending); (b) German Utility Model Patent Number 202016008454 (granted January 22, 2018); (c) German Utility Model Patent Number 202016008455 (granted January 18, 2018); (d) German Utility Model Patent Number 202016008452 (granted January 18, 2018); and (e) Chinese Utility Patent Number 205376593 (granted July 6, 2016).

5.25 Non-Technical Description of the '013 patent: The following non-technical description of the '013 patent is for descriptive purposes only and does not limit or expand the scope of its claims. The '013 patent is generally directed to a UAV with a battery assembly that is detachably connected to the UAV's body. Through the use of a restorable elastic piece connected to a clamp button on the battery assembly, the button on the battery assembly can be pressed down, disengaging the clamp button and restorable elastic piece from the clamping portion of the UAV body and allowing the battery assembly to be removed from the UAV.

5.26 A list of the licensees of the '013 patent has been included as Confidential Exhibit 52C.

5.27 The expiration date of the '013 patent is October 25, 2036.

VI. UNLAWFUL AND UNFAIR ACTS OF THE RESPONDENTS

6.1 On information and belief, DJI unlawfully imports into the United States, sells for importation, and/or sells within the United States after importation, the Accused Products. These acts of DJI constitute acts in violation of Section 337. The Accused Products infringe the following Asserted Claims of the Asserted Patents:

Asserted Patents	Asserted Claims
'174 patent	1-8, 14-16, 17
'184 patent	1-5, 11

'013 patent	1, 3–16, 18, 21–24
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A. Infringement of the '174 Patent

6.2 DJI directly infringes one or more of the Asserted Claims of the '174 patent in violation of 35 U.S.C. § 271(a), literally or under the doctrine of equivalents; induces the infringement of one or more of the Asserted Claims of the '174 patent in violation of 35 U.S.C. § 271(b); and/or contributorily infringes one or more of the Asserted Claims of the '174 patent in violation of 35 U.S.C. § 271(c). Discovery may reveal that DJI infringes additional claims of the '174 patent, in which case Autel reserves the right to seek leave to amend this Complaint to assert such claims.

6.3 DJI has directly infringed and continues to directly infringe one or more of the Asserted Claims of the '174 patent. The Accused Products manufactured and sold by DJI are autonomous vehicles comprising one or more sensors configured to obtain data regarding conditions which affect their movement and includes one or more processors coupled to the one or more sensors and configured to calculate a desired speed based in part on the data obtained from the one or more sensors. By way of example, the Accused Products implement one or more processors coupled to the one or more sensors for tasks such as obstacle avoidance and automatic braking. This allows the Accused Products to slow their forward progress when an obstacle is sensed by the UAV.

6.4 Examples of the Accused Products that infringe one or more of the Asserted Claims of the '174 patent include, but are not limited to, the DJI Mavic, the DJI Spark, the DJI Phantom, and the DJI Inspire.

a) The DJI Mavic includes “Assisted Braking from Forward Vision System” which allows the UAV to intelligently brake when it senses an object ahead of it:

Assisted Braking from Forward Vision System

Powered by the Forward Vision System, the aircraft is able to actively brake when obstacles are detected in front. Forward and Downward Vision Systems work best when lighting is adequate and the obstacle is clearly marked or textured. The aircraft must fly at no more than 22mph (36kph) to allow sufficient braking distance.

See Ex. 18, at 24.

b) The DJI Spark also includes a system of assisted braking:

Powered by the 3D Sensing System, the aircraft is able to actively brake when obstacles are detected in front. The 3D Sensing System works best when lighting is adequate and the obstacle is clearly marked or textured. The aircraft must fly at no more than 6.7 mph (10.8 kph) to allow for sufficient braking distance.

See Ex. 19, at 12.

c) The DJI Phantom describes its assisted braking system as “Assisted Braking from Obstacle Sensing”:

Assisted Braking from Obstacle Sensing

Powered by the Obstacle Sensing, the aircraft will now be able to actively brake when obstacles are detected around the aircraft. Note that Obstacle Sensing function works best when lighting is adequate and the obstacle is clearly marked or textured. The aircraft must fly at **no** more than 31mph (50kph) to allow sufficient **braking distance**.

See Ex. 20, at 29.

d) The DJI Inspire also refers to its assisted braking as “Assisted Braking from Obstacle Sensing”:

Assisted Braking from Obstacle Sensing

Powered by the Obstacle Sensing, the aircraft will now be able to actively brake when obstacles are detected around the aircraft. Note that Obstacle Sensing function works best when lighting is adequate and the obstacle is clearly marked or textured. The aircraft must fly at no more than 31mph (50kph) to allow sufficient braking distance.

See Ex. 21, at 28.

6.5 Upon information and belief, the Accused Products include a control system configured to calculate speed commands based in part on the speed calculated by one or more processors. Additionally, the Accused Products include one or more actuators configured to adjust the speed of the autonomous vehicle based on the speed commands from the control

system wherein the one or more processors are further configured to output a speed command category associated with the desired speed. The Accused Products perform this step through their respective flight control modules, which take the inputs from the obstacle avoidance systems and one or more processors and outputs speed commands to the electronic speed control (ESC) systems controlling each of the rotors.

6.6 DJI has directly infringed and continues to directly infringe one or more of the Asserted Claims of the '174 patent.

6.7 DJI has actively induced and continues to actively induce users of the Accused Products to directly infringe one or more of the Asserted Claims of the '174 patent. Since at least April 25, 2018, DJI has been aware of the '174 patent and knows that use of the Accused Products constitutes direct infringement of the '174 patent. *See, infra* ¶¶ 11.1–11.2. Likewise, since at least April 25, 2018, DJI has knowingly induced and continues to induce infringement of the '174 patent with specific intent to do so by, for example, providing marketing materials, package inserts, user guides/manuals, and/or other instructions to perform acts intended by DJI to cause direct infringement of the Asserted Claims of the '174 patent. *See* Exs. 18–21 (copies of user manuals downloaded from DJI.com, <http://www.dji.com> (last visited August 28, 2018)).

6.8 DJI has contributed to and continues to contribute to the direct infringement of one or more of the Asserted Claims of the '174 patent, including users of the Accused Products, by providing the Accused Products, which are especially made or adapted for use in the infringement of the '174 patent. The Accused Products are not staple articles or commodities of commerce suitable for noninfringing use. Since at least April 25, 2018, DJI has had knowledge of the '174 patent and infringement thereof. Since at least April 25, 2018, DJI has had knowledge that the Accused Products were specially made or adapted for use in infringement of

the '174 patent and not staple articles or commodities of commerce suitable for noninfringing use.

6.9 A claim chart that applies the independent claims of the '174 patent to the DJI Spark, a representative example of the Accused Products, is attached hereto as Exhibit 22, showing that the Accused Products, when used as directed by DJI and as imported, infringe at least the following independent claims of the '174 patent:

Asserted Patent	Asserted Independent Claims
'174 patent	1, 14

6.10 Photographs of the Accused Products are attached as Exhibits 25–28, and a DJI Spark, a representative sample of the Accused Products, is included herewith as Physical Exhibit 54.

B. Infringement of the '184 Patent

6.11 DJI directly infringes one or more of the Asserted Claims of the '184 patent in violation of 35 U.S.C. § 271(a), literally or under the doctrine of equivalents; induces the infringement of one or more of the Asserted Claims of the '184 patent in violation of 35 U.S.C. § 271(b); and/or contributorily infringes one or more of the Asserted Claims of the '184 patent in violation of 35 U.S.C. § 271(c). Discovery may reveal that DJI infringes additional claims of the '184 patent, in which case Autel reserves the right to seek leave to amend this Complaint to assert such claims.

6.12 DJI has directly infringed and continues to directly infringe one or more of the Asserted Claims of the '184 patent. For example, the Accused Products include rotor assemblies comprising a rotor blade releasably attached to a driveshaft by a lock mechanism with a drive rotating the driveshaft, one of which is rotating in a clockwise direction and another of which is

rotating in a counterclockwise direction, both of which generate lift force when rotated in their respective directions. The specific directionality of the rotors is shown in the user manual of the Mavic Pro, a representative example of the Accused Products:

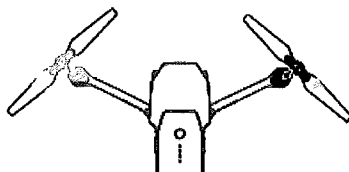


Figure 5. Figure Illustrating the Directionality of the Rotors. *See Ex. 18, at 26.*

6.13 The Accused Products include a lock mechanism that selectively allows the correct rotor to engage with its corresponding driveshaft—clockwise rotor to clockwise driveshaft and counterclockwise rotor to counterclockwise driveshaft.

6.14 Examples of the Accused Products that infringe one or more of the Asserted Claims of the '184 patent include, but are not limited to, the DJI Mavic, the DJI Spark, the DJI Phantom, and the DJI Inspire.

a) The Mavic Pro utilizes “white rings” on its rotors to distinguish between those that go clockwise and those that go counterclockwise:

Attaching and Detaching the Propellers

Use only DJI approved propellers with your Mavic Pro. White ring and unmarked propellers indicate where they should be attached and in which direction they should spin.




Propellers	White Ring	Unmarked
Figure		
Attach On	Motors with white marks	Motors without white marks
Legends	 Lock : Turn the propellers in the indicated direction to mount and tighten.	

Figure 6. *See Ex. 18, at 26.*

b) The Spark also utilizes white rings to differentiate between the rotors that are configured to spin clockwise and those that are configured to spin counterclockwise:




Propellers	White Ring	Unmarked
Figure		
Attach On	Motors with white marks	Motors without white marks
Legend	 Lock : Turn the propellers in the indicated direction to mount and tighten.	

Figure 7. See Ex. 19, at 26.

c) Similarly, the Phantom 4 differentiates between clockwise and counterclockwise rotors by using silver and black rings with black dots:





Propellers	Silver Ring	Black Ring
Figure		
Attach On	Motors without black dots	Motors with black dots
Legends	 Lock : Turn the propellers in the indicated direction to mount and tighten.  Unlock : Turn the propellers in the indicated direction to loosen and remove.	

Figure 8. See Ex. 20, at 30.

d) The Inspire 2 User Manual differentiates between clockwise and counterclockwise motors by the motor/rotor colors as well:

1. Pair the propellers and motors with arrows of the same color (red or white).

See Ex. 21, at 8.

6.15 The Accused Products include a lock mechanism that has a shaft lock portion attached to the first driveshaft and a blade lock portion attached to the clockwise rotor blade, the shaft lock portion defining notches configured to engage corresponding lugs on the blade lock portion.

a) The Mavic Pro User Manual shows the notches of the shaft lock portion and the lugs on the blade lock portion:

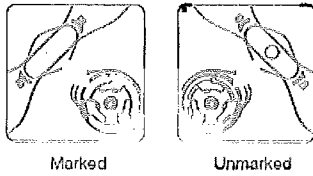


Figure 9. See Ex. 18, at 26.

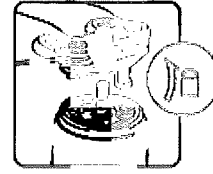


Figure 10. See Ex. 18, at 26.

b) The Spark User Manual also shows the notches of the shaft lock portion and the lugs on the blade lock portion:



Figure 11. See Ex. 19, at 26.

c) The Phantom 4 User Manual also shows the notches that would attach to the lugs on the blade lock portion:

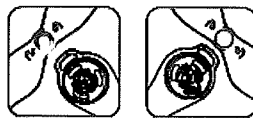


Figure 12. See Ex. 20, at 30.

d) Similarly, the Inspire 2 User Manual also shows the notches and lugs:

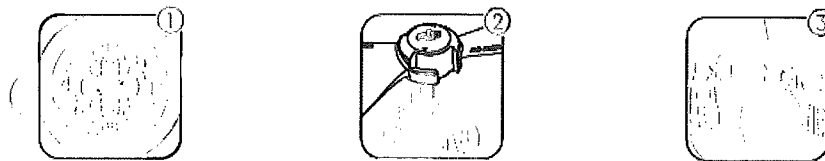


Figure 13. See Ex. 21, at 8.

6.16 DJI has directly infringed and continues to directly infringe one or more of the Asserted Claims of the '184 patent because, when imported into the United States or when sold or offered for sale in the United States, the Accused Products directly infringe one or more of the Asserted Claims of the '184 patent.

6.17 DJI has actively induced and continues to actively induce users of the Accused Products to directly infringe one or more of the Asserted Claims of the '184 patent. Since at least April 25, 2018, DJI has been aware of the '184 patent and knows that use of the Accused Products constitutes direct infringement of the '184 patent. *See, infra* ¶¶ 11.1–11.2. Likewise, since at least April 25, 2018, DJI has knowingly induced and continues to induce infringement of the '184 patent with specific intent to do so by, for example, providing marketing materials, package inserts, user guides/manuals, and/or other instructions to perform acts intended by DJI to cause direct infringement of one or more of the Asserted Claims of the '184 patent. *See* Exs. 18–21 (copies of user manuals downloaded from DJI.com, <http://www.dji.com> (last visited August 28, 2018)).

6.18 DJI has contributed to and continues to contribute to the direct infringement of one or more of the Asserted Claims of the '184 patent, including users of the Accused Products, by providing the Accused Products, which are especially made or adapted for use in the infringement of the '184 patent. The Accused Products are not staple articles or commodities of commerce suitable for noninfringing use. Since at least April 25, 2018, DJI has had knowledge of the '184 patent and infringement thereof. Since at least April 25, 2018, DJI has had knowledge that the Accused Products were specially made or adapted for use in infringement of the '184 patent and not staple articles or commodities of commerce suitable for noninfringing use.

6.19 A claim chart that applies the claims of the '184 patent to a DJI Spark, a representative example of the Accused Products, is attached hereto as Exhibit 23, showing that the Accused Products, when used as direct by DJI and as imported, infringe at least the following independent claim of the '184 patent:

Asserted Patent	Asserted Independent Claims
'184 patent	1

6.20 Photographs of the Accused Products are attached as Exhibits 25–28, and a DJI Spark, a representative sample of the Accused Products, is included herewith as Physical Exhibit 54.

C. Infringement of the '013 Patent

6.21 Examples of DJI's unmanned aerial vehicle products that infringe one or more of the Asserted Claims of the '013 patent include, but are not limited to, the DJI Mavic, the DJI Spark, and the DJI Phantom (collectively, "the '013 Accused Products")⁹.

6.22 DJI directly infringes one or more of the Asserted Claims of the '013 patent in violation of 35 U.S.C. § 271(a), literally or under the doctrine of equivalents; induces the infringement of one or more of the Asserted Claims of the '013 patent in violation of 35 U.S.C. § 271(b); and/or contributorily infringes one or more of the Asserted Claims of the '013 patent in violation of 35 U.S.C. § 271(c). Discovery may reveal that DJI infringes additional claims of the '013 patent, in which case Autel reserves the right to seek leave to amend this Complaint to assert such claims.

⁹ The '013 Accused Products are to be differentiated from the Accused Products in that the Accused Products include the DJI Mavic, Spark, Phantom, and Inspire series of drones, whereas the '013 Accused Products only include the DJI Mavic, Spark, and Phantom series of drones.

6.23 DJI has directly infringed and continues to directly infringe one or more of the Asserted Claims of the '013 patent. The '013 Accused Products manufactured and sold by DJI are multi-rotor unmanned aerial vehicles that utilize a restorable elastic piece connected to a clamp button on the battery assembly to detachably connect the battery assembly to a clamping portion located in the battery compartment of the main body of the UAV. This allows the battery assembly to be easily removed from the main body of the UAV.

6.24 The '013 Accused Products are each multi-rotor unmanned aerial vehicles comprising a main body with a battery compartment.

a) The Mavic Pro's battery compartment is located on the top of the UAV, as seen in the photographs below:

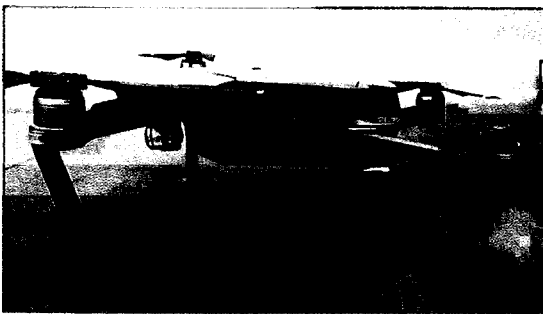


Figure 14. DJI Mavic Pro (side view). Ex. 25.

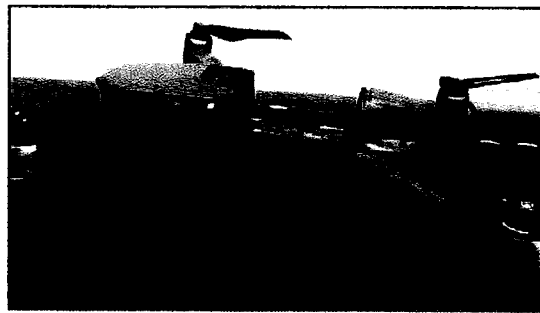


Figure 15. DJI Mavic Pro (side view) with Battery Removed. Ex. 25.

b) The Spark's battery compartment is located on the bottom of the UAV, as seen in the photographs below:

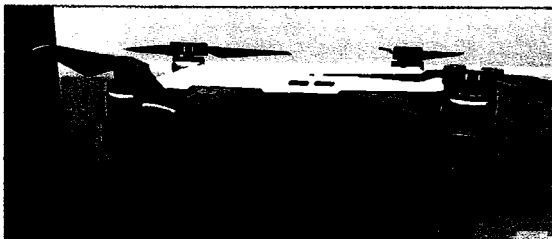


Figure 16. DJI Spark (side view). Ex. 26.



Figure 17. DJI Spark (side view and upside-down) with Battery Removed. Ex. 26.

c) The Phantom 4 Pro's battery compartment is located on the rear of the UAV, as seen in the photographs below:

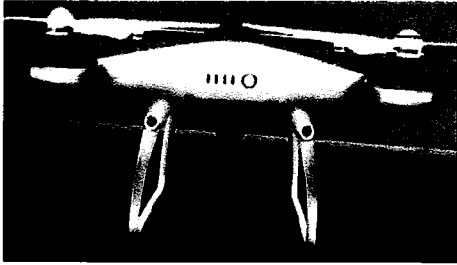


Figure 18. DJI Phantom 4 Pro (rear view). Ex. 27.

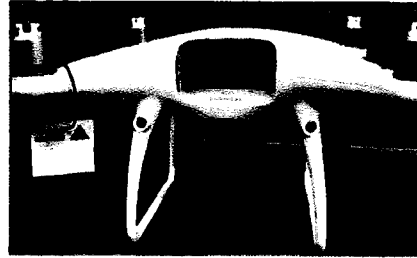


Figure 19. DJI Phantom 4 Pro (rear view) with Battery Removed. Ex. 27.

6.25 The '013 Accused Products each include four arms, wherein each arm is coupled to the main body; and a propulsion assembly disposed on the each arm, wherein the propulsion assembly comprises a propeller and a motor, the motor being configured to drive the propeller to rotate in order to generate lift force.

a) The Mavic Pro's four arms coupled to the main body with a propulsion assembly, comprising a propeller and a motor, at each arm's distal end can be seen in the photographs below:



Figure 20. DJI Mavic Pro (top view). Ex. 25.



Figure 21. DJI Mavic Pro Propulsion Assembly. Ex. 25.

b) The Spark's four arms coupled to the main body with a propulsion assembly, comprising a propeller and a motor, at each arm's distal end can be seen in the photographs below:



Figure 22. DJI Spark (top view). Ex. 26.

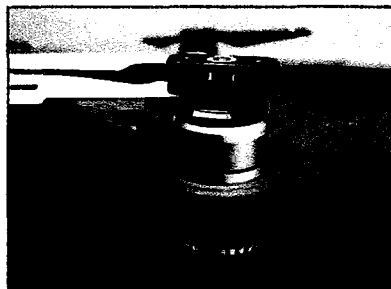


Figure 23. DJI Spark Propulsion Assembly. Ex. 26.

c) The Phantom 4 Pro's four arms coupled to the main body with a propulsion assembly, comprising a propeller and a motor, at each arm's distal end can be seen in the photographs below:

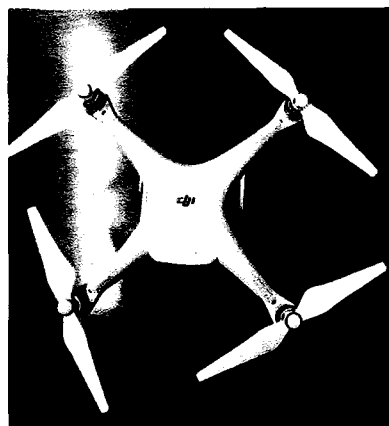


Figure 24. DJI Phantom 4 Pro (top view). Ex. 27.

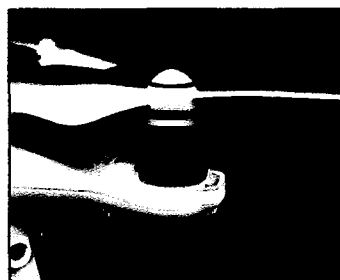


Figure 25. DJI Phantom 4 Pro Propulsion Assembly. Ex. 27.

6.26 The '013 Accused Products each include a battery assembly capable of being accommodated in the battery compartment, the battery assembly comprising a shell and a battery body substantially disposed in the shell.

- a) The Mavic Pro User Manual shows the Mavic Pro's battery assembly:



Figure 26. Battery Assembly for DJI Mavic Pro. Ex. 18, at 26.

- b) The Spark User Manual shows the Spark's battery assembly:

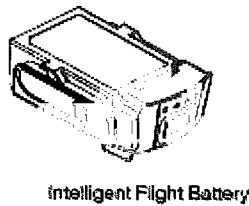


Figure 27. Battery Assembly for DJI Spark. Ex. 19, at 27.

- c) The Phantom 4 Pro User Manual shows the Phantom's battery assembly:

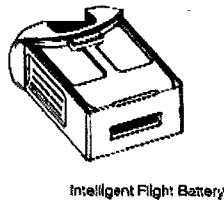


Figure 28. Battery Assembly for DJI Phantom 4 Pro. Ex. 20, at 31.

6.27 The '013 Accused Products each include a clamp button, wherein a first end of the clamp button being mounted directly or indirectly to the shell and a second end of the clamp button being detachably coupled to the main body. The '013 Accused Products further include a restorable elastic piece, wherein a first end of the restorable elastic piece is disposed on the shell or connects directly or indirectly to the shell, a second end of the restorable elastic piece contacting the clamp button.

a) The Mavic Pro includes a clamp button and restorable elastic piece mounted to the shell of the battery assembly that can connect to the main body of the UAV, as shown in the photographs below:

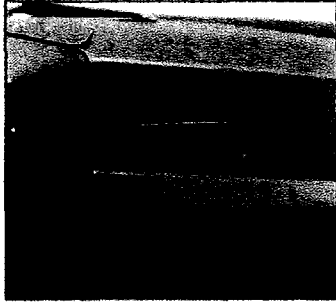


Figure 29. DJI Mavic Pro Clamp Button. Ex. 25.



Figure 30. DJI Mavic Pro Clamp Button and Restorable Elastic Piece. Ex. 25.

b) The Spark includes a clamp button and restorable elastic piece mounted to the shell of the battery assembly that can connect to the main body of the UAV, as shown in the photographs below:

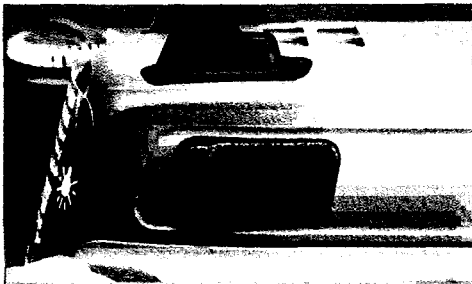


Figure 31. DJI Spark Clamp Button. Ex. 26.



Figure 32. DJI Spark Clamp Button and Restorable Elastic Piece. Ex. 26.

c) The Phantom 4 Pro includes a clamp button and restorable elastic piece mounted to the shell of the battery assembly that can connect to the main body of the UAV, as shown in the photographs below:

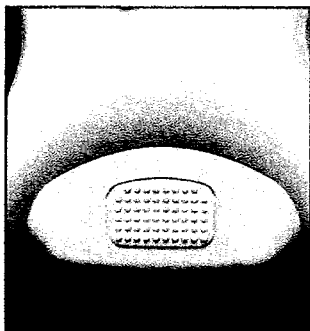


Figure 33. DJI Phantom 4 Pro Clamp Button. Ex. 27.

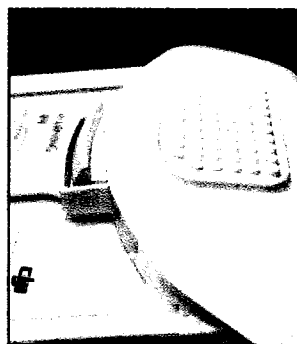


Figure 34. DJI Phantom 4 Pro Clamp Button and Restorable Elastic Piece. Ex. 27.

6.28 The '013 Accused Products each include a battery compartment that comprises a clamping portion configured to detachably connect to the clamp button.

a) The Mavic Pro includes a battery compartment that comprises a clamping portion configured to detachably connect to the clamp button, as shown in the photographs below:

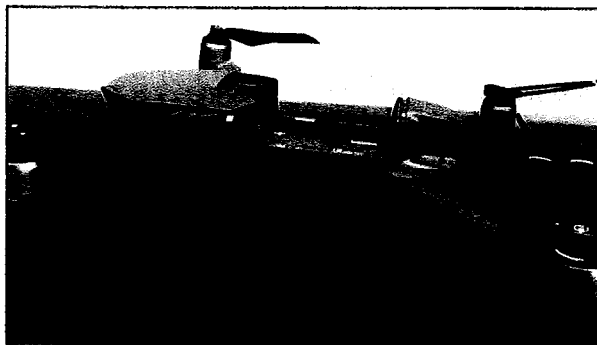


Figure 35. DJI Mavic Pro (side view) with Battery Removed. Ex. 25.

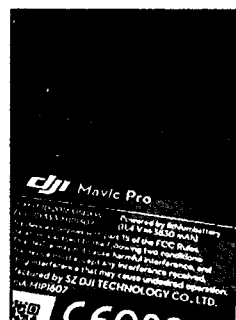


Figure 36. DJI Mavic Pro Clamping Portion of Battery Compartment. Ex. 25.

b) The Spark includes a battery compartment that comprises a clamping portion configured to detachably connect to the clamp button, as shown in the photographs below:

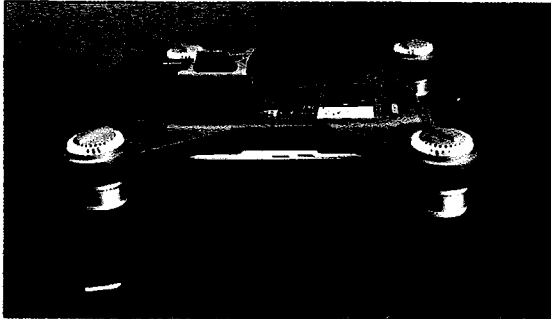


Figure 37. DJI Spark (side view and upside-down) with Battery Removed. Ex. 26.

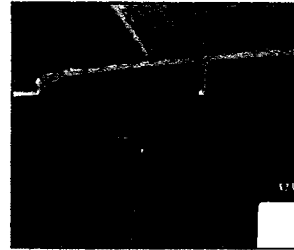


Figure 38. DJI Spark Clamping Portion of Battery Compartment. Ex. 26.

c) The Phantom 4 Pro includes a battery compartment that comprises a clamping portion configured to detachably connect to the clamp button, as shown in the photographs below:

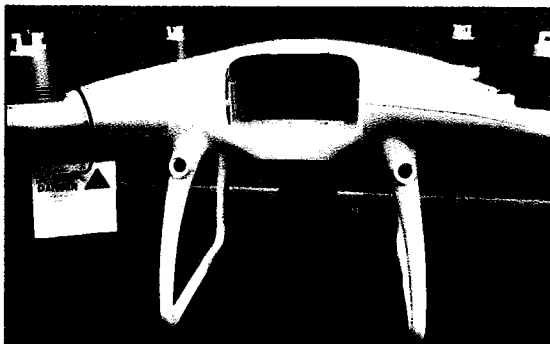


Figure 39. DJI Phantom 4 Pro (rear view) with Battery Removed. Ex. 27.



Figure 40. DJI Phantom 4 Pro Clamping Portion of Battery Compartment. Ex. 27.

6.29 DJI has directly infringed and continues to directly infringe one or more of the Asserted Claims of the '013 patent because, when imported into the United States or when sold or offered for sale in the United States, the '013 Accused Products directly infringe one or more of the Asserted Claims of the '013 patent.

6.30 DJI has actively induced and continues to actively induce users of the '013 Accused Products to directly infringe one or more of the Asserted Claims of the '013 patent. Since at least the filing of this Complaint, DJI has been aware of the '013 patent and knows that use of the '013 Accused Products constitutes direct infringement of the '013 patent. Likewise, since at least the filing of this Complaint, DJI has knowingly induced and continues to induce infringement of the '013 patent with specific intent to do so by, for example, providing marketing materials, package inserts, user guides/manuals, and/or other instructions to perform acts intended by DJI to cause direct infringement of one or more of the Asserted Claims of the '013 patent. *See* Exs. 18–21 (copies of user manuals downloaded from DJI.com, <http://www.dji.com> (last visited August 28, 2018)).

6.31 DJI has contributed to and continues to contribute to the direct infringement of one or more of the Asserted Claims of the '013 patent, including users of the '013 Accused Products, by providing the '013 Accused Products, which are especially made or adapted for use in the infringement of the '013 patent. The '013 Accused Products are not staple articles or commodities of commerce suitable for noninfringing use. Since at least the filing of this Complaint, DJI has had knowledge of the '013 patent and infringement thereof. Since at least the filing of this Complaint, DJI has had knowledge that the '013 Accused Products were specially made or adapted for use in infringement of the '013 patent and not staple articles or commodities of commerce suitable for noninfringing use.

6.32 A claim chart that applies the claims of the '013 patent to a DJI Spark, a representative example of the '013 Accused Products, is attached hereto as Exhibit 24, showing that the '013 Accused Products, when used as direct by DJI and as imported, infringe at least the following independent claim of the '013 patent:

Asserted Patent	Asserted Independent Claims
'013 patent	1

6.33 Photographs of the '013 Accused Products are attached as Exhibits 25–27, and a DJI Spark, a representative sample of the Accused Products, is included herewith as Physical Exhibit 54.

VII. SPECIFIC INSTANCES OF IMPORTATION AND SALE

7.1 DJI sells for importation, imports, and/or sells after importation into the United States the Accused Products, including without limitation, the DJI Mavic, DJI Spark, DJI Phantom, and DJI Inspire. In addition, DJI imported the Accused Products for promotional use at trade shows including, for example, at the 2018 Consumer Electronics Shows in Las Vegas, Nevada.

7.2 On information and belief, DJI imported into and is offering to sell in the United States the Accused Products, including without limitation, the DJI Mavic, Phantom, Spark, and Inspire series of UAVs. Autel is currently aware of the following examples:

- a) In January 2018, DJI imported the Phantom, Mavic, Spark, and Inspire series of UAVs into the United States and advertised and demonstrated use of the Mavic, Phantom, Spark, and Inspire series of UAVs at the Consumer Electronics Show in Las Vegas, Nevada. *See* Exs. 29–30.
- b) In May 2018, a DJI Mavic Pro was bought online through bestbuy.com and shipped to a United States address. *See* Ex. 31. The markings on the packaging and the device itself state that the Mavic Pro was made in China. *See* Ex. 32.

- c) In May 2018, a DJI Spark was bought online through bestbuy.com and shipped to a United States address. *See* Ex. 33. The markings on the packaging and the device itself state that the Spark was made in China. *See* Ex. 34.
- d) In May 2018, a DJI Phantom 4 Pro was bought online through bestbuy.com and shipped to a United States address. *See* Ex. 35. The markings on the packaging and the device itself state that the Phantom 4 Pro was made in China. *See* Ex. 36.
- e) In May 2018, a DJI Inspire 2 was bought and shipped to a United States address. *See* Ex. 37. Specifically, a DJI Inspire 2 was bought in BestBuy store #1199 located in Fairfax, VA, and then shipped to a United States address. *See* Ex. 37. The markings on the packaging and the device itself state that the Inspire 2 was made in China. *See* Ex. 38.
- f) On August 9, 2018, a second DJI Spark was bought online through bestbuy.com and shipped to a United States address. *See* Ex. 39. The markings on the packaging and the device itself state that the second Spark was made in China. *See* Ex. 40.

7.3 These acts by DJI evidence that DJI has imported into, and is offering to sell in the United States, the Accused Products in violation of Section 337.

7.4 Autel believes that discovery will likely reveal other examples of DJI's importation, sale for importation, and/or sale after importation of the Accused Products.

VIII. CLASSIFICATION OF THE INFRINGING PRODUCTS UNDER THE HARMONIZED TARIFF SCHEDULE

8.1 On information and belief, the tariff classifications which may cover importation of the Accused Products are Nos. 8802.20.00.15, 8803.10.00.30, 9503.00.00.00, and

8525.80.40.00 of the Harmonized Tariff Schedule (“HTS”) of the United States. These HTS numbers are intended for illustration only and are not restrictive of the Accused Products.

IX. THE DOMESTIC INDUSTRY

9.1 In accordance with Sections 337(a)(3)(A)–(C), an industry in the United States exists for products protected by the Asserted Patents. Autel’s EVO practices the Asserted Patents and is sold within the United States. Autel has made significant investments in plant and equipment, significant employment of labor and capital, and substantial investments in the exploitation of the Asserted Patents in the United States, including, but not limited to, research and development, engineering, and technical and customer support. *See, e.g.*, Ex. 41 at 42. These investments are all related to products that practice one or more claims of the Asserted Patents. Confidential Exhibit 53C is a declaration regarding domestic industry that sets forth in detail Autel’s significant investments in plant and equipment, significant employment of labor and capital, and substantial investments in the exploitation of the Asserted Patents in the United States. Autel continues to invest and expand in the United States, further growing the domestic industry.

A. Technical Prong

9.2 Autel’s EVO, which is sold and supported in the United States, practices at least one claim of the ’174 patent, at least one claim of the ’184 patent, and at least one claim of the ’013 patent. Exhibit 47C is a claim chart demonstrating that the EVO practices the independent claims of the ’174 patent. Exhibit 48C is a claim chart demonstrating that the EVO practices the independent claim of the ’184 patent. Exhibit 49C is a claim chart demonstrating that the EVO practices the independent claim of the ’013 patent. A user guide for the EVO is attached as Exhibit 41. Photographs of the EVO are attached as Exhibit 42. Photographs of the outside

packaging of the EVO are attached as Exhibit 43. A representative sample of the EVO is submitted with this Complaint as Physical Exhibit 55.

B. Economic Prong

9.3 Autel is a limited liability company organized under the laws of Delaware and headquartered in Bothell, Washington, just outside of Seattle. The following facts establish that an industry related to Autel's unmanned aerial vehicles exists in the United States.

9.4 Significant Investment in Plant or Equipment: Both during the preparation for the release of the EVO, and since it has been released, Autel has made, and plans to further make, significant investments in its plant and in its equipment in the United States related to the EVO.

9.5 Autel has its principal place of business and headquarters at 22522 29th Dr. SE, Suite 101, Bothell, WA 98021. Autel has 10,086 sq. ft. of space at that location, staffed by at least 20 employees devoted to various tasks, including technical support and the development of the mobile app (Autel Explorer) used to control the EVO that enables intelligent flight features.

9.6 Autel has another facility in Silicon Valley. Until recently that facility was located in San Ramon, California and consisted of an office and laboratory. Autel relocated that facility to Redwood City, California on July 1, 2018. The newly-leased premises includes 5,785 sq. ft. of space and is the base of its engineering, design, and research and development.

9.7 Confidential Exhibit 53C contains other facts not publicly known that further establish Autel's domestic industry with respect to the Asserted Patents.

9.8 Significant Employment of Labor or Capital: Both during the preparation for the release of the EVO, and since the EVO has been released, Autel has made, and plans to further make, significant investments in the employment of labor and capital in the United States related to the EVO. Autel's EVO is the product of years of research and development conducted in the

United States by its own employees and university partnerships with Carnegie Mellon University. The EVO is also supported by an industry-leading customer service and technical support team located in Bothell, maintaining a 95% customer satisfaction rating and 4.7 stars on Amazon.

9.9 Autel employs many people to work on research and development and support of its EVO. Autel breaks these employees into “teams.”

9.10 For the purposes of domestic industry, Autel’s workforce includes the Application team, the Technical Support team, the Vision team, and the Flight Control team. Each of the enumerated teams devote 100% of their time to technical work related to the EVO and therefore their work counts towards the domestic industry in their entirety.

- The Application team is responsible for the mobile applications that are used to both control the EVO and to utilize the EVO’s camera.
- The Technical Support team is responsible for communicating with customers regarding issues with the products, collecting feedback, and following up with the customers regarding technical solutions that Autel can offer.
- The Vision team is responsible for research and development pertaining to the computer vision system for the EVO, which allows the EVO to sense obstacles while it is flying.
- The Flight Control team is responsible for research and development for the flight control system for the EVO, which allows the EVO to fly and react to pilot commands through the remote controller.

All of these individuals are located in Autel’s facilities in Washington and California.

9.11 Confidential Exhibit 53C further details Autel’s employees’ United States activities relating to the EVO.

9.12 Substantial Investment in the Exploitation of the Subject Patents: Both during the preparation for the release of the EVO, and since the EVO has been released, Autel has made, and plans to further make, substantial investments into its exploitation of the Asserted Patents in

the United States. As described above, numerous teams of engineers employed by Autel conduct research and development, engineering, and support related to the EVO. These individuals are located in Autel's facilities in Bothell, Washington and Redwood City, California. In addition, Autel has collaborated with (and supported) individuals at America's leading universities to develop the EVO. That work has contributed to an incredible UAV product for U.S. consumers.

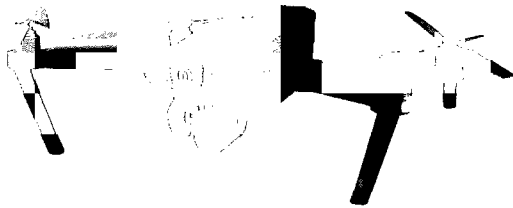


Figure 41. Autel EVO



Figure 42. Autel EVO (folded)

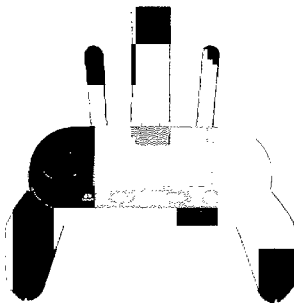


Figure 43. Autel EVO Remote Controller



Figure 44. Autel EVO Battery Pack

9.13 Confidential Exhibit 53C contains further details of Autel's domestic engineering and research and development expenditures.

X. LICENSES

10.1 Pursuant to Rule 210.12(a)(9)(iii), Exhibit 50C is a confidential list of licensees of the '174 patent.

10.2 Pursuant to Rule 210.12(a)(9)(iii), Exhibit 51C is a confidential list of licensees of the '184 patent.

10.3 Pursuant to Rule 210.12(a)(9)(iii), Exhibit 52C is a confidential list of licensees of the '013 patent.

XI. RELATED LITIGATION

A. District of Delaware

11.1 On August 11, 2016, SZ DJI and DJI Europe filed a lawsuit in the United States District Court for the District of Delaware against Autel alleging patent infringement by Autel of four DJI patents. *See* Ex. 9. Autel filed its Answer on December 21, 2016. *See* Ex. 44 at Dkt. 26.

11.2 On May 19, 2017, SZ DJI and DJI Europe filed a lawsuit in the United States District Court for the Western District of Washington against Autel alleging patent infringement by Autel of two other DJI patents. *See* Ex. 45 at Dkt. 1. Autel filed a Motion to Dismiss on July 31, 2017, *see* Ex. 45 at Dkt. 13, which resulted in an Order transferring the lawsuit from the Western District of Washington to the District of Delaware. *See* Ex. 45 at Dkt. 27.

11.3 After the Order from Judge Richard Jones of the Western District of Washington transferred the case to the District of Delaware on February 22, 2018, Autel filed a Motion to Consolidate the two patent infringement actions pending in the District of Delaware on March 2, 2018. *See* Ex. 44 at Dkt. 213. On March 14, 2018, Chief Judge Leonard Stark granted Autel's Motion to Consolidate. *See* Ex. 44 at Dkt. 225.

11.4 On April 30, 2018, Autel filed its Answer and Counterclaims against SZ DJI, DJI Europe, and DJI Technology alleging patent infringement by those defendants of a number of Autel's patents including U.S. Patent Nos. 7,979,174 and 9,260,184. *See* Ex. 44 at Dkt. 241.

11.5 For the consolidated litigation in Delaware, discovery is ongoing and a *Markman* hearing is scheduled for April 1, 2019.

B. Southern District of New York

11.6 On April 25, 2018, Autel filed a Complaint in the United States District Court for the Southern District of New York against SZ DJI, DJI Europe, and DJI Technology alleging patent infringement by those defendants of a number of Autel's patents including U.S. Patent Nos. 7,979,174 and 9,260,184. *See* Ex. 46 at Dkt. 8.

11.7 On July 2, 2018, Autel voluntarily dismissed the action against SZ DJI, DJI Europe, and DJI Technology pending in the Southern District of New York. *See* Ex. 46 at Dkt. 25.

XII. RELIEF

12.1 DJI has infringed and will continue to infringe the '174 patent, the '184 patent, and the '013 patent unless the Commission prohibits the importation into and sale within the United States of the Accused Products.

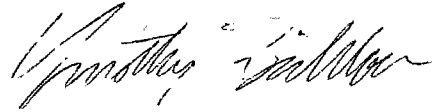
12.2 Autel respectfully requests that the United States International Trade Commission:

- a) Institute an immediate investigation pursuant to Section 337(b)(1) of the Tariff Act of 1930, as amended 19 U.S.C. § 1337, into DJI's violation of Section 337 arising from the sale for importation into the United States, importation, and/or sale within the United States after importation of DJI's unmanned aerial vehicles and components thereof, including without limitation, the DJI Mavic, DJI Spark, DJI Phantom, and DJI Inspire;

- b) Schedule and conduct a hearing, pursuant to Section 337(c), for purposes of receiving evidence and hearing argument concerning whether DJI has violated Section 337 and, following the hearing, determine that DJI has violated Section 337;
- c) Issue a permanent limited exclusion order, pursuant to Section 337(d) and (f)(1), excluding from entry into the United States DJI's unmanned aerial vehicles and components thereof, which infringe one or more claims of U.S. Patent No. 7,979,174, U.S. Patent No. 9,260,184, and U.S. Patent No. 10,044,013, including without limitation, DJI's Mavic, Phantom, Spark, and Inspire;
- d) Issue a permanent order, pursuant to Section 337(f), directing DJI to cease and desist from importing, selling, selling for importation, offering for sale, using, demonstrating, promoting, marketing, and/or advertising in the United States DJI's unmanned aerial vehicles and components thereof which infringe one or more claims of U.S. Patent No. 7,979,174, U.S. Patent No. 9,260,184, and U.S. Patent No. 10,044,013, including without limitation, DJI's Mavic, Phantom, Spark, and Inspire;
- e) Impose a bond on importation and sales of infringing products during the 60-day Presidential review period pursuant to 19 U.S.C. § 1337(j); and
- f) Grant all such other and further relief as it deems appropriate under the law, based upon the facts complained of herein and as determined by the investigation.

Dated: August 30, 2018

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Timothy C. Bickham".

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