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Attorneys for Plaintiff XiDrone Systems, Inc.

IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF UTAH, CENTRAL DIVISION

XIDRONE SYSTEMS, INC.,

FORTEM TECHNOLOGIES, INC.,

v.

Plaintiff,

COMPLAINT

JURY TRIAL DEMANDED

Case No. 2:24-cv-00905-HCN

Judge Howard C. Nielson, Jr.

Defendant.

Plaintiff XiDrone Systems, Inc. asserts claims against Defendant Fortem Technologies,

Inc. and alleges as follows:

INTRODUCTION

1. This is an action for patent infringement arising under the patent laws of the

United States, 35 U.S.C. §§ 101, et seq., including 35 U.S.C. § 271.

THE PARTIES

2. Plaintiff XiDrone Systems, Inc. ("XiDrone") is a Florida Corporation with a place of business at 272 Burnt Pine Drive, Naples, Florida 34119.

3. On information and belief, Defendant Fortem Technologies, Inc. ("Fortem" or "Defendant") is a Delaware corporation with a principal place of business at 1064 S. North County Boulevard, Pleasant Grove, Utah 84062.

JURISDICTION & VENUE

4. This Court has subject matter jurisdiction over all causes of action set forth herein pursuant to 28 U.S.C. §§ 1331 and 1338(a) because this action arises under the patent laws of the United States, including 35 U.S.C. § 271, *et seq*.

5. This Court has personal jurisdiction over Fortem because Fortem has a principal place of business in the State of Utah and in this Judicial District. Fortem therefore has minimum contacts with the State of Utah and has purposefully availed itself of the privileges of conducting business in the State of Utah. *See* <u>https://fortemtech.com/about</u>.

6. On information and belief, Fortem has committed and continues to commit acts of infringement in the State of Utah and in this Judicial District and Division, and the claims addressed in this Complaint arise out of and relate to such acts, including at least by making, using, offering for sale, and selling the infringing technology, products, systems, methods, and/or computer software within this District and Division.

7. Venue is proper in this Court pursuant to 28 U.S.C. §§ 1391 and 1400(b) because
(i) Fortem has a regular and established place of business in this Judicial District and Division
and (ii) Fortem is registered with, and authorized to transact business in, the State of Utah.

Fortem's registered agent in the State of Utah is Mr. Thomas Thebes, 1064 S. North County Boulevard, 6th Floor, Pleasant Grove, Utah 84062.

XIDRONE'S TECHNOLOGY

8. XiDrone was founded by Mr. Dwaine A. Parker who is the first named inventor on several counter-drone related patents, including United States Patent No. 12,092,756 (the "756 Patent"). A true and correct copy of the '756 Patent is attached hereto as Exhibit "A."

9. Mr. Parker was increasingly aware of the dangers of unauthorized drones while logging nearly 5,000 flight hours as a law enforcement helicopter pilot, airplane pilot, and unit safety officer for the Collier County Sheriff's Office in Naples, Florida.

10. Mr. Parker began his 27-year career as a Deputy Sheriff with the Hillsborough County Sheriff's Office in Florida, working as a Tactical Flight Officer, a Road Patrol Deputy, a Traffic Homicide Investigator, and an Aircraft Accident Investigator.

11. Mr. Parker also served in the United States Army and was honorably discharged as a Disabled Veteran at the rank of Sergeant.

12. Mr. Parker co-founded XiDrone to find a solution for the security threat that small class 1 and class 2 drones were posing to the public, government, and military sectors. Mr. Parker recruited a team of engineers and developed systems and methods to detect, track, identify, and/or deter small class 1 and class 2 drones. Mr. Parker filed his first patent application in December 2014, and he presently holds fourteen United States patents and one European patent, which is inclusive of twelve European countries.

13. XiDrone has developed reliable and cost-effective counter-drone solutions that detect, identify, track, monitor, and if necessary, mitigate, small class 1 and class 2 drones.

XiDrone's technologies include mobile and fixed site systems and can be integrated on land, air, or sea. *See* Technologies, XiDrone Systems, <u>https xidronesystems.com/technologies</u>.

14. XiDrone's technology includes: (i) a detection element that uses a x-band radar and radio frequency (RF) technologies that enable rapid notification of class 1 and class 2 drones operating near sensitive or protected airspace; (ii) small class 1 and class 2 drone detection and tracking that combines x-band radar, multiple RF technologies and a laser range finder (LRF) to produce real-time data that identifies class 1 and class 2 drones and displays mitigation options; (iii) an identification element using electro optical/infrared (EO/IR) technology that, coupled with data from the other elements, generates a class 1 and class 2 drone's threat assessment and triggers the appropriate mitigation; (iv) multi-sensors and forensic class 1 and class 2 drone databases to assess a class 1 and class 2 drone's threat; and (v) mitigation options, including a fire control system, that ensures precise class 1 and class 2 drone threat countermeasures, while simultaneously avoiding negative collateral effects. In addition to an RF deterrent, the present system can use the ground-based sensors to detect an unmanned aerial vehicle (UAV) which enters protected airspace and dispatch a counter drone to engage the unauthorized UAV with a kinetic response. This option also affords a second mitigation method that avoids the challenges that may be found with RF signals being received or transmitted within challenging urban environments.

15. XiDrone has and continues to offer for sale a fixed and mobile Counter-Unmanned Aircraft Systems (C-UAS) command unit that is hurricane, tornado, UL1 small arms, and Class A fire resistant; thus, XiDrone is offering personal protection for the occupants within the C-UAS command unit. XiDrone's C-UAS detection and mitigation vehicle is designed to

provide: (i) a 40 foot telescoping radar tower; (ii) an x-band radar to detect class 1 and class 2 drones, manned aircraft, moving vehicles, and pedestrians; (iii) detection of manned air traffic within 50 miles from the mobile vehicle (line of sight); (iv) detection of class 1 and class 2 drones within three miles from the mobile vehicle (line of sight); (v) detection of all DJI drone products within 20 miles from the mobile vehicle; (vi) detection of non-DJI drones within three miles from the mobile vehicle (line of sight); (vii) RF deterrent capability of class 1 and class 2 drones within three miles from the mobile vehicle (line of sight); (viii) a two-person workstation with additional workspace; (ix) four HDTV monitors; (x) a common operating picture console (air map, radar, drone data, drone mitigation); (xii) an FAA manned aircraft communications console (Air Boss, firefighting, DHS, FEMA); (xii) a server room with the capability for additional external sensors/equipment; (xiii) cloud storage of all sensor data recorded; (xiv) a 12 kilowatt quiet generator with 72-hour run time; (xv) exterior unit CCTV with a day and night vision system; and (xvi) a GPS navigation system.

XIDRONE'S U.S. PATENT NO. 12,092,756

16. On September 17, 2024, the United States Patent and Trademark Office duly and legally issued United States Patent No. 12,092,756, entitled "Deterrent For Unmanned Aerial Systems." As part of the public records, the prosecution history of the '756 Patent is incorporated herein by reference. The priority date for the claims of the '756 Patent is no later than December 19, 2014.

17. XiDrone is the owner, by assignment, of all right, title, and interest in and to the '756 Patent, including the right to bring suit for past, present, and future patent infringement, and to collect past, present, and future damages.

18. The '756 Patent was awarded to XiDrone after XiDrone filed a first lawsuit against Defendant in the Central Division of the United States District Court for the District of Utah, Case No. 2:23-cv-00430-AMA-DBP, concerning Defendant's infringement of U.S. Patent No. 9,689,976 and U.S. Patent No. 11,378,651 (the "first lawsuit").

19. The claims of the '756 Patent are not essentially the same as the claims of U.S.Patent No. 9,689,976 and U.S. Patent No. 11,378,651 asserted in the first lawsuit.

20. The '756 Patent was awarded to XiDrone after XiDrone filed a second lawsuit against Defendant in the Central Division of the United States District Court for the District of Utah, Case No. 2:24-cv-00080-AMA-CMR, concerning Defendant's infringement of U.S. Patent No. 10,795,010 (the "second lawsuit").

21. The claims of the '756 Patent are not essentially the same as the claim of U.S.Patent No. 10,795,010 asserted in the second lawsuit.

22. As of the filing date of this Complaint, three entities have non-exclusively licensed XiDrone's patent portfolio, including the '756 Patent.

NO CLAIM OF XIDRONE'S '756 PATENT IS ABSTRACT

23. The claims of XiDrone's '756 Patent are focused on an advancement over the prior art such that their character as a whole is not directed to excluded subject matter, such as an abstract idea, or any other subject matter excluded under 35 U.S.C. § 101.

24. In fact, as shown in the prosecution history of the '756 Patent, the Patent Office determined that the combinations claimed in the claims of XiDrone's '756 Patent are novel and nonobvious. The Patent Office also determined that the claims of XiDrone's '756 Patent are not abstract or unpatentable under 35 U.S.C. § 101.

25. Thus far, the Patent Office has granted or allowed XiDrone fourteen U.S. patents, all with certain commonality in their genealogy. At no time during the extensive examination and prosecution of the respective patent applications that matured into these fourteen patents, including the '756 Patent, did the Patent Office ever issue a § 101 rejection to the applicant XiDrone.

26. Moreover, at present, three other drone security companies have purchased licenses to XiDrone's patent portfolio, including the '756 Patent. Section 101 did not deter any of these companies from taking a license.

27. The systems claimed in the '756 Patent do not involve a process that could be done manually by one or more people. The systems claimed in the '756 Patent also provide concrete and specific ways of detecting undesirable drones by quickly analyzing sensor data (e.g., radar, omnidirectional RF sensor) to identify vulnerable characteristics in making a threat assessment based on specific unique data and parameters of each UAV and implementing a specific, concrete, and unique countermeasure (e.g., a counter unmanned aerial vehicle, electronic counter measure) to address the undesirable drone before it can reach its intended target.

28. It is well-known that it is impossible for a human being to scan a radio frequency spectrum of the type disclosed and claimed in the '756 patent without the use of specialized equipment and hardware. Indeed, it is well-known that it is impossible for a human being to even detect radio frequency transmissions of the type disclosed and claimed in the '756 patent without the use of specialized equipment and hardware.

29. Moreover, the detection of radio frequency transmissions is not remotely analogous to a human being looking at the sky through a pair of binoculars. For one thing, human eyes are only sensitive to visible light, which is far removed from the "radio frequency" disclosed and claimed in the '756 patent. Human eyes have no visual sensitivity to radio frequency.

30. In addition, human eyes work only along straight "lines of sight." Human eyes cannot see around buildings, through clouds, through fog, through smoke, or over-the-horizon. In short, human eyes are confounded by any challenge that does not permit a straight-on line-of-sight view through a visually-transparent medium. In contrast, radio frequency detection equipment is not compromised by clouds, fog, smoke, signals bouncing off (and around) buildings and similar situations that simply "kill" human eyesight.

31. Not surprisingly, simple camouflaging of a rogue drone further compromises the ability of a human-visual-spotter to even see a drone, much less to evaluate and analyze whether that drone would be potentially troublesome. But radio frequency does not care if the drone is camouflaged or not. In each eventuality, the drone can be detected by the specialized radio frequency equipment and methods that the claimed inventions may employ to detect and identify an undesirable drone that a common receiver cannot detect, including but not limited to signals that are protected under Federal Law.

32. Human eyes also do not work well in the dark. In contrast, radio frequency equipment and methods of the type disclosed and claimed in the '756 patent do not care if it is night or day, dark or light, sunny or cloudy, bright or overcast, etc.

33. In fact, one of the advantages of XiDrone's technology is its ability to detect an incoming drone by, for example, radar and/or the reception of unique radio frequency transmissions, long before it can be seen by human eyes or detected with common, OTS, RF equipment.

34. Under step 1 of *Alice* claims 1-30 of the '756 patent are not abstract. The claim terms render the claims specific, concrete, and avoid preemption. As of the priority date of the '756 patent there was an urgent need for counter-drone technology as it did not exist. Independent claims 1, 11, 19, and 30 are not abstract because their claim terms render each claim tangible and concrete, and do not preempt every way for interdicting a target, such as an undesirable drone, that includes a counter unmanned aerial vehicle that is dispatched to interdict the undesirable drone. The '756 Patent teaches a person having ordinary skill in the art non-limiting examples of specific and concrete counter measures in the form of a counter unmanned aerial vehicle, or attack drone:

In addition, a counter sUAS can be dispatched with autonomous navigation data being supplied by the system of present invention to locate and intentionally disable the opposing sUAS by flying into it, dropping a net on the threat, covering it with spray foam or liquid or capturing the opposing sUAS.

Exhibit "A," '756 Patent at Column 19, lines 61-66.

35. The '756 Patent also teaches a person having ordinary skill in the art non-limiting

example of a specific and concrete counter measure in the form of an ECM:

Electronic Counter Measure (ECM) Modulation Type Select – designated as 38 in FIGS. 1A-3 is specialized algorithm software that has been developed to help narrow down the radio frequency identified by a modulation lookup table (defined in this glossary) of the specific unmanned aerial vehicle/system of interest, designated as a target 44 in FIG. 1A, utilizing a database library that was created and categorized with the specific radio frequencies common to all unmanned aerial vehicles/systems.

Exhibit "A," '756 Patent at Column 12, lines 32-40.

36. Claims 10 and 19-30 also are not abstract because the claimed multi-sensor systems include a counter measure, such as a counter unmanned aerial vehicle. Prior to XiDrone's invention, a multi-sensor system that includes a counter measure, such as a counter unmanned aerial vehicle, did not exist. As explained in the Sandia Report:

"The conclusion drawn [in the Sandia Report] from internal discussions and external reports is the following; detection of LSS UAS is a challenging problem that cannot be achieved with a single detection modality for all potential targets. Classification of LSS UAS, especially classification in the presence of background clutter (e.g., urban environment) or other non-threating targets (e.g., birds), is under-explored."

See Exhibit "B," Sandia Report.

37. Indeed, the April 2015 Sandia Report shows that: (1) it was "very difficult" to detect small drones for several reasons, including clutter; (2) differentiating the drones from the background clutter was a problem; and (3) "urgent action [was] necessary" to find "some innovative tactics and technologies to effectively counter these threats." *See* Exhibit "B," Sandia Report.

38. Claims 1-30 of the '756 Patent are not abstract because no prior art system disclosed at least one radio receiver configured to detect a radio frequency (RF) signature based on a radio signal communicated between an aerial target and a remote control device.

39. Claims 1-30 of the '756 Patent are not abstract because no prior art system identified the target based on the detected RF signature and located the target based on the radar detection and based on at least one of target identification and/or target location, determined if the target is an unmanned aerial system (UAS).

40. Claims 1-30 of the '756 Patent are not abstract because no prior art system employed UAS location information to dispatch a counter unmanned aerial vehicle, or counterdrone, to the proximity of a target to interdict the target such as an undesirable drone. No prior art system employed UAS location information to dispatch a counter unmanned aerial vehicle, or counter-drone, to aerially navigate and to interdict the detected target based on at least some navigation data supplied by the system.

41. Claims 1-30 of the '756 Patent are not abstract because no prior art system employed autonomous navigation data supplied by the system to a counter unmanned aerial vehicle, such as a counter drone.

42. Claims 1-30 of the '756 Patent are not abstract because no prior art system determined if the UAS comprises a target of interest or threat when the UAS's location is within a predetermined airspace boundary around a protected interest.

THE INVENTIONS CLAIMED IN XIDRONE'S '756 PATENT WERE NOT WELL-UNDERSTOOD, ROUTINE, OR CONVENTIONAL

43. Under step 2 of *Alice*, claims 1-30 of the '756 Patent are drawn to inventive concepts and are patentable under § 101.

44. The Background section of XiDrone's '756 Patent and the Sandia Report make it clear that there was nothing "well-understood, routine, [and] conventional" about the technology claimed in XiDrone's patents, including the '756 patent. *See* Exhibit "B," Sandia Report.

45. The "ordered combinations" set forth in claims 1-30 of the '756 Patent also provide "inventive concepts."

46. The specific innovations set forth in the '756 Patent have a very significant realworld impact on the ability to detect small drones, assess whether the small drone is a threat, and

implement a counter measure, including a counter unmanned aerial vehicle or an electronic counter measure to interdict an undesirable drone, which the prior art systems lacked. This type of real-world, measurable improvement to the detection, classification, assessment, and counter measure of small drones is precisely the type of improvement that the Supreme Court and the Federal Circuit have repeatedly held satisfies Section 101.

XIDRONE'S FOREIGN PATENTS

47. XiDrone has also been granted related foreign patents. In Europe (including Belgium, Denmark, France, Germany, Great Britain, Ireland, Italy, The Netherlands, Monaco, Poland, Spain, and Switzerland), XiDrone was granted EP 3234633B1.

FORTEM'S INFRINGING SYSTEMS, METHODS, AND DEVICES

48. On information and belief, Fortem has infringed, and continues to infringe, XiDrone's '756 Patent by making, using, offering for sale, and/or selling a system for interdicting an unmanned aerial target.

49. For example, Fortem makes, uses, offers for sale, and sells technologies that achieve drone interdiction including a product named "SkyDome Manager" (*see, e.g.*, "SkyDome Manager" (available at <u>https://fortemtech.com/products/skydome-manager/</u>) and "Fortem SkyDome: Airspace Awareness And Security Platform" (available at <u>https://southerncrossdrones.com/download/fortem-skydome-datasheet-sxd-.pdf</u>.). Fortem's "SkyDome Manager" can integrate with another Fortem product called "DroneHunter" (*see, e.g.*, "DroneHunter F700" (available at <u>https://fortemtech.com/products/dronehunter-f700/</u>) and "DroneHunter: The Premier AI-Enabled, Autonomous Drone Interceptor In The World" (available at <u>https://unival-group.com/wp-content/uploads/2020/03/Fortem-DroneHunter-Data-</u> <u>Sheet-006-ENG-unival.pdf</u>)). Other exemplary technologies from Fortem that support drone mitigation include Fortem's "TrueView R20 Radar" (*see, e.g.*, "TrueView R20 Radar" (available at <u>https://fortemtech.com/products/trueview-r20/</u>), Fortem's "TrueView R30 Radar" (*see, e.g.*, available at <u>https://fortemtech.com/products/trueview-r30/</u>), Fortem's "TrueView C30 Camera System" (*see, e.g.*, <u>https://fortemtech.com/products/trueview-c30/</u>), and Fortem's "Edge Fusion System" (*see, e.g.*, <u>https://fortemtech.com/products/edge-fusion-system/</u>).

50. Fortem's technology detects, tracks, and interdicts class 1 and class 2 drones.

51. Fortem's technology detects, tracks, and interdicts drones weighing less than 20 kg or 55 pounds.

52. Fortem's technology includes a radar for detecting the 3D position of an unmanned aerial vehicle in flight. *See, e.g.*, Fortem Technologies, "SkyDome Manager" (available at <u>https://fortemtech.com/products/skydome-manager/</u>), Fortem Technologies, "TrueView R20 Radar" (available at <u>https://fortemtech.com/products/trueview-r20/</u>), and Fortem Technologies, "TrueView R30 Radar" (available at <u>https://fortemtech.com/products/trueview-r20/</u>).

53. Fortem's technology includes at least one directional or omnidirectional sensor. *See, e.g.*, Fortem's, "SkyDome Manager" (available at

https://fortemtech.com/products/skydome-manager/).

54. Fortem's technology includes a radio frequency receiver for identifying the unmanned aerial vehicle in flight based on at least one radio transmission from the unmanned aerial vehicle. *See, e.g.*, Fortem Technologies, "SkyDome Manager" (available at https://fortemtech.com/products/skydome-manager/).

55. Fortem's technology includes at least one radio receiver configured to detect a radio frequency (RF) signature based on a radio signal communicated between an aerial target and a remote control device. *See, e.g.*, Fortem Technologies, "SkyDome Manager" (available at https://fortemtech.com/products/skydome-manager/) and Fortem Technologies, "The Fortem SkyDome System: Layered Airspace Monitoring & Defeat Solutions" (available at https://uploads-

ssl.webflow.com/648c3eaae99a3460f13becec/64a7df2006e865ba6fdd56f8_MKT_SkyDome-Stations 20230327.pdf).

56. Fortem's technology includes a counter unmanned aerial vehicle dispatchable by the system to interdict the detected target. *See, e.g.*, Fortem's "DroneHunter F700" (available at <u>https://fortemtech.com/products/dronehunter-f700/</u>), Fortem's "Airspace Awareness, Safety And Security" (available at <u>https://www.youtube.com/watch?v=Mohj2A0kD6Q</u>), and Fortem's "SkyDome Manager" (available at https://fortemtech.com/products/skydome-manager/).

57. Fortem's counter unmanned aerial vehicle is configured to receive an RF signal and to interdict the detected target. *See, e.g.*, Fortem's "DroneHunter: The Premier AI-Enabled, Autonomous Drone Interceptor In The World" (available at <u>https://unival-group.com/wp-</u>content/uploads/2020/03/Fortem-DroneHunter-Data-Sheet-006-ENG-unival.pdf).

58. Fortem's technology includes one or more processors coupled to the radar, where the one or more processors determine direction and range to the unmanned aerial target in response to the radar, and where the one or more processors dispatch a counter unmanned aerial vehicle to interdict the target where the flight path of the unmanned aerial vehicle is initiated by a transmitted signal from the one or more processors to the counter unmanned aerial vehicle.

See, e.g., Fortem's "SkyDome Manager" (available at <u>https://fortemtech.com/products/skydome-manager/</u>), Fortem Technologies, "DroneHunter F700" (available at <u>https://fortemtech.com/products/dronehunter-f700/</u>), and Fortem Technologies, "Airspace Awareness, Safety And Security, 2019" (available at <u>https://www.youtube.com/watch?v=Mohj2A0kD6Q</u>); and Fortem Technologies, "SkyDome

Manager" (available at https://fortemtech.com/products/skydome-manager/).

59. Fortem's technology includes one or more processors coupled to the radar, where the one or more processors determine direction and range to the unmanned aerial target in response to the radar, and a counter unmanned aerial vehicle dispatched by a transmitted RF signal from the one or more processors to the counter unmanned aerial vehicle. *See, e.g.*, Fortem's "SkyDome Manager" (available at <u>https://fortemtech.com/products/skydomemanager/</u>), Fortem Technologies, "DroneHunter F700" (available at <u>https://fortemtech.com/products/dronehunter-f700/</u>), Fortem Technologies, "Airspace Awareness, Safety And Security, 2019" (available at <u>https://www.youtube.com/watch?v=Mohj2A0kD6Q</u>), and Fortem Technologies, "SkyDome

Manager" (available at https://fortemtech.com/products/skydome-manager/).

60. Fortem's technology includes at least one omnidirectional RF sensor, at least one radar, and at least one processor coupled to the at least one RF sensor and the at least one radar, where the one processor is configured to detect a target and determine direction and range of the target in response to the at least one omnidirectional RF sensor and the at least one radar. Fortem's technology also includes a counter unmanned aerial vehicle dispatched by a transmitted RF signal from the at least one processor to the counter unmanned aerial vehicle. *See, e.g.*,

Fortem Technologies, "DroneHunter F700" (available at

https://fortemtech.com/products/dronehunter-f700/) and Fortem Technologies, "Airspace Awareness, Safety And Security, 2019" (available at

<u>https://www.youtube.com/watch?v=Mohj2A0kD6Q</u>); and Fortem Technologies, "SkyDome Manager" (available at <u>https://fortemtech.com/products/skydome-manager/</u>).

Fortem's technology includes at least one RF sensor, at least one radar, and one or 61. more processors operatively connected to the at least one RF sensor and the at least one radar, where the one or more processors are configured to detect the unmanned aerial target drone and determine direction and range of the unmanned aerial drone target in response to the at least one RF sensor and the at least one radar. Fortem's technology also includes one or more processors that execute a computer program capable of processing data acquired from the at least one RF sensor and the at least one radar to perform a threat assessment and to select and initiate an appropriate counter measure against the unmanned aerial target drone in flight based at least in part on the threat assessment. See, e.g., Fortem's "SkyDome Manager" (available at https://fortemtech.com/products/skydome-manager/), Fortem Technologies, "DroneHunter F700" (available at https://fortemtech.com/products/dronehunter-f700/), Fortem Technologies, "Airspace Awareness, Safety And Security, 2019" (available at https://www.youtube.com/watch?v=Mohj2A0kD6Q); and Fortem Technologies, "SkyDome Manager" (available at https://fortemtech.com/products/skydome-manager/), and Fortem Technologies, "Airspace Awareness, Safety And Security, 2019" (available at https://www.youtube.com/watch?v=Mohj2A0kD6Q).

62. Fortem's technology includes a counter measure comprising at least one of a radio frequency transmitter and a counter unmanned aerial vehicle. Fortem's processor is structured to selectively (a) control interdiction of the unmanned aerial vehicle in flight using a specific RF jamming frequency transmitted by the radio frequency transmitter, or (b) control deployment of the counter unmanned aerial vehicle. *See, e.g.*, Fortem Technologies, "DroneHunter F700" (available at <u>https://fortemtech.com/products/dronehunter-f700/</u>), Fortem Technologies, "Airspace Awareness, Safety And Security, 2019" (available at <u>https://www.youtube.com/watch?v=Mohj2A0kD6Q</u>), and Fortem Technologies, "SkyDome Manager" (available at <u>https://fortemtech.com/products/skydome-manager/</u>).

63. Fortem's technology includes an electronic countermeasure (ECM) signal generator configured to transmit an ECM signal to disrupt communications between the UAS and the remote control device. *See, e.g.*, Fortem Technologies, "The Fortem SkyDome System: Layered Airspace Monitoring & Defeat Solutions" (available at <u>https://uploads-ssl.webflow.com/648c3eaae99a3460f13becec/64a7df2006e865ba6fdd56f8_MKT_SkyDome-Stations 20230327.pdf).</u>

64. On information and belief, Fortem has and continues to provide counter class 1 and class 2 drone-related countermeasures that comprise an electronic countermeasure (ECM), including "Counter-UAS Stations" that include "electronic jamming." *See, e.g.*, Fortem Technologies, "The Fortem SkyDome System: Layered Airspace Monitoring & Defeat Solutions" (available at <u>https://uploads-</u>

ssl.webflow.com/648c3eaae99a3460f13becec/64a7df2006e865ba6fdd56f8_MKT_SkyDome-Stations 20230327.pdf). 65. On information and belief, Fortem has and continues to provide its systems for interdicting an unmanned aerial target to "Defense," "Airports," "Energy," "Law Enforcement," "Prisons" and "Public Venues." *See, e.g.*, <u>https://fortemtech.com/solutions</u>.

THE PARTIES PRE-SUIT COMMUNICATIONS

66. XiDrone provided Fortem with written notice of XiDrone's counter-drone patent portfolio on or about June 9, 2021. *See* Exhibit "C," June 9, 2021 Letter from XiDrone to Fortem.

67. XiDrone also provided Fortem with written notice of Fortem's past, present, and ongoing infringement of XiDrone's '756 Patent on or about October 1, 2024. *See* Exhibit "D," October 1, 2024 Letter from XiDrone to Fortem. XiDrone also provided Fortem with an infringement claim chart, which demonstrates Fortem's infringement of XiDrone's '756 Patent, on or about October 1, 2024. *Id.* As a result, Fortem has had actual notice and knowledge of Fortem's ongoing infringement of XiDrone's '756 Patent since at least October 1, 2024.

68. Despite Fortem's awareness of XiDrone's '756 Patent, Fortem decided to continue to make, use, offer for sale, and sell its infringing technology without authorization from XiDrone.

69. On information and belief, since receiving XiDrone's notice of infringement, Fortem has not changed (a) its course of conduct, (b) its infringing products or systems, (c) its infringing methods, or (d) any of its instructions or supporting literature and materials despite awareness of XiDrone's notice of infringement of XiDrone's '756 Patent.

70. On information and belief, Fortem's past, present, and future infringement of XiDrone's '756 Patent is intentional, deliberate, malicious, willful, and in bad faith.

COUNT I: DIRECT INFRINGEMENT OF XIDRONE'S '756 PATENT

71. XiDrone incorporates by reference the allegations in the preceding paragraphs.

72. Fortem has made, used, offered for sale and/or sold the infringing products, systems, methods, and computer programs that incorporate one or more of the inventions claimed in XiDrone's '756 Patent within the United States.

73. Fortem has infringed and continues to infringe at least representative claims 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, and 30 of XiDrone's '756 Patent as detailed in Exhibit "E," including either literally or under the doctrine of equivalents, in connection with, for example, Fortem's above-described technology, products, systems, methods, and computer programs including Fortem's "SkyDome Manager," "DroneHunter," "TrueView R20 Radar," "TrueView R30 Radar," "TrueView C30 Camera System," "Edge Fusion System," and "Counter-UAS Stations" that comprise a counter unmanned aerial vehicle or some other counter measure, such as "electronic jamming."

- 74. Additional information germane to Fortem's system(s) may be found at:
- Bhargav Patel and Dmitri Rizer, *Counter-Unmanned Aircraft Systems: Technology Guide*, CUAS-T-G-1, National Urban Security Technology Laboratory, United States Department Of Homeland Security, September 2019.
- Arthur Holland Michel, *Counter-Drone Systems*, Second Edition, Center For The Study Of The Drone at Bard College, 2019.
- Dedrone, "VIPs And Private Property" (available at <u>https://www.dedrone.com/solutions/vips-and-private-property</u>).
- Susan Friedberg, "Introducing DroneTracker 4.1, Providing Advanced Radar & PTZ Camera Integration For sUAS Detection & Threat Mitigation," November 5, 2019 (available at <u>https://www.dedrone.com/blog/the-8-most-important-innovations-of-dronetracker-4-1</u>).

- Fortem Technologies, "About Us" (available at https://fortemtech.com/about).
- Fortem Technologies, "DroneHunter F700" (available at <u>https://fortemtech.com/products/dronehunter-f700/)</u>.
- Fortem Technologies, "Airspace Awareness, Safety And Security," 2019 (available at <u>https://www.youtube.com/watch?v=Mohj2A0kD6Q</u>).
- Fortem Technologies, "SkyDome Manager" (available at <u>https://fortemtech.com/products/skydome-manager/</u>).
- Warren Brown, "Amid Market Demand, Fortem Technologies Opens Washington D.C. Metro Area Office And Expands Executive Team," December 12, 2022 (available at <u>https://fortemtech.com/press-releases/2022-12-12-amid-market-demand-fortem-technologies-opens-washington-dc-metro-area-office/)</u>.
- Fortem Technologies, "TrueView R20 Radar" (available at <u>https://fortemtech.com/products/trueview-r20/</u>).
- Fortem Technologies, "TrueView R30 Radar" (available at <u>https://fortemtech.com/products/trueview-r30/</u>).
- Fortem Technologies, "Fortem SkyDome: Airspace Awareness And Security Platform," 2018 (available at <u>https://southerncrossdrones.com/download/fortem-skydome-datasheet-sxd-.pdf</u>).
- Fortem Technologies, "DroneHunter: The Premier AI-Enabled, Autonomous Drone Interceptor In The World," 2020 (available at <u>https://unival-group.com/wp-content/uploads/2020/03/Fortem-DroneHunter-Data-Sheet-006-ENG-unival.pdf</u>).
- Fortem Technologies, "TrueView C30 Camera System" (available at <u>https://fortemtech.com/products/trueview-c30/</u>).
- Fortem Technologies, "Edge Fusion System" available at <u>https://fortemtech.com/products/edge-fusion-system/</u>.
- Unival Group, "DroneHunter: The Premier AI-Enabled, Autonomous Drone Interceptor In The World" available at <u>https://unival-group.com/wp-</u> <u>content/uploads/2020/03/Fortem-DroneHunter-Data-Sheet-006-ENG-unival.pdf</u>.
- U.S. Testing Equipment, Ltd., "Fortem DroneHunter" available at <u>https://ustesting.com/product/fortem-dronehunter/</u>.

- Fortem Technologies, "The Fortem SkyDome System: Layered Airspace Monitoring & Defeat Solutions" available at <u>https://uploads-</u> <u>ssl.webflow.com/648c3eaae99a3460f13becec/64a7df2006e865ba6fdd56f8_MKT</u> <u>SkyDome-Stations_20230327.pdf</u>.
- Fortem Technologies, "'DroneHunter' Hunts For Unauthorized Drones" available at <u>https://www.youtube.com/watch?v=PpgFNSpANFM</u>.

75. Fortem has directly infringed and continues to directly infringe one or more claims of the '756 Patent, including at least representative claims 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, and 30 of XiDrone's '756 Patent in violation of 35 U.S.C. § 271(a) by, without authority, making, using, offering for sale, and/or selling the infringing products, systems, methods, and computer programs within the United States and importing the infringing products, systems, methods, and computer programs into the United States.

76. Fortem's infringing activities have and continue to be without authority or license under the '756 Patent.

77. On information and belief, despite notice of the '756 Patent, Fortem has and continues to infringe XiDrone's '756 Patent.

78. On information and belief, as Fortem deliberately avoided confirming Fortem's high probability of wrongdoing, Fortem has and continues to directly infringe at least representative claims 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, and 30 of XiDrone's '756 Patent with willful blindness.

79. Fortem's direct infringement of XiDrone's '756 Patent has been, and continues to be, willful, and deliberate conduct. Accordingly, XiDrone seeks damages up to three times on account of Fortem's willful conduct pursuant to 35 U.S.C. § 284 and attorneys' fees on account of Fortem's actions rendering this an exceptional case pursuant to 35 U.S.C. § 285.

80. XiDrone has and continues to suffer damages as a direct and proximate result of Fortem's direct infringement of XiDrone's '756 Patent, and XiDrone will suffer additional and irreparable damages unless the Court preliminarily and permanently enjoins Fortem from continuing its infringing activities. XiDrone does not have an adequate remedy at law.

81. XiDrone is entitled to recover: (i) damages adequate to compensate XiDrone for Fortem's direct infringement of XiDrone's '756 Patent, which at a minimum, amounts to a reasonable royalty; (ii) treble damages; (iii) attorneys' fees; (iv) costs; and (v) an injunction.

COUNT II: INDIRECT INFRINGEMENT OF XIDRONE'S '756 PATENT

82. XiDrone incorporates by reference the allegations in the preceding paragraphs.

83. Fortem has known of the '756 Patent since no later than October 1, 2024. See,e.g., Exhibit "D," October 1, 2024 Letter from XiDrone to Fortem.

84. Fortem has known that its systems infringe one or more claims of the '756 Patent since no later than October 1, 2024. *See, e.g.*, Exhibit "D," October 1, 2024 Letter from XiDrone to Fortem.

85. Fortem's customers directly infringe one or more of the asserted claims of the '756 Patent by using and/or exporting Fortem's "SkyDome Manager," "DroneHunter," "TrueView R20 Radar," "TrueView R30 Radar," "TrueView C30 Camera System," "Edge Fusion System," and "Counter-UAS Stations" that comprise a counter unmanned aerial vehicle or some other counter measure, such as "electronic jamming," in a manner that infringes XiDrone's '756 Patent.

86. Fortem's customers include "Defense," "Airports," "Energy," "Law Enforcement," "Prisons" and "Public Venues." *See, e.g.*, https://fortemtech.com/solutions. On

information and belief, Fortem's customers also include foreign entities and foreign governments.

87. Fortem has in the past and continues to indirectly infringe at least representative claims 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, and 30 of XiDrone's '756 Patent in violation of 35 U.S.C. § 271(b) by actively, knowingly, and intentionally inducing direct infringement by other persons, including customers and end users, by encouraging and instructing their customers to use Fortem's "SkyDome Manager," "DroneHunter," "TrueView R20 Radar," "TrueView R30 Radar," "TrueView C30 Camera System," "Edge Fusion System," and "Counter-UAS Stations" that comprise a counter unmanned aerial vehicle or some other counter measure, such as "electronic jamming," in a manner understood and intended to infringe XiDrone's '756 Patent. For example, despite knowing of XiDrone's '756 Patent, and its infringement thereof; as shown above, Fortem instructs its customers to utilize Fortem's "Sky Dome Manager," "DroneHunter," "TrueView R20 Radar," "TrueView R30 Radar," "TrueView C30 Camera System," and "Counter-UAS Stations" in a manner understood and intended to infringe Fusion System," and "Counter-UAS Stations" in a manner understood and intended to infringe XiDrone's '756 Patent.

88. Fortem also has in the past and continues to indirectly infringe at least representative claims 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, and 30 of XiDrone's '756 Patent in violation of 35 U.S.C. § 271(c) by actively, knowingly, and intentionally contributing to an underlying direct infringement by other persons, such as Fortem's patrons, customers, and end users, by offering and providing Fortem's above-described technology for interdicting an unmanned aerial vehicle without authority or license from XiDrone and in a manner understood and intended to infringe XiDrone's '756 Patent. For example, despite

knowing of XiDrone's '756 Patent, and its infringement thereof; as shown above, Fortem knows that Fortem's "SkyDome Manager," "DroneHunter," "TrueView R20 Radar," "TrueView R30 Radar," "TrueView C30 Camera System," "Edge Fusion System," and "Counter-UAS Stations" that comprise a counter unmanned aerial vehicle or some other counter measure, such as "electronic jamming" each constitute (i) a component and material part of the inventions claimed in one or more claims of the '756 Patent, (ii) knowingly and especially designed for use in infringing one or more claims of the '756 Patent, (iii) intended to be used to infringe one or more claims of the '756 Patent, and (iv) not a staple item of commerce suitable for substantial non-infringing use.

89. On information and belief, despite knowing of XiDrone's '756 Patent and its infringement of XiDrone's '756 Patent, Fortem deliberately avoided confirming its high probability of wrongdoing and Fortem has induced and contributed to, and continues to induce and contribute to, the direct infringement of at least representative claims 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, and 30 of XiDrone's '756 Patent with willful blindness.

90. Fortem's indirect infringement of XiDrone's '756 Patent has been, and continues to be, willful and deliberate. Accordingly, XiDrone seeks damages up to three times on account of Fortem's willful conduct pursuant to 35 U.S.C. § 284 and attorneys' fees on account of Fortem's actions rendering this an exceptional case pursuant to 35 U.S.C. § 285.

91. XiDrone has and continues to suffer damages as a direct and proximate result of Fortem's indirect infringement of XiDrone's '756 Patent and will suffer additional and irreparable damages unless the Court preliminarily and permanently enjoins Fortem from continuing its infringement. XiDrone does not have an adequate remedy at law.

92. XiDrone is entitled to recover: (i) damages adequate to compensate XiDrone for Fortem's indirect infringement of XiDrone's '756 Patent, which, at a minimum, amounts to a reasonable royalty; (ii) treble damages; (iii) attorneys' fees; (iv) costs; and (v) an injunction.

JURY DEMAND

93. Pursuant to Federal Rule of Civil Procedure 38(b), XiDrone demands a trial by jury of all issues so triable.

REQUEST FOR RELIEF

For the foregoing reasons, Plaintiff XiDrone Systems, Inc. seeks the following relief:

- a. Declaring that Fortem has infringed the patent-in-suit;
- b. That Fortem be enjoined from further infringement of the patent-in-suit pursuant to 35 U.S.C. § 283;
- c. That Fortem be ordered to pay damages adequate to compensate XiDrone for Fortem's infringement of the patent-in-suit pursuant to 35 U.S.C. § 284;
- d. That Fortem be ordered to pay XiDrone treble damages pursuant to 35 U.S.C. § 284;
- e. That Fortem be ordered to pay prejudgment interest pursuant to 35 U.S.C. § 284;
- f. That Fortem be ordered to pay all costs associated with this action pursuant to 35 U.S.C. § 284;
- g. That Fortem be ordered to pay XiDrone's attorneys' fees pursuant to 35 U.S.C. § 285;
- h. That XiDrone be granted such other and additional relief as the Court deems just and proper.

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DATED: December 6, 2024.

/s/ Nicole A. Skolout TOMCHAK SKOLOUT Nicole A. Skolout

KENT & RISLEY LLC Stephen R. Risley

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